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標本資料報告　第 132 号

The University Museum, The University of Tokyo
Material Reports No. 132

東京大学総合研究博物館動物部門所蔵
魚類標本リスト(3)

Catalogue of fish collection deposited in the Department of Zoology, The University Museum, The University of Tokyo Vol. 3

和田英敏・小枝圭太・上島　励
Hidetoshi WADA, Keita KOEDA and Rei UESHIMA

令和 6 年　東京
2024　TOKYO

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はしがき

本書は『東京大学総合研究博物館動物部門所蔵 魚類標本リスト(2)』(2022)に次ぐ第3号の標本資料報告である. 2021 年 5 月から第二編者の小枝圭太を中心とし研究事業協力者や外部研究者, ボランティアの協力を得た東京大学総合研究博物館動物部門所蔵の魚類標本(ZUMT: The Department of Zoology, The University Museum, The University of Tokyo)コレクションの整理作業が始まり, 2023 年 1 月から現在までは第一編者の和田英敏の主導のもと継続されている. 第一編者の就任以降は東京大学総合研究博物館ウェブサイトでの標本データの公開作業も進められており, 現在までに第 1・2 号の標本資料報告を PDF ファイルにて公開するとともに, 未整理のものを含めた ZUMT の全標本リストが仮公開されている.

この標本資料報告においては, 18 報の個別のタクソンの標本目録, および 2 報のタイプ標本目録を掲載することが出来た. これらの報告はいずれも単なる目録にとどまらず, 各タクソンの分類学的知見, 生物地理学的知見, および博物学的知見を盛り込んだディスカッションを含む意欲的な内容となっており, 各タクソンの研究における基礎資料となることも期待される.

これまでの活動により, ZUMT コレクションの活発な利用へと繋がり, 新たな学術的発見へと繋がっていくことを切に願う. なお, 標本整理作業は現在も引き続きすすめられており, 今号に掲載できなかった分類群の標本目録については次号以降にて掲載する予定である.

本プロジェクトの推進および本目録の出版に際しては多くの方々のご協力を得た. 東京大学総合研究博物館の研究部教員, 事務職員の方々には様々な御支援をいただいた. 本プロジェクトは, 平成 11–令和 5 年度の本学総合研究博物館プロジェクト研究経費, 公開利用経費による援助を受けて実施された. 藍澤正宏氏, 坂本一男氏, 畑 晴陵氏, 畑あゆみ氏, 藤原恭司氏, 古楯龍星氏, 深谷真央氏, および熊木慧弥氏には標本の観察や同定, 管理・維持作業に加え原稿の執筆, 確認をしていただいた. ボランティアの小林健二氏, 宮下雄博氏, 尾形比呂哉氏, 新江ノ島水族館の園山貴之氏, 自然環境研究センターの望月健太郎氏, 東京海洋大学の江藤 暁氏, 齋藤 舞氏, 髙橋あゆみ氏, 阿部伊央太氏, 藤原咲紀氏, 飯沼 藍氏, 金子友哉氏および藤原好生氏, 東京大学の亀井遥香氏, 伊藤想也氏, および須田大朔氏, 雙葉中学校・高等学校の刑部南月子氏, お茶の水女子大学の小田 咲氏には ZUMT 標本の管理・維持作業を手伝っていただいた. これらの方々に, この場を借りて, 厚くお礼申し上げたい. 最後に, ZUMT 標本が今日に至るまでに多大な貢献をいただいた故富永義昭氏に深い感謝の意を示したい.

2024 年 2 月 8 日

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Report on the specimens of sharks deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

The collection of sharks held in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) comprise 474 specimens representing 9 orders, 27 families, and 73 species. Presence of the holotype and/or paratypes of four species were confirmed.

Introduction

In Japanese waters, 9 orders, 35 families, 190 species of sharks have been identified (Nakaya 2016; Bandai 2018 for Pentanchidae). The fish collection of sharks preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were re-identified in the present study. During the management of ZUMT, 474 specimens of sharks were discovered from the collection. The specimens were re-identified by the first author, and listed below. To be a reference on the minimum mature size of various species of sharks, smallest matured male specimen of each species was listed.

Materials and Methods

Identities of the specimens of sharks in ZUMT were confirmed by the first author, generally following Nakabo (2013). Total lengths (TL) were measured for all specimens. Sex of specimens were estimated from presence or absence of claspers. Matured males were determined when the claspers longer than the pelvic fin. Species are arranged in alphabetical order. Local name, and collector's name and affiliation are given where known (from the specimen ledger or tag), with Japanese language equivalents in parentheses. The following list includes ZUMT number, TL, sex with mature or immature for male, number of specimens in parentheses when two or more, type (abbreviated when non-type), collection locality, collection date, collector or donator and affiliation, collection method, local name, and remarks when available. The collection year and collector for some specimens was estimated by following Koeda et al. (2022). Specimens stored in large tank were marked with an asterisk (*). Although, some of the ZUMT specimens collected by Dr. Abe had not been formally cataloged into the ZUMT collection (and the data of some specimens not retained), such specimens which can recognize by having underbar with the number on the accompanying label, are listed herein with the number ZUMT ABE XXXX, due to the possibility of future discovery of Dr. Abe's remaining catalog books with collection data. Catalog numbers after ZUMT 62000 are newly given during this study.

Collection of sharks in ZUMT

Examination of the specimens of sharks deposited in ZUMT comprised 474 specimens representing 9 orders, 27 families, and 73 species were held in the collection including holotypes of *Apristurus macrorhynchus* (Tanaka, 1909) of Pentanchidae, and *Lepidorhinus kinbei* Tanaka, 1918 which is currently recognized as a junior synonym of *Centrophorus squamosus* (Bonnaterre, 1788) of Centrophoridae, paratypes of *Squalus brevirostris* Tanaka, 1917, *Squalus wakiyae* Tanaka, 1918 which is currently recognized as a junior synonym of *Squalus suckleyi* (Girard, 1854) of Squaridae. Some of the type specimens could not find from the collection during the present study (See Aizawa et al. 2022). Smallest sizes of matured male of each species were listed in Table 1. Two embryo

specimens with deformities were illustrated: one with a single eye in *Prionace glauca* (Linnaeus, 1758) (ZUMT 64198), and another with twin heads and dorsal fins in *Squalus* sp. (ZUMT 1526).

Heterodontiformes ネコザメ目
Heterodontidae ネコザメ科
Galeus Rafinesque, 1810 ネコザメ属
Galeus nipponensis Nakaya, 1975 ネコザメ

ZUMT 938: 58.9 mm TL, immature male embryo with egg capsule, Niihama (新井浜), Misaki (三崎), Kanagawa Pref., 29 Aug. 1899, H. Kuwano (桑野久任), stranded after storm.
ZUMT 939: 5 specimens, 78.9 mm TL, female; 76.4 mm TL, immature male; 91.4 mm TL, female; 61.6 mm TL, female; 71.6 mm TL, immature male, Misaki, Sept. 1900, K. Aoki (青木熊吉).
ZUMT 1485: egg capsule, Misaki, 1901, donated by B. Dean.
ZUMT 6141: 345 mm TL, female, locality unknown.
ZUMT 7209*: 254 mm TL, immature male, Aichi Pref., before 1916, Aichi Prefectural Fisheries Station (愛知県水産試験場).
ZUMT 15223: 435 mm TL, immature male, probably Okinawa-jima Island, 1920's, S. Sakaguchi (坂口総一郎) at Okinawa Prefectural No. 1 Junior High School (沖縄県立第一中学校).
ZUMT 18704*: 242 mm TL, immature male, Susaki (須崎), Kochi Pref., Oct. 1928, T. Kamohara (蒲原稔治) at Kochi High School (高知高校), local name "Nakobuka (ネコブカ)".
ZUMT 20989*: 285 mm TL, immature male, Tokyo Market (東京市場).
ZUMT 22161* (cloth tag of 96): 403 mm TL, female, Nagasaki, 1 Aug. (before 1929), I. Kaneko (金子一狼), local name "Sazahiwari (サザヒワリ)".
ZUMT 22668*: 206 mm TL, female, Miyazaki Pref.
ZUMT 26383*: 247 mm TL, immature male, Hayama (葉山), Kanagawa Pref., Oct. 1929, I. Tomiyama (冨山一郎).
ZUMT 31246* (cloth tag of 197): 264 mm TL, immature male, Matsue (松江), Shimane Pref., R. Yanai (柳井隆一) at Matsue High School (松江高校).
ZUMT 32112*: 257 mm TL, female, locality unknown, donated by Gakkaishishinsha (学海指針社).
ZUMT 47839: yolk with egg capsule, near Manazuru (真鶴), Kanagawa Pref., 1953, T. Abe (阿部宗明).
ZUMT 49905*: 395 mm TL, Fukue (福江), Fukue Island (福江島), Goto Islands (五島列島), 10 June 1953, I. Tomiyama.
ZUMT 50563*: 518 mm TL, immature male, Nagasaki Fish Market (長崎魚市場), 27 Aug. 1959, Y. Tominaga (富永義昭).
ZUMT 52100*: 281 mm TL, female, Norin-kaiku 253 and 254 (農林 253, 254 区), East China Sea, landed at Fukuoka Fish Market (福岡魚市場), 2 May 1960.
ZUMT 52292*: 191 mm TL, immature male, near Jeju Island, Korea, Norin-kaiku 253 and 254 (農林 253, 254 区), East China Sea, No. 1 and 2 Shotokumaru (第 1, 2 昭徳丸), landed at Fukuoka Fish Market (福岡魚市場), 5 May 1960, bottom trawl.
ZUMT 55451: 241 mm TL, female, Mera (妻良), Izu Peninsular (伊豆半島), Shizuoka Pref., 20 Sept. 1986, M. Aizawa (藍澤正宏) and K. Aizawa (藍澤純住), set net.
ZUMT 63845* [sketch no. 187 (写生第 187 号)]: 351 mm TL, immature male; **ZUMT 63846***: 222 mm TL, immature male; **ZUMT 63890***: 350 mm TL, immature male; **ZUMT 63899**: egg capsules (2); **ZUMT ABE 62-285**: 301 mm TL, female, locality unknown.

Heterodontus Blainville, 1816 シマネコザメ属
Heterodontus zebra (Gray, 1831) シマネコザメ

ZUMT 3410*: 546 mm TL, immature male, Nagasaki Pref., probably 1920's, I. Kaneko.
ZUMT 50989: 370 mm TL, female; **ZUMT 50992***: 417 mm TL, female, East China Sea, Sept. 1959.

ZUMT 63844*: 835 mm TL, immature male, Shimonoseki (下関), Yamaguchi Pref., June 1937, donated by Tokyo Fisheries Station at Chiba.

Orectolobidae オオセ科
Orectolobus Bonaparte, 1834 オオセ属
Orectolobus japonicus Regan, 1906 オオセ

ZUMT 20143*: 217 mm TL, Kagoshima Pref.
ZUMT 31970*: 195 mm TL, off Nagasaki, Nagasaki Pref., T. Kuraba (倉場富三郎), trawl.
ZUMT 63851*: 285 mm HL; **ZUMT 63852*** (cloth tag of 74): 396 mm TL, female; **ZUMT 63853***: 211 mm TL, female, locality unknown.

Orectolobiformes テンジクザメ目
Hemiscylliidae テンジクザメ科
Chiloscyllium Müller & Henle, 1837 テンジクザメ属
Chiloscyllium plagiosum (Anonymous, 1830) テンジクザメ

ZUMT 26898: 155.6 mm TL, Kagoshima Pref.
ZUMT 33733: 189.8 mm TL, probably Sendai (川内), Kagoshima Pref., T. Arii (有井徳之丞) at Sendai Kagoshima Prefectural Junior High School (鹿児島県川内中学校).
ZUMT 43431: 119.6 mm TL, Unshu (温州), Sekko Sho (浙江省), Shin (清国: presently China), Meiji Period, donated by K.K. Ho (何鴻熙).
Remarks: ZUMT 26898, 33733, and 43431 has cloth tag of "Shiroboshitenjiku (シロボシテンジク)"
ZUMT 50991*: 423 mm TL, East China Sea, Sept. 1959.
ZUMT 63854*: 634 mm TL, Shimonoseki, Yamaguchi Pref., June 1937, donated by Tokyo Fisheries Station at Chiba.

Rhincodontidae ジンベエザメ科
Rhincodon Smith, 1829
Rhincodon typus Smith, 1828

ZUMT 29792: vertebrae of posterior body only; **ZUMT 29793**: teeth, Numazu (沼津), Shizuoka Pref., 22 Dec. 1934.
ZUMT 36126: teeth only, locality unknown.

Lamniformes ネズミザメ目
Mitsukurinidae ミツクリザメ科
Mitsukurina Jordan, 1898 ミツクリザメ属
Mitsukurina owstoni Jordan, 1898 ミツクリザメ

ZUMT 23672*: 1102 mm TL, female, Tokyo Met., May 1931.
ZUMT 63859*: 280 mm HL, head only; **ZUMT 63860***: 276 mm HL, head only, locality unknown.

Odontaspididae オオワニザメ
Mustelus Linck, 1790
Mustelus griseus Pietschmann, 1908 シロワニ

ZUMT 63861*: 1080 mm TL, female, Shimonoseki, Yamaguchi Pref., June 1937, donated by Tokyo Fisheries Station at Chiba.

Pseudocarchariidae ミズワニ
Pseudocarcharias Cadenat, 1963 ミズワニ属
Pseudocarcharias kamoharai (Matsubara, 1936) ミズワニ

ZUMT 63855*: 975 mm TL, female, locality unknown.
Remarks: body slender.
ZUMT 63877*: 924 mm TL, mature male, off Hawaii (13°41' N 161°24' W), 20 Feb. 1997, donated by Mr. Kamogawa (鴨川氏).

Lamnidae ネズミザメ科
Isurus Rafinesque, 1810 アオザメ属
Isurus oxyrinchus Rafinesque, 1810 アオザメ

ZUMT 64180: eyeball only, locality unknown.

Isurus paucus Guitart Manday, 1966 バケアオザメ

ZUMT 63879*: 295 mm HL, head only.

Lamna Cuvier, 1816 ネズミザメ属
Lamna ditropis Hubbs & Follett, 1947 ネズミザメ

ZUMT 4775: 407.7 mm HL, female embryo; 372.3 mm HL, immature male embryo, Igaineura (飯貝根浦), Choshi (銚子), Chiba Pref., 30 Jan. 1904, purchased from Mr, Nakajima (中島氏) at Tokyo Fish Market.
ZUMT 63856*: 480 HL mm HL, locality unknown.

Lamna nasus (Bonnaterre, 1788) ニシネズミザメ

ZUMT ABE 59-5 and **10951** (two tags attached): jaws only, locality unknown.

Alopiidae オナガザメ科
Alopias Rafinesque, 1810 オナガザメ属
Alopias pelagicus Nakamura, 1935 ニタリ

ZUMT 32827: 290 mm TL, female, probably Tokyo Fish Market.
ZUMT 48908: 713 mm TL, female, locality unknown (probably from Southeast Asia), Apr. 1956, Z. Maekawa (前川善四郎) and T. Suzuki (鈴木貞次郎).

ZUMT 63863*: **ZUMT 63864***: **ZUMT 64100**: 800 mm TL, immature male; **ZUMT ABE 55-127***: 270 mm TL; **ZUMT ABE 55-128***: 210 mm TL; **ZUMT ABE 55-129***: 180 mm TL; **ZUMT ABE 55-91***: 450 mm TL, locality unknown.

***Alopias* sp.** オナガザメ属種不明

ZUMT 9832: vertebra only, locality unknown.

Carcharhiniformes メジロザメ目
Scyliorhinidae トラザメ科
Cephaloscyllium Gill, 1862 ナヌカザメ属
Cephaloscyllium umbratile Jordan & Fowler, 1903 ナヌカザメ

ZUMT 3483: 4 specimens, ca. 160 mm TL, Tokyo, local name Nanuka “ナヌカ”.
ZUMT 13324*: 444 mm TL, female, Akita Pref., S. Tanabe (田辺貞夫).
ZUMT 31520* (cloth tag of 247): 554 mm TL, female, Matsue, Shimane Pref., Feb. 1936, R. Yanai.

Scyliorhinus Blainville, 1816 トラザメ属
Scyliorhinus torazame (Tanaka, 1908) トラザメ

ZUMT 3444: 60 mm TL, 4 egg capsules, Tokyo Market.
ZUMT 4770: 60 mm TL, 4 egg capsules, Sagami Bay (相模湾), Jan. 1901, K. Aoki.
ZUMT 8591: 106 mm TL, 2 egg capsules, Tokyo Market, 20 Mar. 1919.
ZUMT ABE 10427: 382 mm TL, female, Kasumi (香住), Hyogo Pref.
ZUMT 25373: 253 mm TL, female, 200 Hiro (=ca. 360 m) south of Shima (志摩), 31 Mar. 1933, S. Yoshikane (吉兼宗一) at Aichi Prefectural Girl's Normal School (愛知県女子師範学校).
ZUMT 26677: 105 mm TL, egg capsule, Nagasaki, I. Kaneko.
ZUMT 44634: 60 mm TL, 2 egg capsules, locality unknown, I. Tomiyama.
ZUMT 51035: 409 mm TL, mature male, East China Sea, 16 Mar. 1960.
ZUMT 56907: 355 mm TL, female, East China Sea (34° 21.7’ N, 129° 56.7’ E), 121 m depth, off southeast of Tushima (対馬), No. 36 Tenyomaru, 10 July 1987, Y. Tominaga and M. Aizawa.
ZUMT 56936: 411 mm TL, mature male, East China Sea (34° 21.7’ N, 129° 56.7’ E), 119–122 m depth, off southeast of Tushima (対馬), 10 July 1987, No. 36 Tenyomaru, Y. Tominaga and M. Aizawa.
ZUMT 57671: 304 mm TL, immature male; **ZUMT 57672**: 459 mm TL, mature male; **ZUMT 57673**: 447 mm TL, mature male; **ZUMT 57674**: 252 mm TL, female; **ZUMT 57675**: 269 mm TL, female; **ZUMT 57676**: 368 mm TL, female, East China Sea (31° 30’ N, 128° 03’ E), 147 m depth, 14 May 1988, No. 36 Tenyomaru.
ZUMT 64099: locality unknown, 7 June 1919.

***Scyliorhinus* sp.** トラザメ属の一種

ZUMT 45952: egg capsule, probably Ariake Sea, probably I. Tomiyama.

Pentanchidae ヘラザメ科

Apristurus Garman, 1913　ヘラザメ属

Apristurus macrorhynchus (Tanaka, 1909)　ナガヘラザメ

ZUMT 2153: 436 mm TL, mature male, holotype, off Misaki (Sagami Bay), Kanagawa Pref., Japan, Apr. 1909, K. Aoki.

Remarks: ZUMT 2154, paratype, could not found.

ZUMT 3466: 60 mm TL, two egg capsules of ZUMT 3467.

ZUMT 3467: 660 mm TL, female, Tokyo Market, before 1913.

ZUMT 5913: 92 mm TL, female, Sea of Sagami (相模灘), K. Aoki, before 1915.

Apristurus platyrhynchus (Tanaka, 1909)　ヘラザメ

ZUMT 3424: 650 mm TL, female, Tokyo Market, before 1913.

ZUMT 64460: 50 mm TL, two egg capsules, Tokyo Market.

ZUMT 3464: 70 mm TL, egg capsule, Tokyo Market.

ZUMT 43406: 80 mm TL, egg capsule; **ZUMT 43408**: 90 mm TL, egg capsule; **ZUMT 64105**: 60 mm TL, egg capsule, locality unknown.

Bythaelurus Compagno, 1988

Bythaelurus dawsoni (Springer, 1971)　ミナミナガサキトラザメ

ZUMT 64101* (MAC 1226): 325 mm TL, immature male; **ZUMT 64102*** (MAC 1227): 240 mm TL, female, off East of Auckland Island, New Zealand (50°22'S, 167°46'E), 340–350 m, 16 Apr. 1983, M. Aizawa.

Galeus Rafinesque, 1810　ヤモリザメ属

Galeus eastmani (Jordan & Snyder, 1904)　ヤモリザメ

ZUMT 21103: 357 mm TL, mature male, locality unknown, collection of A. Owston.

ZUMT 22628: 390 mm TL, female, Tokyo Market.

ZUMT 64107: 340 mm TL, mature male, locality unknown.

Galeus longirostris Tachikawa & Taniuchi, 1987　ハシナガヤモリザメ

ZUMT 6395 (cloth tag of 701): 450 mm TL, female, Nagasaki Pref., Feb. 1915, I. Kaneko.

Remarks: Cloth tag of "Newly proposed Japanese name Togari-shirozame by Mr. Kaneko (トガリシロザメ　金子氏新称)".

Galeus nipponensis Nakaya, 1975　ニホンヤモリザメ

ZUMT 3465: 586 mm TL, female, Tokyo Market.

ZUMT 57780*: 587 mm TL, female, Joga-shima Island (城ヶ島), Miura Peninsular (三浦半島), Kanagawa Pref., 7 July 1988, A. Itoh.

Halaelurus Gill, 1862　ナガサキトラザメ属
Halaelurus buergeri (Müller & Henle, 1838)　ナガサキトラザメ

ZUMT 2340: 368 mm TL, mature male, Nagasaki, 9 July 1909, probably I. Kaneko.
ZUMT 6391: 439 mm TL, female; **ZUMT 6649**: 397 mm TL, female; **ZUMT 7311**: 450 mm TL, female; **ZUMT 7312**: 451 mm TL, female, Nagasaki, I. Kaneko.
ZUMT 6545: 426 mm TL, female; **ZUMT 6546**: 417 mm TL, female; **ZUMT 6547**: 440 mm TL, female; Nagasaki, before 1915, probably I. Kaneko.
ZUMT 6647: 425 mm TL, mature male, Nagasaki, I. Kaneko, dissected by Dr. White.
ZUMT 15114: 474 mm TL, female; **ZUMT 15229***: 485 mm TL, female, Okinawa, 1920's, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.
ZUMT 50454: 410 mm TL, immature male, Miuracho (三浦), Sasebo (佐世保), Nagasaki Pref., purchased at Sasebo Fish Market (佐世保魚市場), 30 Oct. 1953, I. Tomiyama.
ZUMT 50990: 402 mm TL, female, East China Sea, Sept 1959 to Feb. 1960.
ZUMT 51050: 390 mm TL, female, East China Sea, late 1959 to early 1960.
ZUMT 52377: 388 mm TL, mature male, East China Sea (KH 68-2, T 11), *M. S. Hakuho*, 6 May 1968.
ZUMT 64106: 446 mm TL, female, Nagasaki.

Proscylliidae タイワンザメ科
Proscyllium Hilgendorf, 1904　タイワンザメ属
Proscyllium habereri Hilgendorf, 1904　タイワンザメ

ZUMT 24102: 350 mm TL, female; **ZUMT 24103**: 365 mm TL, immature male; **ZUMT 24104**: 385 mm TL, immature male, Naya (納屋) [currently Nakamachi and Kinsei-cho (中町・金生町)], Kagoshima Pref.
Remarks: Local name "Toranokuri (トラノクリ)".
ZUMT 24242: 322 mm TL, female, Mimase (御畳瀬), Kochi, Kochi Pref., 15 Jan. 1930, T. Kamohara.
ZUMT 63869*: 584 mm TL, female; **ZUMT 63870***: 549 mm TL, female, Kansai (関西), purchased at Tokyo Market (東京市場).
Remarks: Probably collected at East China Sea.

Proscyllium venustum (Tanaka, 1912)　ヒョウザメ

ZUMT 14499*: 3 specimens, 569–580 mm TL, females, Ryukyu Archipelago, 24 Mar. 1925, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.
ZUMT 31594* (tag no. 26): 479 mm TL, female, Kagoshima?, received Mar. 1936, Y. Miyoshi (三好保徳) at Yawatahama Women's High School, Ehime Pref. (愛媛県八幡浜高等女学校).
Remarks: The locality is doubtful.
ZUMT 63868*: 544 mm TL, female, locality unknown.

Triakididae ドチザメ科
Hemitriakis Herre, 1923　エイラクブカ属
Hemitriakis complicofasciata Takahashi & Nakaya, 2004　イレズミエイラクブカ

ZUMT 40440: 2 specimens, 192 mm TL, female, 183 mm TL, immature male, Ryukyu Archipelago, 21 May 1921, S. Sakaguchi.
ZUMT 48913: 112 mm TL, immature male; **ZUMT 48914**: 112 mm TL, immature male, locality unknown (probably from Southeast Asia), Apr. 1956, Z. Maekawa (前川善四郎) and T. Suzuki (鈴木貞次郎).

ZUMT 64114: 212 mm TL, female (umbilical cord present); **ZUMT 64103**: 207 mm TL, female; **ZUMT 64104**: 195 mm TL, immature male, locality unknown.

Hemitriakis japanica (Müller & Henle, 1839) エイラクブカ

ZUMT 16045: immature male, probably Fukui Pref., 29 Jan. 1921, Fukui Prefectural Fisheries Research Station (福井県水産試験場), coll. by Teguri Net (手繰り).
ZUMT 44165: 384 mm TL, immature male, probably Uozu, Toyama Pref., Toyama Prefectural Fisheries Research Station Uozu (富山県魚津水産講習所).
ZUMT 47977*: 528 mm TL, immature male, Miuracho, Sasebo, Nagasaki Pref., Sasebo Fish Market, 30 Oct. 1953, I. Tomiyama.
ZUMT 55834*: 494 mm TL, female, Maizuru (舞鶴), Kyoto Pref., purchased at Maizuru Fish Market (舞鶴魚市場), 3 Nov. 1986.
ZUMT 64133* (cloth tag 64): 368 mm TL, immature male, Ise Bay (伊勢湾), Mie Pref.
ZUMT ABE 10764*: 1133 mm TL, immature male, Izu-oshima Island (伊豆大島), 29 June 1953.

Mustelus Linck, 1790 ホシザメ属
Mustelus griseus Pietschmann, 1908 シロザメ

ZUMT 2344: 292 mm TL, female, Nagasaki, 3 July 1909, I. Kaneko.
Remarks: Local name "Noso (ノーソー)".
ZUMT 6732: 416 mm TL, female, Tokyo.
ZUMT 23892: 318 mm TL, immature male, Taniyama (谷山), Kagoshima Pref.
Remarks: Local name "Nokuri (ノクリ)".
ZUMT 26344*: 648 mm TL, mature male, probably Tokyo Market.
ZUMT 45927: 334 mm TL, immature male; **ZUMT 45928**: 327 mm TL, immature male; **ZUMT 45937**: 325 mm TL, immature male; **ZUMT 45938**: 322 mm TL, immature male; **ZUMT 45939**: 333 mm TL, immature male, probably Ariake Sea, probably I. Tomiyama.
ZUMT 46647* (cloth tag 89): 601 mm TL, female, probably Namerikawa (滑川), Uozu, Toyama Pref., probably I. Tomiyama.
ZUMT 48136: 292 mm TL, immature male, Fukue (福江), Fukue-jima Island (福江島), Goto Islands (五島列島), 20, 21 or 25 May 1953, I. Tomiyama (冨山一郎).
ZUMT 50072: 358 mm TL, female, Tamanoura (玉之浦), Fukue-jima Island, Goto Islands, 14 Oct. 1953, I. Tomiyama.
ZUMT 50559*: 590 mm TL, mature male, East China Sea, 28 July 1959, Y. Tominaga.
ZUMT 63865* (cloth tag 88): 629 mm TL, female, probably Namerikawa, Uozu, Toyama Pref., probably I. Tomiyama.
ZUMT 64108: 325 mm TL, immature male, locality unknown.

Mustelus manazo Bleeker, 1855 ホシザメ

ZUMT 4789: 7 specimens, 166 mm TL, female; 279 mm TL, immature male; 181 mm TL, immature male; 182 mm TL, immature male; 172 mm TL, immature male; 229 mm TL, immature male; 279 mm TL, female, Misaki, Soshu (相州: presently Kanagawa Pref.).
ZUMT 6730: 332 mm TL, female; **ZUMT 6731**: 340, immature male, Tokyo Market.
ZUMT 11534*: 604 mm TL, immature male, 20 hiro off Toyoma (豊間), Fukushima Pref., 16 Nov. 1922, T. Nakahira (中平貞次郎)(Fukushima Prefectural Fisheries Station at Onahama).
ZUMT 13095: 302 mm TL, female, Shirahamazaki (白浜崎), Miyako Bay (宮古湾), Iwate Pref., K. Tanabe.

Remarks: Local name “Kozame (コザメ)”.

ZUMT 23416 (cloth tag 75): 388 mm TL, immature male, Owase (尾鷲), Mie Pref., K. Nakahara (中原鋼作) at Owase Women's High School, Mie Pref. (三重県尾鷲高等女学校).

ZUMT 23891: 400 mm TL, female, Taniyama, Kagoshima Pref.

Remarks: Local name “Nokuri (ノクリ)”.

ZUMT 23913: 381 mm TL, female, Naya, Kagoshima Pref.

Remarks: Local name “Manokuri (マノクリ)”.

ZUMT 26937: 155 mm TL, female, Kagoshima Pref., 31 Aug. 1934.

ZUMT 31300 (cloth tag 45): 372 mm TL, immature male; **ZUMT 31328*** (cloth tag 116): 641 mm TL, female, separated to head and trunk, Matsue, R. Yanai at Matsue High School.

ZUMT 32824: 280 mm TL, female; **ZUMT 32826**: 27 specimens, ca. 95 mm TL, probably Tokyo Market.

ZUMT 36423: 312 mm TL, immature male, Hayama, Kanagawa Pref., Aug. 1936, S. Inuo.

ZUMT 40419: 176 mm TL, female; **ZUMT 40420**: 168 mm TL, female, Ryukyu Archipelago, 20 May 1921, S. Sakaguchi.

ZUMT 45926: 321 mm TL, female, probably Ariake Sea, probably I. Tomiyama.

ZUMT 47976*: 522 mm TL, immature male, Miuracho, Sasebo, Nagasaki Pref., Sasebo Fish Market, 30 Oct. 1953, I. Tomiyama.

ZUMT 49904: 330 mm TL, immature male; **ZUMT 49923**: 231 mm TL, female (placental scar); **ZUMT 49959**: 276 mm TL, immature male, Fukue, Fukue-jima Island, Goto Islands, 10 June 1953, I. Tomiyama.

ZUMT 51290*: 511 mm TL, female, East China Sea, 24 Dec. 1959, Y. Tominaga, collected by No. 51 and 52 Tenyomaru.

ZUMT 63864* (cloth tag 181): 489 mm TL, immature male; **ZUMT 63866*** (cloth tag 181): 503 mm TL, female, Tsugaru Straits (津軽海峡), Feb. 1928.

ZUMT 64113: 350 mm TL, immature male; **ZUMT 64125**: 180 mm TL, immature male embryo, locality unknown.

ZUMT 64122: 364 mm TL, Fukuoka, 27 Aug. 1931.

Remarks: Local name “Modama (モダマ)”.

ZUMT 13226* (cloth tag 14): 460 mm TL, immature male, Samemura Beach (鮫村海岸), Aomori Pref., 23 Oct. 1923, K. Tanabe.

Remarks: Local name “Kanokozame (カノコザメ)”.

ZUMT 19448–19950* (separated to head, trunk, and tail): 830 mm TL, female; **ZUMT 19451–19453*** (separated to head, trunk, and tail): 840 mm TL, female, locality unknown.

ZUMT ABE 10428* (cloth tag 19): 560 mm TL, female, Kasumi, Hyogo Pref.

Triakis Müller & Henle, 1838 ドチザメ属

Triakis scyllium Müller & Henle, 1839 ドチザメ

ZUMT 3091: 2 specimens, 170 mm TL, female, Nagasaki Pref., I. Kaneko.

Remarks: Local name “Tessenbuka (テッセンブカ)”.

ZUMT 5077: 186 mm TL, immature male, Omura Bay (大村湾), Nagasaki Pref., T. Chiba (千葉継三郎).

ZUMT 18098* 497 mm TL, immature male, Ariake Sea, Fukuoka, Fukuoka Prefectural Fisheries Research Station.

Remarks: Local name “Torabuka (トラブカ)”.

ZUMT 20442: 243 mm TL, female; **ZUMT 20443**: 235 mm TL, female; **ZUMT 20444**: 234 mm TL, immature male; **ZUMT 20445**: 225 mm TL, immature male; **ZUMT 20994**: 319 mm TL, female, Tokyo Market.

ZUMT 23671: 421 mm TL, female, Misaki, Kanagawa Pref., May 1931.

ZUMT 25577* 551mm TL, immature male; **ZUMT 25579*** 426 mm TL, female; **ZUMT 25581**: 450 mm TL, female, Onahama, Fukuoka Pref., 20 Apr. 1933, H. Tsunoda, Fukushima Prefectural Onahama Elementary School (福島県立小名濱小学校).

Remarks: Local name “Doji or Dojibo (ドヂ、ドヂボ)”.

ZUMT 27068: 205 mm TL, immature male, Yamaguchi Pref., 7 June 1934, S. Nagatomi (永富三治) at Yamaguchi Prefectural Sue Elementary School (山口県須恵小学校).
ZUMT 31508* (cloth tag 161): 345 mm TL, Matsue, Shimane Pref., Nov. 1935, T. Yanai, Matsue High School.
ZUMT 45923: 250 mm TL, immature male; **ZUMT 45924**: 222 mm TL, immature male; **ZUMT 45925**: 236 mm TL, immature male; **ZUMT 45940**: 235 mm TL, female, probably Ariake Sea, probably I. Tomiyama.
ZUMT 47825* 608 mm TL, immature male, Manazuru (真鶴), Kanagawa Pref., 1952, coll. by set net.
ZUMT 49157: 221 mm TL, female, Misaki, Kanagawa Pref., 1956, I. Tomiyama.
ZUMT 51248* 497mm TL, female, East China Sea, 24 Dec. 1959, Y. Tominaga, collected by No. 51 and 52 Tenyomaru.
ZUMT 63108: 281 mm TL, female; **ZUMT 63867*** 590 mm TL, immature male; **ZUMT 64123**: 6 embryo specimens (4 females and 2 immature males), ca. 190 mm TL; **ZUMT 64142**: 5 embryo specimens, ca. 175 mm TL, locality unknown.

Carcharhinidae メジロザメ科
Carcharhinus Blainville, 1816 メジロザメ属
Carcharhinus brevipinna (Valenciennes, 1839) ハナザメ

ZUMT 26871: 247 mm TL, immature male embryo, Kagoshima.
ZUMT 63871*: 653 mm TL, female, locality unknown, 4 Oct. 1930.
ZUMT 63873*: 635 mm TL, immature male; **ZUMT 63874***: 544 mm TL, female; **ZUMT 63875***: 595 mm TL, female; **ZUMT 63876***: 642 mm TL, immature male, locality unknown.

Carcharhinus falciformis (Bibron, 1839) クロトガリザメ

ZUMT 63878*: 981 mm TL, female, off Hawaiian Islands (13° 41' N, 161° 24' W), 20 Feb. 1987, donated by Mr. Kamogawa to K. Sakamoto.

Carcharhinus galapagensis (Snodgrass & Heller, 1905) ガラパゴスザメ

ZUMT 64458*: 727 mm TL, immature male embryo, Ogasawara Islands, Mar. 1913, S. Fujimori (藤森三郎).

Carcharhinus leucas (Valenciennes, 1839) オオメジロザメ

ZUMT 47030: 331 mm TL, female embryo, probably Kochi Pref.
ZUMT 48385: 161 mm TL, immature male embryo; **ZUMT 48386**: 168 mm TL, female embryo; **ZUMT 48387**: 160 mm TL, female embryo; **ZUMT 48388**: 151 mm TL, immature male embryo; **ZUMT 48389**: 152 mm TL, immature male embryo; **ZUMT 48390**: 75 mm TL, female embryo; **ZUMT 48391**: 75 mm TL, immature male embryo; **ZUMT 48392**: 71 mm TL, female embryo; **ZUMT 48393**: 66 mm TL, immature male embryo; **ZUMT 48394**: 62 mm TL, female embryo; **ZUMT 48395**: 64 mm TL, female embryo; **ZUMT 48396**: 60 mm TL, female embryo; **ZUMT 48397**: 61 mm TL, female embryo, off south Hawaiian Islands, 30 Aug. 1955, M. Shinohara (篠原 勝) boarded on training vessel of Toyama Prefectural Fisheries Highschool (富山縣立水産高等学校練習船).
ZUMT 49064: 395 mm TL, immature male embryo; **ZUMT 49065**: 405 mm TL, female embryo, locality unknown, 25 Feb. 1955, M. Shinohara boarded on No. 11 Fukuyoshi-maru (第 11 福吉丸).
ZUMT 63872*: 545 mm TL, female embryo, locality unknown.

Carcharhinus longimanus (Poey, 1861) ヨゴレ

ZUMT 48382*: 614 mm TL, female; **ZUMT 48383***: 816 mm TL, female, off south of Hawaiian Islands, 30 Aug. 1955, M. Shinohara boarded on training vessel of Toyama Prefectural Fisheries Highschool.
ZUMT 48597*: 590 mm TL, immature male, Indian Ocean, 25 Mar. 1956, Z. Maekawa (前川善四郎) and T. Suzuki (鈴木貞次郎).
ZUMT 49063*: 432 mm TL, immature male, locality unknown, 25 Feb. 1955, M. Shinohara boarded on No. 11 Fukuyoshi-maru.

Carcharhinus melanopterus (Quoy & Gaimard, 1824) ツマグロ

ZUMT 42365*: 705 mm TL, female, Basilan Island, Philippines, 1926, U. Yamamura (山村楳次郎).
ZUMT ABE 2810*: 610 mm TL, immature male; **ZUMT ABE 2811***: 494 mm TL, immature male; **ZUMT ABE 2860***: 541 mm TL, immature male; **ZUMT ABE 3850***: 507 mm TL, female, Palau, 1936–1937, T. Abe.

Carcharhinus plumbeus (Nardo, 1827) メジロザメ

ZUMT 7217: 449 mm TL, female embryo, Nagasaki, before 1929, I. Kaneko (金子一狼), local name “Yaheji (ヤヘジ)”.
ZUMT 64128: 362 mm TL, female embryo, locality unknown.

Carcharhinus tjutjot (Bleeker, 1852) スミツキザメ

ZUMT 14982*: 466 mm TL, female, near Tainan (台南), Taiwan.

***Carcharhinus* sp.** メジロザメ属の一種

ZUMT 20334: 142 mm TL, male embryo, Kishu-Tanabe (紀州田辺), Sept. 1921, N. Ui (宇井縫蔵).
ZUMT 31509 (cloth tag 254): 286 mm HL, head only, Matsue, Shimane Pref., Nov., R. Yanai at Matsue High School.
ZUMT 42366: 501 mm TL, female embryo, Basilan Island, Philippines, 1926, U. Yamamura.

Galeocerdo Müller & Henle, 1837 イタチザメ属
Galeocerdo cuvier (Péron & Lesueur, 1822) イタチザメ

ZUMT 63880*: 278 mm HL, locality unknown.

Loxodon Müller & Henle, 1838
Loxodon macrorhinus Müller & Henle, 1839

ZUMT 64127: 363 mm TL, immature male, locality unknown.

Prionace Cantor, 1849 ヨシキリザメ属
Prionace glauca (Linnaeus, 1758) ヨシキリザメ

ZUMT 9831: vertebra, locality unknown.
ZUMT 9867: 252 mm TL, male embryo, Japan, purchased from Kono (河野), Yamaguchi Pref., collected by Y. Yamatori (山鳥吉五郎) at 兵庫県御影師範学校 (Hyogo Prefectural Mikage High School).
ZUMT 20985: 412 mm TL, female embryo; **ZUMT 20986**: 419 mm TL, male embryo; **ZUMT 20993**: 414 mm TL, female embryo, Tokyo Market.
ZUMT 23411: 326 mm TL, female embryo, Owase (尾鷲), Mie Pref., K. Nakahara (中原鋼作) at Owase Women's High School, Mie Pref. (三重県尾鷲高等女学校).
ZUMT 48911: 340 mm TL, female embryo; **ZUMT 48912**: 322 mm TL, male embryo, locality unknown, Apr. 1956, Z. Maekawa and T. Suzuki.
ZUMT 49090: 223 mm TL, male embryo; **ZUMT 49091**: 217 mm TL, female embryo; **ZUMT 49092**: 215 mm TL, male embryo, Fordata Island (written as Vordate Island), Tanimbar Islands, 31 Nov. 1955, Z. Maekawa and T. Suzuki.
ZUMT 64198: 365 mm TL, female, deformity of single eye at middle of body (Fig. 1), locality unknown.

Rhizoprionodon Whitley, 1929 ヒラガシラ属
Rhizoprionodon acutus (Rüppell, 1837) ヒラガシラ

ZUMT 41635: 133 mm TL, immature male, Nagasaki, May 1918, I. Kaneko.
ZUMT 50557: 371 mm TL, immature male; **ZUMT 50560***: 591 mm TL, immature male, East China Sea, 28 July 1959, Y. Tominaga (富永義昭).
ZUMT 13988*: 540 mm TL, female, Okinawa Island, 1920's, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.

Scoliodon Müller & Henle, 1837 トガリアンコウザメ属
Scoliodon laticaudus Müller & Henle, 1838 トガリアンコウザメ

ZUMT 15159: 372 mm TL, immature male; **ZUMT 15166**: 386 mm TL, immature male, probably Okinawa-jima Island, 1920's, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.
ZUMT 54556: 322 mm TL, female; **ZUMT 54557**: 323 mm TL, female, Norin-kaiku 352 (農林 352 区), East China Sea (34° 15'N, 122° 15'E), 25 m depth, 12 Oct. 1984, F/V No. 8 Ten-yo-maru (第 8 天洋丸), M. Aizawa.

Sphyrnidae シュモクザメ科
Sphyrna Rafinesque, 1810 シュモクザメ属
Sphyrna lewini (Griffith & Smith, 1834) アカシュモクザメ

ZUMT 19392*: 487 mm TL, immature male, Hachijo-jima Island (八丈島), probably 1929, Y. Oshizu (押津義雄).
ZUMT 40374: 405 mm TL, immature male, probably Kagoshima, received in June 1938, K. Ogawa (小川一男) at 鹿児島女子師範学校 (Women's School, Kagoshima Prefecture).
ZUMT 45929*: 504 mm TL, female, probably Ariake Sea, probably I. Tomiyama.
ZUMT 50558*: 477 mm TL, female, East China Sea, 28 July 1959, Y. Tominaga.

Sphyrna zygaena (Linnaeus, 1758) シロシュモクザメ

ZUMT 57784*: 616 mm TL, female, off Inamuragasaki (稲村ケ崎沖), Kanagawa Pref., 3 Aug. 1988, A. Itoh.

Chlamydoselachiformes ラブカ目
Chlamydoselachidae ラブカ科
Chlamydoselachus Garman, 1884 ラブカ属
Chlamydoselachus anguineus Garman, 1884 ラブカ

ZUMT 32829: 144 mm TL, immature male; **ZUMT 32830**: 137 mm TL, female, probably Tokyo market.
ZUMT 43396: 188 mm TL, female, **ZUMT 43397**: 132 mm TL, female, Tokyo Market, provided by donated from Yamakoshi Kosakusyo (山越工作所).
ZUMT 62770: 4 specimens (york-sac cut off), 77.6 mm TL, female embryo, 95.3 mm TL, immature male embryo, 128.9 mm TL, female embryo, 115.1 mm TL, immature male embryo, probably Misaki, Kanagawa Pref., 1912, donated by K. Aoki (青木熊吉) to I. Iijima (飯島 魁).
ZUMT 63847*: 850 mm TL, immature male; **ZUMT 63848***: tail only (463 mm); **ZUMT 63857***: 204 mm HL, head only; **ZUMT 63858***: 185 mm HL, head only, locality unknown.

Hexanchiformes カグラザメ目
Hexanchidae カグラザメ科
Heptranchias Rafinesque, 1810 エドアブラザメ属
Heptranchias perlo (Bonnaterre, 1788) エドアブラザメ

ZUMT 50439*: 647 mm TL, female; **ZUMT 50440***: 603 mm TL, female, Sasebo Fish Market (佐世保魚市場), Miuracho (三浦町), Sasebo (佐世保), Nagasaki Pref., 30 Oct. 1953, I. Tomiyama.
ZUMT 63849*: 1080 mm TL, female; **ZUMT 63850***: 952 mm TL, female, locality unknown.

Hexanchus Rafinesque 1810 カグラザメ属
Hexanchus griseus (Bonnaterre, 1788) カグラザメ

ZUMT 4711: 264 mm TL, female, Tokyo Market,

Notorynchidae エビスザメ科
Notorynchus Ayres, 1855
Notorynchus cepedianus (Péron, 1807) エビスザメ

ZUMT 46082: 412 mm TL, female, probably Tosa (Kochi Pref.), preserved with ZUMT 24590.
ZUMT 63900: 541 mm TL, female, locality unknown.

Squaliformes ツノザメ目
Echinorhinidae キクザメ科
Echinorhinus Blainville, 1816 キクザメ属
Echinorhinus cookei Pietschmann, 1928 コギクザメ

ZUMT 48355: jaws and skin only, Tokyo Market, 4 Nov. 1954, T. Abe.

Etmopteridae カラスザメ

Centroscyllium Müller & Henle, 1841 カスミザメ属

Centroscyllium ritteri Jordan & Fowler, 1903 カスミザメ

ZUMT 21101 (O.C. 6215, Owston Collection): 440 mm TL, female, Misaki, Kanagawa Pref., 28 Dec. 1900.

ZUMT 31669: 406 mm TL, female, Kuji (久慈), Ibaraki Pref., June 1935, K. Tashiro (田代清友), local name "Fujikujira (フジクジラ)"

Etmopterus Rafinesque, 1810 カラスザメ属

Etmopterus brachyurus Smith & Radcliffe, 1912 ホソフジクジラ

ZUMT 57775: 401 mm TL, female; **ZUMT 57776**: 371 mm TL, female, near Okinoayama (沖ノ山周辺), off Joga-shima Island (城ヶ島沖), 200–400 m depth, 8 Sept. 1988, A. Itoh, bottom long line (底延縄).

ZUMT 64145: 361 mm TL, mature male; **ZUMT 64146**: 318 mm TL, female; **ZUMT 64147**: 340 mm TL, mature male; **ZUMT 64148**: 368 mm TL, mature male, Izu.

Etmopterus lucifer Jordan & Snyder, 1902 フジクジラ

ZUMT 39265: 272 mm TL, immature male, Hirota (広田村), Kesen-gun (気仙郡), Iwate Pref., donated by R. Chiba (千葉蘭児).

Etmopterus molleri (Whitley, 1939) ヒレタカフジクジラ

ZUMT 2718: 4 specimens, 97–110 mm TL (1 male and 3 females), Nagasaki, Apr. 1910, Nagasaki Prefecture Normal School (長崎師範学校).

Remarks: ZUMT 2717 which the same species was dismissed for corruption.

ZUMT 4487: 254 mm TL, immature male, Tokyo Market.

ZUMT 13858: 267 mm TL, female, Kesen (気仙), Iwate Pref., 7 Jan. 1926, G. Toba (鳥羽源蔵) at Iwate Prefecture Normal School (岩手師範学校).

ZUMT 34645: 246 mm TL, female; **ZUMT 34646**: 178 mm TL, female; **ZUMT 34647**: 175 mm TL, female, Kochi Pref., T. Kamohara at Kochi High School.

ZUMT 55165: 201 mm TL, immature male; **ZUMT 55166**: 181 mm TL, female; **ZUMT 55167**: 186 mm TL, immature male; **ZUMT 55168**: 167 mm TL, female; **ZUMT 55169**: 192 mm TL, female; **ZUMT 55170**: 169 mm TL, female; **ZUMT 55171**: 159 mm TL, female; **ZUMT 55172**: 162 mm TL, female; **ZUMT 55173**: 190 mm TL, mature male; **ZUMT 55174**: 132 mm TL, female; **ZUMT 55175**: 187 mm TL, mature male; **ZUMT 55176**: 180 mm TL, female; **ZUMT 55177**: 171 mm TL, female, off Kunozan (久能山沖), Suruga Bay (駿河湾), 9 Nov. 1983, M. Aizawa.

ZUMT 64118: 286 mm TL, mature male, Misaki, Kanagawa Pref., H. Oshima (大島　広).

Remarks: Separated from ZUMT 4766 *Etmopterus pusillus* (Lowe, 1839).

Etmopterus pusillus (Lowe, 1839) カラスザメ

ZUMT 3162 [sketch no. 56 (写生第五十六号)]: 158 mm TL, female, Misaki, Kanagawa Pref., H. Oshima.

Remarks: Present specimen illustrated and described by Tanaka (1911).

ZUMT 4766: 231 mm TL, mature male; 186 mm TL; 182 mm TL, female; 219 mm TL, immature male; 184 mm TL, immature male; 188 mm TL, immature male; 242 mm TL, female; 175 mm TL, female; 182 mm TL, immature male; 179 mm TL, female, Misaki, Kanagawa Pref., H. Oshima.

ZUMT 6877: 271 mm TL, female, Tokyo.

ZUMT 11347: 398 mm TL, female, 100 hiro (ca. 180 m) off Horobetsu (幌別沖), 13 Nov. 1922, M. Tsuda (津田美津彦) at Hokkaido Fishery Station Muroran Branch (北海道水産試験場室蘭支場), cod longline (鱈延縄), local name "Budo-zame (ブドウザメ)" or "Neko-zame (ネコザメ)".

ZUMT 13860: 365 mm TL, mature male, Kesen, Iwate Pref., 7 Jan. 1926, G. Toba at Iwate Prefecture Normal School.

ZUMT 53480: 162 mm TL, female; **ZUMT 53482**: 166 mm TL, mature male, locality unknown, T. Sato (佐藤寅夫).

Remarks: The specimen supposedly collected from Ishigaki-jima Island (based on the ZUMT specimen ledger) was included in a series with specimens of *Sardinops melanostictus* (Temminck & Schlegel, 1846) (Dorosomatidae) (ZUMT 53211) and *Pempheris japonica* Döderlein, 1883 (Pempheridae) (ZUMT 53349). Therefore the locality is doubtful.

ZUMT 57774: 195 mm TL, female, off Joga-shima Island, 7 July 1988, A. Itoh.

ZUMT 57777: 310 mm TL, immature male; **ZUMT 57778**: 242 mm TL, immature male, near Okinoayama, off Joga-shima Island, 200–400 m depth, 8 Sept. 1988, A. Itoh, bottom long line.

ZUMT 64150: 151 mm TL, female; **ZUMT 64151**: 140 mm TL, immature male, locality unknown, 20 July 1908.

Etmopterus unicolor (Engelhardt, 1912) ニセカラスザメ

ZUMT 14384: 142 mm TL, female, Kuji, Ibaraki Pref.

ZUMT 40270: 163 mm TL, female, Choshi Fish Market (銚子魚市場), Choshi, Chiba Pref., 20 Nov. 1934, Y. Haneda (羽根田彌太).

ZUMT 64143: 142 mm TL, female; **ZUMT 64144**: 231 mm TL, female; **ZUMT 64184**: 477 mm TL, mature male, locality unknown.

Somniosidae オンデンザメ科

Centroscymnus Barbosa du Bocage & de Brito Capello, 1864 ユメザメ属

Centroscymnus owstonii Garman, 1906 ユメザメ

ZUMT 4749: 276 mm TL, immature male, Tokyo.

ZUMT 64185: 540 mm TL, female; **ZUMT 64186**: 452 mm TL, male; **ZUMT 64187**: 499 mm TL, female, locality unknown.

Scymnodon Barbosa du Bocage & de Brito Capello, 1864 ビロウドザメ属

Scymnodon ichiharai Yano & Tanaka, 1984 イチハラビロウドザメ

ZUMT ABE 57-3*: 735 mm TL, male; **ZUMT ABE 57-4***: 676 mm TL, male, locality unknown.

Somniosus Lesueur, 1818 オンデンザメ属

Somniosus* (*Rhinoscymnus*) *longus (Tanaka, 1912) カエルザメ

ZUMT 63881*: 1330 mm TL, head, fins, and vertebrae only, locality unknown,

Oxynotidae オロシザメ科
Oxynotus Rafinesque, 1810 オロシザメ属
Oxynotus bruniensis (Ogilby, 1893) ミナミオロシザメ

ZUMT 64193: 382 mm TL, New Zealand, M. Aizawa.

Dalatiidae ヨロイザメ科
Dalatias Rafinesque, 1810 ヨロイザメ属
Dalatias licha (Bonnaterre, 1788) ヨロイザメ

ZUMT 21102: 379 mm TL, immature male, off 400 hiro (ca. 731 m) of Atami (熱海沖), Shizuoka Pref., 24 June 1906, K. Aoki.
ZUMT 63892: 443 mm TL, female, locality unknown.

Centrophoridae アイザメ科
Centrophorus Müller & Henle, 1837 アイザメ属
Centrophorus atromarginatus Garman, 1913 アイザメ

ZUMT 2764*: 662 mm TL, female, Nagasaki, 1910's, Nagasaki Prefecture Normal School.
ZUMT 26346: 436 mm TL, immature male, probably Tokyo Market.

Centrophorus squamosus (Bonnaterre, 1788) モミジザメ

ZUMT 12349*: 1420 mm TL, female, body skin and head only, holotype of *Lepidorhinus kinbei* Tanaka, 1918 "Kinbezame (キンベエザメ)", Tokyo Market (Sagami Bay?).
Remarks: *Lepidorhinus kinbei* Tanaka, 1918 is currently recognized as a junior synonym of *Centrophorus squamosus* (Bonnaterre, 1788).
ZUMT 46645: 445 mm TL, female, Tokyo Market, S. Tanaka.
ZUMT 64182: 416 mm TL, immature male; **ZUMT 64183**: 432 mm TL, immature male, locality unknown.

Centrophorus tessellatus Garman, 1906 ゲンロクザメ

ZUMT 46634 [sketch no. 217 (写生第 217 号)]: 500 mm TL, immature male, Tokyo Market, 7 Mar. 1911, S. Tanaka.
Remarks: A cloth tag of "A species of shark, Shiro-aizame" (サメ一種 シロアイザメ).
ZUMT 46635: 549 mm TL, immature male, Tokyo Market, 7 Mar. 1911, S. Tanaka.
Remarks: A cloth tag of "Aizame, 44" (アイザメ、44).
ZUMT 46644: 438 mm TL, female, S. Tanaka, donated by Yamagoe Works (山越工作所).
Remarks: A cloth tag of "one of ten, Asagi (Aizame)" [十個のウチ、アサギ (アイザメ)].

Squalidae ツノザメ科
Cirrhigaleus Tanaka, 1912 ヒゲツノザメ属
Cirrhigaleus barbifer Tanaka, 1912 ヒゲツノザメ

ZUMT ABE 10172: 230 mm TL, Misaki, Kanagawa Pref., 16 Feb. 1955.

Squalus Linnaeus, 1758　ツノザメ属
Squalus brevirostris Tanaka, 1917　ツマリツノザメ

ZUMT 3715: 415 mm TL, immature male, Shimonoseki, Yamaguchi Pref. (purchased at Tokyo Market), 17 Dec. 1913.
Remarks: Labelled as “Tokyo Market Bakan (東京市場馬関)”. Bakan is an old name of Shimonoseki (下関).
ZUMT 6047*: 495 mm TL, mature male, paratype of *Squalus brevirostris* Tanaka, 1917 “Tsumari-aizame (ツマリアイザメ)”; **ZUMT 6048***: 568 mm TL, mature male, paratype of *S. brevirostris*, Atsuta (熱田), Nagoya (名古屋), Aichi Pref., 1 May 1915.
ZUMT 7630*: 422 mm TL, mature male, paratype of *S. brevirostris*, Shimonoseki, Yamaguchi Pref. (purchased at Tokyo Market).
Remarks: Labelled as “Tokyo Market Bakan”.
ZUMT 64154: 217 mm TL, female (umbilical cord present), locality unknown.

Squalus japonicus Ishikawa, 1908トガリツノザメ

ZUMT 7308: 375 mm TL, female, Nagasaki, April, probably 1920’s, I. Kaneko.
ZUMT 13996: 329 mm TL, female, probably Okinawa, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.

Squalus mitsukurii Jordan & Snyder, 1903　フトツノザメ

ZUMT 6181: 461 mm TL, female, Hachinohe (八戸), Aomori Pref., Aomori Prefectural Hachinohe Junior High School.
ZUMT 10790: 475 mm TL, immature male, Kushiro (釧路), Hokkaido, M. Akiyoshi (秋谷六三) at Kushiro Fishery Station (釧路水産試験場).
ZUMT 14394: 405 mm TL, immature male, Kuji, Ibaraki Pref.
ZUMT 15107: 277 mm TL, female, probably Okinawa, S. Sakaguchi at Okinawa Prefectural No. 1 Junior High School.
ZUMT 15970: 491 mm TL, immature male, Fukui Pref., Fukui Prefectural Fisheries Research Station.
ZUMT 31217: 368 mm TL, immature male, Matsue, R. Yanai at Matsue High School.
ZUMT 31586: 440 mm TL, mature male, Kagoshima?, received Mar. 1936, Y. Miyoshi at Yawatahama Women's High School, Ehime Pref.
ZUMT 32825: 281 mm TL, immature male (umbilical cord mark present), Tokyo Market?.
ZUMT 46636: 470 mm TL, female, Tokyo Market, 7 Mar. 1911, S. Tanaka.
ZUMT 46646: 506 mm TL, female, Tokyo Market, S. Tanaka.
ZUMT 63888 (cloth tag G8): 650 mm TL, female; **ZUMT 63889** (cloth tag No. 7): 309 mm TL, female; **ZUMT 64155**: 321 mm TL, immature male (umbilical cord present); **ZUMT 64188**: 309 mm TL, immature male (umbilical cord mark present), locality unknown.

Squalus suckleyi (Girard, 1854)　アブラツノザメ

ZUMT 3231: 245 mm TL, immature male, Nagasaki, 3 Dec. 1912, I. Kaneko.
ZUMT 4684: 259 mm TL, immature male, paratype of *Squalus wakiyae* Tanaka, 1918; **ZUMT 4685**: 260 mm TL, immature male, paratype of *S. wakiyae*, Tokyo Market, Tokyo, Japan.
ZUMT 6182: 450 mm TL, female, Hachinohe, Aomori Pref., Aomori Prefectural Hachinohe Junior High School.
ZUMT 8502: 676 mm TL, female, Otaru City (Takashima-Cho written as “後志高島村”), Hokkaido.

ZUMT 10536: 108 mm TL, female, probably Fukui Pref., K. Toida (戸井田　蔵) at Fukui Prefectural Onahama Fisheries School (福井県立小浜水産学校).

ZUMT 10789: 217 mm TL, female (umbilical cord present), Kushiro (釧路), Hokkaido, M. Akiyoshi (秋谷六三) at Kushiro Fishery Station (釧路水産試験場).

ZUMT 11299: 283 mm TL, immature male, Hokkaido, M. Tsuda (津田美津彦) at Hokkaido Fishery Station Muroran Branch (北海道水産試験場室蘭支場).

ZUMT 13743: 501 mm TL, female, Muroran, Hokkaido, J. Katsuki (勝木重太郎) at Hokkaido Fishery Station Muroran Branch.

ZUMT 13859: 288 mm TL, female, Kesen, Iwate Pref., 7 Jan. 1926, G. Toba at Iwate Prefecture Normal School.

ZUMT 26345: 407 mm TL, immature male, probably Tokyo Market.

ZUMT 31578: 275 mm TL, mature male, Matsue, Shimane Pref., R. Yanai at Matsue High School.

ZUMT 36806: 181 mm TL, female (umbilical cord present); **ZUMT 36807**: 178 mm TL, female (umbilical cord present); **ZUMT 36825**: 180 mm TL, female (umbilical cord present); **ZUMT 36836**: 177 mm TL, female (umbilical cord present), Rakuma (楽磨), Karafuto (樺太) currently Sakhalin, 9 Aug. 1936, J. Ishida (石田寿老).

ZUMT 41539: 250 mm TL, immature male, Uozu, Toyama Pref., June 1932, I. Tomiyama.

ZUMT 45801: 242 mm TL, immature male, Uozu, Toyama Pref., 1921.

ZUMT 46116: 250 mm TL, immature male; **ZUMT 46117**: 223 mm TL, immature male; **ZUMT 46123**: 225 mm TL, immature male; **ZUMT 46124**: 261 mm TL, immature male; **ZUMT 46150**: 249 mm TL, immature male; **ZUMT 46151**: 243 mm TL, immature male; **ZUMT 46670**: 231 mm TL, immature male; **ZUMT 46671**: 223 mm TL, female (umbilical cord present); **ZUMT 46672**: 206 mm TL, immature male; **ZUMT 46673**: 235 mm TL, female; **ZUMT 46674**: 244 mm TL, immature male; **ZUMT 46675**: 214 mm TL, immature male, probably Namerikawa, Uozu, Toyama Pref., probably I. Tomiyama.

ZUMT 51174: 511 mm TL, immature male, East China Sea.

ZUMT 51256: 144 mm TL, female (umbilical cord present), East China Sea, landed at Fukuoka Fish Market, 24 Dec. 1959, Y. Tominaga, collected by No. 51 and 52 Tenyomaru.

ZUMT 64149: 155 mm TL, immature male, locality unknown.

***Squalus* sp.**　ツノザメ属の一種

ZUMT 1360: 175 mm TL, female (umbilical cord present), off 80 hiro (ca.150 m) of Atami, Shizuoka Pref., 22 June 1906, K. Aoki.

ZUMT 1526: 145 mm TL, immature male, twin heads and dorsal fins deformity (Fig. 2), Sambomdake (3本ダケ), Kouzu-jima Island (神津島), Izu Islands, 15 June 1900, K. Aoki.

ZUMT 21114: 185 mm TL, female (umbilical cord present), off Nagasaki, Nagasaki Pref., T. Kuraba, trawl.

ZUMT 64124: ca. 205 mm, two females and three immature males, probably Nagasaki.

ZUMT 64141: 140–211 mm, four embryos, Nagasaki, I. Kaneko, 1910's.

ZUMT 43407: 87 mm TL, female, half body; **ZUMT 64153**: 161 mm TL, immature male; **ZUMT 64156**: 129 mm TL, female (umbilical cord present), locality unknown.

Squatiniformes　カスザメ目

Squatinidae カスザメ科

Squatina Duméril, 1805　カスザメ属

Squatina formosa Shen & Ting, 1972　タイワンコロザメ

ZUMT 63895: 351 mm TL, female, locality unknown.

Squatina japonica Bleeker, 1858　カスザメ

ZUMT 22168 (cloth tag of 97): 295 mm TL, female, Nagasaki Pref., 1 Aug. 1909, I. Kaneko, local name unknown.
ZUMT 31327: 524 mm TL, immature male, Matsue, Shimane Pref.
ZUMT 50561: 411 mm TL, female, East China Sea, 28 July 1959, Y. Tominaga.
ZUMT 51456: 406 mm TL, immature male, Norin-kaiku 325 (農林 325 区), East China Sea, 13 Sept. 1959.
ZUMT 51481: 167 mm TL, female (umbilical cord present), East China Sea, Dec. 1959.
ZUMT 51678: 272 mm TL, female; **ZUMT 51679**: 268 mm TL, female; **ZUMT 51680**: 270 mm TL, immature male; **ZUMT 51681**: 270 mm TL, immature male; **ZUMT 51682**: 267 mm TL, immature male, Norin-kaiku 319 and 320 (農林 319, 320 区), East China Sea, 1 Apr. 1960.
ZUMT 63891: 391 mm TL, female, locality unknown.
ZUMT ABE 2585: 241 mm TL, female, Palau, 1936–1937, T. Abe.

Squatina nebulosa Regan, 1906　コロザメ

ZUMT 937: 197 mm TL, female, off 100 km Jyogashima, 13 Jan. 1900, K. Aoki, local name “Dekaizame, Kasuzame, Korozame, Ozei (テガイザメ、カスザメ、コロザメ、オオゼイ)”.
ZUMT 13326: 335 mm TL, immature male; **ZUMT 13327**: 425 mm TL, immature male, off 12 mi Nyudozaki (入道崎), Oga Peninsular (男鹿半島), Akita Pref., 24 Nov. 1923, S. Tanabe, local name “Ubazame (ウバザメ)”.
ZUMT 20437: 165 mm TL, female, off Nagasaki, Nagasaki Pref., T. Kuraba, trawl.
ZUMT 24278: 223 mm TL, female (umbilical cord present), off Mimase, Kochi Pref., 12 Nov. 1931, T. Kamohara.
ZUMT 32000: 168 mm TL, female (umbilical cord present), Nagasaki Pref.
ZUMT 63896: 350 mm TL, immature male, locality unknown.

Pristiophoriformes　ノコギリザメ目
Pristiophoridae　ノコギリザメ科
Pristiophorus Müller & Henle, 1837　ノコギリザメ属
Pristiophorus japonicus Günther, 1870　ノコギリザメ

ZUMT 23423: 480 mm TL, immature male, Owase, Mie Pref., K. Nakahara at Owase Women's High School, Mie Pref.
ZUMT 27074: 290 mm TL, immature male (umbilical cord present), Nagasaki Pref., 8 Aug. 1911, I. Kaneko.
ZUMT 52290: 316 mm TL, immature male (umbilical cord present), near Jeju Island, Korea, Norin-kaiku 253 and 254, East China Sea, No. 1 and 2 Shotokumaru, landed at Fukuoka Fish Market, 5 May 1960, bottom trawl.
ZUMT 63897: 503 mm TL, immature male; **ZUMT 63898**: 505 mm TL, female, locality unknown.

Unknown shark

ZUMT 1481: 11 egg cuspules, locality unknown.

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Table 1. List of total length (TL) of smallest matured male specimen deposited in ZUMT.

Family	Species	Standard Jpn name	TL (mm)	ZUMT number
Pseudocarchariidae	*Pseudocarcharias kamoharai*	Mizuwani	924	63877
Scyliorhinidae	*Galeus eastmani*	Yamorizame	340	64107
	Halaelurus buergeri	Nagasakitorazame	368	2340
	Scyliorhinus torazame	Torazame	409	51035
Proscylliidae	*Proscyllium habereri*	Taiwanzame	549	63870
Triakididae	*Hemitriakis japanica*	Eirakubuka	1133	ABE 10764
	Mustelus griseus	Shirozame	590	50559
	Mustelus manazo	Hoshizame	522	47976
Etmopteridae	*Etmopterus brachyurus*	Hosofujikujira	340	64147
	Etmopterus molleri	Hiretakafujikujira	187	55175
	Etmopterus pusillus	Karasuzame	166	53482
	Etmopterus unicolor	Nisekarasuzame	477	64184
Somniosidae	*Centroscymnus owstonii*	Yumezame	452	64186
	Scymnodon ichiharai	Ichiharabiroudozame	676	ABE 57-4
Squalidae	*Squalus brevirostris*	Tsumaritsunozame	422	7630
	Squalus mitsukurii	Futotsunozame	440	31586
	Squalus suckleyi	Aburatsunozame	275	31578

Figure 1. Preserved specimen of *Prionace glauca*, ZUMT 64198, 365 mm TL, female, deformity of single eye at middle of body.

Figure 2. Preserved specimen of *Squalus* sp., ZUMT 1526, 145 mm TL, immature male, deformity of twin heads and dorsal fins.

Specimens of the order Torpediniformes (Chondrichthyes: Elasmobranchii) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of Torpediniformes deposited in the Department of Zoology, The University Museum, The University of Tokyo includes 44 specimens (40 lots) of 5 species (including an unidentified specimen of *Torpedo*), representing three families. Type specimens were not found in this research.

Introduction

The order Torpediniformes, included within Chondrichthyes, is characterized by a soft thick body with an entirely smooth surface (no denticles, thorns or spines), and a pair of kidney-shaped electric organs in the disc, distinguishable through the skin in ventral view (Carvalho et al. 2016). Torpediniform rays are known for discharging up to 60 volts of electricity from the electric organs for both defense and predation (Bennett et al. 1961; Macesic and Kajiura 2009).

The classification of Torpediniformes has been and remains confused. Nelson et al. (2016) recognized two families, Narcinidae and Torpedinidae, whereas Carvalho et al. (2016) regarded *Hypnos* [included in Torpedinidae by Nelson et al. (2016)] and Narkinae (a subfamily of Narcinidae) as Hypnidae and Narkidae, respectively. However, although the molecular phylogenetic tree shown in Carvalho et al. (2016: fig. 2. 1) indicated that monophyly of the order was supported, those of Narcinidae and Narkidae were not. The classification of the order is likely to be revised by examinations of a greater number of species.

Species-level taxonomy of Torpediniformes is also confused, many new species and new distributional records having been confirmed in recent years (e.g., Ebert et al. 2015; Bandai et al. 2017; Bhatt et al. 2022). As an aid to future taxonomic studies, a list of specimens of Torpediniformes deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided herein.

Materials and Methods

Specimens of the order Torpediniformes in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study following Hatooka et al. (2013), Carvalho et al. (2016), and Bandai et al. (2017). Classification of the families follows Carvalho et al. (1999, 2016). Parentheses following registration numbers include total length (in mm), disc width [in mm (only indicated in *Tetronarce formosa*)], specimen numbers (if more than one included in lot), sex, collection locality, collection date, and collector. Collection data of specimens are omitted when matching that of immediately following specimens. Total length and disc width are abbreviated as TL and DW, respectively. The collection year and collector for some specimens was estimated by following Koeda et al. (2022). The ZUMT specimens listed herein were stored in Room 406 (specimen storage room) in the museum building. Most were stored in bottles on shelves, although some large specimens were stored in a glass tank, with the glass lid sealed with a silicon adhesive, in Room 406 (as of July 2022).

Results

In the ZUMT fish collection, deposition of two specimens of Narcinidae, 40 specimens of Narkidae, and two specimens of Torpedinidae were confirmed, respectively. No type specimens were found in the collection. Although Tanaka (1908) described a new species, *Tetronarce tokionis* (Torpedinidae) based on three ZUMT specimens of large-sized females [holotype (ZUMT 917: 95 mm TL) and two paratypes (uncataloged: 80 mm TL and 81 mm TL)], only a single large-sized male specimen (ZUMT 64090) with no females of Torpedinidae were discovered during our investigation. Therefore, they are now confirmed as lost (Bandai et al. 2017; Aizawa et al. 2022).

Species accounts

Order Torpediniformes　シビレエイ目
Family Narcinidae　タイワンシビレエイ科
***Narcine maculata* (Shaw, 1804)**

LOCARITY UNKNOWN
ZUMT 62644 (264.4 mm; male)
ZUMT 62645 (282.3 mm; female)

Family Narkidae　シビレエイ科
***Narke dipterygia* (Bloch & Schneider, 1801)**

LOCARITY UNKNOWN
ZUMT 62641 (103.1 mm; female), ZUMT 62642 (127.3 mm; female), ZUMT 62643 (140.6 mm; female; no data)

***Narke japonica* (Temminck & Schlegel, 1850)　シビレエイ**

JAPAN
ZUMT 23649 (118.5 mm; male; Urado, Kochi City, Kochi Pref.; 19 Apr. 1931; coll. by T. Kamohara)
ZUMT 26255 [190.2 mm; female; probably from Yamaguchi Pref.; Oct. 1933; coll. by I. Tanaka (Kashima, Hagi City)]
ZUMT 26259 [302.0 mm; male; probably from Kanagawa Pref.; coll. by K. Minoshima (Kozu, Odawara City)]
ZUMT 26641 (110.2 mm; female; Hayama Town, Kanagawa Pref.; 1 Aug. 1934; coll. by S. Inuo)
ZUMT 32007 (169.0 mm; female; off Nagasaki Pref.)
ZUMT 32478 (80.4 mm; female), ZUMT 32479 (76.0 mm; female), ZUMT 32480 (76.5 mm; male), ZUMT 32481 (78.2 mm; female), ZUMT 32482 (77.6 mm; female), ZUMT 32483 (72.0 mm; female), ZUMT 32484(75.6 mm; female), ZUMT 32485 (74.4 mm; female), ZUMT 32486 (76.0 mm; female), ZUMT 32487 (72.5 mm; male; probably collected from Misaki, Miura City, Kanagawa Pref.)
ZUMT 36413 (155.0 mm; female; Hayama Town, Kanagawa Pref.; Aug. 1936; coll. by S. Inuo)
ZUMT 48832 (124.4 mm; female; Hayama Town, Kanagawa Pref.; 13 Feb. 1956; trawl; coll. by Imperial Household Agency)
ZUMT 49641 (119.9 mm; female), ZUMT 49642 (118.6 mm; female), ZUMT 49643 (122.0 mm; female), ZUMT 49644 (142.9 mm; female), ZUMT 49645 (110.6 mm; male), ZUMT 49646 (145.8 mm; female; Hayama Town, Kanagawa Pref.; 22 Jan. 1959)
ZUMT 56934 (183.7 mm; female), ZUMT 56937 (208.7 mm; female; southeast of Tsushima Island, Nagasaki Pref.; 10 July 1987; coll. by Y. Tominaga and M. Aizawa on board F/V *No. 36 Ten'yo-maru*)

KOREA

ZUMT 51489 [192.9 mm; male; approx. 85 km west of Jeju Island (33°15’N, 125°15’E); 29 Mar. 1960; coll. by Y. Tominaga]
ZUMT 51514 [240.6 mm; male; approx. 150 km west of Jeju Island; 30 Mar. 1960]

CHINA
ZUMT 52006 [265.5 mm; male; east off Shanghai (31°45’N, 123°15’E or 31°15’N, 123°45’E)]
ZUMT 52010 [264.3 mm; female; approx. 200 km east off Shanghai (30°45’N, 124°15’E); May 1960]

EAST CHINA SEA
ZUMT 51887 (224.4 mm; female; East China Sea)
ZUMT 57632 (111.8 mm; male; East China Sea; 7 May 1988)

LOCALITY UNKNOWN
ZUMT 33000 (206.3 mm; female), ZUMT 64092 [72.6–80.7 mm; 5 specimens (3 males and 2 females); no data]

Family Torpedinidae　ヤマトシビレエイ科

Tetronarce formosa (Haas & Ebert, 2006)　ツキミシビレエイ

JAPAN
ZUMT 64090 (cloth tag labelled No. 199 “写生百九十九号”) (773.8 mm TL; 459.4 mm DW; male; probably from Japan)

Torpedo sp.

Italy
ZUMT 4774 (124.9 mm; male; probably from Italy; donated by the Zoological Station at Naples, Italy)
Remarks: This specimen was identified as genus *Torpedo* due to the presence of papillae on the spiracle margins and arched mouth (Carvalho et al. 2016). According to Carvalho et al. (2016), *T. marmorata* and *T. torpedo*, both known from the Mediterranean region, can be distinguished by the dorsal color pattern. However, the color pattern of the present specimen has been lost due to preservation, and its identity remains unresolved.

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Report on the specimens of the order Acipenseriformes deposited in the Department of Zoology, the University Museum, the University of Tokyo with comments on distribution and specimen collection status in Japan of some rare species in the order.

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Abstract

The collection of the order Acipenseriformes deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) comprises 11 specimens, including eight species of two families. Two holotypes of *Acipenser kikuchii* Jordan & Snyder, 1901 (ZUMT 946) and *Acipenser multiscutatus* Tanaka, 1908 (ZUMT 955) were registered in the collection, however the latter could not find during our investigation (only the original photographs of holotype were found). Further, some specimens of extinct species were discovered from the collection: *Psephurus gladius* (Martens, 1862) (ZUMT 25426), which was extinct, *Acipenser dabryanus* Duméril, 1869 (ZUMT 25427) which was extinct in the wild, and the only extant species, *Pseudoscaphirhynchus kaufmanni* (Bogdanow, 1874) (ZUMT 63411) of the genus *Pseudoscaphirhynchus* Nikolskii, 1900. In addition, the morphological characteristics of all the acipenseriform specimens in ZUMT are described briefly.

Introduction

The order Acipenseriformes comprises two families, Acipenseridae Linnaeus, 1758 and Polyodontidae Lacépède, 1797, including six genera with 27 species known to date (Nelson et al. 2016). Unfortunately, *Psephurus gladius* in the genus *Psephurus* Günther, 1873 was certificated extinction (Zhang et al. 2020) and assessed the extinct (EX) category in the Red List by IUCN (Qiwei 2022a). Moreover, *Pseudoscaphirhynchus fedtshenkoi* (Kessler, 1872) in the genus *Pseudoscaphirhynchus* Nikolskii, 1900 is probably extinct (Zholdasova, 1997). All acipenseriforms live in fresh water for all or a part of their lifetime in the Northern Hemisphere (Nelson et al. 2016). Although no acipenseriforms live in Japanese waters at the present time, some species such as *Acipenser medirostris* Ayres, 1854, *Asipenser sinensis* Gray, 1835, *Acipenser schrenckii* Brandt, 1869 and *Huso dauricus* (Georgi, 1775) strayed into Japan.

The taxonomy of the genus *Acipenser* appears to be confused. Some scientists considered a population of *A. medirostris* in the western Pacific as *Acipenser mikadoi* Hilgendorf, 1892 based on its genetic difference in ploidy (Birstein and Bemis 1997). Nevertheless, two species are indistinguishable in morphology, and Shedlko (2017) regarded the differences as intraspecific. As a result, we consider *A. mikadoi* as a junior synonym of *A. medirostris* in this study.

All acipenseriform specimens of the fish collection preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were re-identified in the present study. Hence, we described them as primary data for future taxonomic studies on this group.

Materials and Methods

Methods for taking counts and measurements generally follow Hubbs and Lagler（1949）, dorsal scutes jointing head isn't counted following Takeuchi (1979) and confirmation of at least one diagnostic character. The standard lengths (SL) of all specimens were measured. Major parts of most specimens were also measured: dorsal-

fin rays (D), anal-fin rays (A), pectoral-fin rays (P_1), pelvic-fin rays (P_2), dorsal scutes (DS), lateral scutes (LS), ventral scutes (VS), gill raker, total length (TL), fork length (FL), head length (HL), trunk breadth, trunk height, eye diameter, pectoral-fin length, outer barbel, inner barbel, mouth width, snout to anterior nostril, snout to mouth, snout to eye, snout to dorsal-fin origin, snout to upper caudal-fin origin, snout to pectoral-, snout to pelvic-, and snout to anal-fin origins.

Species are arranged in alphabetical order by species name. Japanese or Chinese names were given in parentheses for local name and personal name when written in the specimen ledger or tags. In addition, the list contains the ZUMT number, SL, TL, FL, collection locality, collection date, collector or donator, and collection method when available, and remarks if needed. Each collection year and collector for some specimens was estimated by following Koeda et al. (2022).

Some specimens for comparison and reference posted in The Kyoto University Museum, Kyoto University, Kyoto City and Field Science Education and Research Center Kyoto University, Maizuru City (FAKU), Hagi Museum, Hagi City (HH), The Kagoshima University Museum, Kagoshima City (KAUM), Kitakyusyu Museum of Natural History and Human History, Kitakyusyu City, (KMNH), Kanagawa Prefectural Museum of Natural History, Odawara City (KPM), Shimonoseki Municipal Shimonoseki Aquarium, Shimonoseki City (Kaikyokan), and National Museum of Nature and Science, Tsukuba City (NSMT). The registration numbers of KPM are expressed as seven digits, including leading zeros, on the museum database, although leading zeros are omitted here.

Collection of Acipenseriformes in ZUMT

Although ZUMT 955 is recognized as the large sized (2120 mm SL) holotype of *Acipenser multiscutatus*, it could not be found in the collection. In addition, this species has been regarded as a junior synonym of *A. schrenckii* since Lindberg and Legeza (1965), we newly concluded it as a junior synonym of *A. sinensis*. Fortunately, the original film photographs of ZUMT 955 were discovered from a digital archive collection of ZUMT, showing some diagnoses of *A. sinensis*. Further, we confirmed ZUMT 946 found in the collection as the holotype of *A. kikuchii*, which has been regarded as a junior synonym of *A. sinensis* (Takeuchi 1979). Our examination revealed that 11 specimens of eight acipenseriform species deposited in the collection: 9 specimens of five species of Acipenseridae; two specimens of two species of Polyodontidae.

ZUMT 25427 of *A. dabryanus* was caught from Chongqing (重慶), the Yangtze River in early twentieth century. However, this species is not currently observed in this area and considered as extinct in the wild (Qiwei 2022b). ZUMT 63413, also collected from the Yangtze River, is identified as *A. medirostris*, the first record in the East China Sea.

Pseudoscaphirhynchus kaufmanni is one of the extant species in the genus, and a single uncatalogued specimen of this species is discovered in the ZUMT collection and enrolled as ZUMT 63411; this specimen is probably considered a sole specimen in the genus *Pseudoscaphirhynchus* presently preserved in Japanese museum collections. In addition, ZUMT 25426 of *Psephurus gladius* from Yichang (宜昌) along the Yangtze River should also very rare in the Japanese collection, because, the species was certificated extinct and assessed the extinct (EX) category in the Red list by IUCN (Zhang et al. 2020; Qiwei 2022a).

Acipenseridae チョウザメ科
Acipenser Linnaeus, 1758 チョウザメ属
Acipenser dabryanus Duméril, 1869
Yangtze Sturgeon チョウセンチョウザメ 达氏鲟

ZUMT 25427 (Fig. 1): 256 mm SL, 316 mm TL, 274 mm FL, Chongqing (重慶), Yangtze River, China, donated by Earl of Tsugaru (津軽伯爵).

Countable characters: D 53; A 35; P_1 61; P_2 37; DS 13+1; LS 36; VS 12+2+2.

Proportional characters: head length 30.7% SL; trunk breadth 13.1% SL; trunk height 16.8% SL; eye diameter 7.1% HL; pectoral-fin length 15.5% SL; outer barbel 10% HL; inner barbel 8.6% HL; mouth width 25.2% HL;

snout to anterior nostril 10.6% SL; snout to mouth 17.3% SL; snout to eye 14.4% SL; snout to dorsal-fin origin 74.2% SL; snout to upper caudal-fin origin 89.9% SL; snout to pectoral-fin origin 64.5% SL; snout to pelvic-fin origin 28.9% SL; snout to anal-fin origin 78.5% SL.

Remarks: Although this specimen was enrolled as *Acipenser sinensis*, 鮮魚（鰉）on the ZUMT specimen ledger, we re-identified to *A. dabryanus* in this study. The captured date is unknown; however, this specimen was probably registered before 1933 (Koeda et al. 2022). The caption written on the ledger is as follows: 表面癩病患者ニ髣髴セリトテ四川省ニテハ癩子魚トモ称ス, サレド清朝時代迄ハ皇帝ニ献上サレントテ鰉トモ云フ (This species called as "leprous fish" in Sichuan Province, because its surface suggests a patient of leprosy. However, these sturgeons were dedicated to emperors until the Shing dynasty period and called as "Higai=character of emperor's fish"). This specimen donated by Earl of Tsugaru, however no such more information was found. *A. dabryanus* is considered near extinct in the wild, and its natural reproduction has not been observed for over 20 years. Therefore, a conservation program of the species based on large-scale farming was started to disseminate by the Yangtze River Fisheries Research Institute in 2007 (Qiwei 2022b).

Although Tanaka (1915) reported a single specimen of *A. dabryanus* was collected from the Ariake Sea (有明海), Kumamoto Pref. on 13th June 1915, the specimen could not find in this study, and the authenticity of the record is still questionable. This species was not recorded elsewhere in Japanese water except for Tanaka's report, and known only from the Yangtze River Basin, Yellow River, and West Korea Bay (Amaoka and Muto 2003). It is indicated that a local newspaper article which posted this record could not be found. Takeuchi (1979) mentioned that a stuffed specimen of *A. dabryanus* was stored in Shimonoseki Municipal Shimonoseki Aquarium, Yamaguchi Pref. (presently "Kaikyokan"). Our research revealed that three stuffed specimens existed in two institutions at Yamaguchi Prefecture: HH-Pi 747 of 1500 mm SL is deposited in the Hagi Museum (Sonoyama et al. 2020; Takeuchi 1979), previously transferred from Kaikyokan; for the other two held in "Kaikyokan" (uncatalogued and each locality unknown), the specimen of 1471 mm SL observed in this study was in good condition. However, the larger-sized specimen was in poor condition, and was unfortunately discarded excluding a few parts of dorsal and ventral scutes (the remnants are enough for the identification). These specimens had re-identified them as *A. sinensis* in the present study, which indicating that there are currently no reliable record of *A. dabryanus* in Japanese waters.

Acipenser medirostris Ayres, 1854
Green Sturgeon　チョウザメ　中吻鮮

ZUMT 944 (Fig. 2): stuffed specimen, 1150 mm SL, 1290 mm TL, 1119 mm FL, Ishikari River (石狩川), Hokkaido.

Countable characters: D 38; A 29; P_1 47; P_2 29+; DS 8+1; LS 32; VS 8+5+2.

Proportional characters: head length 26.8% SL; trunk breadth 12.5% SL; trunk height 14.7% SL; eye diameter 5.5% HL; pectoral-fin length 12.1% SL; outer barbel 9.5% HL; inner barbel 10.2% HL; mouth width 17.6% HL; snout to anterior nostril 9.8% SL; snout to mouth 16.1% SL; snout to eye 13.6% SL; snout to dorsal-fin origin 81.2% SL; snout to upper caudal-fin origin 93.9%SL; snout to pectoral-fin origin 29.2% SL; snout to pelvic-fin origin 60.9% SL; snout to anal-fin origin 73.9% SL.

ZUMT 945 (Fig. 3): stuffed specimen, 1330 mm SL, 1450 mm TL, 1288 mm FL, Sea of Mikawa country (三河国) presently eastern Aichi Pref., purchased from Alan Owston, 2 Feb. 1900.

Countable characters: D 42; A 28; P_1 46; P_2 32; DS 7+2; LS 34; VS 8+5+3.

Proportional characters: head length 24.7% SL; trunk breath 12.1% SL; trunk height 12.6% SL; eye diameter 5.7% HL; pectoral-fin length 10.6% SL; outer barbel 10% HL; inner barbel 10.2% HL; mouth width 22.3% HL; snout to anterior nostril 8.8% SL; snout to mouth 15.3% SL; snout to eye 12.1% SL; snout to dorsal-fin origin 70.7% SL; snout to upper caudal-fin origin 90.7% SL; snout to pectoral-fin origin 25.1% SL; snout to pelvic-fin origin 57.4% SL; snout to anal-fin origin 77.2% SL.

ZUMT 63413 (Fig. 4): 380 mm SL, 377 mm TL, 336 mm FL, Yangtze River, 金公淡？
Countable characters: D 35; A 23; P_1 33; P_2 27; DS 9+2; LS 33; VS 7+3+1; gill rakers 9+10.
Proportional characters: head length 27.7% SL; trunk breadth 10.3% SL; trunk height 8.4% SL; eye diameter 7.4% HL; pectoral-fin length 11.6% SL; outer barbel 18.8% HL; inner barbel 18.4% HL; mouth width 20.3% HL; snout to anterior nostril 12% SL; snout to mouth 17.3% SL; snout to eye 14.8% SL; snout to dorsal-fin origin 62.4% SL; snout to upper caudal origin 81.6% SL; snout to pectoral-fin origin 29.0% SL; snout to pelvic-fin origin 52.4% SL; snout to anal-fin origin 66.6% SL.

Remarks: ZUMT 944 and ZUMT 945 were registered under "*Acipenser mikadoi* Hilgendorf" on the ZUMT specimen ledger in 1906 (Koeda et al. 2022). These specimens were identified as *A. medirostris* in the present study. Although *A. medirostris* used to go upstream in the Ishikari River and Teshio River of Hokkaido and fished commonly by fixed nets on each mouth of the rivers, the sturgeons rapidly dwindled from 1935 and were presently assessed as the extinct (EX) category in the Red Data Book by the Japanese Ministry of the Environment (Otaki 1908; Haryu 2014).

The locality of ZUMT 945, "Mikawa country", is the old name of the eastern Aichi Prefecture, and this specimen is the first record from the Pacific side of the Chubu region. However, it is possible that Mikawa was misspelled for "Mukawa River" (鵡川) in Hokkaido.

The newly assigned ZUMT 63413 third specimen was not registered on the specimen ledger before and discovered in the collection. The species occurs in the northern Pacific: the eastern Pacific of Alaska and Ensenada in Mexico, the Amur and Tumnin rivers on the western Pacific coasts, Sakhalin, North Japan, and the Bering Sea (Amaoka and Muto 2003). Hence, ZUMT 63413 is first recorded in the East China Sea and updates the southernmost limit of the species. A small cloth tag attached to the specimen (Fig. 5), indicated its locality (the Yangtze River, China, flows into the East China Sea) with three Chinese characters (probably 金公淡？ might be the name of the local place or collector). Many sturgeons, including *A. medirostris,* are anadromous, so adults sometimes stray outside the known distributional range (Bemis and Kynard 1997). However, ZUMT 63413 is small in size and immature. Accordingly, there is a possibility that *A. medirostris* may have swum upstream in the Yangtze River and reproduced there in the past.

Acipenser ruthenus Linnaeus, 1758
Sterlet　コチョウザメ　小体鮭

ZUMT 63414: 220 mm SL, 286 mm TL, 250 mm FL, donated from Rio (Japanese tropical fish wholesaler) to M. Aizawa (藍澤正宏), 1985?
Countable characters: D 44; A 29; P_1 30; P_2 26; DS 16; LS 65; VS 15+5; gill rakers 5+11.
Proportional characters: head length 33.5% SL; trunk breadth 11% SL; trunk height 12.4% SL; eye diameter 10% HL; pectoral-fin length 26% SL; outer barbel 19% HL; inner barbel 17% HL; mouth width 17% HL; snout to anterior nostril 13.5% SL; snout to mouth 19.5% SL; snout to eye 16.4% SL; snout to dorsal-fin origin 74.6% SL; snout to upper caudal-fin origin 95.2% SL; snout to pectoral-fin origin 35.7% SL; snout to pelvic-fin origin 62.7% SL; snout to anal-fin origin 82.7% SL.

Remarks: This specimen was imported as an aquarium fish to Japan.

Acipenser schrenckii Brandt, 1869
Amur sturgeon　アムールチョウザメ　施氏鮭

ZUMT 66264 (Fig. 6): 455 mm SL, 560 mm TL, 490 mm FL, Nizhnetambovskoe (village name near the Amur River), Kaludsenok, Russia, collected with gill net, 2 June. 1930, D. Kanevich.
Countable characters: D 38; A 22; P1 27; P2 21; DS 13+4; LS 34; VS 9+3+1.
Proportional characters: head length 25.5% SL; trunk breadth 13.7% SL; trunk height 14.6% SL; eye diameter

7.5% HL; pectoral-fin length 15.3% SL; outer barbel 19.8% HL; inner barbel 17.5% HL; mouth width 28.0% HL; snout to anterior nostril 10.1% SL; snout to mouth 13.3% SL; snout to eye 12.3% SL; snout to dorsal-fin origin 76.0% SL; snout to upper caudal-fin origin 96.3% SL; snout to pelvic-fin origin 67.2% SL; snout to pectoral-fin origin 28.9% SL; snout to anal-fin origin 26.8% SL.

Remarks: This specimen assigned to ZUMT 66264 as *Acipenser schrenkii* Brandt, 1869 was not registered on the ledger then and recently discovered in the ZUMT collection. ZUMT 66264 is attached two paper tags (Fig. 7). This specimen was posted in Pacific Fisheriess Institute. Vladivostok. U. S. S. R. and identified by G. Lindberg (Georgiĭ Ustinovich Lindberg) (Fig. 7: Left). The caption written on the tag is as follows in Russian (Fig. 7: Right): 2 июня 1930, Калудсенок, Река Амур у селения, Н-Тамбóвское, Сплавной сеткой, Дан Каневич (2 June. 1930, Kaludsenok, Amur River near the village, Nijnetambovskoïe, gill net, Dan Kanevich).

Acipenser sinensis Gray, 1835
Chinese Sturgeon　カラチョウザメ　中华鲟

ZUMT 946 (Fig. 8): stuffed specimen, 1710 mm SL, 1950 mm TL, 1760 mm FL, holotype of *Acipenser kikuchii* Jordan & Snyder, 1901, off Misaki (三崎), Sagami Bay, collected with gill net, May 1895, collected by K. Aoki (青木熊吉).
Countable characters: D 55; A 36; P_1 46; P_2 36; DS 11+1; LS 32; VS 11+2+1.
Proportional characters: head length 22.6% SL; trunk breadth 14.8% SL; trunk height 14.2% SL; eye diameter 4% HL; pectoral-fin length 11% SL; inner barbel 5.3% HL; mouth width 21.8% HL; snout to anterior nostril 6.6% SL; snout to mouth 11.2% SL; snout to eye 9.1% SL; snout to dorsal-fin origin 77.7% SL; snout to upper caudal-fin origin 96.2% SL; snout to pectoral-fin origin 24.8% SL; snout to pelvic-fin origin 65.9% SL; snout to anal-fin origin 85.3% SL.

Remarks: Although *Acipenser kikuchii* "Kikuchi-chozame" was originally described based on a single specimen without information on the catalog number (Jordan and Snyder 1901), ZUMT 946 was the only specimen whose scientific name, and collection data matched with the original description (Aizawa et al. 2022). In this study, the specimen was re-identified as *A.sinensis*, which also resembles with the figure of the stuffed specimen shown in the original description (Jordan and Snyder 1901: Figs. 1–2, pl. 15). Further, Takeuchi (1979) previously observed the holotype and indicated that the species was a junior synonym of *A. sinensis.* Hence, we agree with his opinion.

ZUMT 955 (lost) (Fig. 9): stuffed specimen, 2120 mm SL, holotype of *Acipenser multiscutatus* Tanaka, 1908, 7 miles off Ukedo-hama (請戸浜), Iwaki City, Fukushima Pref., collected by gill net, 21 May 1905.
Countable characters: D 42; A 35; DS 15–16; LS 41–43; VS 12–16 (from Tanaka 1908).
Proportional characters: head length 22.6% SL; trunk height 15.1% SL; snout to eye 34.4% HL; interorbital width 39.6% HL; between posterior end of dorsal- and caudal-fin bases 6.4% SL; longest dorsal-fin ray 5.7% SL; longest anal-fin ray 11.32% SL; longest pelvic-fin ray 8.2%; longest pectoral-fin ray 15.1% SL; length of upper caudal-fin lobe 25.5% SL; length of lower caudal-fin lobe 17.9% SL (from Tanaka 1908).

Remarks: The original description of *Acipenser multiscutatus* specified the holotype as ZUMT 955 which sized 2120 mm SL with the Japanese name "Sennin-chozame". However, such a large specimen did not find in the ZUMT collection presently. Only the scientific name appeared in the column of ZUMT 955 in the specimen ledger (Aizawa et al. 2022). The four original film photographs of ZUMT 955 (Fig. 9) which used in the original description by Tanaka (1908: pl. II, fig. 1A and 1B, trimmed) were found in ZUMT digital archives. Although Tanaka (1908) noted that "Two, more or less imperfect skin of the same species purchased of a fish-merchant in Tokyo, are contained in the Imperial Museum of Tokyo", these specimens are not founded in the National Museum of Nature and Science, Tsukuba City (NSMT), and not enrolled on a specimen ledger in this museum. *A. multiscutatus* was regarded as a synonym of *A. schrenckii* (Birstein and Bemis 1997). However, this synonym of *A. multiscutatus,* identifying between *A. sinensis* and *A. schrenckii* based on counts and measures is difficult.

Especially, many count characters have overlapped (Tables 1, 2). Hence, this study re-identified *A. multiscutatus* as a synonym of *A. sinensis* following comparison *A. sinensis* with *A. schrenckii* based on figures of dorsal scutes (Fig. 10). Scanning for Tanaka (1908: pl. II, fig. 1B), dorsal scutes of *A. multiscutatus* are bigger and lined densely between head and dorsal-fin base (Fig. 10A). This character is matched *A. sinensis* (Fig. 10B, C), dorsal scutes of *A. schrenckii* are inconspicuous over 892 mm SL at least (Fig. 10D, E).

Comparative specimens

A. sinensis (two specimens): uncatalogued, stuffed specimen, stored in Kaikyokan, 1471 mm SL, 1731 mm TL, locality unknown, donated from Taiyo fishing company (current: Maruha Corporation); KAUM–I. 99269, 2700 mm SL, 3100 mm TL, 158 kg, female, South of Mt. Kaimon, Ibusuki, Kagoshima Pref., Japan, 31°09′N, 130°32′E, collected by fixed net, captured on 17 May 1997. *A. schrenckii* (two specimens): FAKU uncatalogued, stuffed specimen, 892 mm SL, 974 mm TL, locality unknown, stored in Field Science Education and Research Center, Kyoto University; lost, 1640 mm TL, Off the Mombetsu coast, Hokkaido Pref., Japan.

Pseudoscaphirhynchus Nikolskii, 1900 シルダリアチョウザメ属

Pseudoscaphirhynchus kaufmanni (Bogdanow, 1874)

Large Amu-Darya Shovelnose Sturgeon オオアムダリアチョウザメ 阿姆河大拟铲鲟

ZUMT 63411 (Fig. 11): 98.6 mm SL, Nukus, Turkestan, A. Nikolsky.

Countable characters: D 36; A 21; P_1 40; P_2 29; DS 11; LS 32; VS 5.

Proportional characters: head length 37.7% SL; trunk breadth 12.9% SL; trunk height 10.6% SL; eye diameter 3.8% HL; pectoral-fin length 17.6% SL; outer barbel 27.4% HL; inner barbel 13.7% HL; mouth width 34.2% HL; snout to anterior nostril 17.1% SL; snout to mouth 22.9% SL; snout to eye 20.7% SL; snout to dorsal-fin origin 80.0% SL; snout to pectoral-fin origin 33.0% SL; snout to pelvic-fin origin 67.2% SL; snout to anal-fin origin 85.8% SL.

Remarks: This species is known only from the Amu Darya River in Turkmenistan, Uzbekistan, and Tajikistan. Three species, *Pseudoscaphirhynchus fedtshenkoi*, *Pseudoscaphirhynchus hermanni* (Kessler, 1877), and *P. kaufmanni*, are recognized in the genus and considered "critically endangered", however *P. fedtshenkoi* is probably extinct (Zholdasova 1997). Although *P. hermanni* was not observed ever since 1996, it was re-discovered in 2020 with *P. kaufmanni* (Sheraliev et al. 2021). ZUMT 63411 was discovered in the ZUMT collection was registered to the specimen ledger in this study. The information of collection and/or donation of ZUMT 63411 is unknown, however, a paper tag which attached to this specimen (Fig. 12), indicating its scientific name, locality (Nukus, Turkestan), and collector or donator (A. Nikolsky). Turkestan is an old name of Central Asia, and A. Nikolsky is Alexander Nikolsky (1858–1942) who originally described *Pseudoscaphirhynchus rossikowi* Nikolskii, 1900, which is presently recognized as a junior synonym of *P. hermanni* (Fricke et al. 2023). A same series which uncatalogued with common a type of paper and handwriting as ZUMT 63411 were found in the ZUMT collection (38 specimens in total) and are meaning that these series localities are restricted to Central Asia and East Russia. From the above, we assumed that international exchange of specimens between ZUMT and Russian institutions probably took place in the past. However, no such information was found.

Polyodontidae ヘラチョウザメ科

Polyodon Lacépède, 1797 ヘラチョウザメ属

Polyodon spathula (Walbaum, 1792)

North American Paddlefish ヘラチョウザメ 匙吻鲟

ZUMT 64578 (Fig. 13): 401 mm SL, 479 mm Tl, 426 mm FL, locality unknown, donated from the University of Michigan Museum of Natural History (jar in room 1044), 11 Oct. 1965, T. Ueno (上野輝彌).

Countable characters: D 53; A 53; P_1 31; P_2 32.

Proportional characters: head length 73.3% SL; trunk breadth 8.1% SL; trunk height 14.1% SL; eye diameter 2.8% HL; pectoral-fin length 9.5% SL; snout to anterior nostril 42.6% SL; snout to mouth 43.4% SL; snout to eye 44.5% SL; snout to dorsal-fin origin 80.8% SL; snout to upper caudal-fin origin 90.8% SL; snout to pectoral-fin origin 63.1% SL; snout to pelvic-fin origin 71.3% SL; snout to anal-fin origin 82.2% SL.

Remarks: This specimen assigned to ZUMT 64578 as *Polyodon spathula* (Walbaum, 1792) was not registered on the ledger then and recently discovered in the ZUMT collection. The species is distributed from the Mississippi River Basin from southwestern New York to central Montana and south to Louisiana, and Gulf Slope drainages from Mobile Basin, Alabama, to Galveston Bay, and Texas in northern America (Moore and Rider 2022). A paper tag attached to this specimen noted that "no data: found in museum jar in Rm. 1044 on 11:X:1965. use for classroom study", thus it was captured before 1965, deposited in the museum probably for educational purpose and donated by Teruya Uyeno (1930–2021), who studied abroad at the University of Michigan from 1956 to 1965 (Hayashi 2017).

Psephurus Günther, 1873　ハシナガチョウザメ属
Psephurus gladius (Martens, 1862)
Chinese Paddle Fish　ハシナガチョウザメ　白鲟

ZUMT 25426 (Fig. 14): 649.6 mm SL, 735.5 mm TL, 663.6 mm FL, Yichang (宜昌), Yangtze River.
Countable characters: D 68, A 60, P_1 43, P_2 43, gill rakers 26+23.
Proportional characters: head length 56.7% SL; trunk breadth 8.3% SL; trunk height 10.7% SL; eye diameter 1.0% HL; pectoral-fin length 8.1% SL; snout to anterior nostril 38.3 % SL; snout to mouth 41.7 % SL; snout to eye 39.8 % SL; snout to dorsal-fin origin 74.4 % SL; snout to upper caudal-fin origin 92.2 % SL; snout to pectoral-fin origin 56.7 % SL; snout to pelvic-fin origin 69.8% SL; snout to anal-fin origin 83.1% SL.

Remarks: This specimen was registered as *Psephurus gladius* (白鲟, 象魚) on the ZUMT specimen ledger probably in 1933 (Koeda et al. 2022). The paddle and body were separated with the same number tags attached. Although this species was previously distributed in wild from the Yangtze, Yellow, and Qiantang rivers, China (Amaoka and Muto 2003), its population began to decrease rapidly in the mid-20th century, and has not been confirmed since 2003, and presently considered as extinct and assessed EX in the Red List by IUCN (Zhang et al. 2020; Qiwei 2022a). Five specimens of *P. Gladius*, including ZUMT 25426: a two juvenile fish (National Museum of Nature and Science, Tsukuba City: NSMT-P 136893, 158.7 mm SL; Kitakyusyu Museum of Natural History and Human History, Kitakyusyu City: KMNH-VR uncatalogued 275 mm SL), young fish (The Kyoto University Museum, Kyoto University, Kyoto City: FAKU-P 352, 557.5 mm SL) and a stuffed specimen (Kanagawa Prefectural Museum of Natural History, Odawara City: KPM-NI 44803, 2160 mm FL) were presently deposited in the Japanese museum collection.

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Table 1. Counts of *Acipenser multiscutatus* and *A. sinensis*

	A. multiscutatus	*A. sinensis*			
	Tanaka (1908)	Present study		Hata et al. (2018)	—*
	ZUMT 955	ZUMT 946	uncatalogued specimen**	KAUM–I. 99269	—
Standard length (SL; mm)	2285.0	1710.0	1471.0	2700.0	—
Dorsal fin rays	42	55	65	65	50–65
Anal fin rays	35	36	35+	37	26–42
Pectoral fin	—	46	37+	49***	—
Pelvic fin	—	36	35+	29***	—
Dorsal scutes	15–16	11+1	12+1	14+1	10–15
Lateral scutes	41–43	32	28	36	27–41
Ventral scutes	12–16	11+2+1	11+4+2	12+1+1	9–15
Gill raker	—	—	—	17	15–25

* Referenced from the changjiang aquatic resources survey group, Sichuan province (1988); ** deposited in Kaikyokan, Shimonoseki, Japan; *** counted during this study

Table 2. Counts of *Acipenser schrenckii*

	A. schrenckii				
	Present study		Amaoka and Muto (2003)	Omoto et al. (2004)	Gritsenko et al. (2006)
	ZUMT 66264	uncatalogued specimen*	—	—	—
Standard length (SL; mm)	455.0	892.0	—	—	—
Dorsal fin rays	38	31+ (broken)	50-	—	38-53
Anal fin rays	22	—	22–26	—	20-32
Pectoral fin	27	35	—	—	—
Pelvic fin	21	27	—	—	—
Dorsal scutes	13+4	14	13–15	13	11–17
Lateral scutes	34	39	38–48	37	32-47
Ventral scutes	9+3+1	11+2+1	7–10	2	—
Gill raker	—	—	—	—	36–46

* Deposited in FAKU

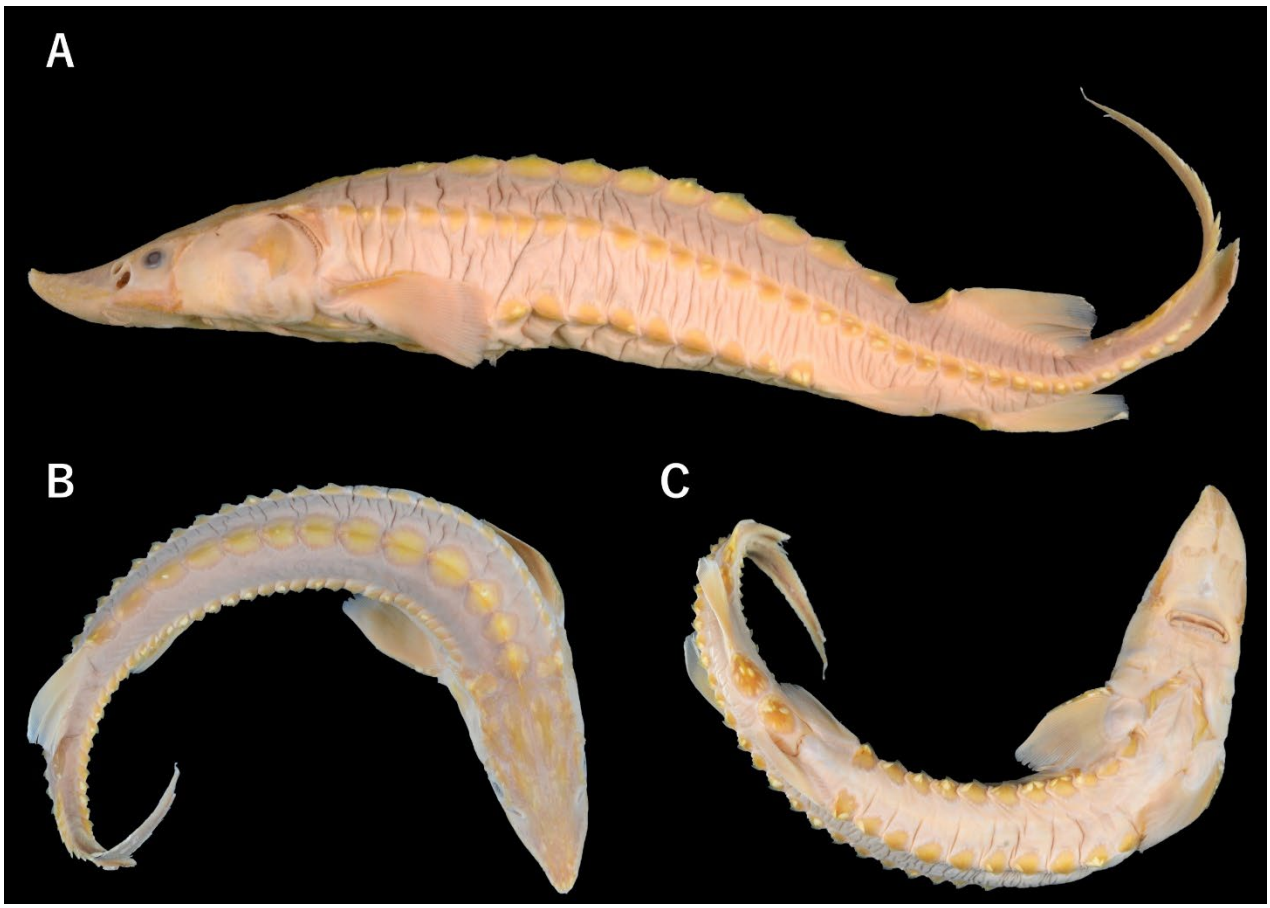

Figure 1. Preserved specimen of *Acipenser dabryanus* from Chongqing, Yangtze River, China (ZUMT 25427, 256 mm SL). A: lateral view; B: dorsal view; C: ventral view.

Figure 2. Preserved specimen (stuffed) of *Acipenser medirostris* from Ishikari River, Hokkaido Pref., Japan (ZUMT 944, 1150 mm SL).

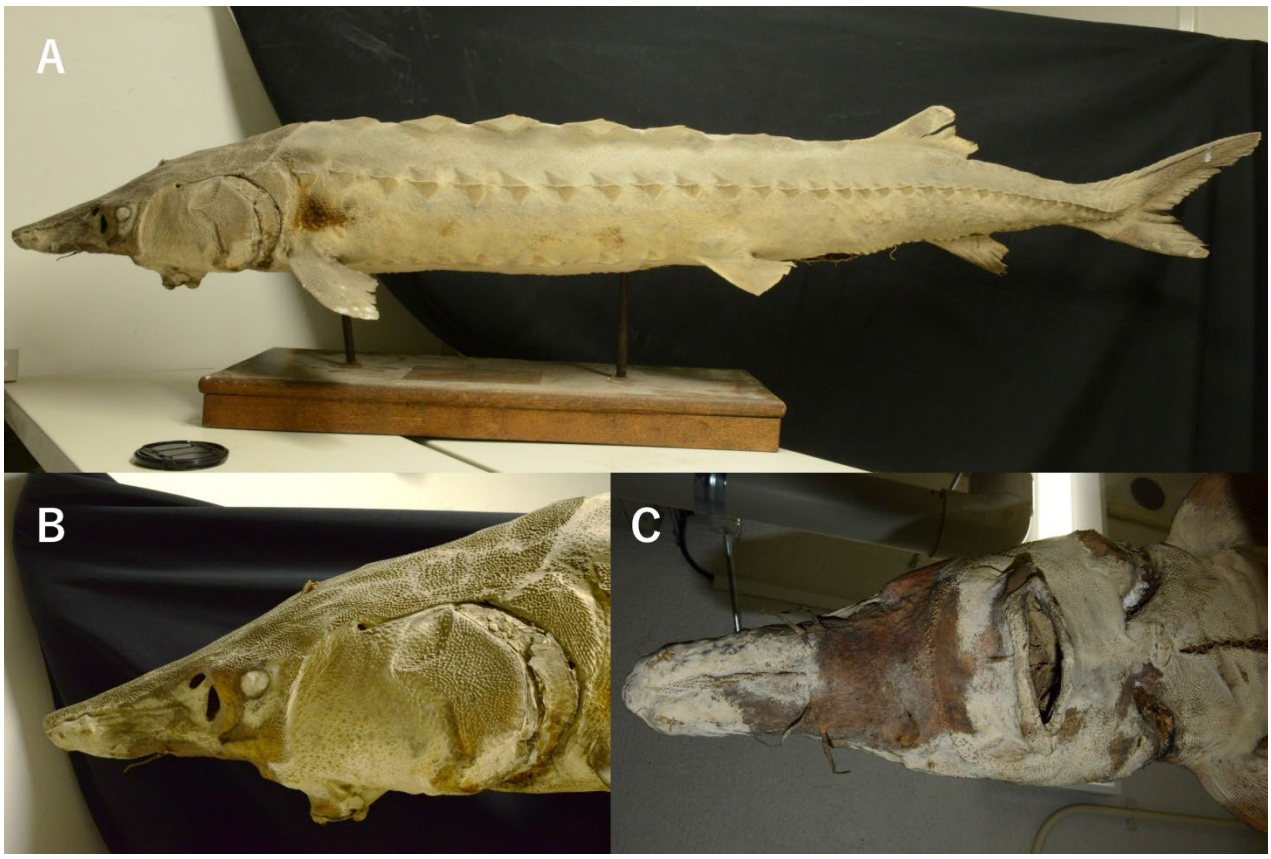

Figure 3. Preserved specimen (stuffed) of *Acipenser medirostris* from Sea of Mikawa country, Japan (ZUMT 945, 1330 mm SL). A: lateral view; B: lateral view of head; C: ventral view of head.

Figure 4. Preserved specimen of *Acipenser medirostris* from Yangtze River, 金公淡？, China (ZUMT 63413; 380 mm SL). A: lateral view; B: dorsal view; C: ventral view.

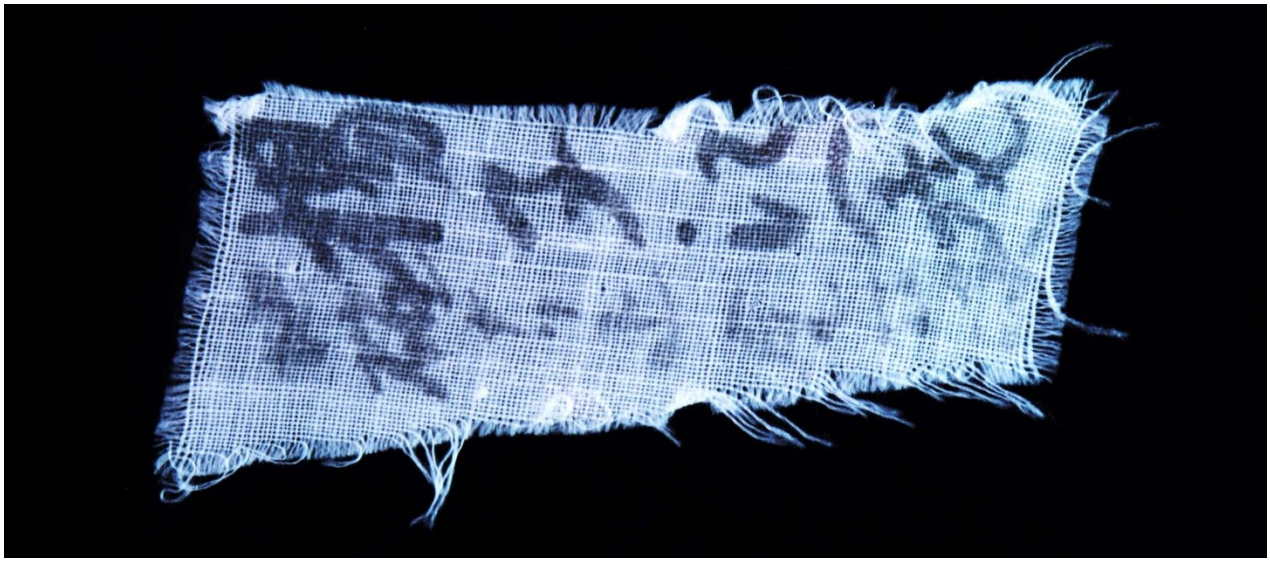

Figure 5. Tag of *Acipenser medirostris* (ZUMT 63413).

Figure 6. Preserved specimen of *Acipenser schrenkii* from Amur River, Russia (ZUMT 66264; 455 mm SL). A: lateral view; B: dorsal view; C: ventral view.

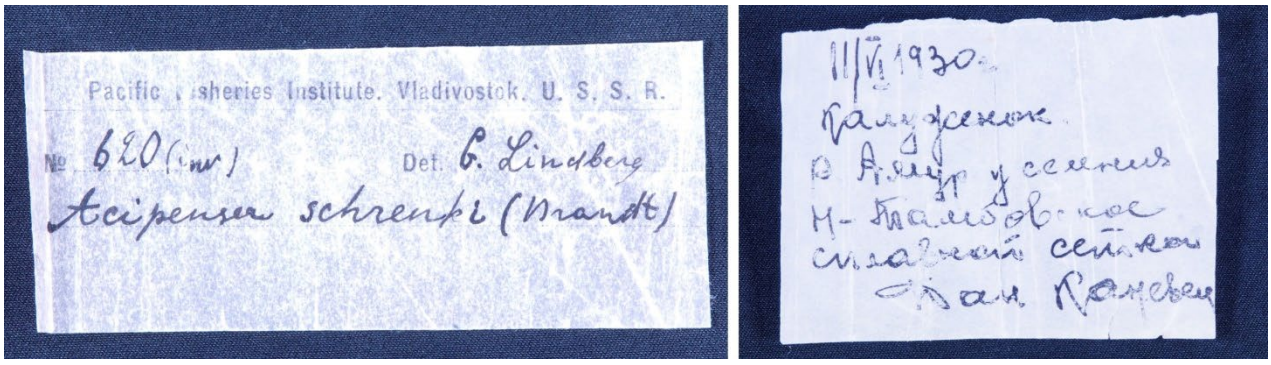

Figure 7. Tags of *Acipenser schrenkii* (ZUMT 63413).

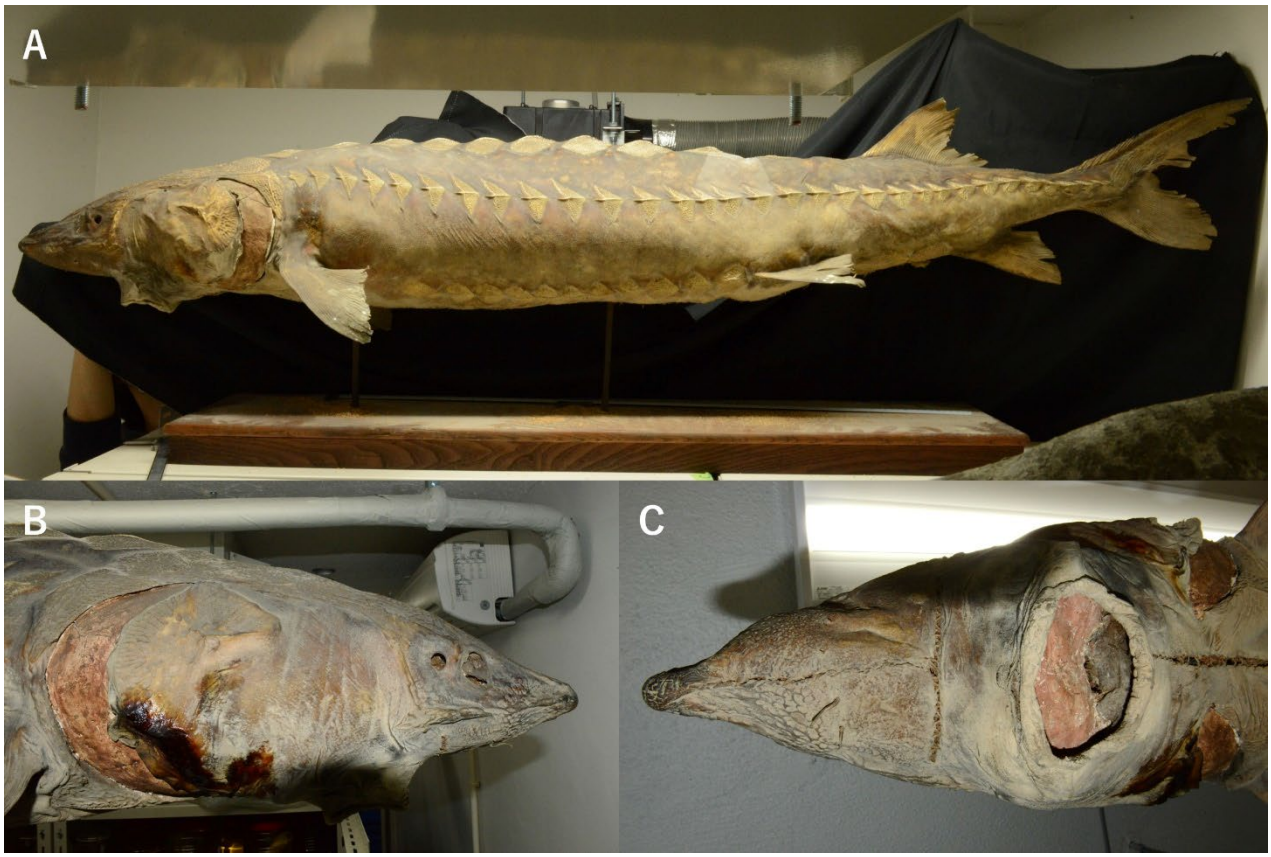

Figure 8. Preserved specimen (stuffed) of *Acipenser sinensis* from off Misaki (Sagami Bay), Japan (ZUMT 946; 1710 mm SL). A: lateral view; B: lateral view of head; C: ventral view of head.

Figure 9. Film photography of *Acipenser sinensis* from 7 miles off Ukedo-hama, Iwaki City, Fukushima Pref., Japan (ZUMT 955; 2120 mm SL).

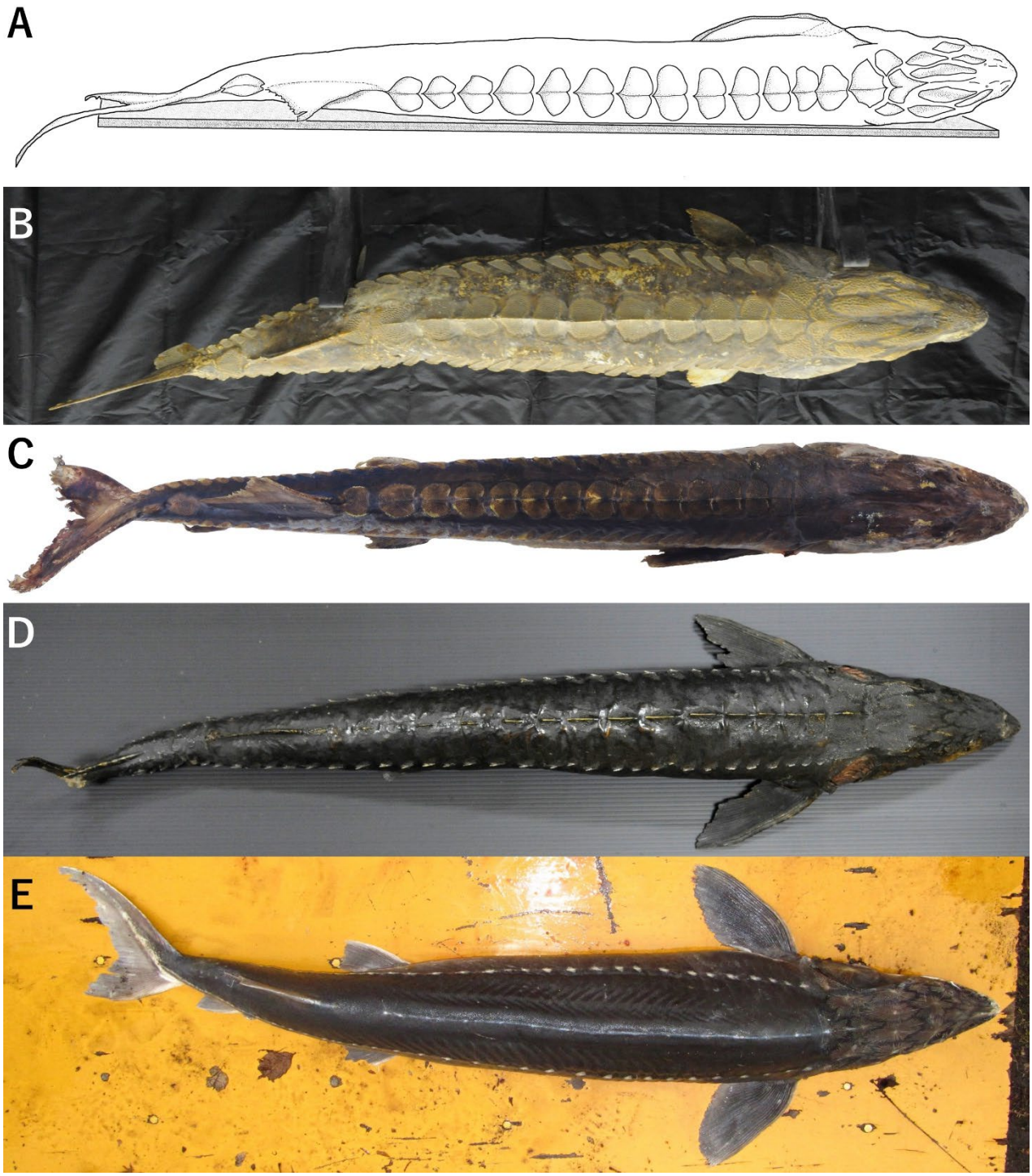

Figure 10. Dorsal view of *Acipenser sinensis* and *A. schrenckii*. A: *A. sinensis* (ZUMT 955, lost; 2120 mm SL), from 7 miles off Ukedo-hama, Iwaki City, Fukushima Pref., Japan, original figure by Tanaka (1908: pl. Ⅱ, Figs. 1B), Illustrated by Keiya Kumaki; B: *A. sinensis* (uncatalogued, stuffed; 1471 mm SL), locality unknown, stored in Kaikyokan; C: *A. sinensis* (KAUM-I 99269; 2700 mm SL), from south of Mt. Kaimon, Ibusuki, Kagoshima Pref., Japan; D: *A. schrenckii* (FAKU uncatalogued, stuffed; 892 mm SL), locality unknown; E: *A. schrenckii* (lost, 1640 mm TL) from off the Mombetsu coast, Hokkaido Pref., Japan.

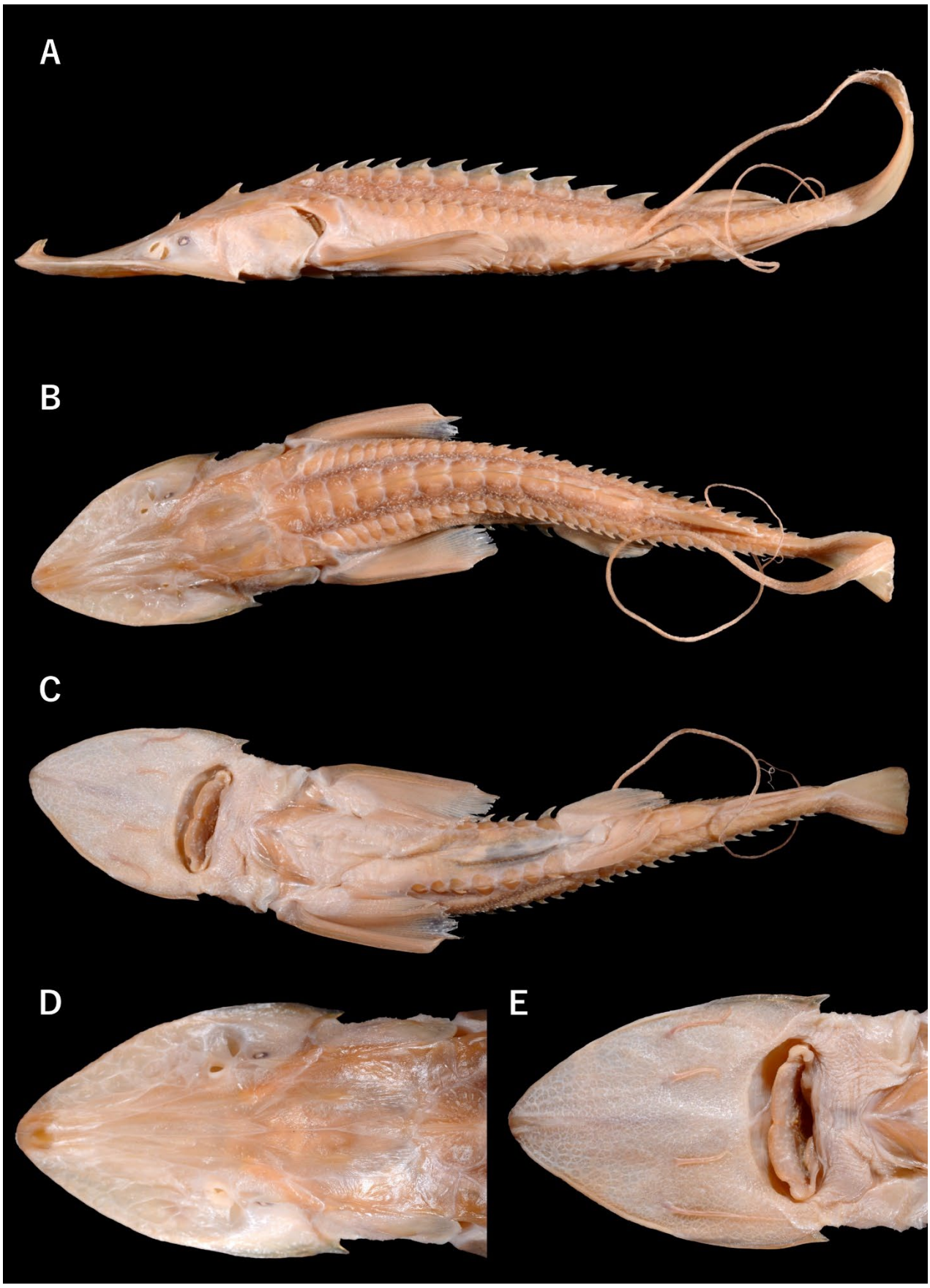

Figure 11. Preserved specimen of *Pseudoscaphirhynchus kaufmanni* from Nukus, Turkestan (ZUMT 63411; 98.6 mm SL). A: lateral view; B: dorsal view; C: ventral view; D: close-up of dorsal surface of head; E: close-up of ventral surface of head.

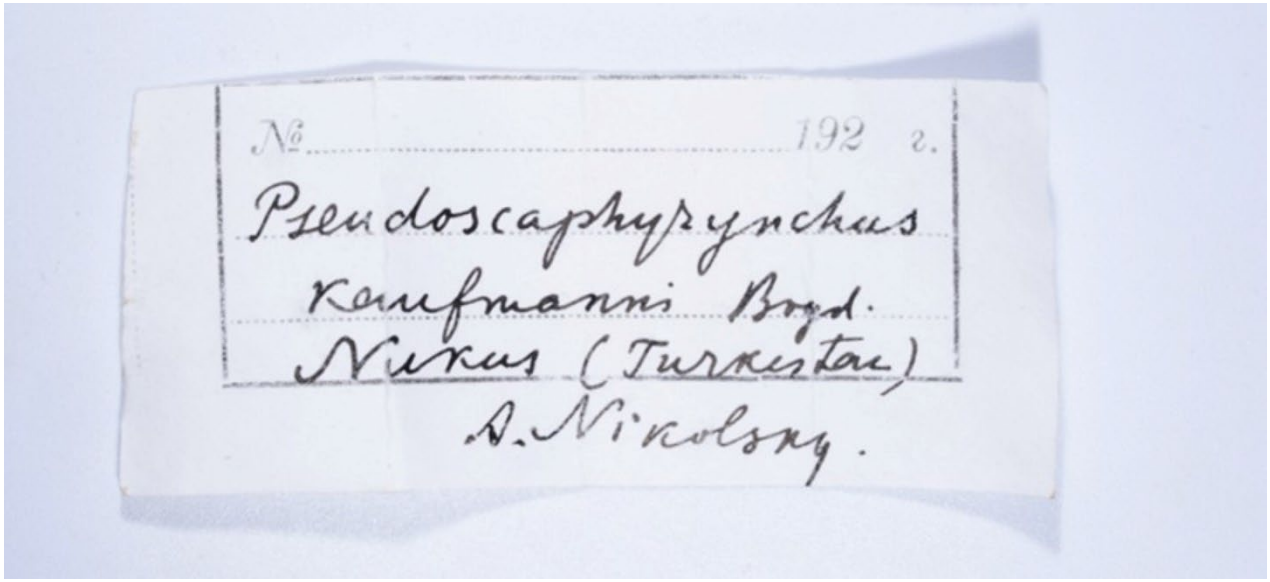

Figure 12. Tag of *Pseudoscaphirhynchus kaufmanni* (ZUMT 63411).

Figure 13. Preserved specimen of *Polyodon spathula*, donated from the University of Michigan Museum of Natural History (ZUMT 64578; 401 mm SL). A, B: lateral view; C: ventral view; D: close-up of ventral surface of paddle.

Figure 14. Preserved specimen of *Psephurus gladius* from Yichang, Yangtze River, China (ZUMT 25426; 650 mm SL). A: lateral view; B: dorsal view; C: ventral view.

Specimens of the order Elopiformes (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

Specimens of the order Elopiformes deposited in the Department of Zoology, The University Museum, The University of Tokyo included 13 extant specimens of *Elops hawaiensis* Regan, 1909, and 62 of *Megalops cyprinoides* (Broussonet, 1782). No types for the order were found.

Introduction

Fish species included within the order Elopiformes are distributed in warm seas globally. The order, characterized by a leptocephalus larval stage, comprises two families, Elopidae and Megalopidae (Nelson et al. 2016; Betancur-R et al. 2017), the former including a single genus and seven species, known as tenpounders or ladyfishes (McBride et al. 2010). Elopids differ from megalopids in having 95 or more lateral-line scales and the last fin dorsal fin ray not elongate, compared with fewer than 50 scales in the latter and the last fin ray elongate and filamentous (Smith 1999a). The family Megalopidae comprises a single genus and two species, *Megalops atlanticus* Valenciennes, 1847 (a western Atlantic endemic) and *Megalops cyprinoides* (Broussonet, 1782) (Indo-Pacific) (Hatooka 2018). The former has 13–16 dorsal-fin rays (16–21 in *M. cyprinoides*), 21–25 anal-fin rays (23–31), 53–57 vertebrae (66–70), and 41–48 lateral-line scales (30–42). In addition, the pelvic fin is located just below or slightly anterior to the dorsal-fin origin in the former, compared with significantly anterior to the dorsal-fin) (Tanaka 1930; Smith 2002b; Aizawa and Doiuchi 2013b; Nelson et al. 2016).

Although elopiform fishes are not popular as food in Japan, they are abundantly landed and used for human consumption in tropical areas (Losse 1968; Smith 1999b, 2002a, b; Koeda 2019a, b). Moreover, due to their large-sized body, *M. atlanticus* in particular, reaching 2 m in total length (120 kg), elopiforms are popular targets of sport-fishing (Smith 1999a, b, 2002b). Because the megalopid species are euryhaline and can be bred in freshwater, they are sometimes included in the aquarium trade (Pisces Publishers 2004), although their escape into prawn or fish aquaculture ponds may cause problems (Tzeng and Yu 1986). A list of specimens of Elopiformes deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided.

Materials and Methods

Specimens of Elopidae and Megalopidae in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study, following Whitehead (1962), Fraser (1973), McBride et al. (2010), and Aizawa and Doiuchi (2013a), and Tanaka (1930), Smith (2002b), Aizawa and Doiuchi (2013b), and Nelson et al. (2016), respectively. Parentheses following registration numbers include standard length, collection locality, collection date, and collector. Collection data of specimens are omitted if the same as that for the previous specimen. The collection year and collector for some specimens were estimated following Koeda et al. (2022).

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room) in the museum building. Most were stored in shelved containers, although some larger specimens were stored in a glass

tank in the same room, with the glass lid sealed with a silicon adhesive (as of July 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

As a result of the survey, 13 specimens of *Elops hawaiensis* Regan, 1909 and 62 specimens of *Megalops cyprinoides* (Broussonet, 1782) were confirmed. No types for the family were found. Two specimens (ZUMT 64304, 64305) of *E. hawaiensis* had remained unregistered until the present time, the remaining examples located including 10 ZUMT registrations and one ZUMT ABE specimen. ZUMT 11144, a specimen of *M. cyprinoides* from Ishigaki-jima Island is now deposited in the Field Museum, Chicago, as FMNH 59150.

Although 41 lots, including specimens collected from Basilan, Philippines (ZUMT 48496–48501, 48507, 48508, 48511–48515, 48520, 48523, 48526, 48527, 48535, 48542, 48547, 48548, 48559), Ogasawara Islands (ZUMT 6831, coll. by S. Fujimori), Okinawa-jima Island (ZUMT 17401–17403, coll. by S. Tanabe and Y. Hiyane), Osaka Pref. (ZUMT 7388, coll. by E. Watanabe), Hamana Lake (ZUMT 3179, coll. on Oct. 1910, by T. Aoki), Tokyo Bay (Tsukuda-jima Island; ZUMT 1580, 2 individuals), and Tokyo Market, Japan (ZUMT 3400, 2 individuals) had been registered as "*Elops*" in the ZUMT ledger, all of those from Basilan (22 lots) were identified here as *M. cyprinoides*. Because the remaining 19 registered lots could not be found, it transpired that only 10 of 19 (52.6%) elopoid specimens still remained in ZUMT. Furthermore, because many ledger entries referred to lot numbers only (lacking species names), it is suggested that even more ZUMT specimens may have been lost, for reasons unknown. Such a low retention rate can be compared to those of Istiophoridae (72.7%), Coryphaenidae (81.6%), and Menidae (91.7%) (Hata et al. 2022a, b).

A number of examples of Megalopidae, including 2 lots from Okinawa Prefecture (ZUMT 10381 and 58167) and 24 lots from riverine waters in Basilan, Philippines (ZUMT 42600–42623) [registered as *M. cyprinoides* or ハイレン（"Hairen", Japanese name of *M. cyprinoides*）], were not found. Because some ZUMT specimens of the latter species had been registered under *Dorosoma* (Dorosomatidae; ZUMT 42119), Cyprinidae (ZUMT 15119), *Ilisha* (Pristigasteridae; ZUMT 13961), or *Sciaena* (Sciaenidae; ZUMT 14963), confusion of *M. cyprinoides* with other taxonomic groups at the time of registration is evident. Since an accurate number of registered ZUMT specimens of the family cannot be presently determined, the retention rate of Megalopidae in the ZMUT collection is unclear.

Species accounts

Family Elopidae　カライワシ科

***Elops hawaiensis* Regan, 1909　カライワシ**

JAPAN

ZUMT 15198 [165.9 mm; probably collected from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School), 1920s]

ZUMT 17997 (251.8 mm; rice field along the coast of Naha Bay, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 11 Oct. 1927; coll. by K. Tashiro)

ZUMT 39714 (56.0 mm; Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 8 July 1936; coll. by S. Inuo)

ZUMT 39862 (117.5 mm; Ryukyu Archipelago; coll. by S. Sakaguchi)

ZUMT 44892 [62.5 mm; probably from Shizuoka Pref.; coll. by N. Onodera (Shizuoka Prefectural Mitsuke Junior High School)]

LOCALITY UNKNOWN

ZUMT 41642 (150.6 mm), ZUMT 41643 (171.0 mm), ZUMT 41644 (152.2 mm), ZUMT 41645 (166.2 mm), ZUMT 41646 (139.5 mm), ZUMT 64304 (249.9 mm), ZUMT 64305 (179.8 mm), ZUMT ABE 6005 (118.2 mm; no data)

Remarks. Tanaka (1912) described and figured this species based on a single specimen landed at Tokyo Market, Japan (ZUMT 3400, 29 cm total length). However, that specimen was not found during this study.

Family Megalopidae　イセゴイ科

Megalops cyprinoides (Broussonet, 1782)　イセゴイ

JAPAN

ZUMT 3192 (153.9 mm; Lake Hamana, Shizuoka Pref.; Oct. 1911)

ZUMT 8967 (160.5 mm; Amami-oshima Island; Amami Islands, Ryukyu Archipelago; 1 July 1919; coll. by H. Kuroiwa)

ZUMT 10640 (84.0 mm; Yaeyama Islands; coll. by H. Kuroiwa, 1910s or 1920s)

ZUMT 10886 (103.3 mm), ZUMT 10889 (110.9 mm; Nagura-gawa River estuary, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 24 Oct. 1922; coll. by H. Kuroiwa)

ZUMT 11143 (150.3 mm; Arakawa-River, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; May 1923; coll. by H. Kuroiwa)

ZUMT 11144 [157.7 mm; Arakawa-River, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; May 1923; coll. by H. Kuroiwa; currently registered as FMMH 59150 (see Results)]

ZUMT 13961 (160.6 mm), ZUMT 14019 (96.3 mm), ZUMT 14022 (80.3 mm), ZUMT 14023 (95.3 mm), ZUMT 15199 (78.8 mm; probably from Okinawa-jima Island, Ryukyu Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior High School)

ZUMT 17998 (106.4 mm), ZUMT 18000 (105.3 mm), ZUMT 18001 (140.5 mm), ZUMT 18006 (135.2 mm), ZUMT 18007 (153.3 mm; rice field along the coast of Naha Bay, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 11 Oct. 1927; coll. by K. Tashiro)

ZUMT 21087 (123.5 mm; Hamana Lake, Shizuoka Pref.; coll. by Y. Watanabe, before 1930)

ZUMT 39863 (79.3 mm; Okinawa Pref.; coll. by S. Sakaguchi, 1920s),

ZUMT 45892 (96.9 mm; probably from Okinawa Pref.)

ZUMT 58166 (108.8 mm), ZUMT 58168 (117.4 mm), ZUMT 58169 (102.4 mm), ZUMT 58170 (95.7 mm; Oharada, southeastern part of Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 11 July 1988; coll. by H. Senou and M. Aizawa)

ZUMT 60371 (101.2 mm; Oharada, southeastern part of Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 21 Aug. 1989; coll. by H. Senou and M. Aizawa)

TAIWAN

ZUMT 14962 (177.5 mm), ZUMT 14963 (178.3 mm; Tainan; coll. by T. Aoki, 1920s)

ZUMT 25327 (160.5 mm), ZUMT 25334 (111.4 mm; Taiwan; coll. by Y. Yamada)

PHILIPPINES

ZUMT 42119 (155.9 mm; Philippines; Jan. 1936; coll. by Y. Yamamura)

ZUMT 42580 (110.0 mm), ZUMT 42581 (100.2 mm), ZUMT 42599 (105.5 mm), ZUMT 48496 (162.0 mm), ZUMT 48497 (122.9 mm), ZUMT 48498 (102.6 mm), ZUMT 48499 (135.9 mm), ZUMT 48500 (94.9 mm), ZUMT 48501 (110.3 mm), ZUMT 48507 (94.6 mm), ZUMT 48508 (92.1 mm), ZUMT 48511 (132.5 mm), ZUMT 48512 (94.4 mm), ZUMT 48513 (96.9 mm), ZUMT 48514 (126.0 mm), ZUMT 48515 (106.4 mm), ZUMT 48520 (170.6 mm), ZUMT 48523 (124.9 mm), ZUMT 48526 (116.8 mm), ZUMT 48527 (116.2 mm), ZUMT 48535 (114.7 mm), ZUMT 48542 (150.9 mm), ZUMT 48547 (131.1 mm), ZUMT 48548 (85.0 mm), ZUMT 48559 (154.5 mm; freshwater in Basilan; 1926; coll. by U. Yamamura)

PALAU

ZUMT ABE 3026 (163.0 mm), ZUMT ABE 3777 (108.4 mm), ZUMT ABE 5962 (72.7 mm), ZUMT ABE 6011 (71.3 mm; Palau, 1936 or 1937)

SINGAPORE

ZUMT 40739 (165.7 mm; Singapore; 12 Mar. 1910; coll. by I. Iijima and K. Aoki)

LOCALITY UNKNOWN

ZUMT 62048 (419.5 mm; no data)

ZUMT 63072 (64.1 mm; no data; tagged as “23”)

Remarks. ZUMT 3192 was described in detail and illustrated by Tanaka (1930).

Acknowledgements

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Specimens of the order Albuliformes (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

Twenty-six single specimen lots of the order Albuliformes (Teleostei), deposited in the Department of Zoology, The University Museum, The University of Tokyo, were examined and found to represent four species in two genera. An example of *Albula oligolepis* Hidaka, Iwatsuki & Randall, 2008, collected from Taiwan, represented the first record of the species from the South China Sea. No types for the order were known.

Introduction

Fish species in the order Albuliformes, globally distributed in warm seas, and characterized by a leptocephalus larval stage, are included in the single family Albulidae, comprising two subfamilies (Nelson et al. 2016).

The subfamily Albulinae includes the single genus *Albula* (Nelson et al. 2016). Although the taxonomy of species in the genus have long been confused, it is gradually being resolved by recent studies (e.g., Pfeiler et al. 2006, 2008, 2011; Pfeiler, 2008; Hidaka et al. 2008; Kwun and Kim 2011; Kim et al. 2019). In addition, doubts have persisted regarding the number of species distributed in Japanese waters, and their applicable names (Aizawa and Doiuchi 2013a). However, Matsunuma et al. (2022) reviewed the taxonomy of northwestern Pacific species of the genus, indicating that at least four species were distributed off Japan, and giving the applicable scientific and Japanese names for each. Species of *Albula* typically inhabit sand or mud bottoms of shallow coastal waters, sometimes invading estuaries. Although sometimes marketed, their value as edible fish is not high due to their numerous fine intramuscular bones (Smith 1977, 1986; Smith and Randall, 1999; Chiang et al. 2014; Smith 2002; Koeda 2019; Hata 2020; Heemstra 2022). Nevertheless, albulinid species are popular targets of sport-fishing, being regarded as “bonefish” (Smith 1977, 1986, 2016a). Some species are threatened because of habitat loss or degradation, and overfishing (Adams et al. 2012a, b).

The subfamily Pterothrissinae, sometimes regarded as a separate family (Pterothrissidae) (Berg 1940; Matsubara 1955; Aizawa and Doiuchi 2013b; Smith 2016b), includes two species, *Nemoosis belloci* (Cadenat, 1937) (distributed in the eastern Atlantic) and *Pterothrissus gissu* Hilgendorf, 1877 (northwestern Pacific). Although often treated as representing a single genus (e.g., Matsubara, 1955; Smith 1986), the two species were clearly shown to be generically distinct by Hidaka et al. (2017). Pterothrissinids inhabit deep sea waters (*N. belloci* in 50–500 m depth, *P. gissu* in 200–1000 m depth; Sato 1997; Smith 2016; Hidaka et al. 2017). The latter species is caught mainly by trawl or long-line in the East China Sea, and used commercially in the preparation of fishballs (Tameka 1982; Machida 1984). Despite the recent studies of both subfamilies, the albuliform fishes are still taxonomically confused, with the distributional range of each species still incompletely known. A list of Albuliformes specimens deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided below.

Materials and Methods

Specimens deposited in the Department of Zoology, The University Museum, The University of Tokyo

(abbreviated as ZUMT) were identified during the present study, using following references: *Albula*: Hidaka et al. (2008) and Matsunuma et al. (2022); *Pterothrissus*: Aizawa and Doiuchi (2013b) and Hidaka et al. (2017). Parentheses following registration numbers include standard length, collection locality, collection date, and collector. Collection data of specimens are omitted if the same as that for the previous specimen. The collection year and collector for some specimens were estimated following Koeda et al. (2022).

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room) in the museum building. Most were stored in shelved containers, although some larger specimens were stored in a glass tank in the same room, with the glass lid sealed with a silicon adhesive (as of July 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future.

Results

As a result of the survey, 10 specimens representing species of the genus *Albula*, and 16 specimens of *Pterothrissus gissu* Hilgendorf, 1877 were confirmed. No specimens of *Nemoossis* or types for the order were known.

Species accounts

Family Albulidae　ソトイワシ科

***Albula argentea* (Forster, 1801)　ソトイワシ**

JAPAN

ZUMT 17126 (138.1 mm), ZUMT 17127 (147.2 mm), ZUMT 17128 (150.3 mm), ZUMT 17129 (130.3 mm; Baten, Nanjo City, Okinawa-jima Island, Ryukyu Archipelago; 1920's; coll. by S. Tanabe)

***Albula glossodonta* (Forsskål, 1775)　マルクチソトイワシ**

PHILIPPINES

ZUMT 12674 (372.7 mm; Philippines; 1920's; coll. by U. Yamamura)

***Albula oligolepis* Hidaka, Iwatsuki & Randall, 2008　アラメソトイワシ**

TAIWAN

ZUMT 14930 (217.2 mm; Tainan; 1920's; coll. by T. Aoki)

LOCALITY UNKNOWN

ZUMT 44635 (46.2 mm), ZUMT 44636 (68.2 mm), ZUMT 44637 (52.0 mm), ZUMT ABE 61-848 (327.4 mm; no data)

Remarks. Although Matsunuma et al. (2022) showed that this species is widely distributed in the Indo-West Pacific, *A. oligolepis* had not been previously recorded from the South China Sea. ZUMT 14930 therefore represents the first record of the species from that area.

Pterothrissus gissu **Hilgendorf, 1877　ギス**

JAPAN

ZUMT 13857 (329.1 mm; Kesen District, Iwate Pref.; 5 Jan. 1925; coll. by G. Toba)

ZUMT 14205 [344.5 mm; probably from Hokkaido; 1910's to 1920's coll. by S. Katsuki (Muroran Branch of Hokkaido Prefectural Fisheries Experimental Station)]

ZUMT 18395 (252.3 mm; obtained at Tokyo Market, Tokyo Met.)

ZUMT 20102 (137.4 mm; Misaki, Miura City, Kanagawa Pref.)

ZUMT 39400 (approx. 383.7 mm, caudal fin detached; Hachijo-jima Island, Izu Islands; coll. by M. Uchiyama)

ZUMT 46251 (316.7 mm; probably from Uozu or Namerikawa, Toyama Pref.)

ZUMT 48904 (367.5 mm; off Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 11 Mar. 1957; coll. by I. Tomiyama)

ZUMT 59319 (168.6 mm), ZUMT 59320 (134.6 mm; off Nakaminato, Hitachinaka City, Ibaraki Pref., 200–220 m depth; 31 Oct. 1988; coll. by trawl)

ZUMT 59401 (128.1 mm), ZUMT 59402 (195.3 mm), ZUMT 59403 (98.5 mm; off Nakaminato, Hitachinaka City, Ibaraki Pref., 230 m depth; 5 Nov. 1988; coll. by trawl)

ZUMT 64313 (320.5 mm), ZUMT 64314 (331.0 mm; off Esan, Hakodate City, Hokkaido; Feb. 1928)

LOCALITY UNKNOWN

ZUMT 62049 (360.4 mm; no data)

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Additional registrations and revised taxonomy of Clupeiformes (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A revised list of Clupeiformes specimens deposited in the Department of Zoology, The University Museum, The University of Tokyo includes newly found or registered material. The taxonomy of some species included in a recent listing has also been updated. Specimens of *Sardinella melanura* collected in 2023 represent the first records of that species from Sagami Bay.

Introduction

The order Clupeiformes includes more than 400 species, many being commercially important (Nelson et al., 2016; Birge al., 2021). In recent years, more than 500,000 tons of *Sardinops melanostictus* (Temminck & Schlegel, 1846) have been caught annually in waters around Japan, the species representing the largest catch of any fish species in Japan since 2019. Additionally, some other clupeiform species, including *Etrumeus micropus* (Temminck & Schlegel, 1846) and *Engraulis japonica* Temminck & Schlegel, 1846, are also abundantly caught in Japanese waters (Statistics Department of Ministry of Agriculture, Forestry and Fisheries, Japan, 2023; Ministry of Agriculture, Forestry and Fisheries, Japan. 2023). Because clupeiform fishes have been studied for many years in Japan (e.g., Kishinouye, 1908, 1911), many specimens collected since the early 20th Century have been deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT), and were subsequently listed by Hata et al. (2022a). However, due to the many taxonomic studies of clupeiform fishes published since Hata et al. (2022a), with new species descriptions and applicable name changes (e.g., Agosinho et al., 2022; Hata and Motomura, 2022, 2023; Hata, 2023a; Hata et al., 2023b), the identities and type status of some ZUMT specimens have been changed. Furthermore, during ongoing reorganization of the ZUMT specimens, many unregistered clupeiform fishes were found. This article lists specimens included in Hata et al. (2022a), for which the species names have been changed, plus those newly found or registered.

Materials and Methods

The classification of clupeiforme families generally follows Wang et al. (2022). Species nomenclature and identifications of ZUMT specimens generally follow Whitehead (1985), Whitehead et al. (1988), Munroe et al. (1999a, b) and Wongratana et al. (1999), exceptions being noted in the Remarks following the applicable species. Specimens for which identifications have been changed, or which were newly found or registered are listed in "Revised specimens list" and "Additional specimens list", respectively. Contents included in parentheses following registration numbers are as follows: [specimen counts, standard length; collection locality; collection date; collector; remarks (if applicable)]. Collection data of specimens are omitted if the same as that for the

previous specimen. The ZUMT specimens listed herein were stored in shelved containers (as of Sept. 2023) in Room 406 (specimen storage room) in the museum building, except for type-specimens stored in Room 407. Although one of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with only partial collection data, it is listed herein together with the ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

The identifications for 14 lots of ZUMT specimens listed in Hata et al. (2022a) have been changed to reflect the latest published research results. Additionally, 16 clupeiform species in 32 lots, including 75 specimens, have been newly found or registered. Among of them, two species (*Opisthopterus tardore* and *Thrissina porava*) had not been previously recorded in the ZUMT collection. ZUMT ABE 3035–3038 (*Thrissina samam*) and ZUMT ABE 3041–3044 (*Stolephorus balinensis*), specimens from Palau are now deposited in Natural History Museum, London as BMNH 1966.1.17.120–123 and BMNH 1966.1.17.143–146, respectively. In total, at least 79 clupeiform species in 1175 lots, including 2342 specimens, were found. In addition, newly registered specimens of *Sardinella melanura* were noted as the first records of that species from Sagami Bay.

Revised specimens list

Family Dussumieriidae

***Dussumieria hasseltii* Bleeker, 1851**

ZUMT 41001 (1, 100.8 mm; Jolo Island, Philippines; Feb. 1909; coll. by K. Aoki and I. Iijima)

Remarks. Although this specimen was listed as *Dussumieria elopsoides* Bleeker, 1849 in Hata et al. (2022a), Hata et al. (2022c) showed that specimens previously identified as *D. elopsoides* included at least four species: true *D. elopsoides*, *D. hasseltii*, *Dussumieria modakanda*i Singh, Teena Jayakumar, Kumar, Murali, Mishra, Singh & Lal, 2021, and *Dussumieria productissima* Chabanaud, 1933, the present specimen being identified as *D. hasseltii*. In addition, ZUMT 62628 (1, 102.3 mm; Jakarta, Java; 5 Mar. 1909; coll. by I. Iijima and K. Aoki), also listed as *D. elopsoides* in Hata et al. (2022a), was recognized as true *D. elopsoides*.

Family Engraulidae

***Stolephorus diabolus* Hata, Lavoué & Motomura, 2022**

ZUMT 62056 (paratypes of *S. diabolus*, 5, 28.5–38.4 mm, Singapore; 23 Feb. 1922; coll. by D. G. Stead; although the lot originally included 9 specimens, two specimens each were subsequently deposited in the Kagoshima University Museum, Kagoshima (KAUM–I. 163702, 163703) and National Museum of Nature and Science, Tsukuba (NSMT-P 143554, 143555)

ZUMT 62106 (3, 27.4–32.9 mm; Singapore; 23 Feb. 1922; coll. by D. G. Stead, separated from ZUMT 10494)

Remarks. Although these specimens were listed as *Stolephorus bengalensis* (Datt & Babu Rao, 1959) in Hata et al. (2022a), Hata et al. (2022b) showed that specimens previously identified as *S. bengalensis* or *Stolephorus insularis* Hardenberg, 1933 (Whitehead et al., 1988; Wongratana et al., 1999) included at least four species: true *S. bengalensis*, *Stolephorus diabolus* Hata, Lavoué & Motomura, 2022, *Stolephorus eclipsis* Hata, Lavoué & Motomura, 2022, and *S. eldorado*. Specimens registered as ZUMT 62056 were designated as paratypes of *S. diabolus*.

***Stolephorus eldorado* Hata, Lavoué & Motomura, 2022**

ZUMT 43430 (1, broken; Wenzhou City, Zheijiang Province)

Remarks. The specimen was listed as *S. bengalensis* in Hata et al. (2022a). See Remarks under *S. diabolus*.

***Thrissina samam* (Montrouzier, 1857) オオイワシ**

ZUMT 11282 (1, 84.3 mm), ZUMT 11283 [1, 92.8 mm; probably Okinawa-jima Island, Ryukyu Archipelago, Japan; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior Hight School)]

ZUMT 39727 (1, 41.8 mm; Okinawa-jima Island, Ryukyu Archipelago, Japan; 8 July 1936; coll. by S. Inuo)

ZUMT 40900 (8, 67.3–79.9 mm), ZUMT 41003 (1, 71.7 mm), ZUMT 41004 (1, 59.7 mm; Jolo Island, Philippines; Feb. 1909; coll. by I. Iijima and K. Aoki)

ZUMT ABE 3039 (1, 69.5 mm), ZUMT ABE 3040 (2, 56.5–73.8 mm; Palau)

ZUMT 62054 (7, 84.1–104.4 mm; Palau; stored in same bottle with ZUMT ABE 5963 and 5964)

Remarks. Although the above specimens were listed as *Thrissina baelama* (Fabricius, 1775) in Hata et al. (2022a), Hata et al. (2023a) showed that specimens previously identified as *T. baelama* included at least five allopatric species: true *T. baelama* (distributed in the Red Sea), *Thrissina evermanni* (Jordan & Seale, 1906) (Fiji, Tonga, and Samoa), *Thrissina polynemoides* (Günther, 1868) (off eastern coast of Africa), *T. samam* (western Pacific), and *Thrissina tuberculosa* (Lacepède, 1803) (Mauritius). All of the present ZUMT specimens were reidentified as *T. samam* [see Hata et al. (2023a)].

***Thrissina splendida* Hata, 2022**

ZUMT 44497 [paratype of *T. splendida*, 1, 114.9 mm; precise locality unknown, probably collected from Korea; coll. by G. Umaniwa (South Gyeongsang Province, Korea)]

Remarks. Although the specimen was listed as *Thrissina* sp. in Hata et al. (2022a: fig. 1C), it was later designated as a paratype of *T. splendida* by Hata (2022).

Additional specimens list

Family Spratelloididae

***Spratelloides gracilis* (Temminck & Schlegel, 1846) キビナゴ**

ZUMT 63780 (1, 59.5 mm), ZUMT 63781 (1, 54.5 mm; no data)

Family Engraulidae

***Coilia mystus* (Linnaeus, 1758)**

ZUMT 66572 (1, 303.0 mm; Daedonggang River, Pyongyang, North Korea)

***Encrasicholina heteroloba* (Rüppell, 1837) シロガネアイノコイワシ**

ZUMT 64556 (1, 65.6 mm; Kadogawa Bay, Kadogawa, Higashi-usuki, Miyazaki Prefecture, Japan, Oct. 2021, set net, donated by Y. Ogata and M. Fukatani))

ZUMT 66041 (33, 54.0–67.1 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

***Encrasicholina punctifer* Fowler, 1938 タイワンアイノコイワシ**

ZUMT 64219 [1, 42.6 mm; Kaohsiung, Taiwan, obtained from stomach of ZUMT 22609, *Scomberomorus guttatus* (Bloch & Schneider 1801)]

ZUMT 65911 (1, 67.8 mm; southwest of Gulf of Thailand, Thailand, 20 Aug. 1985)

***Engraulis japonica* Temminck & Schlegel, 1846 カタクチイワシ**

ZUMT 64992 (1, 32.7 mm; Japan, but details unknown, 23 July 1965)

***Stolephorus balinensis* (Bleeker, 1849)　インドアイノコイワシ**

ZUMT 64425 [1, 94.9 mm; Kadogawa Bay, Kadogawa, Higashi-usuki, Miyazaki Prefecture, Japan (32°28′37″N, 131°39′42″E), 9 Nov. 2021, 8 m depth, set net, coll. M. Wada, donated by Y. Ogata and M. Fukatani]

ZUMT ABE 3041 (1, 82.6 mm), ZUMT ABE 3042 (1, 88.1 mm), ZUMT ABE 3043 (1, 82.1 mm), ZUMT ABE 3044 [1, 89.2 mm; Palau, coll. T. Abe; currently registered as BMNH 1966.1.17.120–123 (see Results)]

***Stolephorus baweanensis* Hardenberg, 1933**

ZUMT 66042 (4, 70.7–81.6 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

***Thrissina dussumieri* (Valenciennes, 1848)　ツルギカタクチ**

ZUMT 63269 (7, 29.9–43.9 mm; Tamsui District, New Taipei City, Taiwan, purchased at Tamsui Fish Market, 30 Oct. 1919)

ZUMT 66046 (1, 89.7 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

***Thrissina porava* (Bleeker, 1849)**

ZUMT 66047 (1, 125.8 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

Remarks. See Hata and Lavoué (2024) regarding the nomenclature of this species.

***Thrissina samam* (Montrouzier, 1857)　オオイワシ**

ZUMT ABE 3035 (1, 61.2 mm), ZUMT ABE 3036 (1, 71.6 mm), ZUMT ABE 3037 (1, 72.0 mm), ZUMT ABE 3038 [1, 66.9 mm; Palau, coll. T. Abe; currently registered as BMNH 1966.1.17.143–146 (see Results)]

***Thrissina setirostris* (Broussonet, 1782)**

ZUMT 63317 (2, 54.2–55.8 mm; Tamsui District, New Taipei City, Taiwan, purchased at Tamsui Fish Market, 30 Oct. 1919)

ZUMT 66048 (1, 114.1 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

Family Pristigasteridae

***Ilisha melastoma* (Bloch & Schneider, 1801)**

ZUMT 66043 (1, 123.8 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

***Opisthopterus tardoore* (Cuvier, 1829)**

ZUMT 66044 (1, 131.5 mm), ZUMT 66045 (1, 136.5 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

Family Dorosomatidae

***Clupanodon thrissa* (Linnaeus, 1758)**

ZUMT 45438 (1, 103.1 mm; Taiwan)

Remarks. Hata (2023b: fig. 1) figured this specimen.

***Nematalosa come* (Richardson, 1846)　リュウキュウドロクイ**

ZUMT 60288 [1, 131.9 mm; estuary of Yonada-gawa River, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago, Japan (24°23'20.0"N 123°45'25.0"E), 20 Aug. 1989, cast net, coll. by M. Aizawa, H. Senou, T. Suzuki, and T. Uryu]

***Sardinella gibbosa* (Bleeker ,1849)　ナンカイサッパ**

ZUMT 65946 (1, 61.3 mm; off Songkhla Province, Gulf of Thailand, Thailand, 9 July 1985, trawl)

***Sardinella melanura* (Cuvier, 1829)　オグロイワシ**

(Fig. 1)

ZUMT 66516 [2, 47.2–54.9 mm; Nabetahama Beach, Shimoda, Shizuoka Pref., Japan (34°40'00.2"N, 138°56'10.3"E), 0.5 m depth, 9 Oct. 2023, hand net, coll. A. Kawakami]

ZUMT 66517 [1, 54.6 mm; Nabetahama Beach, Shimoda, Shizuoka Pref., Japan (34°40'00.2"N, 138°56'10.3"E), 0.5 m depth, 11 Oct. 2023, hand net, coll. A. Kawakami]

ZUMT 66518 [1, 54.2 mm; Nabetahama Beach, Shimoda, Shizuoka Pref., Japan (34°40'00.2"N, 138°56'10.3"E), 0.5 m depth, 25 Nov. 2023, hand net, coll. A. Kawakami]

Remarks. This species has been previously recorded from Kashima-nada Sea (Ibaraki Pref.) and off the Pacific coast south of Wakayama Pref. (Hata and Kanou, 2023: fig. 2). The present specimens, representing the first records of *S. melanura* from Sagami Bay, were collected on a shallow sandy beach.

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Fig. 1. Specimen of *Sardinella melanura*, ZUMT 66516, Nabeta-hama Beach, Shimoda City, Shizuoka Pref., Japan.

Specimens of the order Gonorynchiformes (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of the order Gonorynchiformes deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided. Although 25 and 37 specimens of Chanidae and Gonorynchidae, respectively, were confirmed, no examples of the freshwater family Kneriidae were found.

Introduction

The order Gonorynchiformes, including three families, Chanidae (Indo-Pan Pacific marine/brackish/freshwater), Gonorynchidae (Indo-Pan Pacific marine/brackish) and Kneriidae (African freshwater), is characterized by having the first three vertebrae specialized and associated with one or more cephalic ribs. Because this character is similar to the Weberian Apparatus, a unique character of the series Otophysi (including Cypriniformes, Characiformes, Siluriformes, and Gymnotiformes), Gonorynchiformes is considered to be related to that series (Nelson et al. 2016). The family Chanidae includes a single extant species, *Chanos chanos* (Fabricius, 1775), and seven fossil genera (Nelson et al. 2016). The former, commonly called milkfish due to its whitish muscle color, is the most important commercial fisheries fish species in Southeast Asia, tolerating low salinity and undergoing rapid growth. Accordingly, it is extensively aquacultured in tropical Indo-Pacific regions, although mainly in Southeast Asia, where it is widely farmed in freshwater or brackish water ponds (sometimes together with prawns) and processed for food (Tanaka et al. 1990; Koeda 2019), although not highly popular as such. It is also used as baitfish for tuna-fishing (Tateishi 2000; Nibe 2003a, b; Hata 2017, 2022). Gonorynchidae includes five recent species, inhabiting the sea floor up to hundreds of meters in depth (Grande 1999). They are caught by trawls, but the catch is small and of no significant commercial importance (Yamada 1986; Ferraris 1999; Koeda 2020). Kneriidae includes 31 recent freshwater species, found in tropical Africa. All are less than 16 cm in length (Nelson et al. 2016), some species, such as *Phractolaemus ansorgii* Boulenger, 1901 (called Tobacco Fish or African Mudfish), are included in the aquarium trade (Matsuzaka 1997; Pisces Publishers 2001, 2004).

During a survey of the fish collection deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT), a number of specimens of the order Gonorynchiformes, collected from Japan and elsewhere, were found. They are detailed in the following list.

Materials and Methods

Specimens of Gonorynchiformes in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study following Bagarinao (1999), Ferraris (1999), Grande (1999), Nakabo and Kai (2013a, b), and Nelson et al. (2016). Parentheses following registration numbers include standard length, collection locality, collection date, and collector. The collection year and collector for some specimens were estimated following Koeda et al. (2022).

The ZUMT specimens listed herein were stored in shelved containers in Room 406 (specimen storage room) in the museum building (as of July 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

A total of 25 and 37 specimens, respectively, of Chanidae and Gonorynchidae from the Pacific region were confirmed in the ZUMT collection. ZUMT 10982, an example of *Chanos chanos* from Yonaguni-jima Island, Japan is now deposited in the Field Museum, Chicago (FMNH 59151).

However, no ZUMT specimens or ZUMT ledger registrations of examples of the family Kneriidae were found. Additionally, no type specimens for the order were found in the collection.

Species accounts

Order Gonorynchiformes　ネズミギス目
Family Chanidae　サバヒー科
***Chanos chanos* (Fabricius, 1775)　サバヒー**

JAPAN

ZUMT 8812 (99.0 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by H. Kuroiwa)

ZUMT 9315 (72.0 mm; Miyako-jima Island, Miyako Islands, Ryukyu Archipelago; coll. by H. Kuroiwa)

ZUMT 10425 (59.0 mm), ZUMT 10434 (105.0 mm), ZUMT 10435 (77.0 mm), ZUMT 64214 (98.0 mm), ZUMT 64215 (64.0 mm; Yonaguni-jima Island, Yaeyama Islands, Ryukyu Archipelago; coll. by N. Kuroda)

ZUMT 10982 [body unmeasurable due to bending; Yonaguni-jima Island, Yaeyama Islands, Ryukyu Archipelago; Feb. 1923; coll. H. Kuroiwa; currently registered as FMNH 59151 (see Results)]

ZUMT 14020 (113.0 mm), ZUMT 14021 (111.0 mm), ZUMT 15339 [109.0 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]

TAIWAN

ZUMT 5680 (168.0 mm), ZUMT 64216 (60.0 mm), ZUMT 64217 (191.0 mm; Yilan; Oct. 1896; coll. by K. Tada)

ZUMT 18008 (167.0 mm; rice field along coast of Naha Bay, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 11 Oct. 1927; coll. by K. Tashiro)

ZUMT 64200 (205.0 mm; Ximending Market, Taipei City; 3 Oct. 1929)

PHILIPPINES

ZUMT 42324 (230.0 mm), ZUMT 42673 (89.0 mm), ZUMT 48530 (236.0 mm; Basilan; 1926; coll. by U. Yamamura)

ZUMT 54602 (121.6 mm; Puerto Princesa, Palawan; 8 Feb. 1985; coll. by M. Aizawa)

PALAU

ZUMT ABE 5960 (98.0 mm), ZUMT ABE 5961 (104.0 mm), ZUMT ABE 6006 (86.0 mm; Palau)

HAWAIIAN ISLANDS

ZUMT 57257 (352.2 mm), ZUMT 57258 (380.8 mm; Hawaiian Islands; 3 Jan. 1988; coll. by H. Fujimoto)

Family Gonorynchidae　ネズミギス科

***Gonorynchus abbreviatus* Temminck & Schlegel, 1846　ネズミギス**

JAPAN

ZUMT ABE 94-1205 (275.0 mm; Manazuru Town, Kanagawa Pref.)
ZUMT 8710 [163.5 mm; probably collected from Saga Pref.; coll. by K. Kikuchi (Saga Prefectural Saga Junior High School)]
ZUMT 20271 (198.2 mm; Wakayama Pref.)
ZUMT 21703 (174.3 mm; Wakayama Pref.; 4 Feb. 1906)
ZUMT 23034 (178.7 mm; Sakaiura, Minabe Town, Wakayama Pref.; 24 Nov. 1929; coll. by T. Kinoshita)
ZUMT 23277 (65.4 mm; Susaki City, Kochi Pref.; 15 Aug. 1930; coll. by T. Kamohara)
ZUMT 23894 (288.6 mm; Naya, Kagoshima City, Kagoshima Pref.)
ZUMT 31598 (246.5 mm; Kagoshima Pref.)
ZUMT 34455 (226.5 mm; probably Japan)
ZUMT 42926 (181.8 mm; Sumoto City, Awaji-shima Island, Hyogo Pref.)
ZUMT 49050 (297.5 mm; obtained at Misaki Fish Market, Misaki, Miura City, Kanagawa Pref.; 23 July 1957; coll. by I. Tomiyama)
ZUMT 53921 [118.5 mm; continental slope in East China Sea, approx. 230−240 km north of Miyako-jima Island, Miyako Islands, Ryukyu Archipelago (26°55'N, 125°00.5'E−26°56.6'N, 125°02.5'E), 120 m depth; 24 May 1968; coll. by Y. Tominaga boarding on RV *Hakuyo-maru*]
ZUMT 57668 (215.4 mm), ZUMT 57669 [209.1 mm; East China Sea, approx. 140 km southwest off Goto Islands, Nagasaki Pref. (31°30'N, 128°03'E), 147 m depth; 14 May 1988; coll. by M. Aizawa]
ZUMT 64289 (266.2 mm), ZUMT 64290 (255.0 mm), ZUMT 64291 [270.3 mm; obtained at Misaki Fish Market (probably caught in Sagami Bay), Miura City, Kanagawa Pref.; 23 July 1957; coll. by I. Tomiyama]
ZUMT 64303 (264.4 mm; Misaki, Miura City, Kanagawa Pref.; around 1968)
ZUMT 64552 (312.0 mm), ZUMT 64553 (312.0 mm; Suzaki, Shimoda City, Shizuoka Pref.; Mar. 1939)

TAIWAN

ZUMT 14813 (81.3 mm), ZUMT 14814 (75.2 mm; Tainan City; coll. by T. Aoki)
ZUMT 14825 (89.8 mm), ZUMT 14826 (75.7 mm), ZUMT 14827 (46.8 mm), ZUMT 14828 (74.9 mm), ZUMT 14829 (77.4 mm), ZUMT 14830 (93.7 mm; Taiwan; coll. by T. Aoki)

LOCALITY UNKNOWN

ZUMT ABE 59-658 (72.5 mm; no data)

***Gonorynchus greyi* (Richardson, 1845)**

NEW ZEALAND

ZUMT 64087 [439.1 mm; approx. 180 km east of Chatham Island, Chatham Islands (43°29'S, 173°57'W), 306–315 m depth, 6 Mar. 1983, coll. by M. Aizawa]
ZUMT 64316 (472.0 mm), ZUMT 64317 (408.0 mm), ZUMT 64319 (484.0 mm), ZUMT 64320 (456.0 mm), ZUMT 64321 (451.0 mm), ZUMT 64322 [525.0 mm; approx. 920 km southeast of Chatham Islands (50°22'S, 167°46'W), 340–350 m depth, 16 Mar. 1983, coll. by M. Aizawa]

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A list of the specimens of Synodontidae (Actinopterygii: Aulopiformes) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

Detailed investigation on the Synodontidae (lizardfish) specimens deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) revealed that there are 383 catalog numbers including 668 specimens representing 27 species and four genera. Type specimens confirmed are as follows: the holotype and two paratypes of *Saurida isarankurai* Shindo & Yamada, 1972; two syntypes of *Saurida macrolepis* Tanaka, 1917; a paratype of *Saurida micropectoralis* Shindo & Yamada, 1972; the holotype of *Saurida wanieso* Shindo & Yamada, 1972; the holotype of *Synodus hoshinonis* Tanaka, 1917; the three syntypes of *Synodus macrops* Tanaka, 1917. One of the syntypes of *Saurida macrolepis* and the holotype of *Synodus fuscus* Tanaka, 1917, which are thought to be stored in ZUMT, were not found in the present study.

Introduction

The lizardfishes (family Synodontidae) are bottom-living, carnivorous fish which mainly feeds small fishes and crustaceans (Russell, 1999). Some of them are commercially important, and often harvested in Indo-Pacific countries using bottom trawling or other traditional ways (Russell, 1999; Kalhoro et al., 2013; Yang et al., 2021). The family includes four genera, *Harpadon*, *Saurida*, *Synodus,* and *Trachinocephalus*. In Japanese waters, two species of *Harpadon*, 10 species of *Saurida*, 16 species of *Synodus*, and one species of *Trachinocephalus* are known today (Randall, 1998; Yamada and Yagishita, 2013; Nakamura and Motomura, 2020; Nakayama and Tamai, 2020; Furuhashi et al., 2022).

This catalogue provides information attained from the specimens and the ledgers on the collection of lizardfishes in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT). The collection treated here consists of specimens collected mainly from Japan, and Southeast Asia, and partly from Hawaii, Papua New Guinea, and Suriname.

Material and Methods

The specimens of Synodontidae deposited in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified following Shindo and Yamada (1972), Ueno and Aizawa (1983), Inoue and Nakabo (2006), Yamada and Yagishita (2013), Ozawa (2014), Polanco et al. (2016), Furuhashi and Motomura (2022a, b, c), and Furuhashi et al. (2022). Japanese names of the species also follow these studies. Type attributes follow Aizawa et al. (2022). For some specimens without collecting dates in the ledgers or specimen tags, according to Koeda et al. (2022), the numbers of years before which the specimen was collected were estimated by their specimen numbers. During the study, we needed to register specimens anew. Such specimens were assigned to numbers of ZUMT 62000–65000.

In this list, the ZUMT specimens are described as "ZUMT XXXX", while the specimens of "ABE collection",

which was collected by Tokiharu ABE (阿部宗明) and once registered aside from ZUMT collection, are described as "ZUMT ABE XXXX." After ZUMT numbers, the following data are given when available: type attributes (abbreviated for non-type); standard length (SL) measured to the nearest 0.1 mm; locality; collecting date; collectors; donators; local names; collecting methods; remarks. For specimens whose localities are not clearly described in the ledgers but are able to be inferred from other information such as collectors, donators, or localities of specimens in the same lot, an asterisk (*) is put before the ZUMT number. Species are arranged in alphabetical order.

Results and Discussion

During the study, a total of 668 lizardfish specimens from 27 species and four genera were discovered in the ZUMT collection. While the following type specimens were verified [the holotype and two paratypes of *Saurida isarankurai* Shindo & Yamada, 1972; two syntypes of *Saurida macrolepis* Tanaka, 1917; a paratype of *Saurida micropectoralis* Shindo & Yamada, 1972; the holotype of *Saurida wanieso* Shindo & Yamada, 1972; the holotype of *Synodus hoshinonis* Tanaka, 1917; the three syntypes of *Synodus macrops* Tanaka, 1917], we could not find one of the syntypes of *Saurida macrolepis* and the holotype of *Synodus fuscus* Tanaka, 1917.

The reason the number of specimens was much larger than that of catalog numbers is that some bottles with one ZUMT number included lots of larvae, especially for *Synodus* sp. (unidentified, see remarks in Secies Accounts) and *Trachinocephalus trachinus* (Temminck & Schlegel, 1846). These larvae were mostly collected by the research vessels of ORI (Ocean Research Institute, current AORI), Tansei-maru (淡青丸) and Hakuho-maru (白鳳丸), with plankton nets in East China Sea and Pacific ocean off the coasts of southern Japan, and by someone (probably including T. Abe) with landing nets in Papua New Guinea. Because most of them had not to be registered to ZUMT, they were newly registered and assigned to ZUMT numbers from 62000 to 65000.

For the species distributed in Japanese waters, two species of *Harpadon* (100 % of total), nine of *Saurida* (90 %), seven of *Synodus* (43.75 %), and one of *Trachinocephalus* (100 %) were confirmed. Lizardfishes of the genus *Synodus* include several species whose localities are very limited in Japan (e.g. *Synodus lobeli* Waples & Randall, 1988; *Synodus orientalis* Randall and Pyle, 2008)(Senou et al., 1995), or species with few specimens from Japan to date (e.g. *Synodus rubromarmoratus* Russell & Cressey, 1979; *Synodus usitatus* Cressey, 1981)(Cressey, 1981; Randall, 1998). The small number of the species of *Synodus* in ZUMT is thus reasonable for some extent. However, there remains a question as to the reason some apparently common species (e.g. *Synodus jaculum* Russell & Cressey, 1979; *Synodus variegatus* (Lacepède 1803))(Moyer and Sano, 1985; Iwatsuki et al., 2017; Motomura and Harasaki, 2017) were hardly or not at all found in the ZUMT collection. One possibility is that these lizardfish species have recently spread widely and settled in the Japanese waters (note that at least the specimens with catalog numbers <40000 were collected before the World War II). Another possibility is that the selectivity of the collecting may have affected these.

Species Accounts

Synodontidae エソ科

Harpadon Lesueur, 1825 ミズテング属

Harpadon microchir Günther, 1878 ミズテング

[JAPAN]

Tokyo Met.

ZUMT 21043: 392.3 mm; Tokyo Market (東京市場).

Kanagawa Pref.

ZUMT 64450: 346.0 mm; Odawara (小田原); 22 Jan. 2022; donated by M. Fukatani (深谷真央); Gill net.

[Locality unknown]

ZUMT 52332: 590.0 mm, **ZUMT 64408**: 201.0 mm, **ZUMT 64409**: 209.2 mm, **ZUMT 64410**: 126.9 mm, **ZUMT 64411** (2 specimens): 24.8–34.0 mm, **ZUMT ABE 60-1161**: 44.7 mm.

Harpadon nehereus (Hamilton, 1822) テナガミズテング

[JAPAN]

East China Sea

ZUMT 51325: 238.3 mm, **ZUMT 51326**: 229.2 mm; Sept. 1959 to Feb. 1960; coll. by Y. Tominaga (富永義昭).

ZUMT 52001: 238.1 mm, **ZUMT 52002**: 198.9 mm; off Shanghai, China. Norin-kaiku 337 or 328 (農林 337 or 328 区); 7–16 July 1960; offshore pair-trawl fishery in the East China Sea (以西底曳網); coll. by Y. Tominaga, Ten'yo-maru No.51 (第 51 天洋丸).

ZUMT 52266: 219.2 mm; Norin-kaiku 319 (農林 319 区); 23 May 1960; coll. by Y. Tominaga, Ten'yo-maru No.31 (第 31 天洋丸).

Saurida Valenciennes, 1850 マエソ属

Saurida caribbaea Breder, 1927 カリブエソ

[SURINAME]

ZUMT 64379: 105.1 mm; coll. by R/V Nisshin.maru No. 201 (第 201 日進丸).

Saurida elongata (Temminck & Schlegel, 1846) トカゲエソ

[JAPAN]

Niigata Pref.

***ZUMT 2131**: 206.0 mm; donated by Echigo Shibata Junior High School (越後新発田中学校).

ZUMT 23444: 274.0 mm, **ZUMT 24471**: 170.2 mm.

Remarks: ZUMT 23444 is stored in a large glass tank (211-B).

Toyama Pref.

ZUMT 41226: 258.0 mm, **ZUMT 41227**: 197.0 mm, **ZUMT 41264**: 190.0 mm, **ZUMT 41265**: 188.8 mm, **ZUMT 41266**: 190.0 mm; Uozu (魚津) or Namerikawa (滑川); coll. by I. Tomiyama (冨山一郎).

Remarks: ZUMT 41226 is stored in a large glass tank (211-B).

ZUMT 45800: 133.4 mm; Uozu (魚津); 1921.

ZUMT 46158: 225.0 mm, **ZUMT 46208**: 287.0 mm; Uozu (魚津) or Namerikawa (滑川).

Remarks: ZUMT 46208 is stored in a large glass tank (211-B).

Kyoto Pref.

ZUMT 38304: 130.0 mm; Miyazu Bay (宮津湾); 7 July 1903; coll. by Iizuka (飯塚).

Shimane Pref.

ZUMT 31253: 146.1 mm; Matsue (松江); donated by T. Yanai (柳井隆一) (Matsue High School) (松江高校).

Shizuoka Pref.

ZUMT 57817: 260.5 mm; Numazu Fish Market (沼津魚市場); 10 Oct. 1988; coll. by Aizawa (藍澤), Senou (瀬能), Mochizuki (望月), and Urano (浦野).

Wakayama Pref.

ZUMT 20286: 181.5 mm.

Hyogo Pref.

ZUMT 25068: 150.2 mm, **ZUMT 25069**: 148.2 mm, **ZUMT 25070**: 232.2 mm; Shikanose (鹿之瀬), Akashi (明石); 24 June 1930; coll. by T. Saito (斉藤敏夫) (Akashi Fisheries Experimental Station) (明石水産試験場); received on 23 Jan. 1933.

ZUMT 25071: 151.1 mm, **ZUMT 25072**: 152.8 mm; Ako (赤穂); 18 Oct. 1932; coll. by T. Saito (斉藤敏夫) (Akashi Fisheries Experimental Station) (明石水産試験場); received on 23 Jan. 1933.

ZUMT 44672: 91.7 mm; Sumoto (洲本), Awaji (淡路).

Okayama Pref.

ZUMT 16440: 166.0 mm; Kanaura (金浦); Kasaoka (笠岡); coll. by K. Matsushima (松島克生) (Kojo Junior High School) (岡山県後月郡西江原町興譲中学校).

ZUMT 37518: 102.0 mm; Misaki (三崎) or Ushimado (牛窓); coll. by S. Miyoshi (三好　晋) (Mito High School) (水戸高等学校); written down by Tomiyama (冨山) on 25 May 1937.

Ehime Pref.

ZUMT 24948: 211.0 mm; the coast of Horie (堀江海岸), Matsuyama (松山); Oct. 1931; coll. by J. Ishikawa (石川重治郎) (Matsuyama Womens High School) (松山高等女学校); checked on 1 Nov. 1931.

Fukuoka Pref.

ZUMT 35778: 156.5 mm, **ZUMT 35779**: 126.6 mm, **ZUMT 35780**: 130.2 mm, **ZUMT 35781**: 96.0 mm, **ZUMT 35782**: 195.0 mm; Okinohata (沖端), Yanagawa (柳川); Oct. 1931; coll. by I. Tomiyama (冨山一郎); donated by Ariakekai research center (有明海研究所), local name Eso (エソ).

ZUMT 50591: 218.0 mm; Fukuoka Fish Market (福岡魚市場); Aug. 1959; coll. by Y. Tominaga (富永義昭).

Nagasaki Pref.

ZUMT 2350: 213.0 mm; 20 June 1909.

Remarks: ZUMT 2350 is stored in a large glass tank (211-B).

ZUMT 48120: 300.0 mm; Fukue (福江) Fish Market, Minamimatsuura (南松浦); May 1953; coll. by I. Tomiyama (冨山一郎).

ZUMT 50414: 290.2 mm; Ichibu (壱部), Itsuki (生月町), Hirado (平戸); 25 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Itsuki Fish. Corp. (生月漁業協同組合), triangular set net (大敷網).

ZUMT 50441: 302.0 mm; Sasebo Fish Market (佐世保魚市場); 30 Oct. 1953; coll. by I. Tomiyama (冨山一郎).

Remarks: ZUMT 50441 is stored in a large glass tank (211-B).

East China Sea

ZUMT 51533: 226.0 mm; Norin-kaiku 314–304–305 (農林 314–304–305 区); 30 Mar. 1960.

Remarks: ZUMT 51533 is stored in a large glass tank (211-B).

ZUMT 54537: 135.5 mm; [34°05′N, 122°33′E], Norin-kaiku 342 (農林 342 区), depth 25 m; 13 Oct, 1984; Ten'yo-maru No.8 (第 8 天洋丸).

[TAIWAN]

***ZUMT 19664**: 137.2 mm; coll. by H. Sato (佐藤春吉) (Taipei Keelung Junior High School) (台北基隆中学校).

[Locality unknown]

ZUMT 64218: 333.0 mm, **ZUMT 64366**: 426.6 mm.

Remarks: ZUMT 64218 and ZUMT 64366 are stored in a large glass tank (211-B).

Saurida gracilis (Quoy & Gaimard, 1824)　マダラエソ

[JAPAN]

Kagoshima Pref.

ZUMT 29611: 95.8 mm; Naze (名瀬), Amami-Oshima Island (奄美大島); 10 Sept. 1910; Amami-Oshima Junior High School (奄美大島中学校); donated by K. Enoya (榎屋兼武) (Kagoshima Prefectural Oshima Junior High School) (鹿児島県立大島中学校).

Okinawa Pref.

ZUMT 14434: 127.5 mm; S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received on 24 Mar. 1925.

ZUMT 15324: 163.6 mm; before 1926; S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校).

ZUMT 16977: 135.2 mm, **ZUMT 16978**: 179.3 mm; Itoman (糸満); before 1926; S. Tanabe (田辺貞夫).

ZUMT 39986: 77.2 mm, **ZUMT 40344**: 122.6 mm; S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received in Mar. 1925.

ZUMT 45834: 130.0 mm; S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received in Mar. 1925.

ZUMT 47252: 114.0 mm, **ZUMT 47253**: 120.1 mm, **ZUMT 47254**: 113.5 mm, **ZUMT 47255**: 129.1 mm, **ZUMT 47256**: 119.5 mm; donated by G. Ogawa (小川銀太郎) (Okinawa Prefectural Nomal School) (沖縄県師範学校).

ZUMT 60683: 192.1 mm; Kabira Bay (川平湾), Ishigaki Island (石垣島); 28 Aug. 1989.

***ZUMT 64963**: 116.6 mm; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received in Mar. 1925; probably the same lot as ZUMT 40342.

[PHILIPPINES]

ZUMT 11025: 169.9 mm; before 1923; coll. by U. Yamamura (山村楳次郎).

ZUMT 42062: 76.4 mm; 1926; U. Yamamura (山村楳次郎).

[PALAU]

ZUMT 43187: 92.9 mm; Y. Haneda (羽根田弥太); received in Jan. 1938.

ZUMT 55303: 87.5 mm; Caroline Island; Aug. 1935; Y. Haneda (羽根田弥太).

[Locality unknown]

ZUMT 46385: 210.1 mm, **ZUMT 46386**: 241.0 mm, **ZUMT 64359**: 115.8 mm, **ZUMT ABE 2919**: 180.0 mm, **ZUMT ABE 3047**: 120.0 mm, **ZUMT ABE 3776**: 161.8 mm, **ZUMT ABE 5959**: 140.4 mm.

Saurida isarankurai Shindo & Yamada, 1972

[THAILAND]

ZUMT 52501 (holotype): 109.2 mm, **ZUMT 54347 (Paratype)**: 100.7 mm, **ZUMT 54348 (Paratype)**: 106.7 mm; Prachambkirikan Prov., the Gulf of Thailand.

Remarks: ZUMT 52501 is currently stored in room 407 in the museum building, while ZUMT 54347 and ZUMT 54348 are in shelved containers (not large glass tanks) in room 406.

ZUMT 65836: 99.0 mm, **ZUMT 65837**: 114.5 mm; southwestern part of the Gulf of Thailand; 22 Aug. 1985.

ZUMT 65841: 87.7 mm, **ZUMT 65842**: 90.6 mm, **ZUMT: 65843**: 81.0 mm, **ZUMT 65844**: 87.6 mm, **ZUMT 65845**: 79.7 mm, **ZUMT 65846**: 73.3 mm, **ZUMT 65847**: 76.8 mm, **ZUMT 65848**: 81.8 mm, **ZUMT 65849** 74.2 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand; 9 July 1985.

Saurida macrolepis Tanaka, 1917　マエソ

[JAPAN]

Toyama Pref.

ZUMT 23263: 104.0 mm; Toyama Bay (富山湾); before 1930; coll. by K. Kikuchi (菊池勘左衛門) (Toyama High School) (富山高等学校).

Remarks: ZUMT 23263 represents the first reliable record of the species from Toyama Bay, and was collected before 16 Dec. 1930 (Fukatani, 2023).

Kyoto Pref.

ZUMT 38305: 110.0 mm, **ZUMT 38363**: 110.0 mm, **ZUMT 38306**: 109.7 mm, **ZUMT 38307**: 116.1 mm; Miyazu Bay (宮津湾); 7 July 1903; coll. by Iizuka (飯塚).

Shimane Pref.

ZUMT 31216: 193.4 mm; Matsue (松江); before 1935; donated by T. Yanai (柳井隆一) (Matsue High School) (松江高校).

Yamaguchi Pref.

ZUMT 10096: 158.5 mm, **ZUMT 10144**: 121.0 mm; Senzaki (仙崎), Nagato (長門); before 1922; coll. by S. Tanaka (田中茂穂).

Tokyo Met.

ZUMT 7477 (syntype, lost), **ZUMT 7478 (syntype)**: 197.3 mm, **ZUMT 7479 (syntype)**: 195.1 mm; Tokyo Market; before 1917.

Remarks: ZUMT 7477 was previously regarded as the holotype of *S. macrolepis* (Inoue and Nakabo, 2006), but the specimen is one of the syntypes of the species with ZUMT 7478 and ZUMT 7479 (Aizawa et al., 2022). However, ZUMT 7477 is missing (Inoue and Nakabo, 2006; Aizawa et al., 2022) and was not found in this study.

ZUMT 21006: 151.4 mm; Tokyo market (東京市場); before 1930.

ZUMT 21036: 149.3 mm; before 1930.

Kanagawa Pref.

ZUMT 20843: 154.6 mm; Misaki (三崎); before 1930.

ZUMT 64442: 143.8 mm; Sagami Bay (相模湾), depth 72–74 m; 3 Nov. 2021; coll. by A. Kato (加藤　晃); donated by M. Fukatani (深谷真央).

Wakayama Pref.

***ZUMT 8085**: 105.5 mm; before 1917; coll. by N. Ui (宇井縫蔵).

ZUMT 20242: 115.1 mm, **ZUMT 20287**: 151.4 mm; before 1930.

ZUMT 22528: 94.2 mm, **ZUMT 22529**: 78.0 mm, **ZUMT 22571**: 53.0 mm, **ZUMT 22574**: 74.4 mm; Tanabe (田辺); Jan. 1920; coll. by N. Ui (宇井縫蔵).

ZUMT 41832: 91.5 mm; Tatsugahama (辰ヶ浜), Shirahama (白浜); 10 Apr. 1942; coll. by M. Inoue (井上光雄).

Hyogo Pref.

ZUMT 2256: 174.5 mm; Awaji Fukura Fish Market (淡路福良魚市場); 15 June 1909; coll. by R. Uchiyama (内山柳太郎).

Kochi Pref.

ZUMT 17622: 167.0 mm; off the coast of Tosa (土佐沖); 14 May. 1927; Y. Yamamoto (山本義光) (Oita Prefectural nomal School) (大分師範学校).

ZUMT 21921: 159.7 mm; before 1930; coll. by Kochi prefectural Susaki Fisheries Experimental Station (高知県須崎水産試験場).

ZUMT 23272: 182.5 mm; Urado (浦戸); 11 July 1930; T. Kamohara (蒲原稔治) (Kochi High School) (高知高等学校).

ZUMT 33666: 138.4 mm, **ZUMT 33667**: 143.2 mm, **ZUMT 33668**: 133.0 mm, **ZUMT 33669**: 148.5 mm, **ZUMT 33670**: 126.3 mm, **ZUMT 33671**: 144.1 mm; before 1936; coll. and donated by Kochi prefectural Susaki Fisheries Experimental Station (高知県須崎水産試験場).

ZUMT 47023: 126.0 mm.

Nagasaki Pref.

ZUMT 47895: 124.2 mm, **ZUMT 47896**: 145.7 mm, **ZUMT 47897**: 134.1 mm, **ZUMT 47898**: 111.0 mm, **ZUMT 47899**: 127.0 mm, **ZUMT 47900**: 118.1 mm, **ZUMT 47901**: 105.0 mm, **ZUMT 47902**: 107.0 mm; Tamanoura (玉之浦), Minamimatsuura (南松浦); 23–24 May 1953; coll. by I. Tomiyama (冨山一郎).

ZUMT 48273: 111.1 mm; Tamanoura (玉之浦), Minamimatsuura (南松浦).

ZUMT 50075: 165.1 mm, **ZUMT 50076**: 147.4 mm, **ZUMT 50077**: 174.9 mm, **ZUMT 50078**: 147.5 mm, **ZUMT 50079**: 92.0 mm, **ZUMT 50080**: 155.8 mm; Tamanoura (玉之浦), Minamimatsuura (南松浦); 14 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Tamanoura Fish. Corp. (玉之浦町漁業協同組合).

ZUMT 50183: 149.7 mm; Arikawa (有川), Minamimatsuura (南松浦); 18 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Arikawa Fish. Corp. (有川町漁業協同組合).

ZUMT 50204: 173.9 mm; Arikawa (有川), Minamimatsuura (南松浦); 19 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Arikawa Fish. Corp. (有川町漁業協同組合).

ZUMT 50326: 193.1 mm; Hirado (平戸); 10 June 1953; coll. by I. Tomiyama (冨山一郎); Hirado Fish. Corp. (平戸漁業協同組合).

ZUMT 50342: 232.0 mm; Usuka (薄香), Hirado (平戸); 20 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Usuka Fish. Corp. (薄香漁業協同組合).

ZUMT 50416: 169.0 mm; Ichibu (一部), Itsuki (生月), Hirado (平戸); 25 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Itsuki Fish. Corp. (生月漁業協同組合), triangular set net (大敷網).

ZUMT 50421: 213.0 mm; Kasegawa (加勢川), Itsuki (生月), Hirado (平戸); 26 Oct. 1953; coll. by I. Tomiyama (冨山一郎).

ZUMT 50539: 211.1 mm; Nagasaki Fish Market (長崎魚市場); 26 Aug. 1959; coll. by Y. Tominaga (富永義昭).

ZUMT 50630: 174.5 mm; Nagasaki Fish Market (長崎魚市場); 27 Aug. 1959; coll. by Y. Tominaga (富永義昭).

Miyazaki Pref.

ZUMT 18819: 99.2 mm, **ZUMT 18838**: 90.0 mm; before 1928.

ZUMT 21766: 94.0 mm; Miyazaki (宮崎); before 1930; coll. by S. Tanaka (田中茂穂).

Kagoshima Pref.

ZUMT 5163: 175.2 mm, **ZUMT 5164**: 225.0 mm, **ZUMT 5165**: 199.1 mm; before 1915.

***ZUMT 5166**: 178.0 mm; probably Kushikino (串木野); before 1915; local name Kishi (キシ).

ZUMT 23883: 234.8 mm; Taniyama (谷山); before 1931.

ZUMT 24144: 113.2 mm; Kushikino (串木野); before 1932; local name Eso (エソ).

East China Sea

ZUMT 51142: 90.5 mm; Dec. 1959; offshore pair-trawl fishery in the East China Sea (以西底曳網).

[PHILIPPINES]

ZUMT 39517: 120.5 mm; before 1939; coll. by U. Yamamura (山村楳次郎).

[THAILAND]

ZUMT 65850: 131.5 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand; 22 Aug. 1985.

ZUMT 65862: 219.8 mm, **ZUMT 65863**: 144.3 mm, **ZUMT 65864**: 181.7 mm, **ZUMT 65865**: 129.0 mm, **ZUMT 65866**: 135.7 mm, **ZUMT 65868**: 112.8 mm, **ZUMT 65869**: 108.5 mm, **ZUMT 65870**: 121.3 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand; 9 July 1985.

[Locality unknown]

ZUMT 46907: 171.0 mm, **ZUMT 62910**: 159.0 mm, **ZUMT 62911**: 170.5 mm, **ZUMT 62912**: 169.8 mm, **ZUMT 64365**: 230.8 mm, **ZUMT ABE 61-878**: 168.0 mm.

Remarks: ZUMT 64365 is stored in a large glass tank (211-B).

Saurida microlepis Wu & Wang, 1931　コウカイトカゲエソ

[JAPAN]

East China Sea

ZUMT 50550: 344.0 mm; 28 July 1959; coll. by Y. Tominaga (富永義昭).

Remarks: ZUMT 50550 is stored in a large glass tank (211-B).

ZUMT 51029: 240.0 mm; 16 Mar. 1960; offshore pair-trawl fishery in the East China Sea (以西底曳網), Ten‘yo-maru No. 35, 38 (35, 38 天洋丸), unloading at Fukuoka Fish Market (福岡魚市場).

Remarks: ZUMT 51029 is stored in a large glass tank (211-B).

ZUMT 51245: 224.0 mm, **ZUMT 51291**: 245.0 mm; 24 Dec. 1959; coll. by Y. Tominaga (富永義昭); offshore pair-trawl fishery in the East China Sea (以西底曳網), unloading at Fukuoka Fish Market (福岡魚市場).

Remarks: ZUMT 51245 and ZUMT 51291 are stored in a large glass tank (211-B).

Saurida micropectoralis Shindo & Yamada, 1972　コソデエソ

[JAPAN]

Okinawa Pref.

ZUMT 14435: 252.0 mm, **ZUMT 14436**: 180.2 mm; before 1925; S. Sakaguchi (坂口総一郎); received on 24. Mar. 1925.

***ZUMT 15364**: 180.4 mm; before 1926; S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校).

ZUMT 17133: 163.2 mm, **ZUMT 17134**: 87.8 mm, **ZUMT 17135**: 157.0 mm; Baten (馬天), Nanjo (南城); before 1926; coll. by S. Tanabe (田辺貞夫).

[TAIWAN]

ZUMT 14932: 233.0 mm, **ZUMT 14933**: 223.1 mm; Tsuausei (嗅青), around Tainan (台南); before 1926; T. Aoki (青木赳雄).

ZUMT 37427: 158.0 mm; Taipei (台北); July 1908.

[PHILIPPINES]

ZUMT 12635: 303.0 mm; before 1926; coll. by U. Yamamura (山村楳次郎); stored in a large glass tank (211-B).

ZUMT 39518: 131.0 mm; before 1939; coll. by U. Yamamura (山村楳次郎).

ZUMT 40849: 108.9 mm; Manila; 11 Feb. 1909; coll. by I. Iijima (飯島　魁), K. Aoki (青木熊吉).

ZUMT 42150: 162.1 mm; 1926; coll. by U. Yamamura (山村楳次郎).

ZUMT 42374: 194.0 mm; Basilan; 1926; coll. by U. Yamamura (山村楳次郎).

[CHINA]

ZUMT 22824: 116.0 mm; Hainan (海南); before 1930.

[THAILAND]

ZUMT 52503 (holotype): 188.6 mm, **ZUMT 54349 (paratype)**: 125.9 mm; Prachambkirikan Prov., the Gulf of Thailand.

Remarks: ZUMT 52503 and ZUMT 54349 are stored in room 407.

ZUMT 65855: 94.6 mm, **ZUMT 65856**: 114.5 mm, **ZUMT 65857**: 77.1 mm, **ZUMT 65858**: 103.2 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand.

[Locality unknown]

ZUMT 64364: 131.5 mm.

Saurida nebulosa Valenciennes, 1850　ウチウミマダラエソ

[JAPAN]

Kagoshima Pref.

ZUMT 22241: 144.1 mm; Naze (名瀬); Amami-oshima Island (奄美大島); 2 Apr. 1922; coll. by K. Enoya (榎屋兼武) (Kagoshima Prefectural Oshima Junior High School) (鹿児島県立大島中学校); received in Aug. 1922; local name Norokujira (ノロクジラ).

Okinawa Pref.

ZUMT 5155: 102.5 mm; Ishigaki-jima Island (石垣島); Apr. 1899; “is taken at lowtide O.C.”, donated by Owston on 14 Dec. 1899.

***ZUMT 11215**: 137.0 mm, ***ZUMT 11216**: 109.0 mm; before 1923; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校).

***ZUMT 13933**: 125.2 mm; before 1926; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校).

ZUMT 17233: 123.0 mm, **ZUMT 17234**: 86.5 mm; Unten (運天), Nakijin (今帰仁); before 1926; coll. by S. Tanabe (田辺貞夫) (沖縄学生採), local name Shirahamaino (シラハマイノ).

ZUMT 58472: 29.4 mm; inner part of Amitori Bay (網取湾), Iriomote Island (西表島), depth 1–3 m; 14 July 1988.

***ZUMT 64959**: 79.3 mm; Itoman (糸満); coll. by S. Tanabe (田辺貞夫); probably the same lot as ZUMT 16977.

***ZUMT 64961**: 114.4 mm; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received in Mar. 1925; probably the same lot as ZUMT 40342.

[PHILIPPINES]

ZUMT 40946: 93.3 mm, **ZUMT 40947**: 60.1 mm, **ZUMT 40982**: 74.0 mm; Jolo; Feb. 1909; coll. by I. Iijima (飯島　魁), K. Aoki (青木熊吉).**[Locality unknown]**

ZUMT 64360: 99.7 mm, **ZUMT 64361**: 109.2 mm, **ZUMT 64362**: 140.6 mm, **ZUMT 64363**: 144.3 mm.

Saurida normani Longley, 1935　ノルマンエソ

[SURINAME]

ZUMT 64380: 151.3 mm, **ZUMT 64381**:127.0 mm; coll. by R/V Nisshin-maru No. 201 (第 201 日進丸).

Saurida cf. ***tumbil*** (Bloch, 1795)

[PHILIPPINES]

ZUMT 40865: 91.0 mm; Manila; 11 Feb. 1909; coll. by I. Iijima (飯島　魁) and K. Aoki (青木熊吉).

ZUMT 42239: 131.4 mm; 1926; coll. by U. Yamamura (山村楳次郎).

Remarks: ZUMT 40865 and 42239 are similar to *Saurida tumbil*, which is only distributed in the Indian Ocean, by having 50 and 52 lateral-line scales (50–53 in *S. tumbil*), respectively. However, these specimens seem to be different species, because the specimens are collected from the Philippines (Russell, 1999, 2011, 2015; Fricke et al., 2022). In the western Pacific Ocean, the specimens are most similar to *Saurida micropectoralis*, but this species is distinct because it has more than 54 lateral-line scales (Miyahara et al. 2002). Therefore, the specimens are assigned to *Saurida* cf. *tumbil* in this study.

Saurida umeyoshii Inoue & Nakabo, 2006　クロエソ

[JAPAN]

Nagasaki Pref.

ZUMT 50271: 246.0 mm, **ZUMT 50276**: 192.1 mm; Sasebo Fish Market (佐世保魚市場), Sasebo (佐世保); 22 Oct. 1953; coll. by I. Tomiyama (冨山一郎).

Remarks: ZUMT 50271 and ZUMT 50276 were probably collected from the East China Sea.

East China Sea

ZUMT 51762: 142.0 mm; East China Sea; coll. by Ten'yo-maru (天洋丸), which came back to the port in early Sept. 1959.

ZUMT 52379: 294.0 mm, 25 May 1968; [start: 26°55′00″N, 125°00′50″E; finish: 26°56′60″N, 125°02′50″E], depth 120 m; coll. by Hakuho-maru (白鳳丸); Otter trawl.

Remarks: ZUMT 52379 is stored in a large glass tank (211-B).

ZUMT 57646: 191.5 mm, East China Sea; 9 May 1968.

[Locality unknown]

ZUMT 64375: 161.3 mm.

Saurida cf. ***undosquamis*** (Richardson, 1848)　ツケアゲエソ

[TAIWAN]

ZUMT 13672: 99.0 mm; Keelung (基隆); before 1926; coll. by T. Aoki (青木赳雄) (Taiwan Government General Fishery Division (台湾総督府水産課).

Remarks: This species was first recorded from Japan by Nakamura and Motomura (2020) as *S. undosquamis*, but because the type locality of *S. undosquamis* is northwestern Australia and is genetically distinct from the Japanese species, Furuhashi et al. (2022) considered them to be distinct species and assigned the Japanese

species to *S.* cf. *undosquamis*. ZUMT 13672 is considered morphologically the same species as those from Japan and is therefore assigned to *S.* cf. *undosquamis* in this study.

Saurida wanieso Shindo & Yamada, 1972 ワニエソ

[JAPAN]

Fukui Pref.

***ZUMT 16048**: 247.0 mm; before 1926; coll. by Fukui Prefectural Fisheries Experimental Station (福井県水産試験場).

Kyoto Pref.

ZUMT 24325: 293.0 mm, **ZUMT 24348**: 159.2 mm; Miyazu (宮津); Nov. 1931; Kyoto Fisheries Training Institute (京都府水産講習所).

Remarks: ZUMT 24325 is stored in a large glass tank (211-B).

ZUMT 55338: 160.8 mm; Maizuru Market (舞鶴市場); 4 Nov. 1985; set net (定置網).

ZUMT 55842: 118.5 mm; Maizuru Market (舞鶴市場); 3 Nov. 1986.

Wakayama Pref.

***ZUMT 8086**: 83.1 mm; before 1918; coll. by N. Ui (宇井縫蔵).

ZUMT 22001: 99.0 mm; Jan. 1920.

Nagasaki Pref.

ZUMT 35389: 72.0 mm **ZUMT 35390**: 51.0 mm; before 1936.

ZUMT 50438: 301.0 mm; Sasebo Fish Market (佐世保魚市場); 30 Oct. 1953; coll. by I. Tomiyama (冨山一郎).

Remarks: ZUMT 50438 is stored in a large glass tank (211-B).

Miyazaki Pref.

ZUMT 22393: 77.1 mm; before 1930; coll. by S. Tanaka (田中茂穂).

East China Sea

ZUMT 52502 (holotype): 289.4 mm.

ZUMT 50565: 296.0 mm; 13 Sept. 1959; coll. by Y. Tominaga (富永義昭); Ten'yo-maru (天洋丸).

Remarks: ZUMT 50565 is stored in a large glass tank (211-B).

ZUMT 51145: 140.0 mm; Dec. 1959; offshore pair-trawl fishery in the East China Sea (以西底曳網).

[TAIWAN]

ZUMT 5148: 225.8 mm; Keelung (基隆); Sept. 1896; coll. by T. Tada (多田綱輔).

ZUMT 13673: 125.2 mm; Keelung (基隆); before 1926; T. Aoki (青木赳雄) (Taiwan Government General Fishery Division (台湾総督府水産課).

[CHINA]

ZUMT 21237: 232.2 mm; before 1930.

[Locality unknown]

ZUMT 40647: 108.1 mm, **ZUMT 40648**: 87.8 mm; "Morioka? (盛岡か？)."

***Saurida* sp.**

[JAPAN]

Wakayama Pref.

ZUMT 22572: 49.2 mm, **ZUMT 22573**: 44.0 mm; Tanabe (田辺); Jan. 1920; coll. by N. Ui (宇井縫蔵).

Kochi Pref.

ZUMT 47246: 46.4 mm.

Nagasaki Pref.

ZUMT 43539: 46.7 mm; 12 Feb. 1912.

ZUMT 43750: 56.9 mm.

Kagoshima Pref.

ZUMT 39180: 43.9 mm; Kawajiri (川尻), Ukitsu (浮津), Tarumi (垂水); before 1938; probably coll. by S. Tanaka (田中茂穂); casting net.

East China Sea

ZUMT 65099: 26.5 mm; Southern East China Sea, Norin-kaiku 504 (農林 504 海区)[start: 28°01′18″N, 124°59′00″E; finish: 28°02′00″N, 124°58′42″E], depth 103 m; 23 May 1968; coll. by Hakuho-maru (白鳳丸).

[PAPUA NEW GUINEA]

ZUMT 64400: 39.3 mm; 3 Nov. 1969.

[Locality unknown]

ZUMT 45641 (2 specimens): 37.3–39.0 mm, **ZUMT ABE 60-366** (43 specimens): 42.4–49.3 mm.

Remarks: The above specimens could not be identified, because they are larvae and do not have developed traits enough for species level identification.

Synodus Scopoli, 1777 アカエソ属

Synodus dermatogenys Fowler, 1912 ミナミアカエソ

[JAPAN]

Kagoshima Pref.

ZUMT 29610: 104.4 mm; Naze (名瀬), Amami-Oshima Island (奄美大島); 10 Sept. 1910; coll. by Kagoshima Prefectural Oshima Junior High School (鹿児島県立大島中学校); donated by K. Enoya (榎屋兼武) (Kagoshima Prefectural Oshima Junior High School).

ZUMT 29694: 109.0 mm; Naze (名瀬), Amami-Oshima Island (奄美大島); 10 July 1910; donated by Mr. Miyashita (宮下).

ZUMT 64451: 142.9 mm; Furusato (古里), Wadomari (和泊), Okinoerabu-jima Island (沖永良部島); 23 Mar. 2022; coll. by T. Namikawa (浪川大誠); donated by M. Fukatani (深谷真央).

Remarks: ZUMT 64451 represents the first record of the species from Okinoerabu-jima Island

Okinawa Pref.

ZUMT 14308: 159.7 mm; Naha (那覇); 6 Feb. 1925; coll. by H. Yashiro (屋代弘孝) (Naha Market) (那覇市場).

Remarks: The location is a shallow water of coral reef around Naha. A fisherman from Itoman (糸満) caught the specimen with a logboat (独木舟) and a small net.

ZUMT 14433: 152.5 mm; before 1926; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received on 24 Mar. 1925.

ZUMT 15177: 124.7 mm, **ZUMT 15323**: 133.4 mm; before 1926; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校).

ZUMT 16891: 188.9 mm; Onna (恩納); before 1926; coll. by S. Tanabe (田辺貞夫).

ZUMT 16976: 185.0 mm; Itoman (糸満); before 1926; coll. by S. Tanabe (田辺貞夫).

ZUMT 39730: 128.5 mm, **ZUMT 39731**: 135.1 mm, **ZUMT 39732**: 111.6 mm; before 1939.

ZUMT 40342: 70.9 mm, **ZUMT 40343**: 46.8 mm; coll. by S. Sakaguchi (坂口総一郎); received in Mar. 1925.

***ZUMT 64962**: 130.0 mm; coll. by S. Sakaguchi (坂口総一郎) (Okinawa Prefectural Daiichi Junior High School) (沖縄県立第一中学校); received in Mar. 1925; probably the same lot as ZUMT 40342.

[Locality unknown]

ZUMT 64367: 95.8 mm, **ZUMT 64964**: 141.9 mm.

Synodus foetens (Linnaeus, 1766) キツネアカエソ

[SURINAME]

ZUMT 64376: 215.2 mm, **ZUMT 64377**: 237.7 mm; coll. by R/V Nisshin.maru No. 201 (第 20 1 日進丸).

Synodus fuscus Tanaka, 1917 スナエソ

[JAPAN]

Shimane Pref.

ZUMT 31229: 208.0 mm; Matsue (松江); before 1935; donated by T. Yanai (柳井隆一) (Matsue High School) (松江高校).

Remarks: ZUMT 31229 represents the first record of the species from Shimane Pref.

Yamaguchi Pref.

ZUMT 10137: 133.1 mm; Senzaki (仙崎), Nagato (長門); before 1923; coll. by S. Tanaka (田中茂穂).

Tokyo Met.

ZUMT 7472 (holotype, lost): Tokyo Market (東京魚市場); before 1915.

Remarks: ZUMT 7472 is missing (Aizawa et al., 2022) and was not found in this study.

Kanagawa Pref.

ZUMT 48306: 149.4 mm; around Aburatsubo (油壺); 1935; coll. by T. Abe (阿部宗明).

Wakayama Pref.

***ZUMT 7565**: 124.6 mm; before 1915; coll. by I. Hoshino (星野伊三郎) [Hiro (広), Arida (有田)].

ZUMT 20288: 134.7 mm; before 1930.

Kochi Pref.

ZUMT 47159: 128.5 mm.

Synodus hoshinonis Tanaka, 1917 ホシノエソ

[JAPAN]

Kanagawa Pref.

ZUMT 64439: 156.3 mm, **ZUMT 64440**: 161.5 mm; Sagami Bay (相模湾), depth 45 m; 17 Mar. 2022; coll. by A. Kato (加藤　晃); donated by M. Fukatani (深谷真央).

ZUMT 64441: 181.9 mm; Sagami Bay, depth 45 m; 2. Apr. 2022; coll. by A. Kato (加藤　晃); donated by M. Fukatani (深谷真央).

Wakayama Pref.

ZUMT 7476 (Holotype): 134.9 mm; before 1918; Hiro (広), Arida (有田); coll. by I. Hoshino (星野伊三郎); once identified by M. Aizawa (藍澤正宏) on 11 June 1983.

Kochi Pref.

ZUMT 47198: 105.5 mm.

Nagasaki Pref.

ZUMT 2302: 194.4 mm; 11 July 1909.

ZUMT 2485: 212.0 mm; Aug. 1909.

ZUMT 33547: 79.0 mm, **ZUMT 33548**: 68.0 mm; before 1936; donated by I. Kaneko (金子一狼).

ZUMT 50069: 210.0 mm Fukue-jima Island (福江島), Goto (五島); 14 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Tamanoura Fish. Corp. (玉之浦漁業組合); local name Gataeso (ガタエソ).

ZUMT 50132: 77.2 mm, **ZUMT 51033**: 121.2 mm; Fukue-jima Island (福江島), Goto (五島); 15 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Tamanoura Fish. Corp. (玉之浦漁業組合).

[THAILAND]

ZUMT 65851: 114.0 mm, **ZUMT 65852**: 120.5 mm, **ZUMT 65853**: 117.8 mm, **ZUMT 65854**: 89.8 mm; southwestern part of the Gulf of Thailand; 22 Aug. 1985.

ZUMT 65859: 124.1 mm, **ZUMT 65860**: 76.2 mm, **ZUMT 65861**: 99.6 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand; 9 July 1985.

Synodus kaianus (Günther, 1880) ハナトゴエソ

[JAPAN]
Kochi Pref.
ZUMT 47024: 175.6 mm.

Synodus macrops Tanaka, 1917 チョウチョウエソ

[JAPAN]
Tokyo Met.
ZUMT 7473 (Syntype): 144.3 mm, **ZUMT 7474 (Syntype)**: 154.3 mm, **ZUMT 7475 (Syntype)**: 137.2 mm; before 1918; Tokyo Market (東京市場); once identified by M. Aizawa (藍澤正宏) on 14 May 1983.
Remarks: ZUMT 7473 was previously regarded as the holotype of *S. macrops*, but the specimen is one of the syntypes of the species with ZUMT 7474 and ZUMT 7475 (Aizawa et al., 2022).
Kanagawa Pref.
ZUMT 20606: 126.9 mm; Misaki (三崎), Miura (三浦); before 1930.
ZUMT 26707: 85.6 mm; Aburatsubo (油壺), Miura (三浦); Oct. 1903.
ZUMT 43639: 89.4 mm; Misaki (三崎), Miura (三浦).
Mie Pref.
ZUMT 23380: 125.3 mm; Owase (尾鷲); before 1930; coll. by K. Nakahara (中原鋼作) (Mie Prefectural Owase Womens High School) (三重県尾鷲町尾鷲高等女学校).
Wakayama Pref.
ZUMT 21979: 167.7 mm; around Wakayama (和歌山); Jan. 1920.
Kochi Pref.
ZUMT 47025: 156.4 mm.
Nagasaki Pref.
ZUMT 56925: 142.6 mm, **ZUMT 56926**: 174.3 mm, **ZUMT 56927**: 128.1 mm; a southeastern coast of Tsushima Island (対馬)[34°23′10″N, 129°51′00″E], depth 116 m; 10 July 1987; coll. by Y. Tominaga (富永義昭) and M. Aizawa (藍澤正宏); Ten-yo maru No.36 (第 36 天洋丸).
East China Sea
ZUMT 53911: 102.4 mm, **ZUMT 53197**: 94.6 mm, **ZUMT 53922**: 92.0 mm, **ZUMT 53923**: 88.6 mm; Southern East China Sea[start: 26°55′00″N, 125°00′50″E; finish: 26°56′60″N 125°02′50″E], Norin-kaiku 497 (農林 479 区), depth 120 m; 24 May 1968; coll. by Y. Tominaga (富永義昭); Hakuhou-maru (白鳳丸).
[Locality unknown]
ZUMT 63412: 118.2 mm, **ZUMT 64373**: 88.6 mm, **ZUMT 64374**: 161.3 mm.

Synodus poeyi Jordan, 1887 オトガイアカエソ

[SURINAME]
ZUMT 64378: 121.3 mm; coll. by R/V Nisshin.maru No. 201 (第 20 1 日進丸).
[Locality unknown]
ZUMT 64728: 115.2 mm, **ZUMT 64729**: 123.5 mm.

Synodus ulae Schltz, 1953　アカエソ

[JAPAN]

Chiba Pref.

ZUMT 64404: 44.2 mm; 27 May 1960; Kominato (小湊), Kamogawa (鴨川).

Tokyo Met.

ZUMT 19163: 230.9 mm; Hachijo-jima Island (八丈島); 6 July 1929; coll. by Y. Otsuki (大槻洋四郎); spear; local name Kamatsuka (カマツカ).

ZUMT 19421: 215. 9 mm; Hachijo-jima Island (八丈島); before 1929; coll. by Y. Oshizu (押津義雄).

ZUMT 40552: 257. 0 mm; Hachijo-jima Island (八丈島); before 1939.

ZUMT 65699: 123.5 mm; East coast of Mikura Island (御蔵島); depth 60–90 m; 27 July 2023; coll. by H. Wada (和田英敏), K. Munakata (棟方航平), T. Maeda (前田達郎) and S. Nishikawa (西川志朗).

Kanagawa Pref.

ZUMT 32571: 235. 2 mm; Enoura (江の浦); Aug. 1930; S. Watanabe (渡辺洲三) (Shimomeguro) (下目黒); before 1936.

Kochi Pref.

ZUMT 18662: 129.5 mm; 28 Nov. 1928; coll. by T. Kamohara (蒲原稔治) (Kochi Prefectural High School) (高知高等学校); sent on 1 Dec. 1928.

ZUMT 18776: 103.5 mm; 12 Mar. 1905; Kashiwa-jima Island (柏島), Otsuki (大月); K. Tago (田子勝弥).

ZUMT 18979: 176.4 mm; Kashiwa-jima Island (柏島), Otsuki (大月); before 1929; T. Kamohara (蒲原稔治); (Kochi Prefectural High School) (高知高等学校); once identified on 14 June 1929.

ZUMT 47094: 144.7 mm.

Miyazaki Pref.

ZUMT 21148: 135.6 mm; Fukushima (福島); before 1930; coll. by Fukushima Fish. Corp. (福島村漁業組合).

ZUMT 22671: 157.4 mm; before 1930.

Okinawa Pref.

ZUMT 16890: 151.7 mm; Onna (恩納); before 1926; coll. by S. Tanabe (田辺貞夫).

ZUMT 16979: 165.9 mm; Itoman (糸満); before 1926; coll. by S. Tanabe (田辺貞夫).

ZUMT 64960: 164.2 mm; Itoman (糸満); coll. by S. Tanabe (田辺貞夫); probably the same lot as ZUMT 16977.

Remarks: ZUMT 16890, ZUMT 16979 and ZUMT 64960 are the first reliable records of the species from Okinawa Pref.

[Locality unknown]

ZUMT 64368: 248.5 mm, **ZUMT ABE 60-1545**: 264.0 mm.

Synodus variegatus (Lacepède 1803)　ヒトスジエソ

[JAPAN]

Kagoshima Pref.

ZUMT 20198: 190.7 mm; before 1930.

***Synodus* sp.**

[JAPAN]

Wakayama Pref.

***ZUMT 9637**: 83.8 mm; before 1920; coll. by N. Ui (宇井縫蔵).

Remarks: ZUMT 9637 is similar to *Synodus dermatogenys* by following characters: lateral-line scales 59; dorsal-fin rays 12; anal-fin rays 8; pectoral-fin rays 12; anterior palatine teeth longer than posterior palatine

teeth; not scaled on posterior end of preopercle (Cressey, 1981; Waples and Randall, 1988). However, the specimen has 4.5 scale rows above lateral line (5.5 in *S. dermatogenys*), so it is a different species from *S. dermatogenys*. Although there are some species of *Synodus* (for example *S. houlti* or *S. fasciapelvicus*) with 4.5 scale row above lateral line in the western Pacific Ocean (Waples and Randall, 1988; Randall, 2009), this specimen was assigned to *Synodus* sp. in this study, because it could not be accurately identified due to the lack of information on its coloration when fresh.

Hiroshima Pref.

ZUMT 4966: 30.7 mm; Tomo (鞆); July 1882.

Kagoshima Pref.

ZUMT 39181: 36.1 mm; Kawajiri (川尻), Ukitsu (浮津), Tarumi (垂水); before 1938; probably coll. by S. Tanaka (田中茂穂); casting net.

[PAPUA NEW GUINEA]

ZUMT 64382 (36 specimens): 27.8–37.2 mm, **ZUMT 64384** (14 specimens): 31.7–34.5 mm, **ZUMT 64385** (16 specimens): 25.7–32.2 mm; Lamassa Str.; 2 Nov. 1969; hand net.

***ZUMT 64386** (4 specimens): 31.5–34.0 mm; Nuguria; hand net.

ZUMT 64387 (5 specimens): 30.1–34.3 mm; Nuguria; hand net.

ZUMT 64399 (2 specimens): 37.8–38.9 mm; Buka Island; 3 Nov. 1969, St.2.

ZUMT 64402 (8 specimens): 30.9–34.8 mm, **ZUMT 64403**: 24.6–34.6 mm (13 specimens); New Ireland.

[Locality unknown]

ZUMT 64393 (7 specimens): 30.5–39.9 mm, **ZUMT 64394**: 32.7 mm; hand net.

Remarks: The above specimens except ZUMT 9637 could not be identified, because they are larvae and do not have developed traits enough for species level identification.

Trachinocephalus Gill, 1861　オキエソ属

Trachinocephalus myops (Forster, 1801)

[SURINAME]

ZUMT 64371: 148.0 mm, **ZUMT 64372**: 157.7 mm; coll. by R/V Nisshin.maru No. 201 (第 20 1 日進丸).

Trachinocephalus trachinus (Temminck & Schlegel, 1846)　オキエソ

[JAPAN]

Toyama Pref.

ZUMT 46652: 218.0 mm; probably Uozu (魚津), Namerikawa (滑川).

Remarks: ZUMT 46652 is stored in a large glass tank (211-A).

Kyoto Pref.

ZUMT 55336: 158.0 mm, **ZUMT 55337**: 186.0 mm; Maizuru Market (舞鶴市場); 4 Nov. 1985; coll. by M. Aizawa (藍澤正宏); set net (定置網).

Remarks: ZUMT 55336 and ZUMT 55337 are stored in a large glass tank (211-A).

Hyogo Pref.

ZUMT 9857: 99.5 mm; Mikage (御影), Kobe (神戸); Oct. 1919; coll. by K. Yamadori (山鳥吉五郎).

Shimane Pref.

ZUMT 2471: 258.0 mm; Masuda (益田); July 1909.

Remarks: ZUMT 2471 is stored in a large glass tank (211-A).

***ZUMT 31480**: 134.0 mm; before 1935; sent by T. Yanai (柳井隆一) (Matsue High School) (松江高校) in Nov. 1935.

Chiba Pref.

ZUMT 27559: 67.3 mm; Boshu (房州); before 1934.

Tokyo Met.

ZUMT 19462: 297.0 mm; before 1928; coll. by Y. Oshizu (押津義雄) (Hachijo-jima Island) (八丈島).

Remarks: ZUMT 19462 is stored in a large glass tank (211-A).

Kanagawa Pref.

ZUMT 34027: 32.0 mm; Yokohama (横浜) or Ninomiya (二宮); before 1936.

ZUMT 38300: 81.0 mm; Misaki (三崎), Miura (三浦); before 1937; local name Eso (エソ).

ZUMT 48307: 156.0 mm; around Aburatsubo (油壺), Misaki (三崎); 1935; coll. by T. Abe (阿部宗明).

Remarks: ZUMT 48307 is stored in a large glass tank (211-A).

ZUMT 64396: 38.6 mm; Sagami Bay (相模湾); 22 Nov. 1971; 2130–2200; coll. by Tansei-maru (淡青丸); fishing light.

ZUMT 64397: 16.8 mm; Sagami Bay (相模湾)[start: 35°08′10″N, 139°19′80″E; finish: 35°07′60″N, 139°18′80″E], depth 25 m; 26 Nov. 1970; coll. by Tansei-maru (淡青丸); plankton net.

ZUMT 64398 (2 specimens): 33.9–38.7 mm; Suruga Bay (駿河湾); 24 Nov. 1971; coll. by Tansei-maru (淡青丸); fishing light.

ZUMT 64956: 72.7 mm, **ZUMT 64957**: 267.0 mm; Aburatsubo (油壺); 18 Aug. 1932.

Shizuoka Pref.

ZUMT 16488: 56.0 mm; Shizuura (静浦), Numazu (沼津); before 1926; coll. by N. Kuroda (黒田長礼); local name Okaeso (オカエソ).

ZUMT 17746: 99.5 mm; Enoura (江の浦), Numazu (沼津); before 1927; coll. by N. Kuroda (黒田長礼).

ZUMT 33859: 57.0 mm, **ZUMT 33860**: 69.0 mm; Shizuura (静浦), Numazu (沼津); before 1936; donated by N.. Kuroda (黒田長礼).

Mie Pref.

ZUMT 23195: 167.0 mm, **ZUMT23196**: 135.0 mm; Kinomoto (木本), Kumano (熊野); 3 May 1929; coll. by Y. Tsuchiga (槌賀安平) (Kinomoto Junior High School) (木本中学校); 48. Donated by T. Koide (小出哲夫); local name Shieso (シエソ).

Wakayama Pref.

***ZUMT 8058**: 74.0 mm, ***ZUMT 8059**: 80.0 mm, ***ZUMT 8060**: 88.0 mm; before 1918; coll. by I. Hoshino (星野伊三郎) (Hiro (広), Arida (有田)).

ZUMT 22441: 73.0 mm; Tanabe (田辺); N. Ui (宇井縫蔵); received on 11 Aug. 1920.

Kochi Pref.

ZUMT18686: Kashiwa-jima Island (柏島), Otsuki (大月); Oct. 1928; coll. by T. Kamohara (蒲原稔治) (Kochi High School) (高知高等学校); sent on 1 Dec. 1928; local name Hoshieso (ホシエソ).

Fukuoka Pref.

ZUMT 51405: 224.0 mm; East China Sea or Fukuoka Fish Market (福岡魚市場); Oct. 1959.

Remarks: ZUMT 51405 is stored in a large glass tank (211-A).

ZUMT 51460: 249.0 mm; Fukuoka Fish Market (福岡魚市場); 10 Dec. 1959; Sanno-maru (山王丸) (Shimonoseki) (下関).

Remarks: ZUMT 51460 is stored in a large glass tank (211-A).

Nagasaki Pref.

ZUMT 27136: 39.5 mm, **ZUMT 27137**: 37.7 mm**, ZUMT 27138**: 41.0 mm; before 1934; donated by Mr. Kaneko (金子氏) (Nagasaki Pref.) on 8 June 1911.

ZUMT 43540: 42.8 mm, **ZUMT 43541**: 58.0 mm, **ZUMT 43542**: 54.5 mm; 12 Feb. 1912.

ZUMT 50081: 153.0 mm; Tamanoura (玉之浦), Fukue (福江); 14 Oct. 1953; coll. by I. Tomiyama (冨山一郎); Tamanoura Fish. Corp. (玉之浦町漁業協同組合); local name Gataeso (ガタエソ).

Oita Pref.

***ZUMT 13798**: 145.0 mm; before 1926; coll. by N. Nakayama (中山直紀) (Oita Prefectural Yokkaichi Agricultural School) (大分県四日市農学校); local name of Buzen (豊前), Torahaze (トラハゼ).

Miyazaki Pref.

***ZUMT 21165**: 83.0 mm; before 1930; coll. by Fukusima Fish. Corp., Miyazaki Pref. (宮崎県福島村漁業組合).

ZUMT 52167: 130.0 mm; Totoro (土々呂), Nobeoka (延岡); 4 Aug. 1960; Shirasu net (シラス網).

ZUMT 64388 (5 specimens): 25.5–36.8 mm; 17 May 1968; 2107–2137; Hyuga-nada (日向灘)[start: 32°01′20″N, 131°58′90″E; finish: 31°58′90″N, 131°58′80″E]; coll. by Hakuho-maru (白鳳丸); surface net.

Kagoshima Pref.

ZUMT 5168: 168.0 mm; Kagoshima Bay (鹿児島湾); before 1915; local name Etsu (エツ).

ZUMT 40730: 105.5 mm, **ZUMT 40731**: 90.5 mm; Amami-Oshima Island (奄美大島); coll. by K. Enoya (榎屋兼武) (Kagoshima Prefectural Oshima Junior High School) (鹿児島県立大島中学校); received in Nov. 1922.

ZUMT 23796: 169.0 mm; Taniyama (谷山); 20 July to 15 Aug. 1930; local name Eso (エソ).

ZUMT 23936: 213.0 mm; Taniyama (谷山); before 1931; local name Eso (エソ).

Remarks: ZUMT 23936 is stored in a large glass tank (211-A).

ZUMT 64405 (6 specimens): unmeasurable; 18 May 1968; 2105–2135; southwest off Yakushima Island (屋久島)[start: 30°11′00″N, 130°13′70″E; finish: 31°12′10″N, 130°12′00″E]; coll. by Hakuho-maru (白鳳丸); surface net.

Okinawa Pref.

ZUMT 17130: 94.0 mm, **ZUMT 17131**: 130.5 mm, **ZUMT 17132**: 96.0 mm; Baten (馬天), Nanjo (南城); before 1923; coll. by S. Tanabe (田辺貞夫).

East China Sea

ZUMT 64391 (2 specimens): 10.1–11.5 mm; 22 May 1968; south of East China Sea [start: 28°46′80″N, 126°44′00″E; finish: 28°48′00″N, 126°41′20″E]; coll. by Hakuho-maru (白鳳丸); surface net.

Details unknown

ZUMT 27917: 79.0 mm; before 1934; probably southern Japan.

ZUMT 40357: 190.0 mm; before 1939; probably the Ryukyu Islands.

Remarks: ZUMT 40357 is stored in a large glass tank (211-A).

[TAIWAN]

ZUMT 14864: 124.0 mm, **ZUMT 14865**: 129.0 mm, **ZUMT 14866**: 123.0 mm; around Tainan (台南); before 1926; T. Aoki (青木赳雄).

ZUMT 18456: 92.0 mm, **ZUMT 18457**: 105.5 mm; Keelung (基隆); July 1928; coll. by H. Sato (佐藤春吉) (Keelung Junior High School) (基隆中学校); “土名　魚生公.”

ZUMT 64369: 165.2 mm; Keelung (基隆).

[PHILIPPINES]

ZUMT 14617: 108.0 mm; before 1926.

ZUMT 42258: 123.0 mm; 1926; coll. by U. Yamamura (山村楳次郎).

[THAILAND]

ZUMT 65838: 188.1 mm, **ZUMT 65839**: 123.5 mm, **ZUMT 65840**: 115.7 mm; off Songkhla Prov., southwestern part of the Gulf of Thailand; 9 July 1985.

[PAPUA NEW GUINEA]

ZUMT 64383 (15 specimens): 36.9–39.1 mm; New Ireland, Lamassa Str.; 2 Nov. 1969; hand net.

ZUMT 64401 (3 specimens): 31.4–37.5 mm; New Ireland.

[U.S.A.]

ZUMT 57557: 266.5 mm, **ZUMT 57558**: 221.0 mm, **ZUMT 57559**: 179.5 mm; 600 feet off Puako, Hawaii; 10 Apr. 1987; coll. by Bill Cuccaro.

Remarks: ZUMT 57557, ZUMT 57558 and ZUMT 57559 are stored in a large glass tank (211-A).

[Locality unknown]

ZUMT 46529: 155.0 mm, **ZUMT 46530**: 152.0 mm, **ZUMT 64370**: 162.0 mm.

Remarks: ZUMT 46530 is stored in a large glass tank (211-A).

Trachinocephalus sp.

[Locality unknown]

ZUMT 63566 (59 specimens): 14.9–38.2 mm.

ZUMT 64389 (10 specimens): 30.6–38.1 mm; Sept. 1964.
ZUMT 64390 (4 specimens): 38.2–39.0 mm; 6 June 1970; hand net.
ZUMT 64392 (3 specimens): 35.6–36.5 mm; hand net.
ZUMT 64395: 35.7 mm, **ZUMT 64406**: unmeasurable, **ZUMT 64407**: 31.0 mm.

Remarks: The above specimens could not be identified, because they are larvae and do not have any locality information.

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Specimens of the family Belonidae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of Belonidae deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided. One hundred lots with 111 specimens representing ten species were confirmed. No types for the family were found.

Introduction

The family Belonidae, a member of Beloniformes characterized by an elongated body, is represented by species mostly living just below the water surface. Long considered as comprising only species with both jaws extended into long beaks, and the dorsal and anal fins without finlets – the so-called "needle-gars" or "needlefishes" (Collette 1999; Pisces Publishers 2001, 2004; Aizawa and Doiuchi 2013b), recent phylogenetic studies (Lovejoy et al. 2014; Toyama et al. 2020) have shown that Belonidae also includes four genera previously placed in the family Scomberesocidae, and characterized by dorsal and ventral finlets on the caudal peduncle, and jaws not extended (Hubbs and Wisner 1980; Noichi 1997).

In Japan, *Cololabis saira* (Brevoort, 1856), previously included in Scomberesocidae, has been abundantly fished and used as food. However, although the catch of the species in other countries has been increased, catches in Japan have rapidly decreased in recent times (Hata 2020b).

Although species of some needle-gar genera, such as *Strongylura* and *Tylosurus*, are abundantly caught in southern Japan, they are not utilized as food due to their flesh appearing greenish-blue, due to large amounts of biliverdin contained in the bones (Hata 2020a). Moreover, these needle-gars are known to be phototaxic, with reported incidents in which they pierced divers using underwater lights at night (Araki et al. 1990; Tomihara and Araki 2014). In addition, some river-inhabiting needle-gars in tropical areas, such as *Potamorrhaphis guianensis* (Jardine, 1843) and *Xenentodon cancila* (Hamilton, 1822), are included in the aquarium trade (Pisces Publishers 2001, 2004).

During the survey of the fish collection deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT), a number of specimens of the family Belonidae, collected from Japan and elsewhere, were found. They are detailed in the following list.

Materials and Methods

Specimens of Belonidae in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study, following Hubbs and Wisner (1980), Collette (1999) and Aizawa and Douichi (2013a, b).

Contents included in parentheses following registration numbers are as follows: [specimen counts, standard length; postorbital length (PL: measured from posterior margin of eye to posterior margin of hypural; not indicated in *Cololabis saira* and *Scomberesox saurus*); collection locality; collection date; collector]. Collection data of specimens are omitted if the same as that for the previous specimen.

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room) in the museum building. Most were stored in shelved containers, although some larger specimens were stored in a glass tank in the same room, with the glass lid sealed with a silicon adhesive (as of Apr. 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

One hundred lots, including 111 specimens representing 10 belonid species, were confirmed in the ZUMT fish collection. No types are known for the family in the collection.

Species accounts

Family Belonidae　ダツ科

Subfamily Tylosurinae　ダツ亜科

***Ablennes hians* (Valenciennes, 1846)　ハマダツ**

JAPAN

ZUMT 31332 [approx. 528 mm PL (bisected into anterior and posterior halves); Matsue City, Shimane Pref.; coll. by R. Yanai]

ZUMT 33737 [354 mm SL; 271 mm PL; probably collected from Kagoshima Pref.; donated by T. Arii (Sendai Junior High School, Kagoshima Pref.)]

ZUMT 50027 [458+ mm SL; 375 mm PL; Miiraku, Goto City (Fukue-jima Island, Goto Islands); 13 Oct. 1953; collected by I. Tomiyama]

ZUMT 50157 [524 mm SL; 407 mm PL; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 17 Oct. 1953; collected by I. Tomiyama]

ZUMT 50355 (356 mm SL; 274 mm PL; obtained at Hiradoguchi Fish Market; 24 Oct. 1953; collected by I. Tomiyama)

ZUMT 50412 (390 mm SL; 296 mm PL), ZUMT 50413 (304 mm SL; 239 mm PL; Motoura, Ikitsuki, Hirado City; 25 Oct. 1953; collected by I. Tomiyama)

ZUMT 55827 (548 mm SL; 433 mm PL; Hayase, Mihama Town Fukui Pref.; 1 Nov. 1986; collected by M. Aizawa, H. Senou, T. Urano et al.)

ZUMT 23810 (335+ mm SL; 251 mm PL), ZUMT 23811 (331+ mm SL; 263.6 mm PL), ZUMT 23812 (349+ mm SL; 254 mm PL; Naya, Kagoshima City, Kagoshima Pref.)

ZUMT 23997 (224.5 mm SL; 166.3 mm; Shibushi City, Kagoshima Pref.)

ZUMT 31326 (501+ mm SL; 426 mm PL; Matsue City, Shimane Pref.; coll. by R. Yanai)

LOCALITY UNKNOWN

ZUMT ABE 60-1546 (356 mm SL; 275 mm PL), ZUMT ABE 60-1547 (355 mm SL; 274 mm PL; no data)

***Strongylura anastomella* (Valenciennes, 1846)　ダツ**

JAPAN

ZUMT 15409 [681 mm SL; 558 mm PL; obtained at Morioka Market, Iwate Pref. (landed at Ishinomaki Port, Miyagi Pref.); 5 June 1925; collected by G. Toba]

ZUMT 18088 (305 mm SL; 237 mm PL), ZUMT 18089 (279 mm SL; 217 mm PL; Ariake Sea; donation from Fukuoka Prefectural Fisheries Experimental Station)

ZUMT 18670 (183 mm SL; 137 mm PL; Susaki City, Kochi Pref.; 20 Aug. 1925; collected by K. Akamatsu)
ZUMT 24977 [550 mm SL; 421 mm PL; Horie Village (currently northern part of Matsuyama City), Ehime Pref.; Oct. 1931; collected by J. Ishikawa]
ZUMT 31184 [approx.187 mm SL; approx. 144 mm PL (bisected into anterior and posterior halves)], ZUMT 31254 (434 mm SL; 359 mm PL; Matsue City, Shimane Pref.; coll. by R. Yanai)
ZUMT 33739 [264 mm SL; 210 mm PL; probably collected from Kagoshima Pref.; donated by T. Arii (Sendai Junior High School, Kagoshima Pref.)]
ZUMT 35769 (278 mm SL; 215 mm PL), ZUMT 35770 (244 mm SL; 181 mm PL; Ariake Sea; Oct. 1931; collected by I. Tomiyama)
ZUMT 48081 (632 mm SL; 523 mm PL; obtained at Aiura Fish Market, Sasebo City; 1 June 1953; collected by I. Tomiyama)
ZUMT 49572 (646 mm SL; 476 mm PL; Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 10 June 1959; collected by Y. Tominaga)
ZUMT 50524 (342 mm SL; 249 mm PL), ZUMT 50753 (209 mm SL; 174 mm PL; Ariake Sea; 19 Apr. 1959; collected by Y. Tominaga)

LOCALITY UNKNOWN
ZUMT 21104 (316 mm SL; 230 mm PL; locality unknown; Owston Collection)

Strongylura incisa (Valenciennes, 1846)　リュウキュウダツ

JAPAN
ZUMT 14740 (421+ mm SL; 284.9 mm PL), ZUMT 14741 (367 mm SL; 255 mm PL; Yaeyama Islands, Ryukyu Archipelago; coll. by H. Yashiro)
ZUMT 37587 (747 mm SL; 587 mm PL; Japan, precise locality unknown)

PALAU
ZUMT ABE 2763 (418 mm SL; 291 mm PL), ZUMT ABE 2813 (532+ mm SL; 370 mm PL), ZUMT ABE 2907 (554+ mm SL; 387 mm PL), ZUMT ABE 2908 (610 mm SL; 434 mm PL), ZUMT ABE 2909 (440+ mm SL; 304 mm PL), ZUMT ABE 2922 (293 mm SL; 204 mm PL), ZUMT ABE 3415 (258 mm SL; 181 mm PL), ZUMT ABE 3753 (593+ mm SL; 417 mm PL), ZUMT ABE 3756 (419 mm SL; 308 mm PL; Palau)

Strongylura strongylura (van Hasselt, 1823)　コクテンダツ

TAIWAN
ZUMT 34322 (214 mm SL; 161 mm PL; Taiwan)

PHILIPPINES
ZUMT 42245 (252 mm SL; 168 mm PL; Philippines; 1926; collected by U. Yamamura)

Strongylura urvillii (Valenciennes, 1846)

PHILIPPINES
ZUMT 42175 (251.9 mm SL; 169.5 mm PL; Philippines; 1926; collected by U. Yamamura)

Tylosurus acus melanotus (Bleeker, 1850)　テンジクダツ

JAPAN

ZUMT ABE 9490 (400 mm SL; 302 mm PL; Tokyo Market, Tokyo Met.)

ZUMT 16842 (495 mm SL; 384 mm PL; Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; collected by S. Tanabe)

ZUMT 16973 [259+ mm SL; 169+ mm PL (head only); Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; collected by S. Tanabe]

ZUMT 19084 (745+ mm SL; 625 mm PL), ZUMT 19085 (733 mm SL; 619 mm PL; probably collected from Okinawa Pref.; donation from Okinawa Prefectural Fisheries Experimental Station)

ZUMT 32644 (166 mm SL; 128 mm PL; probably collected from Shizuura, Numazu City; Jan. 1932)

ZUMT 40529 (697 mm SL; 558 mm PL), ZUMT 40530 (685+ mm SL; 555 mm PL; Hachijo-jima Island, Izu Islands)

ZUMT 50155 [approx. 925 mm SL; approx. 742 mm PL (cut into four parts)], ZUMT 50156 [281+ mm PL (head only); Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 17 Oct. 1953; collected by I. Tomiyama]

ZUMT 64079 (470+ mm SL; 378 mm PL), ZUMT 64080 (651+ mm SL; 533 mm PL; Ogasawara Islands; Mar. 1913)

LOCALITY UNKNOWN

ZUMT 63921 [(420+ mm PL (cut into anterior and posterior portions; no head); no data)], ZUMT ABE 60-1025 (158 mm SL; 126 mm PL; no data)

Tylosurus crocodilus crocodilus (Péron & Lesueur, 1821)　オキザヨリ

JAPAN

ZUMT 2392 (169 mm SL; 129 mm PL; Fukuoka Pref.)

ZUMT 18703 (165 mm SL; 125.0 mm PL; Kashiwa-jima Island, Otsuki Town, Kochi Pref.; Aug. 1928; collected by T. Kamohara)

ZUMT 19082 (748.0 mm SL; 617.0 mm PL), ZUMT 19083 (768.0 mm SL; 624.0 PL; probably collected from Okinawa Pref.; 18 May 1928; donation from Okinawa Prefectural Fisheries Experimental Station)

ZUMT 21111 (234.0 mm SL; 180.0 mm PL; off Nagasaki Pref.; trawl, collected by T. Kuraba)

ZUMT 21931 (167.0 mm SL; 134.0 mm PL; Kochi Pref.; donation from Kochi Prefectural Fisheries Experimental Station)

ZUMT 23996 (231.0 mm SL; 174.0 mm PL; Shibushi City, Kagoshima Pref.)

ZUMT 25404 [839.0 mm+ SL; 671.0 mm PL; probably collected from Hiroshima Prefecture; donated by Y. Ozaki (Hiroshima City)]

ZUMT 33738 [195.0 mm SL; 147.0 mm PL; probably collected from Kagoshima Pref.; donated by T. Arii (Sendai Junior High School, Kagoshima Pref.)]

ZUMT 47894 [693.0 mm SL; 555.0 mm PL; Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 23 May 1953; collected by I. Tomiyama]

ZUMT 50158 (364.0 mm SL; 282.0 mm PL), ZUMT 50159 [345.0 mm SL; 278.0 mm PL; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 17 Oct. 1953; collected by I. Tomiyama]

ZUMT 50329 (408.0 mm SL; 325.0 mm PL; Hirado City, Nagasaki Pref.; 10 June 1953; collected by I. Tomiyama)

ZUMT 50752 (183.0 mm SL; 139.0 mm PL; Ariake Sea; 19 Apr. 1959; collected by Y. Tominaga)

ZUMT 64078 (652.0 mm+ SL; 513.0 mm PL; Ogasawara Islands; Mar. 1913)

PALAU

ZUMT ABE 3755 (843 mm SL; 674 mm PL; Palau)

LOCALITY UNKNOWN

ZUMT 62837 (481.0 mm SL; 373.0 mm PL; no data)

Subfamily Beloninae　サンマ亜科

Cololabis saira (Brevoort, 1856)　サンマ

JAPAN

ZUMT 12784 (133.6 mm SL; obtained at Tokyo Market, Tokyo Met.)

ZUMT 13133 (299.3 mm SL; probably collected from Iwate Pref.; coll. by personnel of Kamaishi Fisheries Experimental Station)

ZUMT 20289 (128.6 mm SL; Wakayama Pref.)

ZUMT 20572 (90.9 mm SL), ZUMT 20761 (105.8 mm SL; Wakayama Pref.; Jan. 1920)

ZUMT 23412 (256.1 mm SL; Owase City, Mie Pref.)

ZUMT 24577 (183.8 m SL; Taneichi, Hirono Town, Iwate Pref.; 17 Aug. 1925; coll. by H. Fukuda)

ZUMT 33352 (112.5 mm SL), ZUMT 33353 (109.6 mm SL; Shizuoka Pref.)

ZUMT 50515 (133.8 mm SL; Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 7 July 1959; coll. by Y. Tominaga)

ZUMT 64477 (278.0 mm SL; Miho, Shimizu, Shizuoka City, Shizuoka Pref.; 16 Apr. 1976; coll. by M. Aizawa)

LOCALITY UNKNOWN

ZUMT 64076 (277.2 mm SL), ZUMT ABE 2384 (152.2 mm SL), ZUMT ABE 2385 (139.6 mm SL), ZUMT ABE 57-346 (4 specimens, 46.8–100.5 mm SL), ZUMT 59-102 (278.5 mm SL), ZUMT 59-133 (120.3 m SL), ZUMT ABE 60-85 (61.9 mm SL), ZUMT ABE 60-95 (86.1 mm SL; no data)

ZUMT 64077 (9 specimens, 78.2–119.6 mm SL; no locality; tagged as“マ 37”)

Platybelone argalus platyura (Bennett, 1832)　ヒメダツ

LOCALITY UNKNOWN

ZUMT ABE 56-119 (314 mm SL; 237 mm PL), ZUMT 62847 (359 mm SL; 267 mm PL), ZUMT 62848 (376 mm SL; 278 mm PL; no data)

Scomberesox saurus (Walbaum, 1792)

LOCALITY UNKNOWN

ZUMT ABE 18191 (330.0+ mm SL; no data)

Remarks. The species is distributed in temperate waters of the North Atlantic and Southern Hemisphere (Hubbs and Wisner 1980)

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Specimens of the families Lactariidae and Latidae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of the families Lactariidae and Latidae deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided. Eight specimens of each family included *Lactarius lactarius* (Bloch & Schneider, 1801), the sole species of Lactariidae, and all three latid species distributed in the Pacific region. However, no examples were found of the genus *Centropomus* which is sometimes included together with Latidae in the family Centropomidae.

Introduction

Lactarius lactarius (Bloch & Schneider, 1801), the only species included within the family Lactariidae, is widely distributed in the Indo-West Pacific, from the Persian Gulf to Taiwan and Fiji (Leis 1999; Nelson et al. 2016). As indicated by its English common name "false trevally", the species resembles those of Carangidae, but *L. lactarius* can be distinguished from carangids by the lack of scutes on the lateral line and no detached anal fin spines (Leis 1999). *Lactarius lactarius* forms schools in coastal waters shallower than 100m depth, and is abundantly caught and marketed in tropical areas of the Indo-Pacific (Leis 1999; Motomura 2018). During the 1960's, the species contributed 0.43−2.37% of India's total annual marine catch (Talwar and Kacker 1984). Although *L. lactarius* has at no time been recorded from Japanese waters, it is sometimes called by the Japanese name "アクタウオ" (Matsubara 1955; Shogakukan 2003).

The family Latidae (lates perches), distributed in the Indo-West Pacific and freshwaters on the African Continent, includes 13 species in three genera (Nelson et al. 2016). Although the family had been frequently regarded as a primitive clade of Perciformes, it has recently been suggested as closely related to Carangidae, and placed in Carangiformes together with several other families, including Lactariidae (Mirande 2016; Girard et al. 2020). However, Latidae is morphologically similar to the genus *Centropomus* (snooks), inhabiting tropical areas of the Americas, many other studies regarding them as a single family Centropomidae (Greenwood 1976; Larson 1999), with some [molecular phylogenetic studies, including Betancur-R. et al. (2017)] having further suggested that Centropomidae has a close relationship with the order Pleuronectiformes.

Due to their large body size, latid fishes are eaten all over the world, in particular Barramundi, *Lates calcarifer* (Bloch, 1790), which is abundantly fished and aquacultured in Southeast Asia, where it is an important fisheries resource (Copland and Grey 1987; Larson 1999; Koeda 2019). Moreover, Nile Perch, *Lates niloticus* (Linnaeus 1758), originally distributed in major rivers in tropical Africa, were introduced into eastern African lakes, such as Lake Victoria, as a food resource. Although subsequently becoming an important fisheries resource, the latter introduction has resulted in major ecological problems for local fishes, including endemic cichlids in the lake (GISD 2022)

On the other hand, the endemic Japanese lates perch, *Lates japonicus* Katayama & Taki, 1984, is designated as "Vulnerable (VU)" in the IUCN Red List and an "Endangered species (EN)" in the Red List of the Ministry of the Environment, Government of Japan, because it inhabits the estuaries of large rivers and is easily impacted by

economic developments, and the pressures of both commercial and recreational fishing (Senou 2015; Watanabe et al. 2019).

A list of specimens of the families Lactariidae and Latidae deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided below.

Materials and Methods

Specimens of Lactariidae and Latidae in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study, following Leis (1999) and Katayama and Taki (1984), Harrison (1991), Larson (1999), and Pethiyagoda and Gill (2012), respectively. Parentheses following registration numbers include standard length, collection locality, collection date, and collector. Collection data of specimens are omitted if the same as that for the previous specimen. Information of some specimens were referred from Koeda et al. (2022). The ZUMT specimens listed herein were stored in shelved containers (as of July 2022) in Room 406 (specimen storage room) in the museum building. Although one of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with only partial collection data, it is listed herein together with the ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future.

Results

Examples of all three latid species known from the Pacific Region, numbering Eight specimens, and five specimens of *Lactarius lactarius* were confirmed in the ZUMT collection. No types for the families were found. Moreover, no ZUMT specimens or ZUMT ledger registrations of specimens of the genus *Centropomus* were found, although the ZUMT ledgers included 11 specimens registered under generic names included in Latidae and Centrolophidae by Nelson et al. (2016). Not only were more than 22% of specimens originally registered unable to be accounted for, but also many ledger entries referred to lot numbers only (lacking species names), which suggests an even greater loss of ZUMT specimens.

Species accounts

Family Lactariidae

***Lactarius lactarius* (Bloch & Schneider, 1801)**

TAIWAN

ZUMT 14985 (149.3 mm; Tainan; coll. by T. Aoki)

THAILAND

ZUMT 59696 (177.5 mm; obtained at fish market in Phuket; 15 Nov. 1986)

ZUMT ABE 64-1998 (149.3 mm; Thailand; 14 Sept. 1964)

MALAYSIA

ZUMT 62709 [104.9 mm; probably Sarawak State; tagged as "P2869"; donated in 1960 by Tom Harrisson (Sarawak Museum) to I. Tomiyama]

ZUMT 62710 [120.2 mm; probably Sarawak State; tagged as "P4321"; donated in 1960 by Tom Harrisson (Sarawak Museum) to I. Tomiyama]

Family Latidae　アカメ科

***Lates calcarifer* (Bloch, 1790)**

TAIWAN

ZUMT 14958 (225.1 mm; Tainan; coll. by T. Aoki)

ZUMT 21777 (219.1 mm; probably collected from Taiwan)

PHILIPPINES

ZUMT 40973 (98.0 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

Remarks. The collection locality of ZUMT 21777 was recorded in the ZUMT ledger as "probably Taiwan or Miyazaki Prefecture". However, *L. calcarifer* has at no time been unequivocally recorded from Japanese waters (Suzuki et al. 1995), and the specimen is here considered to have been most likely collected from Taiwan.

Lates japonicus Katayama & Taki, 1984　アカメ

JAPAN

ZUMT 9333 (85.0 mm), ZUMT 40169 (68.8 mm; probably collected from Miyazaki Pref. coll. by K. Tashiro, Miyazaki Prefectural Fisheries Experimental Station)

ZUMT 10437 (228.4 mm; obtained at Kochi Fish Market, Kochi Pref.; Aug. 1904; coll. by S. Tanaka)

Remarks. ZUMT 10437, the sole example of the species located in this study, was described in detail by Tanaka (1922).

Psammoperca waigiensis (Cuvier, 1828)　アカメモドキ

JAPAN

ZUMT 11150 (214.8 mm; probably from Okinawa-jima Island, Ryukyu Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior High School)

PHILIPPINES

ZUMT 54647 (194.6 mm; obtained at fish market in Puerto Princesa, Palawan; 8 Feb. 1985; coll. by M. Aizawa)

Specimens of Latidae recorded in the ZUMT specimen ledger, but not found

ZUMT 4880 [as "*Lates*"; estuary of Oyodo-gawa River, Miyazaki City, Miyazaki Pref., Japan; collected on July 1899; donated from G. Ogura, Miyazaki Junior High School, 6 Nov. 1900, local common name "マルカ (maruka)"]

ZUMT 13518 [as "*Psammoperca waigiensis*" and "young"; donation from Miyazaki Prefectural Fisheries Experimental Station]

ZUMT 18873 (as "*Psammoperca waigiensis*"; obtained at Kochi Market, Kochi Pref., Japan; 22 Jan, 1928; coll. by T. Kamohara, Kochi High School)

ZUMT 21776, ZUMT 21778 (as "*Psammoperca waigiensis*" but probably *L. calcarifer*; locality unknown, as "Taiwan or Miyazaki Prefecture" but probably Taiwan)

Remarks. ZUMT 4880, 13518, and 18873 are considered to have been *Lates japonicus*, based on the distributional range of the species (Pacific coast of temperate Japan from Shizuoka Pref. to Osumi Islands, from which no other latid species have been recorded; Hagiwara and Shimamura 2013; Hatooka 2013; Motomura 2020). ZUMT 21776 and ZUMT 21778 were probably *L. calcarifer*, since ZUMT 21777 has been identified as that species (see above).

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volunteers for the opportunity to examine the present specimens and providing curatorial assistance. We greatly appreciated G. Hardy (Ngunguru, New Zealand), who read the manuscript and provided help with English. This study was supported in part by the Sasakawa Scientific Research Grant from the Japan Science Society (28-745, 2021-4064); a Grant-in-Aid from the Japan Society for the Promotion of Science for JSPS Fellows (DC2: 29-6652); JSPS KAKENHI Grant Numbers 19K23691 and 21K06313JP; JSPS Overseas Research Fellowships (202160519); the Fujiwara Natural History Foundation; Kurita Water and Environment Foundation (23B019); JST, CREST (JPMJCR23J2); Ocean Shot from The Sasakawa Peace Foundation.

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List of specimens of the family Carangidae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A total of 1,974 specimens in 1,639 lots, representing 62 species of Carangidae, were identified in the Department of Zoology, The University Museum, The University of Tokyo, including the holotype of *Decapterus kurroides akaadsi* Abe, 1958 (ZUMT 49749). A list of the specimens is provided, including all available data, and remarks on some species.

Introduction

The mainly marine family Carangidae, distributed in warm waters worldwide (Gushiken, 1983; Smith-Vaniz 1995, 1999, 2002), has usually been regarded as comprising four subfamilies, Naucratinae, Scomberoidinae, Trachinotinae, and Caranginae (Gushiken 1983, 1988; Kijima et al. 1988], although Smith-Vaniz (1984) treated the subfamilies as tribes. However, recent molecular phylogenetic studies demonstrated that Carangidae was polyphyletic, and that a clade including Naucratinae and Caranginae was the sister group of a clade including Scomberoidinae, Trachinotinae, Echeneidae (sharksuckers), Coryphaenidae (dorados), and Rachycentridae (cobias) (Harrington et al. 2016; Girard et al. 2020).

The family Carangidae, as traditionally conceived, includes many commercially important species, such as *Trachurus japonicus* (Temminck & Schlegel, 1844) and species in the genus *Seriola*, of which more than 90,000 tons are taken every year in Japanese waters (Statistics Department of Ministry of Agriculture, Forestry and Fisheries, Japan, 2022). Many other species are abundantly marketed in tropical regions (Talwar and Kacker 1984; Smith-Vaniz 2002; Tan 2009; Kimura 2017; Hata 2019).

During a survey of the fish collection deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT), numerous carangid specimens were found, having been collected mainly from Japanese and other Asian waters. They are listed below, together with all accompanying data.

Materials and Methods

The identification of carangid specimens in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) and classification of genera and species in the family followed Gushiken (1983), Gunn (1990), Smith-Vaniz (1995, 1999, 2002), Senou (2013), Kimura et al. (2013, 2022) and Kimura (2022). Although the family was recently shown to be polyphyletic (Girard et al. 2020), the following list includes genera considered as belonging to Carangidae by Gushiken (1983). Contents included in parenthesis following registration numbers are as follows: [(standard length; specimen counts (if plural specimens included in the lot); collection locality; collection date; collector]. Collection data of specimens are omitted when the same as the following specimen(s).

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room) of the museum building. ZUMT 49749 (holotype of *Decapterus kurroides akaadsi* Abe, 1958) was stored in Room 407, which held type specimens and those attributed to S. Tanaka. Most specimens were shelved, with larger specimens

stored in glass tanks (labelled “Carangidae”) in the same room, with the glass lid sealed with a silicon adhesive (as of May 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe’s catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

A total of 1639 lots, comprising 1974 specimens of 62 carangid species, including the holotype of *Decapterus kurroides akaadsi* Abe, 1958 (ZUMT 49749), were confirmed in the ZUMT fish collection. Although Abe (1958) also designated two paratypes (ZUMT ABE 57-120 and 57-265), no paratypes of the nominal species were found. Lists of ZUMT specimens of Echeneidae and Rachycentridae, and Coryphaenidae, families recently included in Carangidae (Girard et al. 2020), have been published by Hata et al. (2022a) and (2022b), respectively.

Species accounts

Family Carangidae アジ科

***Alectis ciliaris* (Bloch, 1787) イトヒキアジ**

JAPAN

IWATE PREF.

ZUMT 13120 (92.9 mm), ZUMT 13121 (91.7 mm; Miyako Bay; coll. by S. Tanabe)

ZUMT 16383 (61.7 mm; Kesen, Rikuzentakata City; 20 Aug. 1925; coll. by G. Toba)

FUKUSHIMA PREF.

ZUMT 25264 (84.4 mm; Onahama, Iwaki City; coll. by H. Kakuda)

IBARAKI PREF.

ZUMT 59432 (199.2 mm; off Nakaminato City; Jan. 1989)

CHIBA PREF.

ZUMT 18010 (34.5 mm), ZUMT 18011 (48.4 mm; Kujukuri-hama Beach; donated by N. Yosezato)

ZUMT 28268 (74.0 mm), ZUMT 28269 (62.4 mm), ZUMT 28270 (51.6 mm; Chiba Pref.; coll. by S. Obama)

ZUMT 33414 (57.2 mm), ZUMT 33415 (53.6 mm), ZUMT 33416 (49.9 mm; Katsuura City, Chiba Pref.)

TOKYO MARKET

ZUMT 12489 (85.0 mm), ZUMT 47751 (92.9 mm; obtained at Tokyo Market, Tokyo Met.)

KANAGAWA PREF.

ZUMT 4819 (71.9 mm), ZUMT 5888 (56.4 mm), ZUMT 5889 [57.7+ mm (tail broken)], ZUMT 20948 (67.5 mm), ZUMT 49114 (132.0 mm), ZUMT 62295 (49.7 mm; Misaki, Miura City)

ZUMT 17984 (45.5 mm), ZUMT 17985 (70.7 mm), ZUMT 17956 (54.2 mm), ZUMT 17987 (140.5 mm), ZUMT 17988 (127.5 mm), ZUMT 17989 (99.7 mm; Misaki, Miura City; coll. by K. Aoki)

ZUMT 21277 (65.9 mm; Kanagawa Pref.)

ZUMT 35301 (43.2 mm; Kamakura City)

WAKAYAMA PREF.

ZUMT 9552 (96.8 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)

ZUMT 22430 (66.4 mm), ZUMT 22431 (71.6 mm), ZUMT 22432 (32.5 mm), ZUMT 22550 (45.9 mm; Tanabe City; coll. by N. Ui)

HYOGO PREF.

ZUMT 44519 (70.9 mm; Sumoto City, Awaji-shima Island)

SHIMANE PREF.

ZUMT 9515 (73.3 mm; probably from Oki Islands, Shimane Pref.; coll. by T. Okabe, Okinoshima Town, Shimane Prefecture)

EHIME PREF.

ZUMT 24958 [126.3 mm; Horie Village (currently northern part of Matsuyama City); coll. by J. Ishikawa]

KOCHI PREF.

ZUMT 9224 (69.1 mm; probably from Kochi Pref.; coll. by T. Iyoda, Kochi Daiichi Junior High School)

ZUMT 18645 (108.7 mm; Kashiwa-jima Island; Aug. 1928; coll. by T. Kamohara)

ZUMT 18920 (68.6 mm; Susaki City; 20 Aug. 1925; coll. by T. Kamohara)

ZUMT 18986 (29.3 mm; Kashiwa-jima Island, Otsuki Town; Oct. 1928; coll. by T. Kamohara)

ZUMT 19566 (41.2 mm; Susaki City; coll. by T. Kamohara)

ZUMT 19567 (35.0 mm), ZUMT 21689 (125.3 mm; Kashiwa-jima Island, Otsuki Town, Kochi Pref.; coll. by T. Kamohara)

NAGASAKI PREF.

ZUMT 2538 (204.9 mm; Nagasaki Pref.; 3 Oct. 1909)

ZUMT 20435 (85.3 mm; off Nagasaki Pref.; coll. by T. Kuraba)

ZUMT 49938 (82.6 mm), ZUMT 49956 [58.0 mm; Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 49991 (51.0 mm), ZUMT 49992 [141.8 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 50028 [192.2 mm; Miiraku, Goto City (Fukue-jima Island, Goto Islands); 13 Oct. 1953; coll. by I. Tomiyama]

ZUMT 50200 (134.4 mm), ZUMT 50201 [184.5 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 19 June 1953; coll. by I. Tomiyama]

KAGOSHIMA PREF.

ZUMT 23817 (161.9 mm), ZUMT 23910 (71.0 mm), ZUMT 23911 (71.7 mm), ZUMT 24133 (73.2 mm), ZUMT 24134 (90.7 mm; Arata Beach, Kagoshima City)

ZUMT 23986 (114.2 mm), ZUMT 23995 (88.4 mm; Shibushi City)

ZUMT 29686 (35.6 mm; Keraji, Kikai-jima Island, Amami Islands, Ryukyu Islands)

ZUMT 39346 (64.1 mm), ZUMT 40502 (74.6 mm; Kagoshima Pref.)

OKINAWA PREF.

ZUMT 14282 [145.2 mm; probably from Okinawa-jima Island, Ryukyu Islands; coll. by H. Yashiki at Naha Market, Okinawa Pref.)

ZUMT 17031 (103.1 mm), ZUMT 17032 (127.0 mm; Itoman City, Okinawa-jima Island, Ryukyu Islands; coll. by S. Tanabe)

PRECISE LOCALITY UNKNOWN

ZUMT 34800 (86.9 mm; Japan)

EAST CHINA SEA

ZUMT 51393 (225.6 mm; East China Sea; 28 Oct. 1959)

PALAU

ZUMT 31686 [140.7 mm; probably from Palau; labelled as「南洋」(“nan-yo”, general term for Micronesian islands)]

ZUMT 62360 (59.3 mm; probably from Palau, in same bottle with ZUMT ABE 5881 and 5882)

EASTERN PACIFIC

ZUMT ABE 60-1015 [62.3 mm; approx. 2300 km west of Lima, Peru (10°06'S 100°14'W); 9 Aug. 1961]

LOCALITY UNKNOWN

ZUMT ABE 9590 (75.0 mm), ZUMT 12400 (113.5 mm), ZUMT 33743 (82.7 mm), ZUMT 35252 (73.2 mm), ZUMT 39347 (29.8 mm), ZUMT 40694 (55.4 mm), ZUMT 62249 (137.2 mm), ZUMT 62251 (167.3 mm), ZUMT 63674 (45.6 mm), ZUMT 63675 (25.6 mm; no data)

ZUMT 62292 (45.8 mm), ZUMT 62293 (39.1 mm), ZUMT 62294 [53.2 mm, no data; originally stored with

ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

Alepes djedaba (Fabricius, 1775) クロボシヒラアジ

TAIWAN

ZUMT 2505 (200.6 mm; obtained at Kaohsiung Market; Sept. 1908; coll. by K. Akamatsu)
ZUMT 14975 (139.0 mm; Tainan; coll. by T. Aoki)

PHILIPPINES

ZUMT 40769 (130.0 mm; Manila, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)
ZUMT 42177 (142.9 mm), ZUMT 42214 (139.5 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT 63057 (5 specimens, 26.9–35.3 mm), ZUMT 63070 (3 specimens, 40.3–43.5 mm; Palau; coll. by Y. Haneda)

Alepes kleinii (Bloch, 1793) ミヤカミヒラアジ

CHINA

ZUMT 22817 (87.9 mm; Hainan Island)
ZUMT 40518 (100.3 mm), ZUMT 40519 (83.0 mm), ZUMT 40520 (83.4 mm; Hainan Island; Oct. 1906; coll. by I. Katsuge)

PHILIPPINES

ZUMT 40795 (91.5 mm), ZUMT 40796 (123.2 mm), ZUMT 40797 (127.3 mm), ZUMT 40812 (116.5 mm), ZUMT 40813 (89.8 mm), ZUMT 40831 (92.3 mm), ZUMT 40832 (93.9 mm), ZUMT 40833 (93.7 mm), ZUMT 40842 (90.8 mm); ZUMT 40852 (125.8 mm), ZUMT 40853 (93.4 mm; Manila, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)

Alepes vari (Cuvier, 1833) マブタシマアジ

JAPAN

ZUMT 17188 (82.5 mm), ZUMT 17189 (91.6 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 23557 (344.8 mm; Okinawa Pref.; donation from Okinawa Prefectural Fisheries Experimental Station)

PHILIPPINES

ZUMT 42335 (159.5 mm), ZUMT 42336 (142.1 mm), ZUMT 42337 (143.1 mm), ZUMT 42391 (132.8 mm), ZUMT 42392 (142.5 mm; Basilan, Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT ABE 5983 (229.8 mm; Palau)

Atropus armatus (Forsskål, 1775) ヨロイアジ

TAIWAN

ZUMT 14903 (83.3 mm; probably from Taiwan; donated by T. Aoki at Government-General of Taiwan)

Atropus atropos (Bloch & Schneider, 1801) クボアジ

JAPAN

ZUMT 62238 (172.4 mm; Zaimokuza Beach, Kamakura City, Kanagawa Pref.; 21 Mar. 1934)

EAST CHINA SEA

ZUMT 51386 (144.5 mm), ZUMT 51392 (144.0 mm; East China Sea; 28 Oct. 1959)

TAIWAN

ZUMT 57770 [approx. 213.6 mm (body cut); obtained at Kaohsiung Fish Market, Taiwan; Aug. 1975]

Remarks: Hata and Koeda (2022a) reported ZUMT 62238, collected from Kamakura City, Kanagawa Pref., as the first record of *A. atropos* from Sagami Bay.

Atropus hedlandensis (Whitley, 1934) リュウキュウヨロイアジ

JAPAN

ZUMT 9222 (82.8 mm; probably from Kochi Pref.; coll. by T. Iyoda, Kochi Daiichi Junior High School)
ZUMT 12399 (89.4 mm; obtained at Tokyo Market, Tokyo Met.)
ZUMT 17213 (75.5 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 23744 (144.0 mm; Taniyama, Kagoshima City, Kagoshima Pref.; 20 July 1930)
ZUMT 24027 (83.8 mm; Shibushi City, Kagoshima Pref.)
ZUMT 52143 (99.0 mm; Totoro, Nobeoka City, Miyazaki Pref.; Aug. 1960)

TAIWAN

ZUMT 2506 (190.9 mm obtained at Kaohsiung Market; Sept. 1908; coll. by K. Akamatsu)
ZUMT 14849 (133.2 mm), ZUMT 14850 (94.4 mm; Tainan; coll. by T. Aoki)
ZUMT 14851 (104.0 mm; Tainan; coll. by T. Aoki)

PHILIPPINES

ZUMT 40911 (158.5 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

LOCALITY UNKNOWN

ZUMT 45447 (84.8 mm; Taiwan or Singapore)
ZUMT 62291 [52.6 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]
ZUMT 62696 (100.1 mm; no data)

Atropus mentalis (Cuvier, 1833) ヒシカイワリ

TAIWAN

ZUMT 14852 (112.3 mm; Tainan; coll. by T. Aoki)
ZUMT 14902 (77.3 mm; probably from Taiwan; coll. by T. Aoki at Government-General of Taiwan)
ZUMT 37424 (103.4 mm; Taipei City; July 1908)

PALAU

ZUMT ABE 3754 (474.7 mm; Palau)

Atule mate (Cuvier, 1833) マテアジ

EAST CHINA SEA
ZUMT 51429 (214.8 mm; East China Sea; Sept. 1959)

PHILIPPINES
ZUMT 42231 (104.8 mm; Philippines; 1926; coll. by U. Yamamura)

Carangichthys dinema (Bleeker, 1851) イトヒラアジ

JAPAN
ZUMT 12393 (127.9 mm; obtained at Tokyo Market, Tokyo Met.)
ZUMT 15524 (116.3 mm; purchased at Tsurumi, Yokohama City, Kanagawa Pref.; donated by S. Miyashiro, Higashi-Kanagawa Technical School)
ZUMT 17160 (140.8 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 22597 (75.5 mm; Kiragawa, Muroto City, Kochi Pref.; 3 Jan. 1930; coll. by T. Kamohara)
ZUMT 24379 [206.4 mm; Kaminada Village (currently eastern part of Tosashimizu City), Kochi Pref.; 3 Mar. 1932; coll. by M. Fukutomi]
ZUMT 40554 (213.9 mm; Hachijo-jima Island, Izu Islands)
ZUMT 42415 (141.4 mm; Nagasaki Pref.; July)

TAIWAN
ZUMT 14974 (Tainan; coll. by T. Aoki)

PHILIPPINES
ZUMT 42230 (165.7 mm; Philippines; 1926; coll. by U. Yamamura)

LOCALITY UNKNOWN
ZUMT ABE 59-498 (120.0 mm), ZUMT ABE 60-990 (104.4 mm), ZUMT ABE 61-1078 (107.9 mm; no data)

Carangichthys oblongus (Cuvier, 1833) テンジクアジ

JAPAN
ZUMT 9553 [134.4 mm; probably from Wakayama Pref.; collected by N. Ui, Tanabe City, Wakayama Pref.)
ZUMT 12478 (197.4 mm), ZUMT 12483 (128.9 mm; obtained at Tokyo Fish Market, Tokyo Met.)
ZUMT 15109 (112.5 mm; probably from Okinawa-jima Island, Ryukyu Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior High School)
ZUMT 17159 (94.6 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 18930 (56.7 mm; Susaki City, Kochi Pref.; coll. by T. Kamohara)
ZUMT 22454 (101.4 mm; Tanabe City, Wakayama Pref.; coll. by N. Ui)
ZUMT 26803 (91.7 mm; Nagasaki Pref.; Mar. 1903; coll. by S. Tanaka)
ZUMT 27359 (39.2 mm; Naha City, Okinawa-jima Island, Okinawa Islands, Okinawa Pref.; 23 May 1923)
ZUMT 42416 (125.4 mm; Nagasaki Pref.; July)

PHILIPPINES
ZUMT 11134 (97.2 mm; Philippines; coll. by U. Yamamura)

LOCALITY UNKNOWN

ZUMT 62362 (95.0 mm), ZUMT 62363 (88.2 mm), ZUMT 62727 (126.8 mm), ZUMT ABE 57-432 (110.0 mm), ZUMT ABE 60-991 (117.7 mm), ZUMT ABE 60-993 (92.7 mm; no data)

ZUMT 40674 [124.0 mm; although the specimen locality was recorded as "Morioka?(盛岡か？)" in the ledger, this species has only been recorded from south of Sagami Bay on the Pacific coast of Japan (Senou 2013). The ledger entry is probably erroneous]

Caranx ignobilis (Forsskål, 1775) ロウニンアジ

JAPAN

IBARAKI PREF.

ZUMT 17879 (65.5 mm), ZUMT 17882 (60.0 mm), ZUMT 17883 (57.0 mm; Hinuma Lake)

ZUMT 28204 (40.3 mm; Hiraiso, Hitachinaka City; Aug. 1925)

ZUMT 34541 (53.2 mm), ZUMT 34542 (59.3 mm; Hinuma Lake, Ishizaki, Ibaraki Town; 22 May 1935; coll. S. Tanaka)

TOKYO MARKET

ZUMT 12460 (147.1 mm), ZUMT 12487 (100.8 mm), ZUMT 12488 (75.3 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 12398 (87.8 mm), ZUMT 20977 (83.6 mm; Misaki, Miura City)

ZUMT 34225 (21.2 mm; Fujisawa City)

SHIZUOKA PREF.

ZUMT 27160 (40.6 mm; Hamana Lake; coll. by S. Ooe)

EHIME PREF.

ZUMT 7151 (159.1 mm; pearl farm in Uchiumi, Ainan Town; 18 Oct. 1915; coll. by K. Otsuki)

KOCHI PREF.

ZUMT 2850 (79.9 mm; Urado Bay, Kochi City; 12 Nov. 1909)

ZUMT 24380 (184.9 mm; Urado Bay, Kochi City; 15 Feb. 1932; coll. M. Fukutomi)

ZUMT 34610 (121.4 mm; Kochi Pref.)

ZUMT 39165 (66.8 mm; probably from Ukitsu, Muroto City; probably collected by S. Tanaka)

ZUMT 40136 (72.6 mm; Urado, Kochi City)

ZUMT 62316 [43.9 mm; Tanoura, Sukumo City (following Papuan Jellyfish, *Mastigias papua*); 9 Sept. 2021; coll. by S. Toshino]

NAGASAKI PREF.

ZUMT 2462 (108.5 mm; Nagasaki Pref.; Aug. 1909)

MIYAZAKI PREF.

ZUMT 22361 (116.3 mm; Miyazaki Pref.; coll. by S. Tanaka)

KAGOSHIMA PREF.

ZUMT 3869 (2 specimens, 72.6–82.8 mm; Chosa, Aira City)

ZUMT 24063 (73.9 mm; Taniyama, Kagoshima City)

ZUMT 26918 (67.3 mm), ZUMT 40499 (88.7 mm; Kagoshima Pref.)

OKINAWA PREF.

ZUMT 11483 (64.2 mm), ZUMT 11484 (61.4 mm; Arakawa-gawa River, Ishigaki-jima Island, Yaeyama Islands; 1 July 1923; coll. by H. Kuroiwa)

ZUMT 14334 (109.8 mm), ZUMT 14335 (116.8 mm; obtained at Naha Market; 6 Feb. 1925; coll. by H. Yashiki)

ZUMT 17161 (126.2 mm; Baten, Nanjo City, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 19962 (64.7 mm), ZUMT 41141 (55.1 mm; Ryukyu Archipelago)

ZUMT 42680 (44.6 mm), ZUMT 42681 (52.3 mm; Okinawa-jima Island, Okinawa Islands; July 1936; coll. by S. Inuo)

ZUMT 45861 (17 specimens, 40.4–55.6 mm), ZUMT 45862 (9 specimens, 44.0–50.7 mm), ZUMT 45863 (28 specimens, 35.0–50.2 mm), ZUMT 45870 (14 specimens, 35.0–53.2 mm; Okinawa-jima Island, Okinawa Islands; 8 July 1936)
ZUMT 46982 (33.9 mm; Okinawa-jima Island, Okinawa Islands)
ZUMT 58100 (64.7 mm; Nakama-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 9 July 1988; coll. by H. Senou and M. Aizawa)
ZUMT 58738 (3 specimens, 43.3–52.4 mm; Sukuji-gawa River estuary, Kabira, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)

TAIWAN
ZUMT 5874 (7 specimens, 59.6–92.5 mm; Keelung; Sept. 1896; coll. by K. Tada)
ZUMT 14678 (132.9 mm; Dong-gang; coll. by T. Aoki)

PHILIPPINES
ZUMT 40941 (136.6 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)
ZUMT 42218 (108.7 mm; Philippines; 1926; coll. by U. Yamamura), ZUMT 42360 (102.8 mm; Basilan; 1936; coll. by U. Yamamura)

LOCALITY UNKNOWN
ZUMT 33746 (69.0 mm), ZUMT 33747 (62.9 mm), ZUMT 40124 (134.1 mm), ZUMT 40127 (75.4 mm), ZUMT 40128 (71.5 mm), ZUMT 40129 (70.5 mm), ZUMT 40141 (73.8 mm), ZUMT 40142 (62.6 mm), ZUMT 40143 (61.4 mm), ZUMT 44063 (81.3 mm), ZUMT 46869 (89.3 mm), ZUMT 62269 (400.1 mm), ZUMT 62742 (83.8 mm), ZUMT 62745 (66.0 mm), ZUMT 62852 (48.1 mm), ZUMT ABE 10738 (50.8 mm), ZUMT ABE 61-933 (48.7 mm; no data)
ZUMT 62374 (59.3 mm), ZUMT 62376 [49.6 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]
ZUMT 63056 [43.5 mm; originally stored with ZUMT 56-193 (*Psenes arafurensis*; collection data unknown)]

Caranx lugubris Poey, 1860 カッポレ

MIDWAY ATOLL
ZUMT 52331 [431.0 mm+ (head cut); Midway Atoll]

LOCALITY UNKNOWN
ZUMT 62266 (521.0 mm; no data)

Caranx melampygus Cuvier, 1833 カスミアジ

JAPAN
CHIBA PREF.
ZUMT 33403 (65.7 mm; Katsuura City)
TOKYO MARKET
ZUMT 12402 (81.4 mm), ZUMT 12461 (148.4 mm), ZUMT 12462 (155.0 mm), ZUMT 12474 (94.5 mm), ZUMT 12482 (128.3 mm; obtained at Tokyo Market)
SHIZUOKA PREF.
ZUMT 10551 (44.7 mm; Shizuura, Numazu City; Aug. 1922; coll. by N. Kuroda)
MIE PREF.
ZUMT 23201 (54.0 mm; Kimoto, Kumano City, Mie Prefecture; 18 May 1930; coll. by Y. Tsuchiga)

KOCHI PREF.

ZUMT 18879 (150.5 mm; Kashiwa-jima Island, Otsuki Town; Oct. 1928)

ZUMT 21940 (92.5 mm), ZUMT 21942 (100.2 mm), ZUMT 21943 (87.7 mm), ZUMT 21944 (100.8 mm), ZUMT 21945 (94.7 mm; Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)

KAGOSHIMA PREF.

ZUMT 22220 (131.1 mm), ZUMT 22238 (126.8 mm; Naze, Amami City, Amami-oshima Islands, Amami Islands; 3 Feb. 1922; coll. by K. Enokiya)

ZUMT 24126 (104.2 mm; Arata, Kagoshima City)

ZUMT 29598 (86.5 mm; probably from Amami-oshima Island, Amami Islands; donated by K. Enokiya, Kagoshima Prefectural Oshima Junior High School)

ZUMT 40498 (98.0 mm; Kagoshima Pref.)

OKINAWA PREF.

ZUMT 16882 (103.7 mm), ZUMT 16883 (114.2 mm; Onna Village, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 17055 (111.6 mm), ZUMT 17056 (95.7 mm; Itoman City, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 17325 (99.2 mm), ZUMT 17446 (133.8 mm; Yaeyama Islands; coll. by S. Tanabe)

ZUMT 40144 (91.1 mm; Okinawa Pref.)

PHILIPPINES

ZUMT 42137 (120.9 mm), ZUMT 42216 (109.3 mm), ZUMT 42217 (163.1 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT 26182 [87.8 mm; probably from Palau; labelled as「南洋」(“nan-yo”, general term for Micronesian islands)]

ZUMT ABE 3762 (165.3 mm; Palau)

LOCALITY UNKNOWN

ZUMT 41161 (68.9 mm), ZUMT 41176 (65.7 mm), ZUMT 62380 (78.4 mm), ZUMT 62381 (69.0 mm), ZUMT ABE 1882 (73.8 mm), ZUMT ABE 60-992 (112.5 mm), ZUMT ABE 60-1534 (182.8 mm), ZMT-ABE 61-1085 (60.7 mm; no data)

Caranx papuensis Alleyne & Macleay, 1877 オニヒラアジ

JAPAN

ZUMT 17163 (53.6 mm; Baten Port, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)

ZUMT 18842 (63.6 mm; Miyazaki Pref.)

ZUMT 19966 (81.8 mm; Okinawa Pref.)

ZUMT 29597 (80.3 mm; probably from Amami-oshima Island, Amami Islands, Kagoshima Pref.; donated by K. Enokiya, Kagoshima Prefectural Oshima Junior High School)

ZUMT 40134 (72.4 mm; Urado, Kochi City, Kochi Pref.)

ZUMT 58737 (51.9 mm; Sukuji-gawa River estuary, Kabira, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)

ZUMT 60273 (7 specimens, 70.4–86.6 mm; Yonada-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 20 Aug. 1989)

ZUMT 60284 (74.1 mm), ZUMT 60285 (72.4 mm; Yonada-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 20 Aug. 1989)

TAIWAN

ZUMT 14679 (125.6 mm; Dong-gang; coll. by T. Aoki)

PHILIPPINES

ZUMT 40942 (126.2 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

PALAU

ZUMT ABE 2912 (373.0 mm), ZUMT ABE 3006 (281.5 mm), ZUMT ABE 3387 (71.9 mm; Palau)

LOCALITY UNKNOWN

ZUMT 62241 (256.1 mm), ZUMT 62372 (96.7 mm), ZUMT 62373 (91.8 mm), ZUMT 62736 (71.4 mm), ZUMT 62737 (54.0 mm), ZUMT 62741 (95.2 mm), ZUMT 62743 (82.7 mm), ZUMT 62744 (66.3 mm), ZUMT 62746 (63.6 mm), ZUMT 62747 (71.7 mm), ZUMT 62748 (64.5 mm), ZUMT 62749 (59.8 mm), ZUMT 62750 (64.7 mm), ZUMT 62851 (61.5 mm; no data)

ZUMT 62375 [55.4 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

Caranx sexfasciatus Quoy & Gaimard, 1825 ギンガメアジ

JAPAN

IBARAKI PREF.

ZUMT 8105 (62.0 mm; Hinuma Lake; coll. by S. Kono)

ZUMT 17881 (76.6 mm; Hinuma Lake)

CHIBA PREF.

ZUMT 45327 (44.1 mm), ZUMT 45328 (64.1 mm; probably from Chiba Pref.; coll. by M. Yoseri, Chiba Prefectural Naruto Junior High School)

TOKYO MET.

ZUMT 35304 (43.1 mm; around Tokyo Met.)

TOKYO MARKET

ZUMT 12396 (180.8 mm), ZUMT 12455 (161.3 mm), ZUMT 12456 (157.9 mm), ZUMT 12457 (163.7 mm), ZUMT 12479 (167.3 mm), ZUMT 12484 (96.1 mm; obtained at Tokyo Market; 13 Nov. 1914)

ZUMT 12401 (97.2 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 4176 (72.5 mm; Misaki, Miura City)

ZUMT 18892 (120.5 mm), ZUMT 18914 (47.2 mm; probably from Kanagawa Pref.; coll. by Suka Elementary School, Hiratsuka City, Kanagawa Pref.)

ZUMT 21270 (60.4 mm; Kanagawa Pref.; 20 Sept. 1925; coll. by Kamakura Normal School)

ZUMT 21271 (82.5 mm; Kanagawa Pref.)

ZUMT 22694 (50.7 mm; Ajiro, Misaki, Miura City; Aug. 1913)

ZUMT 27382 (55.7 mm; Aburatsubo, Koajiro, Misaki, Miura City; 27 July 1904; coll. by S. Tanaka)

ZUMT 49111 (145.3 mm; Misaki, Miura City; 1956; coll. by I. Tomiyama)

SHIZUOKA PREF.

ZUMT 13513 (72.7 mm; Shizuura, Numazu City; Aug. 1922; coll. by N. Kuroda)

ZUMT 18551 (52.3 mm; Hamana-ko Lake; coll. by S. Ooe)

ZUMT 33843 (63.2 mm), ZUMT 33844 (60.6 mm), ZUMT 33845 (39.3 mm), ZUMT 33846 (47.8 mm; river in Shizuura, Numazu City)

MIE PREF.

ZUMT 23200 (59.1 mm), ZUMT 23202 (50.2 mm; Kimoto, Kumano City; 18 May 1930; coll. by Y. Tsuchiga)

WAKAYAMA PREF.

ZUMT 8022 (99.9 mm; probably from Wakayama Pref., Japan; donated by I. Hoshino, Hiro, Arida, Wakayama City)

ZUMT 22455 (84.3 mm), ZUMT 22473 (42.9 mm; Tanabe City; coll. by N. Ui)

KOCHI PREF.

ZUMT 9221 (91.6 mm; probably from Kochi Pref., Japan; coll. by E. Yamada, Kochi Normal School)

ZUMT 34591 (183.3 mm), ZUMT 34592 (202.8 mm; Kochi Pref.)

ZUMT 39164 (82.8 mm; Ukitsu, Muroto City; probably collected by S. Tanaka)

ZUMT 40135 (68.8 mm; Urado, Kochi City)

SAGA PREF.

ZUMT 6319 (107.0 mm; probably from Saga Pref.; donated by I. Kanekasu, Ogi Junior High School)

ZUMT 9728 (127.9 mm; probably from Saga Pref., Japan; donated by K. Kikuchi, Saga Prefectural Saga Junior High School)

NAGASAKI PREF.

ZUMT 2454 (88.4 mm), ZUMT 2556 (178.0 mm; Nagasaki Pref.; 3 Oct. 1909)

ZUMT 3891 (149.2 mm; Chijiwa, Shimabara City)

ZUMT 21105 (113.7 mm; off Nagasaki Pref.; coll. by T. Kuraba)

ZUMT 50437 (185.1 mm; obtained at Aiura Fish Market, Sasebo City; 28 Oct. 1953; coll. by I. Tomiyama)

OITA PREF.

ZUMT 50665 (129.3 mm; obtained at Beppu Fish Market, Beppu City; 11 Sept. 1959; coll. by Y. Tominaga)

KUMAMOTO PREF.

ZUMT 3302 (179.4 mm; Amakusa City; Oct. 1911; coll. by S. Kawakami)

MIYAZAKI PREF.

ZUMT 18834 (75.1 mm), ZUMT 18835 (63.9 mm; Miyazaki Pref.)

ZUMT 21758 (106.5 mm; Miyazaki City, Miyazaki Pref.; coll. by S. Tanaka)

KAGOSHIMA PREF.

ZUMT 3872 (89.6 mm; Nishikokubu, Kirishima City)

ZUMT 8970 (61.4 mm; Amami-oshima Island, Amami Islands; 1 July 1919; coll. by H. Kuroiwa)

ZUMT 9416 (58.6 mm; Amami-oshima Island, Amami Islands; coll. by H. Kuroiwa)

ZUMT 22239 (124.5 mm; Naze, Amami City, Amami-shima Island, Amami Islands; 3 Feb. 1922; coll. by K. Enokiya)

ZUMT 23800 (149.2 mm; Taniyama, Kagoshima City; 20 July 1930)

ZUMT 24019 (72.0 mm), ZUMT 24020 (92.8 mm), ZUMT 24021 (104.1 mm; Shibushi City)

ZUMT 24061 (96.3 mm), ZUMT 24062 (91.2 mm; Taniyama, Kagoshima City)

ZUMT 26919 (56.1 mm; Kagoshima Pref.)

ZUMT 29595 (90.8 mm; probably from Amami-oshima Island, Amami Islands; donation from Amamioshima Junior High School)

ZUMT 29685 (64.9 mm; Naze, Amami City, Amamio-shima Island, Amami Islands; 10 June 1909)

ZUMT 41160 (71.4 mm; probably from Amami-oshima Island, Amami Islands; donated by K. Enokiya, Oshima Junior High School, Amami City, Kagoshima Prefecture)

ZUMT 44438 (76.8 mm; Kominato, Naze, Amami City, Amami-oshima Island, Amami Islands; 29 Aug. 1916; coll. by K. Nagai)

OKINAWA PREF.

ZUMT 5877 (121.1 mm; Okinawa Pref.)

ZUMT 9799 (63.2 mm; probably from Ryukyu Islands; coll. by H. Kuroiwa)

ZUMT 14336 (130.6 mm), ZUMT 14337 (130.1 mm), ZUMT 14338 (109.0 mm), ZUMT 14339 (82.7 mm; obtained at Naha Market, Naha City; 6 Feb. 1925; coll. by H. Yashiki)

ZUMT 14744 (163.0 mm), ZUMT 14745 (189.0 mm), ZUMT 14796 (151.9 mm; Yaeyama Islands; coll. by H. Yashiki)

ZUMT 16885 (96.5 mm; Unten, Nakijin Village, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 16995 (132.2 mm), ZUMT 17009 (120.9 mm; Itoman City, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 17162 (110.7 mm; Baten Port, Nanjo City, Okinawa-jima Island; coll. by S. Tanabe)

ZUMT 19530 (180.4 mm; probably from Okinawa Pref.; 25 May 1928; coll. by Okinawa Fisheries Experimental Station)

ZUMT 60073 (104.1 mm; upper region of tidal area to mountain reach of Urauchi-gawa River, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 17 Aug. 1989)

ZUMT 60328 (121.7 mm; Nakama-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 21 Aug. 1989)

TAIWAN

ZUMT 12384 (92.9 mm), ZUMT 12385 (72.4 mm), ZUMT 13552 (125.1 mm), ZUMT 13553 (113.5 mm; Tamsui Port, Tamsui River mouth, Taipei City; coll. by T. Aoki)

ZUMT 14957 (166.2 mm; Tainan; coll. by T. Aoki)

ZUMT 25093 (103.7 mm; lower reach of Tamsui River, Taipei; coll. by N. Imai)

ZUMT 25152 (96.4 mm; Keelung Port, Keelung; 1929; coll. by N. Imai)

ZUMT 62535 (168.0 mm), ZUMT 62536 (192.4 mm;Tamsui, Taipei City; 6 Mar. 1931)

ZUMT 62547 (64.1 mm) ZUMT 62548 (86.2 mm;Tamsui, Taipei City; 19 Oct. 1930)

PHILIPPINES

ZUMT 11133 (93.1 mm), ZUMT 12639 (214.0 mm), ZUMT 12643 (218.0 mm; Philippines; coll. by U. Yamamura)

ZUMT 40794 (151.6 mm), ZUMT 40814 (155.1 mm), ZUMT 40843 (161.1 mm; Manila; 11 Feb. 1909; coll. I. Iijima and K. Aoki)

ZUMT 40943 (99.3 mm), ZUMT 40944 (94.7 mm), ZUMT 40990 (101.5 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

ZUMT 42120 (117.2 mm) ZUMT 62734 (109.3 mm), ZUMT 62735 (69.8 mm; Basilan; Jan. 1938; coll. by U. Yamamura)

ZUMT 42179 (88.9 mm), ZUMT 42260 (65.3 mm), ZUMT 42261 (62.8 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT ABE 2913 (490.0 mm), ZUMT ABE 3003 (171.2 mm), ZUMT ABE 3004 (209.4 mm), ZUMT ABE 3005 (174.9 mm), ZUMT ABE 3419 (133.9 mm), ZUMT ABE 3421 (71.4 mm), ZUMT ABE 4002 (176.1 mm; Palau)

ZUMT 42732 (107.2 mm), ZUMT 42733 (119.1 mm), ZUMT 42734 (84.7 mm), ZUMT 42735 (91.6 mm; Palau; coll. by Y. Haneda)

ZUMT 55301 (56.1 mm), ZUMT 55302 (59.2 mm; Palau; Aug. 1935; coll. by Y. Haneda)

ZUMT 62345 (59.4 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

LOCALITY UNKNOWN

ZUMT 33744 (137.4 mm), ZUMT 33745 (87.4 mm), ZUMT 40125 (135.0 mm), ZUMT 40126 (137.0 mm), ZUMT 40140 (92.9 mm), ZUMT 43904 (111.9 mm;), ZUMT 46350 (201.8 mm), ZUMT 46351 (200.3 mm), ZUMT 62738 (123.1 mm), ZUMT 62739 (121.9 mm), ZUMT 62740 (103.4 mm), ZUMT 62853 (58.2 mm), ZUMT 62854 (55.4 mm), ZUMT 62855 (56.2 mm), ZUMT 62932 (43.5 mm), ZUMT 63021 (80.9 mm), ZUMT 62243 (223.0 mm), ZUMT 62257 (218.5 mm), ZUMT 62384 (6 specimens, 27.4–40.5 mm), ZUMT 62477 (467.5 mm), ZUMT 63476 (149.9 mm) ZUMT ABE 535 (154.8 mm), ZUMT ABE 538 (115.9 mm), ZUMT ABE 10122 (38.6 mm), ZUMT ABE 61-934 (53.0 mm), ZUMT ABE 61-1046 (52.2 mm; no data)

ZUMT 53008 (69.0 mm; probably from African coast)

ZUMT 40675 [134.0 mm; although the specimen locality was recorded as “Morioka?（盛岡か？）” in the ledger, this species is rare north of Ibaraki Pref. (Senou 2013). Moreover, records of some other specimens similarly registered are also regarded here as erroneous - see ZUMT 40640–40643 (*Trachinotus baillonii*) and ZUMT 40674 (*Carangichthys oblongus*). The record for ZUMT 40675 is probably erroneous]

Caranx tille Cuvier, 1833 ミナミギンガメアジ

JAPAN
ZUMT 24378 (179.1 mm; Urado Bay, Kochi City, Kochi Pref.; 15 Mar. 1932; coll. by M. Fukutomi)

Remarks: Hata and Koeda (2022b) reported ZUMT 24378 as the first record of the species from the Shikoku region.

Chloroscombrus chrysurus (Linnaeus, 1766)

SURINAME
ZUMT 62497 (139.9 mm; Suriname)

Craterognathus plagiotaenia (Bleeker, 1857) インドカイワリ

JAPAN
ZUMT 20192 (183.0 mm; Kagoshima Pref.)

PALAU
ZUMT ABE 2865 (226.2 mm), ZUMT ABE 3758 (291.8 mm; Palau)

Decapterus akaadsi Abe, 1958 アカアジ

JAPAN
ZUMT 49749 (150.0 mm; holotype of *Decapterus kurroides akaadsi* Abe, 1958; Hatsushima Island, Sagami Bay, Shizuoka Pref.; 19 April 1956; coll. by H. Isokawa, purchased by T. Abe at the Ito City market, Shizuoka Pref.)

LOCALITY UNKNOWN
ZUMT ABE 58-281 (54.8 mm), ZUMT ABE 60-631 (171.6 mm; no data)

Remarks: Although Abe (1958) designated two paratypes of *Decapterus kurroides akaadsi* (ZUMT ABE 57-120 and 57-265), neither were found.

Decapterus macarellus (Cuvier, 1833) クサヤモロ

JAPAN
IWATE PREF.
ZUMT 13037 (158.1 mm), ZUMT 13038 (105.2 mm; Miyako Bay; coll. by S. Tanabe)
TOKYO MARKET
ZUMT 4131 (152.3 mm), ZUMT 12406 (177.3 mm; obtained at Tokyo Market)
ZUMT 23077 (142.5 mm), ZUMT 23078 (140.1 mm), ZUMT 23079 (140.6 mm), ZUMT 23080 (151.0 mm), ZUMT 23081 (136.7 mm; obtained at Tokyo Market; 8 Nov. 1930)
KANAGAWA PREF.
ZUMT 34014 (64.3 mm; Yokohama City or Ninomiya Town, Kanagawa Pref.)

IZU ISLANDS

ZUMT 19469 (7 specimens, 178.5–193.9 mm; probably from Hachijo-jima Island, Japan; coll. by Y. Oshizu, Hachijo-jima Island)

ZUMT 38878 (206.1 mm), ZUMT 38898 (206.4 mm), ZUMT 40553 (190.8 mm), ZUMT 40561 (178.2 mm), ZUMT 46603 (204.9 mm), ZUMT 46604 (156.3 mm), ZUMT 46605 (207.1 mm), ZUMT 46606 (197.9 mm; Hachijo-jima Island)

ZUMT 41937 (209.0 mm; probably from Hachijo-jima Island, Japan; coll. by Y. Uchiyama, Hachijo-jima Island)

ZUMT 44123 (158.4 mm; Hachijo-jima Island; Sept. 1922; coll. by M. Uchiyama)

ZUMT 47748 (157.8 mm; Mitsune, Hachijo-jima Island; 15 Aug. 1952)

ZUMT 64251 (160.9 mm), ZUMT 64252 (172.6 mm), ZUMT 64253 (175.8 mm), ZUMT 64254 (175.7 mm), ZUMT 64255 (172.5 mm), ZUMT 64256 (168.1 mm), ZUMT 64257 (162.1 mm), ZUMT 64258 (167.4 mm; off Motomachi, Izu-oshima Island; 1 Aug. 1993; coll. with set net)

OGASAWARA ISLANDS

ZUMT 45911 (159.3 mm), ZUMT 45912 (166.3 mm; Ogasawara Islands)

TOYAMA PREF.

ZUMT 62687 (182.9 mm), ZUMT 62688 (191.0 mm), ZUMT 62689 (195.2 mm), ZUMT 62690 (158.2 mm), ZUMT 62691 (183.6 mm), ZUMT 62692 (192.6 mm), ZUMT 62693 (188.6 mm), ZUMT 62694 (196.5 mm), ZUMT 62695 (186.3 mm; Uozu or Namerikawa City; coll. by I. Tomiyama)

FUKUI PREF.

ZUMT 16008 (240.0 mm; Kokonogi, Echizen Town; Sept. 1921; coll. by Fukui Prefectural Fisheries Experimental Station)

KYOTO PREF.

ZUMT 24370 (104.3 mm; Miyazu City; Nov. 1931; coll. by Kyoto Prefecture Fisheries Training Center)

KOCHI PREF.

ZUMT 21680 (187.6 mm; Kashiwa-jima Island, Otsuki Town; Aug. 1928; coll. by T. Kamohara)

NAGASAKI PREF.

ZUMT 2317 (168.3 mm; Nagasaki Pref.; 11 July 1909)

ZUMT 33535 (59.7 mm; Nagasaki Pref.)

ZUMT 47864 (178.4 mm), ZUMT 47865 [181.6 mm; Tamanoura, Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 23 May 1953; coll. by I. Tomiyama)]

ZUMT 50045 [192.9 mm; Miiraku, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama)]

ZUMT 62632 (164.1 mm; Nagasaki Pref.; Nov.)

OKINAWA PREF.

ZUMT 14077 (194.4 mm), ZUMT 14078 (193.1 mm), ZUMT 14079 (195.8 mm), ZUMT 14101 (203.0 mm; probably from Okinawa Pref.; coll. by H. Yashiro, Okinawa Pref.)

ZUMT 16741 (214.9 mm), ZUMT 16742 (201.2 mm; Onna Village, Okinawa-jima Island, Okinawa Islands; coll. by S. Tanabe)

ZUMT 18496 (222.8 mm), ZUMT 18497 (227.6 mm; probably from Okinawa Pref.; 23 Nov. 1928; coll. by Okinawa Prefectural Fisheries Experimental Station)

ZUMT 19772 (208.0 mm), ZUMT 19773 (228.5 mm; Kume-jima Island, Okinawa Islands; 6 Nov. 1928; coll. by T. Tachikawa)

TAIWAN

ZUMT ABE 61-822 (2 specimens, 165.1–179.5 mm; Dongsha Atoll; 7 to 24 July 1961)

KIRIBATI

ZUMT 48765 [82.0 mm; approx. 50 km southwest of Banaba (1°16'S 169°14'E); 3 Apr. 1956; coll. by Z. Maekawa and T. Suzuki]

ZUMT 48797 [48.5 mm; approx. 60 km southwest of Banaba (1°15'S 169°09'E); 2 Apr. 1956; coll. by Z. Maekawa and T. Suzuki]

INDIAN OCEAN

ZUMT 49025 [71.1 mm; Indian Ocean, approx. 1200 km east of Sumatra, Indonesia (3°55'S, 90°49'E); 17 Apr. 1957; coll. by I. Tomiyama]

LOCALITY UNKNOWN

ZUMT 62486 (131.3 mm), ZUMT 62487 (167.5 mm), ZUMT 62489 [190.7+ mm (head damaged)], ZUMT 62491 [192.5+ mm (head detached)], ZUMT 62492 [199.1+ mm (head damaged)], ZUMT 62493 [208.9+ mm (tail damaged)], ZUMT 62494 [233.8+ mm (tail damaged)], ZUMT ABE 57-256 (body cut), ZUMT ABE 61-875 (99.4 mm; no data)

Decapterus macrosoma Bleeker, 1851 モロ

JAPAN

IZU ISLANDS

ZUMT 19231 (5 specimens, 62.9–76.2 mm; Hachijo-jima Island; 1 July 1929; coll. by Y. Otsuki)

ZUMT 19378 (35 specimens, 106.6–156.6 mm), ZUMT 19379 (35 specimens, 114.7–149.8 mm; Hachijo-jima Island; coll. by Y. Oshizu)

ZUMT 40560 (154.8 mm), ZUMT 40562 (157.4 mm), ZUMT 40570 (157.6 mm), ZUMT 40571 (155.0 mm), ZUMT 40572 (150.6 mm; Hachijo-jima Island)

ZUMT 62394 (approx. 264.6 mm, poor condition; Habu, Izu-oshima Island)

IWATE PREF.

ZUMT 13059 (118.9 mm; Miyako Bay; coll. by S. Tanabe)

CHIBA PREF.

ZUMT 44759 (100.4 mm; Chiba City; 1925)

ZUMT 62598 (164.0 mm; Koyatsu, Tateyama City; obtained at Tateyama Fish Market; 27 Oct. 1959]

TOKYO MARKET

ZUMT 12408 (204.4 mm), ZUMT 23082 (145.7 mm; obtained at Tokyo Market, Tokyo Met.)

KANAGAWA PREF.

ZUMT 19885 (213.7 mm; Oiso Town; 5 Feb. 1930; coll. by A. Suzuki)

SHIZUOKA PREF.

ZUMT 16489 (35.3 mm; Shizuura, Numazu City; coll. by N. Kuroda)

MIE PREF.

ZUMT 23398 (192.8 mm; Owase City; coll. by K. Nakahara)

OSAKA FISH MARKET

ZUMT 41904 (280.2 mm; obtained at Osaka Fish Market)

YAMAGUCHI PREF.

ZUMT 62915 (163.6 mm; off Futami, Shimonoseki City; 30 Sept. 1991)

EHIME PREF.

ZUMT 7882 [195.4 mm; probably from Ehime Pref.; coll. by K. Otsuki (Uchiumi, Ainan Town, Ehime Pref.)]

KOCHI PREF.

ZUMT 21681 (215.4 mm; obtained at Kochi Market; 4 June 1930; coll. by T. Kamohara)

ZUMT 23271 (153.5 mm; obtained at Kochi Market; 20 Aug. 1930; coll. by T. Kamohara)

ZUMT 18697 (163.7 mm; Okino-shima Island, Sukumo City; Nov. 1926; coll. by T. Kamohara)

NAGASAKI PREF.

ZUMT 7235 (280.2 mm; Nagasaki Pref.)

ZUMT 48126 [212.6 mm; obtained at Fukue Fish Market, Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 62533 (159.7 mm; Nagasaki Pref.; Nov.)

KAGOSHIMA PREF.

ZUMT 23881 (229.7 mm; Taniyama, Kagoshima City)

ZUMT 24112 (234.8 mm; Akime, Bonotsu, Minami-satsuma City)

TAIWAN

ZUMT 2358 (5 specimens, 94.1–125.9 mm; Keelung)

ZUMT 12834 (120.4 mm), ZUMT 12835 (91.0 mm) ZUMT 12836 (94.8 mm; Keelung; coll. by T. Aoki)

ZUMT 13665 (108.1 mm; probably from Taiwan; coll. by T. Aoki at Government-General of Taiwan)

LOCALITY UNKNOWN

ZUMT ABE 59-468 (164.9 mm), ZUMT 46563 (118.4 mm), ZUMT 46571 (112.1 mm), ZUMT 62534 (178.5 mm), ZUMT ABE 992 (91.6 mm), ZUMT ABE 9050 (109.4 mm), ZUMT ABE 9051 (105.9 mm), ZUMT ABE 9052 (127.2 mm), ZUMT ABE 9609 (121.6 mm), ZUMT 9902 (85.8 mm), ZUMT ABE 9903 (73.9 mm), ZUMT ABE 10073–10076 (4 specimens, 152.9–158.8 mm, one specimen with damaged head), ZUMT ABE 10706 (221.1 mm), ZUMT ABE 59-465 (209.8 mm), ZUMT ABE 59-467 (177.7 mm; no data)

ZUMT 63053 [59.3 mm; originally stored with ZUMT ABE 56-193 (*Psenes arafurensis*; collection data unknown)]

Decapterus maruadsi (Temminck & Schlegel, 1843) マルアジ

JAPAN

AOMORI PREF.

ZUMT 13205 (77.6 mm; Same, Hachinohe City, Aomori Pref.; coll. by S. Tanabe)

TOKYO MARKET

ZUMT 6071 (156.6 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 4166 (151.4 mm; Misaki, Miura City; coll. by I. Oga)

ZUMT 19886 (236.0 mm; Oiso Town; 5 Feb. 1930; coll. by A. Suzuki)

ZUMT 19900 (142.7 mm; Chigasaki City; 27 Jan. 1930; coll. by A. Suzuki)

ZUMT 19901 (145.3 mm; Hashirimizu, Uraga City; 7 May 1929; coll. by A. Suzuki)

ZUMT 19902 (144.0 mm; Chigasaki City; 27 Jan. 1930; coll. by A. Suzuki)

ZUMT 49113 (190.3 mm; Misaki, Miura City; 1956; coll. by I. Tomiyama)

ZUMT 49155 (226.1 mm; Joga-shima Island, Miura City; 16 July 1954; coll. by I. Tomiyama)

WAKAYAMA PREF.

ZUMT 7756 (140.5 mm; probably from Wakayama Pref.; donated by I. Hoshino at Hiro, Arida, Wakayama City, Wakayama Pref.)

ZUMT 20756 (119.2 mm; Wakayama Pref.; Jan. 1920)

TOYAMA PREF.

ZUMT 23237 (137.9 mm; Toyama Bay; coll. by K. Kikuchi, Toyama High School)

OSAKA FISH MARKET

ZUMT 41903 (239.9 mm), ZUMT 41907 (145.6 mm; Osaka Fish Market)

OKAYAMA PREF.

ZUMT 16522 (110.3 mm; Kasaoka City; Oct. 1925)

YAMAGUCHI PREF.

ZUMT 26180 (174.7 mm; Yamaguchi Pref.; coll. by M. Nagatomi)

EHIME PREF.

ZUMT 3367 (220.7 mm; probably from Ehime Pref.; donated by G. Norie, Ehime Prefectural Yawatahama Girls School)

ZUMT 7881 (200.2 mm; probably from Ehime Pref.; coll. by K. Otsuki, Uchiumi, Ainan Town, Ehime Pref.)

KOCHI PREF.

ZUMT 21938 (148.3 mm), ZUMT 21939 (143.3 mm; Kochi Pref.; Kochi Prefectural Fisheries Experimental Station)

ZUMT 33672 (148.4 mm), ZUMT 33673 (138.5 mm; probably from Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)

NAGASAKI PREF.

ZUMT 2490 (146.0 mm), ZUMT 12476 (158.8 mm; Nagasaki Pref.)

ZUMT 26493 (136.0 mm; Takematsu, Omura City)

ZUMT 50020 [245.0 mm; Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

OITA PREF.

ZUMT 7618 (163.2 mm; Saeki Bay, Saeki City)

MIYAZAKI PREF.

ZUMT 20027 (135.4 mm; Miyazaki Pref.)

ZUMT 21164 (150.9 mm), ZUMT 22664 (143.2 mm; Miyazaki Pref.; coll. by Fukushima Fisheries Cooperative Association)

TAIWAN

ZUMT 13676 (101.9 mm), ZUMT 13677 (92.4 mm; probably from Taiwan; coll. by T. Aoki at Government-General of Taiwan)

ZUMT 14867 (107.3 mm), ZUMT 14868 (108.4 mm), ZUMT 14869 (112.2 mm), ZUMT 14870 (106.8 mm), ZUMT 14871 (111.9 mm; Tainan; coll. by T. Aoki)

ZUMT 25127 (73.9 mm; Taipei; coll. by N. Imai)

ZUMT 62726 (223.3 mm; obtained at Chitosecho Market, Taipei City; 19 Mar. 1931)

CHINA

ZUMT 54488 (148.62 mm), ZUMT 54490 [149.1 mm; East China Sea, east of Nantong, Jiangsu Province, (32°45'N, 122°45'E)]

LOCALITY UNKNOWN

ZUMT 46882 (119.1 mm), ZUMT 63164 (147.3 mm), ZUMT 63165 (137.8 mm), ZUMT 62260 (272.4 mm), ZUMT ABE 7767 (60.2 mm), ZUMT ABE 10448 (198.5 mm), ZUMT ABE 10698 (174.5 mm), ZUMT ABE 10699 (174.0 mm), ZUMT ABE 10857 (85.2 mm), ZUMT ABE 20773 (197.7 mm), ZUMT ABE 20774 (201.1 mm), ZUMT ABE 57-120 (169.3 mm), ZUMT ABE 57-265 (body cut), ZUMT ABE 58-240 (226.7 mm), ZUMT ABE 58-371 (224.8 mm), ZUMT ABE 59-627 (171.4 mm), ZUMT ABE 59-628 (167.5 mmm), ZUMT ABE 61-943 (48.3 mm)

ZUMT ABE 62-251 (175.8 mm; locality unknown; coll. during Mar. and Apr. 1962)

ZUMT 37582 (108.7 mm; locality unknown; coll. by S. Miyoshi. Mito High School)

ZUMT 62296 [115.6 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

Decapterus muroadsi (Temminck & Schlegel, 1844) ムロアジ

JAPAN

ZUMT 47020 (184.4 mm; probably from Kochi Pref.)

LOCALITY UNKNOWN

ZUMT ABE 51-303 (208.9 mm; no data)

Decapterus russelli (Rüppell, 1830) インドマルアジ

PALAU

ZUMT 5887 (210.4 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

TANZANIA

ZUMT 52867 (137.0 mm; Kunduchi)

LOCALITY UNKNOWN

ZUMT 63054 [5 specimens, 35.7–41.2 mm; originally stored with ZUMT ABE 56-193 (*Psenes arafurensis*; collection data unknown)]

Decapterus tabl Berry, 1968 オアカムロ

JAPAN

ZUMT 4712 (230.8 mm), ZUMT 4713 (232.2 mm), ZUMT 4714 (237.6 mm), ZUMT 4715 (228.7 mm), ZUMT 4716 (234.6 mm; obtained at Tokyo Fish Market, Tokyo Met.)

ZUMT 41902 (355.6 mm; obtained at Osaka Fish Market, Osaka Pref.)

ZUMT 54253 [279.8 mm; Miyake-jima Island, Izu Islands (obtained at Tokyo Market, Tokyo Met., Japan); 1 June 1981]

Elagatis bipinnulata (Quoy & Gaimard, 1825) ツムブリ

JAPAN

FUKUSHIMA PREF.

ZUMT 17494 (347.0 mm; probably from Fukushima Pref.; donation from Fukushima Prefectural Onahama Fisheries Experimental Station)

ZUMT 44145 (362.2 mm; Onahama, Iwaki City)

TOKYO MARKET

ZUMT 6398 (170.0 mm; obtained at Tokyo Market; 9 Aug. 1915; coll. by I. Kaneko)

ZUMT 12477 (270.3 mm; obtained at Tokyo Market)

IZU ISLANDS

ZUMT 46624 (217.6 mm; Hachijo-jima Island)

OGASAWARA ISLANDS

ZUMT 62262 (390.0 mm; Ogasawara Islands; Mar. 1913)

KANAGAWA PREF.

ZUMT 10408 (182.6 mm; Misaki, Miura City; coll. by K. Aoki)

ZUMT 49134 (144.9 mm), ZUMT 49135 (143.4 mm), ZUMT 49137 (158.4 mm), ZUMT 49138 (186.6 mm; Misaki, Miura City; 1956; coll. by I. Tomiyama)

WAKAYAMA PREF.

ZUMT 7996 (218.5 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)

TOYAMA PREF.

ZUMT 25814 (271.3 mm; probably from Toyama Pref.; coll. by K. Kikuchi, Toyama High School)

SHIMANE PREF.

ZUMT 31232 (214.0 mm; Matsue City; coll. by R. Yanai)

YAMAGUCHI PREF.

ZUMT 8636 (187.3 mm; Senzaki, Nagato City; 10 Oct. 1918; coll. by T. Kumada)

PHILIPPINES

ZUMT 14624 (125.6 mm; Philippines)

LOCALITY UNKNOWN

ZUMT 37907 (110.6 mm), ZUMT 62264 (346.9 mm), ZUMT 62391 (223.4 mm), ZUMT 62392 (238.8 mm), ZUMT ABE 61-847 (213.4 mm), ZUMT ABE 61-865 (85.4 mm), ZUMT ABE 61-870 (90.8 mm), ZUMT ABE 61-1082 (88.6 mm), ZUMT ABE 61-1083 (85.9 mm; no data)

Ferdauia ferdau (Fabricius, 1775) クロヒラアジ

JAPAN

ZUMT 31270 (247.3 mm; Matsue City, Shimane Pref.; coll. by R. Yanai)

ZUMT 45897 (185.1 mm; Ogasawara Islands)

LOCALITY UNKNOWN

ZUMT 61-1076 (144.1 mm), ZUMT 5878 (158.2 mm), ZUMT ABE 59-497 (130.3 mm)

Ferdauia orthogrammus (Jordan & Gilbert, 1882) ナンヨウカイワリ

JAPAN

ZUMT 4356 (233.5 mm; off Hamada City, Shimane Pref.; 5 Oct. 1914)

ZUMT 4403 (264.0 mm; probably from Shimane Pref.; donation from Hamada Fisheries Experimental Station, Shimane Pref.)

ZUMT 12463 (216.4 mm; southern part of coast of Tokyo Bay in Chiba Pref.)

ZUMT 16743 (185.2 mm; Onna Village, Okinawa Island, Okinawa Pref.; coll. by S. Tanabe), ZUMT 45897 (183.7 mm; Ogasawara Islands)

TAIWAN

ZUMT 2523 (208.9 mm; Keelung; coll. by T. Aoki)

PALAU

ZUMT ABE 2911 (328.0 mm; Palau)

Gnathanodon speciosus (Forsskål, 1775) コガネシマアジ

JAPAN

ZUMT 12461 (141.2 mm), ZUMT 12462 (165.7 mm; obtained at Tokyo Market, Tokyo Met.)

PHILIPPINES

ZUMT 11140 (105.0 mm), ZUMT 12684 (157.8 mm; Philippines; coll. by U. Yamamura)

PALAU

ZUMT ABE 3000 (363.1 mm; Palau)

LOCALITY UNKNOWN

ZUMT 62255 (128.8 mm; no data)

Kaiwarinus equula **(Temminck & Schlegel, 1844)** カイワリ

JAPAN

AKITA PREF. ZUMT 13352 (136.7 mm; approx. 18.5 km off Nyudozaki, Oga City; 28 Nov. 1923; coll. by S. Tanabe)

CHIBA PREF. ZUMT 33447 (98.1 mm; Takanoshima, Tateyama City; 5 May 1910)

TOKYO MARKET ZUMT 11955 (102.3 mm), ZUMT 12397 (81.3 mm), ZUMT 12458 (160.8 mm), ZUMT 12473 (138.2 mm), ZUMT 26647 (165.0 mm; obtained at Tokyo Market)

KANAGAWA PREF. ZUMT 19894 (193.3 mm; Oiso Town; 5 Feb. 1930; coll. by A. Suzuki)

ZUMT 20103 (160.1 mm), ZUMT 20665 (55.3 mm), ZUMT 20666 (73.8 mm), ZUMT 20667 (55.9 mm), ZUMT 20810 (47.2 mm), ZUMT 20811 (43.0 mm), ZUMT 20868 (74.7 mm), ZUMT 20869 (108.9 mm; Misaki, Miura City)

ZUMT 49597 (52.2 mm), ZUMT 49694 (66.8 mm), ZUMT 49712 (59.7 mm), ZUMT 49714 (68.5 mm; Hayama Town; 17 Dec. 1958)

ZUMT 50511 (159.4 mm; Aburatsubo, Misaki, Miura City; 7 July 1959; coll. by Y. Tominaga)

ZUMT 50964 (60.3 mm; Sagami Bay; 13 Feb. 1958)

SHIZUOKA PREF. ZUMT 6006 (100.9 mm; Shizuura Bay, Numazu City; Feb. 1915; coll. by K. Hattori)

ZUMT 27159 (46.2 mm; Hamana-ko Lake; 13 Sept. 1934; coll. by S. Ooe)

ZUMT 33377 (87.8 mm; Shizuoka Pref.)

ZUMT 57771 [105.1 mm (body cut); Miho, Shimizu, Shizuoka City; 28 June 1979; coll. by Y. Sato]

MIE PREF. ZUMT 3497 (76.6 mm; Hamajima, Shima City; 14 Mar. 1913)

ZUMT 23362 (152.5 mm; Owase City; coll. by K. Nakahara)

WAKAYAMA PREF. ZUMT 8082 (39.6 mm), ZUMT 8083 (71.9 mm), ZUMT 9551 (124.1 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)

ZUMT 22014 (57.6 mm; Wakayama Pref.)

ZUMT 22491 (51.3 mm; Tanabe City; coll. by N. Ui)

FUKUI PREF. ZUMT 4429 (146.1 mm; Obama City)

ZUMT 15999 (64.3 mm; probably from Fukui Pref.; coll. by Fukui Prefectural Fisheries Experimental Center)

SHIMANE PREF. ZUMT 31193 (123.1 mm; Matsue City; coll. by R. Yanai)

YAMAGUCHI PREF. ZUMT 11407 (153.5 mm; off Shimonoseki City; coll. by T. Kumada)

ZUMT 12395 (188.1 mm; Shimonoseki City; obtained at Tokyo Market, Japan)

KOCHI PREF. ZUMT 23276 (48.2 mm; Urado, Kochi City; 20 July 1930; coll. by T. Kamohara)

ZUMT 34611 (40.5 mm; Kochi Pref.)

FUKUOKA PREF. ZUMT 49794 (134.9 mm; obtained at Fukuoka Fish Market; July 1959)

ZUMT 50574 (154.6 mm; obtained at Fukuoka Fish Market; 1 Sept. 1959; coll. by Y. Tominaga)

ZUMT 51813 (71.0 mm; obtained at Fukuoka Fish Market)

ZUMT 62539 (144.8 mm), ZUMT 62540 (129.9 mm; obtained at Fukuoka Fish Market; 25 Aug. 1931)

NAGASAKI PREF. ZUMT 2275 (108.7 mm; Nagasaki Pref.; 27 June 1909)

ZUMT 2542 (144.0 mm; Nagasaki Pref.; 3 Oct. 1909)

ZUMT 2630 (146.7 mm; Nagasaki Pref.; 23 Jan. 1910)

ZUMT 3825 [183.5 mm; south of Osezaki, Goto City (Fukue-jima Island, Goto Islands)]

ZUMT 32262 (44.8 mm; Nagasaki Pref.; Mar. 1911)

ZUMT 47888 (99.6 mm), ZUMT 47892 [82.6 mm; Tamanoura, Goto City (Fukue-jima Island, Goto Islands; 22 May 1953; coll. by I. Tomiyama]

ZUMT 47935 (150.7 mm), ZUMT 47936 [110.1 mm; Miiraku, Goto City (Fukue-jima Island, Goto Islands); 22 May 1953; coll. by I. Tomiyama]

ZUMT 48145 (63.2 mm), ZUMT 48146 (51.7 mm), ZUMT 48147 (70.5 mm), ZUMT 48148 (62.8 mm), ZUMT 48176 [70.6 mm; obtained at fish market in Fukue, Goto City (Fukue-jima Island, Goto Islands); May 1953; coll. by I. Tomiyama]

ZUMT 50119 (129.8 mm; Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 15 Oct. 1953; coll. by I. Tomiyama)

ZUMT 50402 (163.7 mm), ZUMT 50403 (127.4 mm; Ichibu, Ikitsuki, Hirado City; 23 Oct. 1953; coll. by I. Tomiyama)

MIYAZAKI PREF. ZUMT 18826 (128.1 mm; Miyazaki Pref.)

ZUMT 22360 (121.5 mm; Miyazaki City)

KAGOSHIMA PREF. ZUMT 20034 (93.6 mm), ZUMT 21835 (81.9 mm), ZUMT 31600 (123.7 mm; Kagoshima Pref.)

ZUMT 23858 (92.3 mm; Naya, Kagoshima City)

ZUMT 24122 (140.3 mm; Arata, Kagoshima City)

EAST CHINA SEA

ZUMT 3615 [219.7 mm; East China Sea (30°37'N, 127°37'E–30°31'N, 127°35'E)

ZUMT 51046 (170.2 mm), ZUMT 52129 (124.6 mm), ZUMT 52130 (131.5 mm; East China Sea)

CHINA

ZUMT 54481 (115.0 mm), ZUMT 54482 [117.3 mm; East China Sea, east of Nantong, Jiangsu Province, (32°35'N, 122°40'E)]

TAIWAN

ZUMT 13700 (187.7 mm), ZUMT 13701 (196.8 mm; north of Taiwan, between Keelung and Pengjia Islet; coll. by T. Aoki)

ZUMT 22617 (138.1 mm; Kaohsiung; coll. by S. Yamada)

ZUMT 25094 (116.7 mm; probably from Taiwan; coll. by M. Imai, Taipei Medical School)

LOCALITY UNKNOWN

ZUMT 856 (59.0 mm), ZUMT 52216 (168.3 mm), ZUMT 62239 (157.1 mm), ZUMT 62247 (223.7 mm), ZUMT 62252 (168.5 mm), ZUMT 62297 (82.4 mm), ZUMT ABE 1933 (61.7 mm), ZUMT ABE 2123 (52.9 mm), ZUMT ABE 2161 (71.4 mm), ZUMT ABE 60-11 (44.1–48.9 mm; 5 specimens; no data)

ZUMT 62288 (81.6 mm), ZUMT 62289 (87.1 mm), ZUMT 62290 [90.5 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

Megalaspis cordyla (Linnaeus, 1758) オニアジ

JAPAN

ZUMT 2487 (144.1 mm; Nagasaki Pref.)

ZUMT 18825 (174.1 mm; Miyazaki Pref.)

ZUMT 21924 (95.1 mm; Kochi Pref.)

ZUMT 23987 (148.9 mm; Shibushi City, Kagoshima Pref.)

TAIWAN

ZUMT 14983 (150.3 mm), ZUMT 15001 (192.4 mm; Tainan; coll. by T. Aoki)

ZUMT 22598 (191.6 mm; Kaohsiung; coll. by S. Yamada)

ZUMT 62590 (175.8 mm), ZUMT 62591 (185.1 mm; Chitosecho Market, Taipei; 4 Feb. 1931)

PHILIPPINES

ZUMT 14598 (138.6 mm; Philippines)

ZUMT 40770 (185.0 mm), ZUMT 40771 (174.4 mm), ZUMT 40788 (182.7 mm), ZUMT 40799 (169.4 mm), ZUMT 40819 (192.0 mm), ZUMT 40840 (180.3 mm; Manila, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)

LOCALITY UNKNOWN

ZUMT 46370 (238.8 mm), ZUMT 46371 (240.0 mm), ZUMT 62399 (151.8 mm) ZUMT ABE 10737 (56.6 mm; no data)

Naucrates ductor (Linnaeus, 1758) ブリモドキ

JAPAN

HOKKAIDO

ZUMT 11713 (200.0 mm; Muroran City, Hokkaido; Aug. 1921; coll. by S. Katsuki)

FUKUSHIMA PREF.

ZUMT 25269 (246.2 mm; Onahama, Iwaki City; 12 Dec. 1931, H. Kakuda)

TOKYO MET.

ZUMT 40139 (87.4 mm; Okinose, Tokyo Bay; May 1894; coll. by K. Aoki)

TOKYO MARKET

ZUMT 12471 (228.1 mm), ZUMT 12472 (235.3 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT ABE 62-355 (234.6 mm; Manazuru Town, Kanagawa Pref.; 17 Mar. to 21 Apr. 1962)

ZUMT ABE 83-492 (106.0 mm; Manazuru Town, Kanagawa Pref.; 2 Oct. 1983)

WAKAYAMA PREF.

ZUMT 20221 (181.0 mm), ZUMT 20753 (137.4 mm; Wakayama Pref.; Jan. 1920; coll. by N. Ui)

HYOGO PREF.

ZUMT 38067 (195.3 mm; probably from Hyogo Pref.)

SHIMANE PREF.

ZUMT 7964 (189.9 mm; probably from Shimane Pref.; coll. by Shimane Prefecture Fisheries Training Center)

LOCALITY UNKNOWN

ZUMT ABE 496 (96.6 mm), ZUMT ABE 60-1576 (38.8 mm), ZUMT ABE 60-1577 (89.5 mm), ZUMT ABE 60-1578 (94.2 mm; no data)

Parastromateus niger (Bloch, 1795) クロアジモドキ

JAPAN

ZUMT 7329 (266.6 mm; Nagasaki Pref.; coll. by I. Kaneko)

ZUMT 11396 (155.5 mm; off Shimonoseki City, Yamaguchi Pref.; coll. by T. Kumada)

ZUMT 12760 (167.5 mm; obtained at Tokyo Market, Tokyo Met.)

ZUMT 24312 (88.7 mm; Susaki City, Kochi Pref.; Nov. 1931; coll. by T. Kamohara)

ZUMT 52151 (97.5 mm; Totoro, Nobeoka City, Miyazaki Pref.; 1 Aug. 1960)

EAST CHINA SEA

ZUMT 50556 (220.0 mm; East China Sea; 28 July 1959; coll. by Y. Tominaga)

TAIWAN

ZUMT 14977 (118.7 mm), ZUMT 14978 (110.6 mm; Tainan; coll. by T. Aoki)

MALAYSIA

ZUMT 62319 (148.6 mm), ZUMT 62530 (99.6 mm; probably from Sarawak State, Borneo; donation from Sarawak Museum to I. Tomiyama)

INDONESIA

ZUMT 42133 (71.1 mm; Jakarta; 5 Mar. 1909; coll. by I. Iijima and K. Aoki)

LOCALITY UNKNOWN

ZUMT 3730 (114.4 mm), ZUMT 63006 (216.1 mm), ZUMT 63007 (207.2 mm; no data)

Platycaranx malabaricus (Bloch & Schneider, 1801) タイワンヨロイアジ

JAPAN

ZUMT 62256 (194.6 mm; Zaimokuza Beach, Kamakura City, Kanagawa Pref.; 21 Mar. 1954; coll. by T. Abe)

PHILIPPINES

ZUMT 39577 (73.5 mm; Philippines; coll. by U. Yamamura)

Remarks: Hata and Koeda (2022c) reported ZUMT 62256, collected from Kamakura City, Kanagawa Pref., as the first record of *P. malabaricus* from Sagami Bay and the northernmost record of the species.

Platycaranx talamparoides (Bleeker, 1852)

PHILIPPINES

ZUMT 42215 (123.3 mm), ZUMT 42241 (128.6 mm; Philippines; 1926; coll. by U. Yamamura)

Pseudocaranx dentex (Bloch & Schneider, 1801) シマアジ

JAPAN

TOKYO MARKET

ZUMT 6682 (159.3 mm), ZUMT 11956 (122.4 mm), ZUMT 12388 (196.5 mm), ZUMT 12390 (192.0 mm), ZUMT 12391 (177.7 mm), ZUMT 12392 (199.2 mm), ZUMT 62733 (105.1 mm; obtained at Tokyo Market)

IZU ISLANDS

ZUMT 19171 (400.4 mm), ZUMT 19293 (175.2 mm), ZUMT 19294 (167.0 mm), ZUMT 19295 (166.4 mm), ZUMT 19296 (173.0 mm), ZUMT 19297 (156.2 mm), ZUMT 19298 (166.9 mm), ZUMT 19299 (165.2 mm), ZUMT 19301 (173.5 mm; probably from Hachijo-jima Island; 7 July 1929; coll. by Y. Otsuki, Hachijo-jima Island)

ZUMT 62398 (178.0 mm; Hachijo-jima Island)

SHIZUOKA PREF.

ZUMT 32901 (148.9 mm; probably from Shizuoka Pref.; donation from Shizuoka Prefectural Fuji High School for Girls)

KOCHI PREF.

ZUMT 19899 (228.1 mm; Susaki City; coll. by A. Suzuki)

ZUMT 24377 [258.4 mm; Yotsu (currently Okitsu), Shimanto Town; 10 Feb. 1932; coll. by M. Fukutomi]

NAGASAKI PREF.

ZUMT 2540 (196.2 mm; Nagasaki Pref.; 3 Oct. 1909)

ZUMT 2629 (198.7 mm; Nagasaki Pref.; 23 Jan. 1910)

KAGOSHIMA PREF.

ZUMT 39787 (143.6 mm; Yaku-shima Island, Osumi Islands; coll. by H. Kuroiwa)

OKINAWA PREF.

ZUMT 13989 (208.5 mm; probably from Okinawa-jima Island, Okinawa Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior High School)

ZUMT 19071 (259.7 mm; probably from Okinawa Pref.; coll. by Okinawa Prefectural Fisheries Experimental Station)

TAIWAN

ZUMT 62560 (104.1 mm; Ximending Market Taipei City; 3 Oct. 1929)

LOCALITY UNKNOWN

ZUMT 62245 (202.7 mm), ZUMT 62246 (234.9 mm), ZUMT 62248 (237.7 mm), ZUMT 62382 (30.1 mm), ZUMT 62383 (29.0 mm), ZUMT 63168 (27.7 mm), ZUMT 63174 (29.1 mm), ZUMT ABE 533 (199.4 mm), ZUMT ABE 560 (63.0 mm), ZUMT ABE 561 (73.2 mm), ZUMT ABE 562 (82.1 mm), ZUMT ABE 563 (72.2 mm), ZUMT ABE 564 (73.8 mm), ZUMT ABE 565 (64.7 mm), ZUMT ABE 2243 (121.5 mm), ZUMT ABE 2443 (83.7 mm), ZUMT 59-681 (53.8 mm; no data)

Scomberoides commersonnianus Lacepède, 1801 オオクチイケカツオ

TAIWAN

ZUMT 14947 (293.0 mm; Tainan; coll. by T. Aoki)

Scomberoides lysan (Fabricius, 1775) イケカツオ

JAPAN

IBARAKI PREF.

ZUMT 34581 (48.6 mm), ZUMT 34582 (46.7 mm; Hinuma Lake, Ishizaki, Ibaraki Town; 22 May 1935; coll. S. Tanaka)

ZUMT 63181 (40.2 mm; Hitachinaka City)

TOKYO MARKET

ZUMT 12465 (90.9 mm), ZUMT 12486 (109.1 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 46965 (69.5 mm; Ishibashi, Odawara City)

ZUMT 49112 (132.9 mm; Misaki, Miura City; 1956; coll. by I. Tomiyama)

SHIZUOKA PREF.

ZUMT 10553 (4 specimens, 23.9–48.4mm; Shizuura, Numazu City, Shizuoka Pref.; Aug. 1922; coll. by N. Kuroda)

ZUMT 34726 (27.2 mm), ZUMT 34727 (28.4 mm; probably from Shizuoka Pref.; donated by S. Yamamoto, Numazu Junior High School)

ZUMT 44893 (32.2 mm), ZUMT 44894 (25.1 mm; probably from Shizuoka Pref.; coll. by N. Onodera, Mitsuke Junior High School)

WAKAYAMA PREF.

ZUMT 9639 (99.9 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)

ZUMT 20239 (152.8 mm), ZUMT 20525 (106.3 mm), ZUMT 20526 (93.9 mm; Wakayama Pref.)

ZUMT 22036 (101.9 mm; Wakayama Pref.; Jan. 1920)

ZUMT 22562 (54.2 mm), ZUMT 22564 (52.7 mm; Tanabe City; Jan. 1920; coll. by N. Ui)

YAMAGUCHI PREF.

ZUMT 6159 (101.8 mm; Hagi City; coll. by I. Tanaka)

EHIME PREF.

ZUMT 7108 (174.5 mm; pearl farm in Uchiumi, Ainan Town)

ZUMT 24959 [154.5 mm; Horie Village (currently northern part of Matsuyama City); Oct. 1931; coll. by J. Ishikawa]

KOCHI PREF.

ZUMT 34146 (76.7 mm; probably from Kochi Pref.; Sept. 1909; coll. by Kochi Prefectural Fisheries Experimental Station)

NAGASAKI PREF.

ZUMT 2544 (150.5 mm; Nagasaki Pref.; 3 Oct. 1909)

KAGOSHIMA PREF.

ZUMT 23988 (152.1 mm), ZUMT 23989 (86.4 mm), ZUMT 23990 (83.3 mm), ZUMT 23991 (87.6 mm), ZUMT 23992 (85.9 mm), ZUMT 23993 (102.5 mm), ZUMT 24004 (85.6 mm; Shibushi City)

ZUMT 24080 (59.2 mm), ZUMT 24081 (72.1 mm), ZUMT 24082 (119.9 mm; Taniyama, Kagoshima City)

ZUMT 26921 (76.4 mm), ZUMT 40501 (114.8 mm; Kagoshima Pref.)

OKINAWA PREF.

ZUMT 11153 (169.1 mm), ZUMT 11154 (169.3 mm), ZUMT 15160 (225.4 mm; probably from Okinawa-jima Island, Okinawa Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior Hight School)

ZUMT 14695 (190.2 mm; Yaeyama Islands)

ZUMT 16889 (67.7 mm; Unten, Nakijin Village, Okinawa-jima Island, Okinawa Islands; coll. by S. Tanabe)

ZUMT 17084 (103.6 mm; Itoman City, Okinawa-jima Island, Okinawa Islands; coll. by. S. Tanabe)

ZUMT 27360 (40.7 mm; Naha City, Okinawa Pref.)

TAIWAN

ZUMT 23629 (69.9 mm; Taiwan; coll. by S. Arakawa)

ZUMT 40137 (99.4 mm), ZUMT 40138 (49.8 mm; Tamsui, Taipei City)

PHILIPPINES

ZUMT 42342 (137.9 mm), ZUMT 42359 (125.7 mm), ZUMT 42390 (128.0 mm; Basilan; 1926; coll. by U. Yamamura)

ZUMT 62282 (120.9 mm), ZUMT 62283 (122.2 mm), ZUMT 62284 (122.7 mm; Basilan; Jan. 1938; coll. by U. Yamamura)

PALAU

ZUMT ABE 3001 (503.5 mm), ZUMT ABE 3013 (403.2 mm; Palau)

ZUMT 62346 (132.2 mm), ZUMT 62347 (104.7 mm), ZUMT 62348 (96.0 mm), ZUMT 62349 (88.3 mm), ZUMT 62350 (80.5 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

LOCALITY UNKNOWN

ZUMT 62364 (53.1 mm), ZUMT 63313 (24.7 mm), ZUMT 57763 (168.8 mm), ZUMT 59704 [approx. 170.0 mm (body cut)], ZUMT ABE 531 (75.5 mm), ZUMT ABE 1883 (148.7 mm), ZUMT ABE 61-859 (140.1 mm), ZUMT ABE 61-860 (137.8 mm), ABE 61-861 (114.3 mm; no data)

ZUMT 7395 (62.1 mm), ZUMT 7404 (55.9 mm; locality unknown; coll. by E. Watanabe)

Scomberoides tala (Cuvier, 1832) アキイロイケカツオ

PHILIPPINES

ZUMT 40767 (153.5 mm), ZUMT 40772 (147.0 mm; Manila, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)

INDONESIA

ZUMT 62601 (146.8 mm; Jakarta, Java; 5 Mar. 1909; coll. by K. Aoki and I. Iijima)

Scomberoides tol (Cuvier, 1832) ミナミイケカツオ

JAPAN

ZUMT 7993 (97.8 mm), ZUMT 9645 (72.6 mm; probably from Wakayama Pref.; coll. by N. Ui at Tanabe City, Wakayama Pref.)
ZUMT 18843 (65.0 mm; Miyazaki Pref.)
ZUMT 20163 (87.9 mm; Kagoshima Pref.)
ZUMT 23956 (145.8 mm; Naya, Kagoshima City, Kagoshima Pref.)
ZUMT 24223 (72.7 mm; Maizuru City, Kyoto Pref.; coll. by S. Ushikubo)
ZUMT 39172 (86.4 mm; Ukitsu, Muroto City, Kochi Pref.; probably collected by S. Tanaka)

TAIWAN

ZUMT 14936 (155.4 mm), ZUMT 14937 (153.6 mm; Taiwan; coll. by T. Aoki)
ZUMT 18452 (139.3 mm; Keelung; Sept. 1927; coll. by H. Sato)
ZUMT 19685 (91.6 mm; probably from Taiwan; coll. by H. Sato, Keelung Junior High School)
ZUMT 25109 (123.8 mm; lower reach of Tamsui River, Taipei City; Aug. 1930; coll. by M. Imai)
ZUMT 37431 (107.8 mm; Penghu Island; July 1906)

PHILIPPINES

ZUMT 62279 (165.8 mm), ZUMT 62280 (153.1 mm; Basilan; Jan. 1938; coll. by U. Yamamura)

LOCALITY UNKNOWN

ZUMT 57764 (162.5 mm), ZUMT 62372 (62.7 mm), ZUMT ABE 59-487 [165.0 mm (dissected); no data]

Scyris indica Rüppell, 1830 ウマヅラアジ

JAPAN

ZUMT 17208 (38.8 mm), ZUMT 17209 (49.5 mm), ZUMT 17216 (44.0 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 40379 (33.6 mm; probably from Kagoshima Pref., Japan; donated by K. Ogawa, Kagoshima Women's Normal School)
ZUMT 40434 (94.5 mm; Okinawa Pref.; coll. by S. Sakaguchi)

TAIWAN

ZUMT 14922 (68.5 mm), ZUMT 14923 (85.6 mm; probably from Taiwan; donated by T. Aoki at Government-General of Taiwan)
ZUMT 37451 (97.2 mm; Penghu Islands; 3 July 1908)

PALAU

ZUMT 62344 (59.3 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

INDONESIA

ZUMT 62240 (200.5 mm; Jakarta, Java)

LOCALITY UNKNOWN

ZUMT 62321 (70.4 mm; no data)

Selar boops (Cuvier, 1833) テルメアジ

PHILIPPINES

ZUMT 40709 (160.7 mm; Jolo Island; coll. by I. Iijima)

ZUMT 62281 (38.3 mm; Basilan; Jan. 1938; coll. by U. Yamamura)

PALAU

ZUMT ABE 2705 (211.1 mm), ZUMT ABE 2717 (136.9 mm), ZUMT ABE 2718 (128.5 mm), ZUMT ABE 2719 (137.6 mm), ZUMT ABE 2729 (140.1 mm), ZUMT ABE 2799 (126.5 mm; Palau)

ZUMT 62351 (86.2 mm), ZUMT 62352 (89.3 mm), ZUMT 62353 (84.3 mm), ZUMT 62354 (86.6 mm), ZUMT 62356 (79.8 mm), ZUMT 62357 (78.3 mm), ZUMT 62358 (74.6 mm), ZUMT 62359 (89.3 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

LOCALITY UNKNOWN

ZUMT 62235 (87.4 mm), ZUMT 62299 (132.5 mm), ZUMT 62300 (127.3 mm; no data)

Selar crumenophthalmus (Bloch, 1793) メアジ

JAPAN

IZU ISLANDS

ZUMT 62997 (4 specimens, 108.1–116.7 mm; Motomachi Port, Izu-oshima Island; 27 July 1991)

CHIBA PREF.

ZUMT 33407 (132.5 mm; Katsuura City)

TOKYO MARKET

ZUMT 12416 (113.8 mm; obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 5881 (97.6 mm; Misaki, Miura City)

ZUMT 12464 (170.2 mm), ZUMT 12481 [165.7 mm; Odawara City (obtained at Tokyo Market); 13 Nov. 1914]

ZUMT 19906 (179.7 mm), ZUMT 19907 (161.5 mm; Nagai, Yokosuka City; 28 Oct. 1929; coll. A. Suzuki)

SHIZUOKA PREF.

ZUMT 32645 (103.6 mm), ZUMT 32646 (108.8 mm), ZUMT 32647 (109.3 mm; Shizuura, Numazu City; Jan. 1932)

EHIME PREF.

ZUMT 7886 (187.8 mm; Heijo Bay, Ainan Town; 21 Oct. 1916; K. Otsuki)

KOCHI PREF.

ZUMT 18692 (89.3 mm), ZUMT 18693 (117.5 mm; Kashiwa-jima Island, Otsuki Town; Aug. 1928; coll. by T. Kamohara)

ZUMT 47021 (157.4 mm; probably from Kochi Pref.)

OITA PREF.

ZUMT 7616 (121.7 mm), ZUMT 7617 (130.1 mm; Saeki Bay, Saeki City; 4 Aug. 1916)

NAGASAKI PREF.

ZUMT 2539 (147.2 mm; Nagasaki Pref.)

ZUMT 50031 [173.8 mm; Miiraku, Goto City (Fukue-jima Island, Goto Islands); 13 Oct. 1953; coll. by I. Tomiyama]

ZUMT 50178 (198.5 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 18 Oct. 1953; coll. by I. Tomiyama)

MIYAZAKI PREF.

ZUMT 22665 (148.0 mm), ZUMT 22666 (142.8 mm; Miyazaki Pref.)

KAGOSHIMA PREF.

ZUMT 29684 (90.8 mm; Naze, Amami City, Amami-oshima Island, Amami Islands; 30 July 1909)

ZUMT 40479 (211.6 mm; Yaku-shima Island, Osumi Islands)

ZUMT 41159 (106.2 mm), ZUMT 41162 (109.3 mm; probably from Amami-oshima Island, Amami Islands; donated by K. Enokiya, Kagoshima Prefectural Amamioshima Junior High School)

ZUMT 54067 (209.7 mm; Kuji, Setouchi Town, Amami-oshima Island, Amami Islands; 31 May 1966; coll. by Y. Tominaga)

ZUMT 54074 (181.0 mm; Kuji, Setouchi Town, Ammi-oshima Island, Amami Islands; 20 May 1966; coll. by Y. Tominaga)

OKINAWA PREF.

ZUMT 11172 (99.8 mm), ZUMT 11173 (106.1 mm), ZUMT 11174 (109.3 mm; probably from Okinawa-jima Island, Okinawa Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior Hight School)

ZUMT 14013 (161.4 mm; probably from Okinawa-jima Island, Okinawa Islands; coll. by S. Sakaguchi, Okinawa Prefectural Daiichi Junior Hight School)

ZUMT 14461 (131.4 mm; Okinawa Pref.; coll. by S. Sakaguchi)

ZUMT 17063 (94.2 mm; Itoman City, Okinawa-jima Island, Okinawa Islands; coll. by S. Tanabe)

ZUMT 39751 (142.4 mm), ZUMT 39756 (136.6 mm; Ryukyu Islands; coll. by S. Sakaguchi)

TAIWAN

ZUMT 13652 (137.5 mm), ZUMT 13653 (140.2 mm; obtained at Taipei Fish Market; coll. by T. Aoki)

ZUMT 14966 (175.5 mm; Tainan; coll. by T. Aoki)

ZUMT 62569 (102.2 mm; Chitosecho Market, Taipei City; 19 Nov. 1930)

CHINA

ZUMT 54486 (156.2 mm), ZUMT 54487 [160.8 mm; East China Sea, east of Nantong, Jiangsu Province (32°35'N, 122°40'E), 23 m depth; 11 Oct. 1984]

PHILIPPINES

ZUMT 12640 (149.2 mm), ZUMT 12644 (147.5 mm), ZUMT 12649 (162.3 mm; Philippines; coll. by U. Yamamura)

ZUMT 42393 (12 specimens, 73.0–80.6 mm; Basilan; 1936; coll. by U. Yamamura)

PALAU

ZUMT ABE 2720 (144.7 mm), ZUMT ABE 3761 (161.9 mm), ZUMT ABE 5984 (202.7 mm; Palau)

ZUMT 62338 (183.8 mm), ZUMT 62339 (86.8 mm), ZUMT 62340 (83.0 mm), ZUMT 62341 (79.1 mm; probably from Palau; originally stored with ZUMT ABE 5881 and 5882)

LOCALITY UNKNOWN

ZUMT 46566 (115.5 mm), ZUMT 46567 (160.5 mm), ZUMT 46568 (110.4 mm), ZUMT 46569 (105.8 mm), ZUMT 46570 (112.4 mm), ZUMT 46881 (132.1 mm), ZUMT 62298 (161.1 mm), ZUMT 62367 (128.7 mm), ZUMT 62368 (114.6 mm), ZUMT 62369 (108.9 mm), ZUMT 62370 (113.0 mm), ZUMT 62371 (111.9 mm), ZUMT ABE 1884 (118.5 mm), ZUMT ABE 10102 (43.8 mm), ZUMT ABE 10736 (83.1 mm), ZUMT ABE 61-864 (80.9 mm), ZUMT ABE 61-866 (75.3 mm), ZUMT ABE 61-867 (68.3 mm), ZUMT ABE 61-868 (72.8 mm), ZUMT ABE 61-869 (49.7 mm), ZUMT ABE 83-223 (124.3 mm; no data)

ZUMT 62285 [136.4 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

ZUMT 63050 (82.3 mm), ZUMT 63051 (87.7 mm), ZUMT 63052 [67.1 mm; originally stored with ZUMT 56-193 (*Psenes arafurensis*; collection data unknown)]

Selaroides leptolepis **(Cuvier, 1833)** ホソヒラアジ

PHILIPPINES

ZUMT 42178 (57.1 mm), ZUMT 42201 (65.2 mm; Philippines; 1926; coll. by U. Yamamura),

Selene setapinnis **(Mitchill, 1815)**

SURINAME

ZUMT 62496 (113.3 mm; Suriname)

Seriola aureovittata **Temminck & Schlegel, 1845** ヒラマサ

LOCALITY UNKNOWN

ZUMT 64082 (491.0 mm; no data)

Remarks: See Martinez-Takeshita et al. (2015) regarding the nomenclature of this species.

Seriola dumerili **(Risso, 1810)** カンパチ

JAPAN

MIYAGI PREF.

ZUMT 15752 [175.4 mm; around Ishinomaki City (landed at Morioka Market, Iwate Pref.); 22 July 1925; coll. by G. Toba]

FUKUSHIMA PREF.

ZUMT 37668 (168.9 mm; Onahama, Iwaki City)

TOKYO MARKET

ZUMT 6304 (133.7 mm), ZUMT 6305 (131.2 mm), ZUMT 6306 (121.0 mm), ZUMT 6307 (123.5 mm), ZUMT 6308 (124.8 mm), ZUMT 6309 (124.7 mm), ZUMT 6310 (118.7 mm), ZUMT 6311 (137.74 mm), ZUMT 6312 (129.3 mm), ZUMT 6313 (128.1 mm; obtained at Tokyo Market; 23 July 1915)

ZUMT 6702 (123.9 mm), ZUMT 6703 (132.1 mm), ZUMT 6704 (143.7 mm), ZUMT 6705 (146.1 mm), ZUMT 6706 (138.7 mm), ZUMT 6707 (140.0 mm), ZUMT 6708 (146.4 mm), ZUMT 6709 (124.1 mm), ZUMT 6710 (131.4 mm), ZUMT 12409 (203.7 mm), ZUMT 12410 (181.2 mm), ZUMT 12411 (232.1 mm), ZUMT 12412 (168.8 mm), ZUMT 12414 (138.8 mm), ZUMT 12467 (156.9 mm), ZUMT 22953 (125.8 mm; obtained at Tokyo Market)

IZU ISLANDS

ZUMT 19285 (149.2 mm), ZUMT 19286 (141.4 mm), ZUMT 19288 (144.3 mm), ZUMT 19289 (147.8 mm), ZUMT 19290 (136.8 mm), ZUMT 19291 (143.2 mm), ZUMT 19292 (140.6 mm; probably from Hachijo-jima Island; coll. by Y. Oshizu, Hachijo-jima Island)

ZUMT 62592 (165.6 mm; Hachijo-jima Island)

ZUMT 62999 (134.8 mm), ZUMT 63000 (158.4 mm; Motomachi Port, Izu-oshima Island; 27 July 1991)

ZUMT 64244 (151.0 mm), ZUMT 64245 (171.0 mm), ZUMT 64246 (177.0 mm), ZUMT 64247 (186.0 mm; off Motomachi, Izu-oshima Island; 1 Aug. 1993; coll. by set net)

CHIBA PREF.

ZUMT 33401 (84.8 mm), ZUMT 33402 (144.6 mm; Katsuura City)

KANAGAWA PREF.

ZUMT 45856 (137.2 mm; Misaki, Miura City; 2 May 1911)

ZUMT 49149 (133.1 mm; Koajiro, Misaki, Miura City; 1 Sept. 1954; coll. by I. Tomiyama)

SHIZUOKA PREF.

ZUMT 10542 (107.1 mm; Shizuura, Numazu City; Aug. 1922; coll. by N. Kuroda)

ZUMT 15779 (181.5 mm), ZUMT 15780 (187.7 mm; Shimizu, Shizuoka City)

WAKAYAMA PREF.

ZUMT 8021 (148.7 mm; probably from Wakayama Pref.; donated by I. Hoshino, Hiro, Arida, Wakayama City, Wakayama Pref.)

ZUMT 20316 (137.7 mm; Tanabe City), ZUMT 22505 (115.3 mm), ZUMT 22510 (90.4 mm; Tanabe City; Jan. 1920; coll. by N. Ui)

TOYAMA PREF.

ZUMT 41205 (218.3 mm), ZUMT 41230 (244.6 mm), ZUMT 41231 (232.8 mm; Uozu or Namerikawa City; coll. by I. Tomiyama)

KYOTO PREF.

ZUMT 24329 (197.5 mm; Miyazu City; Nov. 1931)

SHIMANE PREF.

ZUMT 31203 (128.5 mm; Matsue City; coll. by R. Yanai)

KOCHI PREF.

ZUMT 18657 (112.3 mm; Kashiwa-jima Island, Otsuki Town; Aug. 1926; coll. by T. Kamohara)

ZUMT 33674 (130.8 mm; probably from Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)

ZUMT 34599 (109.6 mm), ZUMT 34642 (134.5 mm; Kochi Pref.)

ZUMT 47088 (111.6 mm; probably from Kochi Pref.)

SAGA PREF.

ZUMT 10445 (116.0 mm; Karatsu Bay, Karatsu City; 29 July 1920; coll. by K. Yamashita)

OITA PREF.

ZUMT 50668 (179.9 mm; obtained at Beppu Fish Market; 11 Sept. 1959, Y. Tominaga)

KAGOSHIMA PREF.

ZUMT 20473 (144.4 mm; Yaku-shima Island, Osumi Islands)

ZUMT 23934 (191.9 mm), ZUMT 23943 (164.7 mm), ZUMT 23944 (165.9 mm; Naya, Kagoshima City)

ZUMT 23994 (158.6 mm; Shibushi City)

LOCALITY UNKNOWN

ZUMT 32994 (129.7 mm), ZUMT 32995 (109.3 mm), ZUMT 41083 (107.5 mm), ZUMT ABE 9989 (116.2 mm), ZUMT ABE 10510 (258.2 mm), ZUMT ABE 55-7 (178.5 mm), ZUMT ABE 61-871 (103.3 mm; no data)

Seriola quinqueradiata Temminck & Schlegel, 1845 ブリ

JAPAN

HOKKAIDO

ZUMT 8237 (160.2 mm; Takashima, Otaru City; 25 Oct. 1911; coll. by Hokkaido Prefectural Fisheries Experimental Station)

ZUMT 40603 (249.4 mm; Hokkaido)

IWATE PREF.

ZUMT 13083 (197.2 mm), ZUMT 13084 (134.6 mm), ZUMT 13085 (133.4 mm; Miyako Bay; coll. by S. Tanabe)

MIYAGI PREF.

ZUMT 15736 [219.1 mm; Ishinomaki City (obtained at Morioka Market, Morioka City, Iwate Pref.); 10 July 1925; coll. by G. Toba]

TOKYO MARKET

ZUMT 4325 (166.2 mm), ZUMT 6711 (206.4 mm), ZUMT 6712 (185.0 mm), ZUMT 6713 (180.5 mm), ZUMT 12413 (134.5 mm), ZUMT 12470 (147.3 mm), ZUMT 12475 (128.6 mm) ZUMT 22954 (134.0 mm; obtained at Tokyo Market)

KANAGAWA PREF.
ZUMT 24856 (198.3 mm; Kozu, Odawara City; July 1932)
ZUMT 50509 (129.3 mm; Aburatubo, Misaki, Miura City; 7 July 1959; coll. by Y. Tominaga)
SHIZUOKA PREF.
ZUMT 33374 (44.0 mm; Shizuoka Pref.)
WAKAYAMA PREF.
ZUMT 7865 (176.0 mm; probably from Wakayama Pref.; donated by I. Hoshino, Hiro, Arida, Wakayama City, Wakayama Pref.)
ZUMT 20315 (140.2 mm; Tanabe City; coll. by N. Ui)
NIIGATA PREF.
ZUMT 21893 (143.9 mm), ZUMT 21894 (138.5 mm; Niigata Pref.; Aug. 1923; coll. by M. Imai)
KYOTO PREF.
ZUMT 24328 (320.3 mm; Miyazu City; Nov. 1931; coll. by Kyoto Prefectural Fisheries Training Center)
SHIMANE PREF.
ZUMT 31292 (169.0 mm; Matsue City; coll. by R. Yanai)
KOCHI PREF.
ZUMT 18768 (97.1 mm; Kashiwa-jima Island, Otsuki Town; Aug. 1926; coll. by T. Kamohara)
ZUMT 21947 (149.2 mm; Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)
ZUMT 33675 (136.4 mm; probably from Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Center)
ZUMT 34600 (122.2 mm; Kochi Pref.)
ZUMT 39169 (48.0 mm; Ukitsu, Muroto Cit; probably collected by S. Tanaka)
NAGASAKI PREF.
ZUMT 2486 (190.1 mm; Nagasaki Pref.; Aug. 1909)
KAGOSHIMA PREF.
ZUMT 24111 (240.3 mm; Naya, Kagoshima City)

LOCALITY UNKNOWN
ZUMT 7943 (230.8 mm), ZUMT 31504 [approx. 493 mm (body cut)], ZUMT 41084 (102.2 mm), ZUMT 41085 (120.4 mm), ZUMT 46572 (148.6 mm), ZUMT 46573 (153.3 mm), ZUMT 62725 (127.6 mm), ZUMT 62856 (68.5 mm), ZUMT 62857 (248.6 mm), ZUMT ABE 6221 (217.9 mm), ZUMT ABE 9941 (152.6 mm), ZUMT ABE 9942 (147.6 mm), ZUMT ABE 9943 (131.9 mm; no data)

Seriola rivoliana Valenciennes, 1833 ヒレナガカンパチ

JAPAN
ZUMT 31258 (260.1 mm; Matsue City, Shimane Pref.; coll. by R. Yanai)
ZUMT 49139 (226.8 mm; Misaki, Miura City, Kanagawa Pref.; 1956; coll. by I. Tomiyama)
ZUMT 51924 (361.1 mm; Me-shima Island, Danjo Islands, Nagasaki Pref.; 14 May 1954; coll. by Y. Dotsu)

LOCALITY UNKNOWN
ZUMT ABE 55-92 (490.0 mm; no data)

Seriolina nigrofasciata (Rüppell, 1829) アイブリ

JAPAN
KANAGAWA PREF.
ZUMT ABE 62-356 (234.3 mm; Manazuru Town; 17 Mar. to 21 Apr. 1962)
WAKAYAMA PREF.
ZUMT 9663 (206.4 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)

EHIME PREF.
ZUMT 7895 (127.3 mm; Uchiumi, Ainan Town)
FUKUOKA PREF.
ZUMT 51792 (182.6 mm), ZUMT 51802 (177.2 mm; obtained at Fukuoka Fish Market; July 1959)
NAGASAKI PREF.
ZUMT 6564 (194.0 mm; Nagasaki Pref.; Sept. 1915; coll. by I. Kaneko)
ZUMT 18858 (126.7 mm; Kagoshima Prefecture)
ZUMT 21112 (183.9 mm; off Nagasaki Pref.; coll. by T. Kuraba)
KAGOSHIMA PREF.
ZUMT 23774 (147.2 mm), ZUMT 23775 (129.8 mm; Taniyama, Kagoshima City; 20 July 1930)
ZUMT 23947 (150.1 mm; Naya, Kagoshima City)
ZUMT 23974 (109.1 mm), ZUMT 23975 (130.4 mm), ZUMT 23976 (115.3 mm; Shibushi City)

EAST CHINA SEA
ZUMT 50996 (255.3 mm; East China Sea, Sept. 1959)
ZUMT 51149 (177.8 mm; East China Sea; Dec. 1959)

TAIWAN
ZUMT 62242 (220.3 mm; obtained at Chitosemachi Market, Taipei City; 17 Nov. 1930)

PHILIPPINES
ZUMT 40835 (127.8 mm; Manila, Luzon; 11 Feb. 1909)

LOCALITY UNKNOWN
ZUMT 31473 (237.5 mm), ZUMT 35245 (96.3 mm), ZUMT 37906 (115.8 mm), ZUMT 62244 (190.0 mm), ZUMT 62393 (146.3 mm; no data)
ZUMT 62250 (417.7 mm; locality unknown; collected on 21 May 1914)

Trachinotus baillonii (Lacepède, 1801) コバンアジ

JAPAN
TOKYO MARKET
ZUMT 12466 (135.9 mm), ZUMT 12485 (83.2 mm; obtained at Tokyo Market)
OGASAWARA ISLANDS
ZUMT 40303 (126.2 mm; Ogasawara Islands)
KANAGAWA PREF.
ZUMT 12469 [130.6 mm; Kurihama, Yokosuka City (obtained at Tokyo Market)]
ZUMT 27708 (31.0 mm), ZUMT 40302 (109.4 mm; Kanagawa Pref.)
ZUMT 62389 (40.7 mm), ZUMT 62390 (41.0 mm; Misaki, Miura City; 16 Aug. 1909)
SHIZUOKA PREF.
ZUMT 10177 (130.8 mm; probably from Shizuoka Pref.; coll. by Shizuoka Prefectural Fisheries Experimental Station)
ZUMT 10549 (50.1 mm), ZUMT 10550 (28.7 mm; Shizuura, Numazu City; Aug. 1922; coll. by N. Kuroda)
ZUMT 17803 (41.6 mm), ZUMT 17804 (29.8 mm; Enoura, Numazu City; coll. by N, Kuroda)
ZUMT 33853 (55.0 mm), ZUMT 33854 (57.0 mm; Shizuura, Numazu City)
MIE PREF.
ZUMT 7940 (120.1 mm; Shimmei, Shima City; coll. by M. Kobayashi)
WAKAYAMA PREF.
ZUMT 8546 (92.6 mm; probably from Wakayama Pref.; coll. by N. Ui, Tanabe City, Wakayama Pref.)
ZUMT 21982 (90.8 mm; Wakayama Pref.; Jan. 1920)

HYOGO PREF.

ZUMT 42938 (82.2 mm), ZUMT 44639 (68.2 mm; Sumoto, Awaji-shima Island)

KOCHI PREF.

ZUMT 7854 (116.7 mm; Aki City; coll. by S. Tanaka and S. Ueda)

ZUMT 39163 (100.9 mm; Ukitsu, Muroto City; probably collected by S. Tanaka)

NAGASAKI PREF.

ZUMT 6552 (75.9 mm), ZUMT 6553 (77.9 mm), ZUMT 6554 (78.4 mm), ZUMT 6555 (67.4 mm), ZUMT 6556 (93.8 mm), ZUMT 6557 (90.6 mm), ZUMT 6558 (85.7 mm), ZUMT 6559 (69.1 mm), ZUMT 6560 (82.7 mm), ZUMT 6561 (98.1 mm), ZUMT 6562 (91.2 mm), ZUMT 6563 (65.8 mm; Nagasaki Pref.; Sept. 1915; coll. by I. Kaneko)

ZUMT 62513 (63.9 mm; Nagasaki Pref.; Nov.)

KAGOSHIMA PREF.

ZUMT 23962 (93.3 mm), ZUMT 23963 (68.1 mm), ZUMT 23964 (88.9 mm; Kagoshima City)

ZUMT 23970 (146.3 mm; Shibushi City)

TAIWAN

ZUMT 62512 (142.5 mm; obtained at Ximending Market, Taipei City; 9 Nov. 1930)

PHILIPPINES

ZUMT 42213 (120.0 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT 62342 (110.7 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

LOCALITY UNKNOWN

ZUMT 33918 (82.9 mm), ZUMT 62258 (287.1 mm), ZUMT 62514 (95.7 mm), ZUMT 62515 (71.4 mm), ZUMT ABE 60-1532 (180.5 mm), ZUMT ABE 60-1533 (195.9 mm; no data)

ZUMT 40640 (104.1 mm), ZUMT 40641 (69.8 mm), ZUMT 40642 (93.3 mm) ZUMT 40643 [98.9 mm; although the specimen locality was recorded as “Morioka?（盛岡か？）” in the ledger, this species has only been recorded from south of Sagami Bay on the Pacific coast of Japan (Senou 2013). The record in the ledger is probably erroneous]

Trachinotus blochii (Lacepède, 1801) マルコバン

JAPAN

ZUMT 17164 (111.6 mm; Baten, Nanjo City, Okinawa-jima Island, Okinawa Islands, Okinawa Pref.; coll. by S. Tanabe)

ZUMT 26976 (68.6 mm; tidepool at Shimoda City, Shizuoka Pref.; 1933; coll. by T. Ishida)

ZUMT 27161 (66.1 mm; Hamana-ko Lake, Shizuoka Pref.)

Trachinotus paitensis Cuvier, 1832

PERU

ZUMT 57589 (18 specimens, 21.0–74.6 mm; Paita, Peru)

Trachurus declivis (Jenyns, 1841)

LOCALITY UNKNOWN

ZUMT 63426 (205.1 mm), ZUMT 63427 (189.9 mm; no data)

Trachurus japonicus (Temminck & Schlegel, 1844) マアジ

JAPAN

HOKKAIDO

ZUMT 8254 (78.2 mm; Otaru; Oct. 1903; coll. by Hokkaido Prefectural Fisheries Experimental Station)

ZUMT 14215 (200.3 mm; Muroran City; Sept. 1924; coll. by S. Katsuki)

AOMORI PREF.

ZUMT 13197 (94.8 mm), ZUMT 13198 (69.9 mm), ZUMT 13200 (102.3 mm), ZUMT 13201 (92.7 mm), ZUMT 13202 (76.7 mm), ZUMT 13203 (95.3 mm), ZUMT 13204 (75.9 mm; Same, Hachinohe City; coll. by S. Tanabe)

IWATE PREF.

ZUMT 13029 (91.5 mm), ZUMT 13030 (90.0 mm), ZUMT 13031 (105.7 mm), ZUMT 13032 (84.7 mm; Sokei, Miyako City; coll. by S. Tanabe)

ZUMT 16295 (83.9 mm), ZUMT 16296 (148.3 mm; Kesen Region; 10 Aug. 1925; coll. by G. Toba)

MIYAGI PREF.

ZUMT 15405 [185.2 mm; landed at Ishinomaki Fishing Port (obtained at Morioka Market, Iwate Pref.)]

FUKUSHIMA PREF.

ZUMT 32450 (67.2 mm; Onahama, Iwaki City)

IBARAKI PREF.

ZUMT 17898 (62.5 mm; Hinuma Lake)

CHIBA PREF.

ZUMT 4528 (166.1 mm), ZUMT 4529 [174.2 mm; Chiba Pref. (obtained at Tokyo Market)]

ZUMT 28317 (44.1 mm; Chiba Pref.; 1927; coll. by S. Obama)

ZUMT 40299 (97.2 mm; probably from Chiba Pref.; coll. by K. Nunodome at Sammu City, Chiba Pref.)

TOKYO MARKET

ZUMT 3719 (130.0 mm), ZUMT 3979 (130.1 mm), ZUMT 6677 (226.8 mm), ZUMT 6678 (174.1 mm), ZUMT 6679 (222.5 mm), ZUMT 6680 (212.2 mm), ZUMT 6681 (185.9 mm) ZUMT 11957 (146.7 mm), ZUMT 12403 (145.1 mm), ZUMT 12404 (155.7 mm), ZUMT 12405 (145.1 mm), ZUMT 12407 (149.7 mm), ZUMT 26380 (136.1 mm), ZUMT 26381 (170.6 mm), ZUMT 62518 (124.0 mm; obtained at Tokyo Market)]

IZU ISLANDS

ZUMT 62998 (5 specimens, 109.1–125.0 mm; Motomachi Port, Izu-oshima Island; 27 July 1991)

KANAGAWA PREF.

ZUMT 19889 (243.0 mm), ZUMT 19890 (219.7 mm; Oiso Town; 5 Feb. 1930; coll. by A. Suzuki)

ZUMT 19895 (145.5 mm), ZUMT 19896 (161.6 mm), ZUMT 19897 (143.4 mm), ZUMT 19898 (146.7 mm; Iwa, Manazuru Town; 30 Mar. 1930; coll. by A. Suzuki)

ZUMT 19908 (161.6 mm; Fukuura, Yokohama City; 29 Mar. 1929; coll. by A. Suzuki)

ZUMT 19909 (257.8 mm; Fukuura, Yokohama City; 17 Mar. 1929; coll. by A. Suzuki)

ZUMT 19910 (124.9 mm), ZUMT 19911 (143.1 mm; Nagai, Yokosuka City; 7 May 1929; coll. by A. Suzuki)

ZUMT 19912 (128.7 mm; Chigasaki City; 10 May 1929; coll. by A. Suzuki)

ZUMT 19913 (102.8 mm), ZUMT 19914 (248.5 mm), ZUMT 19915 (165.7 mm), ZUMT 19916 (173.9 mm), ZUMT 19917 (104.0 mm; Fukuura, Yokohama City; 17 Mar. 1929; coll. by A. Suzuki)

ZUMT 19918 (216.0 mm), ZUMT 19919 (149.1 mm), ZUMT 19920 (117.7 mm; Chigasaki City; 27 Jan. 1930; coll. by A. Suzuki)

ZUMT 19921 (158.9 mm; Fukuura, Yokohama City or Chigasaki City; 17 Mar. 1929; coll. by A. Suzuki)

ZUMT 20598 (115.5 mm), ZUMT 20726 (130.7 mm), ZUMT 20852 (109.1 mm), ZUMT 20853 (129.5 mm), ZUMT 20854 (116.5 mm), ZUMT 20855 (109.9 mm), ZUMT 21785 (97.1 mm), ZUMT 21786 (93.4 mm), ZUMT 21787 (89.1 mm), ZUMT 21788 (92.5 mm), ZUMT 21789 (93.0 mm), ZUMT 21790 (85.4 mm), ZUMT 21791 (88.0 mm), ZUMT 21792 (84.4 mm), ZUMT 21793 (96.6 mm), ZUMT 21794 (97.1 mm), ZUMT 43383 (98.5 mm), ZUMT 43638 (47.4 mm; Misaki, Miura City)

ZUMT 21303 (150.9 mm; Kanagawa Pref.)

ZUMT 26708 (46.7 mm; Aburatsubo, Misaki, Miura City; Oct. 1930)

ZUMT 27377 (89.1 mm; Koajiro, Misaki, Miura City; 27 July 1940; coll. by S. Tanaka)

ZUMT 28033 (36.4 mm; Misaki, Miura City; May 1918; coll. by S. Tanaka)

ZUMT 28872 (29.1 mm; Misaki, Miura City; May 1918)

ZUMT 62498 (137.3 mm), ZUMT 62499 (138.3 mm), ZUMT 62500 (154.2 mm), ZUMT 62501 (95.0 mm), ZUMT 62502 (101.8 mm), ZUMT 62503 (138.8 mm; Zaimokuza Beach, Kamakura City; 1 May 1932; coll. by T. Abe)

SHIZUOKA PREF.

ZUMT 16232 (56.4 mm), ZUMT 16233 (38.8 mm), ZUMT 16234 (75.5 mm), ZUMT 16235 (53.4 mm), ZUMT 16236 (59.0 mm), ZUMT 16237 (52.2 mm), ZUMT 16238 (43.0 mm), ZUMT 16239 (59.5 mm), ZUMT 16240 (56.9 mm; Kakizaki, Shimoda City; coll. by T. Yoneyama)

ZUMT 33520 (21.0 mm; Shizuura, Numazu City; May 1935; coll. by N. Kuroda)

ZUMT 40301 (65.1 mm; Sagara, Makinohara City; July 1891)

ZUMT 62697 (16 specimens, 45.2–78.1 mm; off Yazu, Kawazu Town)

MIE PREF.

ZUMT 23135 (92.7 mm), ZUMT 23136 (101.3 mm; Kada Bay, Owase City; 1 Aug. 1922; coll. by Y. Tsuchiga)

ZUMT 23208 (75.2 mm), ZUMT 23209 (89.4 mm), ZUMT 23210 (57.3 mm; Kimoto, Kumano City; 18 May 1930; coll. by Y. Tsuchiga)

WAKAYAMA PREF.

ZUMT 7755 (152.1 mm), ZUMT 7757 (143.8 mm), ZUMT 7758 (158.2 mm; probably from Wakayama Pref.; donated by I. Hoshino at Hiro, Arida, Wakayama City, Wakayama Pref.)

OSAKA FISH MARKET

ZUMT 41905 (112.9 mm), ZUMT 41906 (114.7 mm; obtained at Osaka Fish Market)

HYOGO PREF.

ZUMT 2224 (54.7 mm; Fukura, Awaji City, Awaji-shima Island; coll. by R. Uchiyama)

ZUMT 2608 (77.6 mm; Fukura, Awaji City, Awaji-shima Island; 1909; coll. by R. Uchiyama)

AKITA PREF.

ZUMT 13323 (198.4 mm; Akita Pref.; coll. by S. Tanabe)

NIIGATA PREF.

ZUMT 3382 (200.6 mm; probably from Niigata Pref.; coll. by Niigata Prefectural Fisheries School)

ZUMT 21590 (116.6 mm), ZUMT 34695 (113.1 mm; Niigata Pref.; Aug. 1923)

ZUMT 24413 (107.2 mm), ZUMT 24414 (97.7 mm), ZUMT 24415 (109.7 mm; Niigata Pref.)

TOYAMA PREF.

ZUMT 41329 (110.0 mm), ZUMT 41423 (120.8 mm), ZUMT 45711 (86 specimens, 23.5–81.7 mm), ZUMT 46220 (147.1 mm), ZUMT 46221 (130.7 mm), ZUMT 46222 (127.8 mm), ZUMT 46226 (123.3 mm), ZUMT 46286 (98.5 mm), ZUMT 46300 (141.0 mm), ZUMT 46339 (87.4 mm; Uozu or Namerikawa City; coll. by I. Tomiyama)

FUKUI PREF.

ZUMT 55830 (128.8 mm; Hayase, Mihama Town; 1 Nov. 1986; coll. by M. Aizawa et al.)

KYOTO PREF.

ZUMT 24369 (129.9 mm; Miyazu City; Nov. 1931; coll. by Kyoto Prefectural Fisheries Training Center)

SHIMANE PREF.

ZUMT 19905 (214.9 mm; Taishamachi, Izumo City; 20 Oct. 1929; coll. by A. Suzuki)

ZUMT 31190 (112.2 mm; Matsue City; coll. by R. Yanai)

EHIME PREF.

ZUMT 7887 (163.4 mm; probably from Ehime Pref.; coll. by K. Otsuki, Uchiumi, Ainan Town, Ehime Pref.)

KOCHI PREF.

ZUMT 19891 (226.9 mm), ZUMT 19892 (124.9 mm), ZUMT 19893 (132.1 mm; Susaki City; 15 Feb. 1930; coll. by A. Suzuki)

ZUMT 19903 (227.8 mm), ZUMT 19904 (144.4 mm; Muroto Point, Muroto City; 23 May 1938; coll. by A. Suzuki)

ZUMT 23270 (147.9 mm; obtained at Kochi Market; 20 Aug. 1930; coll. by T. Kamohara)

KYUSHU

ZUMT 3619 [291.3 mm; East China Sea, approx. 250 km southwest of Kyushu, Japan (30°37'–30°31'N, 127°37'–127°35'E)]

ZUMT 19640 (137.7 mm; Genkai-nada Sea, north of Kyushu, Japan; coll. by T. Matsumoto)

FUKUOKA PREF.

ZUMT 35037 (57.4 mm), ZUMT 35038 (31.2 mm), ZUMT 35039 (44.0 mm), ZUMT 35040 (30.9 mm), ZUMT 35041 (32.7 mm; Okinohata, Yanagawa City; 28 May 1931)

ZUMT 49832 (227.8 mm; obtained at Fukuoka Fish Market; 28 July 1959)

ZUMT 51853 (66.8 mm), ZUMT 51854 (61.9 mm), ZUMT 51855 (62.6 mm), ZUMT 51856 (66.5 mm; obtained at Fukuoka Fish Market; 1959)

ZUMT 62587 (89.3 mm; obtained at Fukuoka Fish Market; 25 Aug. 1931)

ZUMT 62588 (105.0 mm; obtained at Fukuoka Fish Market; 24 Aug. 1931)

NAGASAKI PREF.

ZUMT 5954 (92.5 mm; Izuhara, Tsushima City, Tsushima Island; 29 Sept. 1903; coll. by S. Watase and S. Yasuda)

ZUMT 27079 (25.7 mm; Nagasaki Pref.)

ZUMT 48021 (63.5 mm; Hirado; 29 May 1953; coll. by I. Tominaga)

ZUMT 48182 (64.8 mm), ZUMT 48183 (56.1 mm), ZUMT 48184 (62.2 mm), ZUMT 48185 (72.6 mm), ZUMT 48186 (47.2 mm), ZUMT 48187 (51.9 mm), ZUMT 48188 (56.8 mm), ZUMT 48189 [63.9 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 25 May 1953; coll. by I. Tomiyama]

ZUMT 48220 (72.9 mm), ZUMT 48221 (53.1 mm), ZUMT 48222 (49.2 mm), ZUMT 48223 (48.7 mm), ZUMT 48224 [30.0 mm; Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 23 May 1953; coll. by I. Tomiyama]

ZUMT 48289 (63.0 mm), ZUMT 48290 (54.0 mm; Ojika-jima Island, Goto Islands; 10 June 1953)

ZUMT 49937 [145.5 mm; Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 49985 (130.1 mm), ZUMT 49986 (139.0 mm), ZUMT 49987 [136.5 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 50019 [97.9 mm; Fukue, Goto City (Fukue-jima Island, Goto Islands); 12 Oct. 1953; coll. by I. Tomiyama]

ZUMT 50330 (102.6 mm; Hirado City; 10 June 1953; coll. by I. Tomiyama)

OITA PREF.

ZUMT 16546 (65.2 mm; Oita City; col. by Y. Yamamoto)

MIYAZAKI PREF.

ZUMT 21170 (64.8 mm), ZUMT 21171 (58.1 mm), ZUMT 21177 (65.9 mm; probably from Miyazaki Pref.; coll. by Fukushima Fisheries Cooperative Association)

ZUMT 22663 (124.4 mm; Miyazaki Pref.; coll. by Fukushima Fisheries Cooperative Association)

KAGOSHIMA PREF.

ZUMT 24037 (161.3 mm), ZUMT 24038 (126.1 mm), ZUMT 24039 (151.2 mm; Taniyama, Kagoshima City)

ZUMT 26920 (66.2 mm; Kagoshima Pref.)

OKINAWA PREF. ZUMT 42765 (91.3 mm), ZUMT 42766 (89.5 mm), ZUMT 42767 (86.8 mm; Okinawa-jima Island, Okinawa Islands; 8 July 1935; coll. by S. Inuo)

PRESICE LOCALITY UNKNOWN

ZUMT 27443 (63.5 mm; Chiba or Ibaraki Pref.)

ZUMT 45658 (30.1 mm), ZUMT 45659 (30.0 mm), ZUMT 45660 (39.0 mm), ZUMT 45661 (29.9 mm; Japan)

EAST CHINA SEA

ZUMT 51257 [158.9 mm; East China sea (obtained at Fukuoka Fish Market, Japan); 24 Dec. 1959; coll. by Y. Tominaga]

ZUMT 51322 (113.3 mm; East China Sea; coll. by Y. Tominaga)

ZUMT 51347 (79.6 mm), ZUMT 51348 (158.8 mm), ZUMT 51372 (115.3 mm; East China Sea)

ZUMT 57635 (159.4 mm), ZUMT 57641 (155.1 mm; East China Sea; 9 May 1988)

CHINA

ZUMT 54491 (135.4 mm), ZUMT 54492 [137.6 mm (body cut)], ZUMT 54493 (137.9 mm), ZUMT 54494 (136.9 mm), ZUMT 54495 (133.7 mm), ZUMT 54496 (134.0 mm), ZUMT 54497 [123.3 mm; East China Sea, east of Nantong, Jiangsu Province (32°35'N, 122°40'E), 23 m depth; 11 Oct. 1984]

TAIWAN

ZUMT 12837 (84.9 mm), ZUMT 12838 (78.8 mm; Keelung; coll. by T. Aoki)

ZUMT 22608 (142.1 mm; Kaohsiung; coll. by S. Yamada)

LOCALITY UNKNOWN

ZUMT 40217 (95.3 mm), ZUMT 40218 (92.9 mm), ZUMT 40300 (76.5 mm), ZUMT 46564 (104.5 mm), ZUMT 46565 (121.2 mm), ZUMT 62395 (131.0 mm), ZUMT 62396 (155.9 mm), ZUMT 62397 (230.7 mm), ZUMT 62507 (147.7 mm), ZUMT 62508 (132.1 mm), ZUMT 62509 (151.2 mm), ZUMT 62516 (140.3 mm), ZUMT 62517 (146.7 mm), ZUMT 62698 (149.7 mm), ZUMT 62699 (151.9 mm), ZUMT 62700 (148.9 mm), ZUMT 62713 (158.9 mm), ZUMT 62714 (155.0 mm), ZUMT 62715 (152.8 mm), ZUMT 62716 (152.4 mm), ZUMT 62717 (131.1 mm), ZUMT 62718 (109.1 mm), ZUMT 62719 (156.2 mm), ZUMT 62720 (115.6 mm), ZUMT 62721 (115.1 mm), ZUMT 62722 (144.8 mm), ZUMT 62723 (112.8 mm), ZUMT 62858 (91.7 mm), ZUMT 63019 (109.6 mm), ZUMT 63022 (23.8 mm), ZUMT 63023 (28.5 mm), ZUMT 63024 (29.5 mm), ZUMT 63239 (288.0 mm) ZUMT ABE 1647 (42.4 mm), ZUMT ABE 1649 (30.5 mm), ZUMT ABE 1845 (78.5 mm), ZUMT ABE 1893 (103.2 mm), ZUMT ABE 1940 (133.8 mm), ZUMT ABE 1958 (39.9 mm), ZUMT ABE 1959 (7 specimens, 22.3–33.6 mm), ZUMT ABE 1981 (42.3 mm), ZUMT ABE 2007 (40.8 mm), ZUMT ABE 2039 (26.4 mm), ZUMT 2040 (22.8 mm), ZUMT ABE 2043 (24.2 mm), ZUMT ABE 2044 (28.2 mm), ZUMT ABE 2099 (80.6 mm), ZUMT ABE 2100 (126.5 mm), ZUMT ABE 2133 (108.6 mm), ZUMT ABE 2198 (83.8 mm), ZUMT ABE 2199 (3 specimens, 57.9–74.5 mm), ZUMT ABE 2298 (4 specimens, 53.4–72.4 mm), ZUMT ABE 2373 (80.3 mm), ZUMT ABE 2397 (3 specimens, 67.0–73.1 mm), ZUMT ABE 7765 (47.4 mm), ZUMT ABE 10077 (110.7 mm; no data)

ZUMT 37772 (112.6 mm; locality unknown; coll. by T. Saito)

ZUMT 62259 (308.6 mm), ZUMT 62261 (319.5 mm), ZUMT 62286 (107.8 mm), ZUMT 62287 [105.2 mm; no data; originally stored with ZUMT 46869 (*Caranx ignobilis*; collection data unknown)]

ZUMT 62610 (109.3 mm), ZUMT 62611 (150.8 mm), ZUMT 62612 (115.3 mm), ZUMT 62613 (150.3 mm), ZUMT 62614 (152.4 mm), ZUMT 62615 (117.0 mm), ZUMT 62616 (108.7 mm), ZUMT 62617 [126.3 mm; no data; stained)]

Trachurus novaezelandiae Richardson, 1843

LOCALITY UNKNOWN

ZUMT 63428 (202.1 mm), ZUMT 63429 (193.8 mm; no data)

Trachurus symmetricus (Ayres 1855)

UNITED STATES

ZUMT 17667 (264.8 mm; California State, U.S.A.; 1926–1927; coll. by S. Tanaka)

Turrum coeruleopinnatum (Rüppell, 1830) マルヒラアジ

JAPAN

ZUMT 2541 (112.1 mm; Nagasaki Pref.; 3 Oct. 1909)
ZUMT 3749 (100.2 mm; obtained at Tokyo Market, Tokyo Met.)
ZUMT 20757 (76.4 mm; Wakayama Pref.; Jan. 1920)
ZUMT 22474 (72.7 mm; probably from Wakayama Pref.; collected by N. Ui, Tanabe City, Wakayama Pref.)
ZUMT 23799 (140.6 mm; Taniyama, Kagoshima City, Kagoshima Pref.; 20 July 1930)
ZUMT 33013 (71.8 mm; probably from Shizuoka Pref.; donation from Usami Elementary School, Ito City, Shizuoka Pref.)
ZUMT 33840 (56.9 mm; Shizuura, Numazu City, Shizuoka Pref.; donated by N. Kuroda)
ZUMT 35302 (47.6 mm; Kamakura City, Kanagawa Pref.)
ZUMT 42417 (109.3 mm; probably from Nagasaki Pref.)
ZUMT 44060 (109.3 mm; Tanabe City, Wakayama Pref.)
ZUMT 44760 (89.1 mm; Chiba City, Chiba Pref.)
ZUMT 53408 (126.5 mm; Ishigaki-jima Island, Yaeyama Islands, Okinawa Pref.)

PHILIPPINES

ZUMT 12637 (168.7 mm), ZUMT 12638 (167.2 mm; Philippines; coll. by U. Yamamura)

PALAU

ZUMT ABE 3767 (260.6 mm; Palau)
ZUMT 62343 (131.6 mm; probably from Palau) (originally stored with ZUMT ABE 5881 and 5882)

MALAYSIA

ZUMT 62528 (170.6 mm), ZUMT 62529 (183.5 mm), ZUMT 62531 (63.0 mm), ZUMT 62532 (73.0 mm; from Sarawak State, Borneo; donation from Sarawak Museum to I. Tomiyama)

LOCALITY UNKNOWN

ZUMT ABE 61-1049 (41.4 mm), ZUMT ABE 61-1073 (142.3 mm), ZUMT ABE 61-1077 (44.1 mm), ZUMT 62541 (164.9 mm; no data)

Turrum fulvoguttatum (Forsskål, 1775) ホシカイワリ

PHILIPPINES

ZUMT 12636 (205.7 mm), ZUMT 12648 (203.0 mm; Philippines; coll. by U. Yamamura)

PALAU

ZUMT ABE 2910 (331.6 mm; Palau)

Uraspis helvola (Forster, 1801) オキアジ

JAPAN

ZUMT 4399 (175.1 mm; probably from Shimane Pref.; coll. by Hamada Fisheries Experimental Station, Shimane Pref.)
ZUMT 7706 (182.8 mm; probably from Mie Pref.; donation from Yokkaichi Elementary School)
ZUMT 12459 (237.1 mm; obtained at Tokyo Market)
ZUMT 23983 (184.2 mm; Shibushi City, Kagoshima Pref.)
ZUMT 28267 (120.4 mm; Chiba Pref.; 1927; coll. by S. Obama)
ZUMT 50569 (209.4 mm; obtained at Fukuoka Fish Market)

LOCALITY UNKNOWN

ZUMT 39322 (146.3 mm), ZUMT 62253 (206.0 mm), ZUMT 62254 (206.0 mm), ZUMT 62400 (135.0 mm), ZUMT ABE 4358 (229.2 mm), ZUMT ABE 6457 (252.2 mm), ZUMT ABE 59-601 (193.3 mm; no data)

Uraspis uraspis (Günther, 1860) インドオキアジ

JAPAN

ZUMT 3474 (154.8 mm; obtained at Tokyo Market)

CHINA

ZUMT 51453 [191.2 mm; East China Sea, east of Zhoushan, Zhejiang Province (29°45'N, 123°45'E)]

LOCALITY UNKNOWN

ZUMT 62365 (73.6 mm), ZUMT ABE 10094 (44.9 mm; no data)

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Specimens of the family Lutjanidae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of the family Lutjanidae (excluding species belonging to genera previously included in the family Caesionidae) held in the Department of Zoology, The University Museum, The University of Tokyo is provided. A total of 575 specimens representing 42 species were confirmed, including the holotypes of *Aprion kanekonis* Tanaka, 1914 and *Paracaesio kusakarii* Abe, 1960, and paratypes of *Lutjanus stellatus* Akazaki, 1983, *P. kusakarii*, and *Paracaesio sordida* Abe & Shinohara, 1962.

Introduction

The snappers, included within the primarily marine family Lutjanidae, are distributed globally in warm waters (Allen and Talbot 1985; Allen 1985). Although the family has long been included in Perciformes (e.g., Matsubara 1955; Allen and Talbot 1985; Allen 1985; Anderson and Allen 2001; Shimada 2013a), it is now included in Lutjaniformes, together with Haemulidae, also previously included in Perciformes (Betancur-R et al. 2017). Moreover, species formerly included in the family Caesionidae (e.g., Carpenter 1987, 2001; Shimada 2013b), are now also included in the Lutjanidae (Betancur-R et al. 2017).

The family Lutjanidae includes many large-sized species, prized for their taste, with many being commercially important (Allen and Talbot 1985; Allen 1985; Anderson and Allen 2001; Yoshida 2013; Motomura et al. 2017; Iwatsuki 2018; Tanaka 2019). In Japan, many large-bodied lutjanid fishes, such as *Etelis coruscans* Valenciennes, 1862, *Paracaesio caerulea* (Katayama, 1934), and *Pristipomoides sieboldii* (Bleeker, 1855), are eaten and command high prices in markets (TMGMIB 2017; Koeda 2022).

Despite the commercial importance of lutjanids, the species-level taxonomy of the family remains confused, with many cryptic species still being found (White and Last 2012; Iwatsuki et al. 2015, 2016; Shimose et al. 2020; Shimose 2021). Moreover, distributional range extensions of lutjanid species are still frequently reported in Japan (e.g., Koeda et al. 2014; Jeong et al., 2015; Hata et al. 2017; Wada and Motomura 2019; Hibino and Nagano 2020; Sato et al. 2021). A list of specimens of Lutjanidae, comprising 42 species (excluding those previously included in Caesionidae) and deposited in the Department of Zoology, The University Museum, The University of Tokyo, is given below to aid future taxonomic studies and clarify some distributional records.

Materials and Methods

Specimens of Lutjanidae in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified following Allen and Talbot (1985), Allen (1985), Kishimoto et al. (1987), Anderson and Allen (2001), Shimada (2013a), Shimose et al. (2020), and Nakagawa et al. (2022). Contents included in parentheses following registration numbers are as follows: number of specimens (if more than 1), standard length, collection locality, collection date, and collector. Collection data of specimens are omitted if the same as that for the previous specimen. Although species treated as members of the family Caesionidae by

previous studies have been recently included in Lutjanidae (e.g., Betancur-R et al. 2017), those belonging to genera included in Caesionidae by Carpenter (1987) are not listed.

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room), with additional specimens in Room 407 (including types and S. Tanaka specimens), in the museum building. Most were stored in shelved containers, although some larger specimens were stored in a glass tank (labelled "Lutjanidae") in the same room, with the glass lid sealed with a silicon adhesive (as of June 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

A total of 510 lots with 575 specimens of 42 lutjanid species were confirmed in the ZUMT fish collection, including the holotypes of *Aprion kanekonis* Tanaka, 1914 [regarded as a junior synonym of *P. filamentosus* (Valenciennes, 1830); Allen 1985], *Paracaesio kusakarii* Abe, 1960, and *Paracaesio sordida* Abe & Shinohara, 1962 and paratypes of *Lutjanus stellatus* Akazaki, 1983, *P. kusakarii*, and *P. sordida*.

Species accounts

Family Lutjanidae　フエダイ科

***Aphareus furca* (Lacepède, 1801)　イシフエダイ**

JAPAN

ZUMT 6785 (127.4 mm; obtained at Tokyo Market, Tokyo Met.)

ZUMT 13939 [148.5 mm; probably collected from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]

***Aphareus rutilans* Cuvier, 1830　オオグチイシチビキ**

JAPAN

ZUMT 22683 (87.6 mm; Ajiro, Misaki, Miura City, Kanagawa Pref.; Aug. 1913)

ZUMT 57773 [approx. 153.3 mm (bisected at midbody); Manazuru Port, Manazuru Town, Kanagawa Pref.; Sept. 1979; coll. with set net]

ZUMT ABE 62-23 (164.1 mm; Manazuru Town, Kanagawa Pref.; 1962)

PALAU

ZUMT ABE 5709 (420.3 mm; Palau)

LOCALITY UNKNOWN

ZUMT 63691 (619.0 mm), ZUMT ABE 60-1530 (158.5 mm; no data)

***Aprion virescens* Valenciennes, 1830　アオチビキ**

JAPAN

ZUMT 17282 (252.6 mm; Yaeyama Islands, Okinawa Pref.; coll. by S. Tanabe)

ZUMT 21141 (142.5 mm; probably collected from Mie Pref.; coll. by Mie Normal School)

ZUMT 34149 (226.5 mm; probably collected from Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)

ZUMT 41634 (187.7 mm), ZUMT 42420 (176.2 mm), ZUMT 42421 (164.8 mm; Nagasaki Pref.)

ZUMT 46615 (156.6 mm; Hachijo-jima Island, Izu Islands)

ZUMT 46727 (141.7 mm; obtained at Tokyo Market, Tokyo Met.)
ZUMT 63025 (180.9 mm), ZUMT 63461 [209.1 mm; Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 1 Dec. 1954]
ZUMT 63460 (165.9 mm; Mera, Minamiizu Town, Shizuoka Pref; 1979)
ZUMT 64268 (109.6 mm; Izu-oshima Island, Izu Islands; 1993)

PALAU
ZUMT ABE 4010 (263.1 mm; Palau)

LOCALITY UNKNOWN
ZUMT 63462 (217.2 mm), ZUMT 63463 (208.9 mm), ZUMT ABE 59-656 (159.4 mm), ZUMT ABE 61-855 (192.9 mm), ZUMT ABE 61-856 (145.2 mm; no data)

Etelis carbunculus Cuvier, 1828　ハチジョウアカムツ

JAPAN
ZUMT 14415 (255.2 mm; Okinawa Pref.; coll. by S. Sakaguchi)
ZUMT 47670 (240.1 mm; Okinawa Pref.; coll. by T. Abe)
ZUMT 47822 (280.8 mm; obtained at Tokyo Market, Tokyo Met.; 18 Feb. 1953)

Etelis coruscans Valenciennes, 1862　ハマダイ

JAPAN
ZUMT 9815 (229.1 mm; Omurodashi Bank, southeast of To-shima Island, Izu Islands; Aug. 1920; coll. by Y. Okada and K. Aoki)
ZUMT 40411 (181.0 mm; Okinawa Pref.; coll. by S. Sakaguchi)
ZUMT 50533 (260.4 mm; obtained at Kagoshima Fish Market, Kagoshima Pref.; 9 Sept. 1959; coll. by T. Abe)
ZUMT 52593 (161.3 mm; obtained at Naha Fish Market, Okinawa Pref.; 3 June 1966)

PALAU
ZUMT ABE 4240 (221.6 mm; Palau)

Lipocheilus carnolabrum (Chan, 1970)　キビレフエダイ

LOCALITY UNKNOWN
ZUMT 63684 (434.5 mm; no data)

Lutjanus argentimaculatus (Forsskål, 1775)　ゴマフエダイ

JAPAN
ZUMT 3655 [73.6 mm; probably from Shizuoka Pref.; coll. by T. Saito (Hamamatsu City, Shizuoka Pref.)]
ZUMT 11145 (109.7 mm), ZUMT 28715 (94.7 mm), ZUMT 28716 (68.1 mm; Arakawa, Ishigaki City, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; May 1923; coll. by H. Kuroiwa)
ZUMT 14299 [179.7 mm; probably from Okinawa Pref.; 16 Feb. 1924; coll. by H. Yashiro (Naha Fish Market, Okinawa Pref.)]
ZUMT 15589 [442.1 mm; Numazu City, Shizuoka Pref. (obtained at Tokyo Fish Market); collected before 1926]
ZUMT 23521 (173.5 mm; Kochi City, Kochi Pref.; 15 Jan. 1931; coll. by T. Kamohara)
ZUMT 28714 (78.4 mm; Arakawa, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; May 1923; coll. by H. Kuroiwa)

ZUMT 58325 [approx. 149.0 mm (bisected at midbody)], ZUMT 58339 (4 specimens, 22.6–34.8 mm), ZUMT 58340 (40.2 mm; Yonada-gawa River estuary, Iriomote-jima Island. Yaeyama Islands, Ryukyu Archipelago; 13 July 1988; casting net, coll. by H. Senou)
ZUMT 58545 (36.0 mm; mangrove area, Urauchi River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 15 July 1988; coll. by H. Senou and M. Aizawa)
ZUMT 58752 (2 specimens, 17.6–19.1 mm; Sukuji-gawa River estuary, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)

TAIWAN
ZUMT 12383 (57.0 mm; Tamsui River, Xinbei City; coll. by T. Aoki)
ZUMT 25086 (84.4 mm; Taiwan; coll. by M. Imai)

PHILIPPINES
ZUMT 42164 (94.3 mm), ZUMT 42195 (153.2 mm), ZUMT 42196 (102.9 mm), ZUMT 42249 (106.0 mm), ZUMT 42294 (97.2 mm), ZUMT 42295 (150.0 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU
ZUMT ABE 2849 (366.7 mm), ZUMT ABE 2906 (258.6 mm), ZUMT ABE 2932 (180.6 mm), ZUMT ABE 2996 (177.2 mm; Palau; collected between 1936 and 1937)
ZUMT 42742 (119.5 mm; Palau; coll. by Y. Haneda)

SINGAPORE
ZUMT 41036 (62.2 mm; Singapore; 12 Mar. 1910; coll. by I. Iijima and K. Aoki)

Lutjanus bengalensis (Bloch, 1790)　ベンガルフエダイ

JAPAN
ZUMT 14719 (101.6 mm), ZUMT 14721 (93.6 mm), ZUMT 14725 (95.6 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by H. Yashiro)
ZUMT 17425 (86.2 mm), ZUMT 17426 (82.9 mm), ZUMT 17427 (86.0 mm; Naha City, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 20520 (119.0 mm; Wakayama Pref.)
ZUMT 23539 (159.3 mm; probably from Okinawa Pref.; July 1928; coll. by Okinawa Prefectural Experimental Station)

PHILIPPINES
ZUMT 11027 (118.8 mm), ZUMT 11058 (143.3 mm), ZUMT 11119 (115.0 mm; Philippines; coll. by U. Yamamura)

LOCALITY UNKNOWN
ZUMT 46383 (138.4 mm), ZUMT 46384 (133.8 mm; no data)

Lutjanus bohar (Fabricius, 1775)　バラフエダイ

JAPAN
ZUMT 11239 (183.4 mm), ZUMT 15327 [97.5 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]
ZUMT 17336 (114.1 mm; Naha City, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 23917 (249.5 mm; Naya, Kagoshima City, Kagoshima Pref.)
ZUMT 52583 (192.5 mm; obtained at Naze Fish Market, Amami City, Amami-oshima Island, Ryukyu Archipelago; 31 May 1966)

PALAU

ZUMT 63672 (71.8 mm), ZUMT ABE 2952 (253.3 mm), ZUMT ABE 5588 (387.2 mm; Palau; collected between 1936 and 1937)

LOCALITY UNKNOWN

ZUMT 63785 (135.0 mm), ZUMT ABE 12600 (188.6 mm; no data)

Lutjanus decussatus (Cuvier, 1828)　アミメフエダイ

JAPAN

ZUMT 17302 (124.4 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by S. Tanabe)

PHILIPPINES

ZUMT 11038 (117.0 mm), ZUMT 11067 (119.2 mm), ZUMT 42222 (120.9 mm; Philippines; coll. by U. Yamamura)

ZUMT 40929 (60.0 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

Lutjanus fulvus (Forster, 1801)　オキフエダイ

JAPAN

KANAGAWA PREF.

ZUMT 20962 (47.3 mm; Misaki, Miura City, Kanagawa Pref.)

ZUMT 48619 (81.4 mm; Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 7 Nov. 1955; coll. by I. Tomiyama)

KOCHI PREF.

ZUMT 23495 (89.0 mm; Kochi City; 26 Feb. 1931; coll. by T. Kamohara)

ZUMT 47053 (96.3 mm; probably from Kochi Pref.)

KAGOSHIMA PREF.

ZUMT 20488 (56.7 mm; Yaku-shima Island, Osumi Islands; 10 July 1921; coll. by H. Kuroiwa)

ZUMT 21955 (131.0 mm; Kagoshima Pref.)

ZUMT 29608 (70.5 mm; Naze, Amami City, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; 20 Oct. 1909)

ZUMT 32104 (56.7 mm; Amagi Town, Tokuno-shima Island, Amami Islands, Ryukyu Archipelago)

ZUMT 38150 (74.8 mm; Tokuno-shima Island, Amami Islands, Ryukyu Archipelago; Aug. 1937)

ZUMT 40716 (64.1 mm), ZUMT 40720 (51.6 mm; Amami-oshima Island, Amami Islands,Ryukyu Archipelago)

ZUMT 41157 [69.8 mm; probably from Amami-oshima Island, Amami Islands, Ryukyu Archipelago; coll. by K. Enokiya (Kagoshima Prefectural Oshima Junior High School)]

ZUMT 44440 (39.3 mm; Kominato, Naze, Amami City, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; 29 Aug. 1916; coll. by K. Nagai)

ZUMT 54076 (154.0 mm; Kuji, Setouchi Town, Amami o-shima Island, Amami Islands, Ryukyu Archipelago; 20 May 1966; coll. by Y. Tominaga)

OKINAWA PREF.

ZUMT 8813 (74.0 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by H. Kuroiwa)

ZUMT 11263 [125.7 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior Hight School)]

ZUMT 17014 (79.0 mm), ZUMT 17015 (108.2 mm), ZUMT 17023 (88.3 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 17322 (56.7 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 23555 (65.2 mm; probably from Okinawa Prefecture; coll. by Okinawa Prefectural Fisheries Experimental Station)

ZUMT 58614 (2 specimens, 40.3–63.0 mm, ZUMT 60004 (55.1 mm; Urauchi-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 16 Aug. 1989; coll. by M. Aizawa)

ZUMT 58745 (20 specimens, 23.2–52.4 mm; Sukuji-gawa River estuary, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)
ZUMT 60225 (3 specimens, 59.9–73.1 mm; Omija-gawa River estuary, Iriomote-jima Island, Yaeyama Islands; 19 Aug. 1989)
ZUMT 60289 (1, 42.4 mm; Yonada-gawa River estuary, Iriomote-jima Island, Yaeyama Islands; 20 Aug. 1989)

OGASAWARA ISLANDS

ZUMT 45917 (34.4 mm; Ogasawara Islands)

PHILIPPINES

ZUMT 40935 (107.0 mm; Jolo Island, Philippines; Feb. 1902; coll. by I. Iijima and K. Aoki)
ZUMT 41954 (50.0 mm), ZUMT 41955 (52.7 mm), ZUMT 41960 (51.6 mm; Basilan; coll. U. Yamamura)

PALAU

ZUMT 63669 (71.9 mm), ZUMT 63670 (60.9 mm), ZUMT 63671 (65.2 mm), ZUMT 63752 (58.9 mm), ZUMT ABE 2695 (190.0 mm), ZUMT ABE 2714 (168.0 mm), ZUMT ABE 2736 (65.1 mm), ZUMT ABE 2742 (176.9 mm), ZUMT ABE 2820 (181.1 mm), ZUMT ABE 2828 (183.9 mm), ZUMT ABE 2830 (169.6 mm), ZUMT ABE 3400 (122.1 mm), ZUMT ABE 3405 (140.7 mm), ZUMT ABE 3704 (121.1 mm), ZUMT ABE 3705 (121.4 mm), ZUMT ABE 3706 (95.4 mm), ZUMT ABE 3707 (108.0 mm), ZUMT ABE 3708 (102.0 mm), ZUMT ABE 3823 (131.3 mm), ZUMT ABE 3932 (129.5 mm; Palau)
ZUMT 42741 (95.1 mm), ZUMT 42743 (125.2 mm), ZUMT 42744 (112.0 mm; Palau; coll. by Y. Haneda)

LOCALITY UNKNOWN

ZUMT 41156 (49.7 mm), ZUMT 41184 (42.7 mm), ZUMT 43161 (45.7 mm), ZUMT 63777 (61.3 mm), ZUMT 63778 (56.4 mm), ZUMT 63782 (178.3 mm), ZUMT 63786 (197.1 mm), ZUMT ABE 61-1084 (48.6 mm), ZUMT ABE 61-1108 (48.2 mm), ZUMT ABE 61-945 (38.4 mm; no data)

Lutjanus fulviflamma (Forsskål, 1775)　ニセクロホシフエダイ

JAPAN

ZUMT 15346 [105.5 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Daiichi Junior High School)]
ZUMT 17016 (124.0 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 17374 (86.1 mm), ZUMT 17360 (105.3 mm; Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 21059 (101.3 mm; purchased at Naha City, Okinawa Pref.; 29 May 1900; coll. by M. Miyajima)
ZUMT 40347 (103.6 mm), ZUMT 40433 (101.3 mm; Okinawa Pref.; coll. by S. Sakaguchi)
ZUMT 54111 (194.4 mm; Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago)
ZUMT 58460 (18.1 mm; Amitori Bay. Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; coll. by H. Senou and M. Aizawa)
ZUMT 58701 (3 specimens, 15.9–22.3 mm; Sukuji Beach, Kabira, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)
ZUMT 58743 (8 specimens, 20.4–43.4; Sukuji-gawa River estuary, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)
ZUMT 60711 (15.2 mm; Sukuji, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 29 July 1989)

TAIWAN

ZUMT 18440 (59.5 mm; Keelung City; July 1928; coll. by H. Sato)

PHILIPPIPNES

ZUMT 25509 (142.2 mm; Philippines; coll. by A. W. C. T. Herre)

ZUMT 40920 (94.0 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

PALAU

ZUMT 63651 (84.3 mm), ZUMT 63652 (91.8 mm), ZUMT 63653 (84.4 mm), ZUMT 63654 (102.1 mm), ZUMT 63655 (97.1 mm), ZUMT 63656 (92.2 mm), ZUMT 63657 (102.0 mm), ZUMT ABE 2696 (240.0 mm), ZUMT ABE 2743 (178.5 mm), ZUMT ABE 2826 (165.6 mm), ZUMT ABE 3711 (125.6 mm), ZUMT ABE 3712 (123.7 mm), ZUMT ABE 3820 (217.8 mm), ZUMT ABE 3933 (107.5 mm), ZUMT ABE 4012 (109.6 mm), ZUMT ABE 4100 (94.0 mm), ZUMT ABE 5597 (130.8 mm; Palau)

TANIZANIA

ZUMT 52844 (84.1 mm), ZUMT 52845 (75.8 mm), ZUMT 52856 (90.1 mm), ZUMT 52857 (76.9 mm), ZUMT 52858 (79.8 mm; Mkome, Pangani; 19 July 1972)

AFRICAN COAST (tentative)

ZUMT 53002 (66.1 mm; probably from African coast)

LOCALITY UNKNOWN

ZUMT 53309 (65.3 mm; no data; registered as “KT-74-17 1-2”), ZUMT 63682 (120.0 mm; no data)

Lutjanus gibbus (Forsskål, 1775)　ヒメフエダイ

JAPAN

IZU ISLANDS

ZUMT 44278 (35.3 mm; Hachijo-jima Island, Izu Islands; Aug. 1922; coll. by Y. Uchiyama)

ZUMT 64269 (60.4 mm; Izu-oshima Island, Izu Islands; 1993)

KANAGAWA PREF.

ZUMT ABE 544 (54.8 mm; Koajiro, Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 16 Dec. 1935)

CHIBA PREF.

ZUMT 44406 (67.1 mm; probably from Chiba Pref.)

WAKAYAMA PREF.

ZUMT 22649 (92.8 mm; Tanabe City, Wakayama Pref.)

KAGOSHIMA PREF.

ZUMT 18856 (110.9 mm; Kagoshima Pref.)

ZUMT 29609 (71.3 mm; Naze, Amami City, Amami-oshima Island, Amami Islands; Ryukyu Archipelago; 20 Oct. 1909; coll. by Amami-oshima Junior High School)

OKINAWA PREF.

ZUMT 15173 (90.2 mm), ZUMT 15201 [114.4 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior Hight School)]

ZUMT 17238 (69.6 mm), ZUMT 17239 (61.0 mm; Unten Port, Nakijin Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 17386 (66.3 mm; Naha City, Okinawa Pref.; coll. by S. Tanabe)

ZUMT 58458 (32.6 mm; Amitori Bay, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; H. Senou and M. Aizawa)

PALAU

ZUMT 63667 (146.2 mm), ZUMT 63668 (94.7 mm), ZUMT ABE 2797 (72.5 mm), ZUMT ABE 2930 (192.3 mm), ZUMT ABE 2931 (215.4 mm), ZUMT ABE 2995 (267.3 mm), ZUMT ABE 3709 (113.3 mm; Palau)

LOCALITY UNKNOWN

ZUMT ABE 48 (2 specimens, 37.0–61.8 mm; no data)

Lutjanus goldiei (Macleay, 1882)　ウラウチフエダイ

JAPAN

ZUMT 60061 (46.2 mm), ZUMT 60067 (20.7 mm; mountain stream of Urauchi River, Iriomote-jima Island, Yaeyama Islands, Okinawa Pref.; 17 Aug. 1989)

Lutjanus johnii (Bloch, 1792)　カドガワフエダイ

TAIWAN

ZUMT 25167 (75.7 mm; Keelung Port, Keelung City; July 1930; coll. by M. Imai)

LOCALITY UNKNOWN

ZUMT 39377 [162.7 mm; locality unknown (labelled as southern Japan, but probably erroneous)]

Lutjanus kasmira (Fabricius, 1775)　ヨスジフエダイ

JAPAN

ZUMT 14720 (95.7 mm), ZUMT 14722 (88.0 mm), ZUMT 14723 (99.4 mm), ZUMT 14727 (107.2 mm), ZUMT 14729 (105.2 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by T. Yashiro)

ZUMT 17018 (90.3 mm; Itoman City, Okinawa-jima Island, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 17248 (83.5 mm; Unten, Nakijin Village, Okinawa-jima Island, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 18921 (103.5 mm; Kiragawa, Muroto City, Kochi Pref.; 27 Mar. 1929; coll. by T. Kamohara)

ZUMT 20208 (168.3 mm; Wakayama Pref.; Jan. 1920; coll. by N. Ui)

ZUMT 21805 [160.5 mm; probably from Amami-oshima Island, Amami Islands, Ryukyu Archipelago; donated by T. Mukai (Miyakonojo Junior High School)]

ZUMT 23929 (198.0 mm), ZUMT 23938 (185.2 mm), ZUMT 24101 (233.4 mm; Naya, Kagoshima City, Kagoshima Pref.)

ZUMT 39825 (87.4 mm; Okinawa Pref.; coll. by S. Sakaguchi)

ZUMT 42815 (90.1 mm; Hachijo-jima Island, Izu Islands; coll. by Sept. 1922; coll. by M. Uchiyama)

ZUMT 45906 (183.0 mm; Ogasawara Islands)

ZUMT 58457 (2 specimens, 35.7–45.9 mm; Amitori Bay, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; coll. by H. Senou and M. Aizawa)

PALAU

ZUMT 63662 (149.4 mm), ZUMT 63663 (146.1 mm), ZUMT 63664 (93.3 mm; Palau)

LOCALITY UNKNOWN

ZUMT ABE 61-924 (91.5 mm; no data)

Lutjanus lutjanus Bloch, 1790　キンセンフエダイ

TAIWAN

ZUMT 2447 (142.7 mm; Kaohsiung City; Sept. 1908; coll. by K. Akamatsu)

ZUMT 22610 (85.5 mm; Kaohsiung City; coll. by S. Yamada)

ZUMT 64091 (82.8 mm; Ximending Market, Taipei City; 3 Oct. 1929)

PHILIPPINES

ZUMT 41009 (100.6 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)
ZUMT 41952 (46.2 mm; Basilan; coll. by U. Yamamura)
ZUMT 42192 (103.3 mm; Philippines; 1926; coll. by U. Yamamura)

PALAU

ZUMT ABE 2850 (175.3 mm), ZUMT 42751 (54.4 mm; Palau)
ZUMT 31732 [158.8 mm; probably Palau; labelled as「南洋」("Nan-yo", general term for Micronesian islands)]

INDONESIA

ZUMT 31821 (104.8 mm; Buton, southeast off Sulawesi)

TANZANIA

ZUMT 52869 (97.3 mm; Kunduchi, Dal es Salaam)

LOCALITY UNKNOWN

ZUMT 62659 (85.9 mm; no data)

***Lutjanus malabaricus* (Bloch & Schneider, 1801)　ヨコフエダイ**

JAPAN

ZUMT 7268 (182.7 mm; Nagasaki Pref.; coll. by I. Kaneko)
ZUMT 16957 (80.8 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 65629 (510.0 mm; Okinawa Pref.; 29 July 1928)

EAST CHINA SEA

ZUMT 51224 (207.5 mm; East China Sea; probably obtained at Fukuoka Fish Market, Fukuoka Pref., Japan; Dec. 1959)

TAIWAN

ZUMT 14998 (134.2 mm; Tainan City; coll. by T. Aoki)
ZUMT 19673 (37.0 mm), ZUMT 19674 [40.3 mm; probably collected from Keelung City; coll. by H. Sato (Taipei-Keelung Junior High School)]
ZUMT 63735 (205.9 mm; Chitosecho Market, Taipei City; 9 Mar. 1931)

PHILIPPINES

ZUMT 40782 (92.4 mm), ZUMT 40783 (92.6 mm; Manilla, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)
ZUMT 42037 (73.3 mm; Philippines; coll. by U. Yamamura)

SINGAPORE

ZUMT 41037 (72.0 mm; Singapore; 12 Mar. 1910; coll. by K. Iijima and K. Aoki)

LOCALITY UNKNOWN

ZUMT 46817 (227.0 mm), ZUMT 63734 (250.4 mm; no data)
ZUMT 63932 (150.6 mm; locality unknown; tagged as"百五十四")

Lutjanus monostigma **(Cuvier, 1828)　イッテンフエダイ**

JAPAN

ZUMT 14318 (119.7 mm; obtained at Naha Market, Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 6 Feb. 1925; coll. by H. Yashiro)

ZUMT 20489 (56.3 mm; Yaku-shima Island, Osumi Islands, Ryukyu Archipelago; 10 July 1921)

ZUMT 31116 (65.4 mm; Shizuura, Numazu City, Shizuoka Pref.)

ZUMT 42642 (76.5 mm), ZUMT 42643 (94.7 mm; Okinawa Pref.; coll. by S. Sakaguchi)

ZUMT 55570 (242.8 mm; obtained at Okinawa Prefectural Fisheries Association; Okinawa-jima Island, Ryukyu Archipelago, Okinawa Pref.; 16 Sept. 1986; coll. by H. Senou)

ZUMT 58327 (116.9 mm; Yonada-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 13 July 1988; coll. by H. Senou)

ZUMT 58461 (26.3 mm; Amitori Bay, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; H. Senou and M. Aizawa)

ZUMT 58741 (56.3 mm), ZUMT 58742 (51.1 mm), ZUMT 58744 (6 specimens, 24.6–57.1 mm; Sukuji-gawa River estuary, Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 19 July 1988)

ZUMT 60007 (66.8 mm; Urauchi-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 16 Aug. 1989)

ZUMT 62994 (43.6 mm; Izu-oshima Island; 1 Aug. 1992)

TAIWAN

ZUMT 55249 (19.9 mm; Shihli Beach, Penghu Island; 31 May 1970; coll. by Y. Tominaga)

ZUMT 63283 (33.7 mm; Tamsui Beach, Xinbei City; 19 Oct. 1930)

CHINA

ZUMT 22815 (79.1 mm; Hainan Island)

ZUMT 41149 (78.4 mm), ZUMT 41150 (92.2 mm; Guangdong Province)

PHILIPPINES

ZUMT 12713 (63.9 mm; Philippines; coll. by U. Yamamura)

ZUMT 41942 (42.5 mm), ZUMT 41943 (38.0 mm), ZUMT 41944 (44.1 mm), ZUMT 41951 (60.0 mm), ZUMT 41953 (49.6 mm; Basilan; coll. by U. Yamamura)

SINGAPORE

ZUMT 40751 (67.0 mm; Singapore; 12 Mar. 1910; coll. by I. Iijima and K. Aoki)

PALAU

ZUMT ABE 2827 (151.6 mm), ZUMT ABE 2904 (137.3 mm), ZUMT ABE 2905 (151.1 mm), ZUMT ABE 3698 (162.6 mm), ZUMT ABE 3822 (138.4 mm; Palau)

TANZANIA

ZUMT 52859 (117.5 mm; Pangani; 19 July 1972)

AFRICAN COAST

ZUMT 53014 (48.1 mm; African coast)

LOCALITY UNKNOWN

ZUMT 62573 (85.3 mm; locality unknown; tagged as “3164”)

ZUMT ABE 7785 (78.5 mm; no data)

Lutjanus ophuysenii (Bleeker, 1860)　ヨコスジフエダイ

JAPAN

ZUMT 2276 (98.9 mm; Nagasaki Pref.; 27 June 1909)
ZUMT 3290 (156.6 mm; Misumi, Umi City, Kumamoto Pref.; Nov. 19011; coll. by S. Kawakami)
ZUMT 4874 (99.8 mm; Nu-shima Island, Minamiawaji City, Hyogo Pref.)
ZUMT 7451 (123.1 mm), ZUMT 8157 [95.9 mm; probably from Wakayama Pref.; coll. by I. Hoshino (Hiro, Hirokawa, Arida City, Wakayama Pref.)]
ZUMT 9588 [86.1 mm; probably from Wakayama Pref.; coll. by N. Ui (Tanabe City, Wakayama Pref.)]
ZUMT 19950 (120.4 mm; Okinawa Pref.)
ZUMT 20517 (77.6 mm), ZUMT 22017 (51.4 mm), ZUMT 22044 [approx. 88.3 mm (bisected at midbody); Wakayama Pref.; Jan. 1920]
ZUMT 21726 (83.5 mm; Wakayama Pref. Aug. 1904)
ZUMT 21728 (85.3 mm; Wakayama Pref.)
ZUMT 31179 (257.1 mm; Matsue City, Shimane Pref.; coll. by R. Yanai)
ZUMT 44770 [approx. 82.6 mm (bisected at midbody)], ZUMT 44771 (82.4 mm; Uozu or Namerikawa City, Toyama Pref.; coll. by I. Tomiyama)
ZUMT 48072 (244.1 mm; obtained at Ainoura Branch of Sasebo Fish Market, Sasebo City, Nagasaki Pref.; 1 June 1953; coll. by I. Tomiyama)
ZUMT 52017 (254.3 mm; obtained at Fukuoka Fish Market; 20 June 1960; coll. by Y. Tominaga)

EAST CHINA SEA

ZUMT 52238 [185.4 mm; East China Sea, 200 km ca. east off Shanghai (30°45’N, 124°15’E); 23 May 1960; coll. by FV Ten’yo-maru]

TAIWAN

ZUMT 14860 (96.7 mm; Tainan City; coll. by T. Aoki)
ZUMT 22599 (115.2 mm; Kaohsiung City; coll. by S. Yamada)

LOCALITY UNKNOWN

ZUMT 63783 (198.6 mm; no data)

Lutjanus quinquelineatus (Bloch, 1790)　ロクセンフエダイ

JAPAN

ZUMT 9587 [86.2 mm; probably collected from Wakayama Pref.; coll. by I. Hoshino (Hiro, Hirokawa, Arida City, Wakayama Pref.)]
ZUMT 14726 (99.6 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by H. Yashiro)
ZUMT 17019 (82.3 mm), ZUMT 17020 (75.9 mm), ZUMT 17021 (81.1 mm), ZUMT 17022 (58.9 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 17428 (173.8 mm; Naha City, Okinawa Pref.; coll. by S. Tanabe)
ZUMT 58456 (17 specimens, 26.3–31.9 mm; Amitori Bay, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; coll. by H. Senou and M. Aizawa)

TAIWAN

ZUMT 18438 (53.1 mm), ZUMT 18439 (51.7 mm; Keelung City; 7 Aug. 1928; coll. by H. Sato)
ZUMT 19661 [110.1 mm; probably from Taiwan; coll. by H. Sato (Keelung Junior High School, Keelung City, Taiwan)]

PALAU

ZUMT 63665 (82.4 mm), ZUMT 63666 (85.5 mm; Palau)

LOCALITY UNKNOWN

ZUMT 63787 (80.3 mm), ZUMT ABE 59-496 (161.2 mm; no data)

Lutjanus rivulatus (Cuvier, 1828)　ナミフエダイ

JAPAN

ZUMT 58613 (51.6 mm; Urauchi-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 16 July 1988; coll. by M. Aizawa)

ZUMT 58462 (29.4 mm; Amitori Bay, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 1–3 m depth; 14 July 1988; coll. by H. Senou and M. Aizawa)

PALAU

ZUMT ABE 3853 (64.8 mm; Palau)

LOCALITY UNKNOWN

ZUMT 63166 (147.8 mm; no data)

Lutjanus russellii (Bleeker, 1849)　クロホシフエダイ

JAPAN

CHIBA PREF.

ZUMT 27562 (32.9 mm; Chiba Pref.)

ZUMT 34341 (26.8 mm; Okitsu, Katsuura City; Aug. 1930; coll. by S. Masuda)

ZUMT 34975 (23.5 mm; Chiba City; 1925)

KANAGAWA PREF.

ZUMT 48618 (81.3 mm; Aburatsubo, Misaki, Miura City; 7 Nov. 1955; coll. by I. Tomiyama)

SHIZUOKA PREF.

ZUMT 4416 (141.5 mm; Uchiura, Numazu City; coll. by T. Aoki)

ZUMT 44890 (67.6 mm), ZUMT 44896 [43.4 mm; probably from Shizuoka Pref.; coll. by N. Onodera (Mitsuke Junior High School, Iwata City)]

AICHI PREF.

ZUMT 6060 (46.8 mm; Nagoya City)

WAKAYAMA PREF.

ZUMT 7452 [118.3 mm; probably from Wakayama Pref.; coll. by I. Hoshino (Hiro, Arida, Wakayama City, Wakayama Pref.)]

ZUMT 8542 [199.4 mm; probably from Wakayama Pref.; coll. by N. Ui (Tanabe City)]

ZUMT 8158 [67.9 mm; probably from Wakayama Pref.; coll. by I. Hoshino (Hiro, Arida City)]

ZUMT 21991 (67.2 mm), ZUMT 22023 (61.1 mm; Wakayama Pref.)

ZUMT 22034 (86.9 mm; Wakayama Pref.; Jan. 1920)

ZUMT 22445 (84.2 mm; Tanabe City; coll. N. Ui)

ZUMT 22533 (63.1 mm; Tanabe City; Jan. 1920; coll. by N. Ui)

HYOGO PREF.

ZUMT 26844 (29.6 mm; Fukura, Minamiawaji City, Awaji-shima Island, Hyogo Pref.; 5 Mar. 1912; coll. by R. Uchimura)

KOCHI PREF.

ZUMT 9229 (80.8 mm), ZUMT 9230 (84.9 mm), ZUMT 9231 (76.3 mm), ZUMT 9232 (65.6 mm), ZUMT 9233 (67.5 mm), ZUMT 9234 (67.2 mm), ZUMT 9235 (61.0 mm; Urado Bay, Kochi City; Sept. 1919; coll. by S. Tanaka)

ZUMT 21929 (123.9 mm; Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)

ZUMT 34609 (79.3 mm; Kochi Pref.)

MIYAZAKI PREF.

ZUMT 18841 (69.3 mm; Miyazaki Pref.)

KAGOSHIMA PREF.

ZUMT 23872 (71.2 mm; Naya, Kagoshima City)

ZUMT 24088 (70.1 mm), ZUMT 24094 (47.4 mm; Taniyama, Kagoshima City)

OKINAWA PREF.

ZUMT 14425 (156.3 mm), ZUMT 14426 (153.7 mm), ZUMT 14427 (115.4 mm; Okinawa Pref.; coll. by S. Tanabe)

ZUMT 17017 (124.0 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 17222 (77.0 mm; Baten Port, Nanjo City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 58545 (39.3 mm; Urauchi-gawa River estuary, Iriomote-jima Island, Yaeyama Islands, Ryukyu Archipelago; 15 July 1988; coll. by H. Senou and M. Aizawa)

TAIWAN

ZUMT 14912 (71.5 mm), ZUMT 14913 (75.5 mm), ZUMT 18434 [67.2 mm; probably from Taiwan; coll. by T. Aoki (Government General of Taiwan)]

ZUMT 18441 (49.8 mm; Keelung City; July 1928; coll. by H. Sato)

ZUMT 23562 [74.7 mm; probably from Taiwan; coll. by S. Arakawa (Taipei High School)]

ZUMT 23591 (64.1 mm; Kaohsiung; 5 Mar. 1912; coll. by R. Uchimura)

ZUMT 23624 [54.1 mm; probably from Taiwan; coll. by S. Arakawa (Taipei High School)]

PHILIPPINES

ZUMT 40922 (57.9 mm; Jolo; Feb. 1909; coll. by K. Iijima and K. Aoki)

ZUMT 42108 (41.3 mm), ZUMT 42109 (110.1 mm), ZUMT 42110 (110.7 mm), ZUMT 42111 (103.9 mm), ZUMT 42112 (69.1 mm; Philippines; Jan. 1938; coll. by U. Yamamura)

ZUMT 42163 (124.2 mm; Philippines; 1926; coll. by U. Yamamura)

SINGAPORE

ZUMT 40750 (85.5 mm; Singapore), ZUMT 40752 (66.3 mm; Singapore; 12 Mar. 1910; coll. by I. Iijima and K. Aoki)

PALAU

ZUMT 63673 (111.7 mm), ZUMT ABE 3401 (134.9 mm), ZUMT ABE 3412 (66.5 mm; Palau)

LOCALITY UNKNOWN

ZUMT 46916 (96.9 mm), ZUMT 63696 (184.4 mm), ZUMT ABE 7778 (51.7 mm), ZUMT ABE 7779 (33.9 mm), ZUMT ABE 7780 (73.2 mm), ZUMT ABE 7781 (45.4 mm), ZUMT ABE 7782 (38.9 mm), ZUMT ABE 7783 (28.4 mm), ZUMT ABE 7784 (26.0 mm), ZUMT ABE 61-1086 (75.3 mm; no data)

ZUMT 63929 (61.3 mm; no locality; tagged as “0,014”)

Lutjanus sebae (Cuvier, 1816)　センネンダイ

JAPAN

ZUMT 8011 (99.0 mm), ZUMT 8069 (91.3 mm), ZUMT 8070 (82.8 mm), ZUMT 8071 [57.6 mm; probably from Wakayama Pref.; coll. by N. Ui (Tanabe City, Wakayama Pref.)]

ZUMT 21708 (89.3 mm; Wakayama Pref.)

ZUMT 21992 (84.7 mm; Wakayama Pref.; Jan. 1920)

PHILIPPINES
ZUMT 14620 (127.5 mm; Philippines)

Lutjanus stellatus Akazaki, 1983　フエダイ

JAPAN
ZUMT 4366 (142.5 mm; Saiki City, Oita Pref.; 12 Jan. 1915; coll. by K. Suito)
ZUMT 23640 (245.5 mm; Kochi Pref.; coll. by T. Kamohara)
ZUMT 55534 (68.3 mm; Mera, Izu Town, Shizuoka Pref.; 16 Sept. 1984)
ZUMT 23809 (112.2 mm; Naya, Kagoshima City, Kagoshima Pref.)
ZUMT 23900 (160.2 mm; Kushikino, Ichikikushikino City, Kagoshima Pref.)
ZUMT 40158 (147.0 mm; Okinawa Pref.; coll. by S. Sakaguchi)
ZUMT 62527 (343 mm; paratype of *L. stellatus*; Udo, Nichinan City, Miyazaki Pref.; Aug. 13, 1981)

TAIWAN
ZUMT 18426 (90.0 mm), ZUMT 18427 (98.5 mm; Keelung City; July 1928; coll. by H. Sato)

LOCALITY UNKNOWN
ZUMT ABE 60-1300 (112.3 mm), ZUMT ABE 62-1312 (242.0 mm; no data)
ZUMT 65630 (445.0 mm; no data)

Lutjanus timorensis (Quoy & Gaimard, 1824)　ワキグロアカフエダイ

LOCALITY UNKNOWN
ZUMT 63650 (369.4 mm; no data)

Lutjanus vitta (Quoy & Gaimard, 1824)　タテフエダイ

TAIWAN
ZUMT 25126 (70.0 mm; Taipei City; coll. by M. Imai)

PHILIPPINES
ZUMT 40711 (150.3 mm; Jolo Islands; coll. by I. Iijima)

PALAU
ZUMT ABE 2796 (169.2 mm), ZUMT ABE 2829 (169.9 mm), ZUMT ABE 2927 (183.3 mm), ZUMT ABE 3699 (175.1 mm), ZUMT ABE 3839 (177.3 mm; Palau)
ZUMT 31687 [150.5 mm; probably Palau; labelled as「南洋」(“nan-yo”, general term for Micronesian islands)]

LOCALITY UNKNOWN
ZUMT 46352 (172.4 mm), ZUMT 46353 [approx. 171.4 mm (bisected at midbody)], ZUMT 63784 (209.4 mm; no data)

Macolor macularis Fowler, 1931　ホホスジタルミ

NORTHERN MARIANA ISLANDS
ZUMT 25669 (161.0 mm; Saipan; coll. by Toyama Prefectural Fisheries Training Center)

PALAU
ZUMT ABE 4034 (133.2 mm; Palau)

***Macolor niger* (Forsskål, 1775)　マダラタルミ**

JAPAN

ZUMT 14780 (219.4 mm; Yaeyama Islands, Okinawa Pref.; coll. by H. Yashiro)
ZUMT 53419 (88.5 mm; Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago)
ZUMT 62303 (29.6 mm; Otsuki Town, Kochi Pref; 2021; coll. by A. Namura)

***Paracaesio caerulea* (Katayama, 1934)　アオダイ**

JAPAN

ZUMT 46080 (246.1 mm; probably from Kochi Pref.)
ZUMT 50535 (394.9 mm; obtained at Kagoshima Fish Market, Kagoshima Pref.; 9 Sept. 1959)

PALAU

ZUMT ABE 4001 (274.0 mm; Palau)

***Paracaesio kusakarii* Abe, 1960　シマアオダイ**

JAPAN

ZUMT 51906 [253.5 mm; holotype of *Paracaesio kusakarii* Abe, 1960; purchased at Tokyo Market (probably caught off Hachijo-jima Island, Izu Islands); 20 June 1960]
ZUMT 51907 [paratype of *P. kusakarii*; dissected; purchased at Tokyo Market (caught south of Tokyo); 5 Sept. 1960]
ZUMT 51908 [paratype of *P. kusakarii*; dissected; purchased at Tokyo Market (caught south of Tokyo); 14 Sept. 1960]

LOCALITY UNKNOWN

ZUMT 47671 (171.4 mm; locality unknown; coll. by M. Katayama)

***Paracaesio sordida* Abe & Shinohara, 1962　ヨゴレアオダイ**

JAPAN

ZUMT 51922 (275.0 mm; paratype of *P. sordida*; Okinawa-jima Island, Ryukyu Archipelago; Mar. 1961),
ZUMT 52041 (268.0 mm), ZUMT 52042 (278.0 mm), ZUMT 52044 (head bones only; paratype of *P. sordida*; Okinawa-jima Island, Ryukyu Archipelago)
ZUMT 52043 (214.9 mm; holotype of *Paracaesio sordida* Abe & Shinohara, 1962; Okinawa-jima Island, Ryukyu Archipelago)

LOCALITY UNKNOWN

ZUMT ABE 62-660 (293.1 mm; no data)

***Paracaesio xanthura* (Bleeker, 1869)　ウメイロ**

JAPAN

ZUMT 4397 (240.1 mm; Saiki City, Oita Pref.; 29 Jan. 1915; coll. by K. Suito)
ZUMT 9585 [125.1 mm; probably collected from Wakayama Pref.; coll. by N. Ui (Tanabe City, Wakayama Pref.)]
ZUMT 19553 (189.7 mm; Kochi City, Kochi Pref.; 31 Jan. 1929; coll. by T. Kamohara)
ZUMT 19598 (185.2 mm; Tanabe City, Wakayama Pref.; 20 Dec. 1929; coll. by T. Kinoshita)
ZUMT 20224 (200.5 mm; Wakayama Pref.; coll. by N. Ui)
ZUMT 21117 (136.1 mm; obtained at Tokyo Market, Tokyo Met.)
ZUMT 32037 (186.8 mm; Nagasaki Pref.; 1 Aug. 1909)

ZUMT 34144 (195.8 mm), ZUMT 34145 (181.0 mm; probably from Kochi Pref.; coll. by Kochi Prefectural Fisheries Experimental Station)
ZUMT 40539 (243.4 mm), ZUMT 40546 (256.5 mm; Hachijo-jima Island, Izu Islands)
ZUMT 45973 (281.5 mm; Yamagawa City, Fukuoka Pref.)
ZUMT 46081 (198.1 mm), ZUMT 47036 (154.1 mm; probably from Kochi Pref.)
ZUMT 49158 (152.7 mm; Misaki, Miura City, Kanagawa Pref.; 5 Oct. 1954; coll. by I. Tomiyama)
ZUMT 63488 (186.4 mm; Wakayama Pref.)

LOCALITY UNKNOWN
ZUMT 56409 [approx. 150.9 mm (bisected at midbody); no data]

***Pinjalo pinjalo* (Bleeker, 1850)　チカメタカサゴ**

PHILIPPINES
ZUMT 11127 (108.0 mm; Philippines; coll. by U. Yamamura)

***Pristipomoides amoenus* (Snyder, 1911)　ウスハナフエダイ**

JAPAN
ZUMT 14000 [163.2 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]
ZUMT 14416 (176.5 mm; Okinawa Pref.; coll. by S. Sakaguchi)

***Pristipomoides argyrogrammicus* (Valenciennes, 1832)　ハナフエダイ**

JAPAN
ZUMT 9816 (260.5 mm; Omurodashi, southeast of To-shima Island, Izu Islands; Aug. 1920; coll. by Y. Okada and K. Aoki)
ZUMT 14443 (174.2 mm; Okinawa Pref.; coll. by S. Sakaguchi)
ZUMT 15225 [118.8 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]
ZUMT 23517 (136.7 mm; Urado, Kochi City, Kochi Pref.; 16 Mar. 1931; coll. by T. Kamohara)
ZUMT 52581 (207.2 mm; obtained at Naze Fish Market, Naze, Amami City, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; 31 May 1966)
ZUMT ABE 10646 (28.9 mm; probably from Misaki, Miura City, Kanagawa Pref.)

LOCALITY UNKNOWN
ZUMT 31580 (239.9 mm; locality unknown; donation from Osaka Fish Co., Ltd, 2 Mar. 1936)
ZUMT ABE 9384 (237.7 mm; female; no data)

***Pristipomoides auricilla* (Jordan, Evermann & Tanaka, 1927)　キマダラヒメダイ**

PALAU
ZUMT ABE 4005 (262.1 mm; Palau)

***Pristipomoides filamentosus* (Valenciennes, 1830)　オオヒメ**

JAPAN
ZUMT 3687 [182.7 mm; holotype of *Aprion kanekonis* (regarded as junior synonym of *P. filamentosus*; Allen 1985); Nagasaki; coll. by I. Kaneko], ZUMT 18146 (456.6 mm), ZUMT 18147 [413.5 mm; probably from Okinawa Pref.; coll. by K. Tashiro (Okinawa Prefectural Fisheries Experimental Station)]

ZUMT 19518 (296.7 mm; probably from Okinawa Pref.; 24 May 1928; coll. by Okinawa Prefectural Fisheries Experimental Station)
ZUMT 46608 (207.3 mm; Hachijo-jima Island, Izu Islands)
ZUMT 49755 (372.8 mm; Ogasawara Islands; obtained at Tokyo Market, Tokyo Met.; 1953)
ZUMT 59705 [approx. 154.6 mm (bisected at midbody); Kamakura City, Kanagawa Pref.; 1982; coll. by M. Aizawa]

LOCALITY UNKNOWN
ZUMT ABE 60-1153 (92.2 mm), ZUMT 63676 (200.4 mm; no data)

Pristipomoides flavipinnis Shinohara, 1963　キンメヒメダイ

JAPAN
ZUMT 51921 (290.0 mm; obtained at Naha Fish Market, Okinawa Pref.; Mar. 1961; coll. by S. Shinohara)

Pristipomoides multidens (Day, 1871)　ナガサキフエダイ

JAPAN
ZUMT ABE 10700 (465.0 mm; Tokyo Market, Tokyo Met.; 26 Apr. 1956)

LOCALITY UNKNOWN
ZUMT 46827 (296.0 mm), ZUMT 52205 (188.2 mm; no data)

Pristipomoides sieboldii (Bleeker, 1855)　ヒメダイ

JAPAN
ZUMT 9556 [2 specimens, 153.1–153.5 mm; probably from Wakayama Pref.; coll. by N. Ui (Tanabe City, Wakayama Pref.)]
ZUMT 18934 (77.0 mm; Kashiwa-jima Island, Otsuki Town, Kochi Pref.; Oct. 1928; coll. by T. Kamohara)
ZUMT 50534 (286.1 mm; obtained at Kagoshima Fish Market, Kagoshima Pref.; 9 Sept. 1959; Y. Tominaga)
ZUMT 55549 (233.0 mm; Okinawa-jima Island, Okinawa Islands; 16 Sept. 1986; coll. by H. Senou)
ZUMT 64262 (157.9 mm; Wagu, Shima City, Mie Pref.; 10 Mar. 1913)

PALAU
ZUMT ABE 4003 (269.0 mm; Palau)

LOCALITY UNKNOWN
ZUMT 63480 (164.8 mm), ZUMT 63481 (156.3 mm), ZUMT 63695 (256.4 mm), ZUMT ABE 55-93 (332.5 mm; no data)

Pristipomoides typus Bleeker, 1852　バラヒメダイ

JAPAN
ZUMT 27396 (59.8 mm; Koajiro, Aburatsubo, Misaki, Miura City, Kanagawa Pref.; 27 July 1927; coll. by S. Tanaka)

Symphorus nematophorus (Bleeker, 1860)　イトヒキフエダイ

JAPAN
ZUMT 13967 [146.6 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]

PHILIPPINES

ZUMT 40972 (129.2 mm; Jolo Island; Feb. 1909; coll. by I. Iijima and K. Aoki)

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Specimens of the genus *Parupeneus* (Actinopterygii: Teleostei: Mullidae) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of *Parupeneus* (Mullidae) deposited in the Department of Zoology, The University Museum, The University of Tokyo, including 196 specimens (187 lots) of 11 species, is provided. No types for the genus were located in the collection.

Introduction

Parupeneus Bleeker, 1863, a genus of Indo-Pacific goatfishes (Mullidae), is characterized by the following characters: 27–32 lateral-line scales; 2 or 3 scale rows between the dorsal fins; moderately large, bluntly conical, and well-spaced rows of teeth in both jaws; no teeth on the vomer or palatines (Randall 2004; Hatooka and Doiuchi 2013). Mullid fishes, including *Parupeneus*, are well known for having a pair of barbels on their lower jaws, utilized for various behavioral activities, including stirring sand and poking into holes in searches for prey, and courtship movements. Moreover, the barbels have also been suggested as used in agonistic displays between males (Gosline 1984; Filkovsky and Springer 2010).

Although a well-known group, many new species of Mullidae have been described recently (Shibuya and Motomura 2020; Uiblein 2021), as well as new distributional records (Koeda et al. 2018; Bandai et al. 2018a, b, 2019a; Nakashimada et al. 2021), in addition to non-taxonomic studies (Bandai et al. 2019b). For an aid to future taxonomic studies, a specimen list of the genus *Parupeneus* in the Department of Zoology, The University Museum, The University of Tokyo is provided herein.

Materials and Methods

Specimens of *Parupeneus* in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study following Randall (2004) and Hatooka and Doiuchi (2013). Parentheses following registration numbers include standard length (in mm), specimen numbers (if more than one included in lot), collection locality, collection date, collector, and remarks (if applicable). The collection year and collector for some specimens was estimated by following Koeda et al. (2022). Collection data of specimens are omitted when matching that of immediately following specimens. The ZUMT specimens listed herein were stored in Room 406 (specimen storage room), in the museum building. Most were stored in bottles on shelves, although some large specimens were stored in a glass tank, with the glass lid sealed with a silicon adhesive in Room 406 (as of July 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr. Abe's catalog books with collection data will be rediscovered.

Results

Eleven species of *Parupeneus* were confirmed in the ZUMT fish collection. No type specimens of the genus were found in the collection. In addition, the ZUMT collection of fish specimens were collected from a wide range of localities in Japan between 1900 and 1940. However, in the present investigation of genus *Parupeneus*, some species were not collected from the mainland of Japan until around 1940, even though their distribution had been reported from there as of 2023. For examples, *P. heptacanthus* [observed only from Ryukyu Archipelago in this study (three specimens collected from Wakayama Prefecture in 1975) vs. currently known from south of Miyagi and Kyoto prefectures] and *P. multifasciatus* (Kagoshima Prefecture and Ryukyu Archipelago vs. south of Chiba and Yamaguchi prefectures) (Hatooka and Doiuchi 2013; Tashiro et al. 2017; Sonoyama et al. 2020; Motomura 2023) which are similar trends have been shown in Chaetodontidae (Koeda et al. 2022). This suggests that some species for the genus *Parupeneus* have been obtained from more northerly localities after about 1940. Whether this is due to abortive migration or change of environments is not clear and requires further study.

Species accounts

Genus *Parupeneus* ウミヒゴイ属

Parupeneus barberinoides (Bleeker, 1852) インドヒメジ

JAPAN

ZUMT 17431 (144.8 mm; Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe and Y. Hiyane)

PHILIPPINES

ZUMT 11024 (131.4 mm; Philippines; 1920's; coll. by U. Yamamura)

PALAU

ZUMT ABE 4089 (135.7 mm; Palau; 1936–1937)

Parupeneus barberinus (Lacepède, 1801) オオスジヒメジ

JAPAN

ZUMT 17268 (9 specimens, 29.1–32.3 mm; Unten, Nakijin Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe)

ZUMT 22857 (147.2 mm; before 1930; Ryukyu Archipelago)

PALAU

ZUMT ABE 2988 (181.6 mm; Palau; 1936–1937)

ZUMT 55313 (83.6 mm; Palau; Aug. 1935; coll. by Y. Haneda)

LOCALITY UNKNOWN

ZUMT ABE 1879 (93.9 mm), ZUMT ABE 1880 (91.5 mm), ZUMT ABE 1881 (109.8 mm), ZUMT 64350 (107.6 mm; no data)

Parupeneus biaculeatus (Richardson, 1846) ミナベヒメジ

JAPAN

ZUMT 32993 (128.2 mm; probably from Yamaguchi Pref.; donated by I. Tanaka)

ZUMT 50538 (213.0 mm; obtained at Nagasaki Fish Market, Nagasaki Pref.; 26 Aug. 1959; coll. by Y. Tominaga)

LOCALITY UNKNOWN

ZUMT 52204 (198.5 mm; no data)

Parupeneus chrysopleuron (Temminck & Schlegel, 1843) ウミヒゴイ

JAPAN

ZUMT 3884 (cloth tag labelled No. 104 “写生百四号”) (237.4 mm; obtained at Tokyo Fish Market; before 1914)

LOCALITY UNKNOWN

ZUMT 64348 (108.7 mm; no data)

Remarks. Tanaka (1914) described and figured this species based on a single specimen collected from Tokyo Fish Market, Japan (ZUMT 3884, 306 mm total length).

Parupeneus ciliatus (Lacepède, 1802) ホウライヒメジ

JAPAN

ZUMT 12100 (cloth tag labelled No. 542 “写生第五四二号”) (110.3 mm; Misaki, Miura City, Kanagawa Pref.; 1920’s)

ZUMT 15275 (163.8 mm), ZUMT 15277 (143.5 mm), ZUMT 39819 (100.0 mm), ZUMT 39994 (58.5 mm), ZUMT 39995 [91.2 mm, probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School); 1920’s]

ZUMT 16765 (159.6 mm), ZUMT 16766 (103.4 mm; Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920’s; coll. by S. Tanabe)

ZUMT 17066 (91.2 mm; Itoman City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920’s; coll. by S. Tanabe)

ZUMT 19158 [294.8 mm; probably from Hachijo-jima Island, Izu Islands; 6 July 1929; coll. by Y. Otsuki (Hachijo-jima Island)]

ZUMT 19367 (259.4 mm), ZUMT 19368 (333.5 mm), ZUMT 19369 (316.1 mm) ZUMT 19498 [261.7 mm; probably from Hachijo-jima Island, Izu Islands; 1920’s; coll. by Y. Oshizu (Hachijo-jima Island)]

ZUMT 21734 (217.0 mm; Wakayama Pref.; 22 Jan. 1906)

ZUMT 23903 (162.7 mm; Kushikino, Ichikikushikino City, Kagoshima Pref.)

ZUMT 34349 (32.7 mm; Okitsu, Katsuura City, Chiba Pref.; Aug. 1930, coll. by S. Masuda)

ZUMT 40534 (192.3 mm; Hachijo-jima Island, Izu Islands)

ZUMT 41123 (128.7 mm; Kagoshima Bay, Kagoshima Pref.; coll. by K. Ogawa)

ZUMT 41926 [290.2 mm; probably from Hachijo-jima Island, Izu Islands; coll. by Y. Uchiyama (Hachijo-jima Island)]

ZUMT 42835 (58.9 mm), ZUMT 42837 (57.9 mm), ZUMT 42838 (45.3 mm), ZUMT 42839 [37.3 mm; probably from Hachijo-jima Island, Izu Islands; Sept. 1922; coll. by M. Uchiyama (Hachijo-jima Island)]

ZUMT 53409 (113.6 mm; Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago)

ZUMT 56745 (90.5 mm; tidepool on Okino-shima Island, Tateyama City, Chiba Pref.; 16 Apr. 1987; coll. by M. Aizawa, H. Senou and Y. Sato)

PALAU

ZUMT ABE 4083 (214.4 mm), ZUMT ABE 4092 (118.8 mm; Palau; 1936–1937)

TANZANIA

ZUMT 62057 (46.0 mm; probably from Tanzania; 18–19 July 1972; coll. by Y. Taki)

LOCALITY UNKNOWN

ZUMT ABE 2676 (113.0 mm), ZUMT ABE 2677 (97.7 mm), ZUMT ABE 61-1066 (188.5 mm), ZUMT 64358 (66.0 mm; no data)

Parupeneus cyclostomus (Lacepède, 1801) マルクチヒメジ

JAPAN

ZUMT 11200 (165.4 mm), ZUMT 11241 (167.2 mm,) ZUMT 15355 [139.5 mm; probably from Okinawa Pref.; 1920's; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]

ZUMT 17284 (186.9 mm, Yaeyama Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe)

ZUMT 23542 (171.7 mm; probably from Okinawa Pref.; July (before 1931); coll. by Okinawa Prefectural Fisheries Experimental Station)

ZUMT 23914 (235.0 mm; probably obtained at Naya Fish Market, Kagoshima City, Kagoshima Pref.; before 1931)

ZUMT 54107 (137.8 mm; obtained at fish market on Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 4 June 1966; coll. by Y. Tominaga)

TAIWAN

ZUMT 46835 (284.0 mm; probably from Taipei)

PALAU

ZUMT ABE 3700 (183.7 mm), ZUMT ABE 3752 (191.5 mm), ZUMT ABE 3795 (237.4 mm), ZUMT ABE 4007 (138.3 mm), ZUMT ABE 4093 (125.0 mm; Palau; 1936–1937)

LOCALITY UNKNOWN

ZUMT 31703 [256.1 mm; Southeast Asia (precise locality unknown); labelled as「南洋」("nan-yo")]

ZUMT 40441 (139.2 mm), ZUMT 46389 (210.8 mm), ZUMT 64346 (132.2 mm), ZUMT 64351 (202.9 mm; no data)

Parupeneus heptacanthus (Lacepède, 1802) タカサゴヒメジ

JAPAN

ZUMT 17155 (77.7 mm; Baten Port, Nanjo City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe; 1920's)

ZUMT 19657 (280.0 mm; probably from Okinawa Pref.; July 1928; coll. by Okinawa Prefectural Fisheries Experimental Station)

ZUMT 54071 (115.0 mm), ZUMT 54087 (118.0 mm; Kuji, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; 20 May 1966; coll. by Y. Tominaga)

ZUMT 55528 (90.7 mm), ZUMT 55529 (72.0 mm), ZUMT 55530 (80.0 mm), ZUMT 55531 (87.4 mm; Kii Peninsula, Wakayama Pref.; July 1975)

PALAU

ZUMT ABE 3771 (193.3 mm), ZUMT ABE 3794 (218.1 mm), ZUMT ABE 4094 (142.5 mm; Palau)

LOCALITY UNKNOWN

ZUMT 64353 (70.1 mm; no data)

Parupeneus indicus (Shaw, 1803) コバンヒメジ

JAPAN

ZUMT 19076 (211.8 mm; probably from Okinawa Pref.; 14 May 1928; coll. by Okinawa Prefectural Fisheries Experimental Station)

ZUMT 40346 (74.0 mm; Ryukyu Archipelago; 1920's; coll. by S. Sakaguchi)

ZUMT 53888 (273.7 mm; probably from Naha City, Okinawa Pref.; 1975; coll. by T. Sato)

ZUMT 54105 (129.2 mm; obtained at fish market on Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 4 June 1966; Y. Tominaga)

ZUMT 64171 (124.3 mm; Kadogawa Bay, Kadogawa, Miyazaki Pref.; 26 Oct. 2021; set net; coll. by M. Wada)

PALAU

ZUMT ABE 4090 (190.0 mm; Palau; 1936–1937)

LOCALITY UNKNOWN

ZUMT ABE 53 (2 specimens; 67.5–82.0 mm; no data)

Parupeneus multifasciatus (Quoy & Gaimard, 1825) オジサン

JAPAN

ZUMT 11198 (94.1 mm), ZUMT 11199 (133.5 mm), ZUMT 15130 (102.8 mm), ZUMT 15132 (96.1 mm), ZUMT 15139 (134.2 mm), ZUMT 15206 (109.2 mm), ZUMT 15207 (89.2 mm), ZUMT 15208 (87.3 mm), ZUMT 15232 (115.5 mm), ZUMT 15233 (147.7 mm), ZUMT 15234 (167.7 mm), ZUMT 15235 (167.4 mm), ZUMT 15236 (178.2 mm), ZUMT 15281 (124.8 mm), ZUMT 15376 (97.7 mm), ZUMT 15377 [92.1 mm; probably from Okinawa Pref.; 1920's; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]

ZUMT 14104 [168.7 mm; probably from Okinawa Pref.; 1920's; coll. by H. Yashiro (Okinawa Pref.)]

ZUMT 14321 (70.1 mm), ZUMT 14322 (87.9 mm; Naha Fish Market, Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 6 Feb. 1925; coll. by H. Yashiro)

ZUMT 16990 (113.3 mm), ZUMT 16991 (68.1 mm), ZUMT 17008 (64.1 mm), ZUMT 17052 (95.6 mm; Itoman City, Okinawa Pref.; coll. by S. Tanabe)

ZUMT 17197 (136.9 mm; Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe)

ZUMT 17294 (157.7 mm; Yaeyama Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe)

ZUMT 17434 (126.0 mm; Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 1920's; coll. by S. Tanabe and Y. Hiyane)

ZUMT 22739 (116.3 mm; Okinawa Pref.; before 1930)

ZUMT 23827 (144.7 mm), ZUMT 23857 (177.0 mm), ZUMT 23941 (171.5 mm), ZUMT 23942 (151.7 mm; probably obtained at Naya Fish Market, Kagoshima City, Kagoshima Pref.; before 1931)

ZUMT 39378 (134.2 mm; southern Japan; before 1939)

ZUMT 39809 (103.6 mm), ZUMT 39811 (92.7), ZUMT 39820 (115.9 mm), ZUMT 39821 (130.5 mm), ZUMT 39822 (125.0 mm), ZUMT 39906 (97.2 mm), ZUMT 39907 (91.8 mm), ZUMT 39918 (98.9 mm), ZUMT 39919 (87.2 mm), ZUMT 39920 (99.8 mm), ZUMT 39921 (94.0 mm), ZUMT 39996 (107.0 mm), ZUMT 45783 (96.6 mm; Ryukyu Archipelago; before 1939; coll. by S. Sakaguchi)

ZUMT 40012 (70.7 mm; Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 8 July 1936; coll. by S. Inuo)

ZUMT 40712 (140.7 mm; Amami-oshima Island, Amami Islands, Ryukyu Archipelago; coll. by K. Enokiya)

ZUMT 41187 (145.2 mm), ZUMT 41188 (115.0 mm; Naze, Amami City, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; coll. by K. Enokiya)

ZUMT 45913 (172.5 mm; Ogasawara Islands)

ZUMT 49731 (126.9 mm), ZUMT 49732 (104.5 mm; Oshima Strait, Setouchi Town, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; Mar. 1956)
ZUMT 53410 (143.3 mm), ZUMT 53418 (81.7 mm; Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago)
ZUMT 54083 (148.8 mm), ZUMT 54084 (130.2 mm; Kuji, Amami-oshima Island, Amami Islands, Ryukyu Archipelago; 20 May 1966; coll. by Y. Tominaga)
ZUMT 54108 (128.5 mm; obtained at fish market on Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 4 June 1966; coll. by Y. Tominaga)
ZUMT 55560 (117.7 mm), ZUMT 55562 (104.2 mm), ZUMT 55563 (111.5 mm; obtained at fish market on Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 16 Sept. 1986; coll. by H. Senou)
ZUMT 64354 (60.0 mm; off Amami-oshima Island, Amami Islands, Ryukyu Archipelago; coll. by K. Enokiya)

HAWAIIAN ISLANDS
ZUMT 55192 [175.7 mm; originally registered as BPBM (Bishop Museum, Honolulu, Hawaii) 4061; probably from Oahu, Hawaii; 1898–1927; coll. by J. W. Thompson; donated from Bishop Museum]

PALAU
ZUMT ABE 2803 (120.1 mm), ZUMT ABE 3884 (112.8 mm), ZUMT ABE 4084 (161.9 mm), ZUMT ABE 4085 (114.3 mm), ZUMT ABE 4086 (141.5 mm), ZUMT ABE 4087 (112.6 mm), ZUMT ABE 4088 (118.7 mm; Palau)

LOCALITY UNKNOWN
ZUMT ABE 1876 (118.0 mm), ZUMT 44064 (103.0 mm), ZUMT 64264 (200.6 mm), ZUMT 64265 (156.0 mm), ZUMT 64266 (134.8 mm), ZUMT 64267 (140.3 mm), ZUMT 64347 (124.5 mm), ZUMT 64349 (110.7 mm; no data)

Remarks. Tanaka (1915) described and figured this species based on a single specimen collected from Bonin Island, Ogasawara Islands, Japan (ZUMT 4189, 260 mm total length). However, that specimen was not found during the present investigation.

Parupeneus pleurostigma (Bennett, 1831) リュウキュウヒメジ

JAPAN
ZUMT 17432 (119.4 mm, Naha City, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; before 1925; coll. by S. Tanabe and Y. Hiyane)
ZUMT 23540 (168.0 mm; probably from Okinawa Pref.; July 1928; coll. by Okinawa Prefectural Fisheries Experimental Station)
ZUMT 39922 (95.5 mm; Ryukyu Archipelago; coll. by S. Sakaguchi)
ZUMT 54112 (123.3 mm; obtained at fish market on Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 4 June 1966; coll. by Y. Tominaga)

PALAU
ZUMT ABE 4091 (164.0 mm; Palau; 1936–1937)

PITCAIRN ISLANDS
ZUMT 55190 (204.5 mm), ZUMT 55191 (174.3 mm; off Bounty Bay, Pitcairn Island, approx. 30–40 m (100–130 feet) depth; 26 Dec. 1970; coll. by J. Randall, D. Cannoy and D. Bryant)

LOCALITY UNKNOWN
ZUMT 64260 (134.8 mm; no data)

***Parupeneus spilurus* (Bleeker, 1854)　オキナヒメジ**

JAPAN

ZUMT 7894 (cloth tag labelled No. 540 “写生第五四〇号”) [111.4 mm; probably from Ehime Pref.; 1910’s; coll. by K. Otsuki (Uchiumi, Ainan Town, Ehime Pref.)]

ZUMT 9519 [203.9 mm; probably from Wakayama Pref.; before 1920; coll. by N. Ui (Tanabe City, Wakayama Pref.)]

ZUMT 31615 (167.4 mm; Kagoshima Pref.; donated by Y. Miyoshi on Mar. 1936)

ZUMT 39993 (62.0 mm; Ryukyu Archipelago; 1920’s; coll. by S. Sakaguchi)

ZUMT 40014 (34.9 mm; Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; 8 July 1936; coll. by S. Inuo)

ZUMT 42840 (46.9 mm; Hachijo-jima Island, Izu Islands; Sept. 1922; coll. by M. Uchiyama)

ZUMT 46440 (246.1 mm; Takamatsu City, Kagawa Pref.)

ZUMT 48123 [263.0 mm; Fukue Fish Market, Fukue, Goto City (Fukue-jima Island, Goto Islands); May 1953; coll. by I. Tomiyama]

ZUMT 49105 (198.0 mm; Misaki, Miura City, Kanagawa Pref.; 1956; coll. by I. Tomiyama)

ZUMT 50043 [178.4 mm; Miiraku, Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953]

PHILIPPINES

ZUMT 11023 (156.3 mm; Philippines; 1920’s; coll. by U. Yamamura)

ZUMT 42369 (192.0 mm), ZUMT 42379 (169.6 mm; Basilan; 1926; coll. by U. Yamamura)

LOCALITY UNKNOWN

ZUMT ABE 60-1060 (149.9 mm; no data)

Remarks. Tanaka (1916) described and figured this species based on a single specimen collected from Saiki City, Bungo Province (currently Oita Pref.), Japan (343 mm total length). However, that specimen was not found during this study.

Acknowledgements

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Report on the specimens of family Oplegnathidae and Pentacerotidae (Teleostei: Aulopiformes) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

The collection of Oplegnathidae and Pentacerotidae (Teleostei: Perciformes) deposited in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were re-identified in the present study. In total 219 specimens (132 lots) of a single genus of two species including hybrids between these species were found for Oplegnathidae. Additionally, in total 35 specimens of three genera of four species for Pentacerotidae were found from the collection. No types are known for these families in ZUMT collection.

Introduction

The fish collection of families Oplegnathidae and Pentacerotidae (Teleostei: Perciformes) which preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were re-identified in the present study. The species belonging to these families are often traded commercially in fish market and targeted for anglers (Araga 1997). Two species of Oplegnathidae inhibit in coastal water in temperate area, and three species of Pentacerotidae except for *Evistias acutirostris* (Temminck & Schlegel, 1844), inhibit in deep-sea. The specimens of these families were re-identified by the first author, and listed below.

Materials and Methods

The specimens of Oplegnathidae and Pentacerotidae in ZUMT were re-identified in the present study, generally following Hatooka and Yagishita (2013ab). The standard length (SL) of the specimens were measured for all specimens. Species are arranged in alphabetical order. Local name, and collector's name and affiliation are given where known (from the specimen catalog or tag), with Japanese language equivalents in parentheses. The following list includes ZUMT number, SL, collection locality, collection date, collector or donator and affiliation, collection method, and remarks when available. The collection year and collector for some specimens was estimated by following Koeda et al. (2022). Although, some of the ZUMT specimens collected by Dr. Abe had not been formally cataloged into the ZUMT collection (and the data of some specimens not retained), such specimens which can recognize by having underbar with the number on the accompanying label, are listed herein with the number ZUMT ABE XXXX, due to the possibility of future discovery of Dr. Abe's remaining catalog books with collection data. Catalog numbers after ZUMT 62000 are newly given during this study.

Collection of Oplegnathidae and Pentacerotidae in ZUMT

During this research, In total 219 specimens (132 lots) of a single genus of two species including hybrids between these species were found for Oplegnathidae. Additionally, in total 35 specimens of three genera of four species for Pentacerotidae were found from the collection. No types are known for this family in ZUMT collection. Although *Oplegnathus fasciatus* (Temminck & Schlegel, 1844) is known to have expanded its distributional range northward due to global warming, the present survey has confirmed that this species was presented in Hokkaido and Tohoku approximately 100 years ago. In contrast, specimens of *Oplegnathus punctatus* (Temminck & Schlegel, 1844), which share the same habitat with *O. fasciatus*, were not found north of Ibaraki Prefecture. These

facts suggest the possibility of that the difference in distribution between the two species may not have changed significantly over the past 100 years. Furthermore, in recent years, there have been occasional collection records of the former species in the Ryukyu Archipelago. As for the latter species, it is commonly fished and marketed. However, no specimens from this area were found in the ZUMT specimens in the present study.

Oplegnathidae イシダイ科
Oplegnathus Richardson, 1840 イシダイ属
Oplegnathus fasciatus (Temminck & Schlegel, 1844) イシダイ

ZUMT 1398: 85.1 mm SL, Ibaraki Pref., 12 Oct. 1907, donated by M. Kobatsuzaki (小松崎三枝) at Ibaragi Prefectural Otsu Fisheries School (茨城県大津水産学校), local name “Shimadai (シマダイ)”.
ZUMT 2330: 135.2 mm SL, Nagasaki Pref., 3 July 1909, Probably I. Kaneko (金子一狼).
ZUMT 3163: 109.8 mm SL, Hamanako Lake (浜名湖), Shizuoka Pref., 28 Oct. 1911, T. Aoki (青木赳雄).
ZUMT 3288: 161.1 mm SL, Ariake Sea (有明海), Nov. 1911, S. Kawakami (河上才次).
ZUMT 3496: 121.4 mm SL, Hamashima-mura (濱島村), Shima-gun (志摩郡)(presently Shima), 10 Mar. 1913, local name “Shimakurome (シマクロメ)”.
ZUMT 5836: 84.1 mm SL, Misaki (三崎), Kanagawa Pref.
ZUMT 7110: 114.8 mm SL, Pearl oyster farm at Uchiumi (内海), Ainan (愛南), Minamiura-gun (南宇和郡), Ehime Pref., 1 Dec. 1915, K. Otsuki (大月菊男) at Ehime Prefectural Fisheries Station (愛媛県水産試験場), local name “Koriio (コリイオ)”.
ZUMT 7415: 79.6 mm SL, 諸寄 (Moroyose), Hyogo Pref., 12 Dec. 1916, K. Yamadori (山鳥吉五郎) at Mikage Normal School (御影師範学校), local name “Sobuguro (ソビグロ)”.
ZUMT 8249: 65.5 mm SL, Takashima (高島), Shiribeshi (後志), presently Otaru (小樽), 25 Sept. 1917, Hokkaido Fisheries Station (北海道水産試験場), local name “Shimadai (シマダイ)”.
ZUMT 9266: 84.2 mm SL, out of Urado Bay (浦戸湾外), Kochi (高知), Kochi Pref., Sept. 1919, S. Tanaka.
ZUMT 10456: 45.7 mm SL, Karatsu Bay (唐津湾), 29 July 1920, K. Yamashita (山下幸平) at Saga Junior High School (佐賀中学校).
ZUMT 11302: 75.0 mm SL; **ZUMT 11313**: 84.5 mm SL, Muroran (室蘭), Hokkaido, before 1923, M. Tsuda (津田美津彦) at Muroran Branch of Hokkaido Fisheries Station (北海道水産試験場室蘭支場).
ZUMT 11436: 102.0 mm SL, Shimonoseki (下関), T. Kumada (熊田頭四郎), trawl.
ZUMT 12102: 70.2 mm SL, near Tokyo, local name “Shimakodai (シマコダイ)”.
ZUMT 12945: 58.0 mm SL; **ZUMT 12946**: 67.5 mm SL, Aomori Pref., before 1924, S. Tanabe (田辺貞夫).
ZUMT 13130: 110.7 mm SL, Shirahamasaki (白浜崎) or Fudosaki (不動崎) at Miyako Bay (宮古湾), before 1924, S. Tanabe, local name “Shimadai (シマダヒ)”.
ZUMT 13589: 32.7 mm SL, Yoshihama (吉浜), Kesen-gun (気仙郡), presently Ofunato (大船渡), Iwate Pref., July 1921, G. Toba (鳥羽源蔵) at Iwate Normal School (岩手師範学校), local name “Shimadai (シマダヒ)”.
ZUMT 13795: 51.7 mm SL; **ZUMT 13796**: 63.9 mm SL, Muroran, Hokkaido, Sept. 1924, J. Katsuki (勝木重太郎) at Muroran Branch of Hokkaido Fisheries Station.
ZUMT 13882: 118.6 mm SL; **ZUMT 13883**: 95.3 mm SL, Kesen (気仙), presently Kesennuma (気仙沼), Iwate Pref., 5 Dec. 1924, G. Toba at Iwate Normal School, local name “Shimadai (シマダヒ)”.
ZUMT 15827: 88.8 mm SL, Shimizu (清水), Shizuoka Pref., before 1926.
ZUMT 16442: 49.6 mm SL, probably Okayama Pref., K. Matsushima (松島克生) at Kojo Junior High School at Nishiehara Town, Okayama Pref. (岡山県西江原町興譲中学校).
ZUMT 17716: 75.7 mm SL; **ZUMT 17717**: 73.6 mm SL; **ZUMT 17718**: 53.7 mm SL, Shizuura (静浦), Shizuoka Pref., N. Kuroda (黒田長礼).
ZUMT 18114: 53.5 mm SL, probably Wakayama Pref., I. Hoshino (星野伊三郎) at Kainan Junior High School (海南中学校).
ZUMT 19475: 28.6 mm SL; **ZUMT 19476**: 44.3 mm SL; **ZUMT 19477**: 52.4 mm SL, probably Hamada (浜田), Shimane Pref., received on 14 Sept. 1929, H.Ban (伴　秀雅) at Shimane Prefectural Hamada Girl's Normal School (島根県濱田女子師範学校), local name “Sambaso (サンバソオ)”.

ZUMT 20784: 77.0 mm SL; **ZUMT 29810**: 81.6 mm SL, Misaki, Kanagawa Pref.

ZUMT 23122: 59.3 mm SL, probably Mie Pref., Aug. 1927, Y. Tsuchiga (槌賀安平) at Kimoto Junior High School (三重県南牟婁郡木本町木本中学校校長).

ZUMT 23949: 117.9 mm SL; **ZUMT 23950**: 114.4 mm SL, Yamanokuchi Market at Kagoshima City (鹿児島市山之口市場), Kagoshima Pref., local name "Hisha (ヒシャ)".

ZUMT 24011: 63.8 mm SL, Shibushi (志布志), Kagoshima Pref., local name "Urume (ウルメ)".

ZUMT 24320*: 208.3 mm SL, Tango-miyazu (丹後宮津), Nov. 1931, Kyoto Prefectural Fishery School (京都府水産講習所).

ZUMT 24417: 92.2 mm SL, Nigata Pref., identified on 28 Mar. 1932.

ZUMT 25234: 93.6 mm SL; **ZUMT 26263**: 55.7 mm SL (color anomaly), Yamaguchi Pref., identified on 17 Mar. 1933, M. Nagatomi (永富三治) at Onoda, Yamaguchi Pref.

ZUMT 25580: 111.6 mm SL, Onahama (小名浜), Fukushima Pref., identified on 27 May 1933, H. Tsunoda (角田春彦), local name "Ishidai (イシダイ), Shimadai (シマダイ), Kimpachi (キンパチ)".

ZUMT 27381: 40.5 mm SL, Koajiro (小網代), Aburatsubo (油壷), 27 July 1904, S. Tanaka (田中茂穂).

ZUMT 27921: 55.4 mm SL, southern Japan?, local name "Sambasou (サンバソウ)".

ZUMT 31239: 90.0 mm SL; **ZUMT 31279***: 280.5 mm SL; **ZUMT 31324**: 56.4 mm SL, Matsue (松江), Shimane Pref., before 1935, R. Yanai (柳井隆一) at Matsue High School (松江高等学校).

ZUMT 31660: 33.7 mm SL, probably Ibaraki Pref., K. Tashiro (田代清友) at Ibaraki Prefectural Fisheries Station (茨城県水産試験場).

ZUMT 32500: 104.8 mm SL, Toyama Bay (富山湾), Apr. 1935, donated by Mr. Yoshida (吉田).

ZUMT 33417: 55.4 mm SL; **ZUMT 33418**: 56.3 mm SL; **ZUMT 33419**: 57.7 mm SL; **ZUMT 33420**: 23.6 mm SL; **ZUMT 33421**: 86.9 mm SL, Katsuura (勝浦), Chiba Pref., local name "Dekki (デッキ)".

ZUMT 33583: 56.4 mm SL, Gogoshima Island (興居島), Iyo (伊豫), presently Ehime Pref., May 1901, S. Kataoka (片岡雋弼).

ZUMT 33584: 54.6 mm SL, Yokohama-honmoku (横浜本牧), Kanagawa Pref.

ZUMT 33645: 69.3 mm SL, Yamaguchi Pref., identified on 4 Oct. 1933, M. Nagatomi at Onoda, Yamaguchi Pref.

ZUMT 34092: 106.6 mm SL; **ZUMT 34093**: 98.7 mm SL; **ZUMT 34094**: 54.9 mm SL, Onahama, Fukushima Pref., identified on 27 May 1933, H. Tsunoda.

ZUMT 35303: 43.9 mm SL, near Tokyo.

ZUMT 37491: 109.6 mm SL; **ZUMT 37492**: 94.0 mm SL; **ZUMT 37493**: 107.0 mm SL, ?Misaki or Ushimado, Kanagawa Pref. (三崎？牛窓？), before 1936, S. Miyoshi (三好 晋) at Mito High School (水戸高等学校).

ZUMT 40303: 103.1 mm SL, Ogasawara Islands.

Remarks: According to the ZUMT specimen ledger, this catalog number is recorded as *Trachinotus jordani* Wakiya, 1924 "Kobanaji". However, during the investigation of the Carangidae specimens by Hata et al. (2023), no specimen labeled with this number was found, leading us to conclude that it was an entry error.

ZUMT 41307: 102.5 mm SL; **ZUMT 41308**: 97.6 mm SL; **ZUMT 41309**: 99.2 mm SL; **ZUMT 41318**: 73.4 mm SL; **ZUMT 41319**: 101.9 mm SL; **ZUMT 44772**: 84.0 mm SL; **ZUMT 44773**: 96.3 mm SL, Namerikawa (滑川), Uozu (魚津), Toyama Pref., I. Tomiyama (冨山一郎).

ZUMT 41728: 113.4 mm SL; **ZUMT 41729**: 97.5 mm SL; **ZUMT 41789**: 94.5 mm SL, Asamushi (浅虫), Aomori Pref., probably 1914–1924, S. Tanabe (田辺貞夫).

ZUMT 43045: 48.8 mm SL, Otaru (小樽), Hokkaido, before 1942.

ZUMT 43256, 43257: 23 specimens, 28.0−68.3 mm SL, Misaki (三崎), Kanagawa Pref.

ZUMT 43280: 60.1 mm SL; **ZUMT 43281**: 86.8 mm SL, Fukura (福良), Awaji-shima Island (淡路島), Hyogo Pref., R. Uchiyama (内山柳太郎).

ZUMT 44659: 50.4 mm SL, Sumoto (洲本), Awaji-shima Island, Hyogo Pref., probably R. Uchiyama.

ZUMT 45330: 56.4 mm SL, probably Chiba Pref., M. Yosezato (與世里盛春) at Naruto Junior High School (千葉県成東中学校).

ZUMT 48328: 18 specimens, 17.0−36.6 mm SL, between Oiso (大磯) and Izu Oshima (伊豆大島), 3 July 1933.

ZUMT 50393: 138.8 mm SL, Hirado (平戸), Nagasaki Pref., June 1953, I. Tomiyama.

ZUMT 50664: 102.6 mm SL, fish market at Beppu (別府), Oita Pref., 11 Sept. 1959, Y. Tominaga (富永義昭).

ZUMT 51344: 115.5 mm SL, Norin-kaiku 169 (農林海区 169 区), East China Sea (東シナ海), 14 Nov. 1959.

ZUMT 56843: 39.6 mm SL, in front of the Misaki Station (三崎臨海実験所前), Aburatsubo Bay (油壷湾), Kanagawa Pref., 1 Aug. 1987, probably Y. Tominaga.

ZUMT 62898: 7 specimens, 55.6−97.9 mm SL; **ZUMT 63071**: 4 specimens, 67.4−99.2 mm SL; **ZUMT 63120**: 68.4 mm SL; **ZUMT 63243**: 81.5 mm SL; **ZUMT 63576**: 117.2 mm SL; **ZUMT 63577**: 99.5 mm SL; **ZUMT 63579**: 58.3 mm SL; **ZUMT 63580**: 34.9 mm SL; **ZUMT ABE 60-48**: 150.5 mm SL; **ZUMT ABE 61-1048**: 59.3 mm SL; **ZUMT ABE 61-1094**: 49.1 mm SL, locality unknown.

Oplegnathus punctatus (Temminck & Schlegel, 1844)　イシガキダイ

ZUMT 1397: 87.8 mm SL, Ibaraki Pref., 12 Oct. 1907, donated by M. Kobatsuzaki (小松崎三枝) at Ibaragi Prefectural Otsu Fisheries School (茨城県大津水産学校), local name “Komondai (コモンダイ)”.

ZUMT 2479*: 189.4 mm SL, Nagasaki Pref., Aug. 1909, probably I. Kaneko (金子一狼), local name “Fuzadai (フサダヒ)”.

ZUMT 4350*: 180.7 mm SL, fish market at Saiki (佐伯), Oita Pref., 31 Jan. 1915, K. Suito (出納国満), local name “Chisha (チシャ)”.

ZUMT 4402*: 156.6 mm SL, Nishihamada (西浜田), Iwami (石見), Shimane Pref., before 1915, Sekishu-Iwami Fisheries Research Station (石州石見水産研究所).

ZUMT 5011: 139.4 mm SL, locality unknown, before 1915, Y. Haneda (羽根田彌太).

ZUMT 5012: 157.2 mm SL; **ZUMT 5013**: 151.7 mm SL, locality unknown, probably Tokyo (東京か？), before 1916.

ZUMT 5130: 57.5 mm SL, Misaki, Kanagawa Pref., before 1916.

ZUMT 33902: 59.8 mm SL, probably Tokyo Market, before 1926.

ZUMT 13402: 59.5 mm SL, Shizuura (静浦), before 1926, N. Kuroda (黒田長礼).

ZUMT 16701*: 213.9 mm SL, probably Yokosuka (横須賀), Kanagawa Pref., H. Tsubota (坪田久福) at Yokosuka.

ZUMT 19200: 73.5 mm SL, Hachijo-jima Island (八丈島), 1 July 1929, Y. Otsuki (大槻洋四郎) at Hachijo-jima Island.

ZUMT 19490*: 238.7 mm SL, Mitsune (三根), Hachijo-jima Island, before 1929, probably Y. Oshizu (押津義雄).

ZUMT 19983*: 267 mm SL, Misaki, Kanagawa Pref., before 1930.

ZUMT 25235*: 141.5 mm SL, probably Onoda (小野田), Yamaguchi Pref., identified on 17 Mar. 1933, M. Nagatomi (永富三治).

ZUMT 28324: 45.1 mm SL, Chiba Pref., 1927, S. Kohama (小浜 秀) at Chiba Girls Normal School (千葉県女子師範学校).

ZUMT 31244: 71.8 mm SL, **ZUMT 31493***: 280.7 mm SL, Matsue (松江), before 1935, Shimane Pref., R. Yanai (柳井隆一) at Shimane Prefectural Matsue High School (島根県松江高校).

ZUMT 32620: 41.3 mm SL, probably Shizuura, Jan. 1932, N. Kuroda.

ZUMT 33413: 97.0 mm SL, Katsuura (勝浦), Chiba Pref., before 1936.

ZUMT 37580: 85.4 mm SL, ?Misaki or Ushimado (三崎？牛窓か？), Kanagawa Pref., before 1936, S. Miyoshi (三好 晋) at Mito High School (水戸高等学校).

ZUMT 39366: 28.4 mm SL; **ZUMT 39367**: 28.0 mm SL, locality unknown.

ZUMT 41207*: 213.1 mm SL, Namerikawa, Uozu, Toyama Pref., I. Tomiyama.

ZUMT 43285: 83.3 mm SL; **ZUMT 43286**: 83.2 mm SL, Fukura, Awaji-shima Island, Hyogo Pref., R. Uchiyama.

ZUMT 44133*: 209.0 mm SL, Hachijo-jima Island, Sept. 1922, M. Uchiyama (内山　操).

ZUMT 48348: 6 specimens, 30.2–71.6 mm SL, between Oiso and Izu Oshima, 3 July 1933.

ZUMT 63581: 3 specimens, 61.6–70.2 mm SL, locality unknown.

Hybrid between ***O. fasciatus*** and ***O. punctatus***

ZUMT 12103: 77.4 mm SL; probably Tokyo Market, before 1926.
ZUMT 25694: 75.1 mm SL, probably Himi (氷見), Toyama Pref., before 1933, M. Ota (太田外正) at Toyama Prefectural Himi Junior Highschool (氷見中学校).
ZUMT 41356*: 108.4 mm SL, Namerikawa, Uozu, Toyama Pref., I. Tomiyama.
ZUMT 63582: 107 mm SL, locality unknown.

Pentacerotidae カワビシャ科
Histiopterus Temminck & Schlegel, 1844 カワビシャ属
Histiopterus typus Temminck & Schlegel, 1844 カワビシャ

ZUMT 3626: 178.0 mm SL, off northwestern coast of Kyuhyu (九州北西岸沖), before 1912, N. Yanagi (柳 直勝).
ZUMT 3817: 140.9 mm SL, Tokyo, before 1913.
ZUMT 4183: 46.9 mm SL, Misaki, Kanagawa Pref., before 1914, I. Oga (大賀一郎).
ZUMT 8324: 49.5 mm SL; **ZUMT 8549** (cloth tag of 838): 149.0 mm SL, Kishu-tanabe (紀州田辺), Wakayama Pref., before 1915, N. Ui (宇井縫蔵), rare, local name unknown.
ZUMT 11371: 67.5 mm SL, Shimonoseki (下関), Yamaguchi Pref., before 1923, T. Kumada (熊田頭四郎), trawled.
ZUMT 13641*: 199.7 mm SL, 150 miles off northeast of Houkasho (彭佳嶼), Keelung (基隆), Taiwan, before 1923, T. Aoki.
ZUMT 21989: 56.6 mm SL, around Wakayama, Wakayama Pref., Jan. 1920.
ZUMT 23733: 163.5 mm SL, locality unknown (purchased at Noto Peninsular), H. Kawashima (川島 弘) at No. 4 High School (第四高等学校).
ZUMT 31499*: 196.9 mm SL, Matsue, Shimane Pref., before 1935, R. Yanai at Shimane Prefectural Matsue High School.
ZUMT 33661: 83.7 mm SL, Aichi Pref., received on 30 Oct. 1933, Aichi Prefectural Fisheries Experimental Station (Osaki, Toyohashi, Aichi Pref., Japan) [愛知県水産試験場 (豊橋市大崎町)].
ZUMT 50981: 140.3 mm SL, off Hayama (葉山), Kanagawa Pref., 6 Dec. 1959, Teguri-ami (手繰網).
ZUMT 51166: 129.5 mm SL, East China Sea, Jan. 1960.
ZUMT 52013*: 200.0 mm SL, Norin-kaiku 319 (農林 319 区), East China Sea, May 1960, F/V No. 51 Ten-yo-maru (第 51 天洋丸).
ZUMT 63439: 46.6 mm SL; **ZUMT ABE 57-345**: 45.8 mm SL; **ZUMT ABE 59-42**: 46.6 mm SL; **ZUMT ABE 60-1582**: 53.6 mm SL, **ZUMT ABE 60-1930**: 41.9 mm SL, locality unknown.
ZUMT ABE 62-26: 52.1 mm SL, Manazuru, west of Sagami Bay, Kanagawa Pref., 13 Jan. 1962.
ZUMT ABE 62-518: 55.0 mm SL, **ZUMT ABE 62-537**: 52.5 mm SL, Manazuru, west of Sagami Bay, Kanagawa Pref., 21–26 Apr. 1962.

Pentaceros Cuvier, 1829 ツボダイ属
Pentaceros wheeleri (Hardy, 1983) クサカリツボダイ

ZUMT ABE 57-125*: 128.3 mm SL; **ZUMT ABE 57-126***: 307.9 mm SL; **ZUMT ABE 57-1257***: 324.3 mm SL, locality unknown.

Pentaceros japonicus Steindachner, 1883 ツボダイ

ZUMT 4465: 172.5 mm SL; **ZUMT 12104**: 63.1 mm SL; **ZUMT 12742**: 180.5 mm SL, Tokyo Market, local

name “Fuefukitai (フエフキタイ)”, “Warushi (ワルシ)”.

ZUMT 21686: 149.7 mm SL, Kochi market (高知市場), Kochi Pref., 8 June 1929, T. Kamohara (蒲原稔治) at Kochi High School (高知高等学校).

ZUMT 25599: 113.9 mm SL, off Onahama, Fukushima Pref., 400 m depth, 3 Apr. 1933, H. Tsunoda at Onahama Elementary School (小名濱小学校), rare.

ZUMT 32842: 105.2 mm SL, Shizuoka Pref., before 1936, Hamamatsu Girls High School (浜松高等女学校).

ZUMT 47214: 147.2 mm SL, Kochi Pref.

ZUMT 49194: 174.6 mm SL, Joga-shima (城ヶ島), Misaki, Kanagawa Pref., 17 Feb. 1958, I. Tomiyama.

ZUMT 63438: 163.1 mm SL, locality unknown.

Evistias Jordan, 1907 テングダイ属

Evistias acutirostris (Temminck & Schlegel, 1844) テングダイ

ZUMT 57556*: 179.9 mm SL, Makapuu, Oahu Island, Hawaiian Islands, 10 Mar. 1987, donated by M. L. Awai and S. Kaiser.

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Specimens of the family Kyphosidae (Teleostei: Perciformes: Percoidei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

Specimens of the family Kyphosidae (Teleostei: Perciformes: Percoidei) in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were examined and found to represent one genus and four species as follows: *Kyphosus bigibbus* (Lacepède, 1801); *Kyphosus cinerascens* (Forsskål, 1775); *Kyphosus pacificus* Sakai & Nakabo, 2004; *Kyphosus vaigiensis* (Quoy & Gaimard, 1825). Additionally, the collection includes one of the seven paratypes of *K. pacificus*.

Introduction

The seachub family Kyphosidae (Teleostei: Perciformes: Percoidei) occurs worldwide in tropical and temperate seas, with most of species inhabiting shallow reefs and feeding primarily on macroalgae in adult (Sakai 2001; Knudsen and Clements 2013). Within this family, there exist diverse views regarding the recognition of subfamilies, genera, and species. However, since the publication of the revision of this family by Knudsen and Clements (2013), it has commonly been acknowledged as a family comprises a single extant genus, *Kyphosus* Lacepède, 1801, and approximately 12 valid species (Fricke et al. 2023).

During management of the fish collection in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT), 111 kyphosid specimens were identified by the first author. They are listed below with distributional notes.

Materials and Methods

Identifications of the kyphosid specimens in ZUMT were confirmed by reference to Sakai and Nakabo (1995, 2004, 2006, 2008), Sakai (2001), and Honda et al. (2022). Standard lengths (SL) were measured for all specimens, which are arranged herein in alphabetical order by species. Collectors' name and affiliations are given where known (from ZUMT specimen catalog or tags), with Japanese language equivalents in parentheses. The following list includes ZUMT number, SL, collection locality, collection depth, collection date, collecting method, collector or donator and affiliation, and remarks when applicable. For some specimens without collecting dates in the ledgers or specimen tags, according to Koeda et al. (2022), the numbers of years before which the specimen was collected were estimated by their specimen numbers. Catalog numbers after ZUMT 62000 were newly given during this study.

Collection of Kyphosidae in ZUMT

Four species of the family Kyphosidae were represented by 111 specimens held in ZUMT, including three paratypes of *K. pacificus*. Specimens were collected from 1913 to 2021, mainly in the early years, many representing Kanagawa to Kochi Prefectures on the Pacific coast of Japan and the Izu Islands, southern Japan. The specimens from Hachijo-jima Island, Izu Islands , which account for most of these specimens, were donated by Yoshio Oshitsu (押津義雄), who is presumed to be a philanthropist from the Hachijo-jima Island (Koeda et al. 2022). The specimens, identified as *Kyphosus bigibbus* (Lacepède, 1801), *Kyphosus cinerascens* (Forsskål, 1775);

K. pacificus, *Kyphosus vaigiensis* (Quoy & Gaimard, 1825), were collected from the areas where these four species are still commonly found (Sakai and Nakabo 1995, 2004, 2006, 2008; Nakabo and Doiuchi 2013).

Kyphosidae イスズミ科
Kyphosus Lacepède, 1801 イスズミ属
***Kyphosus bigibbus* Lacepède 1801** ノトイスズミ

JAPAN

Ibaraki Pref.

ZUMT 31662, 72.5 mm SL, before 1936, K. Tashiro (田代清友).

Tokyo

ZUMT 4672, 128.6 mm SL, Tokyo Market, before 1915.

ZUMT 19127, 377.0 mm SL, Hachijo-jima I., Izu Is., coast of Mitsune, 3 July 1929, net fishing (probably gill net), Y. Otsuki (大槻洋四郎), local name "Sasagi (ササギ)".

ZUMT 19172, 377.0 mm SL, **ZUMT 19173**, 368.0 mm SL, **ZUMT 19174**, 325.0 mm SL, Hachijo-jima I., Izu Is., 7 July 1929, net fishing (probably gill net), Y. Otsuki.

ZUMT 19254, 378.0 mm SL, **ZUMT 19370**, 267.0 mm SL, **ZUMT 19402**, 316.0 mm SL, Hachijo-jima I., Izu Is., before 22 July 1929, Y. Oshitsu (押津義雄).

ZUMT 19273, 349.0 mm SL, **ZUMT 19309**, 404.0 mm SL, Hachijo-jima I., Izu Is., Mitsune, July 1929, Y. Oshitsu.

ZUMT 19483, 240.0 mm SL, Hachijo-jima I., Izu Is., Mitsune, before 22 July 1929, Y. Oshitsu.

ZUMT 32235, 35.6 mm SL, **ZUMT 32236**, 34.4 mm SL, **ZUMT 32238**, 35.6 mm SL, Tokyo (details unknown), Japan, before 1936.

ZUMT 32570, 187.8 mm SL, Fukagawa Fish Market (深川魚市場)[currently Monzen-naka-cho (門前仲町)], Koto-ku, Nov. 1928, S. Watanabe (渡辺洲三).

ZUMT 41925, 239.0 mm SL, Hachijo-jima I., Izu Is., probably before 1940, K. Uchiyama (内山吉五郎).

ZUMT 43371, 102.0 mm SL, Izu-oshima I., Izu Is., Habu Port, 17 Aug. 1933, N. Kuroda (黒田長礼).

ZUMT 44120, 171.1 mm SL, Hachijo-jima I., Izu Is., Sept. 1922, M. Uchiyama (内山　操).

ZUMT 44139, 191.3 mm SL, Hachijo-jima I., Izu Is., Mitsune, Sept. 1922, M. Uchiyama.

ZUMT 48296, 88.7 mm SL, **ZUMT 48297**, 67.2 mm SL, Aburatsubo Bay in Sagami Bay, Koajiro, Misaki, 1935, T. Abe (阿部宗明).

Kanagawa Pref.

ZUMT 21319, 28.1 mm SL, coast of Kanagawa Pref., 20 Sept. 1925, Kamakura Normal School [Shonan (Fujisawa) Junior High School] (鎌倉師範学校).

ZUMT 22692, 26.2 mm SL, Sagami Bay, Ajiro, Misaki, Aug. 1913.

ZUMT 43245, 47.2 mm SL, **ZUMT 43247**, 81.4 mm SL, **ZUMT 43250**, 55.2 mm SL, **ZUMT 43251**, 72.2 mm SL, **ZUMT 43252**, 44.8 mm SL, **ZUMT 43255**, 66.0 mm SL, Sagami Bay, Misaki, probably before 1940.

Shizuoka Pref.

ZUMT 43337, 31.8 mm SL, **ZUMT 43338**, 26.9 mm SL, Suruga Bay, Numazu, before 27 Dec. 1933, N. Kuroda.

Mie Pref.

ZUMT 7739, 52.8 mm SL, **ZUMT 7919**, 110.5 mm SL, Ise, before 1918, M. Kobayashi, Ise-yokkaichi Elementary School (伊勢四日市第一小学校 小林万作).

ZUMT 55514, 153.7 mm SL, Kumano-nada Sea, Owase, Aug. 1980, set net, K. Mochizuki (detail unknown).

Kochi Pref.

ZUMT 19937, 164.5 mm SL, Tosa Bay, Susaki, 22 July 1925, T. Kamohara (蒲原稔治).

Fukui Pref.

ZUMT 4431, 109.3 mm SL, Wakasa Bay, Sashu-obama (若州小濱), currently Obama, before 1915, N. Taniguchi (谷口直太郎).

Shimane Pref.

ZUMT 31319, 74.1 mm SL, Matsue, Shimane Pref., Japan, before 1936, R. Yanai (柳井隆一).

Yamaguchi Pref.

ZUMT 46447, 89.6 mm SL, Hagi, probably before 1940.

Nagasaki Pref.

ZUMT 31967, 104.7 mm SL, off Nagasaki Pref., before 1936, trawl, T. A. Glover (倉場富三郎).

Remarks: Tomisaburo Awajiya Glover (1871–1945), the donor of this specimen, is the son of Thomas Blake Glover (1838–1911), an individual engaged in trading activities in Japan during the late Edo and early Meiji eras (Faculty of Fisheries, Nagasaki University, 1973; Nagasaki University Library 2006). He edited "Fishes of Southern and Western Japan", commonly known as "Glover Atlas (グラバー図譜)", before his death, and the beautiful figures in it have been found to be of artistic value (Faculty of Fisheries, Nagasaki University, 1973; Senou 2013), although some argue that this has little scientific value because no specimens have remained to support it (Senou 2013). Since ZUMT has 21 specimens donated by him, including this one, future research may overturn the assessment that Glover Atlas has no scientific basis.

ZUMT 50022, 122 mm SL, Nakadori-jima I., Goto Is., Arikawa, 12 Oct. 1953, I. Tomiyama (冨山一郎).

ZUMT 50194, 127.9 mm SL, **ZUMT 50195**, 135.4 mm SL, **ZUMT 50196**, 124.1 mm SL, **ZUMT 50197**, 132.3 mm SL, Nakadori-jima I., Goto Is., Arikawa, 18 Oct. 1953, I. Tomiyama.

Miyazaki Pref.

ZUMT 64169, 123.4 mm SL, Inoran-tani (イノラン谷), a fishing point of Kadogawa Bay (32°28′49″N, 131°42′44″E), 25 Oct. 2021, M. Fukatani (深谷真央).

UNKNOWN

ZUMT 48349, 49.7 mm SL, locality unknown (probably Japan), 3 July 1933.

ZUMT 63369, 187.5 mm SL, **ZUMT 63370**, 117.8 mm SL, locality and date unknown.

ZUMT ABE '60-199, 154.7 mm SL, **ZUMT ABE '60-200**, 157.7 mm SL, **ZUMT ABE '60-1006**, 82.1 mm SL, **ZUMT ABE '60-1295**, 150.7 mm SL, **ZUMT ABE '60-1296**, 132.8 mm SL, **ZUMT ABE '60-1297**, 121.8 mm SL, probably Manazuru, western Sagami Bay, Kanagawa Pref., Japan, 1960, T. Abe.

Remarks: The six specimens of *K. bigibbus* and the five specimens of *K. vaigiensis* (ZUMT ABE '59-678, ZUMT ABE '61-902, ZUMT ABE '60-1294, ZUMT ABE '60-1517, and ZUMT ABE '60-1618), registered by T. Abe, were highly likely collected from Manazuru. This assumption is based on the fact that T. Abe often purchased fish from local fisherman running set net in the Manazuru area in the 1960s. Both *K. bigibbus* and *K. vaigiensis* are commonly distributed in the coast of Sagami Bay, including Manazuru (Sakai and Nakabo, 1995, 2004, 2008; Senou et al. 2006; Honda et al. 2022).

***Kyphosus cinerascens* (Forsskål 1775)** テンジクイサキ

JAPAN

Tokyo

ZUMT 19457, 368.0 mm SL, Hachijo-jima I., Izu Is., before 22 July 1929, Y. Oshitsu.

ZUMT 32237, 33.8 mm SL, Tokyo (details unknown), Japan, before 1936.

ZUMT 63367, 364.0 mm SL, Ogasawara Is., Tokyo, Japan, Mar. 1913, S. Fujimori (藤森三郎), local name "Sasauo (ササウオ)".

Kanagawa Pref.

ZUMT 43244, 92.2 mm SL, **ZUMT 43248**, 62.9 mm SL, **ZUMT 43249**, 76.2 mm SL, **ZUMT 43253**, 72.2 mm SL, **ZUMT 43254**, 60.7 mm SL, Sagami Bay, Misaki, probably before 1940.

Shizuoka Pref.

ZUMT 10543, 98.7 mm SL, **ZUMT 10544**, 33.8 mm SL, Suruga Bay, Shizuura, Numazu, Aug. 1922, N. Kuroda.

Kochi Pref.

ZUMT 18878, 102.0 mm SL, Kashiwa-jima I., Aug. 1928, T. Kamohara, local name "Kitsuuo (キツウオ)".

ZUMT 47012, 280.0 mm SL, probably before 1940, T. Kamohara.

Okinawa Pref.

ZUMT 14329, 106.4 mm SL, Okinawa-jima I., Ryukyu Archipelago, Naha, Okinawa Pref., Japan, 6 Feb. 1925, H. Yashiro (屋代弘孝).

ZUMT 16834, 103.6 mm SL, ZUMT 16835, 111.7 mm SL, ZUMT 16836, 116.2 mm SL, Okinawa-jima I., Ryukyu Archipelago, Onna, Kunigami, Okinawa Pref., Japan, before 1926, S. Tanabe (田辺貞夫).

PALAU

ZUMT ABE 2817, 153.2 mm SL, **ZUMT ABE 2818**, 158.9 mm SL, 1936, T. Abe.

PHILIPPINES

ZUMT 42372, 217.0 mm SL, ZUMT 42377, 207.0 mm SL, Basilan, 1926, U. Yamamura (山村楳次郎).

UNKNOWN

ZUMT 39276, 103.2 mm SL, probably Japan, before 1938.

ZUMT 39368, 33.8 mm SL, l probably Japan, before 1939.

Kyphosus pacificus Sakai & Nakabo, 2004 ミナミイスズミ

JAPAN (Tokyo)

ZUMT 6830, 143.8 mm SL, Ogasawara Is., before 1915, S. Fujimori (藤森三郎), local name "Sasauo (ササウオ)".

ZUMT 19160, 316.0 mm SL, Hachijo-jima I., Izu Is., 6 July 1929, line fishing, Y. Otsuki, local name "Sasagi (ササギ)".

ZUMT 19310, 263.0 mm SL, **ZUMT 19311**, 232.0 mm SL, **ZUMT 19312**, 224.0 mm SL, Hachijo-jima I., Izu Is., Mitsune, July 1929, Y. Oshitsu.

ZUMT 19403, 229.0 mm SL, **ZUMT 19409**, 264.0 mm SL, **ZUMT 19430**, 216.0 mm SL, **ZUMT 19432**, 205.0 mm SL, Hachijo-jima I., Izu Is., before 22 July 1929, Y. Oshitsu.

ZUMT 19482, 238.0 mm SL, **ZUMT 19484**, 229.0 mm SL, Hachijo-jima I., Izu Is., Mitsune, Hachijo, Tokyo, Japan, before 22 July 1929, Y. Oshitsu.

ZUMT 31003, 173.7 mm SL, paratype of *Kyphosus pacificus*, Hachijo-jima I., Izu Is., Hachijo, Tokyo, Japan, before 1935, local name "Hatouwo (ハトウヲ)".

ZUMT 38887, 150.9 mm SL, Hachijo-jima I., Izu Is., before 1938.

ZUMT 40568, 143.8 mm SL, Hachijo-jima I., Izu Is., probably before 1940.

ZUMT 63368, 221.0 mm SL, Ogasawara Is., Mar. 1913, S. Fujimori, local name "Sasauo (ササウオ)".

Remarks: In this study, the scientific name *Kyphosus pacificus* Sakai & Nakabo, 2004 was adopted for the species. Knudsen and Clements (2013) used a principal component analysis to consider *Kyphosus sectatrix* (Linnaeus, 1758) as a senior synonym of *K. pacificus*, based on morphometric characteristics measured from multiple specimens of *K. sectatrix* and a single paratype specimen of *K. pacificus*. However, this conclusion is hardly reliable due to problems such as the fact that a material (MNHN 0000-2977) examined as a holotype of *K. sectatrix* is actually a non-type specimen and that only one sample was used as material of *K. pacificus* (Knudsen and Clements 2013; Gilbert 2015).

The description of *Perca saltatrix* (= *Kyphosus sectatrix*) by Linnaeus (1758) is based on a sketch of an individual obtained from the Gulf of Mexico (Catesby, 1743: 8, pl. 8, middle figure). The sketch depicts the upper lateral surface of the individual as brownish with scattered dull yellow spots, while the lower half is described as having contrasting yellow and white vertical lines (Catesby, 1743). Although no species of the genus *Kyphosus* from the Gulf of Mexico perfectly matches this sketch and the described characteristics, there are similarities to the approximately 80 mm SL individuals of *Kyphosus sectatrix* presented by Knudsen and Clements (2013) in terms of having a dark-colored upper lateral surface with scattered light-colored spots and a light-colored lower half without prominent light-colored spots (Knudsen and Clements, 2013: fig. 17H). This differs from the coloration characteristics of juvenile *K. pacificus*, which have a uniformly dark body with densely distributed white spots throughout the body (Honda et al. 2022; figs. 5, 6A, C). Furthermore, Gilbert (2015) designates a neotype for *K. sectatrix*, and this specimen can be distinguished from the holotype and paratypes of *K. pacificus* based on counts and measurements such as the number of vertical scale rows (Sakai and Nakabo, 2004, 2014). Based on these circumstances, this study distinguished *K. pacificus* and *K. sectatrix* as separate species and treats *K. pacificus* as valid species.

Kyphosus vaigiensis (Quoy & Gaimard 1825) イスズミ

JAPAN

Tokyo

ZUMT 19159, 278.0 mm SL, Hachijo-jima I., Izu Is., 6 July 1929, line fishing, Y. Otsuki, local name "Hatouo (ハトウオ)".

ZUMT 19433, 315.0 mm SL, Hachijo-jima I., Izu Is., before 22 July 1929, Y. Oshitsu.

Shimane Pref.

ZUMT 4359, 178.8 mm SL, off Hamada, 5 Oct. 1914, Shimane Prefectural Fisheries Experimental Station (島根県水産試験場).

ZUMT 4400, 162.6 mm SL, Hamada Fisheries Experimental Station, Setogashima, Hamada, before 1915.

ZUMT 31174, 169.0 mm SL, ZUMT 31487, 158.7 mm SL, Matsue, before 1936, R. Yanai (柳井隆一).

Yamaguchi Pref.

ZUMT 8634, 169.0 mm SL, Senzaki, Nagato, 10 Oct. 1918, Toshiro Kumada, Senzaki [熊田頭四郎 (山口県仙崎)].

Nagasaki Pref.

ZUMT 50035, 154.7 mm SL, East China Sea, Fukue-jima I., Goto Is., Fukue, Goto, Nagasaki Pref. Japan, 12 Oct. 1953, I. Tomiyama.

Okinawa Pref.

ZUMT 19087, 225.0 mm SL, Okinawa-jima I., Ryukyu Archipelago, 23 May 1928, Okinawa Prefectural Fisheries Experimental Station (沖縄県水産試験場).

PALAU

ZUMT ABE 2935, 351.0 mm SL, **ZUMT ABE 3745**, 209.0 mm SL, **ZUMT ABE 3927**, 164.4 mm SL, Palau, 1936, T. Abe.

UNKNOWN

ZUMT 46345, 236.0 mm SL, locality unknown, probably before 1940.

ZUMT ABE '59-678, 283.0 mm SL, **ZUMT ABE '61-902**, 121.2 mm SL, **ZUMT ABE '60-1294**, 170.5 mm SL, **ZUMT ABE '60-1517**, 179.4 mm SL, **ZUMT ABE '60-1618**, 150.1 mm SL, probably Manazuru, western Sagami Bay, Kanagawa Pref., Japan, 1961, T. Abe.

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Specimens of the family Gobiesocidae (Teleostei: Gobiesociformes) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

Specimens of the family Gobiesocidae, deposited in the Department of Zoology, The University Museum, The University of Tokyo, were examined and found to represent eight genera and species as follows: *Aspasma ubauo* Fujiwara & Motomura, 2019, *Aspasmichthys ciconiae* (Jordan & Fowler, 1902), *Conidens laticephalus* (Tanaka, 1909), *Diademichthys lineatus* (Sauvage, 1883), *Kopua yoko* Fujiwara, Okamoto & Motomura, 2018, *Pherallodus indicus* (Weber, 1913), *Propherallodus briggsi* Shiogaki & Dotsu, 1983, and *Lepadichthys misakius* (Tanaka, 1908).

Introduction

Clingfishes in the family Gobiesocidae inhabit a range of habitats in the Atlantic and Indo-Pacific oceans, from intertidal to deep sea, with some additional tropical species occurring in freshwater streams (Conway et al. 2020). The family is characterized by the following combination of characters: body slender, cylindrical and compressed at caudal peduncle, and lacking scales; single dorsal and anal fins; pelvic fins and pelvic girdle forming adhesive disc (except for species of *Alabes* Cloquet, 1816). Currently 191 gobiesocid species, included in 52 genera , are recognized (Briggs 1955; Nelson et al. 2016; Fricke et al. 2023; Fujiwara et al. 2023).

During the first authors' revisional study of Gobiesocidae, all specimens of the family deposited in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were examined. A list of those specimens is provided herein, along with brief comments on type specimens.

Materials and Methods

Gobiesocid specimens were identified by the first author, with reference to Hayashi et al. (1986), Hayashi and Hagiwara (2013), Fujiwara and Motomura (2018, 2019a, b), and Fujiwara et al. (2018). Standard lengths (SL) of all specimens were measured, except for some in poor condition. The collection year and collector are given where recorded in the ZUMT specimen catalogue or on a tag, with some also determined following Koeda et al. (2022). The following list includes ZUMT number, SL, number of specimens when two or more, type status if any, collection locality, and associated collection data. Collection data for specimens are omitted if the same as that for the next specimen listed.

Although some of the ZUMT specimens collected by Dr. Tokiharu Abe had not been registered into the ZUMT collection, with the collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr. Abe's catalog books with collection data will be rediscovered in the future.

Collection of Gobiesocidae in ZUMT

A total 272 specimens in 67 lots of Gobiesocidae were found in the ZUMT collection, and subsequently

identified as eight genera and species as listed below. All specimens were collected from Japan in the 20th century (from 1908 to 1989), the majority from the Japanese mainland. Compared with currently known distributional records, no specimens, except for ZUMT 65731, represented range extensions for their respective species. ZUMT 65731 was reported as the first records of *Kopua yoko* Fujiwara, Okamoto & Motomura, 2018 from the southern East China Sea by Fujiwara & Wada (2023). According to the ZUMT specimen catalogue and Tanaka (1908, 1909), three type specimens of Gobiesocidae had been deposited in ZUMT (viz., ZUMT 1981, 1982, 2158). However, the holotype of *Aspasma laticephala* (= *Conidens laticephalus*; ZUMT 2158) and paratype of *Aspasma misakia* (= *Lepadichthys misakius*; ZUMT 1982) have apparently been lost as they could not be found during the present search. The remaining specimen (ZUMT 1981: holotype of *Aspasma misakia*) was reported in Fujiwara and Motomura (2019a: fig. 9) and Fig. 1.

Gobiesocidae　ウバウオ科
Aspasma Jordan & Fowler, 1902　ウバウオ属
Aspasma ubauo Fujiwara & Motomura, 2019　ウバウオ

ZUMT 1783: 12 specimens, 25.1–46.0 mm SL; **ZUMT 1785**: 13 specimens, 24.8–47.6 mm SL, tide pool at Misaki, Miura, Kanagawa Pref., May 1908, S. Tanaka.
ZUMT 2125: 59.5 mm SL, “Anbotatekawa” (probably Tateyama), Chiba Pref., 5 Apr. 1908.
ZUMT 5468: 3 specimens, 24.2–43.1 mm SL, Jyogashima, Miura, Kanagawa Pref.
ZUMT 7812: 3 specimens, 35.2–42.9 mm SL, Jyogashima, Miura, Kanagawa Pref., Apr. 1917, S. Tanaka.
ZUMT 22021: 42.2 mm SL, Wakayama Pref., Jan. 1920.
ZUMT 28393: 37.8 mm SL; **ZUMT 28394**: 25.6 mm SL; **ZUMT 28395**: 23.5 mm SL; **ZUMT 28396**: 23.4 mm SL, Misaki, Miura, Kanagawa Pref.
ZUMT 28639: 106 specimens, 17.8–49.4 mm SL, Misaki, Miura, Kanagawa Pref., 2 May 1909.
ZUMT 29021: 25.7 mm SL; **ZUMT 29022**: 29.1 mm SL; **ZUMT 29023**: 22.6 mm SL; **ZUMT 29024**: 24.6 mm SL; **ZUMT 29025**: 28.5 mm SL; **ZUMT 29026**: 28.7 mm SL; **ZUMT 29027**: 25.3 mm SL; **ZUMT 29028**: 25.4 mm SL; **ZUMT 29029**: 26.2 mm SL, Misaki, Miura, Kanagawa Pref., May 1918.
ZUMT 38979: 42.9 mm SL **ZUMT 38980**: 32.8 mm SL **ZUMT 38981**: 32.3 mm SL, Misaki, Miura, Kanagawa Pref.
ZUMT 48691: 43.7 mm SL, Najima-sensho (fishing point at northeastern Sagami Bay), Kanagawa Pref., 11 June 1956, donated from Biological Laboratory, Akasaka Imperial Palace, Imperial Household, Tokyo, Japan.
ZUMT 54789: 27.1 mm SL; **ZUMT 54790**: 24.1 mm SL; **ZUMT 54791**: 45.0 mm SL; **ZUMT 54851**: 4 specimens, 23.2–37.1 mm SL, tide pool at Moroiso Beach, Misaki, Miura, Kanagawa Pref., 5 May 1985.
ZUMT 55183: 7 specimens, 29.0–41.2 mm SL, Mito Beach, Mito, Miura, Kanagawa Pref., 20 July 1966.
ZUMT 55184: 6 specimens, 25.6–38.6 mm SL, Ebishima (vicinity of Moroiso Beach), Misaki, Miura, Kanagawa Pref., 21 Apr. 1966.
ZUMT 55185: 38 specimens, 21.3–38.4 mm SL; **ZUMT 55186**: 19 specimens, 13.6–43.1 mm SL, Misaki, Miura, Kanagawa Pref.
ZUMT 55268: 40.5 mm SL, tide pool at Ebishima (vicinity of Moroiso Beach), Misaki, Miura, Kanagawa Pref., 10 May 1986, M. Aizawa.
ZUMT 58932: 30.4 mm SL; **ZUMT 58933**: 43.5 mm SL, Arai Beach, Koajiro, Miura, Kanagawa Pref., 30 Apr. 1990, M. Aizawa.
ZUMT ABE 1929: 44.1 mm SL; **ZUMT ABE 1930**: 47.7 mm SL, locality unknown.

Aspasmichthys Briggs, 1955　ツルウバウオ属
Aspasmichthys ciconiae (Jordan & Fowler, 1902)　ツルウバウオ

ZUMT 9859: 73.1 mm SL, south coast of Awaji-shima island, Hyogo Pref., K. Yamadori.

ZUMT 18933: 49.7 mm SL, Okino-shima island, Sukumo, Kochi Pref., Nov. 1926, T. Kamohara.
ZUMT 20570: 51.8 mm SL, Wakayama Pref., Jan. 1920.
ZUMT 25576: 51.4 mm SL, Shimoda, Shizuoka Pref., May 1933, T. Ishida.
ZUMT 42414: 74.6 mm SL, Shimoda, Shizuoka Pref., M. Kato.
ZUMT 55285: 19.1 mm SL, tide pool at Motomachi, Izu-oshima island, Izu Islands, Tokyo, 18 Aug. 1933, I. Tomiyama.

Conidens Briggs, 1955　アンコウウバウオ属
Conidens laticephalus (Tanaka, 1909)　アンコウウバウオ

ZUMT 41071: 12.7 mm SL, Hachijyo-jima island, Izu Islands, Tokyo, S. Watanabe.
ZUMT 54748: 32.7 mm SL, Mito Beach, Mito, Miura, Kanagawa Pref., 20 July 1966.
ZUMT 60791: 32.1 mm SL; **ZUMT 60792**: 31.1 mm SL; **ZUMT 60793**: 29.8 mm SL; **ZUMT 60794**: 25.0 mm SL, Izu Oceanic Park, Futo, Itou, Shizuoka Pref., 24 May 1990, H. Senou and M. Aizawa.

Diademichthys Pfaff, 1942　ハシナガウバウオ属
Diademichthys lineatus (Sauvage, 1883)　ハシナガウバウオ

ZUMT 60673: 40.1 mm SL, Kabira Bay, Ishigaki-jima island, Yaeyama Islands, Okinawa Pref., 28 Aug. 1989, H. Senou and M. Aizawa.
ZUMT 61455: 24.7 mm SL, locality unknown.

Kopua Hardy, 1984　ヨザクラウバウオ属
Kopua yoko Fujiwara, Okamoto & Motomura, 2018)　ヨウコウヨザクラウバウオ

ZUMT 65731: 2 specimens, ca. 16–19 mm SL, southern East China Sea (ca. 200 km northwest of Kume Island, Okinawa Islands, Okinawa Pref.), RV *Hakuho-maru*.

Pherallodus Briggs, 1955　ホソウバウオ属
Pherallodus indicus (Weber, 1913)　ホソウバウオ

ZUMT 54737: 2 specimens, standard length undetermined; **ZUMT 55181**: clear and stained specimen, standard length undetermined; **ZUMT 55182**: 3 specimens, 22.0–25.8 mm SL, Mito Beach, Mito, Miura, Kanagawa Pref., 20 July 1966.

Propherallodus Shiogaki & Dotsu, 1983　ヒメウバウオ属
Propherallodus briggsi Shiogaki & Dotsu, 1983　ヒメウバウオ

ZUMT 63012: 24.6 mm SL, tide pool at Okada Port, Izu-oshima island, Izu Islands, Tokyo, 28 July 1991.

Lepadichthys Waite, 1904　ミサキウバウオ属
Lepadichthys misakius (Tanaka, 1908)　ミサキウバウオ

ZUMT 1981: holotype of *Aspasma misakia*, 51.9 mm SL, Misaki, Miura, Kanagawa Pref., S. Tanaka, May 1908.

ZUMT 19233: 40.0 mm SL, Hachijyo-jima island, Izu Islands, Tokyo, 1 July 1929, Y. Otsuki.
ZUMT 29000: 47.8 mm SL, Misaki, Miura, Kanagawa Pref.
ZUMT 41875: 32.3 mm SL; **ZUMT 41876**: 45.2 mm SL; Hachijyo-jima island, Izu Islands, Tokyo, Sept. 1922, K. Uchiyama.
ZUMT 42858: 22.8 mm SL, Hachijyo-jima island, Izu Islands, Tokyo, Sept. 1922, M. Uchiyama.
ZUMT 55178: 40.0 mm SL; **ZUMT 55179**: 48.1 mm SL; **ZUMT 55180**: 53.8 mm SL, Misaki, Miura, Kanagawa Pref., 2 May 1909.
ZUMT 56842: 55.9 mm SL, Aburatsubo Bay, Miura, Kanagawa Pref., 1 Aug. 1987.
ZUMT 60795: 44.6 mm SL, Izu Oceanic Park, Futo, Itou, Shizuoka Pref., 24 May 1990, H. Senou and M. Aizawa.
ZUMT 61450: originally included in ZUMT 55186, 48.3 mm SL, Misaki, Miura, Kanagawa Pref.

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Fig. 1. Holotype of *Aspasma misakia* (= *Lepadichthys misakius*), ZUMT 1981, 51.9 mm SL, Misaki, Miura, Kanagawa Pref., Japan.

Specimens of the monotypic family Scombrolabracidae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of the monotypic family Scombrolabracidae deposited in the Department of Zoology, The University Museum, The University of Tokyo is provided, eight examples of *Scombrolabrax heterolepis* being confirmed.

Introduction

The monotypic family Scombrolabracidae (longfin escolars) comprises the single species *Scombrolabrax heterolepis* Roule, 1921 (Bond and Uyeno 1981; Nelson et al. 2016), which inhabits continental shelves and slopes at depths between 100 and 900 m (Nakabo and Doiuchi 2013). Although *S. heterolepis* is widely distributed in circumtropical waters, except in the eastern Pacific and southeastern Atlantic oceans, the species is rarely caught by trawl (Roule 1921; Arté 1952; Grey 1960; Fujii 1983; Nakamura and Parin 2001, 2002, 2016; Hidaka 2016; Hata 2019, 2020). As a result, the biology of the species is very poorly known, although specimens are sometimes found in the stomachs of tunas and swordfishes (Higgins et al. 1970). Although *S. heterolepis* resembles species included in Scombridae and Gempylidae, the former is distinguishable from them by its large eye (diameter equal to snout length vs. eye diameter less than half snout length in gempylids), the lateral line closely following the dorsal contour (vs. running along mid-lateral surface of body or absent in gempylids), body uniformly dark brown (vs. dorsum blue and lateral/ventral body surface silver in scombrids) and lack of keels on the caudal peduncle (vs. keels present in scombrids) (Nakamura and Parin 2001, 2002, 2016). Scombrolabracidae is also characterized by bullae on the first to twelfth vertebrae, which accommodate bubble-like evaginations of the swimbladder dorsal surface. Such a character has not been reported in any other fish species (Bond and Uyeno 1981).

Scombrolabracidae has long been suggested as related to Scombridae, Gempylidae, and Trichiuridae (Grey 1960; Potthoff et al. 1980), and, although sometimes included in the suborder Scombroidei (e.g., Gosline 1968), has frequently been placed in the monotypic suborder Sombrolabracoidei (e.g., Roue 1921; Bond and Uyeno 1981; Nakamura and Parin 2001, 2002, 2016; Nakabo and Doiuchi 2013) or the monotypic order Scombrolabracoiformes (Nelson et al. 2016), due to its unique characters. However, Johnson (1986) suggested a close relationship between *S. heterolepis* and *Pomatomus saltatrix* (Linnaeus, 1766) (bluefish), and while recent molecular phylogenetic studies (Miya et al. 2013; Betancur-R et al. 2017) have shown that Scombrolabracidae is distantly related to Scombridae and Pomatomidae, it is closer to Centrolophidae (jellyfishes). The specific phylogenetic position of *Scombrolabrax* remains unclear. While seemingly uncommon throughout its range, *S. heterolepis* has recently been reported for the first time from Taiwanese waters (Hata et al. 2019). The following list of specimens of Scombrolabracidae deposited in the Department of Zoology, The University Museum, The University of Tokyo includes additional valuable distribution records.

Materials and Methods

Specimens of Scombrolabracidae in the Department of Zoology, The University Museum, The University of

Tokyo (abbreviated as ZUMT) were identified during the present study, following Nakamura and Parin (2001, 2002, 2016) and Nakabo and Doiuchi (2013). Parentheses following registration numbers include standard length, collection locality, collection date, and collector. The collection year and collector for some specimens were estimated following Koeda et al. (2022).

The ZUMT specimens listed herein were stored in shelved containers in Room 406 (specimen storage room) in the museum building (as of July 2022). Although one of the ZUMT specimens collected by Dr. Tokiharu Abe had not been registered into the ZUMT collection, it is included herein, together with its ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future.

Results

Eight specimens of *Scombrolabrax heterolepis*, widely collected from the Pacific and eastern Atlantic oceans, were confirmed in the ZUMT collection. No type specimens for the family were found in the collection.

Species accounts

Family Scombrolabracidae　ムカシクロタチ科

***Scombrolabrax heterolepis* Roule, 1921　ムカシクロタチ**

PALAU

ZUMT ABE 4156 (176.5 mm; Palau) [collected between 1936 and 1937 (Koeda et al. 2022)].

INDONESIA

ZUMT 48727 [78.0 mm; Banda Sea, approx. 50 km north of Molu Island (6°15'S, 131°24'E); 29 Jan. 1956; coll. by Z. Maekawa and T. Suzuki]

ZUMT 48706 [84.5 mm; Banda Sea, approx. 200 km south of Ambon (5°34'S 128°35'E); 20 Jan. 1956; coll. by Z. Maekawa and T. Suzuki]

NEW GUINEA

ZUMT 63132 (78.5 mm; New Guinea; coll. by T. Abe)

KIRIBATI

ZUMT 48970 [60.8 mm; approx. 280 km northwest of Tabuaeran (5°12'N, 157°04'W); 5 Oct. 1956; coll. by Z. Maekawa and T. Suzuki]

SURINAME

ZUMT 63235 [138.5 mm; approx. 270 km northeast of Suriname (7°22'N 52°05'W), 740 m depth; 27 Jan. 1981; coll. by *CV Nisshin-maru*]

LOCALITY UNKNOWN

ZUMT 63234 (147.2 mm; no data)

ZUMT 63236 (81.1 mm locality unknown; collected between June and Aug., 1960)

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Specimens of the family Scombridae (Actinopterygii: Teleostei) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

A list of specimens of Scombridae deposited in the Department of Zoology, The University Museum, The University of Tokyo included a total of 368 specimens, representing 21 species. Two partial specimens were not identifiable. No types for the family were found.

Introduction

The Scombridae, variously known as mackerels, tunas, or bonitos, and comprising 15 genera and 51 species (Collette and Graves 2019), has been regarded traditionally as closely related to the families Gempylidae and Trichiuridae (e.g., Matsubara 1955; Nakamura and Parin 1993), although recent studies have shown scombrids to be more closely related to Nomeidae and Ariommatidae, families previously included within the suborder Stromateoidei, together with several other families, including Arripidae (Australian salmon) and Pomatomidae (Bluefish) (Miya et al. 2013; Betancur-R 2017).

Scombrid fishes are widely consumed the world over because many of them are large and form large schools. Several species are included in the top 15 species in the world's total fish catch, that of *Katsuwonus pelamis* (Linnaeus, 1758), in particular, amounting to 4% of the total catch (FAO 2022). In recent years, there have been concerns about the decline of many scombrid species due to overfishing, with some species, such as *Thunnus maccoyii* (Castelnau, 1872) and *Thunnus orientalis* (Temminck & Schlegel, 1844), for which global demand is increasing, being threatened with extinction (Collette et al. 2021a, b).

On the other hand, several new cryptic scombrid species have been found, as well as new distributional records reported, in recent years (e.g., Abdussamad et al. 2016; Hata et al. 2020; Shimose and Imai 2021; Barabanshchikov et al. 2021; Jeena et al. 2022), and the family still includes some taxonomic issues. A list of specimens of Scombridae, comprising at least 21 species, deposited in the Department of Zoology, The University Museum, The University of Tokyo, is given below to aid future taxonomic studies and clarify some distributional records.

Materials and Methods

Specimens of Scombridae in the Department of Zoology, The University Museum, The University of Tokyo (abbreviated as ZUMT) were identified during the present study, following Collette and Nauen (1983), Collette (2001), Nakabo and Doiuchi (2013), and Collette and Graves (2019).

Contents included in parentheses following registration numbers are as follows: number of specimens (if more than 1), standard length, collection locality, collection date, and collector. Collection data of specimens are omitted if the same as that for the following specimen.

The ZUMT specimens listed herein were primarily stored in Room 406 (specimen storage room) in the museum building. Most were stored in shelved containers, although some larger specimens were stored in a glass tank in the same room, with the glass lid sealed with a silicon adhesive (as of July 2022). Although some of the ZUMT specimens, collected by Dr. Tokiharu Abe, had not been registered into the ZUMT collection, with the

collection data of most missing, they are listed herein together with their ZUMT ABE number (number with underbar written on the specimen label), in the hope that Dr Abe's catalog books with collection data will be rediscovered in the future. Additionally, specimens with catalogue numbers ZUMT ABE 2700 to 6000 were collected from Palau by Dr. Abe between 1936 and 1937 (Koeda et al. 2022).

Results

A total of 331 lots, including 368 specimens representing 21 scombrid species, plus two partial specimens of the genera *Scomber* and *Thunnus* that could not be identified, were confirmed in the ZUMT fish collection. No types for the family were found in the collection.

Species accounts

Family Scombridae　サバ科

***Acanthocybium solandri* (Cuvier, 1832)　カマスサワラ**

JAPAN

ZUMT 31330 [approx. 613 mm (divided into two parts); Matsue City, Shimane Pref.]

LOCALITY UNKNOWN

ZUMT 64220 (475.7 mm; no data)

***Allothunnus fallai* Serventy, 1948**

AUSTRALIA

ZUMT 52314 (divided into three parts), ZUMT 52315 (fork length given as 82 cm in the ledger, but only the head remains; off Tasmania)

***Auxis rochei rochei* (Risso, 1810)　マルソウダ**

JAPAN

HOKKAIDO

ZUMT 13758 (297.2 mm; Muroran City Sept. 1924; coll. by S. Katsuki)

MIYAKI PREF.

ZUMT 16380 (257.3 mm; Ishinomaki City; 14 Sept. 1925; coll. by G. Toba)

SHIZUOKA PREF.

ZUMT 54922 (207.3 mm; Mera, Minamiizu Town; 12 Sept. 1981; coll. by M. Aizawa)

WAKAYAMA PREF.

ZUMT 20200 (227.7 mm; Wakayama Pref.; Jan. 1920)

NIIGATA PREF.

ZUMT 46643 (316.1 mm; Niigata Pref.; Aug. 1923)

TOYAMA PREF.

ZUMT 41208 (206.6 mm), ZUMT 41213 (205.8 mm), ZUMT 41221 (209.2 mm), ZUMT 41222 (197.9 mm), ZUMT 41223 (198.0 mm), ZUMT 41224 (197.2 mm), ZUMT 41249 (210.8 mm), ZUMT 41250 (209.5 mm), ZUMT 41251 [approx. 198 mm (caudal peduncle damaged)], ZUMT 41252 (205.8 mm), ZUMT 41253 (215.1 mm), ZUMT 41254 (187.4 mm), ZUMT 41255 (206.0 mm), ZUMT 41256 (196.2 mm), ZUMT 41282 (206.1 mm), ZUMT 41283 (202.1 mm), ZUMT 41284 (197.0 mm; Uozu or Namerikawa City; coll. by I. Tomiyama)

FUKUI PREF.

ZUMT 55829 (208.4 mm; Hayase, Mihama Town; 1 Nov. 1986; coll. by M. Aizawa, H. Senou, and T. Urano et al.)

FUKUOKA PREF.

ZUMT 51365 (237.7 mm; obtained at Fukuoka Fish Market; 3 Dec. 1959)

NAGASAKI PREF.

ZUMT 50407 (232.1 mm; Motoura, Ikitsuki-jima Island, Hirado City)

KIRIBATI

ZUMT 48766 [73.9 mm; approx. 55 km southwest of Banaba (1°16'01.2"S 169°14'24.0"E) (temperature 30.0 degrees, sea temperature 27.2 degrees); 3 Apr. 1956; coll. by Z. Maekawa and S. Suzuki)

Auxis thazard thazard (Lacepède, 1800)　ヒラソウダ

JAPAN

HOKKAIDO

ZUMT 13744 (301.3 mm; Muroran City; Sept. 1924; coll. by S. Katsuki)

TOYAMA PREF.

ZUMT 41220 (190.1 mm), ZUMT 41228 (199.4 mm), ZUMT 41257 [approx. 198 mm (caudal peduncle damaged); Uozu or Namerikawa City]

KANAGAWA PREF.

ZUMT ABE 10110 (313.5 mm; Manazuru Town; 31 Oct. 1954; coll. by set net),

SHIZUOKA PREF.

ZUMT 54923 (248.0 mm), ZUMT 54924 (240.4 mm; Mera, Minamiizu Town; 12 Sept. 1981; coll. by M. Aizawa)

SHIMANE PREF.

ZUMT 31281 (320.4 mm), ZUMT 31286 (290.0 mm; Matsue City)

NAGASAKI PREF.

ZUMT 2475 [approx. 222 mm (caudal peduncle damaged); Nagasaki Pref.; Aug. 1909]

ZUMT 50160 [266.3 mm; Arikawa, Shinkamigoto Town (Nakadori-jima Island, Goto Islands); 17 Oct. 1953; coll. by I. Tomiyama]

KAGOSHIMA PREF.

ZUMT 23751 (240.5 mm; Taniyama, Kagoshima City; 20 July 1930)

ZUMT 23977 (203.6 mm; Shibushi City)

OKINAWA PREF.

ZUMT 16740 (256.6 mm), ZUMT 17104 (263.1 mm; Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S, Tanabe)

LOCALITY UNKNOWN

ZUMT 64227 (215.3 mm), ZUMT ABE 57-255 (222.4 mm; no data)

Euthynnus affinis (Cantor, 1849)　スマ

JAPAN

ZUMT 16737 (286.6 mm), ZUMT 17102 [228+ mm (caudal peduncle damaged); Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe]

ZUMT 38881 (269.3 mm; Hachijo-jima Island, Izu Islands)

ZUMT 41938 [239.2 mm; probably from Hachijo-jima Island, Izu Islands; col. by Y. Uchiyama (Hachijo-jima Island)]

TAIWAN

ZUMT 2359 (160.0 mm), ZUMT 40117 (135.8 mm; Keelung)
ZUMT 13660 (118.5 mm; Keelung, coll. by T. Aoki)
ZUMT 14984 (272.0 mm; Tainan; coll. by T. Aoki)

PHILIPPINES

ZUMT 42330 (302.8 mm), ZUMT 42331 (284.0 mm), ZUMT 42345 (290.5 mm; Basilan; 1926; coll. by U. Yamamura)

LOCALITY UNKNOWN

ZUMT 64224 (271.9 mm; no data)

Gasterochisma melampus Richardson 1845

AUSTRALIA

ZUMT 52312 (head only; off Tasmania; 1963)

URUGUAY

ZUMT 52313 (head only; off Uruguay; July 1965)

Grammatorcynus bilineatus (Rüppell, 1836)　ニジョウサバ

JAPAN

ZUMT 13983 [302.1 mm; probably collected from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Prefectural Daiichi Junior High School)]
ZUMT 16738 (354.5 mm; Onna Village, Okinawa-Jima Island, Okinawa Islands, Ryukyu Archipelago; S. Tanabe)
ZUMT 52381 [approx. 478 mm (caudal peduncle damaged); Ishigaki-jima Island, Yaeyama Islands, Ryukyu Archipelago; 4 June 1966]

Gymnosarda unicolor (Rüppell, 1836)　イソマグロ

JAPAN

ZUMT ABE 83-520 (160.2 mm; Tomiura, Minamiboso City, Chiba Pref.; 5 Oct. 1983)
ZUMT 12020 (131.4 mm; obtained at Tokyo Market, Tokyo Met.; 1 Sept. 1922)
ZUMT 12311 (196.1 mm), ZUMT 12312 (199.1 mm), ZUMT 12313 (190.4 mm), ZUMT 12314 (187.7 mm), ZUMT 12322 [181.1 mm; obtained at Tokyo (caught in Izu, Shizuoka Pref.)]
ZUMT 44114 (184.7 mm; Hachijo-jima Island, Izu Islands; Sept. 1922)
ZUMT 46623 (173.6 mm; Hachijo-jima Island, Izu Islands)

LOCALITY UNKNOWN

ZUMT 38699 (134.6 mm), ZUMT 38700 (132.0 mm), ZUMT 40118 (136.5 mm), ZUMT 40119 (122.2 mm), ZUMT 40120 (132.5 mm), ZUMT 40121 (118.2 mm; locality unknown; coll. by Y. Haneda)

***Katsuwonus pelamis* (Linnaeus, 1758)　カツオ**

JAPAN

ZUMT 5891 (gill arche only; obtained at Tokyo Market, Tokyo Met; 30 July 1912)
ZUMT 17103 (295.3 mm; Onna Village, Okinawa-jima Island, Okinawa Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 17281 (285.2 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by S. Tanabe)
ZUMT 23767 (233.4 mm; Taniyama, Kagoshima City, Kagoshima Pref.; 20 July 1930) ZUMT 31285 (323.0 mm; Matsue City, Shimane Pref.)
ZUMT 46620 (254.4 mm; Hachijo-jima Island, Izu Islands)

***Rastrelliger brachysoma* (Bleeker, 1851)**

PHILIPPINES

ZUMT 40768 (152.9 mm), ZUMT 40786 (135.6 mm), ZUMT 40841 (143.4 mm), ZUMT 40851 (146.9 mm; Manila, Luzon; 11 Feb. 1909; coll. by I. Iijima and K. Aoki)
ZUMT 42387 (153.2 mm; Basilan; 1936; coll. by U. Yamamura)

***Rastrelliger faughni* Matsui, 1967**

TAIWAN

ZUMT 14964 (109.3 mm; Tainan; coll. by T. Aoki)

***Rastrelliger kanagurta* (Cuvier, 1816)　グルクマ**

JAPAN

ZUMT 11165 (163.9 mm), ZUMT 11166 [168.9 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Daiichi Junior High School)]
ZUMT 17406 (184.3 mm; Naha, Okinawa Pref.; coll. by S. Tanabe and Y. Hiyane),
ZUMT 18148 (232.3 mm), ZUMT 18149 (282.0 mm), ZUMT 18150 (288.3 mm), ZUMT 18151 (281.1 mm), ZUMT 18152 [243.3 mm; probably from Okinawa Pref.; coll. by K. Tashiro (Okinawa Prefectural Fisheries Experimental Station)]

EAST CHINA SEA

ZUMT 51415 (166.6 mm; East China Sea; Dec. 1959)
ZUMT 51430 (176.2 mm; East China Sea)

TAIWAN

ZUMT 8102 (126.5 mm; Penghu Islands)
ZUMT 12848 (101.4 mm; Keelung; coll. by T. Aoki)
ZUMT 14965 (160.7 mm; Tainan; coll. by T. Aoki),
ZUMT 22600 (209.5 mm; Kaohsiung; coll. by S. Yamada)
ZUMT 37428 (150.9 mm; Keelung; July 1908)

PHILIPPINES

ZUMT 12645 (219.3 mm), ZUMT 12646 (207.1 mm), ZUMT 12647 (196.0 mm; Philippines; coll. by U. Yamamura)

ZUMT 42316 (156.2 mm), ZUMT 42333 (157.9 mm), ZUMT 42371 (155.6 mm), ZUMT 42388 (155.9 mm; Basilan; 1936; coll. by U. Yamamura)

INDONESIA

ZUMT 64233 [120.6+ mm (caudal peduncle damaged); Menado, Sulawesi; Mar. 1918; coll. by K. Aoki]

PALAU

ZUMT ABE 2892 (288.5 mm), ZUMT ABE 3759 (285.5 mm), ZUMT ABE 3772 (125.5 mm), ZUMT ABE 5982 (208.9 mm), ZUMT 42736 (120.9 mm), ZUMT 42737 (117.7 mm; Palau)

ZUMT 63061 (135.5 mm; Palau; coll. by Y. Haneda)

LOCALITY UNKNOWN

ZUMT 46402 (204.6 mm), ZUMT 46403 (206.0 mm), ZUMT 64228 (204.4 mm), ZUMT 64229 (200.0 mm; no data)

ZUMT 62563 (107.0 mm; locality unknown; 3 Oct. 1929; tagged as “P-4121”)

Sarda orientalis (Temminck & Schlegel, 1844)　ハガツオ

JAPAN

HOKKAIDO

ZUMT 13745 (261.0 mm; Muroran City; Feb. 1924; coll. by S. Katsuki)

IWATE PREF.

ZUMT 13057 (169.4 mm), ZUMT 13058 (134.2 mm; Miyako Bay; coll. by S. Tanabe)

TOKYO MARKET

ZUMT 10032 (4 specimens, 145.6–157.3 mm; landed at Tokyo Market, Tokyo Met.; July 1921)

ZUMT 12018 (160.6 mm), ZUMT 12019 (126.3 mm; landed at Tokyo Market, Tokyo Met.;1 Sept. 1922)

SHIMANE PREF.

ZUMT 31267 (395 mm; Matsue City)

KOCHI PREF.

ZUMT 47116 (72.5 mm; probably from Kochi Pref.)

KAGOSHIMA PREF.

ZUMT 19993 (142.0 mm; Kagoshima City)

LOCALITY UNKNOWN

ZUMT ABE 61-1067 (187.3 mm; no data)

Scomber australasicus Cuvier, 1832　ゴマサバ

JAPAN

AOMORI PREF.

ZUMT 13194 (113.3 mm; Same, Hachinohe City; coll. by S. Tanabe)

IWATE PREF.

ZUMT 13132 (161.3 mm; Miyako Bay; coll. by S. Tanabe)

MIYAGI PREF.

ZUMT 13884 (185.4 mm; Kesen, Rikuzentakata City; 20 Dec. 1924; coll. by G. Toba)

FUKUSHIMA PREF.

ZUMT 26292 (201.0 mm), ZUMT 26294 (199.9 mm), ZUMT 26295 (248.2 mm), ZUMT 26296 (225.3 mm), ZUMT 26297 (248.0 mm), ZUMT 26298 (242.4 mm), ZUMT 37674 (174.8 mm; Onahama, Iwaki City)

TOKYO MARKET

ZUMT 26348 (314.3 mm; probably obtained at Tokyo Market)

KANAGAWA PREF.

ZUMT 19065 (238.4+ mm), ZUMT 19069 (242.0+ mm; Koajiro Bay, Aburatsubo, Miura City; coll. by K. Aoki)

ZUMT 20639 (197.1 mm), ZUMT 24869 (261.6 mm), ZUMT 24871 (253.4 mm; Misaki, Miura City)

ZUMT 62765 (344.9 mm), ZUMT 62766 (201.2 mm), ZUMT 62767 (336.3 mm; Sagami Bay; 23 Oct. 2021; line fishing, coll. by K. Koeda on *R/V Kaimei*)

ZUMT 64231 (85.6 mm), ZUMT 64232 (212.1 mm; Yuiga-hama Beach, Kamakura City; 31 Mar. 1932; coll. by T. Abe)

SHIZUOKA PREF.

ZUMT 33862 (53.0 mm; river in Shizuura, Numazu City)

WAKAYAMA PREF.

ZUMT 20203 (227.7 mm; Wakayama Pref.; Jan. 1920; coll. by N. Ui)

TOYAMA PREF.

ZUMT 25815 [226.3 mm; probably form Toyama Pref.; coll. by K. Kikuchi (Toyama High School)]

SHIMANE PREF.

ZUMT 31175 (292.0 mm; Matsue City)

NAGASAKI PREF.

ZUMT 50211 (185.3 mm), ZUMT 50212 (192.3 mm), ZUMT 50213 (179.5 mm; Madara-jima Island, Ojika Islands; 20 Oct. 1953; coll. by I. Tomiyama)

ZUMT 50323 (195.5 mm; Hirado City; 10 June 1953; coll. by I. Tomiyama)

ZUMT 50564 (316.5 mm; obtained at Nagasaki Fish Market; 27 Aug. 1959; coll. by Y. Tominaga)

OGASAWARA ISLANDS

ZUMT 8064 (129.1 mm; Ogasawara Islands; donation from Tokyo Metropolitan Ogasawara Islands Branch Office)

TAIWAN

ZUMT 40105 (119.4 mm), ZUMT 40106 (112.8 mm), ZUMT 40107 (112.6 mm), ZUMT 40108 (115.8 mm), ZUMT 40109 (130.8 mm), ZUMT 40110 (113.5 mm), ZUMT 40111 (114.6 mm), ZUMT 40112 (107.7 mm), ZUMT 40113 (98.1 mm), ZUMT 40114 (95.4 mm; Penghu Islands)

ZUMT 63278 (61.0 mm), ZUMT 63279 (53.3 mm; Tamsui, Taiwan)

LOCALITY UNKNOWN

ZUMT ABE 2046 (73.7 mm), ZUMT ABE 2223 (2 specimens, 87.5–92.0 mm), ZUMT ABE 2344 (96.2 mm), ZUMT ABE 57-396 (269.5 mm), ZUMT 39324 (217.5 mm), ZUMT 64230 [155.5+ mm (head missing); no data]

Scomber japonicus Houttuyn, 1782　マサバ

JAPAN

HOKKAIDO

ZUMT 10833 (154.9 mm), ZUMT 10852 (161.5 mm), ZUMT 10857 (158.5 mm), ZUMT 10860 (153.6 mm; probably collected from around Otaru City; 4 Nov. 1922, donation from Takashima Fisheries Research Institute)

AOMORI PREF.

ZUMT 12916 (129.5 mm), ZUMT 12917 (117.5 mm; Koen-maehama, Aomori City; 4 Nov. 1923; coll. by S. Tanabe)

ZUMT 13189 (144.3 mm), ZUMT 13190 (140.4 mm), ZUMT 13191 (148.2 mm), ZUMT 13192 (115.4 mm), ZUMT 13193 (134.3 mm), ZUMT 13195 (118.9 mm), ZUMT 13196 (163.3 mm; Same, Hachinohe City; coll. by S. Tanabe)

ZUMT 41749 (272.7 mm), ZUMT 41788 (68.2 mm; Asamushi, Aomori City; coll. by S. Tanabe)

IWATE PREF.

ZUMT 13122 (95.6 mm), ZUMT 13123 (133.5 mm), ZUMT 13124 (111.7 mm), ZUMT 13125 (142.0 mm; Sokei, Miyako City; coll. by S. Tanabe)

ZUMT 13863 (177.1 mm; Kesen Region; 20 Dec. 1924; coll. by G. Toba)

ZUMT 13885 (147.4 mm; Kesen Region; 15 Dec. 1924; coll. by G. Toba)

ZUMT 16309 (62.4 mm; Kesen Region; 20 Aug. 1925; coll. by G. Toba)

FUKUSHIMA PREF.

ZUMT 26290 (222.9 mm), ZUMT 26291 (212.2 mm), ZUMT 26293 (272.9 mm), ZUMT 32452 (96.4 mm), ZUMT 32453 (76.0 mm; Onahama, Iwaki City)

ZUMT 46808 (94.1 mm; Onahama, Iwaki City; 1933; coll. by H. Tsunoda)

IBARAKI PREF.

ZUMT 59382 (220.3 mm; Nakaminato Port, Hitachinaka City; 29 Oct. 1988)

TOKYO MARRKET

ZUMT 26350 (362.0 mm), ZUMT 46732 (367.9 mm; collected from Shimonoseki City, Yamaguchi Pref., landed at Tokyo Market, Tokyo Met.; 6 Nov. 1917)

ZUMT 46731 (305.3 mm; Tokyo Market, Tokyo Met.)

KANAGAWA PREF.

ZUMT 18886 [256.4+ mm (left side of trunk only)], ZUMT 18887 [281.0+ mm (left side of trunk only); Misaki, Miura City; coll. by K. Aoki]

ZUMT 18916 [307.0+ mm (without caudal peduncle)], ZUMT 18917 [approx. 363 mm (caudal peduncle detached)], ZUMT 18918 (351.0 mm), ZUMT 18919 (363.1 mm; Misaki, Miura City; 30 Apr. 1929)

ZUMT 23669 (33.1 mm), ZUMT 23670 (331.2 mm; Misaki, Miura City; May 1931; coll. by K. Aoki)

ZUMT 24870 (252.9 mm), ZUMT 24872 (254.6 mm; Misaki, Miura City; Aug. 1932; coll. by K. Aoki)

ZUMT 55651 (202.4 mm; obtained at Misaki Fish Market, Misaki, Miura City; 29 July 1986)

ZUMT 62768 (189.9 mm; Sagami Bay; 23 Oct. 2021; coll. with line fishing by K. Koeda on *R/V Kaimei*),

SHIZUOKA PREF.

ZUMT 17725 (108.7 mm; Enoura, Numazu City; coll. by N. Kuroda)

MIE PREF.

ZUMT 23133 (93.3 mm), ZUMT 23134 (123.7 mm; Kada Bay, Owase City; 1 Aug, 1922; coll. by Y. Tsuchiga)

ZUMT 23211 (93.8 mm), ZUMT 23212 (131.9 mm; Kimoto, Kumano City; 18 May 1930; coll. by Y. Tsuchiga)

WAKAYAMA PREF.

ZUMT 20202 (209.1 mm; Wakayama Pref.; Jan. 1920; coll. N. Ui)

OKAYAMA PREF.

ZUMT 16424 (174.0 mm; Kanaura, Kasaoka City; coll. by K. Matsuhima)

EHIME PREF.

ZUMT 8122 [385.7 mm; probably from Ehime Pref.; coll. by K. Otsuki (Uchiumi, Ainan Town)]

KAGOSHIMA PREF.

ZUMT 23790 (191.6 mm), ZUMT 24035 (185.5 mm), ZUMT 24036 (188.7 mm; Taniyama, Kagoshima City)

ZUMT 23912 (187.5 mm), ZUMT 24110 (199.9 mm; Kushikino, Ichikikushikino City)

ZUMT 43018 [53.9 mm; probably from Kagoshima Pref.; donated by K. Hamana (Makurazaki Fisheries)]

NIIGATA PREF.

ZUMT 24416 (166.8 mm; Niigata Pref.)

TOYAMA PREF.

ZUMT 44173 [106.3 mm; probably from Toyama Pref.; donation from Toyama Uozu Fisheries Training Center]

ZUMT 46225 (170.3 mm; probably from Uozu or Namerikawa City)

ISHIKAWA PREF.

ZUMT 34187 (67.8 mm), ZUMT 34188 (76.0 mm), ZUMT 34189 (68.1 mm; Shoin, Suzu City)

KYOTO PREF.

ZUMT 24324 (351.6 mm; Miyazu City; Nov. 1931)

SHIMANE PREF.

ZUMT 31165 (254.7 mm; Matsue City)

YAMAGUCHI PREF.

ZUMT 62890 (9 specimens, 108.8–140.0 mm), ZUMT 62893 (6 specimens, 116.4–155.4 mm; off Futami, Hohoku, Shimonoseki City, Yamaguchi Pref.; 19 Aug. 1991; coll. by set net)

FUKUOKA PREF.

ZUMT 62571 (105.3 mm; Fukuoka Pref., Japan; 26 Aug. 1931)

NAGASAKI PREF.

ZUMT 27130 (51.2 mm), ZUMT 27131 (50.1 mm; Nagasaki Pref.)

ZUMT 48233 [35.8 mm; Tamanoura, Goto City (Fukue-jima Island, Goto Islands); 23 May 1953; coll. by I. Tomiyama]

ZUMT 49909 [123.3 mm; Fukue, Goto City (Fukue-jima Island, Goto Islands); 10 June 1953; coll. by I. Tomiyama]

ZUMT 50544 (282.0 mm; obtained at Nagasaki Fish Market; 26 Aug. 1959)

PRECISE LOCALITY UNKNOWN

ZUMT 38294 (86.4 mm), ZUMT 38295 [57.1 mm; Japan (precise locality unknown)]

EAST CHINA SEA

ZUMT 51148 (174.2 mm; East China Sea; Dec. 1959)

KOREA

ZUMT 26349 (373.0 mm; Ulleung-do Island, Gyeongsangbuk-do)

CHINA

ZUMT 54498 (196.0 mm), ZUMT 54499 [210.5 mm; approx. 180 km east of Yancheng City, Jiangsu Province (34°15'N, 122°15'E); 12 Oct. 1984; coll. by RV *8th Ten-yo-maru*]

TAIWAN

ZUMT 12847 (102.4 mm; Keelung; coll. by T. Aoki)

ZUMT 13667 (116.9 mm; probably from Taiwan; coll. by T. Aoki at Government-General of Taiwan)

ZUMT 37453 (124.2 mm; Penghu Islands; Aug. 1908)

UNITED STATES

ZUMT 17642 (286.2 mm), ZUMT 17649 (280.0 mm), ZUMT 17650 (297.8 mm; California State)

LOCALITY UNKNOWN

ZUMT ABE 2108 (45.1 mm), ZUMT ABE 2109 (76.4 mm), ZUMT ABE 2110 (83.9 mm), ZUMT ABE 2127 (6 specimens, 58.7–75.2 mm), ZUMT ABE 2171 (2 specimens, 87.0–95.3 mm), ZUMT ABE 2200 (2 specimens, 99.8–109.1 mm), ZUMT ABE 2201 (108.1 mm), ZUMT ABE 2215 (14 specimens, 62.9–93.6 mm), ZUMT ABE 57-392 (259.9 mm), ZUMT ABE 57-393 (282.7 mm), ZUMT ABE 57-395 (246.6 mm), ZUMT ABE 57-397 (283.3 mm), ZUMT ABE 57-400 (261.1 mm), ZUMT ABE 57-402 (242.3 mm), ZUMT ABE 57-404 (237.7 mm), ZUMT ABE 61-874 (103.1 mm), ZUMT ABE 61-1068 (166.0 mm), ZUMT ABE 61-1069 (151.0 mm), ZUMT ABE 62-312 (218.0 mm), ZUMT ABE 62-313 (199.1 mm), ZUMT 45637 (67.6 mm), ZUMT 45639 (68.0 mm), ZUMT 46528 (201.1 mm), ZUMT 46984 (134.9 mm), ZUMT 64223 (252.4 mm), ZUMT 64226 [278.6 mm (right side only); no data]

ZUMT 38695 (133.9 mm; no locality data; donated by K. Nishio)

ZUMT 62504 (81.3 mm; locality unknown; 31 Mar. 1932; coll. by T. Abe)

Scomber scombrus Linnaeus, 1758

UNITED KINGDOM
ZUMT 12288 (291.0 mm; United Kingdom)

Scomber sp.　サバ属未同定種

JAPAN
ZUMT 19067 [96.3 mm+ (head only); Koajiro, Misaki, Miura City, Kanagawa Pref.; coll. by K. Aoki]

Scomberomorus commerson (Lacepède, 1800)　ヨコシマサワラ

JAPAN
ZUMT 17095 (247.3 mm), ZUMT 17096 (258.8 mm), ZUMT 17097 (138.1 mm), ZUMT 17098 (165.0 mm), ZUMT 17099 (143.9 mm; Baten Port, Baten, Nanjo City, Okinawa-jima Island, Okinawa Pref.; coll. by S. Tanabe)

TAIWAN
ZUMT 19696 [84.3 mm; probably collected from Taiwan; donated by H. Sato (Taipei Keelung Junior High School)]

PHILIPPINES
ZUMT 42317 (230.5 mm), ZUMT 42346 (234.6 mm), ZUMT 42347 (241.2 mm), ZUMT 42370 (247.9 mm; Basilan; 1926; coll. by U. Yamamura)

Scomberomorus guttatus (Bloch & Schneider, 1801)　タイワンサワラ

JAPAN
ZUMT 12350 (409.3 mm; landed at Tokyo Market, collected from Shimonoseki City, Yamaguchi Pref.; 23 June 1922)

EAST CHINA SEA
ZUMT 51390 (255.4 mm; East China Sea; 26 Oct. 1959)

TAIWAN
ZUMT 14992 (244.0 mm; Tainan; coll. by T. Aoki)
ZUMT 22609 (106.7 mm; Kaohsiung)

Scomberomorus niphonius (Cuvier, 1832)　サワラ

JAPAN
ZUMT 2480 (281.3 mm; Nagasaki Pref.; Aug. 1909)
ZUMT 64225 [139.8+ mm (head only); obtained at Tokyo Market, Tokyo Met.]

CHINA

ZUMT 41202 (400.0 mm; probably from China)

ZUMT 54416 (334.1 mm), ZUMT 54417 [309.4 mm; Yellow Sea, approx. 200 km east of Yancheng, Jiangsu Province (34°47'N 122°20'E), 24 m depth; 15 Oct. 1984; coll. by RV *8th Ten-yo-maru*]

LOCALITY UNKNOWN

ZUMT 64222 [337.2+ mm (no head; right side only); no data]

Thunnus albacares (Bonnaterre, 1788)　キハダ

JAPAN

ZUMT 13980 [307.0 mm; probably from Okinawa Pref.; coll. by S. Sakaguchi (Okinawa Daiichi Junior High School)]

LOCALITY UNKNOWN

ZUMT 26252 (386.1 mm; locality unknown; 1 Aug. 1933)

ZUMT 64221 [approx. 370 mm (body evenly bisected); no data]

Thunnus orientalis (Temminck & Schlegel, 1844)　クロマグロ

JAPAN

ZUMT 17290 (218.5 mm; Yaeyama Islands, Ryukyu Archipelago; coll. by S. Tanabe)

ZUMT 23766 (228.0 mm; Taniyama, Kagoshima City, Kagoshima Pref.; 20 July 1930)

ZUMT 31283 (283.3 mm; Matsue City, Shimane Pref.)

ZUMT 41285 (226.4 mm; Uozu or Namerikawa City, Toyama Pref.; coll. by I. Tomiyama)

ZUMT 46622 (186.5 mm; Hachijo-jima Island, Izu Islands)

Thunnus sp.　マグロ属未同定種

LOCALITY UNKNOWN

ZUMT 63425 (tail only; no data)

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Fish types deposited in the Department of Zoology, The University Museum, The University of Tokyo – Part 4: Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformes

東京. 大学総合研究博物館動物部門収蔵の魚類タイプ標本－第 4 部:アンコウ目、ダツ目、アカマンボウ目、シャチブリ目、カンムリキンメダイ目、キンメダイ目、マトウダイ目、トゲウオ目、ボラ目及びスズキ目のカサゴ亜目、カジカ亜目

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Abstract

The current status of type specimens of Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformes in the ZUMT collection were investigated with recourse to original descriptions, information tags on specimens, and/or the ZUMT specimen ledger. Of the 37 holotypes, 12 syntypes, 2 lectotypes, 115 paratypes and 9 paralectotypes purported to be in the collection and applicable to 55 species in 30 families, only 20 holotypes, 7 syntypes, 2 lectotypes, 98 paratypes and 9 paralectotypes have been located to date.

Introduction

The current designation and status of type specimens in the fish collection, preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) collection is now under review. The present list is a summary of type specimens of Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformes currently held.

本研究では、東京大学総合研究博物館動物学部門（ZUMT）に収蔵されるタイプ標本の現状について整理するとともに、タイプ指定に関する議論も行なった。本リストは、ZUMT に含まれるタイプ標本のうちアンコウ目、ダツ目、アカマンボウ目、シャチブリ目、カンムリキンメダイ目、キンメダイ目、マトウダイ目、トゲウオ目、ボラ目およびスズキ目のカサゴ亜目とカジカ亜目魚類についてまとめたものである。

Materials and Methods

The first author confirmed that the type specimen is in the Department of Zoology, University of Tokyo Museum (ZUMT). We report on Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformesof fishes. Specimens marked as " available" in this type list are kept in room 407 of the museum. The ZUMT collection also includes a variety of personal specimens acquired by the late De. Tokiharu Abe, such being identifiable in the first instance by an underlined number on the specimen tag. These specimens from the Abe collection are not registered in ZUMT. The specimen will be

managed as ZUMT ABE○○○○ in the ZUMT collection.

The systematic arrangement of families generally follows Nelson (2006), with species arranged in alphabetical order by species name. The present list includes all the available information pertinent to the ZUMT specimens, including those taken from the ZUMT specimen ledger and/or tags on the specimens.

Information from original description: scientific name, publication, Japanese name in the original description.

Current status on types: available or lost.

Information on type specimens: ZUMT catalog number (number of specimens when more than two), field number or previous catalog number if available, sex, preservation status (stuffed or skin only indicated), collection locality, collection date, collector or donator, collection method, typographical error.

Remarks: Authority for determining type status, correction of previously published erroneous information, and newly determined information from specimen registers and tags.

Current status of species: synonyms, current scientific name and standard Japanese name.

Reference: publications cited in remarks or basis for current status. Listed for each species.

第一著者により、東京大学総合研究博物館動物学部門（ZUMT）に所蔵するアンコウ目、ダツ目、アカマンボウ目、シャチブリ目、カンムリキンメダイ目、キンメダイ目、マトウダイ目、トゲウオ目、ボラ目およびスズキ目のカサゴ亜目とカジカ亜目魚類のタイプ標本が確認された。本タイプリストにおいて「available」と示した標本は博物館の 407 号室に保管されている。ZUMT コレクションには、故阿部宗明博士の個人標本が混在しており、これらは基本的に標本タグに書かれた番号に下線が付されていることで識別可能である。これら阿部氏の標本は、ZUMT コレクションに登録されていない。標本は ZUMT ABE○○○○と扱い ZUMT コレクションとして、管理されている。

科の体系的な順番は、主に Nelson (2006)に従い、種については学名のアルファベット順に示した。本リストでは、ZUMT 標本に基づき（あるいは基づいたと想定される）記載されたアンコウ目、ダツ目、アカマンボウ目、シャチブリ目、カンムリキンメダイ目、キンメダイ目、マトウダイ目、トゲウオ目、ボラ目およびスズキ目のカサゴ亜目とカジカ亜目魚類に関する以下の情報を可能な限り示した。また ZUMT 標本台帳や標本のタグから読み取れる情報についても含めた。

原記載の情報：学名、記載された出版物、記載時に与えられた和名。

タイプ標本の確認状況：確認または未確認。

タイプ標本の情報：ZUMT 番号（複数の場合は標本数）、フィールド番号または寄贈前の他機関登録番号、性別、保存の状態（剥製または皮膚のみの場合に記載）、採集場所、採集年月日、採集者または寄贈者、採集方法など。標本台帳から読み取れる新たな情報についても可能な限り記した。

備考：該当標本をタイプと判断した根拠、ZUMT のタイプ標本が誤って引用された情報、本研究で新たに確認された標本台帳やタグに関する情報、入力ミスなどについて必要に応じて記した。

種の現状：シノニム関係および適用されている学名と標準和名。

引用文献：備考または現状の根拠として引用された出版物や報告論文を種ごとに示した。

Type specimens of Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformes in ZUMT

Based on the original descriptions, tags on the specimens, and the ZUMT specimen ledger, type specimens of 55 species of Lophiiformes, Beloniformes, Lampridiformes, Ateleopodiformes, Stephanoberyciformes, Beryciformes, Zeiformes, Gasterosteiformes, Mugiliformes, and the suborders Scorpaenoidei and Cottoidei of the order Perciformes in 30 families, including 37 holotypes, 12 syntypes, 2 lectotypes, 116 paratypes, and 9 paralectotypes, were purported to be in the ZUMT collection. 20 holotypes, 7 syntypes, 2 lectotypes, 99 paratypes, and 9 paralectotypes, have been confirmed as “available” to date.

原記載、標本のタグおよび ZUMT 台帳の情報などから ZUMT コレクションに所蔵されるアンコウ目、ダツ目、アカマンボウ目、シャチブリ目、カンムリキンメダイ目、キンメダイ目、マトウダイ目、トゲウオ目、ボラ目およびスズキ目のカサゴ亜目とカジカ亜目魚類標本には 30 科 55 種タイプ標本が登録（あるいは未登録）されていることが明らかになった。その内訳はホロタイプ 37 標本、シンタイプ 12 標本、レクトタイプ 2 標本、パラタイプ 115 標本、パラレクトタイプ 9 標本である。本研究において、これらのうち現在 ZUMT に所在することが確認できたものはホロタイプ 20 標本、シンタイプ 7 標本、レクトタイプ 2 標本、パラタイプ 98 標本、パラレクトタイプ 9 標本である。

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Lophiiformes　アンコウ目

Lophiidae　アンコウ科

Lophiodes fimbriatus Saruwatari & Mochizuki, 1985　ミノアンコウ

Original description: Saruwatari and Mochizuki (1985): 299, fig. 2A.

Saruwatari, T. and Mochizuki, K. 1985. A new lophiid anglerfish, *Lophiodes fimbriatus* from the coastal waters of Japan. Japanese Journal of Ichthyology, 32 (3): 299–304.

Holotype (available): ZUMT 44066, Wakayama Pref., Japan.

Current status: Valid as *Lophiodes fimbriatus* Saruwatari & Mochizuki, 1985 ミノアンコウ

山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

Shinohara, G., Sato, T., Aonuma, Y., Horikawa, H., Matsuura, K., Nakabo, T. and Sato, K. 2005. Annotated checklist of deep–sea fishes from the waters around the Ryukyu Islands, Japan. Deep-sea fauna and pollutants in the Nansei Islands. Monographs of the National Science Museum, Tokyo, 29: 385–452.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

松沼瑞樹・野村玲偉・甲斐嘉晃. 2022. 日本産アンコウ科ヒメアンコウ属魚類の標準和名と分類形質. Ichthy, Natural History of Fishes of Japan, 21: 47–74. [Matsunuma, M., Nomura, R. and Kai, Y. 2022. Notes on standard Japanese names and diagnostic characters of species of *Lophiodes* (Lophiiformes: Lophiidae) from Japan. Ichthy, Natural History of Fishes of Japan, 21: 47–74. (In Japanese with English abstract)]

Lophiomus laticephalus Tanaka, 1918　コオトオアンコオ

Original description: Tanaka (1918): 227.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Syntypes (available): ZUMT 8337 (1), ZUMT 8510 (1), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邉[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. ZUMT 8337 and ZUMT 8510 are specimens whose scientific names and collection data match from the records in the ZUMT specimen ledger. These specimens are syntypes (ICZN Art. 72.1.1, 72.4.1.1). In ZUMT 8510 of the ZUMT specimen ledger, "same as 08337" was written. The ZUMT 8337 also has a cloth tag that says "Sketch No. 394".

原記載にはホロタイプの指定がない。ZUMT 8337 と ZUMT 8510 は、ZUMT 標本台帳の記録から学名と採集データが一致した標本である。これらの標本はシンタイプである(ICZN Art. 72.1.1, 72.4.1.1)。ZUMT 標本台帳の ZUMT 8510 には、「08337 と同じ」と書き込まれていた。ZUMT 8337 は、「写生番号 394 号」と書かれた布タグが付いている。

Current status: Synonym of *Lophius litulon* (Jordan, 1902) キアンコウ

Caruso, J. H. 1983. The systematics and distribution of the lophiid anglerfishes: II. Revisions of the genera *Lophiomus* and *Lophius*. Copeia, 1983 (1): 11–30.

山田梅芳・田川 勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

尼岡邦夫・仲谷一宏・矢部 衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Lophiomus longicephalus Tanaka, 1918 チョオトウアンコオ

Original description: Tanaka (1918): 227.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Syntype (available): ZUMT 8533 (1), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Syntypes (lost): ZUMT 8338 (1), ZUMT 8534 (1), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. 3 specimens, ZUMT 8338, ZUMT 8533 and ZUMT 8534 are specimens whose scientific names and collection data match from the records in the ZUMT specimen ledger. These specimens are syntypes (ICZN Art. 72.1.1, 72.4.1.1).

記載にはホロタイプの指定がない。3 標本 ZUMT 8338, ZUMT 8533 と ZUMT 8534 は、ZUMT 標本台帳の記録から学名と採集データが一致した標本である。これらの標本はシンタイプである (ICZN Art. 72.1.1, 72.4.1.1)。

Current status: Synonym of *Lophiomus setigerus* (Vahl, 1797) アンコウ

Caruso, J. H. 1983. The systematics and distribution of the lophiid anglerfishes: II. Revisions of the genera *Lophiomus* and *Lophius*. Copeia, 1983 (1): 11–30.

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]
尼岡邦夫・仲谷一宏・矢部　衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 58.

Antennariidae カエルアンコウ科

Antennarius lateralis Tanaka, 1917　オオモンイザリウオ

Original description: Tanaka (1917): 200.
田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (345): 198–201. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (345): 198–201. (In Japanese)]

Holotype (lost): ZUMT 12325, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the description. Tanaka (1918) re-described and illustrated the holotype in the Figures and descriptions of the fishes of Japan (27–28: 494–479, pl. 135, fig. 378). However, there was no type-specific information such as registration number. ZUMT 12325 is the only specimen whose scientific name and collection data match from the records in the ZUMT specimen ledger. This specimen ZUMT 12325 is the holotype (ICZN Art. 73.1.2). Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.

記載にはホロタイプの指定がない。田中（1918）の 日本産魚類図説（27–28: 494–479, pl. 135, fig. 378）は、ホロタイプを再記載し図示した。しかし、登録番号などタイプを特定する情報はなかった。ZUMT 12325 は、ZUMT 標本台帳の記録から学名と採集データが原記載に一致した唯一の標本である。この標本 ZUMT 12325 がホロタイプである (ICZN Art. 73.1.2)。ただし残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Synonym of *Antennarius commerson*
(Lacepède, 1798) オオモンカエルアンコウ

田中茂穂. 1918. 日本産魚類図説, 27: 475–494, pls. 131–135. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 27: 475–494, pls. 131–135. (In Japanese and English)]
田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Pietsch, T. W. and Grobecker, D. B. 1987. Frogfishes of the world: Systematics, zoogeography, and behavioral ecology. Stanford University Press, Stanford. xxii + 420pp, pls. 1–56.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]
Arnold, R. J. and Pietsch, T. W. 2012. Evolutionary history of frogfishes (Teleostei: Lophiiformes: Antennariidae): A molecular approach. Molecular Phylogenetics and Evolution, 62: 117–129.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Antennarius sarasa Tanaka, 1916　サラサイザリウオ

Original description: Tanaka (1916):143.
田中茂穂. 1916. 日本産魚類の三新種. 動物学雑誌, 28 (330): 141–144. [Tanaka, S. 1916. Three new species of Japanese fishes. Zoological Magazine Tokyo, 28 (330): 141–144. (In Japanese)]

Holotype (lost): ZUMT 7185, Tokyo Fish Market, Tokyo, Japan.

Remarks: There is no holotype designation in the description. Although it is stated that "three individuals were confirmed in the Tokyo Market", it is not a type series because it does not exist as a specimen (ICZN Art. 72.1.1). ZUMT 7185 is the only specimen whose scientific name and collection data match from the records in the ZUMT specimen ledger. ZUMT 7185 is holotype. Tanaka (1916) described and illustrated the holotype in the Figures and descriptions of the fishes of Japan (24: 432–435, pl. 119, fig. 346).
　原記載にはホロタイプの指定がない。「東京市場にて 3 個体を確認した」と記載にあるが、標本として存在しないためタイプシリーズに含まれない(ICZN Art. 72.1.1)。ZUMT 7185 は、ZUMT 標本台帳の記録から学名と採集データが一致した唯一の標本である。この標本 ZUMT 7185 はホロタイプである(ICZN Art. 73.1.2)。田中(1916)は、日本産魚類図説(24: 432–435, pl. 119, fig. 346) にホロタイプを記載、図示した。

Current status: Synonym of *Fowlerichthys scriptissimus* (Jordan, 1902) ソウシカエルアンコウ
田中茂穂. 1916. 日本産魚類図説, 24: 419–440, pls. 116–120. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 24: 419–440, pls. 116–120. (In Japanese and English)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Pietsch, T. W. and Grobecker, D. B. 1987. Frogfishes of the world: Systematics, zoogeography, and behavioral ecology. Stanford University Press, Stanford. xxii + 420pp, pls. 1–56.
Arnold, R. J. and Pietsch, T. W. 2012. Evolutionary history of frogfishes (Teleostei: Lophiiformes: Antennariidae): A molecular approach. Molecular Phylogenetics and Evolution, 62: 117–129.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Ogcocephalidae アカグツ科

Malthopsis annulifera Tanaka, 1908

Original description: Tanaka (1908): 44.

Tanaka, S. 1908. Descriptions of eight new species of fishes from Japan. Annotationes Zoologicae Japonenses, 7 (1): 27–47.

Holotype (available): ZUMT 1954[not 1754], off Misaki (Sagami Bay), Kanagawa Pref., Japan; 1908; collected by Kumakichi Aoki.

Remarks: The original description specified the holotype as ZUMT 1754. From the records in the ZUMT specimen ledger, ZUMT 1954 is the only specimen that matches the scientific name and collection data. The correct registration number for the holotype is ZUMT 1954.

原記載にはホロタイプをZUMT 1754に指定した。ZUMT標本台帳の記録からZUMT 1754ではなく、ZUMT 1954が学名と採集データに一致した唯一の標本である。ホロタイプの正しい登録番号は、ZUMT 1954である。

Current status: Valid as *Malthopsis annulifera* Tanaka, 1908 ワヌケフウリュウウオ

岡村　収・北島忠弘（編）. 1984. 沖縄舟状海盆及び周辺海域の魚類 I. 日本水産資源保護協会, 東京. 414 pp. [Okamura, O. and Kitajima, T. (eds). 1984. Fishes of the Okinawa Trough and the adjacent water I. Japan Fisheries Resource Conservation Association, Tokyo. 414 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

Ho, H.-C. and Shao, K.-T. 2010. A review of *Malthopsis jordani* Gilbert, 1905, with description of a new batfish from the Indo-Pacific Ocean (Lophiiformes: Ogcocephalidae). Bulletin of the National Museum of Nature and Science (Ser. A) Supplement, 4: 9–19.

Ho, H.-C. 2020. Two new deep-water batfish of the genus *Malthopsis* from the Pacific Ocean (Lophiiformes: Ogcocephalidae). Raffles Bulletin of Zoology, 68: 859–869.

Ho, H.-C. and Last, P. R. 2021. Review of the batfish genus *Malthopsis* from Australia (Lophiiformes: Ogcocephalidae), with descriptions of five new species. Bulletin of Marine Science, 97 (1): 165-218.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Malthopsis gigas Ho & Shao, 2010

Original description: Ho and Shao (2010): 13, figs. 2B, 3B, D, 4B, C, 5.

Ho, H.-C. and Shao, K.-T. 2010. A review of *Malthopsis jordani* Gilbert, 1905, with description of a new batfish from the Indo-Pacific Ocean (Lophiiformes: Ogcocephalidae). Bulletin of the National Museum of Nature and Science (Ser. A) Supplement, 4: 9–19.

Paratype (available): ZUMT 44910 (1), Suruga Bay, Fukude, Iwata City, Shizuoka Pref., Japan.

Paratype (available): ZUMT 54659 (1), off Kuno (Suruga Bay), Negoya, Suruga, Shizuoka City, Shizuoka Pref., Japan; 9 May 1983.

Current status: Valid as *Malthopsis gigas* Ho and Shao, 2010 コワヌケフウリュウウオ

岡村　収・北島忠弘（編）. 1984. 沖縄舟状海盆及び周辺海域の魚類 I. 日本水産資源保護協会, 東京. 414 pp. [Okamura, O. and Kitajima, T. (eds). 1984. Fishes of the Okinawa Trough and the adjacent water I. Japan Fisheries Resource Conservation Association, Tokyo. 414 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Ho, H.-C. and Shao, K.-T. 2010. Redescription of *Malthopsis lutea* Alcock, 1891 and resurrection of *M. kobayashii* Tanaka, 1916 (Lophiiformes: Ogcocephalidae). Journal of the National Taiwan Museum, 63 (3): 1–18.

Ho, H.-C. 2013. Two new species of the batfish genus *Malthopsis* (Lophiiformes: Ogcocephalidae) from the western Indian Ocean. Zootaxa, 3716 (2): 289–300.

Ho, H.-C. 2020. Two new deep-water batfish of the genus *Malthopsis* from the Pacific Ocean (Lophiiformes: Ogcocephalidae). Raffles Bulletin of Zoology, 68: 859–869.

Ho, H.-C. and Last, P. R. 2021. Review of the batfish genus *Malthopsis* from Australia (Lophiiformes: Ogcocephalidae), with descriptions of five new species. Bulletin of Marine Science, 97 (1): 165-218.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 58.

Malthopsis kobayashii Tanaka, 1916　イセフウリュウウオ

Original description: Tanaka (1916): 348.

田中茂穂. 1916. 日本産魚類の一新種. 動物学雑誌, 28 (335): 348. [Tanaka, S. 1916. A new species of Japanese fish. Zoological Magazine Tokyo, 28 (335): 348. (In Japanese)]

Holotype (available): ZUMT 55048, probably Ise Bay, Mie Pref., Japan; collected by Mansaku Kobayashi.（おそらく伊勢湾産 小林萬作採集）

Remarks: There is no holotype designation in the original description, and there is no record of the corresponding specimen in the ZUMT specimen ledger. The specimen found in the ZUMT collection had a cloth tag with the words "Yokkaichi Daiichi Elementary School, Mansaku Kobayashi". This is the name of the collector in the original description. In addition, this specimen, which also matched the body size, is the holotype (ICZN Art. 73.1.2). Registered in ZUMT 55048 of the ZUMT collection.

原記載にはホロタイプの指定がなく、ZUMT 標本台帳に該当する標本の記録がない。ZUMT コレクションから発見された標本に、「四日市第一小学校、小林萬作」と書かれた布タグが付いていた。原記載にある採集者名である。さらに、体サイズも一致したこの標本は、ホロタイプである(ICZN Art. 73.1.2)。ZUMT コレクションの ZUMT 55048 に登録された。

Current status: Valid as *Malthopsis kobayashii* Tanaka, 1916 フウリュウウオ

岡村　収・北島忠弘（編）. 1984. 沖縄舟状海盆及び周辺海域の魚類 I. 日本水産資源保護協会, 東京. 414 pp. [Okamura, O. and Kitajima, T. (eds). 1984. Fishes of the Okinawa Trough and the adjacent water I. Japan Fisheries Resource Conservation Association, Tokyo. 414 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Ho, H.-C. and Shao, K.-T. 2010. Redescription of *Malthopsis lutea* Alcock, 1891 and resurrection of *M. kobayashii* Tanaka, 1916 (Lophiiformes: Ogcocephalidae). Journal of the National Taiwan Museum, 63 (3): 1–18.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Ho, H.-C. and Koeda, K. 2019. A new *Malthopsis* batfish from Taiwan, with comments on *Malthopsis tiarella* Jordan, 1902 (Lophiiformes: Ogcocephalidae). Zootaxa, 4702 (1): 73–86.
Ho, H.-C. 2020. Two new deep-water batfish of the genus *Malthopsis* from the Pacific Ocean (Lophiiformes: Ogcocephalidae). Raffles Bulletin of Zoology, 68: 859–869.
Ho, H.-C. and Last, P. R. 2 021. Review of the batfish genus *Malthopsis* from Australia (Lophiiformes: Ogcocephalidae), with descriptions of five new species. Bulletin of Marine Science, 97 (1): 165-218.

Himantolophidae チョウチンアンコウ科
Corynolophus globosus Tanaka, 1918 チョウチンアンコウ

Original description: Tanaka (1918): 529, pl. 139 (Fig. 388)
田中茂穂. 1918. 日本産魚類図説, 29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Holotype (lost): ZUMT 8460, off Misaki (Sagami Bay), Kanagawa Pref., Japan.

Remarks: The original description specified the holotype as ZUMT 8460. In the records of the ZUMT specimen ledger, there was no specimen other than ZUMT 8460 that matched the scientific name and collection data. Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.
原記載ではホロタイプに ZUMT 8460 を指定した。ZUMT 標本台帳の記録にも学名と収集データに一致する標本は ZUMT 8460 以外なかった。ただし残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Valid as *Himantolophus sagamius* (Tanaka, 1918) チョウチンアンコウ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Bertelsen, E. and Krefft, G. 1988. The ceratioid family Himantolophidae (Pisces, Lophiiformes). Steenstrupia, 14 (2): 9–89.
尼岡邦夫・仲谷一宏・矢部 衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Tatsuta, N., Imamura, H., Nakaya, K., Kawai, T., Abe, T., Sakaoka, K., Takagi, S. and Yabe, M. 2014. Taxonomy of mesopelagic fishes collected around the Ogasawara Islands by the T/S Oshoro-Maru. Memoirs of the Faculty of Fisheries Sciences, Hokkaido University, 56 (1): 1–64.
Ho, H.-C., Kawai, T. and Amaoka, K. 2016. Records of deep-sea anglerfishes (Lophiiformes: Ceratioidei) from Indonesia, with descriptions of three new species. Zootaxa, 4121 (3): 267–294.

Corynolophus sagamius Tanaka, 1918　サガミチョウチンアンコウ

Original description: Tanaka (1918): 91, pl. 134 (Fig. 377)

田中茂穂. 1918. 日本産魚類図説, 29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Holotype (lost): ZUMT 8201, Sagami Bay, Kanagawa Pref., Japan.

Remarks: The original description specified ZUMT 8201 as the holotype. In the ZUMT specimen ledger, there was no specimen other than ZUMT 8201 that matched the scientific name and collection data. Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.

原記載はホロタイプに ZUMT 8201 を指定した。ZUMT 標本台帳にも学名と収集データに一致する標本は ZUMT 8201 以外なかった。現時点でこの標本は確認できないため、失われたと判断した。

Current status: Valid as *Himantolophus sagamius* (Tanaka, 1918) チョウチンアンコウ

田中茂穂. 1918. 日本産魚類図説, 27: 475–494, pls. 131–135. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 27: 475–494, pls. 131–135. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Bertelsen, E. and Krefft, G. 1988. The ceratioid family Himantolophidae (Pisces, Lophiiformes). Steenstrupia, 14 (2): 9–89.

Kharin, V. E. 2006. *Himantolophus sagamius* (Himantolophidae), a new fish species for fauna of Russia. Journal of Ichthyology, 46 (3): 274–275.

尼岡邦夫・仲谷一宏・矢部　衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. (Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Tatsuta, N., Imamura, H., Nakaya, K., Kawai, T., Abe, T., Sakaoka, K., Takagi, S. and Yabe, M. 2014. Taxonomy of mesopelagic fishes collected around the Ogasawara Islands by the T/S Oshoro-Maru. Memoirs of the Faculty of Fisheries Sciences, Hokkaido University, 56(1): 1–64.

Ho, H.-C., Kawai, T. and Amaoka, K. 2016. Records of deep-sea anglerfishes (Lophiiformes: Ceratioidei) from Indonesia, with descriptions of three new species. Zootaxa, 4121 (3): 267–294.

Oneirodidae　ラクダアンコウ科

Bertella idiomorpha Pietsch, 1973

Original description: Pietsch (1973): 194, Figs. 1–6.

Pietsch, T. W. 1973. A new genus and species of deep-sea anglerfish (Pisces: Oneirodidae) from the northern Pacific Ocean. Copeia, 1973 (2): 193–199.

Paratype (available): ZUMT 52705 (1), 35°02'N, 139°18'E; bottom 1200–1400 m depth; 27 October 1966; collected with larvae net, 0–1000 m, 1300–1400 hr.

Remarks: The original specimen abbreviation ZIFSUT (Zoological Institute, Faculty of Science, University of Tokyo) is the same as ZUMT (Department of Zoology, the University Museum, the University of Tokyo).

原記載の標本略号 ZIFSUT(Zoological Institute, Faculty of Science, University of Tokyo)は、

ZUMT(Department of Zoology, the University Museum, the University of Tokyo)と同じである。

Current status: Valid as *Bertella idiomorpha* Pietsch, 1973　バーテルセンアンコウ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Prokofiev, A. M. 2014. New species and new records of deep sea anglerfish of the family Oneirodidae. Journal of Ichthyology, 54 (8):602–607.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Ceratiidae　ミツクリエナガチョウチンアンコウ科

Mancalias sessilis Imai, 1941 エナシビワアンコウ

Original description: Imai (1941): 245, Figs. 12–13.

Imai, S. 1941. Seven new deep–sea fishes obtained in Sagami Sea and Suruga Bay. Japanese Journal of Zoology, 9 (2): 233–250.

Holotype (lost): ZUMT uncatalogued, Sagami Sea, east of Hashima; 14 November 1937; collected with 1 m vertical net with 1220 m wire.

Remarks: Although the original description did not specify holotype, it was described based on the only one individual. No specimens matching the original description could be found in the fish specimens of the Mitsui Institute for Marine Biology transferred to ZUMT. No specimens were found at this time, and it was determined that they were lost.

原記載にはホロタイプの指定がないが、1 個体のみに基づいて記載された。ZUMT に移管された三井海洋生物学研究所の魚類標本からは、原記載に一致する標本は発見できなかった。現時点では標本は発見されておらず、紛失したと判断された。

Current status: Synonym of *Ceratias uranoscopus* Murray, 1877　エナシビワアンコウ

Pietsch, T. W. 1986. Systematics and distribution of bathypelagic anglerfishes of the family Ceratiidae (order: Lophiiformes). Copeia, 1986 (2): 479–493.

Anderson, M. E. and Leslie, R. W. 2001. Review of the deep-sea anglerfishes (Lophiiformes: Ceratioidei) of southern Africa. Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 70: 1–32.

尼岡邦夫・仲谷一宏・矢部　衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Gigantactinidae　シダアンコウ科

Gigantactis kreffti Bertelsen, Pietsch & Lavenberg, 1981

Original description: Bertelsen, Pietsch and Lavenberg (1981): 29, Figs. 4D, 27–29.

Bertelsen, E., Pietsch, T. W. and Lavenberg, R. J. 1981. Ceratioid anglerfishes of the family Gigantactinidae: morphology, systematics, and distribution. Contributions in Science (Los Angeles), 332: 1–74.

Paratype (available): ZUMT 52706 (1, 44 mm SL.), Sagami Bay, Shizuoka Pref., Japan (35°06'N, 139°24'E); 1200–1400 m depth.

Remarks: The original specimen abbreviation ZIFSUT (Zoological Institute, Faculty of Science, University of Tokyo) is the same as ZUMT (Department of Zoology, the University Museum, the University of Tokyo).
原記載の標本略号 ZIFSUT(Zoological Institute, Faculty of Science, University of Tokyo)は、ZUMT(Department of Zoology, the University Museum, the University of Tokyo)と同じである。

Current status: Valid as *Gigantactis kreffti*
Bertelsen, Pietsch & Lavenberg, 1981 クレフトアンコウ

岡村 収・尼岡邦夫・三谷文夫(編). 1982. 九州一パラオ海嶺ならびに土佐湾の魚類. 日本水産資源保護協会, 東京. 436 pp. [Okamura, O., Amaoka, K. and Mitani, F. (eds). 1982. Fishes of the Kyushu-Palau Ridge and Tosa Bay. The intensive research of unexploited fishery resources on continental slopes. Japan Fisheries Resource Conservation Association, Tokyo. 436 pp. (In Japanese and English; various authors)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Anderson, M. E. and Leslie, R. W. 2001. Review of the deep-sea anglerfishes (Lophiiformes: Ceratioidei) of southern Africa. Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 70: 1–32.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Linophrynidae オニアンコウ科
Linophryne densiramus Imai, 1941 オニアンコウ

Original description: Imai (1941): 247, figs. 14–17.
Imai, S. 1941. Seven new deep-sea fishes obtained in Sagami Sea and Suruga Bay. Japanese Journal of Zoology, 9 (2): 233–250.

Holotype (available): ZUMT 55032, Suruga Bay, Japan; 21 October 1940 (winter of 1939); collected by C/V Dainichi–Maru.

Remarks: The original description was given only for holotype. The specimen found in the fish specimens of the Mitsui Marine Biology Institute transferred to ZUMT matches the original figure (figs. 14–17) and body size. This specimen is holotype (ICZN Art. 73.1.2). Registered in ZUMT 55032 of the ZUMT collection.
原記載はホロタイプのみで記載された。ZUMT に移管された三井海洋生物学研究所の魚類標本から発見された標本は、原記載の図(figs. 14–17)や体サイズが一致する。この標本がホロタイプである(ICZN Art. 73.1.2)。ZUMT コレクションの ZUMT 55032 に登録された。

Current status: Valid as *Linophryne densiramus* Imai, 1941 オニアンコウ

Bertelsen, E. 1980. Notes on Linophrynidae V: A revision of the deep sea anglerfishes of the *Linophryne arborifera*-group (Pisces, Ceratioidei). Steenstrupia, 6 (6): 29–70.
Bertelsen, E. and Pietsch, T. W. 1983. The ceratioid anglerfishes of Australia. Records of the Australian Museum, 35 (2): 77–99.
Stewart, A. L. and Pietsch, T. W. 1998. The ceratioid anglerfishes (Lophiiformes: Ceratioidei) of New Zealand. Journal of the Royal Society of New Zealand, 28 (1): 1–37.
Anderson, M. E. and Leslie, R. W. 2001. Review of the deep-sea anglerfishes (Lophiiformes: Ceratioidei) of southern Africa. Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 70: 1–32.

尼岡邦夫・仲谷一宏・矢部　衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Tatsuta, N., Imamura, H., Nakaya, K., Kawai, T., Abe, T., Sakaoka, K., Takagi, S. and Yabe, M. 2014. Taxonomy of mesopelagic fishes collected around the Ogasawara Islands by the T/S Oshoro-Maru. Memoirs of the Faculty of Fisheries Sciences, Hokkaido University, 56 (1): 1–64.

Beloniformes　ダツ目
Hemiramphidae　サヨリ科
Hemirhamphus elongatus Tanaka, 1911　トウザヨリ

Original description: Tanaka (1911): 22, pl. 6 (fig. 21).
田中茂穂. 1911. 日本産魚類図説, 2: 19–34, pls. 6–10. [Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 2: 19–34, pls. 6–10. (In Japanese and English)]

Holotype (lost): ZUMT 2946, off Misaki (Sagami Bay), Kanagawa Pref., Japan.

Remarks: In the original description, ZUMT 2946 was specified as the holotype. Unfortunately, the specimen has not been located at this time, and was judged to have been lost.
原記載はホロタイプに ZUMT 2946 を指定した。残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Synonym of *Euleptorhamphus viridis* (van Hasselt, 1823) トウザヨリ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Collette, B. B. and Su, J.-X. 1986. The halfbeaks (Pisces, Beloniformes, Hemiramphidae) of the Far East. Proceedings of the Academy of Natural Sciences of Philadelphia, 138: 250–302.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 58.

Hyporhamphus (Hyporhamphus) taiwanensis Collette & Su, 1986

Original description: Collette and Su (1986): 276, fig. 2D.
Collette, B. B. and Su, J.-X. 1986. The halfbeaks (Pisces, Beloniformes, Hemiramphidae) of the Far East. Proceedings of the Academy of Natural Sciences of Philadelphia, 138: 250–302.

Paratype (available): ZUMT 37434(1), Taiwan; August1908.
Paratypes (available): ZUMT 45441–ZUMT 45443(3), Taiwan; about 1943.

Current status: Valid as *Hyporhamphus taiwanensis* Collette & Su, 1986
Collette, B. B. 2004. Family Hemiramphidae Gill 1859–halfbeaks. California Academy of Sciences, Annotated Checklists of Fishes, 22: 1–35.

Exocoetidae トビウオ科
***Cypselurus opisthopus* hiraii** Abe, 1953　ホソトビ

Original description: Abe (1953): 962, pl. 191, figs. 523–524.
Tomiyama, I. and T. Abe. 1953. Figures and descriptions of the fishes of Japan (a continuation of Dr. Shigeho Tanaka's work). Kazama-shobo, Tokyo, 49: 961–982, pls. 191–195. (In Japanese and English)

Holotype (lost): ZUMT 47765, 202 mm SL, Tokyo Market (shipping from Mera, Chiba Pref.), Japan; 11 September 1952; collected by Tokiharu Abe.［東京市場（千葉県布良）; 1952 年 9 月 11 日; 阿部宗明採集. ］
Paratypes (lost): 9 specimens.
ZUMT 13044 (1), ZUMT 13525 (1), ZUMT 13586 (1), Miyako Bay, Iwate Pref., Japan.
ZUMT 16547 (1), near Oita City, Oita Pref., Japan; collected by Yoshimatsu Yamamoto.
ZUMT 20687 (1), ZUMT 20793 (1), ZUMT 20923 (1), Misaki (Sagami Bay), Kanagawa Pref., Japan; collected by Shigeho Tanaka.
ZUMT 34916 (1), Niigata Pref., Japan; collected by Shigeho Tanaka.
ZUMT 47819 (1), Manazuru (Sagami Bay), Kanagawa Pref., Japan; 5 June or 5 August 1952; collected by Masaji Hirai.（神奈川県足柄下郡真鶴 相模湾; 1952 年 6 月 5 日または 8 月 5 日; 平井政次採集）
Paratypes (available): 56 specimens
ZUMT 12927 (1), Aomori (Mutsu Bay), Pref., Japan; collected by Sadao Tanabe.
ZUMT 26177 (1), Onoda, Yamaguchi Pref., Japan; collected by Sanji Nagatomi.
ZUMT 41819 (1), Asamushi, Aomori Pref., Japan; collected by Sadao Tanabe.
ZUMT 46204 (1), ZUMT 46215 (1), Toyama Pref., Japan; collected by Shigeho Tanaka.
ZUMT 47750 (2), Hasama, Tateyma City, Chiba Pref., Japan; 10June 1952; Collected by Tatsuyoshi Masuda.（千葉県館山市波左間; 1952 年 6 月 10 日）
ZUMT 47761– ZUMT 47762 (2), ZUMT 47766–ZUMT 47775 (10), ZUMT 47778–ZUMT 47786 (9), same as holotype.
ZUMT ABE 8591 (1), Manazuru, Kanagawa Pref., Japan; 14 June 1952; collected by Tokiharu Abe.（神奈川県足柄下郡真鶴 相模湾; 1952 年 6 月 14 日; 阿部宗明採集）
ZUMT ABE 8622 (1), same area as holotype; June 15, 1951.
ZUMT ABE 8623–ZUMT ABE 8630 (8), ZUMT ABE 8773–ZUMT ABE 8790 (18), same area as holotype; 9 September 1952.
ZUMT ABE 8732 (1), Fukaura, Minami-uwa, Ehime Pref., Japan; September 1950; collected by Masao Katayama.（愛媛県南宇和郡深浦; 1950 年 9 月; 片山正夫採集）

Remarks: The location of the following paratype 45 lots from the Abe collection is unknown.
以下の阿部コレクションのパラタイプ 45 標本の所在は不明。
ABE uncatalogued (2), Sea of Japan; probably 19-20 July 1949; collected by Sukekata Ito.
ABE 668 – ABE 678 (11), ABE 684 – ABE 698 (14), ABE 741– ABE 744 (4), same area as holotype; dated 15 June 1951.
ABE 8592 (1), ABE 8593 (1), Manazuru, Kanagawa Pref., Japan; 14 June 1952; collected by Tokiharu Abe.（神奈川県足柄下郡真鶴 相模湾; 1952 年 6 月 14 日; 阿部宗明採集）
ABE 8604–ABE 8609 (6), Manazuru (Sagami Bay), Kanagawa Pref., Japan; 30 July 1952; collected by Tokiharu Abe.（神奈川県足柄下郡真鶴 相模湾; 1952 年 7 月 30 日; 阿部宗明採集）

ABE 8700 (1), Kesen-numa, Miyagi Pref., Japan; August 1952; collecte by Chikashi Nakamura.（宮城県気仙沼）
ABE 8709 (1), same as holotype.
ABE 8712 (1), off south western coast of Hachijo Island, Tokyo, Japan; 25 August 1952; collected by Tokiharu Abe.（八丈島南西; 1952 年8月 25 日; 阿部宗明採集）
ABE 8726 (115), same area as holotype; dated 21 October 1952.
ABE 8735 (1), off Nozaki (Nanao Bay), Noto, Ishikawa Pref., Japan; 24 July 1952; collected by Sukekata Ito.（石川県能登, 野崎（七尾湾）; 1952 年 7 月 24 日）
ABE 8736 (1), off Nozaki (Nanao Bay), Noto, Ishikawa Pref., Japan; 22 July 1952; collected by Sukekata Ito.（石川県能登, 野崎（七尾湾）; 1952 年 7 月 22 日

Current status: Valid as *Cypselurus hiraii* Abe, 1953 ホソトビウオ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]
Kharin, V. E. and Saveliev, P. A. 2011. First occurrence of the bony flying fish *Hirundichthys oxycephalus* (Exocoetidae) in waters of Russia. Journal of Ichthyology, 51 (7): 551-555.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Saveliev, P. A., Kolpakov, E. V. and Semenchenko, A. A. 2014. The first capture of the flying fish *Cypselurus hiraii* Abe, 1953 (Beloniformes: Exocoetidae) in waters of northern Primorye (Sea of Japan). Russian Journal of Marine Biology, 40(5): 405 – 406.
園山貴之・荻本啓介・堀 成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]

Cypselurus starksi Abe, 1953 アリアケトビウオ

Original description: Abe (1953): 969, pl. 192, figs. 525–526.
Tomiyama, I. and Abe, T. 1953. Figures and descriptions of the fishes of Japan (a continuation of Dr. Shigeho Tanaka's work). Kazama-shobo, Tokyo, 49: 961–982, pls. 191–195. (In Japanese and English)

Holotype (available): ZUMT 47821, Akamizu, Nobeoka City, Miyazaki Pref., Kyushu, Japan; early in November 1952.
Paratypes (available): 21specimens.
ZUMT 20544 (1), ZUMT 20550 (1), ZUMT 20551 (1), ZUMT 20760 (1), Wakayama Pref., Japan; January 1921.
ZUMT 22641 – ZUMT 22642 (2), Tanabe, Wakayama Pref., Japan; November 1922; collected by Shigeho Tanaka.
ZUMT 23798 (1), Kagoshima Pref., Japan; 20 July–15 August1930; collected by Ichiro Tomiyama.
ZUMT 25661 (1), ZUMT 25663 (1), probably Toyama Pref., Japan; collected by Shigeho Tanaka.
ZUMT 31323 (1), Matsue, Shimane Pref., Japan; collected by Shigeho Tanaka.
ZUMT 35049 – ZUMT 35050 (2), Okinohata, Yanagawa, Fukuoka Pref., Japan; 26–31 May 1931; collected by Ichiro Tomiyama.
ZUMT 39344 (1), probably Shizuoka Pref., Japan; collected by Shigeho Tanaka.
ZUMT ABE 8657 (1), Manazuru (Sagami Bay), Kanagawa Pref., Japan; 5 October 1958; collected by Tokiharu Abe.

ZUMT ABE 8691 – ZUMT ABE 8692 (2), ZUMT ABE 8694 – ZUMT ABE 8696 (3), same as holotype.
ZUMT ABE 8733 (1), Toyama Bay, Japan; probably summer, 1938; collected by Masao Katayama.
ZUMT ABE 8772 (1), Tokyo Market (probably from Numazu), Japan; 21 October 1958; collected by Tokiharu Abe.

Remarks: The location of the following paratypes 2 specimens from the Abe collection is unknown.
以下の阿部コレクションのパラタイプ 2 標本の所在は不明。
ABE 8697 (1) and ABE 8698 (1), ame as holotype.

Current status: Valid as *Cypselurus starksi* Abe, 1953 アリアケトビウオ
久新健一郎・尼岡邦夫・仲谷一宏・井田　斉. 1977. インド洋の魚類. 海洋水産資源開発センター, 東京. 393 pp. [Kyushin, K., Amaoka, K., Nakaya, K. and Ida, H. 1977. Fishes of Indian Ocean. Japan Marine Fishery Resource Research Center, Tokyo. 393 pp. (In Japanese and English; various authors)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会,秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]
Shakhovskoy, I. B. and Parin, N. V. 2022. A review of the flying fish genus *Cypselurus* (Beloniformes: Exocoetidae). Part 2. Revision of the subgenus *Poecilocypselurus* Bruun, 1935 with descriptions of three new species and five new subspecies and reinstatement of *Exocoetus apus* Valenciennes and *E. neglectus* Bleeker. Zootaxa, 5117 (1): 1–109.

Prognichthys sealei Abe, 1955　ダルマトビ

Original description: Abe (1955): 185, figs. 1–3.
Abe, T. 1955. On a new Pacific flying fish, *Prognichthys sealei*, retaining five unbranched fin–rays above in the pectoral throughout life. Records of Oceanographic Works in Japan, 2 (1): 185–192, 1 pl.

Holotype (available): ZUMT 50474 (male, 183 mm SL), 30 miles east of Miyako Island, southern Ryukyu Islands, Japan; 11 May 1953.
Paratype (lost): ZUMT 50475 (1), taken at Oomuro–dashi (south of Izu-oshima Island), Japan; 20–21 May 1953.
Paratype (lost): ZUMT 50476 (1), taken near Izu Islands, Japan; probably in 1952.

Remarks: The whereabouts of the following paratype specimen in the Abe collection are unknown. ABE 10195 (1), east of the New Hebrides (16°08'S, 169°00'E.); 19 January 1955.
次の阿部コレクションのパラタイプ標本の所在は不明。
ABE 10195 (1), east of the New Hebrides (16°08'S, 169°00'E.); 19 January 1955.

Current status: Valid as *Prognichthys sealei* Abe, 1955 ダルマトビウオ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Winterbottom, R., Emery, A. R. and Holm, E. 1989. An annotated checklist of the fishes of the Chagos Archipelago, central Indian Ocean. Royal Ontario Museum Life Science Contributions, 145: 1-226, pls. 1-8.
Parin, N. V. 1996. On the species composition of flying fishes (Exocoetidae) in the west-central part of tropical Pacific. Journal of Ichthyology, 36 (5): 357-364.
Parin, N. V. 1999. Flying-fishes of the genus *Prognichthys* (Exocoetidae) in the Atlantic Ocean. Journal of Ichthyology, 39 (4):281-293.
Kharin, V. E., Zemnukhov, V. V. and Tolokonnikov, A. A. 2007. *Prognichthys sealei* (Exocoetidae) - a species of flying fish new for the Russian fauna. Journal of Ichthyology, 47 (1): 110–111.
Kharin, V. E. and Saveliev, P. A. 2011. First occurrence of the bony flying fish *Hirundichthys oxycephalus* (Exocoetidae) in waters of Russia. Journal of Ichthyology, 51 (7): 551-555.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Lampridiformes アカマンボウ目
Trachipteridae フリソデウオ科
Trachypterus misakiensis Tanaka, 1908

Original description: Tanaka (1908): 52, pl. 4 (fig. 2).
Tanaka, S. 1908. Notes on some Japanese fishes, with descriptions of fourteen new species. Journal of the College of Science, Imperial University of Tokyo, 23 (7): 1–54, pls. 1–4.

Holotype (lost): ZUMT 960 (13.8 cm SL), off Misaki (Sagami Bay), Kanagawa Pref., Japan. (Specimen B)
Paratypes (lost): ZUMT uncatalogued, (Specimen A; 17.3 cm SL), (Specimen C; 7.5 cm SL), (Specimen D; 8.3 cm SL); Okinose, Misaki (Sagami Sea), Kanagawa Pref., Japan.

Remarks: The original description specified ZUMT 960 as the holotype. In addition, paratype 3 specimens were added. ZUMT 1347 (2) and ZUMT 1348 (1) matched from the scientific name of the ZUMT specimen ledger and the record of collected data. ZUMT 1347 (2) was destroyed because it rotted. ZUMT 1348 (1), whose specimen was confirmed, had a body size that did not match the description and was reidentified as *Desmodema lorum* in Koeda et al. 2022. No paratype of this species was found in the ZUMT collection.
原記載ではホロタイプに ZUMT 960 を指定した。その他にパラタイプ 3 標本を加え記載した。ZUMT 標本台帳の学名や採集データの記録から ZUMT 1347 (2)と ZUMT 1348 (1)が一致した。ZUMT 1347 (2)は腐敗したため廃棄された。標本が確認できた ZUMT 1348 (1)は、体サイズが記載とは一致せず、また再同定の結果、オキフリソデウオであった(Koeda et al. 2022)。本種のパラタイプは ZUMT コレクションからは発見できなかった。

Current status: Synonym of *Desmodema polystictum* (Ogilby, 1898) フリソデウオ
Heemstra, P. C. and Kannemeyer, S. X. 1984. Trachipteridae and Radiicephalidae (Pisces, Lampriformes) and a new species of *Zu* from South Africa. Annals of the South African Museum, 94 (2): 13–39.
尼岡邦夫・仲谷一宏・新谷久男・安井達夫（編）. 1983. 東北海域・北海道オホーツク海域の魚類. 日本水産資源保護協会, 東京. 327 pp. [Amaoka, K., Nakaya, K., Araya, H. and Yasui, T. (eds). 1983. Fishes from the north-eastern Sea of Japan and the Okhotsk Sea off Hokkaido. Japan Fisheries Resource Conservation Association, Tokyo. 327 pp. (In Japanese and English; various authors)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with

English abstract)]
Koeda, K., Aizawa, M., Sakamoto, K. and Ueshima, R. 2022. Report on the specimens of order Lampridiformes (Teleostei) deposited in the Department of Zoology, the University Museum, the University of Tokyo. The University Museum, The University of Tokyo Material Reports, 128 (2): 25−35.
Martin, J. M. and Hilton, E. J. 2021. A taxonomic review of the family Trachipteridae (Acanthomorpha: Lampridiformes), with an emphasis on taxa distributed in the western Pacific Ocean. Zootaxa, 5039 (3): 301–351.

Ateleopodiformes シャチブリ目
Ateleopodidae シャチブリ科
Ateleopus purpureus Tanaka, 1915 ムラサキシャチブリ

Original description: Tanaka (1915): 566.
田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Holotype (lost): ZUMT uncatalogued, off Minato–machi, near Mito, Ibaraki Pref., Japan.

Remarks: There is no holotype designation in the original description. There is no record of the corresponding specimen in the ZUMT specimen ledger, and there is no specimen that matches the description in the ZUMT collection. Unfortunately, this specimen cannot be confirmed at this time, so it was determined that it was lost.
原記載にはホロタイプの指定がない。ZUMT 標本台帳に該当する標本の記録がなく、ZUMT コレクションにも記載に一致する標本はない。残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Synonym of *Ateleopus japonicus* Bleeker, 1853 シャチブリ
田中茂穂. 1916. 日本産魚類図説, 22: 383–398, pls. 106–110. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 22: 383–398, pls. 106–110. (In Japanese and English)]
Prokofiev, A. M. 2006. New finding of *Ateleopus purpureus* Tanaka, 1915 (Ateleopodiformes: Ateleopodidae) in the Pacific waters of Japan. Journal of Ichthyology, 2006, 46 (4): 342–344.
Kaga, T., van Oijen, M. J. P., Kubo, Y. and Kitagawa, E. 2015. Redescription of *Ateleopus japonicus* Bleeker 1853, a senior synonym of *Ateleopus schlegelii* van der Hoeven 1855, *Ateleopus purpureus* Tanaka 1915, and *Ateleopus tanabensis* Tanaka 1918 with designation of a lectotype for *A. japonicus* and *A. schlegelii* (Ateleopodiformes: Ateleopodidae). Zootaxa, 4027 (3): 389–407.
Kaga, T. 2017. Redescription of *Ateleopus japonicus* Bleeker 1853, a senior synonym of *Ateleopus natalensis* Regan 1921 (Teleostei: Ateleopodiformes: Ateleopodidae). Zootaxa, 4238 (4): 583–592.
園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]

Ateleopus tanabensis Tanaka, 1918 タナベシャチフリ

Original description: Tanaka (1918): 223.
田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Syntypes (available): ZUMT 8320– ZUMT 8323(4), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀

伊國田邊 [和歌山県田辺市] 宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. There was a description of "8320–8323 *Ateleopus tanabensis* n. sp." in the record of the ZUMT specimen ledger. The four individuals of ZUMT 8320–ZUMT 8323 are syntypes (ICZN Art. 72.1.1, 72.4.1.1, 73.2.). Tanaka wrote "8320 type" and "total number of soft rays of anal and caudal fins: 109". This ZUMT 8320 has a cloth tag of "Sketch No. 398".

原記載にはホロタイプの指定がない。ZUMT 標本台帳の記録から「8320–8323 *Ateleopus tanabensis* n. sp.」が該当した。ZUMT 8320–ZUMT 8323 の 4 個体は全てシンタイプである (ICZN Art. 72.1.1, 72.4.1.1, 73.2)。田中の直筆で「8320 type」と「臀鰭と尾鰭の合計軟条数 109 本」の書き込みがあった。この ZUMT 8320 には「写生 398 号」の布タグが付いている。

Current status: Synonym of *Ateleopus japonicus* Bleeker, 1853 シャチブリ

Kaga, T., van Oijen, M. J. P., Kubo, Y. and Kitagawa, E. 2015. Redescription of *Ateleopus japonicus* Bleeker 1853, a senior synonym of *Ateleopus schlegelii* van der Hoeven 1855, *Ateleopus purpureus* Tanaka 1915, and *Ateleopus tanabensis* Tanaka 1918 with designation of a lectotype for *A. japonicus* and *A. schlegelii* (Ateleopodiformes: Ateleopodidae). Zootaxa, 4027 (3): 389–407.

Kaga, T. 2017. Redescription of *Ateleopus japonicus* Bleeker 1853, a senior synonym of *Ateleopus natalensis* Regan 1921 (Teleostei: Ateleopodiformes: Ateleopodidae). Zootaxa, 4238 (4): 583–592.

園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]

Stephanoberyciformes カンムリキンメダイ目

Rondeletiidae アンコウイワシ科

Rondeletia loricata Abe & Hotta, 1963　アカチョッキクジラウオ

Original description: Abe and Hotta (1963): 43, pl. XI, figs. 1–7, pl. XII, figs. 8–9.

Abe, T. and Hotta, H. 1963. Description of a new deep–sea fish of the genus *Rondeletia* from Japan. Japanese Journal of Ichthyology, 10 (2–6): 43–48, pls. 6–7.

Holotype (available): ZUMT 52196 (stained in alizarin Red–S.), 30 miles off Kesen–numa, Miyagi Pref., Japan; 750 m depth; two–boat–type trawler; October 1962; Tomoe–maru.

Current status: Valid as *Rondeletia loricata* Abe & Hotta, 1963 アカチョッキクジラウオ

Tominaga Y. and Kubota, T. 1972. Records of the redmouth whalefish, *Rondeletia loricata*, from Sagami Bay and Suruga Bay, Japan, with notes on the holotype. Japanese Journal of Ichthyology, 19 (3): 181–185.

岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]

尼岡邦夫・仲谷一宏・矢部　衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cetomimidae クジラウオ科

Cetomimus compunctus Abe, Marumo & Kawaguchi, 1965　イレズミクジラウオ

Original description: Abe, Marumo and Kawaguchi (1965): 57, figs. 1–2.

Abe, T., Marumo, R. and Kawaguchi, K. 1965. Description of a new cetomimid fish from Suruga Bay. Japanese Journal of Ichthyology, 12 (3–6): 57–63.

Holotype (available): ZUMT 55046 [ex ORIT 641], Suruga Bay, Shizuoka Pref., Japan (34°02.8'N, 138°18.8'E.); 19 August1964.

Remarks: This holotype specimen abbreviation ORIT is an abbreviation for Ocean Research Institute, University of Tokyo. Transferred to the ZUMT collection and registered with ZUMT 55046. The second author name in the original description is Marumo (Ryuzo Marumo), not Maruno.

ホロタイプの標本略号 ORIT は Ocean Research Institute, University of Tokyo の略号。ZUMT コレクションに移管され、ZUMT 55046 に登録された。

原記載の第 2 著者名は Maruno ではなく、Marumo（丸茂隆三）である。

Current status: Valid as Cetomimus *compunctus* Abe, Marumo & Kawaguchi, 1965 イレズミクジラウオ

Maul, G. E. 1969. On the genus *Cetomimus* (Cetomimidae) with the description of a new species. Bocagiana, Museu Municipal do Funchal (História Natural), 18: 1–12.

Paxton, J. R. 1989. Synopsis of the whalefishes (family Cetomimidae) with descriptions of four new genera. Records of the Australian Museum, 41 (2): 135–206.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Beryciformes　キンメダイ目

Holocentridae　イットウダイ科

Adioryx dorsomaculatus Shimizu & Yamakawa, 1979　バラエビス

Original description: Shimizu and Yamakawa (1979): 119, figs. 3C, 4A, 5A, 9.

Shimizu, T. and Yamakawa, T. 1979. Review of the squirrelfishes (subfamily Holocentrinae: order Beryciformes) of Japan, with a description of a new species. Japanese Journal of Ichthyology, 26 (2): 109–147.

Paratype (available): ZUMT 54050(1), Kakeroma Is., Amami Islands, Kagoshima Pref., Japan; 4 August 1976; collected by W. Takada.

Current status: Valid as *Sargocentron dorsomaculatum* (Shimizu & Yamakawa, 1979) バラエビス

Matsuura, K. and Shimizu, T. 1982. The squirrelfish genus *Adioryx*, a junior synonym of *Sargocentron*. Japanese Journal of Ichthyology, 29 (1): 93–94.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Randall, J. E. 1998. Revision of the Indo-Pacific squirrelfishes (Beryciformes: Holocentridae: Holocentrinae) of the genus *Sargocentron*, with descriptions of four new species. Indo-Pacific Fishes, 27: 1–105, pls. 1–11.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

江口慶輔・本村浩之. 2016. 琉球列島におけるイットウダイ科魚類相. Nature of Kagoshima, 42: 57–112. [Eguchi, K. and Motomura, H. 2016. Holocentrid fishes of the Ryukyu Islands, Japan. Nature of Kagoshima, 42: 57–112. (In Japanese)]

Ostichthys sandix Randall, Shimizu & Yamakawa, 1982

Original description: Randall, Shimizu and Yamakawa (1982): 16, fig. 10.

Randall, J. E., Shimizu, T. and Yamakawa, T. 1982. A revision of the holocentrid fish genus *Ostichthys*, with descriptions of four new species and a related new genus. Japanese Journal of Ichthyology, 29 (1): 1–26, 2 pls.

Paratype (available): ZUMT 54238(1), off Barber's Point, Waianae coast, Oahu Island, Hawaiian Islands; 84–94.5 m depth; gill net at bottom; 19–20 April 1971; collected by Thomas A. Clarke.

Current status: Valid as *Ostichthys sandix* Randall, Shimizu & Yamakawa, 1982

Randall, J. E. 2007. Reef and shore fishes of the Hawaiian Islands. Sea Grant College Program, University of Hawai'i, Honolulu. i-xiv + 1-546.

Greenfield, D. W., Randall, J. E. and Psomadakis, P. N. 2017. A review of the soldierfish genus *Ostichthys* (Beryciformes: Holocentridae), with descriptions of two new species from Myanmar. Journal of the Ocean Science Foundation, 26: 1–33.

Fricke, R. 2017. *Ostichthys kinchi*, a new species of soldierfish from New Ireland, Papua New Guinea, western Pacific Ocean (Teleostei: Holocentridae). FishTaxa, 2 (2): 62–70.

Fricke, R. 2017. *Ostichthys spiniger*, a new species of soldierfish from New Ireland, Papua New Guinea, western Pacific Ocean (Teleostei: Holocentridae). Ichthyological Research, 65 (1): 127-133.

Matsunuma, M., Fukui, Y. and Motomura, H. 2018 . Review of the *Ostichthys japonicus* complex (Beryciformes: Holocentridae: Myripristinae) in the northwestern Pacific Ocean, with description of a new species. Ichthyological Research, 65 (3): 285–314.

Berycidae キンメダイ科

Beryx mollis Abe, 1959 フウセンキンメ

Original description: Abe (1959): 157, pls. 4–6.

Abe, T. 1959. New, rare or uncommon fishes from Japanese waters. VII. Description of a new species of *Beryx*. Japanese Journal of Ichthyology, 7 (5–6): 157–163, pls. 4–6.

Holotype (available): ZUMT 49583, off Iwa, Manazuru (Sagami Bay), Kanagawa Pref., Japan; 16 January 1959; hook and line.

Paratype (available): ZUMT ABE 59-2 (1), off Odawara City (Sagami Bay), Kanagawa Pref., Japan; 12 March 1959; hook and line.

Remarks: The following paratype specimens from the Abe collection are currently unknown.
以下の阿部コレクションのパラタイプ標本は、所在不明。

Paratype: ABE 59–27 (1, skeletonized), off Odawara City (Sagami Bay), Kanagawa Pref., Japan; 12 March 1959; hook and line.

Current status: Valid as *Beryx mollis* Abe, 1959 フウセンキンメ

Yoshino, T., Kon, T. and Miura, A. 1999. Morphological differences between *Beryx splendens* Lowe and *B. mollis* Abe (Teleostei: Beryciformes: Berycidae). Bulletin Faculty Science, University of the Ryukyus, 67: 77–86.

Yoshino, T. and Kotlyar, A. N. 2001. World distribution of the baloon alfonsino, *Beryx mollis* (Pisces: Beryciformes: Berycidae). Bulletin of the Faculty of Science, University of the Ryukyus No. 72: 119–123. [Errata appeared in Bulletin Faculty of Science, University of the Ryukyus, 2002, 73: 63]

福井美乃・松沼瑞樹・本村浩之. 2015. 鹿児島県黒島沖の大陸斜面域から得られた底生魚類およびギンザメ科アカギンザメ *Hydrolagus mitsukurii* の記録. Nature of Kagoshima, 41: 177–186. [Fukui, Y., Matsunuma, M. and Motomura, H. 2015. A list of demersal fishes collected from off Kuro-shima island in the Osumi Group, Kagoshima Prefecture, southern Japan, with record of *Hydrolagus mitsukurii* (Chimaeriformes: Chimaeridae).

Nature of Kagoshima, 41: 177–186. (In Japanese)]

畑　晴陵・岩坪洸樹・原口百合子・森　幸二・本村浩之．2016. 鹿児島県のキンメダイ科魚類. Nature of Kagoshima, 42: 49–56. [Hata, H., Iwatsubo, H., Haraguchi, Y., Mori, K. and Motomura, H. 2016. A synopsis of alfonsinos (Beryciformes: Berycidae) in Kagoshima Prefecture, Japan. Nature of Kagoshima, 42: 49–56. (In Japanese)]

Zeiformes マトウダイ目

Oreosomatidae オオメマトウダイ科

Xenocyttus nemotoi Abe, 1957　ツブマトウダイ

Original description: Abe (1957): 228, pls. 1–2.

Abe, T. 1957. Notes on fishes from the stomachs of whales taken in the Antarctic. I. *Xenocyttus nemotoi*, a new genus and new species of zeomorph fish of the subfamily Oreosominae Goode and Bean, 1895. Scientific Reports of the Whales Research Institute,　Tokyo, 12: 225–233, 2 pls.

Holotype (available): ZUMT 49756, Antarctic Ocean (64°32'S, 115°25'E.); 15 January 1955; collected by Nemoto from the stomach of a fin whale along with numerous euphausids.

Current status: Synonym of *Pseudocyttus maculatus* Gilchrist, 1906　ヒョウマトウダイ

Abe, T. and Suzuki, M. 1981. Notes on some fishes associated with the Antarctic krill. II. On *Xenocyttus nemotoi* Abe, and again on *Neopagetopsis ionah* Nybelin. Antarctic Record, (71): 121–129. [In Japanese with English summary]

James, G. D., Inada, T. and Nakamura, I. 1988. Revision of the oreosomatid fishes (family Oreosomatidae) from the southern oceans, with a description of a new species. New Zealand Journal of Zoology, 15: 291–326.

尼岡邦夫・松浦啓一・稲田伊史・武田正倫・畑中　寛・岡田啓介（編）. 1990. ニユージーランド海域の水族深海丸により採集された魚類・頭足類・甲殻類. 海洋水産資源開発センター, 東京. 411 pp. [Amaoka, K., Matsuura, K., Inada, T., Takeda, M., Hatanaka, H. and Okada, K. (eds). 1990. Fishes collected by the R/V Shinkai Maru around New Zealand. Japan Marine Fishery Resource Research Center, Tokyo. 411 pp. (In Japanese and English; various authors)]

Gasterosteiformes トゲウオ目

Gasterosteidae トゲウオ科

Pygosteus kaibarae Tanaka, 1915　サバジャコ, カツオ

Original description: Tanaka (1915): 565.

田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Lectotype (available): ZUMT 8197, Kisshoin, Minami-ku, Kyoto City, Kyoto, Japan; collected by Fukuzo Imaoji.（京都附近吉詳院村 [京都府京都市南区吉祥院] 今大路復三採集）

Paralectotypes (available): ZUMT 59848–ZUMT 59853 (6), same as lectotype.

Paralectotypes (available): ZUMT 3442 (2), Kakishiba, Hikami-cho, Tanba City, Hyogo Pref., Japan; collected by Yasaburo Tanaka and Tomiji Ashida, donated by Jun Nakagawa.（丹波柏原付近成松町内柿紫町小字清水 [兵庫県丹波市氷上町柿柴]、田中弥三郎、芦田富治採集、中川 純寄贈）

Paralectotypes (available): LBL1210060298 (1, ex: ZUMT 59854), same as lectotype.

Remarks: The original description states that there are 8 and 9 dorsal fin spines. In addition, it is said to be collected from three production areas, "Kakishiba Town Shimizu in Tanba Kaibara Narimatsu Town = Kakishiba, Hikami-cho, Tanba City, Hyogo Prefecture", "Wada Village, Hikami-cho District, Tanba Province = Wada Village,

Hikami-cho, Tanba City, Hyogo Prefecture", and "Kisshoin Village, Kyoto Prefecture = Kisshoin, Minami-ku, Kyoto City, Kyoto." From this, the type series is syntypes consisting of multiple specimens (ICZN Art. 72.1.1, 72.4.1.1, 73.2).

The ZUMT collection ledger, includes 8 specimens of ZUMT 8197 "*Pygosteus kaibarae*, n. sp.", "Type Illustrated southwest of Kyoto, Kisshoin Village, collected by Fukuzo Imaoji" and includes 2 specimens of ZUMT 3442 "*Pygosteus sinesis*" and "Hyogo Prefecture Kaibara Junior High School, Jun Nakagawa". ZUMT 3442 has a different scientific name, but the specimen label of "Tanba Kaibara", which matches the original description, was confirmed. Specimen ZUMT 3442 is also a syntype. The species name "*kaibarae*" is thought to be derived from Kaibara.

Tanaka (1918)'s Illustrated Encyclopedia of Japanese Fishes (27: 486–491, pl. 134, fig. 376) designated one specimen of ZUMT 8197 collected at ``Kichijoin in southwestern Kyoto City" as the holotype. The act of selecting a specific sample as the name-bearing type (holotype in this case) from these syntypes is regarded as the designation of lectotype (ICZN Art. 74.5). There are eight specimens of specimen ZUMT 8197, and one of them has a "type" cloth tag. The specimen with the cloth tag ``type" was designated as ZUMT 8197, and the other seven specimens were re-registered as ZUMT 59848–59854. Additionally, ZUMT 59854 (1) was transferred to Shiga Prefectural Lake Biwa Museum (LBM, 1091 Oroshimo, Kusatsu, Shiga 525-0001, Japan) and registered as LBL 1210060298 (1). Specimen ZUMT 8197 is lectotype, and ZUMT 59848–59853 (6), ZUMT 3442 (2) and LBM 1210060298 (1) are paralectotypes (ICZN Art. 74.1.3).

原記載には、背鰭棘が8本と9本とあること。また 3 カ所の産地「丹波柏原附近成松町の内の柿柴町小字清水(＝兵庫県丹波市氷上町柿柴)」、「丹波國氷上郡和田村(兵庫県氷上郡和田村)」、「京都附近吉詳院村(京都府京都市南区吉祥院)」から採集とある。これらのことからタイプシリーズは複数の標本からなるシンタイプである(ICZN Art. 72.1.1, 72.4.1.1, 73.2)。

ZUMT コレクション台帳には、ZUMT 8197「*Pygosteus kaibarae*, n. sp.」、「type 図説用 京都の南西，吉祥院村 今大路復三採集」の 8 個体と ZUMT 3442「*Pygosteus sinesis*」、「兵庫県柏原中学校、中川純」の2個体があった。ZUMT 3442 の学名は異なるが採集地は、原記載と一致する「丹波柏原」の標本ラベルを確認できた。標本 ZUMT 3442 もシンタイプとなる。種小名「kaibarae」は柏原が由来と考えられる。

田中(1918)の日本産魚類図説(27: 486–491, pl. 134, fig. 376) は、「京都市の西南、吉祥院」から収集された ZUMT 8197 の 1 標本をホロタイプに指定した。このシンタイプから特定の標本を担名タイプ（ここではホロタイプ）に選定した行為は、レクトタイプの指定と見なされる (ICZN Art. 74.5)。標本 ZUMT 8197 には 8 個体あり、その中の 1 個体に「type」の布タグが付いた。「type」の布タグが付いた標本を ZUMT 8197 とし、それ以外の 7 個体を ZUMT 59848–59854 に再登録した。また、ZUMT 59854 (1)を滋賀県立琵琶湖博物館（LBM: Lake Biwa Museum, 1091 Oroshimo, Kusatsu, Shiga 525-0001, Japan）へ譲渡し、LBL 1210060298 (1）に登録された。標本 ZUMT 8197 はレクトタイプに、ZUMT 59848–53 (6)、ZUMT 3442 (2)と LBL 1210060298 (1)はパラレクトタイプとなる (ICZN Art. 74.1.3)。

原記載の京都産の採集者名は「今大路複三」、1918 年の図説では「今大路復三」となっている。ZUMT 標本台帳には「復三」と記述されている。採集者名の漢字表記に「復三」を採用した。

Current status: Valid as *Pungitius kaibarae* (Tanaka, 1915) ミナミトミヨ

田中茂穂. 1918. 日本産魚類図説, 27: 475–494, pls. 131–135. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 27: 475–494, pls. 131–135. (In Japanese and English)]

Bogutskaya, N. G., Naseka, A. M., Shedko, S. V., Vasil'eva, E. D. and Chereshnev, I. A. 2008. The fishes of the Amur River: updated check-list and zoogeography. Ichthyological Exploration of Freshwaters, 19 (4): 301–366.

Takahashi, H., Møller, P. R., Shedko, S. V., Ramatulla, T., Joen, S.-R., Zhang, C.-G., Sideleva, V. G., Takata, K., Sakai, H., Goto, A. and Nishida, M. 2016. Species phylogeny and diversification process of Northeast Asian *Pungitius* revealed by AFLP and mtDNA markers. Molecular Phylogenetics and Evolution, 99: 44–52.

Matsumoto, T., Matsuura, K. and Hanzawa, N. 2021. A new species of nine-spined stickleback, *Pungitius modestus* (Gasterosteiformes, Gasterosteidae), from northern Honshu, Japan. Zootaxa, 5005 (1): 1–20.

Solenostomidae カミソリウオ科

Solenostomus leplosoma Tanaka, 1908

Original description: Tanaka (1908): 29, unnumbered figure.

Tanaka, S. 1908. Descriptions of eight new species of fishes from Japan. Annotationes Zoologicae Japonenses, 7 (1): 27–47.

Holotype (lost): ZUMT 1948 [not 1748], Yodomi, 50 fathoms (50 hiro), off Misaki (Sagami Bay), Kanagawa Pref., Japan; February 1908; collected by Kumakichi Aoki.（50 尋 ヨドミ 相模湾 明治 41 年 2 月 青木熊吉採集）

Remarks: The original description specifies ZUMT 1784 as the holotype, but there are two ZUMT 1784 in the ZUMT specimen ledger. There were some corrections before and after the latter, which was consistent with the original description, such as the scientific name and collection data. The correct holotype registration number is ZUMT 1948.

原記載はホロタイプに ZUMT 1784 を指定しているが、ZUMT 標本台帳の ZUMT 1784 は 2 箇所にあった。学名や収集データなど原記載と一致した後者の前後に加筆訂正がされた箇所があった。ホロタイプの正しい登録番号は ZUMT 1948 である。

Current status: Valid as *Solenostomus leplosoma* Tanaka, 1908 ヤセフウライウオ

瀬能　宏. 1994. 日本産カミソリウオ科魚類の分類:学名と和名の整理. I.O.P. Diving News, 5(6): 2–6. [Senou, H. 1994. A review of the ghost pipefishes, genus *Solenostomus* (Teleostei: Solenostomidae) from Japan. I. O. P. Diving News, 5 (6): 2–6. (In Japanese with English abstract)]

中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]

Allen, G. R. and Adrim, M. 2003. Coral reef fishes of Indonesia. Zoological Studies, 42 (1): 1–72.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Golani, D. and Fricke, R. 2018. Checklist of the Red Sea fishes with delineation of the Gulf of Suez, Gulf of Aqaba, endemism and Lessepsian migrants. Zootaxa, 4509 (1): 1–215.

Syngnathidae ヨウジウオ科

Hippocampus takakurae Tanaka, 1916　タカクラタツ

Original description: Tanaka (1916a): 423, vol. 23, pl. 115 (fig. 341).

田中茂穂. 1916a. 日本産魚類図説, 24: 419–440, pls. 116–120. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 24: 419–440, pls. 116–120. (In Japanese and English)]

Holotype (available): ZUMT 22674, Hojo Beach, Tateyama City, Chiba Pref., Japan; collected by Usamaro Takakura.（房州北条（館山市北条）, 高倉卯三麿採集）

Remarks: There is no holotype designation in the original description. ZUMT 22674 is the only specimen whose scientific name and collected data match from the records in the ZUMT specimen ledger. This specimen is the holotype (ICZN Art. 72.4.1.1, 73.1.4).

原記載にはホロタイプの指定がない。ZUMT 22674 は、ZUMT 標本台帳の記録から学名と採集データが一致する唯一の標本であり、この標本がホロタイプである (ICZN Art. 72.4.1.1, 73.1.4)。

Current status: Synonym of *Hippocampus trimaculatus* Leach, 1814 タカクラタツ

田中茂穂. 1916b. 日本産魚類図説, 23: 399–418, pls. 111–115. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 23: 399-418, pls. 111-115. (In Japanese and English)]

Kim, I.-S. and Lee, W.-O. 1995. First record of the seahorse fish, *Hippocampus trimaculatus* (Pisces: Syngnathidae) from Korea. Korean Journal of Zoology, 38 (1): 74–77.

中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Lourie, S. A., Pollom R. A. and Foster, S. J. 2016. A global revision of the seahorses *Hippocampus* Rafinesque 1810 (Actinopterygii: Syngnathiformes): taxonomy and biogeography with recommendations for further research. Zootaxa, 4146 (1): 1–66.

園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]

Mugiliformes ボラ目

Mugilidae ボラ科

Chelon persicus Senou, Randall & Okiyama, 1995

Original description: Senou, Randall and Okiyama (1995): 235, fig. 611.

Senou, H., Randall, J. E. and Okiyama, M. 1996. *Chelon persicus*, a new species of mullet (Perciformes, Mugilidae) from the Persian Gulf. Bulletin of the Kanagawa Prefectural Museum (Natural Science), 25: 71–78.

Paratype (available): ZUMT 59484 (1), 200.6 mm, Doha fish market, Qatar, Persian Gulf; 3 July 1989; collected by Shiro Hara.

Paratype (available): ZUMT 59485 (1, stained in alizarin Red–S.), 195.4 mm, Doha fish market, Qatar, Persian Gulf; July 1989; coll. by Shiro Hara.

Paratype (available): ZUMT 59505 (1), ripe female, 227.8 mm, Doha fish market, Qatar, Persian Gulf; 24 December 1989; coll. by Shiro Hara.

Current status: Valid as *Chelon persicus* Senou, Randall & Okiyama 1995

Carpenter, K. E., Krupp, F., Jones, D. A. and Zajonz, U. 1997. FAO species identification guide for fishery purposes. The living marine resources of Kuwait, eastern Saudi Arabia, Bahrain, Qatar, and the United Arab Emirates. FAO, Rome. 293 pp., pls. 1–17.

Eagderi, S., Fricke, R., Esmaeili, H. R. and Jalili, P. 2019. Annotated checklist of the fishes of the Persian Gulf: diversity and conservation status. Iranian Journal of Ichthyology, 6 (Supplement 1): 1–171.

Thieme, P., Bogorodsky, S. V., Alpermann, T. J., Whitfield, A. K., Freitas, R. and Durand, J.-D. 2022. Contributions to the taxonomy of the mugilid genus *Chelon* Artedi (Teleostei: Mugilidae), with a major review of the status of *C. persicus* Senou, Randall & Okiyama, 1995. Zootaxa, 5188 (1): 1–42.

Liza akame Tanaka, 1916 アカメ

Original description: Tanaka (1916): 395.

田中茂穂. 1916. 日本産魚類の二新種. 動物学雑誌. 28 (336): 394–395. [Tanaka, S. 1916. Two new species of Japanese fishes. Zoological Magazine Tokyo, 28 (336): 394–395. (In Japanese)]

Holotype (lost): ZUMT uncatalogued, Urado, near Kochi, Kochi Pref., Japan; August1916.

Remarks: There is no holotype designation in the original description. There is no record of specimens corresponding to the scientific name "*Liza akame*" and the collection place "Urado, Kochi City" in the ZUMT specimen ledger. There is no specimen that matches the description in the ZUMT collection.
原記載にはホロタイプの指定がない。ZUMT 標本台帳に学名「*Liza akame*」、採集場所「高知市浦戸」に該当する標本の記録はない。ZUMT コレクションにも記載に一致する標本は確認できない。

Current status: Synonym of *Osteomugil perusii* (Valenciennes, 1836) ナンヨウボラ
Thomson, J. M. 1997. The Mugilidae of the world. Memoirs of the Queensland Museum, 41 (13): 457–562.
Kottelat, M. 2013. The fishes of the inland waters of Southeast Asia: a catalogue and core bibliography of the fishes known to occur in freshwaters, mangroves and estuaries. Raffles Bulletin of Zoology Supplement, 27: 1–663.

Liza menada Tanaka, 1916 メナダ

Original description: Tanaka (1916): 394.
田中茂穂. 1916. 日本産魚類の二新種. 動物学雑誌, 28 (336): 394–395. [Tanaka, S. 1916. Two new species of Japanese fishes. Zoological Magazine Tokyo, 28 (336): 394–395. (In Japanese)]

Holotype (lost): ZUMT 3338, Tokyo Market, Tokyo, Japan.

Remarks: In the original description, the holotype of "*Liza menada*" was the illustrated specimen ZUMT 3338, which Tanaka (1912) published as "*Liza haematochila*" in the Figures and descriptions of the fishes of Japan (8: 137–140, pl. 37, fig. 142, pl. 38, fig. 144, pl. 39, fig. 146, pl. 40, fig. 150). The holotype is ZUMT 3338 (ICZN Art. 73.1.4).
原記載で「*Liza menada*」のホロタイプを田中（1912）の日本産魚類図説（8: 137–140, pl. 37, fig. 142, pl. 38, fig. 144, pl. 39, fig. 146, pl. 40, fig. 150）に「*Liza haematochila*」として掲載した図示標本 ZUMT 3338 を指定した (ICZN Art. 73.1.4)。

Current status: Synonym of *Planiliza haematocheilus* (Temminck & Schlegel, 1845) メナダ
田中茂穂. 1912. 日本産魚類図説, 8: 129–144, pls. 36–40. [Tanaka, S. 1912. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 8: 129–144, pls. 36–40. (In Japanese and English)]
Thomson, J. M. 1997. The Mugilidae of the world. Memoirs of the Queensland Museum, 41 (13): 457–562.
Chang, C.-W., Huang C.-S, and Tzeng, W.-N. 1999. Redescription of red lip mullet *Chelon haematocheilus* (Pisces: Mugilidae) with a key to mugilid fishes in Taiwan. Acta Zoologica Taiwanica, 10 (1): 37–43.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Perciformes スズキ目
Scorpaenoidei カサゴ亜目
Sebastidae メバル科
Adelosebastes latens Eschmeyer, Abe & Nakano, 1979 フトユビメヌケ

Original description: Eschmeyer, Abe and Nakano (1979): 80, pl. 1, figs. 1–2.

Eschmeyer, W. N., Abe, T. and Nakano, S. 1979. *Adelosebastes latens*, a new genus and species of scorpionfish from the North Pacific Ocean (Pisces, Scorpaenidae). Uo (Japanese Society of Ichthyologists), 30: 77–84, pl. 1.

Holotype (lost): ZUMT 54180, Emperor Seamount Chain, North Pacific; 900–1000 m depth.

Current status: Valid as *Adelosebastes latens* Eschmeyer, Abe & Nakano, 1979 フトユビメヌケ

Barsukov, V. V., Borets, L. A., Kodolov, L. S. and Snytko, V. A. 1983. New data on *Adelosebastes latens* Eschmeyer, Abe and Nakano, 1979 (Scorpaenidae). Journal of Ichthyology, 23 (4): 8–13.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Orr, J. W. and Baker, D. C. 1996. New North American records of the northeast Pacific scorpaenids *Adelosebastes latens* and *Sebastes glaucus*. Alaska Fishery Research Bulletin, 3: 94–102.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Helicolenus avius Abe & Eschmeyer, 1972　オキカサゴ

Original description: Abe and Eschmeyer (1972): 49, figs. 1–2.

Abe, T. and Eschmeyer, W. N. 1972. A new species of the scorpionfish genus *Helicolenus* from the North Pacific Ocean. Proceedings of the California Academy of Sciences (Series 4), 39 (4): 47–53.

Holotype (available): ZUMT 52457, southern end of Emperor Seamount Chain, northwestern Pacific (32°40'N, 172°17'E and 35°05'N, 171°46'E); 450–600 m depth; around 21–22 August 1970; collected with a bottom trawl vessel Daini–Oriento Maru.

Remarks: The location of the ABE collection paratype ABE 15256 (1; same as holotype) is unknown.
阿部コレクションのパラタイプ ABE 15256 (1; same as holotype)は、所在不明。

Current status: Valid as *Helicolenus avius* Abe & Eschmeyer, 1972 オキカサゴ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Mundy, B. C. 2005. Checklist of the fishes of the Hawaiian Archipelago. Bishop Museum Bulletins in Zoology, 6: 1–703.

Sebastodes sasakii Tanaka, 1916　ミヤギメバル、アカウオ

Original description: Tanaka (1916): 10.

田中茂穂. 1916. 日本産魚類の二新種. 動物学雑誌, 28 (333): 257–258. [Tanaka, S. 1916. Two new species of Japanese fishes. Zoological Magazine Tokyo, 28 (333): 257–258. (In Japanese)]

Holotype (lost): ZUMT uncatalogued, 120 fathoms (120 hiro), off Rhikuzen, Miyagi Pref., Japan; collected by Takuma Sasaki, Director of Miyagi Prefectural Fisheries Experimental Station.

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, there were no specimens that matched the scientific name, the collection locality "off Rikuzen", the collectors "Miyagi Prefectural Fisheries Experimental Station", and "Okitarou Sasaki". No corresponding specimen could be confirmed in the ZUMT collection.

原記載にはホロタイプの指定がない。ZUMT 標本台帳には、学名、原記載の産地「陸前沖」、採集者「宮城県水産試験場」、「佐々木沖太郎」に一致する標本はない。ZUMT コレクションにも該当する標本を確認できなかった。

Current status: Synonym of *Sebastes itinus* (Jordan & Starks, 1904) ヤナギメバル

松原喜代松. 1955. 魚類の形態と検索 II. 石崎書店, 東京. vi+791–1605 pp. [Matsubara, K. 1955. Fish morphology and hierarchy. Ishizaki–shoten, Tokyo. Part 2: vi+791–1605 pp. (In Japanese)]

尼岡邦夫・仲谷一宏・矢部 衛. 2011. 北海道の全魚類図鑑. 北海道新聞社, 札幌. 482 pp. [Amaoka, K., Nakaya, K. and Yabe, M. 1995. Fishes of Hokkaido. The Hokkaido Shimbun Press, Sapporo. 482 pp. (In Japanese)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Sebastiscus tsuraara Tanaka, 1917 ツラアラ

Original description: Tanaka (1917): 10.

田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (available): ZUMT 7437, off Misaki (Sagami Bay), Kanagawa Pref., Japan; Late November 1916; collected by Shigeho Tanaka.(相州三崎 大正 5 年 11 月下旬 田中茂穂採集)

Remarks: There is no holotype designation in the original description. The ZUMT specimen ledger had the only specimen ZUMT 7437 with the same scientific name and collection data. ZUMT 7437 is ？holotype (ICZN Art. 73.1.2). This specimen has two cloth tags with the registration number "7437" and "Tsuraara Misaki, November 1918, new sp., type".

原記載にはホロタイプの指定がない。ZUMT 標本台帳には学名と収集データが一致する唯一の標本 ZUMT 7437 があった。ZUMT 7437 がホロタイプである (ICZN Art. 73.1.2)。この標本に登録番号の「7437」と「ツラアラ 三崎 大正 5 年 11 月 new sp. type」と書かれた 2 つの布タグが付いている。

Current status: Synonym of *Sebastiscus marmoratus* (Cuvier, 1829) カサゴ

松原喜代松. 1955. 魚類の形態と検索 II. 石崎書店, 東京. vi+791–1605 pp. [Matsubara, K. 1955. Fish morphology and hierarchy. Ishizaki–shoten, Tokyo. Part 2: vi+791–1605 pp. (In Japanese)]

中坊徹次・町田吉彦・山岡耕作・西田清徳(編). 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Scorpaenidae フサカサゴ科

Pterois paucispinula Matsunuma & Motomura, 2014 ミズヒキミノカサゴ

Original description: 329, Figs. 2–3, 11a.

Matsunuma, M. and H. Motomura 2014. *Pterois paucispinula*, a new species of lionfish (Scorpaenidae: Pteroinae) from the western Pacific Ocean. Ichthyological Research, 62 (3): 327-346. [First published online, p. 1-20; printed version appeared on 30 Apr. 2015.]

Paratype (available): ZUMT 46873 (1), Collection site unknown.

Current status: Valid as *Pterois paucispinula* Matsunuma & Motomura, 2014 ミズヒキミノカサゴ

松沼瑞樹・本村浩之. 2011. ミノカサゴ亜科魚類ミズヒキミノカサゴ（新称）*Pterois mombasae* の日本からの初記録および近縁種ネッタイミノカサゴ *P. antennata* との形態比較. 魚類学雑誌, 58 (1): 27–40. [Matsunuma, M. and Motomura, H. 2011. First records of a lionfish, *Pterois mombasae* (Scorpaenidae: Pteroinae), from Japan, and morphological comparisons with *P. antennata*. Japan. J. Ichthyol., 58 (1): 27–40. (In Japanese)]

松沼瑞樹・藍澤正宏・桜井　雄・本村浩之. 2011.ミズヒキミノカサゴ *Pterois mombasae*（フサカサゴ科）の屋久島からの記録および国内におけるミズヒキミノカサゴとネッタイミノカサゴ *P. antennata* の分布状況. Nature of Kagoshima, 37: 3–8. [Matsunuma M, Aizawa M, Sakurai Y, Motomura, H. 2011. Record of a lionfish, *Pterois mombasae* (Smith, 1957), from Yaku-shima Island, southern Japan, and notes on distributional implications of the species and *P. antennata* in Japan. Nat Kagoshima, 37:3–8. (In Japanese)]

Matsunuma, M. and Motomura, H. 2018. Redescription and geographic variations of *Pterois antennata* and first record of *Pterois paucispinula* from French Polynesia (Scorpaenidae: Pteroinae). Species Diversity, 23: 95-114.

Pterois tanabensis Tanaka, 1918 **タナベミノ**

Original description: Tanaka (1918): 225.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Holotype (lost): ZUMT uncatalogued, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊 [和歌山県田辺市] 宇井縫蔵採集）

Remarks: There is no holotype information in the original description. There is no specimen in the ZUMT specimen ledger that matches the scientific name and the collection data. No specimen should be confirmed to be the holotype that matches the description.

原記載にはホロタイプの情報がない。ZUMT標本台帳には学名と収集データが一致する標本がない。記載に一致するホロタイプとなるべき標本は確認できなかった。

Current status: Synonym of *Parapterois heterura* (Bleeker, 1856) セトミノカサゴ

Motomura, H. 2004. Morphological comparison of a poorly known scorpionfish, *Parapterois macrura*, with a related species, *P. heterura* (Scorpaenidae: Pteroinae). Zoological Studies, 43 (1): 1–7.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 58.

Matsunuma, M. and Motomura, H. 2021. Revision of the genus *Parapterois* (Scorpaenidae: Pteroinae) and resurrection of *Parapterois nigripinnis* (Gilchrist 1904). Ichthyological Research, 69 (4): 401–432.

Sebastella littoralis Tanaka, 1917　イソカサゴ

Original description: Tanaka (1917): 10.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (available): ZUMT 7439, off Misaki (Sagami Bay), Kanagawa Pref., Japan; November 1916; collected by Shigeho Tanaka.（相州三崎 大正 5 年 11 月 田中茂穂採集）

Remarks: There is no holotype designation in the original description. There is no scientific name that matches the scientific name from the ZUMT specimen ledger, but the genus name "*Sebastella*" described in the new genus matches. The collection data of ZUMT 7439, "Collection by Shigeho Tanaka in November 1918, Sagami Misaki" is consistent with the original description. Specimen ZUMT 7439 had three cloth tags with registration numbers "7439", "Misaki" and "Sketch No. 327 Isokasago". The Japanese name "Isokasago" for this cloth tag was originally proposed. ZUMT 7439 is the only specimen that matches the original description and is holotype (ICZN Art. 73.1.2).

The specimen illustrated as *Sebastopsis guamensis* in Tanaka's (1928) Figures and descriptions of the fishes of Japan (42: 825–830, pl. 174, fig. 480. ZUMT 7439) is holotype of this species.

原記載にはホロタイプの指定がない。ZUMT 標本台帳から学名に一致するものはないが、新属で記載された属名「*Sebastella*」が一致した ZUMT 7439 の収集データは、「相州三崎、大正 5 年 11 月, 田中茂穂採集」とあり、原記載と一致する。標本 ZUMT 7439 には登録番号「7439」、「三崎」と「写生番号 327 号 イソカサゴ」の3つの布タグが付いていた。この布タグの和名「イソカサゴ」は原記載で提唱されたもの。ZUMT 7439 は原記載に一致する唯一の標本で、ホロタイプである (ICZN Art. 73.1.2)。

田中（1928）の日本産魚類図説（42: 825–830, pl. 174, fig. 480. ZUMT 7439）に *Sebastopsis guamensis* と図示した標本は、本種のホロタイプである。

Current status: Synonym of *Scorpaenodes evides* (Jordan & Thompson, 1914) イソカサゴ
田中茂穂. 1928. 日本産魚類図説, 42: 809–830, pls. 172–174. [Tanaka, S. 1928. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 42: 809–830, pls. 172–174. (In Japanese and English)]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Motomura, H., Arbsuwan, S. and Musikasinthorn, P. 2010. *Thysanichthys evides, a* senior synonym of *Sebastella littoralis*, and a valid species of *Scorpaenodes* (Actinopterygii: Scorpaenidae). Species Diversity, 15: 71–81.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Aploactinidae　イボオコゼ科

Kanekonia florida *T*anaka, 1915　ハナチゴオコゼ

Original description: Tanaka (1915): 566.
田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Lectotype (available): ZUMT 6544, Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.（長

崎市場　金子一狼採集）
Paralectotypes (available): ZUMT 6375 (2), same as holotype.

Remarks: There is no holotype designation in the original description. The ZUMT specimen ledger had two records, ZUMT 6375 and ZUMT 6544, which matched the scientific name and collection data. Tanaka (1918. Figures and descriptions of the fishes of Japan. 28: 510–513, pl. 136, fig. 380) mentioned that multiple specimens were collected by Kaneko Ichiro for the description of this species. Furthermore, ZUMT 6544 was specified as holotype, and it was re-described and illustrated.

This action is regarded as the designation of the name-bearing type from the syntypes, ZUMT 6544 becomes the lectotype, and ZUMT 6375 (2) become the paralectotypes (ICZN Art. 74.5).

原記載にはホロタイプの指定がない。ZUMT 標本台帳には、学名や収集データに一致する ZUMT 6375 と ZUMT 6544 の 2 つの記録があった。田中(1918)の日本産魚類図説(28: 510–513, pl. 136, fig. 380) には、金子一狼氏が本種の記載のために複数の標本を採集したことに言及した。さらに、ZUMT 6544 をホロタイプに指定し、再記載と図示した。この行為はシンタイプから担名タイプの指定（ここではホロタイプ）と見なされ、ZUMT 6544 はレクトタイプとなり、ZUMT 6375(2) はパラレクトタイプとなる(ICZN Art. 74.5)。

Current status: Valid as *Kanekonia florida* Tanaka, 1915 ハナチゴオコゼ

田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]

Poss, S. G. 1982. A new aploactinid fish of the genus *Kanekonia* from Indonesia and redescription of *K. florida.* Japanese Journal of Ichthyology, 28 (4): 375–380.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Platycephalidae コチ科

Thysanophrys megacephalus Tanaka, 1917　ハナメゴチ

Original description: Tanaka (1917): 11.

田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌. 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (lost): ZUMT uncatalogued, Tokyo Market, Japan.

Remarks: There is no holotype designation in the original description. There was no registered specimen in the ZUMT specimen ledger that matched the scientific name "*Thysanophrys megacephalus*" and the collection data "Tokyo Market". There are no specimens that match the description in the ZUMT collection.

原記載にはホロタイプの指定がない。ZUMT 標本台帳には、学名「*Thysanophrys megacephalus*」と採集地「東京市場」に一致する登録標本がなかった。ZUMT コレクションにも、記載に一致するホロタイプとなるべき標本は確認できなかった。

Current status: Valid as *Ratabulus megacephalus* (Tanaka, 1917)　ハナメゴチ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417-781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417-781 pp. (In Japanese and English; various authors)]
山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
Imamura, H. and Gomon, M. F. 2010. Taxonomic revision of the genus *Ratabulus* (Teleostei: Platycephalidae), with descriptions of two new species from Australia. Memoirs of the Museum of Victoria, 67: 19–33.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cottoidei　カジカ亜目
Ereuniidae トリカジカ科
Ereunias grallator Jordan & Snyder, 1901

Original description: Jordan and Snyder (1901): 378, pl. 18.
Jordan, D. S. and Snyder, J. O. 1901. Descriptions of two new genera of fishes (*Ereunias* and *Draciscus*) from Japan. Proceedings of the California Academy of Sciences (Series 3), 2 (7–8): 377–380, pls. 18–19.

Paratype (lost)**:** ZUMT 5211 (1), off Misaki (Sagami Bay), Kanagawa Pref., Japan; collected by Kumakichi Aoki.

Remarks: The original description says “One of these specimens is in the Imperial University of Tokyo”, and the location of the paratype is ZUMT. The ZUMT specimen ledger had the only specimen ZUMT 5211 that matched the scientific name and collection data (Sagami Bay). Specimen's current whereabouts is/are unknown.
原記載に「One of these specimens is in the Imperial University of Tokyo」とあり、パラタイプの所在は ZUMT である。ZUMT 標本台帳には、学名や収集データ（相模湾）に唯一 ZUMT 5211 が一致した。現在、標本の所在は不明。

Current status: Valid as *Ereunias grallator* Jordan & Snyder, 1901 トリガジカ
岡村　収・尼岡邦夫・三谷文夫（編）. 1982. 九州ーパラオ海嶺ならびに土佐湾の魚類. 日本水産資源保護協会, 東京, 436pp. [Okamura, O., Amaoka, K. and Mitani, F. (eds). 1982. Fishes of the Kyushu-Palau Ridge and Tosa Bay. The intensive research of unexploited fishery resources on continental slopes. Japan Fisheries Resource Conservation Association, Tokyo. 436pp. (In Japanese and English; various authors)]
岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417-781 pp. (In Japanese and English; various authors)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cottidae　カジカ科
Artediellus dydymovi Soldatov, 1915

Original description: Soldatov (1915): 157, fig. 1.
Soldatov, V. K. 1915. Two new species of *Artediellus* (Cottidae) from Tartar Strait and Okhotsk Sea. Ezhegodnik, Zoologicheskago Muzeya Imperatorskoi Akademii Nauk, 20 (for 1915): 155-161.

Paratype (available): ZUMT 61499 (1), Tatar Strait, 49°28'10"N, 140°39'30"E, Russia, northern Sea of Japan; 25 Aug. 1911; collected by V. Soldatov.

Remarks: The label of the specimen says that it was collected from the same place as the type locality: Tatar Strait, 49°28'10"N, 140°39'30"E, and there is alsoa description of "Co-type". The original description says "Type , a male specimen 71 mm, long from station 61 and many cotypes from different stations of Tartan Strait and Okhotsk Sea." "Cotypes" in the original description is used to mean paratypes. This ZUMT 61499 is a paratype of *Artediellus dydymovi* Soldatov 1915. (ICZN Art. 72.4.5)

標本のラベルには、タイプ産地と同じ採集地 Tatar Strait, 49°28'10"N, 140°39'30"E とあり、"Co-type"の記述もあった。原記載には、"Type, a male specimen 71 mm, long from station 61 and many cotypes from different stations of Tartan Strait and Okhotsk Sea."とあり、原記載の"cotypes"はパラタイプの意味で使われており、ZUMT 61499 は *Artediellus dydymovi* Soldatov, 1915 のパラタイプとなる(ICZN Art. 72.4.5)

Current status: Valid as *Artediellus dydymovi* Soldatov, 1915 コブオキカジカ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Nelson, D. W. 1986 . Two new species of the cottid genus *Artediellus* from the western North Pacific Ocean and the Sea of Japan. Proceedings of the Academy of Natural Sciences of Philadelphia, 138 (1): 33-45.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese with English abstract)]

Dyldin, Yu. V., Fricke, R., Hanel, L., Vorobiev, D. S., Interesova, E. A., Romanov, V. I. and Orlov, A. M. 2021. Freshwater and brackish water fishes of Sakhalin Island (Russia) in inland and coastal waters: an annotated checklist with taxonomic comments. Zootaxa, 5065 (1): 1–92.

Dyldin, Yu. V. and Orlov, A. M. 2022. Annotated list of ichthyofauna of inland and coastal waters of Sakhalin Island. 4. Families Triglidae—Agonidae. Journal of Ichthyology, 62 (1): 34–68.

Icelus omodakae Tanaka, 1915　オモダカカジカ

Original description: Tanaka (1915): 616.

田中茂穂. 1915. 日本産魚類の二新種. 動物学雑誌, 27 (326): 615–616. [Tanaka, S. 1915. Two new species of Japanese fishes. Zoological Magazine Tokyo, 27 (326): 615–616. (In Japanese)]

Syntypes (lost): ZUMT 6420 (1), ZUMT 6449 (1), ZUMT 6450 (1), 50 nautical miles off the coast of Cape Hino, Shimane Pref., Japan; 120 fathoms (120 hiro) depth; donated by Keinosuke Omodaka, Director of the Shimane Prefectural Fisheries Experimental Station on 13 July 1915.（日御崎沖 50 海里 水深 120 尋 大正 4 年 7 月 13 日 島根県水産試験場長 面高慶之助氏寄贈）

Remarks: Since the original description is based on 3 specimens, these are syntypes. From the ZUMT specimen ledger, there were 3 samples ZUMT 6420 and ZUMT 6449–6550 that matched the scientific name and collection data. In the description of ZUMT 6420, "type, D. IX–21, A. 16" was added by Tanaka's autograph. The description of ZUMT 6449–6550 says "same kind as 06420".

原記載は 3 標本に基づいているため、これらはシンタイプとなる (ICZN Art. 72.1.1, 72.4.1.1, 73.2)。ZUMT 標本台帳から学名や収集データに一致する 3 標本 ZUMT6420 と ZUMT 6449 と 6550 があった。ZUMT 6420 の

記述には、田中の直筆で「type、D. IX–21, A. 16」と加筆されていた。ZUMT 6449-6550 の記述に、「06420 と同種」とある。

Current status: Synonym of *Icelus cataphractus* (Pavlenko, 1910) コオリカジカ

Nelson, D. W. 1984. Systematics and distribution of cottid fishes of the genera *Rastrinus* and *Icelus*. Occasional Papers of California Academy of Sciences, 138: 1–58.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Porocottus ijimai Tanaka, 1908　イイジマカジカ

Original description: Tanaka (1908a): 39 [244], pl. 3 (figs. 3–4).

田中茂穂. 1908a (15 Feb.). 飯島博士採集南樺太の魚類に就いて. 動物学雑誌, 20 (232): 33–47, pl. 3. [Tanaka, S. 1908a. About the fish that Prof. Ijima collected in southern Sakhalin. Zoological Magazine Tokyo, 20 (232): 33–47, pl. 3. (In Japanese)]

Holotype (available): ZUMT 1388, Susuya River Estuary, Korsakov Port, Sakhalin Region, Russia; 15 May 1906; collected by Isao Iijima.（サハリン州コルサコフ港内ススヤ川河口）

Paratype (available): ZUMT 1389 (1), same as holotype.

Remarks: Two papers on this species were published in 1908, one in Japanese (1908a) and one in English (1908b). The publication date is February 15, 1908 for the Japanese version and June 20, 1908 for the English version and the Japanese version is the original entry (ICZN Art. 23.1). The original holotype was ZUMT 1388, and the paratype ZUMT 1389. Although the circumstances are unknown, the holotype was re-registered as ZUMT 21700 and the paratype was re-registered as ZUMT 21701. To avoid confusion, the registration number has been changed as originally written. ZUMT21700 and 21701 will no longer be used.

The original description is that there are 3 paratype specimens, and it is ZUMT 1389 from the ZUMT specimen register. One individual of paratype ZUMT 1389 with body length 208 mm SL has been registered. Tanaka (1908b)'s measurement table shows holotype specimen A and three paratype specimens B to D. ZUMT 1389 falls under Specimen C based on its body length, and was collected at the mouth of the Susuya River. The remaining two paratypes are registered in FMNH 71846 at the Field Museum of Natural History, Chicago. According to the measurement table of Tanaka (1908b), the individual with 8 dorsal spines is specimen B, and the collection location is the Susuya River estuary; 15 May 1906; collected by Isao Iijima., and the specimen with 9 dorsal spines is specimen D, and the collection location is off the coast of Chipesani (Ogyolskoye) 15 Aug. 1906; collected by Isao Iijima.

本種は 1908 年に和文(1908a)と英文(1908b)の 2 論文が発行。刊行日は和文版が 1908 年 2 月 15 日、英文版が 1908 年 6 月 20 日であり、和文版が原記載となる(ICZN Art. 23.1)。原記載のホロタイプは ZUMT 1388、パラタイプ ZUMT 1389 である。経緯は不明であるが, ホロタイプは ZUMT 21700 に、パラタイプが ZUMT 21701 に再登録されていた。混乱を避けるため登録番号を原記載のとおりにした。今後、ZUMT21700と21701は使用しない。

原記載はパラタイプ 3 標本あり、ZUMT 標本台帳から ZUMT 1389 と判断した。現在、パラタイプ ZUMT 1389 は体長 208 mm SL の 1 個体が登録されている。Tanaka (1908b)の計測表にはホロタイプの標本 A の他に標本 B から D のパラタイプ 3 個体が示されている。パラタイプ ZUMT 1389 は、体長から標本 C に該当し、採集地はススヤ川河口である。残り 2 件のパラタイプは、Field Museum of Natural History, Chicago の FMNH 71846 に登録されている。Tanaka (1908b)の計測表から背鰭棘数が 8 棘の個体は、標本 B であり採集地はス

スヤ川河口、背鰭棘数が 9 棘の個体は、標本 D となり採集地は、チペサニ沖（オジョルスコエ）である。

Current status: Synonym of *Megalocottus taeniopterus* (Kner, 1868) クロカジカ
Tanaka, S. 1908b (20 June). Notes on a collection of fishes made by Prof. Ijima in the southern parts of Sakhalin. Annotationes Zoologicae Japonenses, 6: 235–254, pl. 9.
Dyldin, Yu. V. and Orlov, A. M. 2017. Ichthyofauna of fresh and brackish waters of Sakhalin Island: an annotated list with taxonomic comments: 3. Gadidae—Cryptacanthodidae families. Journal of Ichthyology, 57 (1): 53–88.

Porocottus nigrescens Tanaka, 1908 クロカジカ

Original description: Tanaka (1908a): 37 [241], pl. 3 (figs. 1–2).
田中茂穂. 1908a (15 Feb.). 飯島博士採集南樺太の魚類に就いて. 動物学雑誌, 20 (232): 33－47, pl. 3. [Tanaka, S. 1908a. About the fish that Prof. Ijima collected in southern Sakhalin. Zoological Magazine Tokyo, 20 (232): 33–47, pl. 3. (In Japanese)]

Holotype (available): ZUMT 1387, southern part of Sakhalin Oblast, Russia; May-Sept. 1906; collected by Isao Iijima.

Remarks: Two papers on this species were published in 1908, one in Japanese (1908a) and one in English (1908b). The publication date is February 15, 1908 for the Japanese version and June 20, 1908 for the English version and the Japanese version is the original entry (ICZN Art. 23.1). The holotype originally described is ZUMT 1387. Although the circumstances are unknown, the holotype was re-registered as ZUMT21699. To avoid confusion, the registration number has been changed as originally written. ZUMT21699 will no longer be used.
本種は 1908 年に和文と英文の 2 論文が発行。刊行日は和文版が 1908 年 2 月 15 日、英文版が 1908 年 6 月 20 日であり、和文版が原記載となる(ICZN Art. 23.1)。原記載のホロタイプは、ZUMT 1387 である。経緯は不明であるが、ホロタイプは ZUMT 21699 に再登録されていた。混乱を避けるため登録番号を原記載のとおりにした。今後、ZUMT 21699 は使用しない。

Current status: Synonym of *Megalocottus taeniopterus* (Kner, 1868) クロカジカ
Tanaka, S. 1908b (20 June). Notes on a collection of fishes made by Prof. Ijima in the southern parts of Sakhalin. Annotationes Zoologicae Japonenses, 6: 235–254, pl. 9.
Dyldin, Yu. V. and Orlov, A. M. 2017. Ichthyofauna of fresh and brackish waters of Sakhalin Island: an annotated list with taxonomic comments: 3. Gadidae—Cryptacanthodidae families. Journal of Ichthyology, 57 (1): 53–88.

Vellitor minutus Iwata, 1983 ヒメスイ

Original description: Iwata (1983): 2, figs. 1, 2 (A–B), 3 (A, C).
Iwata, A. 1983. A revision of the cottid fish genus *Vellitor*. Japanese Journal of Ichthyology, 30 (1): 1–9.

Paratype (available): ZUMT 54267 (1), Kominato (35°07'N, 140°11'E), Chiba Pref., Japan; February 26, 1976.
Paratype (available): ZUMT 54268 (1), same area as ZUMT 54267, dated 20 July 1976.
Paratype (available): ZUMT 54269 (1), same area as ZUMT 54267, dated 29 January 1977.
Paratype (available): ZUMT 54270 (1), same area as ZUMT 54267, dated 7 July 1977.
Paratype (available): ZUMT 54271 (1), same area as ZUMT 54267, dated 12 August 1977.

Current status: Valid as *Vellitor minutus* Iwata, 1983 ヒメスイ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東

京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psychrolutidae ウラナイカジカ科
Dasycottus japonicus Tanaka, 1914 カエルカジカ

Original description: Tanaka (1914): 308, pl. 83 (fig. 280).
田中茂穂. 1914. 日本産魚類図説, 18: 295–318, pls. 86–90. [Tanaka, S. 1914. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 18: 295–318, pls. 86–90. (In Japanese and English)]

Holotype (available): ZUMT 3916, Niigata Pref., Japan.

Remarks: The original description specified ZUMT 3916 as the holotype. The specimen has two cloth tags with the registration number "3916" and "Sketch No. 19".
原記載はホロタイプに ZUMT 3916 を指定した。標本には登録番号の「3916」と「写生番号 19 号」が 2 つの布タグが付いている。

Current status: Synonym of *Dasycottus setiger* Bean, 1890 ガンコ
松原喜代松. 1955. 魚類の形態と検索 II. 石崎書店, 東京. vi+791–1605 pp. (Matsubara, K. 1955. Fish morphology and hierarchy. Ishizaki–shoten, Tokyo. Part 2: vi+791–1605 pp. (In Japanese)]
尼岡邦夫・仲谷一宏・新谷久男・安井達夫(編). 1983. 東北海域・北海道オホーツク海域の魚類. 日本水産資源保護協会, 東京. 327 pp. [Amaoka, K., Nakaya, K., Araya, H. and Yasui, T. (eds). 1983. Fishes from the north-eastern Sea of Japan and the Okhotsk Sea off Hokkaido. Japan Fisheries Resource Conservation Association, Tokyo. 327 pp. (In Japanese and English; various authors)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cyclopteridae ダンゴウオ科
Cyclolumpus asperrimus Tanaka, 1912 コンペイトオ

Original description: Tanaka (1912): 86, pl. 21 (Figs. 80–83).
田中茂穂. 1912. 日本産魚類図説, 5: 71–86 + 1 errata page, pls. 21–25. [Tanaka, S. 1912. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 5: 71–86 + 1 errata page, pls. 21–25. (In Japanese and English)]

Holotype (lost): ZUMT uncatalogued (dry), Niigata, Echigo Province, western coast of Honshu, Japan.

Remarks: There are no corresponding specimen records in the ZUMT specimen ledger, and no specimens matching the description have been confirmed in the ZUMT collection.
ZUMT 標本台帳に該当する標本の記録がなく、ZUMT コレクションにも記載に一致する標本は確認できていない。

Current status: Valid as *Eumicrotremus asperrimus* (Tanaka, 1912) コンペイトウ

尼岡邦夫・仲谷一宏・新谷久男・安井達夫（編）. 1983. 東北海域・北海道オホーツク海域の魚類. 日本水産資源保護協会, 東京. 327 pp. [Amaoka, K., Nakaya, K., Araya, H. and Yasui, T. (eds). 1983. Fishes from the north-eastern Sea of Japan and the Okhotsk Sea off Hokkaido. Japan Fisheries Resource Conservation Association, Tokyo, 327 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Stevenson, D. E., Mecklenburg, C. W. and Kai, Y. 2017. Taxonomic clarification of the *Eumicrotremus asperrimus* species complex (Teleostei: Cyclopteridae) in the eastern North Pacific. Zootaxa, 4294 (4): 419–435.

Liparididae クサウオ科

Careproctus okadae Tanaka, 1916　ホシビクニン

Original description: Tanaka (1916): 174.

田中茂穂. 1916. 日本産魚類の四新種. 動物学雑誌, 28 (331): 173–174. [Tanaka, S. 1916. Four new species of Japanese fishes. Zoological Magazine Tokyo, 28 (331): 173–174. (In Japanese)]

Holotype (available): ZUMT 7080, off Moroiso, Misaki (Sagami Bay), Kanagawa Pref., Japan; 5 April 1916; collected by Yaichiro Okada.（相州諸磯濱 大正 5 年 4 月 5 日 岡田彌一郎採集）

Remarks: There is no holotype designation in the original description. From the ZUMT specimen ledger, the only specimen that matches the collection site "Moroiso", the collector "Okada", and the collection date "5 April 1918" is the ZUMT 7080. This specimen is holotype (ICZN Art. 73.1.2).

原記載にはホロタイプの指定がない。ZUMT 標本台帳から採集地「諸磯濱」、採集者「岡田」、採集日「大正 5 年 4 月 5 日」に一致する唯一の標本は ZUMT 7080 である。この標本がホロタイプとなる(ICZN Art. 73.1.2)。

Current status: Synonym of *Liparis punctulatus* (Tanaka, 1916) スナビクニン

Abe, T. 1955. New, rare or uncommon fishes from Japanese waters. III. Description, redescription and records of rare fishes of the genus *Liparis*. Bulletin of the Biogeographical Society of Japan, 16–19: 319–325.

Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries, Hokkaido University, 35 (2): 125–256.

Chernova, N. V., Stein, D. L. and Andriashev, A. P. 2004. Family Liparidae Scopoli 1777 – snailfishes. California Academy of Sciences Annotated Checklists of Fishes, (31): 1–72.

Chernova, N. V. 2008. Systematics and phylogeny of fish of the genus *Liparis* (Liparidae, Scorpaeniformes). Journal of Ichthyology, 48 (10): 831–852.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Careproctus punctulatus Tanaka, 1916　スナビクニン

Original description: Tanaka (1916): 174.

田中茂穂. 1916. 日本産魚類の四新種. 動物学雑誌, 28 (331): 173–174. [Tanaka, S. 1916. Four new species of Japanese fishes. Zoological Magazine Tokyo, 28 (331): 173–174. (In Japanese)]

Holotype (available): ZUMT 7079, off Bishamon, Misaki (Sagami Bay), Kanagawa Pref., Japan; 28 March 1916; collected by Yaichiro Okada.（相州三崎付近毘沙門 大正 5 年 3 月 28 日 岡田彌一郎採集）

Remarks: There is no holotype designation in the original description. The only specimen that matches the collection site "Misaki, Bishamon" of the ZUMT specimen ledger, the collector "Okada", and the collection date "March 28, 1918" is ZUMT 7079. This specimen is holotype (ICZN Art. 73.1.2).
原記載にホロタイプの指定がない。ZUMT 標本台帳の採集地「三崎、毘沙門」、採集者「岡田」、採集日「大正 5 年 3 月 28 日」に一致する唯一の標本は ZUMT 7079 である。この標本がホロタイプである(ICZN Art. 73.1.2)。

Current status: Valid as *Liparis punctulatus* (Tanaka, 1916) スナビクニン
Abe, T. 1955. New, rare or uncommon fishes from Japanese waters. III. Description, redescription and records of rare fishes of the genus *Liparis*. Bulletin of the Biogeographical Society of Japan, 16–19: 319–325.
Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries, Hokkaido University, 35 (2): 125–256.
Chernova, N. V., Stein, D. L. and Andriashev, A. P. 2004. Family Liparidae Scopoli 1777 – snailfishes. California Academy of Sciences Annotated Checklists of Fishes, (31): 1–72.
Chernova, N. V. 2008. Systematics and phylogeny of fish of the genus *Liparis* (Liparidae, Scorpaeniformes). Journal of Ichthyology, 48 (10): 831–852.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Careproctus sarasa Tanaka, 1916　サラサビクニン

Original description: Tanaka (1916): 174.
田中茂穂. 1916. 日本産魚類の四新種. 動物学雑誌, 28 (331): 173–174. [Tanaka, S. 1916. Four new species of Japanese fishes. Zoological Magazine Tokyo, 28 (331): 173–174. (In Japanese)]

Holotype (available): ZUMT 7017, probably Toba, Mie Pref., Japan; collected by Hisato Kuwano.（おそらく志州鳥羽 奈良女子高等師範学校教授 桑野久任採集）

Remarks: There is no holotype designation in the original description. The ZUMT 7017 is the only specimen that matches the collection site "probably Shishu Toba" and the collector "Hisato Kuwano" in the ZUMT specimen ledger. This specimen is holotype (ICZN Art. 73.1.2).
原記載にホロタイプの指定がない。ZUMT 標本台帳の採集地「おそらく志州鳥羽」や採集者「桑野久任」に一致する唯一の標本が ZUMT 7017 である。この標本がホロタイプとなる (ICZN Art. 73.1.2)。

Current status: Synonym of *Liparis punctulatus* (Tanaka, 1916) スナビクニン
Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries, Hokkaido University, 35 (2): 125–256.
Chernova, N. V., Stein, D. L. and Andriashev, A. P. 2004. Family Liparidae Scopoli 1777 – snailfishes. California Academy of Sciences Annotated Checklists of Fishes, (31): 1–72.
Chernova, N. V. 2008. Systematics and phylogeny of fish of the genus *Liparis* (Liparidae, Scorpaeniformes). Journal of Ichthyology, 48 (10): 831–852.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Liparis franzi Abe, 1950　スジクサウオ

Original description: Abe (1950): 135, figs. 1–2

Abe, T. 1950. New, rare or uncommon fishes from Japanese waters. I. *Liparis franzi*, new name. Japanese Journal of Ichthyology, 1 (2): 135–139.

Paratype (available): ZUMT 30206 (1), Misaki, Kanagawa Pref., Japan; collected by Shigeho Tanaka.

Current status: Synonym of *Liparis punctulatus* (Tanaka, 1916) スナビクニン

Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries, Hokkaido University, 35 (2): 125–256.

Chernova, N. V., Stein, D. L. and Andriashev, A. P. 2004. Family Liparidae Scopoli 1777 – snailfishes. California Academy of Sciences Annotated Checklists of Fishes, (31): 1–72.

Chernova, N. V. 2008. Systematics and phylogeny of fish of the genus *Liparis* (Liparidae, Scorpaeniformes). Journal of Ichthyology, 48 (10): 831–852.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Liparis punctulatus rutilus Abe, 1955　アカビクニン

Original description: Abe (1955): 323, fig. 4.

Abe, T. 1955. New, rare or uncommon fishes from Japanese waters. III. Description, redescription and records of rare fishes of the genus *Liparis*. Bulletin of the Biogeographical Society of Japan, 16–19: 319–325.

Paratypes (available): ZUMT 5547 (1), date unknown, but it was taken in Japan.

Current status: Synonym of *Liparis punctulatu*s (Tanaka, 1916) スナビクニン

Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries, Hokkaido University, 35 (2): 125–256.

Chernova, N. V., Stein, D. L. and Andriashev, A. P. 2004. Family Liparidae Scopoli 1777 – snailfishes. California Academy of Sciences Annotated Checklists of Fishes, (31): 1–72.

Chernova, N. V. 2008. Systematics and phylogeny of fish of the genus *Liparis* (Liparidae, Scorpaeniformes). Journal of Ichthyology, 48 (10): 831–852.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Fish types deposited in the Department of Zoology, The University Museum, The University of Tokyo – Part 5: Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei

東京大学総合研究博物館動物部門収蔵の魚類タイプ標本－第 5 部:スズキ亜目、イボダイ亜目、ベラ亜目、ゲンゲ亜目、ワニギス亜目、ギンポ亜目、ウバウオ亜目、ネズッポ亜目

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Abstract

The current statuses of type specimens of Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei in the ZUMT collection were investigated with recourse to original descriptions, information tags on specimens, and/or the ZUMT specimen ledger. Of the 70 holotypes, 31 syntypes, 3 lectotypes, 175 paratypes and 29 paralectotypes purported to be in the collection and applicable to 115 species in 34 families, only 54 holotypes, 24 syntypes, 3 lectotype, 138 paratypes and 26 paralectotypes have been located to date.

Introduction

The current designation and status of type specimens in the fish collection, preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) collection is now under review. The present list is a summary of type specimens of Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei currently held.

本研究では、東京大学総合研究博物館動物学部門（ZUMT）に所蔵されているタイプ標本の現状について整理するとともに、タイプ指定に関する議論もおこなった。本リストは、ZUMT に所蔵れるタイプ標本のうちスズキ亜目、イボダイ亜目、ベラ亜目、ゲンゲ亜目、ワニギス亜目、ギンポ亜目、ウバウオ亜目、ネズッポ亜目の魚類についてまとめたものである。

Materials and Methods

The first author confirmed that the type specimen is in the Department of Zoology, University of Tokyo Museum (ZUMT). We report on Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei of fishes. Specimens marked as "available" in this type list are kept in room 407 of the museum. The ZUMT collection also includes a variety of personal specimens acquired by the late Dr. Tokiharu Abe, such being identifiable in the first instance by an underlined number on the specimen tag. The confirmed type specimen from the specimens in Abe's collection is treated as his ZUMT ABE○○○○ and is managed in the same way as the ZUMT collection.

The systematic arrangement of families generally follows Nelson (2006), with species arranged in alphabetical order by species name. The present list includes all the available information pertinent to the ZUMT specimens, including that taken from the ZUMT specimen ledger and/or tags on the specimens.

Information from original description: scientific name, publication, Japanese name in the original description.

Current status on types: available or lost.

Information on type specimens: ZUMT catalog number (number of specimens when more than two), field number or previous catalog number if available, sex, preservation status (stuffed or skin only indicated), collection locality, collection date, collector or donator, collection method, typographical error.

Remarks: Authority for determining type status, correction of previously published erroneous information, and newly determined information from specimen registers and tags.

Current status of species: synonyms, current scientific name and standard Japanese name.

Reference: publications cited in remarks or basis for current status. Listed for each species.

第一著者により、東京大学総合研究博物館動物学部門（ZUMT）に所蔵するタイプ標本が確認されたスズキ亜目、イボダイ亜目、ベラ亜目、ゲンゲ亜目、ワニギス亜目、ギンポ亜目、ウバウオ亜目、ネズッポ亜目魚類を報告する。本タイプリストにおいて「available」と示した標本は博物館の 407 号室に保管されている。ZUMT コレクションには、故阿部宗明博士の個人標本が一部、混在しており、これらは基本的に標本タグに書かれた番号に下線が付されているなどで識別可能である。阿部コレクションの標本から、確認したタイプ標本は ZUMT ABE ○○○○と扱い ZUMT コレクションと同様に、管理されている。

科の体系的な順番は、主に Nelson (2006)に従い、種については学名のアルファベット順に示した。本リストでは、ZUMT 標本に基づき（あるいは基づいたと想定される）記載されたスズキ亜目、イボダイ亜目、ベラ亜目、ゲンゲ亜目、ワニギス亜目、ギンポ亜目、ウバウオ亜目、ネズッポ亜目魚類に関する以下の情報を可能な限り示した。また ZUMT 標本台帳や標本のタグから読み取れる情報についても含めた。

原記載の情報: 学名、記載された出版物、記載時に与えられた和名(旧仮名づかいを訂正)。

タイプ標本の確認状況: 確認または未確認。

タイプ標本の情報: ZUMT 番号（複数の場合は標本数）、フィールド番号または寄贈前の他機関登録番号、性別、保存の状態（剥製または皮膚のみの場合に記載）、採集場所、採集年月日、採集者または寄贈者、採集方法など。標本台帳から読み取れる新たな情報についても可能な限り記した。

備考: 該当標本をタイプと判断した根拠、ZUMT のタイプ標本が誤って引用された情報、本研究で新たに確認された標本台帳やタグに関する情報、入力ミスなどについて必要に応じて記した。

種の現状: シノニム関係および適用されている学名と標準和名。

引用文献: 備考または現状の根拠として引用された出版物や報告論文を種ごとに示した。

Type specimens of Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei in ZUMT

Based on the original descriptions, tags on the specimens, and the ZUMT specimen ledger, type specimens of 115 species of Percoidei, Stromateoidei, Labroidei, Zoarcoidei, Trachinoidei, Blennioidei, Gobiesocoidei, and Callionymoidei in 34 families, including 70 holotypes, 30 syntypes, 3 lectotypes, 176 paratypes, and 29 paralectotypes, were purported to be in the ZUMT collection. 54 holotypes, 23 syntypes, 3 lectotype, 136 paratypes, and 26 paralectotypes, have been confirmed as “available” to date.

原記載、標本のタグおよび ZUMT 台帳の情報などから ZUMT コレクションに所蔵されるスズキ亜目、イボダイ亜目、ベラ亜目、ゲンゲ亜目、ワニギス亜目、ギンポ亜目、ウバウオ亜目、ネズッポ亜目類標本には 34 科 115 種のタイプ標本が登録されていることが明らかになった。その内訳は、ホロタイプ 70 標本、シンタイプ 31 標本、レクトタイプ 3 標本、パラタイプ 175 標本、パラレクトタイプ 29 標本である。これらのうち現在、ZUMT に所蔵確認できたものは、ホロタイプ 54 標本、シンタイプ 24 標本、レクトタイプ 3 標本、パラタイプ 138 標本、パラレクトタイプ 26 標本である。

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We are deeply grateful to the late Y. Tominaga for his dedication and efforts to the ZUMT collection. We are also grateful to I. Abe, S. Fujiwara, A. Iinuma, M. Saito, A. Takahashi (Tokyo University of Marine Science and Technology), M. Fukatani, S. Ito (University of Tokyo), and H. Ogata (ZUMT) for curatorial assistance. Dr. R. Fricke (State Museum of Natural History Stuttgart, Germany) gave us type information on *Synchiropus moyeri*.

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Overseas Research Fellowships (202160519); the Fujiwara Natural History Foundation; Kurita Water and Environment Foundation (23B019); JST, CREST (JPMJCR23J2); Ocean Shot from The Sasakawa Peace Foundation.

ZUMT コレクションに多大な貢献をされた故富永義昭氏に深く感謝する。また、東京海洋大学の阿部伊央太氏、藤原咲紀氏、飯沼 藍氏、齋藤 舞氏、髙橋あゆみ氏、東京大学の深谷真央氏、伊藤想也氏およびボランティアの尾形比呂哉氏には標本の管理にご助力いただいた。Dr. R. Fricke (State Museum of Natural History Stuttgart, Germany) にはミヤケテグリ *Synchiropus moyeri* のタイプ情報を頂いた。

本研究は、東京大学総合研究博物館の公開利用経費、プロジェクト経費の支援を受けた。また本研究の一部は、第 2 著者への日本学術振興会科研費 21K06313 JP、日本学術振興会笹川科学研究助成金（2021-4064）、藤原ナチュラルヒストリー財団、クリタ水・環境科学振興財団、JST の CREST、笹川平和財団の Ocean Shot の助成を受けた。

Percoidei スズキ亜目

Sinipercidae ケツギョ科

Siniperca aequiformis Tanaka, 1925 コウライケツギョ

Original description: Tanaka (1925): 636, pls. 151 (fig. 420), 152 (fig. 416).

田中茂穂. 1925. 日本産魚類図説, 34: 629–644, pls. 151–153. [Tanaka, S. 1925. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 34: 629–644, pls. 151–153. (In Japanese and English)]

Holotype (lost): ZUMT 13462, Miryang, Nakdong River, Gyeongsang-do, South Korea; July 1918.（韓国慶尚道洛東江密陽（釜山附近）大正 7 年 7 月）

Paratype (lost): ZUMT 13467 (1), same as holotype.

Remarks: ZUMT 13462 was specified as the holotype in the original description. Further, one specimen of a color variation obtained from the same collection site was added and described. ZUMT 13467 is a specimen whose scientific name and collection data match from the records in the ZUMT specimen ledger. This specimen is a paratype (ICZN Art. 72.4.5).

原記載にはホロタイプに ZUMT 13462 を指定した。さらに同一の産地から得られた色彩変異の1標本を加えて記載した。ZUMT 13467 は、ZUMT 標本台帳の記録から学名と収集データが一致した標本である。この標本がパラタイプである (ICZN Art. 72.4.5)。

Current status: Synonym of *Siniperca scherzeri* Steindachner, 1892 コウライケツギョ

Zhou, C.-W., Yang Q. and Ca, D.-L.1988. On the classification and distribution of the Sinipercinae fishes (Family Serranidae). Zoological Research, 9 (2): 113–125.

Acropomatidae ホタルジャコ科

Neoscombrops pacificus Mochizuki, 1979 バケムツ

Original description: Mochizuki (1979): 247, fig. 1A.

Mochizuki, K. 1979. A new percichthyid fish, *Neoscombrops pacificus*, from Japan, with a redescription of *N. annectens* from South Africa. Japanese Journal of Ichthyology, 26 (3): 247–252.

Holotype (available): ZUMT 52879, around Aogashima Island (ca. 32 ° 25'N, 139 ° 47'E), Izu Islands, Tokyo, Japan; 17 December 1972; depth between 300 m and 500m; vertical long line with pieces of squid as bait.(伊豆諸島青ヶ島[東京都青ヶ島村])

Paratype (available): ZUMT 52880 (1), same as holotype.

Paratype (lost): ZUMT 52881 (1), same as holotype.

Current status: Valid as *Verilus pacificus* (Mochizuki, 1979) バケムツ

Yamanoue, Y. 2016. Revision of the genus *Verilus* (Perciformes: Acropomatidae) with a description of a new species. Journal of Fish Biology, 89 (5): 2375–2398.

Yamanoue, Y., Johnson, G. D. and Starnes, W. C. 2009. Redescription of a poorly known acropomatid, *Verilus sordidus* Poey, 1860 and comparison with *Neoscombrops atlanticus* Mochizuki and Sano, 1984 (Teleostei: Perciformes). Ichthyological Research, 56 (4): 400–406.

Fricke, R., Kulbicki, M. and Wantiez, L. 2011. Checklist of the fishes of New Caledonia, and their distribution in the Southwest Pacific Ocean (Pisces). Stuttgarter Beiträge zur Naturkunde A, Neue Serie, 4: 341–463.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

稲葉智樹・畑 晴陵・本村浩之. 2016. トカラ列島と奄美群島から得られた 鹿児島県初記録のバケムツ(ホタルジャコ科). Nature of Kagoshima, 42: 129–133. (Inaba, T., Hata, H. and Motomura, H. 2016. First records of *Neoscombrops pacificus* (Perciformes: Acropomatidae) from Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 42: 129–133. (In Japanese)]

Epigonidae ヤセムツ科

Epigonus pectinifer Mayer, 1974 ヤセムツ

Original description: 186, Fig. 19.

Mayer, G. F. 1974. A revision of the cardinalfish genus *Epigonus* (Perciformes, Apogonidae), with descriptions of two new species. Bulletin of the Museum of Comparative Zoology, 146 (3): 147-203.

Paratype (available): ZUMT ABE 64-2245 (1), Suruga Bay, Japan; 14–31 Oct. 1964.
Paratype (available): ZUMT ABE 64-2248 (1), Suruga Bay, Japan; Oct. 1964.

Remarks: Three specimens from the Abe collection were designated as paratype specimens of this species. Two of these specimens have been confirmed and are kept in Room 407 under the care of the ZUMT Collection. The whereabouts of ABE 64-2085 (1) is unknown.

本種のパラタイプ標本に阿部コレクション 3 標本が指定されていた。そのうち2標本が確認され、ZUMT コレクションの管理のもと 407 号室に保管される。尚、ABE 64-2085 (1)の所在は不明である。

Current status:Valid as *Epigonus pectinifer* Mayer, 1974 ヤセムツ

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Mochizuki, K. and Shirakihara, K. 1983. A new and a rare apogonid species of the genus *Epigonus* from Japan. Japanese Journal of Ichthyology, 30 (3): 199–207.

Abramov, A. A. 1992. Species composition and distribution of *Epigonus* (Epigonidae) in the world ocean. Voprosy Ikhtiologii, 32 (2): 17–31. [In Russian. English translation in Journal of Ichthyology, 32 (5):94-108.]

Okamoto, M. and Fukui, A. 2011. Redescription of a rare deepwater cardinalfish, *Epigonus ctenolepis* Mochizuki and Shirakihara 1983, and comparison with related species (Perciformes: Epigonidae). Ichthyological Research, 58 (4): 388–392.

Okamoto, M. 2012. Two new species of the genus *Epigonus* (Perciformes: Epigonidae) from the South Pacific, with a description of the *Epigonus constanciae* group. Ichthyological Research, 59: 242–254.

Fricke, R. 2017. *Epigonus okamotoi*, a new species of deepwater cardinalfish from New Britain, Papua New Guinea, Solomon Sea, western Pacific Ocean (Teleostei: Epigonidae). FishTaxa, 2 (3): 116–122.

Okamoto, M. and Gon, O. 2018. A review of the deepwater cardinalfish genus *Epigonus* (Perciformes: Epigonidae) of the Western Indian Ocean, with description of two new species. Zootaxa, 4382 (2): 261–291.
Okamoto, M. 2018. First records of two deepwater cardinalfishes (Perciformes: Epigonidae), *Epigonus lifouensis* and *E. pectinifer*, from Indonesia, Eastern Indian Ocean. Species Diversity, 23: 243–248.

Serranidae ハタ科

Anthias* (*Mirolabrichthys*) *flavoguttatus Katayama & Masuda, 1980 アサヒハナゴイ

Original description: Katayama and Masuda (1980): 187, figs. 2-3.
Katayama, M. and Masuda, H. 1980. Two new anthiine fishes from Sagami Bay, Japan. Japanese Journal of Ichthyology, 27 (3): 185–190.

Holotype (available): ZUMT 54243, coast of Izu-Oshima, Tolyo, Japan.（伊豆大島[東京都大島町]）
Paratype (available): ZUMT 54244 (1), same as holotype.

Current status: Valid as *Pyronotanthias flavoguttatus* (Katayama & Masuda, 1980) アサヒハナゴイ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1– 62.
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
Gill, A. C. 2022. Revised definitions of the anthiadine fish genera *Mirolabrichthys* Herre and *Nemanthias* Smith, with description of a new genus (Teleostei: Serranidae). Zootaxa, 5092 (1): 41–66.
中村潤平・本村浩之. 2022. ハタ科 Serranidae とされていた日本産各種の帰属, および高次分類群に適用する標準和名の検討. Ichthy, Natural History of Fishes of Japan, 19: 26–43. [Nakamura, J. and Motomura, H. 2022. Review of all Japanese species and standard Japanese names of families, subfamilies, and genera, previously included in the family Serranidae sensu Johnson (1983). Ichthy, Natural History of Fishes of Japan, 19: 26–43. (In Japanese with English abstract)]

Anthias* (*Pseudanthias*) *leucozonus Katayama & Masuda, 1982 シロオビハナダイ

Original description: Katayama and Masuda (1982): 393, fig. 1
Katayama, M. and Masuda, H. 1982. A new anthiine fish, *Anthias leucozonus*, from Sagami Bay, Japan. Japanese Journal of Ichthyology, 28 (4): 393–395.

Holotype (available): ZUMT 54295, off Futo (Sagami Bay), Ito City, Sagami Bay, Izu Peninsula, Shizuoka Pref., Japan; depth 40 meters.（静岡県伊東市富戸伊豆海洋公園地先, 相模湾）

Current status: Valid as *Pseudanthias leucozonus*
(Katayama & Masuda, 1982) シロオビハナダイ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

瀬能　宏・御宿昭彦. 1994. シロオビハナダイの分布および生態に関する最近の知見について。伊豆海洋公園通信, 5 (7): 2-5. (Senou, H. and Mishiku, A. 1994. Notes on distribution and ecology of a rare anthine fish, Pseudanthias leucozonus (Katayama et Masuda). I. O. P. Diving News, 5 (7): 2-5. [In Japanese, English abstract.])
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Anthias pannuceus Tanaka, 1922　ボロサクラダイ

Original description: Tanaka (1922): 584, pl. 145 (Fig. 402).
田中茂穂. 1922. 日本産魚類図説, 32: 583–606, pls. 145–147. [Tanaka, S. 1922. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 32: 583–606, pls. 145–147. (In Japanese and English)]

Holotype (available): ZUMT 9960, Tokyo Market, Japan.（東京市場）

Remarks: The original description specified ZUMT 9960 as the holotype. This ZUMT 9960 has a cloth tag that says "9960 type".
　原記載はホロタイプに ZUMT 9960 を指定した。この ZUMT 9960 に、「9960 type」と書かれた布タグが付いている。

Current status: Synonym of *Odontanthias rhodopeplus* (Günther, 1872) ボロサクラダイ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Randall, J. E. and Heemstra, P. C. 2006. Review of the Indo-Pacific fishes of the genus *Odontanthias* (Serranidae: Anthiinae), with descriptions of two new species and a related genus. Indo-Pacific Fishes, 38: 1–32.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Anthias unimaculatus Tanaka, 1917　イッテンサクラダイ

Original description: Tanaka (1917): 199.
田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (345): 198–201. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (345): 198–201. (In Japanese)]

Holotype (available): ZUMT 9961, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. ZUMT 9961 is the only specimen whose scientific name and collection data match in the ZUMT specimen ledger. This specimen is the holotype (ICZN Art. 72.4.1, 73.1.2). Tanaka (1922)'s Figures and descriptions of the fishes of Japan (32: 588–591, pl. 145, fig. 403) re-described and illustrated ZUMT9961 as the holotype.

The original description is that the total length of the holotype body size measured up to the upper end of the caudal fin (including the filament) is 125 mm. However, in Tanaka's (1922) Figures and descriptions of the fishes of Japan (32: 588–591), the total length does not match 179 mm. As a result of confirming the holotype ZUMT 9961, the total length described in the original description is an error in the body length.

原記載にはホロタイプの指定がない。ZUMT 9961 は ZUMT 標本台帳の記録から学名と採集データが一致する唯一の標本である。この標本がホロタイプである(ICZN Art. 72.4.1, 73.1.2)。田中（1922）の日本産魚類図説（32: 588–591, pl. 145, fig. 403）は、ZUMT 9961 をホロタイプとして再記載し、図示している。

原記載は、ホロタイプの体サイズを尾鰭上端（フィラメントを含む）まで測定した全長を 125mm とした。しかし、田中（1922）の日本産魚類図説（32: 588–591）では全長が 179 mm と一致しない。ホロタイプ ZUMT 9961 を確認した結果、原記載の全長は、体長の誤記である。

Current status: Valid as *Odontanthias unimaculatus* (Tanaka, 1917) イッテンサクラダイ

田中茂穂. 1922. 日本産魚類図説, 32: 583–606, pls. 145–147. [Tanaka, S. 1922. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 32: 583–606, pls. 145–147. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]

Randall, J. E. and Heemstra, P. C. 2006. Review of the Indo-Pacific fishes of the genus *Odontanthias* (Serranidae: Anthiinae), with descriptions of two new species and a related genus. Indo-Pacific Fishes, 38: 1–32.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

橋本慎太郎・前川隆則・本村浩之. 2021. 奄美大島から得られた奄美群島初記録のイッテンサクラダイ. Ichthy, Natural History of Fishes of Japan, 13: 9–12. (Hashimoto S., Maekawa, T. and Motomura, H. 2021. First records of *Odontanthias unimaculatus* (Serranidae) from the Amami Islands, southern Japan. Ichthy, Natural History of Fishes of Japan, 13: 9–12. (In Japanese with English abstract)]

Caprodon affinis Tanaka, 1924　アイアカイサキ

Original description: Tanaka (1924): 611, pl. 148 (fig. 408).

田中茂穂. 1924. 日本産魚類図説, 33: 607–628, pls. 148–150. [Tanaka, S. 1924. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 33: 607–628, pls. 148–150. (In Japanese and English)]

Holotype (available): ZUMT 11755, Tokyo Market, Japan.（東京市場）

Remarks: In the original description, ZUMT 11755 was specified as the holotype. The specimen has a cloth tag that says "Sketch No. 426".
原記載はホロタイプに ZUMT 11755 を指定した。標本には「写生番号 426 号」と書かれた布タグが付いている。

Current status: Synonym of *Caprodon schlegelii* (Günther, 1859) アカイサキ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村 収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
山田梅芳・田川勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki, xxvi + 502pp. (In Japanese)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
中村潤平・本村浩之. 2022. ハタ科 Serranidae とされていた日本産各種の帰属, および高次分類群に適用する標準和名の検討. Ichthy, Natural History of Fishes of Japan, 19: 26–43. [Nakamura, J. and Motomura, H. 2022. Review of all Japanese species and standard Japanese names of families, subfamilies, and genera, previously included in the family Serranidae sensu Johnson (1983). Ichthy, Natural History of Fishes of Japan, 19: 26–43. (In Japanese with English abstract)]

Cephalopholis formosanus Tanaka, 1911 ユカタハタ

Original description: Tanaka (1911): 24, pl. 7 (Fig. 22).
田中茂穂. 1911. 日本産魚類図説, 2: 19–34, pls. 6–10. [Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 2: 19–34, pls. 6–10. (In Japanese and English)]

Holotype (available, poor condition): ZUMT 2975, Taihoku, Taiwan.

Remarks: In the original description, ZUMT 2975 was specified as the holotype. The specimen has a cloth tag that says "*Cephalopholis formosanus* n. sp. “
原記載はホロタイプに ZUMT 2975 を指定した。標本には「*Cephalopholis formosanus* n. sp.」と書かれた布タグが付いている。

Current status: Synonym of *Cephalopholis miniata* (Forsskål, 1775) ユカタハタ
Randall, J. E. and Heemstra, P. C. 1991. Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. Indo-Pacific Fishes, 20: 1–332, pls. 1–41.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.
中村潤平・本村浩之. 2022. ハタ科 Serranidae とされていた日本産各種の帰属, および高次分類群に適用する標準和名の検討. Ichthy, Natural History of Fishes of Japan, 19: 26–43. [Nakamura, J. and Motomura, H. 2022. Review of all Japanese species and standard Japanese names of families, subfamilies, and genera, previously included in the family Serranidae sensu Johnson (1983). Ichthy, Natural History of Fishes of Japan, 19: 26–43. (In Japanese with English abstract)]

Cephalopholis igarashiensis Katayama, 1957　シマハタ

Original description: Katayama (1957): 156, fig. 3.
Katayama, M. 1957. Four new species of serranid fishes from Japan. Japanese Journal of Ichthyology, 6 (4–6): 153–159.

Paratypes (available): ZUMT 39466 (1), Riukiu Islands (Ryukyu Islands), Japan.

Current status: Valid as *Cephalopholis igarashiensis* Katayama, 1957 シマハタ
久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 333 pp. (In Japanese and English; various authors)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Randall, J. E. and Heemstra, P. C. 1991. Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. Indo-Pacific Fishes, 20: 1–332, pls. 1–41.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
中村潤平・本村浩之. 2022. ハタ科 Serranidae とされていた日本産各種の帰属, および高次分類群に適用する標準和名の検討. Ichthy, Natural History of Fishes of Japan, 19: 26–43. [Nakamura, J. and Motomura, H. 2022. Review of all Japanese species and standard Japanese names of families, subfamilies, and genera, previously included in the family Serranidae sensu Johnson (1983). Ichthy, Natural History of Fishes of Japan, 19: 26–43. (In Japanese with English abstract)]

Epinephelus cometae Tanaka, 1927　ホウキハタ

Original description: Tanaka (1927): 704, pls. 159 (Fig. 445), 160 (447).
田中茂穂. 1927. 日本産魚類図説, 37: 693–708, pls. 159–161. [Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 37: 693–708, pls. 159–161. (In Japanese and English)]

Syntype (lost): ZUMT 3764 (1), Tokyo Market, Japan.（東京市場）
Syntype (available): ZUMT 7991, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊［和歌山県田辺市］宇井縫蔵採集）

Syntypes (available): ZUMT 7499 (1), ZUMT 7509 (1), Hiro, Arita -gun, Wakayama Pref., Japan; collected by Isaburo Hoshino.（紀伊國有田郡廣［和歌山県有田市広］星野伊三郎採集）

Remarks: The original description is mainly based on ZUMT 7991 from Tanabe, and 2 specimens from Arita-gun Hiro are also added. In the original description, in addition to Tanabe and Arita-gun Hiro, Tokyo was also the collection site. In the ZUMT specimen ledger, there were 4 specimens with the same scientific name: ZUMT 7991 from Tanabe, ZUMT 7499 and ZUMT 7509 from Arita-gun, Hiro and ZUMT 3764 from Tokyo. There is no holotype designation in the original description, and these specimens are syntypes (ICZN Art. 72.1.1, 73.2). It is a mistake to treat ZUMT 7991 as the holotype.

The drawn specimen of the figure (fig. 447) published in the Figures and descriptions of the fishes of Japan (37: pl. 160, fig. 447) of Tanaka (1927) is ZUMT 7509. It has a cloth tag that says “Sketch No. 421". In addition, ZUMT 7991 also has a cloth tag of "Sketch No. 415".

原記載は、主に田辺産の ZUMT 7991 に基づいており、有田郡広の 2 標本も加えた。原記載には田辺，有田郡広の他に東京も産地にした。ZUMT 標本台帳の記録から学名が一致した標本は田辺産の ZUMT 7991、有田郡広産の ZUMT 7499 と ZUMT 7509、東京の ZUMT 3764 の 4 個体があった。原記載にはホロタイプの指定がなく、これらの標本はシンタイプである(ICZN Art. 72.1.1, 73.2)。ZUMT 7991 をホロタイプと扱かったのは誤りである。

田中（1927）の日本産魚類図説（37: pl. 160, fig. 447）に掲載された図（fig. 447）の描画された標本は ZUMT 7509 である。「写生番号 421 号」と書かれた布タグが付いている。また、ZUMT 7991 にも「写生番号 415 号」の布タグが付いている。

Current status: Synonym of *Epinephelus morrhua* (Valenciennes, 1833) ホウキハタ

田中茂穂. 1927. 日本産魚類図説，38: 709–740, pls. 162–163. [Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 38: 709–740, pls. 162–163. (In Japanese and English)]

久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター，東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 333 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会，東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Randall, J. E. and Heemstra, P. C. 1991. Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. Indo-Pacific Fishes, 20: 1–332, pls. 1–41.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III，第三版. 東海大学出版会，秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

畑　晴陵・本村浩之. 2020. トカラ列島初記録のホウキハタとカケハシハタ（スズキ目ハタ科）. Nature of Kagoshima, 46: 573–579. (Hata, H., and Motomura, H. 2020 First records of two species of groupers (Perciformes: Serranidae), *Epinephelus morrhua* and *Epinephelus radiatus*, from the Tokara Islands, northern part of the Ryukyu Islands, Japan. Nature of Kagoshima, 46: 573–579. (In Japanese)]

中村潤平・本村浩之. 2022. ハタ科 Serranidae とされていた日本産各種の帰属，および高次分類群に適用する標準和名の検討. Ichthy, Natural History of Fishes of Japan, 19: 26–43. [Nakamura, J. and Motomura, H. 2022. Review of all Japanese species and standard Japanese names of families, subfamilies, and genera, previously included in the family Serranidae sensu Johnson (1983). Ichthy, Natural History of Fishes of Japan, 19: 26–43. (In Japanese with English abstract)]

Epinephelus craigi Frable, Tucker & Walker, 2018

Original description: Frable, Tucker and Walker (2018): 216, figs. 1–3.
Frable, B. W., Tucker, S. J. and Walker Jr. H. J.2018. A new species of grouper, *Epinephelus craigi* (Perciformes: Epinephelidae), from the South China Sea. Ichthyological Research, 66 (2): 215–224.

Paratypes (available): ZUMT 52224 (1), ZUMT ABE 10701 (1), South China Sea.

Remarks: These specimens are also paratypes of *Epinephelus stictus* Randall & Allen, 1987.
これらの標本は、*Epinephelus stictus* Randall & Allen, 1987 のパラタイプでもある。

Current status: Valid as *Epinephelus craigi* Frable, Tucker & Walker, 2018　スミツキアオハタ
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
鈴木悠理・遠藤広光・本村浩之・瀬能 宏・松沼瑞樹. 2020. 高知県および南シナ海南部から得られたハタ科 *Epinephelus craigi* スミツキアオハタ（新称）の記録およびアオハタモドキに適用すべき学名の再検討. 魚類学雑誌, 67 (1): 31–40. [Suzuki, Y., Endo, H., Motomura, H., Senou, H. and Matsunuma, M. 2020. First reliable records of *Epinephelus craigi* (Perciformes: Serranidae) from Japan and the southern South China Sea, and a note on the standard Japanese name proposed for *E. stictus*. Japanese Journal of Ichthyology, 67 (1): 31–40. (In Japanese)]

Epinephelus stictus Randall & Allen, 1987

Original description: Randall and Allen (1987): 394, fig. 1.
Randall, J. E. and Allen, G. R. 1987. Four new serranid fishes of the genus *Epinephelus* (Perciformes: Epinephelinae) from Western Australia. Records of the Western Australian Museum, 13 (3): 387–411.

Paratypes (available): ZUMT 52224 (1), ZUMT ABE 10701 (1), South China Sea.

Remarks: These specimens are also paratypes of *Epinephelus craigi* Frable, Tucker & Walker, 2018.
これらの標本は、*Epinephelus craigi* Frable, Tucker & Walker, 2018 のパラタイプでもある。

Current status: Valid as *Epinephelus stictus* Randall & Allen, 1987 アオハタモドキ
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
鈴木悠理・遠藤広光・本村浩之・瀬能 宏・松沼瑞樹. 2020.高知県および南シナ海南部から得られたハタ科 *Epinephelus craigi* スミツキアオハタ（新称）の記録およびアオハタモドキに適用すべき学名の再検討. 魚類学雑誌, 67 (1): 31–40 [Suzuki, Y., Endo, H., Motomura, H., Senou, H. and Matsunuma, M. 2020. First reliable records of *Epinephelus craigi* (Perciformes: Serranidae) from Japan and the southern South China Sea, and a note on the standard Japanese name proposed for *E. stictus*. Japanese Journal of Ichthyology, 67(1): 31–40. (In Japanese)]

Epinephelus suitonis Tanaka, 1915　ツチホゼリ

Original description: Tanaka (1915):566.
田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Holotype (available): ZUMT 12309, Saeki Market, Saeki City, Oita Pref., Japan; 12 Jan. 1915; collected by Kunimitsu Suitou.（豊後佐伯市場 大正 4 年 1 月 12 日 大分県佐伯市中学校 出納國満採集）

Remarks: There is no holotype designation in the original description. ZUMT 12309 is the only specimen whose original scientific name and collection data match the records in the ZUMT specimen ledger. This specimen is holotype (ICZN Art. 73.1.2). In Tanaka's (1916) Figures and descriptions of the fishes of Japan (23: 402–404, pl. 109, fig. 331), ZUMT 12309 was re-described and illustrated as holotype.
原記載にはホロタイプの指定がない。ZUMT 12309 は、原記載の学名と収集データが ZUMT 標本台帳の記録と一致した唯一の標本である。この標本がホロタイプである(ICZN Art. 73.1.2)。田中（1916）の日本産魚類図説（23: 402–404, pl. 109, fig. 331）では、ZUMT 12309 をホロタイプとして再記載し、図示した。

Current status: Synonym of *Epinephelus cyanopodus* (Richardson, 1846) ツチホゼリ

田中茂穂. 1916. 日本産魚類図説, 23: 399–418, pls. 111–115. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 23: 399–418, pls. 111–115. (In Japanese and English)]
久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Randall, J. E. and Heemstra, P. C. 1991. Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. Indo-Pacific Fishes, 20: 1–332, pls. 1–41.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Franzia affinis Tanaka, 1915　マジリハナダイ

Original description: Tanaka (1915):566.

田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Holotype (available): ZUMT 6579, Nagasaki Market, Japan; July 1915; collected by Ichiro Kaneko.（長崎市場 大正 4 年 7 月 金子一狼採集）

Remarks: There is no holotype designation in the original description. ZUMT 6579 is the only specimen whose original scientific name and collection data match the records in the ZUMT specimen ledger. This specimen is the holotype (ICZN Art. 73.1.2). In Tanaka's (1921) Figures and descriptions of the fishes of Japan (31: 572–575, pl. 144, fig. 400), ZUMT 6579 was re-described and illustrated as the holotype.
The original spelling of the scientific name was spelled "*affiinis*", but Tanaka (1921) corrected it to the subsequent spelling "*affinis*" in the Figures and descriptions of the fishes of Japan (31: 572–575). (ICZN Art. 32.5, 33.2.2).
原記載はホロタイプの指定がない。ZUMT 6579 は、ZUMT 標本台帳の記録から原記載の学名と収集データが一致した唯一の標本である。この標本がホロタイプである(ICZN Art. 73.1.2)。田中(1921)の日本産魚類図説(31: 572–575, pl. 144, fig. 400) では、ZUMT 6579 をホロタイプとして再記載し、図示した。
学名の原綴りは、「*affiinis*」と綴られていたが、田中(1921)は、日本産魚類図説(31: 572–575)で後綴りの「*affinis*」に訂正した(ICZN Art. 32.5, 33.2.2)。

Current status: Synonym of *Pseudanthias squamipinnis* (Peters, 1855) キンギョハナダイ

田中茂穂. 1921. 日本産魚類図説, 31: 559–582, pls. 142–144. [Tanaka, S. 1921. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 31: 559–582, pls. 142–144. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Franzia pectoralis Tanaka, 1917　ムナテンハナダイ

Original description: Tanaka (1917): 268.

田中茂穂. 1917. 日本産魚類の三新種. 動物学雑誌, 29 (347): 268–269. [Tanaka, S. 1917. Three new species of Japanese fishes. Zoological Magazine Tokyo, 29 (347): 268–269. (In Japanese)]

Holotype (available): ZUMT 9896, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊［和歌山県田辺市］宇井縫蔵採集.）

Remarks: There is no holotype designation in the original description. ZUMT 9896 is the only specimen in which the original scientific name and collection site match in the records of the ZUMT specimen ledger. This specimen is the holotype (ICZN Art. 73.1.2). In the record of ZUMT 9896 in the ZUMT specimen ledger, there is a writing of "type".

原記載はホロタイプの指定がない。ZUMT 9896 は、ZUMT 標本台帳の記録に原記載の学名と収集データが一致した唯一の標本である。この標本がホロタイプである(ICZN Art. 73.1.2)。ZUMT 標本台帳の ZUMT 9896 の記録には「type」の書き込みがある。

Current status: Synonym of *Pseudanthias squamipinnis* (Peters, 1855) キンギョハナダイ

田中茂穂. 1921. 日本産魚類図説, 31: 559–582, pls. 142–144. [Tanaka, S. 1921. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 31: 559–582, pls. 142–144. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Franzia ruber Tanaka, 1917　アカハナダイ

Original description: Tanaka (1917): 268.

田中茂穂. 1917. 日本産魚類の三新種. 動物学雑誌, 29 (347): 268–269. [Tanaka, S. 1917. Three new species of Japanese fishes. Zoological Magazine Tokyo, 29 (347): 268–269. (In Japanese)]

Lectotype (available): ZUMT 9906, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊［和歌山県田辺市］宇井縫蔵採集．）
Paralectotype (available): ZUMT 9907 (1), Tokyo Market, Japan.（東京市場）

Remarks: There is no holotype designation in the original description. From the records in the ZUMT specimen ledger, 2 specimens, ZUMT 9906 and ZUMT 9907, matched the original scientific name. These are syntypes (ICZN Art.72.4.1, 73.2). In Tanaka's (1921) Figures and descriptions of the fishes of Japan (31: 571–572, pl. 143, fig. 398), the ZUMT 9906 was made into holotype and re–described and illustrated. The act of selecting a specific specimen from these syntypes as the name-bearing type (here, the holotype) is considered to be the designation of the lectotype (ICZN Art. 74.5). ZUMT 9906 will be lectotype and ZUMT 9907 will be a paralectotype (ICZN Art. 73.2.2, 74.1.3).

The body size of the lectotype is 73 mm in total length measured up to the upper end of the caudal fin (including filament) described in the original, but the total length is different from 109 mm in the Figures and descriptions of the fishes of Japan (31: 571–572). As a result of confirming the lectotype ZUMT 9906, the total length described in the original description is an error in the body length.

In Tanaka's (1921) Figures and descriptions of the fishes of Japan (31: 571–572), the original spelling of the scientific name "*ruber*" was corrected to "*rubra*", but the subsequent spelling is invalid (ICZN Art. 33.3).

原記載はホロタイプの指定がない。ZUMT 標本台帳の記録から ZUMT 9906 と ZUMT 9907 の2標本が原記載の学名に一致した。これらはシンタイプである(ICZN Art.72.4.1, 73.2)。田中(1921)の日本産魚類図説(31: 571–572, pl. 143, fig. 398) では ZUMT 9906 をホロタイプとして再記載し、図示した。これらのシンタイプから特定の標本を担名タイプ（ここではホロタイプ）に選定した行為は、レクトタイプの指定と見なされる（ICZN Art. 74.5）。ZUMT 9906 はレクトタイプとなり、ZUMT 9907 はパラレクトタイプとなる(ICZN Art. 73.2.2, 74.1.3)。

原記載は、レクトタイプの体サイズを尾鰭上端（フィラメントを含む）まで測定した全長を 73 mm とした。しかし、田中(1921)の日本産魚類図説(31: 571–572)では、全長が 109 mm と一致しない。ZUMT 9906 を確認した結果、原記載の全長は、体長の誤記である。

レクトタイプの体サイズは、原記載の尾鰭上端（フィラメントを含む）まで測定した全長を 73 mm が、田中(1921)の日本産魚類図説(31: 571–572)では、全長が 109 mm と一致しない。レクトタイプ ZUMT 9906 を確認した結果、原記載の全長は、体長の誤記である。

田中(1921)の日本産魚類図説（31: 571–572）では、学名の原綴り「*ruber*」を「*rubra*」と修正したが、この後綴りは無効である(ICZN Art. 33.3)。

Current status: Synonym of *Pseudanthias squamipinnis* (Peters, 1855) キンギョハナダイ

田中茂穂．1921．日本産魚類図説，31: 559–582, pls. 142–144. [Tanaka, S. 1921. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 31: 559–582, pls. 142–144. (In Japanese and English)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）．1984．日本産魚類大図鑑．東海大学出版会，東京．xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）．2013．日本産魚類検索全種の同定 I–III，第三版．東海大学出版会，秦野．2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Lepidoperca brochata Katayama & Fujii, 1982

Original description: Katayama and Fujii (1982): 247, fig. 6.

Katayama, M. and Fujii, E. 1982. Two new species of the anthiine genus *Lepidoperca* from Australia and New Zealand. Japanese Journal of Ichthyology, 29 (3): 241–252.

Paratype (available): ZUMT 54320 (1), southeastern Australia (34°51.7'S, 151°07.5'E); 236 m depth.

Current status: Valid as *Lepidoperca brochata* Katayama & Fujii, 1982

Roberts, C. D. 1989. A revision of New Zealand and Australian orange perches (Teleostei; Serranidae) previously referred to *Lepidoperca pulchella* (Waite) with description of a new species of *Lepidoperca* from New Zealand. Journal of Natural History, 23 (3): 557–589.

Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Lepidoperca magna Katayama & Fujii, 1982

Original description: Katayama and Fujii (1982): 250, fig. 7.

Katayama, M. and Fujii, E. 1982. Two new species of the anthiine genus *Lepidoperca* from Australia and New Zealand. Japanese Journal of Ichthyology, 29 (3): 241–252.

Paratype (lost): ZUMT 54319 (1), Norfolk Ridge, southern Pacific (29°35'S, 168°05.8'E); 308 m depth.

Remarks: The cloth tag of the paratype registration number ZUMT 54319 is stored as it is. The location of the specimen is unknown because this specimen has not reached ZUMT.
パラタイプの登録番号 ZUMT 54319 の布タグがそのまま保管されている。この標本は ZUMT に届いていないため，所在は不明。

Current status: Valid as *Lepidoperca magna* Katayama & Fujii, 1982 アカネオキハナダイ

Roberts, C. D. 1989. A revision of New Zealand and Australian orange perches (Teleostei; Serranidae) previously referred to *Lepidoperca pulchella* (Waite) with description of a new species of *Lepidoperca* from New Zealand. Journal of Natural History, 23 (3): 557–589.

尼岡邦夫・松浦啓一・稲田伊史・武田正倫・畑中　寛・岡田啓介（編）. 1990. ニユージーランド海域の水族 深海丸により採集された魚類・頭足類・甲殻類. 海洋水産資源開発センター，東京. 411 pp. [Amaoka, K., Matsuura, K., Inada, T., Takeda, M., Hatanaka, H. and Okada, K. (eds). 1990. Fishes collected by the R/V Shinkai Maru around New Zealand. Japan Marine Fisheries Resource Research Center. 410 pp. (In Japanese and English; many contributors)]

Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Leptanthias kashiwae Tanaka, 1918　カシワハナダイ

Original description: Tanaka (1918): 525, pl. 138 (fig. 387).

田中茂穂. 1918. 日本産魚類図説，29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Holotype (lost): ZUMT 8459, Kashiwajima, Hata, Kochi Pref., Japan; collected by Shigeho Tanaka.（土佐柏島 田中茂穂採集）

Paratypes (available): ZUMT 18727–ZUMT 18741 (15), Kashiwajima, Hata, Kochi Pref., Japan; 12 March 1905; collected by Katsuya Tago.（土佐柏島　明治 38 年 3 月 12 日 田子勝弥採集）

Remarks: In the original description, ZUMT 8459 was specified as the holotype. In addition to the holotype ZUMT 8459, there were specimens ZUMT 18727 to ZUMT 18741 that had the same scientific name and collection data as the original description in the records of the ZUMT specimen ledger. These specimens are paratypes. (ICZN Art. 72.4.1.1, 72.4.5).

原記載ではホロタイプに ZUMT 8459 を指定した。ホロタイプ ZUMT 8459 の他に ZUMT 標本台帳の記録に原記載と同じ学名と収集データが一致した標本 ZUMT 18727–ZUMT 18741 がある。これらの標本はパラタイプとなる(ICZN Art. 72.4.1.1, 72.4.5)。

Current status: Synonym of *Pseudanthias cooperi* (Regan, 1902) カシワハナダイ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Mustelichthys ui Tanaka, 1917　ウイサクラダイ

Original description: Tanaka (1917): 198.

田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (345): 198–201. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (345): 198–201. (In Japanese)]

Holotype (available): ZUMT 9957, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. ZUMT 9957 is the only one that matches with the scientific name and the record of collection data in the ZUMT specimen ledger. This specimen is holotype (ICZN Art. 73.1.2). In the record of ZUMT 9957, there is a note of "*Mustelichthys ui* Tanaka, Type, Tanabe, Nuizo Ui". In addition, the specimen has two cloth tags, "9957" and "Sketch No. 348".

原記載にはホロタイプの指定がない。ZUMT 9957 は、ZUMT 標本台帳から学名と収集データの記録が一致した唯一の標本である。この標本がホロタイプである(ICZN Art. 73.1.2)。ZUMT 9957 の記録には「*Mustelichthys ui* Tanaka, Type, Tanabe、Nuizo Ui」の書き込みがある。また、標本に「9957」と「写生番号 348 号」の布タグ 2 つが付いている。

Current status: Synonym of *Tosana niwae* Smith & Pope, 1906 ヒメハナダイ

田中茂穂. 1921. 日本産魚類図説, 31: 559–582, pls. 142–144. [Tanaka, S. 1921. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 31: 559–582, pls. 142–144. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

橋本慎太郎・大富　潤・本村浩之. 2021. 標本に基づく鹿児島県本土初記録のヒメハナダイ(ハタ科:ハナダイ亜科). Ichthy, Natural History of Fishes of Japan, 11: 6–11. [Hashimoto S., Ohtomi, J. and Motomura, H. 2021. First specimen-based records of *Tosana niwae* (Serranidae: Anthiadinae) from the Kagoshima mainland, southern Kyushu, Japan. Ichthy, Natural History of Fishes of Japan, 11: 6–11. (In Japanese with English abstract)]

Paracanthistius suji Tanaka, 1916　スジアラ

Original description: Tanaka (1916): 415, pl. 112 (fig. 336).
田中茂穂. 1916. 日本産魚類図説, 23: 399–418, pls. 111–115. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 23: 399–418, pls. 111–115. (In Japanese and English)]

Holotype (available): ZUMT 3911, Saigasaki, Wakayama City, Wakayama Pref., Japan; collected by Toukichi Nishikawa.(和歌山県和歌山市雑賀崎 西川藤吉採集)
Paratype (available): ZUMT 8513 (1), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.(紀伊國田邊［和歌山県田辺市］宇井縫蔵採集)

Remarks: ZUMT 3911 was specified as the holotype in the original description. In addition to ZUMT 3911, there is a specimen ZUMT 8513 with the same scientific name in the record of the ZUMT specimen ledger. This specimen is a paratype (ICZN Art. 72.4.1.1, 72.4.5). The holotype ZUMT 3911 comes with two cloth tags, "3911, Wakayama" and "Sketch No. 337".
原記載にはホロタイプに ZUMT 3911 を指定した。ZUMT 3911 の他に ZUMT 標本台帳の記録には学名が一致する標本 ZUMT 8513 があった。この標本はパラタイプである(ICZN Art. 72.4.1.1, 72.4.5)。ホロタイプの ZUMT 3911 には、「3911　和歌山」と「写生番号 337 号」の布タグ 2 つが付いている。

Current status: Synonym of *Plectropomus leopardus* (Lacepède, 1802)　スジアラ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Randall, J. E. and Heemstra, P. C. 1991. Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. Indo-Pacific Fishes, 20: 1–332, pls. 1–41.
Heemstra, P. C. and Randall, J. E. 1993. Groupers of the World (Family Serranidae, Subfamily Epinephelinae); an annotated and illustrated catalogue of the grouper, rockcod, hind, coral grouper and lyretail species known to date. FAO Species Catalog 16. Rome. viii + 382, pls. 1-31.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
Motomura, H., Kimura, S., Giat, S. Y., Kadir, S. T. S. A. and Gaffar, M. A. 2021. Reef and shore fishes of Bidong Island off east coast of Malay Peninsula. The Kagoshima University Museum, Kagoshima. 80 pp.

Pikea latifasciata Tanaka, 1922　ツルグエ

Original description: Tanaka (1922): 595, pl. 147 (fig. 405).
田中茂穂. 1922. 日本産魚類図説, 32: 583–606, pls. 145–147. [Tanaka, S. 1922. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 32: 583–606, pls. 145–147. (In Japanese and English)]

Holotype (available): ZUMT 8000, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）
Paratype (available): ZUMT 3423 (1), Tokyo Market, Tokyo, Japan.（東京市場）

Remarks: In the original description, ZUMT 8000 was specified as the holotype. In addition, ZUMT 3423 was added and described. This specimen ZUMT 3423 is paratype (ICZN Art. 72.4.5). This specimen ZUMT 3423 is paratype (ICZN Art. 72.4.5).
原記載にはホロタイプに ZUMT 8000 を指定した。さらに、ZUMT 3423 を加え記載した。この ZUMT 3423 はパラタイプである(ICZN Art. 72.4.5)。

Current status: Valid as *Liopropoma latifasciatum* (Tanaka, 1922) ツルグエ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
Randall, J. E. and Taylor, Jr., L. R. 1988. Review of the Indo-Pacific fishes of the serranid genus *Liopropoma*, with descriptions of seven new species. Indo-Pacific Fishes, 16: 1–47, pls. 1–4.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Plectranthias altipinnatus Katayama & Masuda, 1980　チゴハナダイ

Original description: Katayama and Masuda (1980): 185, Fig. 1.
Katayama, M. and Masuda, H. 1980. Two new anthiine fishes from Sagami Bay, Japan. Japanese Journal of Ichthyology, 27 (3): 185–190.

Holotype (available): ZUMT 54242, off Futo, Ito City, Shizuoka Pref., Izu Peninsula, Japan; at a depth of 40 m on the rock reef; Feb. 1977.

Current status: Valid as *Plectranthias altipinnatus*
Katayama & Masuda, 1980　チゴハナダイ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
Gill, A. C.,Pogonoski, J. J., Moore, G. I. and Johnson, J. W. 2021. Review of Australian species of *Plectranthias* Bleeker and *Selenanthias* Tanaka (Teleostei: Serranidae: Anthiadinae), with descriptions of four new species. Zootaxa, 4918 (1): 1–116.

Plectranthias kojii Koeda, Muto & Wada, 2021 ミカヅキハナダイ

Original description: Koeda, Muto and Wada (2021): 2, Figs. 1–3.
Koeda, K., Muto, N. and Wada, H. 2021. *Plectranthias kojii* sp. nov., a new perchlet (Perciformes: Serranidae: Anthiinae) from Okinawa, Japan. Ichthyological Research, 69 (3): 352-360. [First published online, pp. 1-9, 27 Oct. 2021. Erratum appeared in Ichthyological Research online first, 1 p., on 3 Dec. 2021 [69 (3): 361]. Volume, issue and pages added 17 June 2022.]

Holotype (available): ZUMT 62001, off Hamahiga-jima Island, near eastern coast of Okinawa-jima Island, Ryukyu Archipelago, Japan; 150 m depth; basket net; Oct. 2018; collected by ABE Koji, preserved on 16 Mar. 2020. 49.4 mm SL.（沖縄諸島 沖縄県うるま市）浜比嘉島沖 水深 150m かご網 2018 年 10 月 安倍肯治（ABE Koji）採集）

Remarks: The species name was changed to *kojiorum* because it was named after two persons, Koji Abe and Koji Wada (ICZN Art. 31.1.2).
安倍肯治(ABE Koji)氏と和田康嗣(WADA Koji)氏の2名に因んで名付けられたため、種小名は、*kojiorum* に変更された(ICZN Art. 31.1.2)。

Current status: Valid as *Plectranthias kojiorum* Koeda, Muto & Wada, 2021 ミカヅキハナダイ
Anderson, W. D., Jr. 2022. Additions and emendations to the annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 5195 (6): 567–578.

Rosanthias amoenus Tanaka, 1917 ウキサクラダイ

Original description: Tanaka (1917): 198.
田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (345): 198–201. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (345): 198–201. (In Japanese)]

Lectotype (lost): ZUMT 8468, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集
Paralectotypes (lost): ZUMT 2187 (5), Tokyo Market, Japan; 1906.（東京市場）
P**aralectotype (available):** ZUMT 39156 (1), same as lectotype.

Remarks: There is no holotype designation in the original description. From the records in the ZUMT specimen ledger, there were ZUMT 2187 (5) and ZUMT 8468 that matched the scientific names. In addition, ZUMT 39156 with a cloth tag of “the same species to Ukisakuradai 0672" was found. From the record of the ZUMT specimen ledger, "0672" is the number given to ZUMT 8468 by the collector Nuizo Ui. Also, in the record of ZUMT 2187, there was a note that "2187 is 8468 reference". These specimens are syntypes. (ICZN Art. 72.1.1, 72.4.1.1).
In the Figures and descriptions of the fishes of Japan (28: 503–506, pl. 136, fig. 379) by Tanaka (1918), ZUMT 8468 is re-described and illustrated as the holotype. The act of selecting a specific specimen from these syntypes as the name-bearing type (here, the holotype) is considered to be the designation of the lectotype, not the holotype (ICZN Art. 74.6). ZUMT 8468 is lectotype, and ZUMT 2187 (5) and ZUMT 39156 are pararectotypes (ICZN Art. 73.2.2).
Due to a typesetting error, the original spelling "*amaenus*" was corrected to subsequent spelling "*amoenus*" in Tanaka's (1918) Figures and descriptions of the fishes of Japan (28: 503–506) (ICZN Art. 32.5.1).
原記載にはホロタイプの指定がない。ZUMT 標本台帳の記録から学名に一致した ZUMT 2187 (5)と ZUMT 8468 があった。さらに「ウキサクラダイ 0672 と同種」の布タグが付いていた ZUMT 39156 が見つかった。ZUMT 標本台帳の記録から「0672」は ZUMT 8468 に採集者宇井縫蔵氏が付けた番号である。また、ZUMT 2187 の記録には「2187 は 8468 参考」と書き込みがあった。これらの標本はシンタイプである(ICZN

Art. 72.1.1, 72.4.1.1)。

田中(1918)の 日本産魚類図説(28: 503–506, pl. 136, fig. 379) では、ZUMT 8468 をホロタイプとして再記載し、図示した。このシンタイプから特定の標本を担名タイプ（ここではホロタイプ）に選定した行為は、ホロタイプではなくレクトタイプの指定と見なされる(ICZN Art. 74.6)。ZUMT 8468 はレクトタイプとなり、ZUMT 2187 (5)と ZUMT 39156 はパラレクトタイプである(ICZN Art. 73.2.2)。

原記載の原綴り「*amaenus*」は植字エラーのため、田中（1918）の日本産魚類図説（28: 503–506）で後綴り「*amoenus*」と訂正された(ICZN Art. 32.5.1)。

Current status: Synonym of *Pseudanthias elongatus* (Franz, 1910) ナガハナダイ

田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.

Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Selenanthias analis Tanaka, 1918　スミツキハナダイ

Original description: Tanaka (1918): 516, pl. 138 (fig. 385).

田中茂穂. 1918. 日本産魚類図説, 29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Holotype (available): ZUMT 8458, Tokyo Market, Japan.（東京市場）
Paratypes (available): ZUMT 11940–ZUMT 11942 (3), same as holotype.

Remarks: The original description specified ZUMT 8458 as the holotype. This specimen has two cloth tags with the registration number "8458" and "Sketch No. 360". In addition to the holotype ZUMT 8458, the ZUMT specimen ledger record contained ZUMT 11940–ZUMT 11942 with the same scientific name and collection data. ZUMT 11941 and ZUMT 11942 had a cloth tag of "Sketch No. 360 Reference". These specimens are paratypes (ICZN Art. 72.4.1, 72.4.5).

原記載は ZUMT 8458 をホロタイプに指定した。この標本には、登録番号の「8458」と「写生番号 360 号」の布タグ2つが付いている。ホロタイプ ZUMT 8458 の他に ZUMT 標本台帳の記録には、学名と収集データが一致した ZUMT 11940–ZUMT 11942 があった。ZUMT 11941 と ZUMT 11942 には「写生 360 号参考」の布タグが付いていた。これらの標本はパラタイプである(ICZN Art. 72.4.1, 72.4.5)。

Current status: Valid as *Selenanthias analis* Tanaka, 1918 スミツキハナダイ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

岡村　収(編). 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2020. An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.
Gill, A. C., Pogonoski, J. J., Moore, G. I. and Johnson, J. W. 2021. Review of Australian species of *Plectranthias* Bleeker and *Selenanthias* Tanaka (Teleostei: Serranidae: Anthiadinae), with descriptions of four new species. Zootaxa, 4918 (1): 1–116.
望月健太郎・Jeong Byeol・本村浩之. 2021. 大隅諸島竹島から得られた初記録の魚類 23 種. Ichthy, Natural History of Fishes of Japan, 14: 48–53. [Mochizuki, K., Jeong, B. and Motomura, H. 2021. First records of 23 fish species from Take-shima island, Osumi Islands, Satsunan Islands, Kagoshima Prefecture, Japan. Ichthy, Natural History of Fishes of Japan, 14: 48–53. (In Japanese with English abstract)]

Tosanoides flavofasciatus Katayama & Masuda, 1980　キシマハナダイ

Original description: Katayama and Masuda (1980): 51, figs. 1–3.
Katayama, M. and Masuda, H. 1980. *Tosanoides flavofasciatus*, a new anthiine fish from Sagami Bay, Japan, and the Tonga Ridge, Melanesia. Japanese Journal of Ichthyology, 27 (1): 51–55.

Holotype (available): ZUMT 54241, off Izu-Oshima (34°47'N, 139°24'E), Japan; 24 Jan. 1979; depth 50 meters; collected by Hajime Masuda.

Current status: Valid as *Tosanoides flavofasciatus* Katayama & Masuda, 1980 キシマハナダイ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村　収(編). 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Anderson, W. D., Jr. 2018. Annotated checklist of anthiadine fishes (Percoidei: Serranidae). Zootaxa, 4475 (1): 1–62.
Parenti, P. and Randall, J. E. 2020.An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes. FishTaxa, 15 (1): 1–170.

Plesiopidae　タナバタウオ科

Plesiops nakaharae Tanaka, 1917　ナカハラタナバタウオ

Original description: Tanaka (1917): 199.
田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (345): 198–201. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (345): 198–201. (In Japanese)]

Holotype (available): ZUMT 8128, probably Shima Province, Mie Pref., Japan; collected by Kosaku Nakahara. (おそらく志摩 中原鋼作採集)

Remarks: There is no holotype designation in the original description. ZUMT 8128 is the only sample that matches with the scientific name and collection data in the ZUMT sample ledger, and this sample is the holotype (ICZN Art. 72.4.1, 73.1.2).

In Tanaka's (1918) Figures and descriptions of the fishes of Japan (28: 497–500, pl. 137, fig. 383), ZUMT 8128 is holotype and is illustrated and re-described it. The specimen has a cloth tag that says "Sketch No. 355".

原記載にはホロタイプの指定がない。ZUMT 8128 は、ZUMT 標本台帳の記録から学名や収集データに一致する唯一の標本であり、この標本がホロタイプである(ICZN Art. 72.4.1, 73.1.2)。

田中(1918)の日本産魚類図説(28: 497–500, pl. 137, fig. 383)は、ZUMT 8128 をホロタイプとして、再記載と図示した。標本には「写生番号 355 号」と書かれた布タグが付いている。

Current status: Valid as *Plesiops nakaharae* Tanaka, 1917 ナカハラタナバタウオ

田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Sano, M., Hayashi, M., Kishimoto, H., Manabe, H. and Kobayashi, K. 1984. Validity of the plesiopid fish *Plesiops nakaharae* Tanaka, 1917, with a record of *Plesiops cephalotaenia* from Japan. Science Report of the Yokosuka City Museum 32: 11–22, pls. 6–7.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Plesiops semeion Tanaka, 1917 タナバタウオ

Original description: Tanaka (1917): 200.

田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29(345): 198–201.(Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29(345): 198–201. (In Japanese)]

Holotype (available): ZUMT 54367, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.(紀伊國田邊[和歌山県田辺市]宇井縫蔵採集)

Remarks: There is no holotype designation in the original description. Tanaka (1918) restated the holotype in Figures and descriptions of the fishes of Japan (28: 495–514, pls. 136–137), but there was no information to identify the holotype such as the registration number. The unregistered specimens found in the ZUMT collection matched the illustrated specimens in body size and characteristics. This specimen is a holotype (ICZN Art. 72.4.1, 73.1). Registered in ZUMT 54367 of the ZUMT collection. It has a cloth tag of "Sketch No. 349".

原記載にはホロタイプの指定がない。田中(1918)の日本産魚類図説(28: 495–514, pls. 136–137)では、ホロタイプの再記載をしたが、登録番号などのタイプを特定する情報はなかった。ZUMT コレクションから発見された未登録標本は、原記載の体サイズや特徴が図説の標本に一致した。この標本はホロタイプとなる (ICZN Art. 72.4.1, 73.1)。ZUMT コレクションの ZUMT 54367 に登録した。「写生番号 349 号」の布タグが付いていた。

Current status: Synonym of *Plesiops coeruleolineatus* Rüppell, 1835 タナバタウオ

田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Mooi, R. D. 1995. Revision, phylogeny, and discussion of biology and biogeography of the fish genus *Plesiops* (Perciformes: Plesiopidae). Royal Ontario Museum Life Science Contributions 159: 1–107.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Apogonidae テンジクダイ科

Amia cathetogramma Tanaka, 1917 ヨコスヂテンヂクダイ

Original description: Tanaka (1917): 225.
田中茂穂. 1917. 日本産魚類の三新種. 動物学雑誌, 29 (346): 225–226. [Tanaka, S. 1917. Three new species of Japanese fishes. Zoological Magazine Tokyo, 29 (346): 225–226. (In Japanese)]

Holotype (available): ZUMT 55054, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊[和歌山県田辺市]宇井縫蔵採集）

Remarks: There is no holotype designation in the original description, and no corresponding specimen record in the ZUMT specimen register. Specimens identified from the ZUMT collection were in good agreement with the original description in terms of body size and characteristics. This specimen is the holotype (ICZN Art. 72.4.1, 73.1). Registered as ZUMT 55054 in ZUMT collection.
原記載にはホロタイプの指定がなく、ZUMT 標本台帳に該当する標本の記録はない。ZUMT コレクションから確認された標本は、体サイズや特徴が原記載とよく一致した。この標本がホロタイプである(ICZN Art. 72.4.1, 73.1)。ZUMT コレクションに ZUMT 55054 として登録。

Current status: Synonym of *Apogonichthyoides sialis* (Jordan & Thompson, 1914) ヨコスジテンジクダイ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Mabuchi, K., Fraser, T. H., Song, H., Azuma, Y. and Nishida, M. 2014. Revision of the systematics of the cardinalfishes (Percomorpha: Apogonidae) based on molecular analyses and comparative reevaluation of morphological characters. Zootaxa, 3846 (2): 151–203.
Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1-42.
Kimura, S., Imamura, H., Nguyen, V. Q. and Pham, T. D. 2018. Fishes of Ha Long Bay, the World Natural Heritage Site in northern Vietnam. Shima (Japan), ix + 314 pp. (In English and Vietnamese. Chapters edited by various authors)

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Apogon ishigakiensis Ida & Moyer, 1974　イシガキテンジクダイ

Original description: Ida and Moyer (1974): 115, Figs. 1, 3A, 5A.
Ida, H. and Moyer, J. T. 1974. Apogonid fishes of Miyake-jima and Ishigaki-jima, Japan, with description of a new species. Japanese Journal of Ichthyology, 21 (3): 113–128.

Holotype (available): ZUMT 52989, northern coast of Iriomote-jima, Yaeyama, Ryukyu Islands, Okinawa Pref., Japan.
Paratypes (available): ZUMT 52988 (1), ZUMT 52990 (1), same as holotype.

Current status: Valid as *Ostorhinchus ishigakiensis* (Ida & Moyer, 1974) ミヤコイシモチ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Mabuchi, K., Fraser, T. H., Song, H., Azuma, Y. and Nishida, M. 2014. Revision of the systematics of the cardinalfishes (Percomorpha: Apogonidae) based on molecular analyses and comparative reevaluation of morphological characters. Zootaxa, 3846 (2): 151–203.
Koeda, K., Hibino, Y., Yoshida, T., Kimura, Y., Miki, R., Kunishima, T., Sasaki, D., Furukawa, T., Sakurai, M., Eguchi, K., Suzuki, H., Inaba, T., Uejo, T., Tanaka, S., Fujisawa, M., Wada, H. and Uchiyama, T. 2016. Annotated checklist of fishes of Yonaguni-jima Island, the westernmost island in Japan. The Kagoshima University Museum, Kagoshima, v + 119 pp, 1.

Henicichthys foraminosus Tanaka, 1915　クダリボオズギス

Original description: Tanaka (1915): 568.
田中茂穂. 1915. 日本産魚類の十新種. 動物学雑誌, 27 (325): 565–568. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (325): 565–568. (In Japanese)]

Syntype (available): ZUMT 2702 (1), Nagasaki Pref., Japan; March 1910 on donated by Nagasaki Normal School.（長崎県　1910 年 3 月 長崎師範学校寄贈）
Syntype (lost): ZUMT 6366 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.（長崎市場　金子一狼採集）
Syntype (available): ZUMT 7747 (1), probably Ise Bay, Japan; collected by Mansaku Kobayashi.（おそらく伊勢湾 小林萬作採集）
Syntype (available): ZUMT 9885 (1), Suo-oshima, Yamaguchi Pref., Japan; collected by Taneitsu Yamahara.（周防国大島［山口県大島郡周防大島町］山原種逸［山口県岩国中学校］採集）

Remarks: There is no holotype designation in the original description. From the records of the ZUMT specimen ledger, 6 specimens corresponded to the scientific names described in the new genus and new species, but the two specimens ZUMT 31351 and 35950 were registered after 1915 and are not included in the type series. Four specimens are syntypes (ICZN Art. 72.4.1.1, 73.2).

原記載にはホロタイプの指定がない。ZUMT 標本台帳の記録から新属新種で記載された学名と一致した6標本が該当したが、ZUMT 31351 と 35950 の2標本は、記載の 1915 年以降に登録されたものでタイプシリーズに含まれない。4 標本が、シンタイプである (ICZN Art. 72.4.1.1, 73.2)。

Current status: Valid as *Gymnapogon foraminosus* (Tanaka, 1915) クダリボウズギス
Tomiyama, I. 1936. Gobiidae of Japan. Japanese Journal of Zoology, 7 (1): 37-112.
松原喜代松. 1955. 魚類の形態と検索 I. 石崎書店, 東京. xii + 790 pp. [Matsubara, K. 1955. Fish morphology and hierarchy, Part I. Ishizaki-Shoten, Tokyo. xii + 790 pp. (In Japanese)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Fraser, T. H. 2016. A new species of cardinalfish (*Gymnapogon*, Gymnapogonini, Apogonidae, Percomorpha) from the Philippines. Zootaxa, 4107 (3): 431–438.
吉田朋弘・本村浩之. 2016. 大隅諸島初記録のテンジクダイ科魚類クダリボウズギス. Nature of Kagoshima, 42: 173–177. [Yoshida, T. and Motomura, H. 2016. First records of *Gymnapogon japonicus* (Perciformes: Apogonidae) from the Osumi Islands, Kagoshima, Japan. Nature of Kagoshima, 42: 173–177. (In Japanese)]

Echeneididae コバンザメ科
Echeneis nubifera Tanaka, 1915 クモコバン

Original description: Tanaka (1915): 360, pls. 96 (302–303), 97 (304–305).
田中茂穂. 1915. 日本産魚類図説, 20: 343–370, pls. 96–100. [Tanaka, S. 1915. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 20: 343–370, pls. 96–100. (In Japanese and English)]

Holotype (available): ZUMT 54384, Matsuwa, near Misaki (Sagami Bay), Kanagawa Pref., Japan; collected by Mfg. Co., Ltd. Yamakoshi.(神奈川県三浦市三崎 松輪 山越製作所)

Remarks: There is no holotype designation in the original description. The ZUMT specimen ledger does not have a record of specimens to which the scientific name or collection data corresponds. From the ZUMT collection, there was a specimen with two cloth tags that read "Kumokoban, Yamakoshi Seisakusho" and "Sketch No. 156". Specimens that match the original description, such as body size, are holotype of *Echeneis nubifera*. Registered as ZUMT 54384 in ZUMT collection.
原記載にはホロタイプの指定がない。ZUMT 標本台帳にも学名や収集データが該当する標本の記録がない。ZUMT コレクションから「クモコバン 山越製作所」と「写生番号 156 号」と書かれた2つの布タグが付いた標本があった。体のサイズなど原記載と一致した標本は、*Echeneis nubifera* のホロタイプである(ICZN Art. 72.4.1, 73.1)。ZUMT コレクションに ZUMT 54384 として登録。

Current status: Synonym of *Remora remora* (Linnaeus, 1758) ナガコバン
中坊徹次・町田吉彦・山岡耕作・西田清徳(編). 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.
Dyldin, Yu. V. and Orlov, A. M. 2021. Annotated list of ichthyofauna of inland and coastal waters of Sakhalin Island. 3. Families Priacanthidae–Sebastidae. Journal of Ichthyology, 61 (6): 832–866.
Parenti, P. 2021. Checklist of fishes of the family Echeneidae. International Journal of Zoological Investigations, 7 (2): 566–573.
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Carangidae アジ科

Decapterus kurroides akaadsi Abe, 1958 アカアジ

Original description: Abe (1958): 176.

Abe, T. 1958. Two new subspecies of fishes from the path of the "Kuro-Shiwo". Records of Oceanographic Works in Japan (Spec., 2): 175–180.

Holotype (available): ZUMT 49749, Hatsushima Island, west of Sagami Bay, Kanagawa Pref., Japan; 19 April 1956.

Remarks: The location of the following paratype 2 specimens from the Abe collection is unknown. ABE 57-120 (1), ABE 57-265 (1), Hatsushima Island, west of Sagami Bay, Kanagawa Pref., Japan; 19 April 1956.
次の阿部コレクションのパラタイプ 2 標本は, 所在不明。ABE 57-120 (1), ABE 57-265 (1), Hatsushima Island, west of Sagami Bay, Kanagawa Pref., Japan; April 19, 1956.

Current status: Valid as *Decapterus akaadsi* Abe, 1958 アカアジ

久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 333 pp. (In Japanese and English; various authors)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村 収(編). 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
山田梅芳・田川勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
Kimura, S., Katahira, K. and Kuriiwa, K. 2013. The red-fin *Decapterus* group (Perciformes: Carangidae) with the description of a new species, *Decapterus smithvanizi*. Ichthyological Research, 60 (4): 363–379.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Leiognathidae ヒイラギ科

Gazza rhombea Kimura, Yamashita & Iwatsuki, 2000 ヒシコバンヒイラギ

Original description: Kimura, Yamashita and Iwatsuki (2000): 2, fig. 1.

Kimura, S., Yamashita, T. and Iwatsuki, Y. 2000. A new species, *Gazza rhombea*, from the Indo-West Pacific, with a redescription of *G. achlamys* Jordan & Starks, 1917 (Perciformes: Leiognathidae). Ichthyological Research, 47 (1): 1–12.

Paratypes (available): ZUMT 55151, ZUMT 55152 (2), Sandakan, Sabah, Malaysia; Mar. 1937.

Current status: Valid as *Gazza rhombea* Kimura, Yamashita & Iwatsuki, 2000 ヒシコバンヒイラギ

Yamashita, T. and S. Kimura. 2001. A new species, *Gazza squamiventralis* from the east coast of Africa (Perciformes: Leiognathidae). Ichthyological Research, 48 (2): 161–166.

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Leiognathus aureus Abe & Haneda, 1972

Original description: Abe and Haneda (1972): 3, pl. 1, figs. 1B, 2B.

Abe, T. and Haneda, Y. 1972. Descriptions of two new species of the ponyfish genus Leiognathus from Indonesia. Science Report of the Yokosuka City Museum, 19: 1–7. [Japanese summary]

Holotype (lost): ZUMT 52703, Ambon Fish Market, Ambon, Indonesia; 18 Nov. 1969; collected by Y. Haneda.
Paratype (lost): ZUMT 52704 (1), same as holotype.

Remarks: Kimura et al. (2003) designated YCM-P35792 (Yokosuka City Museum, Yokosuka City, Kanagawa, Japan) as a neotype, and the paratype ABE 16076 from the Abe collection was registered with YCM-P35800. Additionally, the location of the following three paratype specimens from the Abe collection is unknown. ABE15430 (1), ABE15431 (1), ABE16077 (1).

Kimura et al (2003) は YCM-P35792 (Yokosuka City Museum, Yokosuka City, Kanagawa, Japan) をネオタイプに指定し、さらに阿部コレクションのパラタイプ ABE 16076 を YCM-P 35800 に再登録した。また、以下の阿部コレクションのパラタイプ 3 標本は、所在不明。ABE 15430 (1)、ABE 15431 (1)、ABE 16077 (1)。

Current status: Valid as *Photopectoralis aureus* (Abe & Haneda, 1972) キビレヒイラギ

Kimura, S., Dunlap, P. V., Peristiwady, T. and Lavilla-Pitogo, R. 2003. The *Leiognathus aureus* complex (Perciformes: Leiognathidae) with the description of a new species. Ichthyological Research, 50 (3): 221–232.

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.

畑　晴陵・本村浩之．2019．大隅半島東岸の内之浦湾から得られた キビレヒイラギ（スズキ目：ヒイラギ科）．Nature of Kagoshima, 46: 33–37. [Hata, H. and Motomura, H. 2019. First record of *Photopectoralis aureus* (Perciformes: Leiognathidae) from Uchinoura Bay, east coast of Osumi Peninsula, Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 46: 33–37. (In Japanese)]

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Leiognathus hiraii Abe & Haneda, 1972

Original description: Abe and Haneda (1972): 1, pl. 1, figs. 1A, 2A.
Abe, T. and Haneda, Y. 1972. Descriptions of two new species of the ponyfish genus *Leiognathus* from Indonesia. Science Report of the Yokosuka City Museum, 19: 1–7. [Japanese summary.]

Holotype (lost): ZUMT 52701, Ambon Fish Market, Ambon, North Maluku, Indonesia; 18 Nov. 1969; collected by Y. Haneda.
Paratype (lost): ZUMT 52702 (1), same as holotype.

Remarks: Kimura et al. (2003) designated YCM-P 37696 (Yokosuka City Museum, Yokosuka City, Kanagawa, Japan) as a neotype. The location of the Abe collection paratypes is unknown. ABE 15428 –ABE 15429 (2).
Kimura et al. (2003) は YCM-P 37696 (Yokosuka City Museum, Yokosuka City, Kanagawa, Japan) をネオタイプに指定した。阿部コレクションのパラタイプは、所在不明。ABE 15428 – ABE 15429 (2)。

Current status: Valid as *Photopectoralis hiraii* (Abe & Haneda, 1972)
Kimura, S., Dunlap, P. V., Peristiwady, T. and Lavilla-Pitogo, R. 2003. The *Leiognathus aureus* complex (Perciformes: Leiognathidae) with the description of a new species. Ichthyological Research, 50 (3): 221–232.

Bromide シマガツオ科

Bentvena aesticola Jordan & Snyder, 1901

Original description: Jordan and Snyder (1901): 306, pl. 16, fig. 6.
Jordan, D. S. and Snyder, J. O. 1901. Descriptions of nine new species of fishes contained in museums of Japan. Journal of the College of Science, Imperial University, Tokyo, 15 (2): 301–311, pls. 15–17.

Holotype (lost): ZUMT 2740, off Kashima coast near Mito, Hitachi, Ibaraki Pref., Japan.

Remarks: There is no holotype designation in the original description. ZUMT 2740 is the only holotype that matches the scientific name and collection data from the records in the ZUMT specimen ledger (ICZN Art. 72.4.1, 73.1.2). This holotype disappeared in the fire of the Great Kanto Earthquake of 1923 (Tanaka S. 1927. "Figures and descriptions of the fishes of Japan" 40: 770–775).
原記載にはホロタイプの指定がない。ZUMT 2740 は ZUMT 標本台帳の記録から学名や採集データに一致する唯一の標本でホロタイプとなる(ICZN Art. 72.4.1, 73.1.2)。このホロタイプは、1923 年の関東大地震の火災で消失した（田中茂穂. 1927. "日本産魚類図説" 40: 770–775）。

Current status: Valid as *Pteraclis aesticola* (Jordan & Snyder, 1901) ベンテンウオ
田中茂穂. 1927. 日本産魚類図説, 40: 757–784, pls. 167–169. [Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 40: 757–784, pls. 167–169. (In Japanese and English)]
Mead, G. W. 1957. Bramidae. Dana Report 81: 1–166, pls. 1–9.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
畑　晴陵・伊東正英・山田守彦・高山真由美・本村浩之. 2015. 標本に基づく鹿児島県のシマガツオ科魚類相. Nature of Kagoshima, 41: 73– 93. [Hata, H., Itou, M., Yamada, M., Takayama, M. and Motomura, H. 2015. Bramid fishes of Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 41: 73– 93. (In Japanese)]

Emmelichthyidae　ハチビキ科

Emmelichthys struhsakeri Heemstra & Randall, 1977

Original description: Heemstra and Randall (1977): 382, fig. 5a.

Heemstra, P. C. and Randall, J. E. 1977. A revision of the Emmelichthyidae (Pisces: Perciformes). Australian Journal of Marine and Freshwater Research, 28 (3): 361–396.

Paratype (available): ZUMT 53889 (1), Penguin Bank, Cr. 40 Sta. 1 (21°09.8N, 157°27.5'W); 6 Nov. 1968; 183 m depth; 12.5 m shrimp trawl; collected by R/V Townsend Cromwell.

Paratypes (available): ZUMT 54056 (1, ABE 16710), ZUMT 54057 (1, previously ABE 16712), off Manazuru (Sagami Bay), Kanagawa Pref., Japan.

Remarks: The paratypes ABE 16710 and ABE 16712 specified in the original description were registered in ZUMT 54056 and ZUMT 54057, respectively.

原記載で指定されたパラタイプ ABE 16710 と ABE 16712 は、それぞれ ZUMT 54056 と ZUMT 54057 に登録された。

Current status: Valid as *Emmelichthys struhsakeri* Heemstra & Randall, 1977 ロウソクチビキ

岡村　収・尼岡邦夫・三谷文夫（編）. 1982. 九州ーパラオ海嶺ならびに土佐湾の魚類. 日本水産資源保護協会, 東京. 436 pp. [Okamura, O., Amaoka, K. and Mitani, F. (eds). 1982. Fishes of the Kyushu–Palau Ridge and Tosa Bay. The intensive research of unexploited fishery resources on continental slopes. Japan Fisheries Resource Conservation Association, Tokyo. 436 pp. (In Japanese and English; various authors)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村　収（編）. 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
畑　晴陵・高山真由美・本村浩之. 2016. トカラ列島から得られたハチビキ科魚類ロウソクチビキ *Emmelichthys struhsakeri*. Nature of Kagoshima, 42: 207–211. [Hata, H., Takayama, M. and Motomura, H. 2016. First records of *Emmelichthys struhsakeri* (Perciformes: Emmelichthyidae) from the Tokara Islands, Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 42: 207–211. (In Japanese)]

園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese)]

Lutjanidae フエダイ科

Aprion kanekonis Tanaka, 1914　カネコフエダイ

Original description: Tanaka (1914): 300, pl. 82 (fig. 276).

田中茂穂. 1914. 日本産魚類図説 18: 295–318, pls. 86–90. [Tanaka, S. 1914. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 18: 295–318, pls. 86–90. (In Japanese and English)]

Holotype (available): ZUMT 3687, Nagasaki Market, Nagasaki Pref., Japan; Nov. 1913; collected by Ichiro Kaneko.（長崎市場 大正 2 年 11 月 金子一狼採集）

Remarks: There is no holotype designation in the original description. ZUMT 3687 is the only specimen whose scientific name and collected data match the records in the ZUMT specimen ledger. This specimen is the holotype (ICZN Art. 72.4.1.1, 73.1.2).

This specimen has an original cloth tag with "3687" and "Nagasaki. Sketch No. 265" written on it.

原記載にはホロタイプの指定がない。ZUMT 3687 は、ZUMT 標本台帳の記録に学名と収集データが一致した唯一の標本である。この標本はホロタイプである（ICZN Art. 72.4.1.1, 73.1.2）。この標本には「3687」、「長崎. 写生番号 265 号」と書かれたオリジナルの布タグが付いている。

Current status: Synonym of *Pristipomoides filamentosus* (Valenciennes, 1830) オオヒメ

久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis, 125, 6: 1–208.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Apsilus pluvius Tanaka, 1917　アメフエダイ

Original description: Tanaka (1917): 40.
田中茂穂. 1917. 日本産魚類の六新種. 動物学雑誌, 29 (340): 37–40. [Tanaka, S. 1917. Six new species of Japanese fishes. Zoological Magazine Tokyo, 29 (340): 37–40. (In Japanese)]

Holotype (lost): ZUMT 4677, Tokyo Market, Tokyo, Japan.（東京市場）

Remarks: There is no type series designation in the original description. There was only one specimen ZUMT 4677 from the ZUMT specimen ledger that matched the scientific name and collected data. ZUMT 4677 is a holotype (ICZN Art. 72.4.1, 73.1). No specimens have been identified at this time.
原記載にホロタイプの指定がない。ZUMT 標本台帳から学名や収集データに一致する唯一の標本 ZUMT 4677 があった。ZUMT 4677 がホロタイプである(ICZN Art. 72.4.1, 73.1)。現時点で標本は確認できていない。

Current status: Synonym of *Aprion virescens* Valenciennes, 1830　アオチビキ
久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 6: 1–208.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1-42.
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Lutjanus stellatus Akazaki, 1983　ホシフエダイ

Original description: Akazaki (1983): 367, figs. 2, 3B.
Akazaki, M. 1983. A new lutjanid fish, *Lutjanus stellatus*, from southern Japan and a related species, *L. rivulatus* (Cuvier). Japanese Journal of Ichthyology, 29 (4): 365–373.

Paratype (lost): ZUMT 54350 (1), Kushima City, Miyazaki Pref., Japan; 25 July 1973.
Paratype (available): ZUMT 62527 (1, previously M 7408), Udo, Nichinan City, Miyazaki Pref., Japan; 31 Aug. 1981.

Remarks: Paratype ZUMT 54350 has a registration number tag and has not been delivered to ZUMT. Its whereabouts are unknown. Paratype M7408 (Miyazaki University) was transferred and registered in ZUMT 62527.

パラタイプの ZUMT 54350 は、登録番号タグが保管されており, ZUMT には届いていない。その所在は不明。パラタイプ M7408 (Miyazaki University) は移管され、ZUMT 62527 に登録された。

Current status: Valid as *Lutjanus stellatus* Akazaki, 1983 フエダイ

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 6: 1–208.

中坊徹次・町田吉彦・山岡耕作・西田清徳(編). 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Tanaka, F. and Shinohara, G. 2018. Taxonomy and distribution of star snapper *Lutjanus stellatus* Akazaki, 1983 (Perciformes: Lutjanidae). Bulletin of the National Museum of Nature and Science, Series A, 44 (1): 29–40.

Paracaesio kusakarii Abe, 1960 シマアオダイ

Original description: Abe (1960): 56.

Abe, T. 1960. Description of a new lutjanid fish of the genus *Paracaesio* from Japan. Japanese Journal of Ichthyology, 8 (1–2): 56–62.

Holotype (available): ZUMT 51906, purchased at the Central Wholesale Market of Tokyo on June 20, 1950; undoubtedly fished by hook and line from the sea south of Tokyo and probably near Hachijo Island.

Paratype (available): ZUMT 51907 (1, skeleton), purchased at the same market as above on September 5, 1960; undoubtedly fished by hook and line from the sea south of Tokyo.

Paratype (available): ZUMT 51908 (1, skeleton), purchased at the same market as above on September 14, 1960; undoubtedly fished by hook and line from the sea south of Tokyo.

Current status: Valid as *Paracaesio kusakarii* Abe, 1960 シマアオダイ

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 6: 1–208.

岡村 収(編). 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo. 417–781 pp. (In Japanese and English; various authors)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Paracaesio sordidus Abe & Shinohara, 1962 ヨゴレアオダイ

Original description: Abe and Shinohara (1962):163, pl. 1 (fig. 1); figs. 1–5.
Abe, T. and Shinohara, S. 1962. Description of a new lutianid fish from the Ryukyu Islands. Japanese Journal of Ichthyology, 9 (1–6): 163–171, pl. 1.

Holotype (available): ZUMT 52043, Okinawa Island, Ryukyu Islands, Japan.
Paratype (available): ZUMT 51922 (1), same as holotype at March 1961.
Paratypes (available): ZUMT 52041 (1), ZUMT 52042 (1, skeleton), ZUMT 52044 (1, head bones only), same as holotype.

Remarks: The paratype ZUMT 51992 in the original description is a clerical error of ZUMT 51922.
原記載にあるパラタイプの ZUMT 51992 は ZUMT 51922 の誤記である.

Current status: Valid as *Paracaesio sordidus* Abe & Shinohara, 1962 ヨゴレアオダイ
久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds.). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 6: 1–208.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530pp. (In Japanese)]
江口慶輔・本村浩之. 2016. フエダイ科ヨゴレアオダイ *Paracaesio sordida* の 種子島と奄美大島からの記録. Nature of Kagoshima, 42: 219–223. (Eguchi, K. and Motomura, H. 2016. First records of *Paracaesio sordida* (Perciformes: Lutjanidae) from Tanega-shima and Amami-oshima islands, Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 42: 219–223. (In Japanese)]

Vegetichthys tumidus Tanaka, 1917 ヒワダイ

Original description: Tanaka (1917): 7.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Syntype (lost): ZUMT 7267 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko, Sep. 1915.(長崎市場 大正四年九月 金子一狼採集)
Syntype (lost): ZUMT 8091 (1), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.(紀伊國田濱 [和歌山県田辺市] 宇井縫蔵採集)

Remarks: There is no type series designation in the original description. From the ZUMT specimen ledger, two, ZUMT 7267 and ZUMT 8091, matched the scientific name "*Vegetichthys tumidus*". The ZUMT 7267 and ZUMT 8091 are syntypes (ICZN Art. 72.1.1, 72.4.1.1, 73.2). No specimens have been identified at this time.
原記載にはホロタイプの指定がない。ZUMT 標本台帳の記録から ZUMT 7267 と ZUMT 8091 の 2 標本が学名「*Vegetichthys tumidus*」に一致した。この ZUMT 7267 と ZUMT 8091 はシンタイプである(ICZN Art. 72.1.1, 72.4.1.1, 73.2)。現在、標本は確認できていない。

Current status: Synonym of *Paracaesio xanthura* (Bleeker, 1869) ウメイロ

久新健一郎・尼岡邦夫・仲谷一宏・井田斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 333 pp. (In Japanese and English; various authors)]

Allen, G. R. 1985. FAO species catalogue. Vol. 6. Snappers of the world. An annotated and illustrated catalogue of lutjanid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 6: 1–208.

中坊徹次・町田吉彦・山岡耕作・西田清徳(編). 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1-42.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

畑 晴陵・本村浩之. 2021. 甑島列島初記録のウメイロ(スズキ目フエダイ科). Nature of Kagoshima, 47: 209–214. [Hata, H. and Motomura, H. 2021. First record of *Paracaesio xanthura* (Perciformes: Lutjanidae) from the Koshiki Islands, East China Sea, Japan. Nature of Kagoshima, 47: 209–214. (In Japanese with English abstract)]

Caesionidae タカサゴ科

Pterocaesio* (*Squamosicaesio*) *randalli Carpenter, 1987

Original description: Carpenter (1987): 35, pls. 3D, 7F.

Carpenter, K. E. 1987. Revision of the Indo-Pacific fish family Caesionidae (Lutjanoidea), with descriptions of five new species. Indo-Pacific Fishes, 15: 1–56, pls. 1–7.

Paratype (available): ZUMT 55404 (1), Lapu-Lapu City Market, Mactan Island, (E of Cebu Island), Philippine Islands; 27 May 1981; collected by K. E. Carpenter.

Current status: Valid as *Pterocaesio randalli* Carpenter, 1987

Carpenter, K. E. 1988. FAO species catalog. Vol. 8. Fusilier fishes of the World. An annotated and illustrated catalogue of caesionid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 8: 1–75, pls. 1–5.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Pterocaesio* (*Squamosicaesio*) *tessellate Carpenter, 1987

Original description: Carpenter (1987): 47, pls. 5A, 7J.

Carpenter, K. E. 1987. Revision of the Indo-Pacific fish family Caesionidae (Lutjanoidea), with descriptions of five new species. Indo-Pacific Fishes, 15: 1–56, pls. 1–7.

Paratype (available): ZUMT 55405 (1), 8 miles from York Breakers on a 63° bearing, coral reef; W Palawan, Philippines; 7 Feb. 1985; collected by K.E. Carpenter.

Current status: Valid as *Pterocaesio tessellate* Carpenter, 1987

Carpenter, K. E. 1988. FAO species catalog. Vol. 8. Fusilier fishes of the World. An annotated and illustrated catalogue of caesionid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 8: 1–75, pls. 1–5.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Pterocaesio* (*Squamosicaesio*) *trilineata Carpenter, 1987

Original description: Carpenter (1987): 43, pls. 4D, 7I.

Carpenter, K. E. 1987. Revision of the Indo-Pacific fish family Caesionidae (Lutjanoidea), with descriptions of five new species. Indo-Pacific Fishes, 15: 1–56, pls. 1–7.

Paratypes (available): ZUMT 55406 (1), Dravuni Island; Kandavu; Fiji; 26 Mar. 1983.

Current status: Valid as *Pterocaesio trilineata* Carpenter, 1987 イッセンタカサゴ

Carpenter, K. E. 1988. FAO species catalog. Vol. 8. Fusilier fishes of the World. An annotated and illustrated catalogue of caesionid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 8: 1–75, pls. 1–5.

Nemipteridae イトヨリダイ科

Leptoscolopsis nagasakiensis Tanaka, 1915 イトタマガシラ

Original description: Tanaka (1915): 365, pl. 98 (fig. 308).

田中茂穂. 1915. 日本産魚類図説, 20: 343–370, pls. 96–100. [Tanaka, S. 1915. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 20: 343–370, pls. 96–100. (In Japanese and English)]

Holotype (available): ZUMT 3689, Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.（長崎市場 金子一狼採集）

Remarks: The original description specified ZUMT 3687 as the holotype. This specimen has an original cloth tag with the words "3689" and "Nagasaki, Sketch No. 265".

原記載はホロタイプに ZUMT 3687 を指定した。この標本には「3689」、「長崎. 写生番号 265 号」と書かれたオリジナルの布タグが付いている。

Current status: Valid as *Pentapodus nagasakiensis* (Tanaka, 1915) イトタマガシラ

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds.). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Russell, B. C. 1990. FAO species catalog. Vol. 12. Nemipterid fishes of the world. (Threadfin breams, whiptail breams, monocle breams, dwarf monocle breams, and coral breams). Family Nemipteridae. An annotated and illustrated catalog of Nemipterid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 12: 1–149, pls. 1–8.
Larson, H. K., Williams, R. S. and Hammer, M. P. 2013. An annotated checklist of the fishes of the Northern Territory, Australia. Zootaxa, 3696 (1): 1–293.
中坊徹次（編）. 2013. 日本海産魚類検索全種の同定 I–III, 第三版. 東海大学出版会、秦野. 2530 pp. [Nakabo, T. (ed.). 2013. Fishes of Japan with pictorial keys to the species I-III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
藤原恭司・畑　晴陵・本村浩之. 2014. 標本に基づく鹿児島県のイトヨリダイ科魚類相. Nature of Kagoshima, 40: 59–67. [Fujiwara, K., Hata, H. and Motomura, H. 2014. Nemipterid fishes of Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 40: 59–67. (In Japanese)]
Allen, G. R., Erdmann, M. V. and Brooks, W. M. 2018. *Pentapodus berryae*, a new species of Whiptail (Pisces: Nemipteridae) from Papua New Guinea. aqua, International Journal of Ichthyology, 24 (2): 81–88.

Nemipterus matsubarae Jordan & Evermann, 1902

Original description: Jordan and Evermann (1902): 346, fig. 18.
Jordan, D. S. and B. W. Evermann. 1902. Notes on a collection of fishes from the island of Formosa. Proceedings of the United States National Museum vol. 25 (1289): 315–368.

Holotype (lost): ZUMT 5018, Giran [Yilan], Taiwan.
Paratype (lost): ZUMT uncatalogued (1), Giran [Yilan], Taiwan.

Remarks: There are two specimens in the original description. The holotype is originally described as "Type.—No. 5071, specimen 10.6 inches long, from Giran, Formosa, returned to the Imperial University of Tokyo". The other is a paratype with "8 inches long" and "One specimen 8 inches long, from Giran, Formosa". ZUMT 5018 in the ZUMT specimen ledger says "*Euthyopteroma matubarae* 1 piece" and "Taiwan Type I.U. Giran". "I.U." is an abbreviation for "Imperial University". This specimen ZUMT5018 is holotype. On the other hand, for the paratype, there is no record of the specimen corresponding to the ZUMT specimen ledger, and there is no specimen that matches the description in the ZUMT collection.

原記載には 2 標本がある。ホロタイプは「Type.—No. 5071, specimen 10.6 inches long, from Giran, Formosa, returned to the Imperial University of Tokyo」と原記載にある。もう 1 つは「8 inches long」,「One specimen 8 inches long, from Giran, Formosa」と書かれており、パラタイプとなる。ZUMT 標本台帳の ZUMT 5018 には、「*Euthyopteroma matubarae* 一個」、「台湾 Type I.U. Giran」と書かれている。「I.U.」は「Imperial University」の略号である。この標本 ZUMT5018 がホロタイプである(ICZN Art. 72.4.1, 73.1)。一方，パラタイプは ZUMT 標本台帳に該当する標本の記録がなく、ZUMT コレクションにも記載に一致する標本がない。

Current status: Synonym of *Nemipterus virgatus* (Houttuyn, 1782) イトヨリダイ
Russell, B. C. 1990. FAO species catalog. Vol. 12. Nemipterid fishes of the world. (Threadfin breams, whiptail breams, monocle breams, dwarf monocle breams, and coral breams). Family Nemipteridae. An annotated and illustrated catalog of Nemipterid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 12: 1–149, pls. 1–8.
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds.). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本海産魚類検索全種の同定 I–III, 第三版. 東海大学出版会、秦野. 2530 pp. [Nakabo, T. (ed.). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

藤原恭司・畑　晴陵・本村浩之. 2014. 標本に基づく鹿児島県のイトヨリダイ科魚類相. Nature of Kagoshima, 40: 59–67. [Fujiwara, K., Hata, H. and Motomura, H. 2014. Nemipterid fishes of Kagoshima Prefecture, southern Japan. Nature of Kagoshima, 40: 59–67. (In Japanese)]

Lethrinidae フエフキダイ科

Gymnocranius elongatus Senta, 1973　オナガメイチダイ

Original description: Senta (1973): 135, figs. 1–5.

Senta, T. 1973. A new sparoid fish, *Gymnocranius elongatus*, from the southern South China Sea. Japanese Journal of Ichthyology, 20 (3): 135–144.

Paratypes (lost): ZUMT 52946–ZUMT 52949 (4), Sarawak state, Borneo, East Malaysia (3°31'–4°32'N, 109°42'–110°23'E); 67–114 m depth; 21–22 Oct. 1971.

Remarks: The specimen's whereabouts are unknown, as the paratype's registration number tag has been kept and the specimen has not reached ZUMT.

パラタイプの登録番号タグが保管さており、標本が ZUMT に届いていないため、標本の所在は不明。

Current status: Valid as *Gymnocranius elongatus* Senta, 1973 オナガメイチダイ

久新健一郎・尼岡邦夫・仲谷一宏・井田　斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]

Carpenter, K. E. and Allen, G. R. 1989. FAO species catalogue. Vol. 9. Emperor fishes and large-eye breams of the world (family Lethrinidae). An annotated and illustrated catalogue of lethrinid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 9: 1–118, Pls. 1–8.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Lethrinus rubrioperculatus Sato, 1978　ホホアカクチビ

Original description: Sato (1978): 58, pl. 12 (fig. A); fig. 34.

Sato, T. 1978. A synopsis of the sparoid fish genus *Lethrinus*, with the description of a new species. Bulletin of the University Museum, University of Tokyo, 15: 1–70, pls. 1–12.

Holotype (available): ZUMT 53991, Naha Fish Market, Okinawa Pref., Ryukyu Islands, Japan; 1 April 1977.

Paratype (available): ZUMT 52897 (1), Little Andaman Island, Andaman Islands, India, Indian Ocean.

Paratype (available): ZUMT 52436 (1), ZUMT 52525 (1), Ishigaki Island, Okinawa Pref., Japan.

Paratype (lost): ZUMT 52601 (1), Hachijo Island, Izu Islands, Tokyo, Japan.

Paratypes (lost): ZUMT 52614 (1), ZUMT 52618–ZUMT 52619 (2), ZUMT 52623–ZUMT 52627 (5), Ogasawara Islands, Japan.

Paratypes (lost): ZUMT 52686–ZUMT 52693 (8), Louisiade Achipelago, Milne Bay, Papua New Guinea.

Paratype (lost): ZUMT 52906 (1), Little Andaman Island, Andaman Islands, India, Indian Ocean.

Paratypes (lost): ZUMT 53996 (1), Tutuila Island, Samoa Islands, Territory of American Samoa.

Remarks: The original specimen abbreviation UMUTZ (Department of Zoology, the University Museum, the University of Tokyo) and ZUMT (Department of Zoology, the University Museum, the University of Tokyo) are the same organization.

原記載にある略号 UMUTZ (Department of Zoology, the University Museum, University of Tokyo)は、ZUMT(Department of Zoology, the University Museum, the University of Tokyo)と同じである。

Current status: Valid as *Lethrinus rubrioperculatus* Sato, 1978 ホオアカクチビ

久新健一郎・尼岡邦夫・仲谷一宏・井田 斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 335 pp. (In Japanese and English; various authors)]

Carpenter, K. E. and Allen, G. R. 1989. FAO species catalogue. Vol. 9. Emperor fishes and large-eye breams of the world (family Lethrinidae). An annotated and illustrated catalogue of lethrinid species known to date. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 9: 1–118, pls. 1–8.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Sparidae タイ科

Parargyrops edita Tanaka, 1916 ヒレコダイ

Original description: Tanaka (1916): 141.

田中茂穂. 1916. 日本産魚類の三新種. 動物学雑誌, 28 (330): 141–144. [Tanaka, S. 1916. Three new species of Japanese fishes. Zoological Magazine Tokyo, 28 (330): 141–144. (In Japanese)]

Lectotype (available): ZUMT 7089, Tokyo Market, Tokyo, Japan. (Probably came from Korea or Near Bakan [Shimonoseki, Yamaguchi Pref.]); collected by Shigeho Tanaka.（東京市場 おそらく朝鮮または馬関附近 [山口県下関] 田中茂穂採集）

Paralectotypes (available): 25 specimens

ZUMT 12591 (1), ZUMT 12594 (1), ZUMT 12595 (1), ZUMT 12597– ZUMT 12602 (6), ZUMT 12604 (1), ZUMT 12605 (1), ZUMT 12607 (1), ZUMT 12614 (1), ZUMT 12616 –ZUMT 12618 (3), ZUMT 12621 – ZUMT12624 (4), ZUMT –ZUMT 12631 (3), same as holotype.

Paralectotypes (lost): ZUMT 12603 (1), ZUMT 12634 (1), same as holotype.

Remarks: There is no holotype designation in the original description In the original description, "The third and fourth spines of the dorsal fin may be long, and sometimes the fifth spine is also long." indicate multiple specimens. There were 28 specimens matching the scientific name and collection data in the ZUMT specimen ledger. All of these specimens are syntypes (ICZN Art. 72.4.1, 73.2).

In "Figures and descriptions of the fishes of Japan" (24: 425–428, pl. 116, fig. 342) by Tanaka (1916), ZUMT 7089 is described and illustrated as the holotype. This act is the selection of the name–bearing type (here, the holotype) from the syntypes, and is regarded as the designation of the lectotype rather than the selection of the holotype (ICZN 74.5). ZUMT 7089 is considered to be lectotype, not holotype, and the other 27 specimens are paralectotypes. ZUMT 7089 has a cloth tag of "7089" and "Sketch No. 287".

原記載にホロタイプの指定はない。原記載では、「背鰭第 3 棘及び第 4 棘頗長く時に第 5 棘も頗長きことあり」は、複数の標本を示している。ZUMT 標本台帳には学名や収集データに一致する標本が 28 個体あった。それら全ての標本はシンタイプである (ICZN Art. 72.4.1, 73.2)。

田中(1916)の 日本産魚類図説(24: 425–428, pl. 116, fig. 342) では、ZUMT 7089 をホロタイプとして記載、図示した。この行為は、シンタイプの中から担名タイプ（ここでは、ホロタイプ）の選定となり、ホロタイプの固定ではなくレクトタイプの指定と見なされる(ICZN Art. 74.5)。ZUMT 7089 はホロタイプではなく、レクトタイプと見なされ、その他の 27 標本はパラレクトタイプとなる。レクトタイプ ZUMT 7089 には「7089」と「写生番号 287 号」の布タグが付いている。

Current status: Valid as *Parargyrops edita* Tanaka, 1916 ヒレコダイ
田中茂穂. 1916. 日本産魚類図説, 24: 419–440, pls. 116–120. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 24: 419–440, pls. 116–120. (In Japanese and English)]
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. 2019. An annotated checklist of the fishes of the family Sparidae. FishTaxa, 4 (2): 47–98.

Rhabdosargus thorpei Smith, 1979

Original description: Smith (1979): 704, fig. 1A.
Smith, M. M. 1979. *Rhabdosargus thorpei,* a new sparid fish from South Africa, with a key to the species of *Rhabdosargus*. Copeia, 1979 (4): 702–709.

Paratype (available): ZUMT 54143 (1), from 100 km south of Durban (ca 30°S, 31°E), Republic of South Africa.

Current status: Valid as *Rhabdosargus thorpei* Smith, 1979
Heemstra, P. C. and Heemstra, E. 2004. Coastal fishes of southern Africa. NISC and SAIAB. xxiv + 488 pp.
Fricke, R., Mahafina, J., Behivoke, F., Jaonalison, H., Léopold, M. and Ponton, D. 2018. Annotated checklist of the fishes of Madagascar, southwestern Indian Ocean, with 158 new records. FishTaxa, 3 (1): 1–432.
Parenti, P. 2019. An annotated checklist of the fishes of the family Sparidae. FishTaxa, 4 (2): 47–98.

Sciaenidae　ニベ科

Sciaena aurea Tanaka, 1916　キグチ、キングチ

Original description: Tanaka (1916): 27.
田中茂穂. 1916. 日本産魚類の四新種. 動物学雑誌, 28 (327): 26–28. [Tanaka, S. 1916. Four new species of Japanese fishes. Zoological Magazine Tokyo, 28 (327): 26–28. (In Japanese)]

Syntypes (available): ZUMT 6818–6819 (2), Nagasaki Market, Nagasaki Pref., Japan; Oct. 1915; collected by Ichiro Kaneko.（長崎市場 大正 4 年 10 月 金子一狼採集）
Syntype (available): ZUMT 7325 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.（長崎市場 金子一狼採集）

Remarks: There is no holotype designation in the original description. There were multiple records in the ZUMT specimen ledger that matched the scientific name and collected data. One record is "6818–6819 *Sciaena aurea* n. sp. 0735 Kingchi, October 1914, Nagasaki, Ichiro Kaneko" and "7325 *Sciaena aurea* 0605 Kingchi Nagasaki, Ichiro Kaneko". The three specimens ZUMT 6818, ZUMT 6819 and ZUMT 7325 are syntypes (ICZN Art. 72.4.1, 73.2.).
原記載にホロタイプの指定はない。ZUMT 標本台帳に学名と採集データに一致した複数の記録があった。

1つの記録は「6818–6819 *Sciaena aurea* n. sp. 0735 キングチ 大正 4 年 10 月、長崎 金子一狼」の 2 標本と「7325 *Sciaena aurea* 0605 キングチ 長崎 金子一狼」の記載である。ZUMT 6818、ZUMT 6819 と ZUMT 7325 の 3 標本は、シンタイプである(ICZN Art. 72.4.1, 73.2)。

Current status: Synonym of *Larimichthys polyactis* (Bleeker, 1877) キグチ

Trewavas, E. 1977. The sciaenid fishes (croakers or drums) of the Indo-West-Pacific. Transactions of the Zoological Society of London, 33 (4): 253–541+ frontispiece, pls. 1–14.

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

山田梅芳・田川 勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Seah, Y. G., Hanafi, N., Mazlan, A. G. and Chao, N. L. 2015. A new species of *Larimichthys* from Terengganu, east coast of Peninsular Malaysia (Perciformes: Sciaenidae). Zootaxa, 3956 (2): 271–280.

Parenti, P. 2020. An annotated checklist of fishes of the family Sciaenidae. Journal of Animal Diversity, 2 (1): 1–92.

Sciaena distincta Tanaka, 1916 チョオセングチ

Original description: Tanaka (1916): 26.

田田中茂穂. 1915. 日本産魚類の二新種. 動物学雑誌, 27 (326): 615–616. [Tanaka, S. 1915. Ten new species of Japanese fishes. Zoological Magazine Tokyo, 27 (326): 615–616. (In Japanese)]

Holotype (available): ZUMT 6811, Nagasaki Market, Nagasaki Pref., Japan; Oct. 1915; collected by Ichiro Kaneko.(長崎市場 大正 4 年 10 月 金子一狼採集)

Remarks: There is no description of holotype in the original description. ZUMT 6811 is the only specimen in the ZUMT specimen ledger that matches the scientific name and collected data of this species. The ZUMT 6811 is holotype (ICZN Art. 72.4.1.1, 73.1.2).

原記載にはホロタイプの指定がない。ZUMT 6811 は、ZUMT 標本台帳に原記載の学名や収集データが一致する唯一の標本である。ZUMT 6811 はホロタイプである(ICZN Art. 72.4.1.1, 73.1.2)。

Current status: Valid as *Johnius distinctus* (Tanaka, 1916) アブラグチ

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Sasaki, K. and Amaoka, K. 1989. *Johnius distinctus* (Tanaka, 1916), a senior synonym of *J. tingi* (Tang, 1937) (Perciformes, Sciaenidae). Japanese Journal of Ichthyology, 35 (4): 466–468.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Chao, N. L., Chang, C.-W., Chen, M.-H., Guo, C.-C., Lin, B.-A., Liou, Y.-Y., Shen, K.-N. and Liu, M. 2019. *Johnius taiwanensis*, a new species of Sciaenidae from the Taiwan Strait, with a key to *Johnius* species from Chinese waters. Zootaxa, 4651 (2): 259–270.

Parenti, P. 2020. An annotated checklist of fishes of the family Sciaenidae. Journal of Animal Diversity, 2 (1): 1–92.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Sciaena goma Tanaka, 1915 ゴマニベ

Original description: Tanaka (1915): 615.
田中茂穂. 1915. 日本産魚類の二新種. 動物学雑誌, 27 (326): 615–616. [Tanaka, S. 1915. Two new species of Japanese fishes. Zoological Magazine Tokyo, 27 (326): 615–616. (In Japanese)]

Lectotype (available): ZUMT 6392, Nagasaki Market, Nagasaki Pref., Japan; Jan. 1915; collected by Ichiro Kaneko.(長崎市場 大正 4 年 1 月 金子一狼採集)
Paralectotype (lost): ZUMT 8175 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.(長崎市場 金子一狼採集)

Remarks: There is no holotype designation in the original description. From the records in the ZUMT specimen ledger, two items, ZUMT 6392 and ZUMT 8175, which match the scientific name and collection data, were matched. These ZUMT 6392 and ZUMT 8175 are syntypes (ICZN Art. 72.4.1, 73.2). In ZUMT 6392 of the ZUMT specimen ledger, there was a note of "only two fish were obtained this winter (1915.1)".
In Tanaka's (1916) Figures and descriptions of the fishes of Japan (22: 392–395, pl. 107, fig. 327), ZUMT 6392 was re–described and illustrated as a type specimen. This act is the selection of the name–bearing type (here, the holotype) from the syntypes, and is regarded as the designation of the lectotype rather than the fixed holotype (ICZN Art. 74.5). ZUMT 6392 is considered lectotype, not holotype, and ZUMT 8175 is a paralectotype (ICZN Art. 74.1.3). The lectotype ZUMT 6392 has two cloth tags, "6392" and "Sketch No. 272".
原記載にホロタイプの指定がない。ZUMT 標本台帳の記録に学名や収集データに一致する ZUMT 6392 と ZUMT 8175 の2つが一致した。これら ZUMT 6392 と ZUMT 8175 は、シンタイプである(ICZN Art. 72.4.1, 73.2)。ZUMT 標本台帳の ZUMT 6392 に「今冬 2 尾を得たるのみ(1915.1)」の書き込みがあった。
田中(1916)の日本産魚類図説(22: 392–395, pl. 107, fig. 327) では、ZUMT 6392 をホロタイプとして再記載、図示した。この行為は、シンタイプの中から担名タイプ(ここでは、ホロタイプ)の選定となり、ホロタイプの固定ではなくレクトタイプの指定と見なされる(ICZN Art. 74.5)。ZUMT 6392 はホロタイプではなく、レクトタイプと見なされ、ZUMT 8175 はパラレクトタイプとなる (ICZN Art. 74.1.3)。レクトタイプ ZUMT 6392 に「6392」と「写生番号 272 号」の 2 つの布タグが付いている。

Current status: Synonym of *Protonibea diacanthus* (Lacepède, 1802) ゴマニベ
田中茂穂. 1916. 日本産魚類図説, 22: 383–398, pls. 106–110. [Tanaka, S. 1916. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 22: 383–398, pls. 106–110. (In Japanese and English)]
Trewavas, E. 1977. The sciaenid fishes (croakers or drums) of the Indo-West-Pacific. Transactions of the Zoological Society of London, 33 (4): 253–541+ frontispiece, pls. 1–14.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
山田梅芳・田川 勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Kottelat, M. 2013. The fishes of the inland waters of Southeast Asia: a catalogue and core bibliography of the

fishes known to occur in freshwaters, mangroves and estuaries. Raffles Bulletin of Zoology, Supplement, 27: 1–663.
Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.
Parenti, P. 2020. An annotated checklist of fishes of the family Sciaenidae. Journal of Animal Diversity, 2 (1): 1–92.
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Mullidae ヒメジ科

Pseudupeneus megalops Tanaka, 1917 フクロウヒメジ

Original description: Tanaka (1917): 8.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Syntypes (available): ZUMT 7256 (1), ZUMT 7258–ZUMT 7260 (3), Nagasaki Market, Nagasaki Pref., Japan; Dec. 1915; collected by Ichiro Kaneko.（長崎市場 大正 4 年 12 月 金子一狼採集）
Syntype (lost): ZUMT 7257 (1), same as holotype.

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, there was a record of "7256–7260 *Pseudupeneus megalops* n. sp. Nagasaki, December, Ichiro Kaneko" whose scientific name and collection data matched. These specimens are syntypes (ICZN Art. 72.4.1, 73.2). ZUMT 7259 had a writing by Tanaka "7259, scales 36, no teeth on vomer or palatine, gill–rakers 6 + 23/6 + 23". ZUMT 7259 has two cloth tags, "7259" and "Sketch No. 317".

原記載にホロタイプの指定がない。ZUMT 標本台帳では学名と収集データが一致した「7256–7260 *Pseudupeneus megalops* n. sp. 長崎 12 月 金子一狼」の記録があった。これらの標本はシンタイプである (ICZN Art. 72.4.1, 73.2)。ZUMT 7259 には田中の直筆の書き込み「7259, scales 36, no teeth on vomer or palatine, gill–rakers 6+23/6+23」があった。ZUMT 7259 には「7259」と「写生番号 317 号」の 2 つの布タグが付いている。

Current status: Synonym of *Mulloidichthys vanicolensis* (Valenciennes, 1831) アカヒメジ
岡田彌一郎・松原喜代松. 1938. 日本産魚類檢索. 三省堂, 東京. 584 pp. 113. pls [Okada, Y. and Matsubara, K. 1938. Keys to the fishes and fish–like animals of Japan. Including Kuril Islands, southern Sakhalin, Bonin Islands, Ryukyu Islands, Korea and Formosa. Sansei–do, Tokyo. 584 pp., 113 pls. (In Japanese)]
松原喜代松. 1955. 魚類の形態と検索 I. 石崎書店, 東京. xii + 790 pp. [Matsubara, K. 1955. Fish morphology and hierarchy, Part I. Ishizaki-Shoten, Tokyo. xii + 790 pp. (In Japanese)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Koeda, K., Hibino, Y., Yoshida, T., Kimura, Y., Miki, R., Kunishima, T., Sasaki, D., Furukawa, T., Sakurai, M., Eguchi, K., Suzuki, H., Inaba, T., Uejo, T., Tanaka, S., Fujisawa, M., Wada, H. and Uchiyama, T. 2016. Annotated checklist of fishes of Yonaguni-jima Island, the westernmost island in Japan. The Kagoshima University Museum, Kagoshima, v + 119 pp., 1 pl.

Koeda, K., Maekawa, T., Wada, H. and Motomura, H. 2016. Records of the orange goatfish, *Mulloidichthys pflugeri* (Teleostei: Mullidae), from Amami–Oshima and Yonaguni-jima Iislands in the Ryukyu Archipelago, southern Japan. South Pacific Studies, 37 (1): 1–8.

Pempheridae ハタンポ科

Pempheris nyctereutes Jordan & Evermann, 1902

Original description: Jordan and Evermann (1902): 339, fig. 14.

Jordan, D. S. and Evermann, B. W. 1902. Notes on a collection of fishes from the island of Formosa. Proceedings of the United States National Museum, 25 (1289): 315–368.

Holotype (available): ZUMT 42902, Hokoto (Pescadores Islands) [Pengfu], Taiwan.

Remarks: The original description says "Type–No. 286, a specimen 8 inches long from Hokoto, Formosa, Returned to the Imperial University." The ZUMT specimen ledger has a description of "42902 *Pempheris nyctereutes*, Type". ZUMT 42902 had a metal tag engraved with the same number "286" as "No. 286" in the original description. This specimen is the holotype.

"Hokoto", which is written in the original description as a collection site for specimens, is described by Ho and Shaw (2011) as "Hokuto" in Taipei City. However, "Hokoto" is the Japanese name for Penghu Islands, and Jordan and Evermann (1902) clearly states that "Hokoto" is "Pescadores" (another name for Penghu Islands).

原記載に「Type－No. 286, a specimen 8 inches long from Hokoto, Formosa, Returned to the Imperial University.」とある。ZUMT 標本台帳には、「42902 *Pempheris nyctereutes*, Type」の記述がある。標本 ZUMT 42902 には、原記載にある「No. 286」と同じ番号「286」と刻印された金属タグが付いていた。この標本がホロタイプである(ICZN Art. 72.4.1, 73.1)。

原記載にある採集場所の"Hokoto"は、Ho and Shaw (2011)により台北市の"Hokuto"であるとされた。しかし、"Hokoto"は澎湖諸島の日本名であり、Jordan and Evermann（1902）にも"Hokoto"は“Pescadores（＝澎湖諸島の別名）”であることが明記されている。

Current status: Valid as *Pempheris nyctereutes* Jordan & Evermann, 1902 タカサゴハタンポ

Tominaga, Y. 1963. A revision of the fishes of the family Pempheridae of Japan. Journal of the Faculty of Science, University of Tokyo. Section IV Zoology, 10 (1): 269–290.

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Pempheris xanthopterus Tominaga, 1963 ミナミハタンポ

Original description: Tominaga (1963): 286, figs. 12–13.

Tominaga, Y. 1963. A revision of the fishes of the family Pempheridae of Japan. Journal of the Faculty of Science, University of Tokyo. Section IV Zoology, 10 (1): 269–290.

Holotype (available): ZUMT 51967, Manazuru, Kanagawa Pref., Japan; 25 Sept. 1960.

Paratypes (available): ZUMT 8098 (1), ZUMT 8326–ZUMT 8327 (2), ZUMT 20311–ZUMT 20314 (4), Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田濱 [和歌山県田辺市] 宇井縫蔵採集）
Paratype (available): ZUMT 18643 (1), Suzaki, Kochi Pref., Japan.
Paratypes (available): ZUMT 19138 (1), ZUMT 19166 (1), ZUMT 19168 (1), ZUMT 41871–ZUMT 41873 (3), Hachijo–jima Island, Japan.
Paratypes (available): ZUMT 24054 (1), ZUMT 28600 (1), Tanega-shima, Kagoshima Pref., Japan; collected by A. Kuroiwa.
Paratype (available): ZUMT 37909 (1), Shizuoka Pref., Japan.
Paratype (available): ZUMT 48291 (1), Taniyama, Kagoshima Pref., Japan; July 20, 1930.
Paratype (available): ZUMT 49143 (1), Koajiro, Misaki, Kanagawa Pref., Japan; collected by Ichiro Tomiyama, Aug. 18, 1955.（神奈川県三崎小網代 昭和 30 年 8 月 15 日 冨山一郎採集）
Paratypes (available): ZUMT 49144–ZUMT 49145 (2), Koajiro, Misaki, Kanagawa Pref., Japan; Aug. 19, 1955; collected by Ichiro Tomiyama.（神奈川県三崎小網代 昭和 30 年 8 月 19 日 冨山一郎採集）
Paratype (available): ZUMT 49438 (1), Misaki, Kanagawa Pref., Japan; collected by Ichiro Tomiyama.（神奈川県三崎 冨山一郎採集）
Paratypes (available): ZUMT 49925 (1), ZUMT 49952 (1), ZUMT 50215–ZUMT 50217 (3), Madara–jima, Goto Islands, Nagasaki Pref., Japan; 20 Oct. 1953; collected by Ichiro Tomiyama.（五島列島斑島 [長崎県北松浦群小値賀町斑島]、1953 年 10 月 20 日、富山一郎）
Paratype (available): ZUMT 50060 (1), Miireaku, Fukue-jima Island, Goto Islands, Nagasaki Pref., Japan; 13 Oct. 1953.（五島列島福江島三井楽町［長崎県南松浦郡三井楽町］）
Paratypes (available): ZUMT 52161–ZUMT 52164 (4), Totoro, Nobeoka City, Miyazaki Pref., Japan; 4 Aug. 1960; set net.（宮崎県延岡市土々呂）
Paratype (available): ZUMT 52325 (1, skeleton), Taiho, Goto Islands, Nagasaki Pref., Japan.（長崎県五島列島、）
Paratype (available): ZUMT 55050 (1, ex P-520), Manazuru, Kanagawa Pref., Japan; 15–20 Oct. 1960.（神奈川県真鶴）
Paratypes (available): ZUMT 55791 (8), ZUMT 55796 (20), Toushiki, Izu-oshima Island, Japan.（伊豆大島トウシキ）
Paratypes (available): ZUMT P-117 (6), tide pool, Kominato, Chiba Pref., Japan.
Paratypes (available): ZUMT P-118 (4), tide pool at Matsugahama, Kominato, Chiba Pref., Japan.

Remarks: The original description does not include the paratype registration number. Koeda et al. (2022) determined the paratype registration number based on the place of collection, date and other factors.
原記載にはパラタイプの登録番号が記述されていない。Koeda et al.（2022）は、パラタイプの登録番号を収集地と日付などに基づいて決定した。

Current status: Valid as *Pempheris xanthoptera* Tominaga, 1963 ミナミハタンポ
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Koeda, K., Aizawa, M., Sakamoto, K. and Ueshima, R. 2022. Report on specimens of the family Pempheridae (Teleostei: Perciformes) deposited in the Department of Zoology, the University Museum, the University of Tokyo. The University Museum, the University of Tokyo Material Reports No. 128, Catalogue of the fish collection deposited in the University Museum, the University of Tokyo, 1: 1–16.

Drepaneidae スダレダイ科

Drepane undecimfasciata Tanaka, 1917 スダレダイ

Original description: Tanaka (1917): 9.

田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (lost): ZUMT 7263, Nagasaki Market, Nagasaki Pref., Japan; Oct. 1915; collected by Ichiro Kaneko. （長崎市場 大正 4 年 9 月 金子一狼採集）

Remarks: There is no holotype designation in the original description. In ZUMT 7263 of the ZUMT specimen ledger, there is the only record that matches the original description, "7263 *Drepane undecimfasciata* n. sp. Nagasaki July Kaneko Ichiro". This ZUMT 7263 is the holotype (ICZN Art. 72.4.1, 73.1).

ZUMT 7263 in the ZUMT specimen ledger had "7263, D.I, VIII, 21 A. III, 18" written in it, and the content of this entry was consistent with the original description. Since this specimen cannot be confirmed at this time, it was judged to be lost.

原記載にはホロタイプの指定がない。ZUMT 標本台帳の ZUMT 7263 に「7263 *Drepane undecimfasciata* n. sp. 長崎 七月 金子一狼」と原記載の内容と一致した唯一の記録があった。この ZUMT 7263 がホロタイプである (ICZN Art. 72.4.1, 73.1) 。

ZUMT 標本台帳の ZUMT 7263 には「7263, D. I, VIII, 21 A. III, 18」と書き込みがあり、内容は原記載の内容と一致した。現時点でこの標本は確認できないため、失われたと判断した。

Current status: Synonym of *Drepane longimana* (Bloch & Schneider, 1801) スダレダイ

久新健一郎・尼岡邦夫・仲谷一宏・井田 斉・谷野保夫・千田哲資. 1982. 南シナ海の魚類. 海洋水産資源開発センター, 東京. 335 pp. [Kyushin, K., Amaoka, K., Nakaya, K., Ida, H., Tanino, Y. and Senta, T. 1982. Fishes of the South China Sea. Japan Marine Fishery Resource Research Center, Tokyo, 333 pp. (In Japanese and English; various authors)]

山田梅芳・田川 勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

Heemstra, P. C. 2001. Drepanidae. Pp. 3221–3223 in Carpenter, K. E. and Niem, V. H. (eds.) FAO species identification guide for fishery purposes. The living marine resources of the western central Pacific. Vol. 5. Bony fishes part 3 (Menidae to Pomacentridae). FAO, Rome.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Psomadakis, P. N., Osmany, H. B. and Moazzam, M. 2015. Field identification guide to the living marine resources of Pakistan. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, Rome. x + 386 pp., pls. 1–42.

Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Chaetodontidae チョウチョウウオ科

Coradion fulvocinctus Tanaka, 1918 タキゲンロク

Original description: Tanaka (1918): 223.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Holotype (available): ZUMT 59858, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田濱 [和歌山県田辺市] 宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. There are no specimens that match the scientific name "*Coradion fulvocinctus*" and "Tanabe, Nuizo" in the records of the ZUMT specimen ledger. Later, the specimens of *Coradion fulvocinctus* found in the ZUMT collection were of the same body size as the original. This specimen is a holotype (ICZN Art. 73.1.2). Registered in ZUMT 59858 of the ZUMT collection. In addition, there was ZUMT 8317 recorded as "*Coradion fulvocinctus* Tanaka, Nagasaki, Kaneko Ichiro" in the ZUMT specimen ledger. This specimen is not included in the type series of this species (ICZN Art. 72.4) because the original description states that "it seems to be this species but has 8 spines on its dorsal fin and is collected by Mr. Kaneko Nagasaki."

原記載にホロタイプの指定がない。ZUMT 標本台帳の記録には学名「Coradion *fulvocinctus*」と「田辺 宇井縫蔵」に一致する標本はなく。その後、ZUMT コレクションから発見した *Coradion fulvocinctus* の標本は、体のサイズが原記載と一致した。この標本はホロタイプである (ICZN Art.)。ZUMT コレクションの ZUMT 59858 に登録した。

また、ZUMT 標本台帳に「*Coradion fulvocinctus* Tanaka、長崎、金子一狼」と記録された ZUMT 8317 があった。原記載に「本種と覚しきも背鰭に8棘あるもの長崎金子一狼氏によりて採集される」とあり、この標本は本種のタイプシリーズに含まれない (ICZN Art. 72.4)。

Current status: Synonym of *Coradion altivelis* McCulloch, 1916　タキゲンロクダイ

Burgess, W. E. 1978. Butterflyfishes of the world. A monograph of the family Chaetodontidae. T.F.H. Publ., Inc. Ltd., Neptune City, New Jersey, U.S.A. 832. pp.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. II. Tropical Reef Research, Perth Australia. 425-855 pp.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Larson, H. K., Williams, R. S. and Hammer, M. P. 2013. An annotated checklist of the fishes of the Northern Territory, Australia. Zootaxa, 3696 (1): 1–293.

Pomacanthidae　キンチャクダイ科

Acanthochaetodon nigrolunatus Tanaka, 1918　ゲッテンヤッコ

Original description: Tanaka (1918): 233.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Holotype (lost): ZUMT 8344, off Prov. Izu, Shizuoka Pref. (obtained at Tokyo Market), Japan.（東京市場［静岡県 伊豆］）

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, there was the only description that matched the original description as "8344 *Acanthochaetodon nigrolunatus* n. sp. Tokyo Market (from Izu)". This ZUMT 8344 is the holotype. Unfortunately, the specimen has not been located at this time, and was judged to have been lost.

原記載にはホロタイプ指定がない。ZUMT 標本台帳に ZUMT8344 の「8344 *Acanthochaetodon nigrolunatus* n. sp. 東京市場（伊豆産なり）」と原記載の内容と一致した唯一の記述があった。この ZUMT 8344 はホロタイプである(ICZN Art. 72.4.1, 73.1)。残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Synonym of *Pomacanthus semicirculatus* (Cuvier, 1831) サザナミヤッコ

松原喜代松. 1955. 魚類の形態と検索 II. 石崎書店, 東京. vi + 791-1605 pp. [Matsubara, K. 1955. Fish morphology and hierarchy. Part II. Ishizaki-Shoten, Tokyo. vi + 791-1605 pp. (In Japanese)]
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
畑 晴陵・本村浩之. 2017. 薩摩川内市沿岸から得られたサザナミヤッコ. Nature of Kagoshima, 43: 175–179. [Hata, H. and Motomura, H. 2017. First record of *Pomacanthus semicirculatus* (Perciformes: Pomacanthidae) from Satsuma–Sendai, southern Japan. Nature of Kagoshima, 43: 175–179. (In Japanese)]

Angelichthys interruptus Tanaka, 1918 レンテンヤッコ

Original description: Tanaka (1918): 224.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Holotype (available): ZUMT 8343, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊［和歌山県田辺市］宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, there was the only description that matched the original description with "8343 *Angelichthys interruptus* n. sp. Kii-Tanabe Ui Nuizo". This ZUMT 8343 is the holotype and has a cloth tag with the words "Sketch number 383". Details of the holotype ZUMT 8343 were reported by Tominaga and Yasuda (1973).

原記載にはホロタイプ指定がない。ZUMT 標本台帳に「8343 *Angelichthys interruptus* n. sp. 紀伊田辺 宇井縫蔵」と原記載の内容と一致した唯一の記述があった。この ZUMT 8343 はホロタイプであり、「写生番号 383 号」と書かれた布タグが付けられている。ホロタイプ ZUMT 8343 の詳細は、Tominaga and Yasuda (1973) が報告した。

Current status: Valid as *Centropyge interrupta* (Tanaka, 1918) レンテンヤッコ

Tominaga, Y. and Yasuda, F. 1973. *Holacanthus interruptus*, a valid pomacanthid species, distinct from *Centropyge fisheri*. Japanese Journal of Ichthyology, 20 (3): 157–162.
Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Chaetodontoplus caeruleopunctatus Yasuda & Tominaga, 1976 ホシゾラヤッコ

Original description: Yasuda and Tominaga (1976): 130, fig. 1.
Yasuda, F. and Tominaga, Y. 1976. A new pomacanthid fish, *Chaetodontoplus caeruleopunctatus*, from the Philippines. Japanese Journal of Ichthyology, 23 (3): 130–132.

Holotype (available): ZUMT 52825, Philippines

Current status: Valid as *Chaetodontoplus caeruleopunctatus* Yasuda & Tominaga, 1976 ホシゾラヤッコ
Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425-855 pp.

Genicanthus personatus Randall, 1975

Original description: Randall (1975): 418, pl. 1.
Randall, J. E. 1975. A revision of the Indo-Pacific angelfish genus *Genicanthus*, with descriptions of three new species. Bulletin of Marine Science, 25 (3): 393–421, 1 pl.

Paratype (available): ZUMT 53027(1), Waianae Coast, off Keaau Beach Park, Oahu, Hawaiian Islands, USA; 18 Oct. 1973; 23 m depth; dip net; collected by Eddie Tomihama.

Current status: Valid as *Genicanthus personatus* Randall, 1975
Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.
Mundy, B. C. 2005. Checklist of the fishes of the Hawaiian Archipelago. Bishop Museum Bulletins in Zoology, 6: 1–703.
Randall, J. E. 2007. Reef and shore fishes of the Hawaiian Islands. Sea Grant College Program, University of Hawai'i, Honolulu. xiv + 546 pp.

Genicanthus spinus Randall, 1975

Original description: Randall (1975): 415, figs. 16–17.

Randall, J. E. 1975. A revision of the Indo-Pacific angelfish genus *Genicanthus*, with descriptions of three new species. Bulletin of Marine Science, 25 (3): 393–421, 1 pl.

Paratype (available): ZUMT 52987(1), reef on north side off Gannet Ridge, Pitcairn Island; 44 m depth; 28 Dec. 1970; collected by John E. Randall.

Current status: Valid as *Genicanthus spinus* Randall, 1975
Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.
Randall, J. E. 1999. Report on fish collections from the Pitcairn Islands. Atoll Research Bulletin, 461: 1–36, 14 pp.
Randall, J. E. 2005. Reef and shore fishes of the South Pacific. New Caledonia to Tahiti and the Pitcairn Islands. University of Hawai'i Press, Honolulu. pp. xii+707.

Holacanthus albofasciatus Tanaka, 1909

Original description: Tanaka (1909): 16.

Tanaka, S. 1909. Descriptions of one new genus and ten new species of Japanese fishes. Journal of the College of Science, Imperial University, Tokyo. 27 (8): 1–27, pl. 1.

Holotype (available): ZUMT 2146, Nagasaki Pref., Japan; collected by T. Chiba.（長崎　千葉径三郎）

Remarks: In the original description, the holotype was specified as ZUMT 2146. Details of this holotype ZUMT 2146 were reported by Yasuda and Tominaga (1969).

原記載は、ホロタイプを ZUMT 2146 に指定した。このホロタイプ ZUMT 2146 の詳細は Yasuda and Tominaga (1969)が報告した。

Current status: Synonym of *Chaetodontoplus septentrionalis* (Temminck & Schlegel, 1844)　キンチャクダイ

Yasuda, F. and Tominaga, Y. 1969. A new pomacanthine fish, *Holacanthus venustus*, from the Pacific coast of Japan, with notes on the young of *H. sexstriatus* and *H. septentrionalis*. Japanese Journal of Ichthyology, 16 (4): 143–151.

Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Holacanthus fucosus Yasuda & Tominaga, 1970　クマドリヤッコ

Original description: Yasuda and Tominaga (1970): 141, figs. 1, 2, 13.

Yasuda, F. and Tominaga, Y. 1970. Two new long–tailed pomacanthine fishes from Miyake–Jima and Okinawa–Jima, Japan. Japanese Journal of Ichthyology, 17 (4): 141–151.

Holotype (available): ZUMT 52422, Sanbon-ne, Miyake-jima, Japan (about 34°05'N, 139°30'E); depth about 15 m; 20 Aug. 1969.

Current status: Synonym of *Genicanthus semifasciatus* (Kamohara, 1934)トサヤッコ

Randall, J. E. 1975. A revision of the Indo-Pacific angelfish genus *Genicanthus*, with descriptions of three new species. Bulletin of Marine Science, 25 (3): 393–421, 1 pl.

Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425-855 pp.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Holacanthus venustus Yasuda & Tominaga, 1969　スミレヤッコ

Original description: Yasuda and Tominaga (1969): 143, figs. 1, 3.

Yasuda, F. and Tominaga, Y. 1969. A new pomacanthine fish, *Holacanthus venustus*, from the Pacific coast of Japan, with notes on the young of *H. sexstriatus* and H. *septentrionalis*. Japanese Journal of Ichthyology, 16 (4): 143–151.

Holotype (available): ZUMT 52392, Oshima Island (34°41'N, 139°27'E), Sagami Bay, Japan, about 10 meters.

Current status: Valid as *Centropyge venusta* (Yasuda & Tominaga, 1969) スミレヤッコ

Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Gaither, M. R., Schultz, J. K., Bellwood, D. R., Pyle, R. L., DiBattista, J. D., Rocha, L. A. and Bowen, B. W. 2014. Evolution of pygmy angelfishes: recent divergences, introgression, and the usefulness of color in taxonomy. Molecular Phylogenetics and Evolution, 74: 38–47.

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Volumes II. Tropical Reef Research, Perth Australia. II: 425–855.

Holacanthus watanabei Yasuda & Tominaga, 1970　ヒレナガヤッコ

Original description: Yasuda and Tominaga (1976): 144, figs. 3–7, 11, 12.

Yasuda, F. and Tominaga, Y. 1970. Two new long–tailed pomacanthine fishes from Miyake–Jima and Okinawa–Jima, Japan. Japanese Journal of Ichthyology, 17 (4): 141–151.

Holotype (available): ZUMT 52421, Onna Beach, Okinawa–jima, Ryukyu Islands, Japan, about 26°30'N, 127°50'E. December, 1969.

Paratype (available): ZUMT 52420(1), same as holotype.

Current status: Valid as *Genicanthus watanabei* (Yasuda & Tominaga, 1970) ヒレナガヤッコ

Randall, J. E. 1975. A revision of the Indo-Pacific angelfish genus *Genicanthus*, with descriptions of three new species. Bulletin of Marine Science, 25 (3): 393–421, 1 pl.

Allen, G. R. 1980. Butterfly and angelfishes of the world. Vol. 2. John Wiley & Sons, New York. 149–352 pp.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2.Tropical Reef Research, Perth, Australia. 425–855 pp.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cirrhitidae ゴンベ科

Cyprinocirrhites ui Tanaka, 1917 ウイゴンベ

Original description: Tanaka (1917): 268.

田中茂穂. 1917. 日本産魚類の三新種. 動物学雑誌, 29 (347): 268–269. [Tanaka, S. 1917. Three new species of Japanese fishes. Zoological Magazine Tokyo, 29 (347): 268–269. (In Japanese)]

Holotype (available): ZUMT 55053, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田濱 [和歌山県田辺市] 宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. Tanaka (1918) re–described in the Figures and descriptions of the fishes of Japan (28: 507–510, pl. 137, fig. 384) based on the holotype, but the registration number is not listed. One specimen of *Cyprinocirrhites ui* found in an unregistered specimen from the ZUMT collection had a body size consistent with the original description. This specimen is the holotype. Registered in ZUMT 55053 of the ZUMT collection. The specimen has a cloth tag with the words "Sketch No. 358".

原記載にホロタイプの指定がない。田中（1918）は日本産魚類図説（28: 507–510, pl. 137, fig. 384）にホロタイプを基にを再記載したが、登録番号の掲載はない。ZUMT コレクションの未登録標本から発見した *Cyprinocirrhites ui* の 1 標本は、体のサイズが原記載と一致した。この標本がホロタイプである(ICZN Art. 72.4.1, 73.1)。ZUMT コレクションの ZUMT 55053 に登録した。標本には、「写生番号 358 号」と書かれた布タグが付いている。

Current status: Synonym of *Cyprinocirrhites polyactis* (Bleeker, 1874) ウイゴンベ

田中茂穂. 1918. 日本産魚類図説, 28: 495–514, pls. 136–137. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 28: 495–514, pls. 136–137. (In Japanese and English)]

Randall, J. E. 1963. Review of the hawkfishes (family Cirrhitidae). Proceedings of the United States National Museum, 114 (3472): 389–451, pls. 1–16.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 1. Tropical Reef Research, Perth Australia. x + 424 pp. + end note.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Fricke, R., Allen, G. R., Andréfouët, S., Chen, W.-J., Hamel, M. A., Laboute, P., Mana, R., Tan, H. H. and Uyeno, D. 2014. Checklist of the marine and estuarine fishes of Madang District, Papua New Guinea, western Pacific Ocean, with 820 new records. Zootaxa, 3832 (1): 1–247.

藤原恭司・上原航知・松岡　翠・Kunto Wibowo・本村浩之. 2020. 琉球列島と奄美群島初記録種を含む沖永良部島初記録の魚類 50 種. Ichthy, Natural History of Fishes of Japan, 3: 30-40. [Fujiwara, K., Uehara, K., Matsuoka, M., Wibowo, K. and Motomura, H. 2020. First records of 50 fish species from Okinoerabu Island, the Amami Islands, Kagoshima, Japan. Ichthy, Natural History of Fishes of Japan, 3: 30-40. (In Japanese with English abstract)]

Latridae タカノハダイ科

Goniistius zebroides Tanaka, 1915 ユウダチタカノハ

Original description: Tanaka (1915): 347, pl. 93 (fig. 298).

田中茂穂. 1915. 日本産魚類図説, 20: 343–370, pls. 96–100. [Tanaka, S. 1915. Figures and descriptions of

the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 20: 343–370, pls. 96–100. (In Japanese and English)]

Holotype (available): ZUMT 4299, Wakayama Market, Wakayama Pref., Japan; March 1909; collected by Shigeho Tanaka.
Paratype (available): ZUMT 4300 (1), same as holotype.

Remarks: The original description specified ZUMT 4299 as the holotype. The ZUMT collection had a specimen ZUMT 4300 with the same collection data as the holotype. This specimen is a paratype. (ICZN Art. 72.4.1, 73.2)。
原記載はホロタイプに ZUMT 4299 を指定した。ZUMT コレクションにホロタイプと同じ収集データの標本 ZUMT 4300 があった。この標本はパラタイプである。(ICZN Art. 72.4.1, 73.2)。

Current status: Synonym of *Goniistius quadricornis* (Günther, 1860) ユウダチタカノハ
Randall, J. E. 1983. A review of the fishes of the subgenus *Goniistius*, genus *Cheilodactylus*, with description of a new species from Easter Island and Rapa. Occasional Papers of the Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History, 25 (7): 1–24.
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Kimura, K., Imamura, H. and Kawai, T. 2018. Comparative morphology and phylogenetic systematics of the families Cheilodactylidae and Latridae (Perciformes: Cirrhitoidea), and proposal of a new classification. Zootaxa, 4536 (1): 1–72.
Ludt, W. B., Burridge, C. P. and Chakrabarty, P. 2019. A taxonomic revision of Cheilodactylidae and Latridae (Centrarchiformes: Cirrhitoidei) using morphological and genomic characters. Zootaxa, 4585 (1): 121–141.
園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese)]

Embiotocidae ウミタナゴ科

Ditrema temminckii pacificum Katafuchi & Nakabo, 2007　マタナゴ

Original description: Katafuchi and Nakabo (2007): 358, figs. 1D, E, 3, 6B.
Katafuchi, H. and Nakabo, T. 2007. Revision of the East Asian genus *Ditrema* (Embiotocidae), with description of a new subspecies. Ichthyological Research, 54 (4): 350–366.

Paratype (available): ZUMT 3544 (1), Katsuura, Chiba Pref., Japan; 26 Aug. 1913.
Paratypes (available): ZUMT 48630 (1), ZUMT 48613 (1), Aburatsubo, Kanagawa Pref., Japan; 7 Nov. 1955.

Current status: Valid as *Ditrema temminckii pacificum* Katafuchi & Nakabo, 2007 マタナゴ
Katafuchi, H., Kai, Y. and Nakabo, T. 2011. Genetic divergence in *Ditrema jordani* (Perciformes: Embiotocidae) from the Pacific coast of southern Japan as inferred from mitochondrial DNA sequences. Ichthyological

Research, 58 (1): 90–94.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Dyldin, Yu. V. and Orlov, A. M. 2021. Annotated list of ichthyofauna of inland and coastal waters of Sakhalin Island. 3. Families Priacanthidae–Sebastidae. Journal of Ichthyology, 61 (6): 832–866.

Pomacentridae スズメダイ科

Chromis mirationis Tanaka, 1917 トオカイスズメダイ

Original description: Tanaka (1917): 8.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (available): ZUMT 3627, off Goto Island, Nagasaki Pref., Japan (31° 27'–32'N, 126° 52'–57'E); collected by Naokatsu Yanagi.(長崎五島沖 柳 直勝採集)

Remarks: There is no holotype designation in the original description. ZUMT 3267 is the only specimen whose scientific name and collected data match from the records in the ZUMT specimen ledger. ZUMT 3267 is the holotype (ICZN Art. 72.4.1, 73.1).
原記載にはホロタイプの指定がない。ZUMT 3267 は、ZUMT 標本台帳の記録から学名と採集データが一致する唯一の標本である。ZUMT 3267 がホロタイプである(ICZN Art. 72.4.1, 73.1)。

Current status: Valid as *Chromis mirationis* Tanaka, 1917トウカイスズメダイ
Randall, J. E., Ida, H. and Moyer, J. T. 1981. A review of the damselfishes of the genus *Chromis* from Japan and Taiwan, with description of a new species. Japanese Journal of Ichthyology, 28 (3): 203–242, pl. 1.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
岡村 収(編). 1985. 沖縄舟状海盆及び周辺海域の魚類 II. 日本水産資源保護協会, 東京. 417–781 pp. [Okamura, O. (ed). 1985. Fishes of the Okinawa Trough and the adjacent waters II. Japan Fisheries Resource Conservation Association, Tokyo, 417–781 pp. (In Japanese and English; various authors)]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Tea, Y.-K., Gill, A. C. and Senou, H. 2019. *Chromis tingting*, a new species of damselfish from mesophotic coral ecosystems of southern Japan, with notes on *C. mirationis* Tanaka (Teleostei: Pomacentridae). Zootaxa, 4586 (2): 249–260.
Parenti, P. 2021. An annotated checklist of damselfishes, family Pomacentridae Bonaparte, 1831. Journal of Animal Diversity, 3 (1): 37–109.

Chromis miyakeensis Moyer & Ida, 1976 ミヤケスズメダイ

Original description: Moyer and Ida (1976): 189, figs. 1–4.
Moyer, J. T. and Ida, H. 1976. Description of a new damselfish, *Chromis miyakeensis* from Miyake Island, Japan. Japanese Journal of Ichthyology, 22 (4): 189–194.

Holotype (available): ZUMT 53957, Igaya Bay, Miyake Island, Japan; 14m depth; Nov. 17, 1973.
Paratypes (lost): ZUMT 53958 (1), ZUMT 53959 (1), Igaya Bay, Miyake Island, Japan; 12 Dec. 1974.

Remarks: The whereabouts of these specimens are unknown, as the registration number tags of the paratype 2 specimens are in storage and these specimens have not reached ZUMT.

パラタイプ 2 標本の登録番号タグが保管されており、これらの標本は ZUMT に届いていないため，所在は不明。

Current status: Synonym of *Chromis notata* (Temminck and Schlegel, 1843) スズメダイ

Randall, J. E., Ida, H. and Moyer, J. T. 1981. A review of the damselfishes of the genus *Chromis* from Japan and Taiwan, with description of a new species. Japanese Journal of Ichthyology, 28 (3): 203–242, pl. 1.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会，東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

山田梅芳・田川　勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所，長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III，第三版. 東海大学出版会，秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Iwatsubo, H. and Motomura, H. 2013. Redescriptions of *Chromis notata* (Temminck and Schlegel, 1843) and *C. kennensis* Whitley, 1964 with the description of a new species of *Chromis* (Perciformes: Pomacentridae). Species Diversity, 18: 193–213.

Parenti, P. 2021. An annotated checklist of damselfishes, family Pomacentridae Bonaparte, 1831. Journal of Animal Diversity, 3 (1): 37–109.

Chromis villadolidi Jordan & Tanaka, 1927

Original description: Jordan and Tanaka (1927): 387, pl. 34 (fig. 1).

Jordan, D. S. and Tanaka, S. 1927. Notes on new and rare fishes of the fauna of Japan. Annals of the Carnegie Museum, 17 (3–4): 385–392, pl. 34.

Paratypes (lost): ZUMT 10608 (3), Sea of Japan between Genkaijima Is. or Tsushima and Fukuoka Pref., Kyushu, Japan; mid-Sept.; collected by Fukuoka Prefectural Fisheries Experiment Station.（福岡と玄界島又対馬の間 九月中旬採集 福岡県水産試験場）

Remarks: The original description is based on 5 specimens as a type series. Holotype FMNH 59185 [ex CM 8328] and one specimen of paratype CAS–SU 23681 (1) were designated. The remaining 3 specimens are also paratypes (ICZN Art. 72.4.5). In the original description, it was stated that it was used for dried fish and that the local name was called "Kazakiri" or "Yahazu". ZUMT 10608 is the only specimens whose local name and collection data match the records in the ZUMT specimen ledger. ZUMT 10608 says "Genkaijima or Tsushima, collected in mid–September, Fukuoka Prefectural Fisheries Experiment Station, 5 pieces", and the local names include "Kazakiri", "Yahazu", and dried fish.

A total of two individuals were separated from ZUMT 10608: the holotype of FMNH 59185 [ex CM 8328] and the paratype of CAS–SU 23681(1). The remaining three ZUMT 10608 specimens are also paratypes (ICZN Art. 72.1.1, 72.4.5). Specimen ZUMT 10608 cannot be identified at this time.

Holotype FMNH 59185 [ex CM 8328] and paratype CAS–SU 23681 (1) a total of two individuals are considered to have been split and registered from ZUMT 10608(5), and the remaining 3 individuals are also paratypes (ICZN Art. 72.1.1, 72.4.5). Specimens cannot be identified at this time.

原記載は 5 標本をタイプシリーズとし、ホロタイプ FMNH 59185 [ex CM 8328]とパラタイプ CAS–SU 23681 (1)の 1 標本を指定した。残りの 3 標本もパラタイプである (ICZN Art. 72.1.1, 72.4.5)。原記載中には、干物に使用し地方名を「カザキリ」または「ヤハズ」と呼ぶと記述されていた。ZUMT 標本台帳の ZUMT 10608(5)は、

地方名や採集データの一致した唯一の標本である。ZUMT 10608 には、「玄界島又対馬の間 九月中旬採集 福岡県水産試験場 5 個」とあった。

ZUMT 10608 から FMNH 59185 [ex CM 8328] のホロタイプと CAS–SU 23681(1) のパラタイプの計 2 個体が分離された。残った ZUMT 10608 の 3 個体もパラタイプである(ICZN Art. 72.1.1, 72.4.5)。標本 ZUMT 10608 は現時点では特定できない。

Current status: Synonym of *Chromis notata* (Temminck & Schlegel, 1843) スズメダイ

Randall, J. E., Ida, H. and Moyer, J. T. 1981. A review of the damselfishes of the genus *Chromis* from Japan and Taiwan, with description of a new species. Japanese Journal of Ichthyology, 28 (3): 203–242, pl. 1.

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Iwatsubo, H. and Motomura, H. 2013. Redescriptions of *Chromis notata* (Temminck and Schlegel, 1843) and *C. kennensis* Whitley, 1964 with the description of a new species of *Chromis* (Perciformes: Pomacentridae). Species Diversity, 18: 193–213.

Parenti, P. 2021. An annotated checklist of damselfishes, family Pomacentridae Bonaparte, 1831. Journal of Animal Diversity, 3 (1): 37–109.

Pomacentrus fumeus Tanaka, 1917 マツバスズメダイ

Original description: Tanaka (1917): 9.

田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Syntypes (available): ZUMT 7278 (1), ZUMT 7337 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.(長崎市場 金子一狼採集)

Remarks: There is no holotype designation in the original description. From the records in the ZUMT specimen ledger, there were two, ZUMT 7278 and ZUMT 7337, which match the scientific name and collection data. These specimens are syntypes (ICZN Art. 72.1.1, 72.4.1, 73.1). The ZUMT 7278 had a cloth tag with "7278" and "Sketch No. 316" written on it.

原記載にはホロタイプの指定がない。ZUMT 標本台帳の記録から学名と収集データに一致する ZUMT 7278 と ZUMT 7337 の 2 つがあった。これらの標本はシンタイプである(ICZN Art. 72.1.1, 72.4.1, 73.1)。ZUMT 7278 には、「7278」、「写生番号 316 号」と書かれた布タグが付いている。

Current status: Valid as *Chromis fumea* (Tanaka, 1917) マツバスズメダイ

Randall, J. E., Ida, H. and Moyer, J. T. 1981. A review of the damselfishes of the genus *Chromis* from Japan and Taiwan, with description of a new species. Japanese Journal of Ichthyology, 28 (3): 203–242, pl. 1.

益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Parenti, P. 2021. An annotated checklist of damselfishes, family Pomacentridae Bonaparte, 1831. Journal of Animal Diversity, 3 (1): 37–109.

Pomacentrus nagasakiensis Tanaka, 1917　ナガサキズズメダイ

Original description: Tanaka (1917): 9.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7 –12. (In Japanese)]

Syntypes (available): ZUMT 6582 (1), ZUMT 6583 (1), Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.（長崎市場 金子一狼採集.）

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, two items, ZUMT 6582 and ZUMT 6583, matched with the collection data. These specimens are syntypes (ICZN Art. 72.1.1, 72.4.1, 73.1). There is "type 6383" written by Tanaka in the item of ZUMT 6583 in the ZUMT specimen ledger. Moyer and Ida (1975) restated ZUMT 6583 as a holotype on the basis of this writing. However, this writing does not evidence that the holotype was fixed to ZUMT 6583 (ICZN Art. 72.4.7).
原記載にはホロタイプの指定がない。ZUMT 標本台帳には収集データに ZUMT 6582 と ZUMT 6583 の 2 つが一致した。これらの標本は、シンタイプである (ICZN Art. 72.1.1, 72.4.1, 73.1)。ZUMT 標本台帳の ZUMT 6583 の項目に「type 6383」と田中直筆の書き込みがあり、Moyer and Ida (1975)は、この書き込みを根拠に ZUMT 6583 をホロタイプとし、再記載している。しかし、ZUMT 標本台帳の書き込みはホロタイプを ZUMT 6583 に固定されたという証拠にはならない (ICZN Art. 72.4.7)。

Current status: Valid as *Pomacentrus nagasakiensis* Tanaka, 1917 ナガサキズズメダイ
Moyer, J. T. and Ida, H. 1975. Redescription of *Pomacentrus nagasakiensis* and comparison with specimens from Miyake–jima and the Bonin Islands. Japanese Journal of Ichthyology, 22 (2): 104–108.
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Fricke, R., Allen, G. R., Andréfouët, S., Chen, W.-J., Hamel, M. A., Laboute, P., Mana, R., Tan, H. H. and Uyeno, D. 2014. Checklist of the marine and estuarine fishes of Madang District, Papua New Guinea, western Pacific Ocean, with 820 new records. Zootaxa, 3832 (1): 1–247.
Parenti, P. 2021. An annotated checklist of damselfishes, family Pomacentridae Bonaparte, 1831. Journal of Animal Diversity, 3 (1): 37–109.

Kyphosidae　イスズミ科

Kyphosus pacificus Sakai & Nakabo, 2004　ミナミイスズミ

Original description: Sakai and Nakabo (2004): 20, fig. 1.
Sakai, K. and Nakabo, T. 2004. Two new species of *Kyphosus* (Kyphosidae) and a taxonomic review of *Kyphosus bigibbus* Lacepède from the Indo-Pacific. Ichthyological Research, 51 (1): 20–32.

Paratype (available): ZUMT 31003(1), Hachijo–jima Island, Izu Islands, Japan; 21 Oct. 1935.

Current status: Valid as *Kyphosus pacificus* Sakai & Nakabo, 2004　ミナミイスズミ
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Sakai, K. and Nakabo, T. 2014. Taxonomic review of *Kyphosus* (Pisces: Kyphosidae) in the Atlantic and eastern Pacific oceans. Ichthyological Research, 61 (3): 265–292.

Koeda, K., Fujii, T., Koeda, S. and Motomura, H. 2016. Fishes of Yoro-jima and Uke-jima islands in the Amami Islands: 89 new specimen-based records. Memoirs of the Faculty of Fisheries, Kagoshima University, 65: 1–20.
Koeda, K., Hibino, Y., Yoshida, T., Kimura, Y., Miki, R., Kunishima, T., Sasaki, D., Furukawa, T., Sakurai, M., Eguchi, K., Suzuki, H., Inaba, T., Uejo, T., Tanaka, S., Fujisawa, M. Wada, H. and Uchiyama, T. 2016. Annotated checklist of fishes of Yonaguni-jima Island, the westernmost island in Japan. The Kagoshima University Museum, Kagoshima. v + 119 pp, 1 pl.
本田 康介・和田 英敏・瀬能 宏. 2022. 日本産イスズミ属 4 種の成長に伴う形態と色彩の変化および幼魚期における識別. Ichthy, Natural History of Fishes of Japan, 21: 13-26. [Honda, K., Wada H.and Senou H. 2022. Diagnosis and ontogenetic changes in morphological characters and coloration in young stages of four Japanese species of *Kyphosus* (Perciformes: Kyphosidae). Ichthy, Natural History of Fishes of Japan, 21: 13-26. (In Japanese, English abstract)]

Stromateoidei イボダイ亜目
Nomeidae エボシダイ科
Psenes kamoharai Abe, Kojima & Kosakai, 1963 スジハナビラウオ

Original description: Abe, Kojima and Kosakai (1963): 31.
Abe, T., Kojima, S. and Kosakai, T. 1963. Description of a new nomeid fish from Japan. Japanese Journal of Ichthyology, 11 (1/2): 31–35.

Paratype (available): ZUMT 52309 (1), 40 miles (64 km Ca.) northwest of Hamada City, Shimane Pref., Japan; 20 Aug. 1963.

Remarks: The following paratypes from the Abe collection are whereabouts unknown.
以下の阿部コレクションのパラタイプは、所在不明である。
ABE 58-235 (1), at Manazuru, Kyoto, Japan; first half of 1958; probably by trap net.
ABE 58-236 (1), 40 miles northwest of Hamada, Shimane Pref., Japan; 20 Aug. 1963.
ABE 60-1961 (1), ABE 60-1962 (2), off Hamada Shimane Pref., Japan; 31 July 1960.

Current status: Synonym of *Psenes cyanophrys* Valenciennes, 1833 スジハナビラウオ
Haedrich, R. L. 1967. The stromateoid fishes: systematics and a classification. Bulletin of the Museum of Comparative Zoology, 135 (2): 31–139.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 3. Tropical Reef Research, Perth, Australia. 857–1260 pp.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Kawai, T., Tashiro, F., Nakayama, N., Imamura, H., Kamiyama, K., Aungtonya, C. and Banchongmanee, S. 2020. Deep-sea fishes from the Andaman Sea by R/V Chakratong Tongyai during 1996-2000. Part 5: order Perciformes. Phuket Marine Biological Center Research Bulletin, 77: 43–59.
園山貴之・荻本啓介・堀 成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi

Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese)]
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.

Tetragonuridae ドクウロコイボダイ科
Tetragonurus pacificus Abe, 1953

Original description: Abe (1953): 45, figs. 5–6.
Abe, T. 1953. New, rare or uncommon fishes from Japanese waters. II. Records of rare fishes of the families Diretmidae, Luvaridae and Tetragonuridae, with an appendix (description of a new species, *Tetragonurus pacificus*, from off the Solomon Islands). Japanese Journal of Ichthyology, 3(1): 39–47.

Holotype (available): ZUMT 47823, east of New Britain, Papua New Guinea (approx. 6°36'S, 152°29'E; obtained from stomach of *Thunnus albacares* (Bonnaterre, 1788); 30 Dec. 1952; coll. by RV Fusa-maru.

Current status: Valid as *Tetragonurus pacificus* Abe, 1953
Koeda, K. and Teramura, A. 2019. Redescription of *Tetragonurus pacificus* (Teleostei: Stromateoidei: Tetragonuridae), based on specimens collected from Taiwan and Tarawa Atoll. Zootaxa, 4702 (1): 26–31. In Ho, H.-C., Koeda, K. and Hilton, E. J. (eds). Study on the fish taxonomy and diversity of Taiwan.

Labroidei ベラ亜目
Labridae ベラ科
Anampses ikedai Tanaka, 1908

Original description: Tanaka (1908): 32, pl. 1, fig. 2.
Tanaka, S. 1908. Notes on some Japanese fishes, with descriptions of fourteen new species. Journal of the College of Science, Imperial University, Tokyo. 23 (7): 1–54, pls. 1–4.

Holotype (available): ZUMT 964, Kagoshima Pref., Japan.
Current status: Synonym of *Anampses meleagrides* Valenciennes, 1840 ホクトベラ
Randall, J. E. 1972. A revision of the labrid fish genus *Anampses*. Micronesica, 8 (1–2): 151–195, pls. 1–3.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Anampses nagayoi Tanaka, 1908

Original description: Tanaka (1908): 34, pl. 1, fig. 3.
Tanaka, S. 1908. Notes on some Japanese fishes, with descriptions of fourteen new species. Journal of the College of Science, Imperial University, Tokyo. 23 (7): 1–54, pls. 1–4.

Holotype (lost): ZUMT 957, Kagoshima Pref., Japan. 1903

Current status: Synonym of *Anampses meleagrides* Valenciennes, 1840 ホクトベラ
Randall, J. E. 1972. A revision of the labrid fish genus *Anampses*. Micronesica, 8 (1–2): 151–195, pls. 1–3.
益田 一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Cirrhilabrus balteatus Randall, 1988

Original description: Randall (1988): 210, pls. 1 (figs. c–d), 3 (figs. d–f).
Randall, J. E. 1988. Five new wrasses of the genera *Cirrhilabrus* and *Paracheilinus* (Perciformes: Labridae) from the Marshall Islands. Micronesica, 21: 199–226, pls. 1–3.

Paratype (available): ZUMT 55207 (1), off POL pier, Enewetak I., Marshall Islands; rubble bottom in 3–21.5 m depth; rotenone; 5 Sept. 1968; collected by G. R. Allen.

Current status: Valid as *Cirrhilabrus balteatus* Randall, 1988
Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Cirrhilabrus flavidorsalis Randall & Carpenter, 1980

Original description: Randall and Carpenter (1980): 21, figs. 1B, 7–8.
Randall, J. E. and Carpenter, K. E. 1980. Three new labrid fishes of the genus *Cirrhilabrus* from the Philippines. Revue française d'Aquariologie Herpétologie, 7 (1): 17–26.

Paratype (available, poor condition): ZUMT 54169 (1), coral rubble bottom, Tua Island (NW of Manado), Manado, Celebes, Indonesia; 18–22 m depth; spear and sodium cyanide; 3 Sept. 1978; collected by J.E. Randall and G.W. Tribble.

Current status: Valid as *Cirrhilabrus flavidorsalis* Randall & Carpenter, 1980
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.
Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Cirrhilabrus johnsoni Randall, 1988

Original description: Randall (1988): 217, pl. 2, fig. c.
Randall, J. E. 1988. Five new wrasses of the genera *Cirrhilabrus* and *Paracheilinus* (Perciformes: Labridae) from the Marshall Islands. Micronesica, 21: 199–226, pls. 1–3.

Paratypes (available): ZUMT 55208–ZUMT 55209 (2), lagoon off Mid-Pacific Research Laboratory, Enewetak Atoll, Marshall Islands; dense bed of algae dominated by Halimeda, 24.5 m depth.

Current Status: Valid as *Cirrhilabrus johnsoni* Randall, 1988

Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Tea, Y.-K., Senou, H. and Greene, B. D. 2016. *Cirrhilabrus isosceles*, a new species of wrasse (Teleostei: Labridae) from the Ryukyu Archipelago and the Philippines, with notes on the *C. lunatus* complex. Journal of the Ocean Science Foundation, 21: 18–37.

Cirrhilabrus lubbocki Randall & Carpenter, 1980

Original description: Randall and Carpenter (1980): 18, figs. 1A, 2–6.

Randall, J. E. and Carpenter, K. E. 1980. Three new labrid fishes of the genus *Cirrhilabrus* from the Philippines. Revue française d'Aquariologie Herpétologie, 7 (1): 17–26.

Paratype (available, poor condition): ZUMT 54168 (1), southwestern side of Caban Island, Batangas, Luzon Islands, Philippine.

Current status: Valid as *Cirrhilabrus lubbocki* Randall & Carpenter, 1980

Allen, G. R. 1995. A new species of wrasse (Labridae: Cirrhilabrus) from Western Australia. Revue française d'Aquariologie Herpétologie, 22 (1/2): 14–18.

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425－855 pp.

Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Cirrhilabrus luteovittatus Randall, 1988

Original description: Randall (1988): 203, pls. 1 (figs. a－b), 3.

Randall, J. E. 1988. Five new wrasses of the genera *Cirrhilabrus* and *Paracheilinus* (Perciformes: Labridae) from the Marshall Islands. Micronesica, 21: 199－226, pls. 1–3.

Paratypes (available): ZUMT 55210–ZUMT 55213 (4), lagoon off POL pier, Enewetak I, Marshall Islands; rubble, 3–12m depth; 5 Sept. 1968; collected by G. R. Allen,

Current status: Valid as *Cirrhilabrus luteovittatus* Randall, 1988

Allen, G. R., Drew, J. A. and Barber, P. H. 2008. *Cirrhilabrus beauperryi*, a new wrasse (Pisces: Labridae) from Melanesia. aqua, International Journal of Ichthyology, 14 (3): 129–140.

Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Cirrhilabrus rubripinnis Randall & Carpenter, 1980

Original description: Randall and Carpenter (1980): figs. 9–10.

Randall, J. E. and Carpenter, K. E. 1980. Three new labrid fishes of the genus *Cirrhilabrus* from the Philippines. Revue française d'Aquariologie Herpétologie, 7 (1): 17–26.

Paratype (available, poor condition): ZUMT 54167 (1), southwestern side of Caban Island, Batangas, Luzon Island, Philippines; 28 July 1978.

Current status: Valid as *Cirrhilabrus rubripinnis* Randall & Carpenter, 1980

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.

Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Allen, G. R. and Hammer, M. P. 2017. *Cirrhilabrus greeni*, a new species of wrasse (Pisces: Labridae) from the Timor Sea, northern Australia. Journal of the Ocean Science Foundation, 29: 55–65.

Cirrhilabrus scottorum Randall & Pyle, 1989

Original description: Randall and Pyle (1989): 114, figs. 1–5.

Randall, J. E. and Pyle, R. M. 1989. *Cirrhilabrus scottorum*, a new labrid fish from the South Pacific Ocean. Revue française d'Aquariologie Herpétologie, 15 (4) [1988]: 113–118.

Paratype (available): ZUMT 57521 (1), outer reef slope, Moorea, Society Islands; 12 m depth; rotenone; 10 May 1983; collected by R. Galzin.

Current status: Valid as *Cirrhilabrus scottorum* Randall & Pyle, 1989

Allen, G. R., Drew, J. A. and Barber, P. H. 2008. *Cirrhilabrus beauperryi* a new (Pisces: Labridae) from Melanesia. aqua, International Journal of Ichthyology, 14 (3): 129–140.

Allen, G. R., Erdmann, M. V. and Dailami, M. 2015. *Cirrhilabrus marinda*, a new species of wrasse (Pisces: Labridae) from eastern Indonesia, Papua New Guinea, and Vanuatu. Journal of the Ocean Science Foundation, 15: 1–15.

Coris imbris Tanaka, 1918　シケベラ

Original description: Tanaka (1918): 521, pl. 138, fig. 386.

田中茂穂. 1918. 日本産魚類図説, 29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Holotype (lost): ZUMT uncatalogued, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田濱 [和歌山県田辺市] 宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. There is no record of the corresponding specimen in the ZUMT specimen ledger, and there is no specimen that matches the description in the ZUMT collection.

原記載にはホロタイプの指定がない。ZUMT 標本台帳に該当する標本の記録がなく、ZUMT コレクションにも記載に一致する標本はない。

Current status: Synonym of *Coris aygula* Lacepède, 1801　カンムリベラ

Randall, J. E. 1999. Revision of Indo-Pacific labrid fishes of the genus *Coris*, with descriptions of five new species. Indo-Pacific Fishes, 29: 1–74, pls. 1–22.

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2000. An annotated checklist of the species of the labroid fish families Labridae and Scaridae. Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 68: 1–97.

Halichoeres nafae Tanaka, 1908

Original description: Tanaka (1908): 36, pl. 2, fig. 3.
Tanaka, S. 1908. Notes on some Japanese fishes, with descriptions of fourteen new species. Journal of the College of Science, Imperial University, Tokyo. 23 (7): 1–54, pls. 1–4.

Holotype (lost): ZUMT uncatalogued, In possession of Mr. J. Hashimoto, Okinawa Pref., Japan; Aug. 1906.

Remarks: The original description is based on one individual, and the holotype is "is now in possession of Mr. J. Hashimoto.". There is no corresponding specimen in the ZUMT specimen ledger, and there is no specimen that matches the description in the ZUMT collection.
原記載は1個体を基に記載され、ホロタイプは「is now in possession of Mr. J. Hashimoto.」とある。ZUMT 標本台帳にも該当する標本はなく、ZUMT コレクションにも記載に一致する標本はない。

Current status: Synonym of *Halichoeres margaritaceus* (Valenciennes, 1839) アカニジベラ
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Parenti, P. and Randall, J. E. 2000. An annotated checklist of the species of the Labroid fish families Labridae and Scaridae. Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 68: 1–97.

Paracheilinus carpenteri Randall & Lubbock, 1981

Original description: Randall and Lubbock (1981): 24, pl. 2, figs. A–B.
Randall, J. E. and Lubbock, R. 1981. Labrid fishes of the genus *Paracheilinus*, with descriptions of three new species from the Philippines. Japanese Journal of Ichthyology, 28 (1): 19–30, pls. 1–2.

Paratype (available, poor condition): ZUMT 54166 (1), southwest side, sloping bottom of coral rubble, Fungia, and soft coral, Batangas, Caban Island, Luzon Islands, Philippine; 30 m depth; rotenone; 28 June 1978; collected by J. E. Randall, G. W. Tribble, R. P. H. Rutherford, and K. E. Carpenter.

Current status: Valid as *Paracheilinus carpenteri* Randall & Lubbock, 1981 クジャクベラ
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.

Allen, G. R., Erdmann, M. V. and Yusmalinda, N. L. A. 2013. *Paracheilinus rennyae*, a new species of flasherwrasse (Perciformes: Labridae) from southern Indonesia. aqua, International Journal of Ichthyology, 19 (4): 193–206.

Allen, G. R., Erdmann, M. V. and Yusmalinda, N. L. A. 2016. Review of the Indo-Pacific flasherwasses of the genus *Paracheilinus* (Perciformes: Labridae), with descriptions of three new species. Journal of the Ocean Science Foundation, 19: 18–90.

Paracheilinus lineopunctatus Randall & Lubbock, 1981

Original description: Randall and Lubbock (1981): 21, pl. 1, fig. B.

Randall, J. E. and Lubbock, R. 1981. Labrid fishes of the genus *Paracheilinus*, with descriptions of three new species from the Philippines. Japanese Journal of Ichthyology, 28 (1): 19–30, pls. 1–2.

Paratype (available, poor condition): ZUMT 54165 (1), southwest side, rubble, Fungia**,** and soft coral bottom, Batangas, Caban Island, Luzon, Philippine; 30 m depth; rotenone; 28 July 1978; collected by J. E. Randall, G. W. Tribble, R. P. H. Rutherford and K. E. Carpenter.

Current status: Valid as *Paracheilinus lineopunctatus* Randall & Lubbock, 1981

Allen, G. R. and Erdmann, M. V. 2008. *Paracheilinus nursalim*, a new species of flasher wrasse (Perciformes: Labridae) from the Bird's Head Peninsula of western New Guinea with a key to the species of Paracheilinus. aqua, International Journal of Ichthyology, 13 (3–4): 179–188.

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.

Allen, G. R., Erdmann, M. V. and Yusmalinda, N. L. A. 2016. Review of the Indo-Pacific flasherwasses of the genus *Paracheilinus* (Perciformes: Labridae), with descriptions of three new species. Journal of the Ocean Science Foundation, 19: 18–90.

Verreo cylindriatus Tanaka, 1930　アカボウ

Original description: Tanaka (1930): 941, Pl. 187 (fig. 513).

田中茂穂. 1930. 日本産魚類図説, 47: 925–944, pls. 185–187. [Tanaka, S. 1930. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 47: 925–944, pls. 185–187. (In Japanese and English)]

Holotype (available): ZUMT 19933, Tokyo Market, Japan.（東京市場）

Remarks: There is no holotype designation in the original description. It was mainly described based on ZUMT 19333. This specimen is a holotype (ICZN Art. 73.1.2). In addition to the illustrated specimen, there was ZUMT 23498 with the same scientific name in the record of the ZUMT specimen ledger. This specimen was collected after description and is not a type series.

原記載にはホロタイプの指定がない。ZUMT19333 をもとに記載された。この標本がホロタイプである (ICZN Art. 73.1.2)。図説の標本以外に、ZUMT 標本台帳の記録に学名が一致した ZUMT 23498 があった。この標本は、記載後に採集されものであり、タイプシリーズではない。

Current status: Valid as *Bodianus cylindriatus* (Tanaka, 1930)　アカボウ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Gomon, M. F. 2006. A revision of the labrid fish genus *Bodianus* with descriptions of eight new species. Records of the Australian Museum. Suppl. 30: 1–133.
Randall, J. E. 2007. Reef and shore fishes of the Hawaiian Islands. Sea Grant College Program, University of Hawai'i, Honolulu. xiv + 546 pp.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Zoarcoidei ゲンゲ亜目
Zoarcidae ゲンゲ科
Furcimanus nakamurae Tanaka, 1914 イシゲンゲ

Original description: Tanaka (1914): 303, pl. 82 (fig. 276).
田中茂穂. 1914. 日本産魚類図説, 18: 295–318, pls. 86–90. [Tanaka, S. 1914. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 18: 295–318, pls. 86–90. (In Japanese and English)]

Holotype (lost): ZUMT uncatalogued, Niigata Pref., Japan; collected by Masao Nakamura.(新潟　中村正雄採集)
Remarks: There is no holotype designation in the original description. There is no record of the corresponding specimen in the record of the ZUMT specimen ledger, and there is no specimen matching with the description in the ZUMT collection.
　原記載にホロタイプの指定がない。ZUMT 標本台帳に該当する標本の記録がなく、ZUMT コレクションにも記載に一致する標本はない。

Current status: Valid as *Lycodes nakamurae* (Tanaka, 1914) クロゲンゲ
Toyoshima, M. 1985. Taxonomy of the subfamily Lycodinae (family Zoarcidae) in Japan and adjacent waters. Memoirs of the Faculty of Fisheries, Hokkaido University, 32 (2): 131–243.
Shinohara, G., Shirai, A. M., Nazarkin, M. V. and Yabe, M. 2011. Preliminary list of the deep–sea fishes of the Sea of Japan. Bulletin of the National Museum of Nature and Science (Ser. A), 37 (1): 35–62.
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Shinohara, G., Nakae, M., Ueda, Y., Kojima, S. and Matsuura, K. 2014. Annotated checklist of deep–sea fishes of the Sea of Japan. In: Fujita, T. (ed.): Deep–sea fauna of the Sea of Japan. National Museum of Nature and Science Monographs, 44: 225–291.
園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese)]
Dyldin, Yu. V. and Orlov, A. M. 2021. Annotated list of ichthyofauna of inland and coastal waters of Sakhalin Island. 3. Families Priacanthidae–Sebastidae. Journal of Ichthyology, 61 (6): 832–866.

Lycodes sadoensis Toyoshima & Honma, 1980 サドヒナゲンゲ

Original description: Toyoshima and Honma (1980): 48, fig. 1.
Toyoshima, M. and Honma, Y. 1980. Description of a new zoarcid fish, *Lycodes sadoensis*, from the Sea of Japan. Japanese Journal of Ichthyology, 27 (1): 48–50.

Paratypes (available): ZUMT 54225–ZUMT 54226 (2), off Ishikawa Pref., Japan (37°33.5'N, 136°15.0'E); 235 m depth.

Current status: Synonym of *Petroschmidtia teraoi* (Katayama, 1943) ヒナゲンゲ

Nazarkin, M. V., Shinohara, G. and Shirai, S. M. 2014. Phylogeny and taxonomy of *Petroschmidtia teraoi* (Katayama, 1943) (Osteichthyes: Perciformes: Zoarcidae). Zootaxa, 3780 (1): 171–193.

Shinohara, G., Shirai, A. M., Nazarkin, M. V. and Yabe, M. 2011. Preliminary list of deep–sea fishes of the Sea of Japan. Bulletin of the National Museum of Nature and Science (Ser. A), 37 (1): 35–62.

Balushkin, A. V., Sheiko, B. A. and Fedorov, V. V. 2011. Catalog of the archival collection of the Zoological Institute, Russian Academy of Sciences: Class Osteichthyes (bony fishes), Order Perciformes, Family Zoarcidae. Journal of Ichthyology, 51 (10): 950–1034.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Shinohara, G., Nakae, M., Ueda, Y., Kojima, S. and Matsuura, K. 2014. Annotated checklist of deep–sea fishes of the Sea of Japan. In: Fujita, T. (ed.): Deep–sea fauna of the Sea of Japan. National Museum of Nature and Science Monographs, 44: 225–291.

園山貴之・荻本啓介・堀　成夫・内田喜隆・河野光久. 2020. 証拠標本および画像に基づく山口県日本海産魚類目録. 鹿児島大学総合研究博物館研究報告, 11: 1–152. [Sonoyama, T., Ogimoto, K., Hori, S., Uchida, Y. and Kawano, M. 2020. An annotated checklist of marine fishes of the Sea of Japan off Yamaguchi Prefecture, Japan, with 74 new records. Bulletin of the Kagoshima University Museum, 11: 1–152. (In Japanese)]

Melanostigma orientale Tominaga, 1971　コンニャクハダカゲンゲ

Original description: Tominaga (1971): 151, figs. 1–3.

Tominaga, Y. 1971. *Melanostigma orientale*, a new species of zoarcid fish from Sagami Bay and Suruga Bay, Japan. Japanese Journal of Ichthyology, 18 (4): 151–156.

Holotype (available): ZUMT 52454 (probably male), Sagami Bay, Shizuoka Pref., Japan (35°08' N, 139°16'E); Jan. 26, 1968; collected with the oblique haul of larva net of 1.6m in diameter, (haul depth ca.600 m to surface bottom ca.1200m), 21:56 to 23:18. 131.5 mm in total length.

Paratype (available): ZUMT 52455 (1, clear & stained by alizarin red), Suruga Bay, Shizuoka Pref., Japan (34°54.5 'N, 138°38.1'E); 3 Nov. 1968; collected with oblique haul of larva net of 1.6 m in diameter, (haul depth 1250 m to surface; bottom ca.1600m), 20:13 to 21:47. Young specimen 52.55 mm in total length.

Current status: Valid as *Melanostigma orientale* Tominaga, 1971　コンニャクハダカゲンゲ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫(編). 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Anderson, M. E. 1994. Systematics and osteology of the Zoarcidae (Teleostei: Perciformes). Ichthyological Bulletin of the J. L. B. Smith Institute of Ichthyology, 60: 1–120.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Balushkin, A. V. and Moganova, M. V. 2017. New species of pelagic eelpouts of the genus *Melanostigma* (Zoarcidae) from Western Antarctica. Journal of Ichthyology, 57 (2):171–176.

Balushkin, A. V. and Orlovskaya, M. V. 2019. *Melanostigma meteori* sp. n. (Zoarcidae): a new pelagic eelpout species from the Meteor Bank (Southeastern Atlantic), with remarks on the polymerization of the lateral line in the family. Journal of Ichthyology, 59 (2): 135–143.

Balushkin, A. V. 2019. Description of a new species of pelagic eelpouts *Melanostigma japonicum* sp. nova (Zoarcidae) from the Pacific coast of south Japan with a key for the species of the genus *Melanostigma* from the Pacific Ocean and the adjacent waters of the Indian and Southern Oceans. Journal of Ichthyology, 59 (3): 283–288.

Neozoarcidae ヒメイトギンポ科

Zoarchias glaber Tanaka, 1908

Original description: Tanaka (1908): 38.

Tanaka, S. 1908. Descriptions of eight new species of fishes from Japan. Annotationes Zoologicae Japonenses, 7 (1): 27–47.

Holotype (lost): ZUMT 2011, off Misaki (Sagami Bay), Kanagawa Pref., Japan; 1908; collected by Shigeho Tanaka.（三崎 相模湾 1908 年 田中茂穂採集）

Remarks: The original description specified ZUMT 2011 as the holotype. Unfortunately, the specimen has not been located at this time, and was judged to have been lost.
原記載はホロタイプに ZUMT 2011 を指定した。残念ながら、現時点でこの標本は確認できないため、失われたと判断した。

Current status: Valid as *Zoarchias glaber* Tanaka, 1908 トビイトギンポ

Tomiyama, I. and Abe, T. 1956. Figures and descriptions of the fishes of Japan (a continuation of Dr. Shigeho Tanaka's work).Kazama-shobo, Tokyo. 54: 1091–1113, pls. 217–219. (In English and Japanese)

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

片渕弘志・岸本浩和・瀬能宏. 2002. 駿河湾からゲンゲ科魚類の稀種トビイトギンポを採集. I.O.P Diving News, 13 (9): 1–6. [Katafuchi, H., Kishimoto, H. and Senou, H. 2002. Record of a rare zoarchid fish, *Zoarchias glaber* from Suruga Bay with notes on the color and morphological variations. I.O.P Diving News, 13 (9): 1–6. (In Japanese with English abstract)]

Kimura, S. and Sato, A. 2007. Descriptions of two new pricklebacks (Perciformes: Stichaeidae) from Japan. Bulletin of the National Museum of Nature and Science (Ser. A) Supplement, 1: 67–79.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Zoarchias neglectus Tanaka, 1908

Original description: Tanaka (1908): 24.

Tanaka, S. 1908. On a small collection of tide-pool fishes from Misaki, with descriptions of two new species. Annotationes Zoologicae Japonenses, 7 (1): 17–26.

Holotype (lost): ZUMT 1969, off Misaki (Sagami Bay), Kanagawa Pref., Japan; May 1908; collected by Shigeho Tanaka.（三崎 1908 年 5 月 田中茂穂採集）

Paratype (lost): ZUMT 1968 (1), same as holotype.

Paratypes (available): ZUMT 48583–ZUMT 48584 (2), same as holotype. It was identified as *Zoarchias glaber* by Ichiro Tomiyama.

Paratypes (available): ZUMT 57527–ZUMT 57540 (14), same as holotype.

Remarks: The original description is based on 18 specimens including the holotype ZUMT 1969. According to the records in the ZUMT specimen ledger, the paratype is ZUMT 1968, which includes 17 specimens. Of the ZUMT 1968, two specimens were identified by Dr. Ichiro Tomiyama as Zoarchias glaber Tanaka and re–registered in ZUMT 48583, 48584, and the remaining 14 specimens were re–registered in ZUMT 57527–57540. The whereabouts of one of the holotype ZUMT 1969 and the paratype ZUMT 1968 are unknown.

原記載はホロタイプの ZUMT 1969 を含む 18 標本を基に記載した。ZUMT 標本台帳の記録からパラタイプは ZUMT 1968 であり、17 標本を含むとある。ZUMT 1968 の内、2 標本は冨山一郎博士により *Zoarchias glaber* Tanaka と同定され、ZUMT 48583 と ZUMT 48584 に再登録され、残り 14 標本も ZUMT 57527–57540 に再登録された。ホロタイプ ZUMT 1969 とパラタイプ ZUMT 1968 の 1 個体は所在不明。

Current status: Valid as *Zoarchias neglectus* Tanaka, 1908 コモンイトギンポ

Tomiyama, I. and Abe, T. 1956. Figures and descriptions of the fishes of Japan (a continuation of Dr. Shigeho Tanaka's work) Kazama-shobo, Tokyo. 53: 1077–1090, pls. 213–216. (In English and Japanese)

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Kimura, S. and Sato, A. 2007. Descriptions of two new pricklebacks (Perciformes: Stichaeidae) from Japan. Bulletin of the National Museum of Nature and Science (Ser. A) Supplement, 1: 67–79.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Trachinoidei ワニギス亜目

Pinguipedidae トラギス科

Neopercis muronis Tanaka, 1918　ムロトラギス

Original description: Tanaka (1918): 227.

田中茂穂. 1918. 日本産魚類の十二新種. 動物学雑誌, 30 (356): 223–227. [Tanaka, S. 1918. Twelve new species of Japanese fishes. Zoological Magazine Tokyo, 30 (356): 223–227. (In Japanese)]

Holotype (available): ZUMT 8316, Tanabe, Wakayama Pref., Japan; collected by Nuizo Ui.（紀伊國田邊［和歌山県田辺市］宇井縫蔵採集）

Remarks: There is no holotype designation in the original description. ZUMT 8316 is the only specimen whose scientific name and collection data in the ZUMT specimen ledger match the original description, and is a holotype (ICZN Art. 72.4.1, 73.1.). This specimen has two cloth tags, the registration number "8316" and "Sketch No. 400".

Tanaka (1918) described the "Murotoragisu" illustrated in the Figures and descriptions of the fishes of Japan (29: 536–539, pl. 139, fig. 390) as the holotype.

原記載にはホロタイプの指定がない。ZUMT 8316 は、ZUMT 標本台帳の学名や収集データが原記載に一致する唯一の標本であり、ホロタイプである(ICZN Art. 72.4.1, 73.1)。この標本には登録番号の「8316」と「写生番号 400 号」の 2 つの布タグが付いている。

田中（1918）は、日本産魚類図説（29: 536–539, pl. 139, fig. 390）に図示した「ムロトラギス」は、ホロタイプである。

Current status: Valid as *Parapercis muronis* (Tanaka, 1918) ムロトラギス

田中茂穂. 1918. 日本産魚類図説, 29: 515–538, pls. 138–139. [Tanaka, S. 1918. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 29: 515–538, pls. 138–139. (In Japanese and English)]

Cantwell, G. E. 1964. A revision of the genus *Parapercis*, family Mugiloididae. Pacific Science, 18 (3): 239–280.
益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Johnson, J. W. and Worthington Wilme, J. 2018. Three new species of *Parapercis* (Perciformes: Pinguipedidae) and first records of *P. muronis* (Tanaka, 1918) and *P. rubromaculata* Ho, Chang & Shao, 2012 from Australia. Zootaxa, 4388 (2): 151–181.

Uranoscopidae ミシマオコゼ科

Uranoscopus flavipinnis Kishimoto, 1987　キビレミシマ

Original description: Kishimoto (1987): 4, fig. 2.
Kishimoto, H. 1987. A new stargazer, *Uranoscopus flavipinnis*, from Japan and Taiwan with redescription and neotype designation of *U. japonicus*. Japanese Journal of Ichthyology, 34 (1): 1–14.

Paratype (available): ZUMT 55110 (1, female), outside coast of Miho Peninsula, innermost Suruga Bay, Shimizu-ku, Shizuoka City; Shizuoka Pref., Japan; 10 hiro (18 m ca.) depth; 10 Apr. 1979; a bottom gill net; collected by Hirokazu Kishimoto.
Paratype (available): ZUMT 55111 (1, female), outside coast of Miho Peninsula, innermost Suruga Bay, Japan; 7–20 hiro (12–36 m ca.) depth; a bottom gill net; 17 Apr. 1979; collected by Hirokazu Kishimoto.
Paratype (available): ZUMT 55112 (1, male), outside coast of Miho Pen., innermost Suruga Bay, Shimizu-ku, Shizuoka City; Shizuoka Pref., Japan; 5 hiro (9 m ca.) depth; a bottom gill net; 16 Apr. 1979; collected by Hirokazu Kishimoto.

Current status: Synonym of *Uranoscopus oligolepis* Bleeker, 1878　キビレミシマ
山田梅芳・田川 勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. [Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
Pietsch, T. W. 1989. Phylogenetic relationships of trachinoid fishes of the family Uranoscopidae. Copeia, 1989 (no. 2): 253–303.
Pietsch, T. W. and Kishimoto, H. 1989. *Uranoscopus chinensis* Guichenot in Sauvage, 1882, a senior synonym of *Uranoscopus flavipinnis* Kishimoto, 1987 (Teleostei: Uranoscopidae). Copeia, 1989 (3): 748–750.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. [Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds). 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Fricke, R. 2018. Two new species of stargazers of the genus *Uranoscopus* (Teleostei: Uranoscopidae) from the western Pacific Ocean. Zootaxa, 4476 (1): 157–167.
Psomadakis, P., Thein, H., Russell, B. C. and Tun, M. T. 2020. Field identification guide to the living marine resources of Myanmar. FAO species identification guide for fishery purposes. Food and Agriculture Organization of the United Nations, and Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar, Rome. xvii + 694 pp., pls. 1–58.
Prokofiev, A. M. 2020. New species of stargazers (Uranoscopidae) from the Arafura Sea. Journal of Ichthyology, 60 (5): 673–680.

Prokofiev, A. M. 2021. To the taxonomy of the stargazers of the genus *Uranoscopus* of the Indo-Pacific waters with a description of three new species (Uranoscopidae). Journal of Ichthyology, 61 (5): 655–679.

Blennioidei ギンポ亜目
Blenniidae イソギンポ科
Alticus orientalis Tomiyama, 1955

Original description: Tomiyama (1955): 10, fig. 6.
Tomiyama, I. 1955. Notes on some fishes, including one new genus and three new species from Japan, the Ryukyus and Pescadores. Japanese Journal of Ichthyology, 4 (1/2/3): 1–15.

Holotype (available): ZUMT 48353, Hachijo-jima Island, Izu Islands, Japan; collected by Yojiro Otsuki.（伊豆諸島八丈島 大槻 洋四郎採集）

Current status: Valid as *Alticus orientalis* Tomiyama, 1955 ヤセタマカエルウオ
Smith-Vaniz, W. F. and Springer, V. G. 1971. Synopsis of the tribe Salariini, with description of five new genera and three new species (Pisces: Blenniidae). Smithsonian Contributions to Zoology, 73: 1–72.
Mochizuki K (1982) A record of the blenniid fsh, Alticus orientalis, from Minami-Iwojima Island. In: Nature Conservation Bureau of Ministry of the Environment (ed) Conservation Reports of the Minami-Iwojima Wilderness Area, Tokyo, Japan. Nature Conservation Bureau of Ministry of the Environment, Tokyo, pp 385–389.
Fujiwara, K., Kawama, K., Muto, N., Senou, H. and Motomura, H. 2022. Validity and redescription of the poorly known Japanese blenny *Alticus orientalis* Tomiyama 1955 (Perciformes: Blenniidae). Ichthyological Research, 68 (4): 471–485. [First published online, pp. 1-15, on 27 Mar. 2021. Volume, issue and pages added 25 Oct. 2021.]

Andamia pacifica Tomiyama, 1955

Original description: Tomiyama (1955): 13, pl. 7.
Tomiyama, I. 1955. Notes on some fishes, including one new genus and three new species from Japan, the Ryukyus and Pescadores. Japanese Journal of Ichthyology, 4 (1/2/3): 1–15.

Holotype (available): ZUMT 37924, Kerama Islands, near Okinawa Is., Japan; Apr. 1924; collector unknown.（沖縄県慶良間諸島 大正 13 年 4 月）
Paratype (available): ZUMT 37925 (1), same as holotype.

Current status: Valid as *Andamia pacifica* Tomiyama, 1955
Smith-Vaniz, W. F. and Springer, V. G. 1971. Synopsis of the tribe Salariini, with description of five new genera and three new species (Pisces: Blenniidae). Smithsonian Contributions to Zoology, 73: 1–72.

Meiacanthus kamoharai Tomiyama, 1956 カモハラギンポ

Original description: Tomiyama (1956): 1083, pl. 214–215.
Tomiyama, I. and Abe, T. 1956. Figures and descriptions of the fishes of Japan (a continuation of Dr. Shigeho Tanaka's work), 53: 1077–1090, pls. 213–216. (In English and Japanese)

Holotype (available): ZUMT 18777, Kashiwa-jima, Otsuki-cho, Hata Dist., Kochi Pref., Japan; Mar. 12, 1905; collected by Katsuya Tago.（高知県柏島 明治 38 年 3 月 12 日　田子勝弥採集）

Current status: Valid as *Meiacanthus kamoharai* Tomiyama, 1956 カモハラギンポ

益田　一・尼岡邦夫・荒賀忠一・上野輝彌・吉野哲夫（編）. 1984. 日本産魚類大図鑑. 東海大学出版会, 東京. xx + 448 pp., 370 pls. [Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. (eds). 1984. The fishes of the Japanese Archipelago. Tokai University Press, Tokyo. xx + 448 pp., 370 pls.]

Smith-Vaniz, W. F. and Allen, G. R. 2011. Three new species of the fangblenny genus *Meiacanthus* from Indonesia, with color photographs and comments on other species (Teleostei: Blenniidae: Nemophini). Zootaxa, No. 3046: 39–58.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Koeda, K., Fujii, T., Koeda, S. and Motomura, H. 2016. Fishes of Yoro-jima and Uke-jima islands in the Amami Islands: 89 new specimen-based records. Memoirs of the Faculty of Fisheries, Kagoshima University, 65: 1–20.

Salarias namiyei Jordan & Evermann, 1902

Original description: Jordan and Evermann (1902): 362, fig. 25.

Jordan, D. S. and Evermann, B. W. 1902. Notes on a collection of fishes from the island of Formosa. Proceedings of the United States National Museum, 25 (1289): 315–368.

Holotype (available): ZUMT 5726, Pescadores Islands [Penghu], Taiwan.

Remarks: The original description is "Type-No. 278, specimen 2.5 inches long from Hokoto, or Pescadores Islands; returned to the Imperial University of Tokyo". The ZUMT 5726 is the only specimen whose scientific name and collected data match with the records in the ZUMT specimen ledger. The records of ZUMT 5726 are "*Salarias namiyei* n. sp. 1 piece" and "Hokuto, Jordan. Type". This specimen had a metal tag engraved with the same number "278" as the original "Type-No. 278". This specimen is the holotype (ICZN Art. 73.1).

"Hokoto" is the Japanese name for Penghu Islands, and Jordan and Evermann (1902) specified "Hokoto" and another name for Penghu Islands, "Pescadores".

原記載の記述は「Type－No. 278, specimen 2.5 inches long from Hokoto, or Pescadores Islands; returned to the Imperial University of Tokyo」とある。ZUMT 標本台帳の記録に学名と収集データが一致した ZUMT 5726 は唯一の標本である。ZUMT 5726 の記録は、「*Salarias namiyei* n. sp.　1 個」、「Hokuto、Jordan. type」とある。この標本には、原記載の「Type－No. 278」と同じ番号「278」が刻印された金属タグが付けられていた。この標本がホロタイプである (ICZN Art. 73.1)。

"Hokoto"は澎湖諸島の日本名であり、Jordan and Evermann (1902)は、"Hokoto"と澎湖諸島の別名の “Pescadores”を明記した。

Current status: Valid as *Ecsenius namiyei* (Jordan & Evermann, 1902)　ニラミギンポ

Springer, V. G. 1971. Revision of the fish genus *Ecsenius* (Blenniidae, Blenniinae, Salariini). Smithsonian Contributions to Zoology, 72: ii + 1–74.

平松　亘・山川　武・瀬能　宏. 1993. 日本初記録のニラミギンポ. I.O.P Diving News, (3):2–3. [Hiramatsu W., T. Yamakawa and H. Senou. 2012. First record of the blenniid fish, Ecsenius namiyei, from Japan. I.O.P Diving News, (3): 2–3. (In Japanese and English abstract)]

Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.

中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Gobiesocoidei ウバウオ亜目
Gobiesocidae ウバウオ科
Aspasma laticephala Tanaka, 1909

Original description: Tanaka (1909): 25.
Tanaka, S. 1909. Descriptions of one new genus and ten new species of Japanese fishes. Journal of the College of Science, Imperial University, Tokyo. 27 (8): 1–27, pl. 1.

Holotype (lost): ZUMT 2158, Kouzushima (Kozu-jima), Izu Islands, Japan.（神津島 伊豆諸島）

Remarks: The original description specified ZUMT 2158 as the holotype. In the record of ZUMT 2158 in the ZUMT specimen ledger, Tanaka wrote "Reject". No holotype has been found at this time, and it was determined that it was discard.
原記載はホロタイプに ZUMT 2158 を指定した。ZUMT 標本台帳の ZUMT 2158 の記録には、田中の直筆で「棄却」と書き込みがあった。現時点ではホロタイプは発見されておらず、廃棄したと判断した。

Current status: Valid as *Conidens laticephalus* (Tanaka, 1909) アンコウウバウオ
Briggs, J. C. 1955. A monograph of the clingfishes (Order Xenopterygii). Stanford Ichthyological Bulletin, 6: 1–224.
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. (Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds.) 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
Allen, G. R. and Erdmann, M. V. 2012. Reef fishes of the East Indies. Vol. 2. Tropical Reef Research, Perth, Australia. 425–855 pp.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Koeda, K., Fujii, T., Koeda, S. and Motomura, H. 2016. Fishes of Yoro-jima and Uke-jima islands in the Amami Islands: 89 new specimen-based records. Memoirs of the Faculty of Fisheries, Kagoshima University. 65: 1–20.

Aspasma misakia Tanaka, 1908

Original description: Tanaka (1908): 22.
Tanaka, S. 1908. On a small collection of tide-pool fishes from Misaki, with descriptions of two new species. Annotationes Zoologicae Japonenses, 7(1): 17–26.

Holotype (available): ZUMT 1981 [not 1781], off Misaki (Sagami Bay), Kanagawa Pref., Japan; collected by S. Tanaka; May 1908.（三崎 明治 41 年 5 月 田中茂穂採集）
Paratype (lost): ZUMT 1982[not 1782] (1, 3.3 cm SL), same as holotype.

Remarks: In the original description, ZUMT 1781 was designated as the holotype (sample A in the measurement table) and described based on a paratype (sample B in the measurement table). There are two ZUMT 1781 records in the ZUMT specimen ledger, which is the latter, which matches with the original description such as the scientific name and collection data. The correct holotype registration number is ZUMT 1981. Subsequent ZUMT 1982 [not 1782] is the same collected data as the holotype and is a paratype of "Sample B" in the measurement table. Since this specimen cannot be confirmed at this time, it was judged to be lost.
The "Misaki-ubauo" illustrated in the Figures and descriptions of the fishes of Japan (3: 58–59, pl. 15, fig. 50) by Tanaka (1911) are the holotype of *Aspasma misakia* Tanaka, 1908.
原記載はホロタイプ（測定表の標本 A）に ZUMT 1781 を指定し、パラタイプ1標本 (測定表の標本 B) に基

づいて記載された。ZUMT 標本台帳には ZUMT 1781 が 2 箇所のあり、学名や収集データなど原記載と一致したのは後者である。ホロタイプの登録番号は ZUMT 1981 が正しい。それに続く ZUMT 1982[not 1782]は、ホロタイプと同じ採集データであり、測定表の「標本 B」のパラタイプであるが、現時点でこの標本は確認できないため、失われたと判断した。

田中(1911)の 日本産魚類図説 (3: 58–59, pl. 15, fig. 50) に図示された「ミサキウバウオ」は、*Aspasma misakia* Tanaka, 1908 のホロタイプである。

Current status: Valid as *Lepadichthys misakius* (Tanaka 1908) ミサキウバウオ

田中茂穂. 1911. 日本産魚類図説, 3: 35–50, pls. 11–15. [Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin, 3: 35–50, pls. 11–15. (In Japanese and English)]

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Fujiwara, K. and Motomura, H. 2019. Validity of *Lepadichthys misakius* (Tanaka 1908) and redescription of *Lepadichthys frenatus* Waite 1904 (Gobiesocidae: Diademichthyinae). Zootaxa, 4551 (3): 275–298.

Fujiwara, K. and Motomura, H. 2020. A new species of *Lepadichthys* from the Central South Pacific and comments on the taxonomic status of Lepadichthys springeri Briggs, 2001 (Gobiesocidae). Copeia, 108 (4): 833-846

Fujiwara, K., Hagiwara, K. and Motomura, H. 2020. Redescription of *Lepadichthys coccinotaenia* Regan 1921 and description of *Lepadichthys trishula* sp. nov. from southern Japan (Gobiesocidae: Diademichthyinae). Ichthyological Research, 67 (3): 422–438.

Callionymoidei ネズッポ亜目

Callionymidae ネズッポ科

Callionymus kanekonis Tanaka, 1917 アヤヌメリ

Original description: Tanaka (1917): 12.

田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Holotype (available): ZUMT 7269, Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko.(長崎市場 金子一狼採集)

Remarks: There is no holotype designation in the original description. ZUMT 7269 is the only specimen whose scientific name and collection data match the records in the ZUMT specimen ledger. This specimen is a holotype (ICZN Art. 72.4.1, 73.1). This specimen is tagged with a cloth tag labeled "Sketch No. 312".

原記載にはホロタイプの指定がない。ZUMT 7269 は ZUMT 標本台帳の記録に学名と採集データが一致する唯一の標本である。この標本がホロタイプである (ICZN Art. 72.4.1, 73.1)。この標本には「写生番号 312 号」と書かれた布タグが付いている。

Current status: Synonym of *Callionymus beniteguri* Jordan & Snyder, 1900 トビヌメリ

Fricke, R. 1983. Revision of the Indo-Pacific genera and species of the dragonet family Callionymidae (Teleostei). J. Cramer, Braunschweig. Theses Zoologicae, 3: 1–774.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Fricke, R. 2002. Annotated checklist of the dragonet families Callionymidae and Draconettidae (Teleostei: Callionymoidei), with comments on callionymid fish classification. Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie), 645: 1–103.

Calliurichthys numeri Tanaka, 1917 ミサキゴチ

Original description: Tanaka (1917): 11.
田中茂穂. 1917. 日本産魚類の十一新種. 動物学雑誌, 29 (339): 7–12. [Tanaka, S. 1917. Eleven new species of fish from Japan. Zoological Magazine Tokyo, 29 (339): 7–12. (In Japanese)]

Syntypes (available): ZUMT 7431–ZUMT 7436 (6), off Misaki (Sagami Bay), Kanagawa Pref., Japan; Nov. 1916; collected by Shigeho Tanaka.（三崎 大正 5 年 11 月 田中茂穂採集）

Remarks: There is no holotype designation in the original description. From the ZUMT specimen ledger, there was a record of ZUMT 7431–7436 whose scientific name and collection data match with the original description. These specimens are syntypes (ICZN Art. 73.2). There is a "type" entry on the ZUMT 7431, but this is not evidence of being fixed to the holotype (ICZN Art. 72.4.7).
原記載にはホロタイプの指定がない。ZUMT 標本台帳から学名と収集データが原記載と一致する ZUMT 7431～7436 の記録があった。これらの標本はシンタイプである (ICZN Art. 72.1.1, 73.2)。「type」の書き込みが ZUMT 7431 にあるが、このことがホロタイプに固定されている証拠にはならない (ICZN Art. 72.4.7)。

Current status: Synonym of *Callionymus japonicus* Houttuyn, 1782 ヨメゴチ
Fricke, R. 1982. Nominal genera and species of dragonets (Teleostei: Callionymidae, Draconettidae). Annali del Museo Civico di Storia Naturale `Giacomo Doria', 84: 53–92.
山田梅芳・田川勝・岸田周三・本城康至. 1986. 東シナ海・黄海のさかな. 西海区水産研究所, 長崎. xxvi + 502 pp. (Yamada, U., Tagawa, M., Kishida, S. and Honjo, K. 1986. Fishes of the East China Sea and the Yellow Sea. Seikai Regional Fisheries Research Laboratory, Nagasaki. xxvi + 502 pp. (In Japanese)]
中坊徹次・町田吉彦・山岡耕作・西田清徳（編）. 2001. 以布利 黒潮の魚. 大阪海遊館, 大阪. 300 pp. (Nakabo, T., Machida, Y., Yamaoka, K. and Nishida, K. (eds.) 2001. Fishes of the Kuroshio Current, Japan. Osaka Aquarium KAIYUKAN, Osaka. 300 pp. (In Japanese and English)]
Fricke, R. 2002. Annotated checklist of the dragonet families Callionymidae and Draconettidae (Teleostei: Callionymoidei), with comments on callionymid fish classification. Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie), 645: 1–103.
中坊徹次（編）. 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Fricke, R. and Vo, Q. V. 2018. *Callionymus vietnamensis*, a new species of dragonet from the South China Sea off southern Vietnam, with a review of the subgenus *Callionymus* (Calliurichthys) Jordan & Fowler 1903 (Teleostei: Callionymidae). FishTaxa, 3 (2): 433–452.

Pseudocalliurichthys ikedai Nakabo, Senou & Aizawa, 1998 ナリタイトヒキヌメリ

Original description: Nakabo, Senou and Aizawa (1998): 451, figs. 1–3A.
Nakabo, T., Senou, H. and Aizawa. M. 1998. New species of *Pseudocalliurichthys* (Teleostei: Callionymidae) from Iriomote Island, Japan. Copeia, 1998 (2): 452–455.

Holotype (available): ZUMT 58413, Mouth of Yonada-gawa River, Iriomote Is. (24°23'20"N 123°45'25"E), Yaeyama Islands, Okinawa Pref., Japan; 14 July 1988; 1 m depth; hand net; collected by Hiroshi Senou and Masahiro Aizawa.

Current status: Valid as *Pseudocalliurichthys ikedai* Nakabo, Senou & Aizawa, 1998 ナリタイトヒキヌメリ
Fricke, R. 2002. Annotated checklist of the dragonet families Callionymidae and Draconettidae (Teleostei: Callionymoidei), with comments on callionymid fish classification. Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie), 645: 1–103.

中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]

Synchiropus* (*Synchiropus*) *kiyoae Fricke & Zaiser, 1983 ヒメテグリ

Original description: Fricke and Zaiser (1983): 122, figs. 1–2.
Fricke, R. and Zaiser, M. J. 1983. A new callionymid fish, *Synchiropus kiyoae*, from the Izu Islands, Japan. Japanese Journal of Ichthyology, 30 (2): 122–128.

Paratypes (available): ZUMT 42861–ZUMT 42863(3), ZUMT 42881(1), Sekiyama, Hachijo-jima Is. (33°04'N 139°50'E), Izu Islands, Japan; Sept. 1922; collected by Misao Uchiyama.(伊豆諸島八丈島 大正 11 年 9 月 内山 操採集)

Current status: Valid as *Minysynchiropus kiyoae* (Fricke & Zaiser, 1983) ヒメテグリ
中坊徹次(編). 2013. 日本産魚類検索全種の同定 I–III, 第三版. 東海大学出版会, 秦野. 2530 pp. [Nakabo, T. (ed). 2013. Fishes of Japan with pictorial keys to the species I–III, third edition. Tokai University Press, Hadano. 2530 pp. (In Japanese)]
Motomura, H., Kuriiwa, K., Katayama, E., Senou, H., Ogihara, G., Meguro, M., Matsunuma, M., Takata, Y., Yoshida, T., Yamashita, M., Kimura, S., Endo, H., Murase, A., Iwatsuki, Y., Sakurai, Y., Harazaki, S., Hidaka, K., Izumi, H., and Matsuura, K. 2010. Annotated checklist of marine and estuarine fishes of Yaku–shima Island, Kagoshima, southern Japan. Pp. 65–247. In: Motomura, H. and K. Matsuura (eds.) Fishes of Yaku–shima Island－A World Heritage island in the Osumi Group, Kagoshima Prefecture, southern Japan. National Museum of Nature and Science, Tokyo.
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Synchiropus* (*Synchiropus*) *moyeri Zaiser & Fricke, 1985 ミヤケテグリ

Original description: Zaiser and Fricke (1985): 389, figs. 1–2.
Zaiser, M. J. and Fricke, R. 1985. *Synchiropus moyeri*, a new species of dragonet (Callionymidae) from Miyake-jima, Japan. Japanese Journal of Ichthyology, 31 (4): 389–397.

Paratype (lost): ZUMT 54586 (TMBS 830713-6 :1, male), Igaya Bay (34°06'N 139°28'E), Miyake-jima Is., Izu Islands, Japan; 15 m depth; 13 July 1983; collected by M. J. Zaiser and J. T. Moyer.(伊豆諸島三宅島伊ヶ谷湾)

Remarks: A paratype ZUMT 54586 cloth tag has been preserved. This specimen has not reached ZUMT. The original number for paratype ZUMT 54586 is TMBS 830713-6 (Dr. Ronald Fricke, Prec. Comm). Some of the TMBS type specimens have been transferred to the National Museum of Nature and Science, but they are not included there either (Moyer and Matsuura 1991). This paratype is thought to have been stored in TMBS, and the 2000 eruption of Miyakejima (Mt. Oyama) devastated the Ako district. Specimens with TMBS were judged to have died out.
パラタイプの ZUMT 54586 の布タグが保管されている。この標本は ZUMT には届いていない。パラタイプ ZUMT 54586 の元番号は、TMBS 830713-6 である(Dr. Ronald Fricke、私信)。TMBS のタイプ標本の一部は、国立科学博物館に移管されたが、その中にも含まれていない(Moyer and Matsuura 1991)。このパラタイ

プは TMBS に保管されていたと思われ，その後 2000 年の三宅島（雄山）の噴火災害により阿古地区は壊滅的な被害を受けた。TMBS のあった標本は、火災消失したと判断した。

Current status: Valid as *Neosynchiropus moyeri* (Zaiser & Fricke, 1985) ミヤケテグリ

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