

Fish types deposited in the Department of Zoology, The University Museum, The University of Tokyo - Part 2: Myxiniiformes, Lamniformes, Carcharhiniiformes, Squaliformes, Torpediniiformes, Rajiiformes, Chimaeriformes, and Acipenseriformes
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 2 部：ヌタウナギ目、ネズミザメ目、メジロザメ目、ツノザメ目、シビレエイ目、ガンギエイ目、ギンザメ目、チョウザメ目

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Abstract

The current status of type specimens of Myxiniiformes, Lamniformes, Carcharhiniiformes, Squaliformes, Torpediniiformes, Rajiiformes, Chimaeriformes, and Acipenseriformes in the ZUMT collection were investigated with recourse to original descriptions, information tags on specimens, and/or the ZUMT specimen ledger.

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 Myxiniiformes, Lamniformes, Carcharhiniiformes, Squaliformes, Torpediniiformes, Rajiiformes, Chimaeriformes, and Acipenseriformes currently held.

本研究では、ZUMT コレクション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おこなった。本リストは、ZUMT に含まれるタイプ標本のうちヌタウナギ目、ネズミザメ目、メジロザメ目、ツノザメ目、シビレエイ目、ガンギエイ目、ギンザメ目、チョウザメ目までの魚類についてまとめたものである。

Materials and Methods

The “available” type specimens of Myxiniiformes, Lamniformes, Carcharhiniiformes, Squaliformes, Torpediniiformes, Rajiiformes, Chimaeriformes, and Acipenseriformes in the ZUMT collection were confirmed by the first author. They are currently stored in room 407 in the museum building. The ZUMT collection also includes a variety of personal specimens

acquired by the late Tokiharu Abe, such being identifiable in the first instance by an underlined number on the specimen tag. Although those specimens were at no time registered into the ZUMT collection, they are treated here as ZUMT ABE XXXX.

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、ZUMT に所在するヌタウナギ目、ネズミザメ目、メジロザメ目、ツノザメ目、シビレエイ目、ガンギエイ目、ギンザメ目、チョウザメ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確認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ものの、本リストにおいては ZUMT ABE ○○○○として扱った。

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）記載されたヌタウナギ目、ネズミザメ目、メジロザメ目、ツノザメ目、シビレエイ目、ガンギエイ目、ギンザメ目、チョウザメ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：備考で引用した印刷物や種の現状に関する根拠。種ごとに示した。

Type specimens of Myxiniformes, Lamniformes, Carcharhiniformes, Squaliformes, Torpediniformes, Rajiformes, Chimaeriformes, and Acipenseriformes in ZUMT

Based on the original descriptions, tags on the specimens, and the ZUMT specimen ledger, type specimens of 28 species of Myxiniformes, Lamniformes, Carcharhiniformes, Squaliformes, Torpediniformes, Rajiformes, Chimaeriformes, and Acipenseriformes in 15 families, including 22 holotypes, 9 syntypes, 2 lectotypes, 15 paratypes and 2 paralectotypes, were purported to be in the ZUMT collection. 7 holotypes, 2 syntypes and 4 paratypes 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ヌタウナギ目、ネズミザメ目、メジロザメ目、ツノザメ目、シビレエイ目、ガンギエイ目、ギンザメ目、チョウザメ目魚類標本には 15 科 28 種のタイプ標本が登録（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 22 標本、シンタイプ 9 標本、レクトタイプ 2 標本、パラタイプ 15 標本、パラレクトタイプ 2 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 7 標本、シンタイプ 2 標本、パラタイプ 4 標本である。

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Myxiniformes ヌタウナギ目
Myxinidae ヌタウナギ科
Homea okinoseana Dean, 1904

Original description: Dean (1904): 8, 20, fig. 2B, pl. 1 (fig. 1).

Dean, B. 1904. Notes on Japanese myxinoids. A new genus *Paramyxine* and a new species *Homea okinoseana*. Reference also to their eggs. Journal of the College of Science. Imperial University, Tokyo, 19 (2): 1–25, pl. 1.

Syntypes (lost): ZUMT 1449 (1, female), ZUMT 1450 (1, male), off Misaki, Sagami Sea, Japan, depth 400 fathoms; May 1901; collected by Kumakichi Aoki.

Remarks: There is no holotype designation in the original description. The three specimens of two males and one female used in the original description are syntypes (ICZN Art. 72.1.1, 72.4.1.1). Two specimens were deposited at ZUMT and another one at Columbia University in New York. The information of ZUMT 1449 and ZUMT 1450 in the ZUMT specimen ledger well match with the original description that ZUMT 1449 written as "type female", and ZUMT 1450 as "cotype male". Unfortunately, however, these specimens have not been located at this time, and was judged to have been lost.

原記載にはホロタイプの指定がない。記載に使用した雄 2 個体と雌 1 個体の 3 標本は、シントタイプである (ICZN Art. 72.1.1, 72.4.1.1)。2 標本は ZUMT に、1 標本はニューヨークのコロンビア大学に登録された。ZUMT 標本台帳では、本種に ZUMT 1449 と ZUMT1450 の 2 つが該当し、ZUMT 1449 には「type 雌」、ZUMT1450 には「cotype 雄」の書き込みがある。ただし残念ながら、現時点でこれら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 *Eptatretus okinoseanus* (Dean, 1904) ムラサキヌタウナギ

Kuo, C.-H., Huang, K.-F. and Mok, H.-K. 1994. Hagfishes of Taiwan (I): A taxonomic revision with description of four new *Paramyxine* species. *Zoological Studies*, 33 (2): 126–139.

McMillan, C. B. and Wisner, R. L. 2004. Review of the hagfishes (Myxinidae, Myxiniformes) of the northwestern Pacific Ocean, with descriptions of three new species, *Eptatretus fernholmi*, *Paramyxine moki*, and *P. walkeri*. *Zoological Studies*, 43 (1): 51–73.

Paramyxine atami Dean, 1904

Original description: Dean (1904): 14, fig. 2D, pl. 1 (figs. 3–5).

Dean, B. 1904. Notes on Japanese myxinoids. A new genus *Paramyxine* and a new species *Homea okinoseanus*. Reference also to their eggs. *Journal of the College of Science. Imperial University, Tokyo*, 19 (2): 1–25, pl. 1.

Syntype (lost): ZUMT 1421 (1, female), off Manazuru Cape (Sagami Bay), Kanagawa Pref., Japan, depth 270 fathoms; June 1901; donated by B. Dean.

Syntype (available): ZUMT 1527 (2, egg capsules), off Atami (Sagami Bay), Kanagawa Pref., Japan; Nov. 1896; collected by Kumakichi Aoki.

Remarks: There is no holotype designation in the original description. The three specimens of one female and two eggshells used in the original description are syntypes (ICZN Art. 72.1.1, 72.4.1.1). In the ZUMT specimen ledger, ZUMT 1421 written as "1 sample, female type", and ZUMT 1527 as "type egg". Unfortunately, however, the female specimen ZUMT 1421 has not been located at this time, and was judged to have been lost.

原記載にはホロタイプの指定がない。記載に使用した雌 1 個体と卵殻 2 個の 3 標本はシタイプである (ICZN Art. 72.1.1, 72.4.1.1)。ZUMT 標本台帳には ZUMT 1421 に「1 標本、female type」、ZUMT 1527 には「type egg」の記述があった。ただし残念ながら、現時点で雌の ZUMT 1421 は確認できないため、失われたと判断した。

Current status: Valid as *Eptatretus atami* (Dean, 1904) クロヌタウナギ

Kuo, C.-H., Huang, K.-F. and Mok, H.-K. 1994. Hagfishes of Taiwan (I): A taxonomic revision with description of four new *Paramyxine* species. *Zoological Studies*, 33 (2): 126–139.

McMillan, C. B. and Wisner, R. L. 2004. Review of the hagfishes (Myxinidae, Myxiniformes) of the northwestern Pacific Ocean, with descriptions of three new species, *Eptatretus fernholmi*, *Paramyxine moki*, and *P. walkeri*. *Zoological Studies*, 43 (1): 51–73.

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

Original description: Jordan (1898): 200, pls. 11–12.

Jordan, D. S. 1898. Description of a species of fish (*Mitsukurina owstoni*) from Japan, the type of a distinct family of lamnoid sharks. *Proceedings of the California Academy of Sciences (Series 3) Zoology*, 1 (6): 199–204, pls. 11–12.

Holotype (lost): ZUMT 1455 (immature male), off Misaki (Sagami Bay), near Yokohama Market, Kanagawa Pref., Japan; donated by A. Owston in 1897. (明治 30 年 横浜市場 オーストン氏寄贈)

Remarks: This species was described based on one immature male (ICZN Art. 73.1.1). In the ZUMT specimen ledger, ZUMT 1455 written as "*Mitsukurina owstoni* Jordan type", and is holotype of this species. Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.

この種は未成魚の雄 1 個体に基づいて記載された (ICZN Art. 73.1.1)。ZUMT 標本台帳には ZUMT 1455 に「*Mitsukurina owstoni* Jordan type」の記述があった。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 *Mitsukurina owstoni* Jordan, 1898 ミツクリザメ

Bean, B. A. 1905. Notes on an adult goblin shark (*Mitsukurina owstoni*) of Japan. *Proceedings of the United States National Museum*, 28 (1409): 815–818, 8 figs.

Yano, K., Miya, M., Aizawa, M. and Noichi, T. 2007. Some aspects of the biology of the goblin shark, *Mitsukurina owstoni*, collected from the Tokyo Submarine Canyon and adjacent waters, Japan. *Ichthyol Research*, 54: 388–398.

Carcharhiniformes メジロザメ目
Scyliorhinidae トラザメ科
Catulus torazame Tanaka, 1908

Original description: Tanaka (1908): 6, pl. 2 (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 (lost): ZUMT 953 (male), off Misaki (Sagami Bay), Kanagawa Pref., Japan; 13 Mar. 1904; “Specimen B” in the measurement table.

Remarks: The original description specified ZUMT 953 as the holotype, and is a specimen of "Specimen B" male in the measurement table. The collection data of ZUMT 953 in the ZUMT specimen ledger well match with the original description. It was written as "Cotype (correction)" and "type (corrected by erasing co of cotype) is in the Owston Collection". Considering this writing as a misunderstanding, the holotype was ZUMT 953. Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.

The figure (pl. 2, fig. 2) published in the original description and the figure published later in the Figures and descriptions of the fishes of Japan (1: pl. 3, fig 12) by Tanaka (1911) are the same female. This specimen was regarded as a paratype in "Specimen A" of the measurement table (ICZN Art. 72.4.5). This specimen is said to have been collected by Mr. Owston.

原記載はホロタイプに ZUMT 953 を指定した。記載にある計測表の「Specimen B」雄の標本である。ZUMT 標本台帳には ZUMT 953 の収集データは、原記載と同じである。そこには「Cotype (加筆)」と「type (cotype の co を消して修正) は Owston Collection にあり」の書き込みがあった。この書き込を誤解と見なし、ホロタイプは ZUMT 953 である。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。

原記載に掲載された図 (pl. 2, fig. 2) とその後に田中 (1911) が日本産魚類図説 (1: pl. 3, fig 12) に掲載した図は同じ雌であり、計測表の「Specimen A」でパラタイプである (ICZN Art. 72.4.5)。この標本は、相模湾 (伊豆大島と伊豆半島) から 1905 年 2 月 6 日にオーストン氏が採集したものである。

Current status: Valid as *Scyliorhinus torazame* (Tanaka, 1908) トラザメ

田中茂穂. 1911. 日本産魚類図説, 1: 1–18, pls. 1–5. (Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 1: 1–18, pls. 1–5. [In Japanese and English])

Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2. Charcharhiniformes. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 4 (2): 251–655.

Shirai, S., Hagiwara, S. and Nakaya, K. 1992. *Scyliorhinus tokubee* sp. nov. from Izu Peninsula, southern Japan (Scyliorhinidae, Elasmobranchii). Japanese Journal of Ichthyology, 39 (1): 9–16.

- Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.
- Soares, K. D. A. and De Carvalho, M. R. 2019. The catshark genus *Scyliorhinus* (Chondrichthyes: Carcharhiniformes: Scyliorhinidae): taxonomy, morphology and distribution. *Zootaxa*, 4601 (1): 1–147.
- Ito, N., Fujii, M., Nohara, K. and Tanaka, S. 2022. *Scyliorhinus hachijoensis*, a new species of catshark from the Izu Islands, Japan (Carcharhiniformes: Scyliorhinidae). *Zootaxa*, 5092 (3): 331–349.

Pentanchidae ヘラザメ科
Scyliorhinus macrorhynchus Tanaka, 1909

Original description: Tanaka (1909): 1.

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 2153 (immature male), off Misaki (Sagami Bay), Kanagawa Pref., Japan; Apr. 1909.

Paratype (lost): ZUMT uncatalogued (1, skin), off Misaki (Sagami Bay), Kanagawa Pref., Japan.

Remarks: The original description specified ZUMT 2153 as the holotype. There is an even larger skin paratype, but 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 2153 を指定した。さらに大きな皮のパラタイプがあるものの、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 *Apristurus macrorhynchus* (Tanaka, 1909) ナガヘラザメ

Compagno, L. J. V. 1984. *FAO species catalogue. Vol. 4. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2. Carcharhiniformes.* FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 4 (2): 251–655.

Nakaya, K. and Séret, B. 1999. A new species of deepwater catshark, *Apristurus albisoma* n. sp. from New Caledonia (Chondrichthyes: Carcharhiniformes: Scyliorhinidae). *Cybium*, 23 (3): 297–310.

Nakaya, K., Sato, K. and Iglésias, S. P. 2008. Occurrence of *Apristurus melanogaster* from the South Pacific, Indian and South Atlantic oceans (Carcharhiniformes: Scyliorhinidae). *CSIRO Marine and Atmospheric Research Paper*, 022: 61–74.

Nakaya, K. and Kawachi, J. 2013. A review of the genus *Apristurus* (Chondrichthyes: Carcharhiniformes: Scyliorhinidae) from Taiwanese waters. *Zootaxa*, 3752 (1): 130–171.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology*. 88 (3): 837–1037.

Scyliorhinus platyrhynchus Tanaka, 1909

Original description: Tanaka (1909): 4.

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 2154 (male), off Misaki (Sagami Bay), Kanagawa Pref., Japan; May 1909.

Remarks: The original description specified ZUMT 2154 as the holotype. 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 2154 を指定した。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 *Apristurus platyrhynchus* (Tanaka, 1909) ヘラザメ

Nakaya, K. and Sato, K. 2000. Taxonomic review of *Apristurus platyrhynchus* and related species from the Pacific Ocean (Chondrichthyes, Carcharhiniformes, Scyliorhinidae). Ichthyological Research, 47 (3): 223–230.

Nakaya, K. and Kawauchi, J. 2013. A review of the genus *Apristurus* (Chondrichthyes: Carcharhiniformes: Scyliorhinidae) from Taiwanese waters. Zootaxa, 3752 (1): 130–171.

Ebert, D. A., White, W. T., Ho, H.-C., Last, P. R., Nakaya, K., Séret, B., Straube, N., Naylor, G. J. P. and de Carvalho, M. R. 2013. An annotated checklist of the chondrichthyans of Taiwan. Zootaxa, 3752 (1): 279–386.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Proscylliidae タイワンザメ科

Calliscyllium venustum Tanaka, 1912 ヒョウザメ

Original description: Tanaka (1912): 171, pl. 46 (figs. 178–183).

田中茂穂. 1912 日本産魚類図説, 10: 165–186, pls. 46–50. (Tanaka, S. 1912 Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 10: 165–186, pls. 46–50. [In Japanese and English])

Holotype (lost): ZUMT 3398 (female), Tokyo Market (Sagami Sea), Tokyo, Japan.

Remarks: The original description specified ZUMT 3398 as the holotype. The holotype was obtained from the Tokyo Market and was produced in Sagami Sea. In addition, the local name

"Hoshinokuri" in Kagoshima prefecture is mentioned. ZUMT 31594 corresponded to the record of ZUMT specimen ledger. However, this specimen was donated in March 1936 and is not a paratype. Unfortunately, we couldn't confirm the holotype at this point, so we decided it was lost.

原記載にはホロタイプに ZUMT 3398 を指定した。ホロタイプは、東京市場から得たもので産地を相模灘とした。また鹿児島県の地方名にホシノクリをあげている。ZUMT 標本台帳の記録に ZUMT 31594 が該当した。しかし、この標本は 1936 年 3 月に寄贈されたもので、パラタイプではない。残念ながら、現時点でホロタイプを確認できないため、失われたと判断した。

Current status: Valid as *Proscyllium venustum* (Tanaka, 1912) ヒョウザメ

Nakaya, K. 1983. Redescription of the holotype of *Proscyllium habereri* (Lamniformes, Triakidae). Japanese Journal of Ichthyology, 29 (4): 469-473.

Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2. Charcharhiniformes. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis No. 125, 4 (2): 251-655.

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., Ueno, 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. 2530pp. (Nakabo, T. (ed.). 2013. Fishes of Japan with pictorial keys to the species I-III, third edition. Tokai University Press, Hadano. 2530pp. In Japanese) Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837-1037.

Triakididae ドチザメ科

Cynias kanekonis Tanaka, 1916 ソオボオシロザメ

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])

Holotype (lost): ZUMT 6360, Nagasaki Market, Nagasaki Pref., Japan; collected by Ichiro Kaneko. (長崎市場, 金子一狼氏採集)

Remarks: There is no holotype designation in the original description. In the ZUMT specimen ledger, ZUMT 6360 is only the specimen which the scientific name and collected data match with the original description, and is judged as a holotype. Unfortunately, however, 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 標本台帳の記録から ZUMT 6360 が学名や収集データが一致した唯一の標本である。ZUMT コレクションにも他に該当する標本がないことから、この標本はホロタイプである (ICZN Art. 73.1.1)。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 *Mustelus griseus* Pietschmann, 1908 シロザメ

Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2. Charcharhiniformes. FAO (Food and Agriculture Organization of the United Nations) Fisheries Synopsis 125, 4 (2): 251–655.

White, W. T., S. Arunrugstichai and G. J. P. Naylor. 2021. Revision of the genus *Mustelus* (Carcharhiniformes: Triakidae) in the northern Indian Ocean, with description of a new species and a discussion on the validity of *M. walkeri* and *M. ravidus*. Marine Biodiversity, 51: 42: 1–24.

Squaliformes ツノザメ目

Squalidae ツノザメ科

Cirrhigaleus barbifer Tanaka, 1912 ヒゲズノ

Original description: Tanaka (1912): 151, pl. 41 (figs. 156–162).

田中茂穂. 1912. 日本産魚類図説, 9: 145–164, pls. 41–45. (Tanaka, S. 1912. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 9: 145–164, pls. 41–45. [In Japanese and English])

Holotype (lost): ZUMT 3397 (male), Tokyo Market (Sagami Bay?), Tokyo, Japan.

Remarks: The original description specified ZUMT 3397 as the holotype. 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 3397 を指定した。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 *Cirrhigaleus barbifer* Tanaka, 1912 ヒゲツノザメ

White, W. T., Last, P. R. and Stevens, J. D. 2007. *Cirrhigaleus australis* n. sp., a new Mandarin dogfish (Squaliformes: Squalidae) from the south-west Pacific. Zootaxa, 1560: 19–30.

Ebert, D. A., White, W. T., Ho, H.-C., Last, P. R., Nakaya, K., Séret, B., Straube, N., Naylor, G. J. P. and de Carvalho, M. R. 2013. An annotated checklist of the chondrichthyans of Taiwan. Zootaxa, 3752 (1): 279–386.

Squalus brevirostris Tanaka, 1917 ツマリアイザメ

Original description: Tanaka (1917): 464, pls. 129 (362–363), 130 (364).

田中茂穂. 1917. 日本産魚類図説, 26: 455–474, pls. 126–130. (Tanaka, S. 1917. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 26: 455–474, pls. 126–130. [In Japanese and English])

Holotype (available): ZUMT 7630 (male), Tokyo Market, Tokyo, Japan (probably came from Bakan [Shimonoseki, Yamaguchi Pref.]). (東京市場、おそらく馬関附近 [山口県下関])

Paratype (lost): ZUMT 2406 (1), Fukuoka, Fukuoka Pref., Japan; Apr. 1909; collected by Shigeo Tanaka. (福岡市 明治 42 年 4 月 田中茂穂採集)

Paratype (lost): ZUMT 3715 (1), Tokyo Market, Tokyo, Japan. (probably came from Bakan [Shimonoseki, Yamaguchi Pref.]). (東京市場 [山口県下関])

Paratype (lost): ZUMT 6046 (1), Atsuta Market, Nagoya, Aichi Pref., Japan, 1 May 1915. (愛知県名古屋市熱田市場、大正 4 年 5 月 1 日)

Paratypes (available): ZUMT6047, ZUMT 6048 (2, male), same as ZUMT 6046.

Remarks: The original description specified ZUMT 7630 as the holotype. In addition, descriptions of multiple specimens were found. The collection locality include Nagoya City, Atsuta and Fukuoka City in addition to the Tokyo Market (probably near Bakan [Shimonoseki, Yamaguchi Pref.]). In the ZUMT specimen ledger, there are ZUMT 3715 (Tokyo market [Shimonoseki, Yamaguchi Pref.]), ZUMT 6046 to ZUMT 6048 (Atsuta, Nagoya City) and ZUMT 2406 (Fukuoka) as specimens corresponding to the collection site. These specimens are paratypes (ICZN Art. 72.4.1.1, 72.4.5).

原記載はホロタイプに ZUMT 7630 を指定した。さらに複数標本の記述が見られた。産地には東京市場 (おそらく馬関附近 [山口県下関]) の他に名古屋市熱田と福岡市を含めている。ZUMT 標本台帳には採集地に該当する標本に ZUMT 3715 (東京市場 [山口県下関]), ZUMT 6046~ZUMT 6048 (名古屋市熱田) と ZUMT 2406 (福岡) がある。これらの標本はパラタイプである (ICZN Art. 72.4.1.1, 72.4.5)。

Current status: Valid as *Squalus brevirostris* Tanaka, 1917 ツマリツノザメ

Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the World. An annotated and illustrated catalogue of shark species known to date. Part 1 - Hexanchiformes to Lamniformes. viii + 249 pp.

Viana, S. T. de F. L., Lisher, M. W. and de Carvalho, M. R. 2017. Two new species of short-snouted dogfish sharks of the genus *Squalus* Linnaeus, 1758, from southern Africa (Chondrichthyes: Squaliformes: Squalidae). Marine Biodiversity, 48: 1787–1814.

Viana, S. T. de F. L. and de Carvalho, M. R. 2020. *Squalus shiraii* sp. nov. (Squaliformes, Squalidae), a new species of dogfish shark from Japan with regional nominal species revisited. Zoosystematics and Evolution, 96 (2): 275–311.

Squalus wakiyae Tanaka, 1918 アイザメ

Original description: Tanaka (1918): 475, pl. 130 (figs. 368–370).

田中茂穂. 1918. 日本産魚類図説, 27: 475–494, pls. 126–130. (Tanaka, S. 1917. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 27: 475–494, pls. 126–130. [In Japanese and English])

Syntype (lost): ZUMT 7632 (1, female), Watanoha, Ishinomaki, Miyagi Pref., 225 m depth; Feb. 1916; collected by Miyagi Fishery Station. (宮城県石巻市渡波)

Syntypes (available): ZUMT 4684 (1, neonate male), ZUMT 4685 (1, neonate female), Tokyo Market, Tokyo, Japan.

Remarks: The original description is a short description of the new species of *Squalus mitsukurii* reported by Tanaka (1917) in the Figures and descriptions of the fishes of Japan (26: 471–474, pl. 130, figs. 368–370). Tanaka (1917) investigated multiple specimens in addition to the illustrated ZUMT 7632. The original description mentioned as "It comes from the Rikuzen Sendai or Shiogama Market that transported to the Tokyo Market.". Based on the ZUMT specimen ledger, ZUMT 4684 and ZUMT 4685 are only the specimen of the species which obtained from the Tokyo Market. Therefore, these specimens are the syntypes (ICZN Art. 72.1.1, 72.4.1.1).

原記載は、田中自身 (1917) の日本産魚類図説 (26: 471–474, pl. 130, figs. 368–370) に報告した *Squalus mitsukurii* を新種にする短い記述である。田中 (1917) は、図示した ZUMT 7632 の他に複数標本を調べている。原記載には、「東京市場に来る陸前仙台又塩釜市場より来るもの」とある。ZUMT 標本台帳の記録から東京市場から入手した標本 ZUMT 4684 と ZUMT 4685 がある。これらの標本はシタイプである (ICZN Art. 72.1.1, 72.4.1.1)。

Current status: Synonym of *Squalus suckleyi* (Girard, 1854) アブラツノザメ

田中茂穂. 1917. 日本産魚類図説, 26: 455–474, pls. 126–130. (Tanaka, S. 1917. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 26: 455–474, pls. 126–130. [In Japanese and English])

Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the World. An annotated and illustrated catalogue of shark species known to date. Part 1 - Hexanchiformes to Lamniformes. viii + 249 pp.

Viana, S. T. de F. L., de Carvalho, M. R. and Gomes, U. L. 2016. Taxonomy and morphology of species of the genus *Squalus* Linnaeus, 1758 from the southwestern Atlantic Ocean (Chondrichthyes: Squaliformes: Squalidae). Zootaxa, 4133 (1): 1–89.

Viana, S. T. de F. L. and de Carvalho, M. R. 2020. *Squalus shiraii* sp. nov. (Squaliformes, Squalidae), a new species of dogfish shark from Japan with regional nominal species revisited. Zoosystematics and Evolution, 96 (2): 275–311.

Centrophoridae アイザメ科
Lepidorhinus kinbei Tanaka, 1918 キンベエザメ

Original description: Tanaka (1918): 99.

田中茂穂. 1918. 日本産魚類の二新種. 動物学雑誌, 30 (353): 99–100. (Tanaka, S. 1918. Two new species of Japanese fishes. Zoological Magazine Tokyo, 30 (353): 99–100. [In Japanese])

Holotype (available): ZUMT 12349 (female), body skin and head, Tokyo Market (Sagami Bay?), Tokyo, Japan.

Remarks: There is no holotype designated by the original description, and there is no record of the corresponding specimen in the ZUMT specimen ledger. However, a single specimen (ZUMT 12349, Squalidae in ZUMT specimen ledger) with head and whole-body skin was found from the ZUMT collection during the present investigation, and the morphology of fins, shape of the scales, and number of the dentitions (16 and 17 on the right and left sides of the maxilla, respectively; 13 and 14 on the right and left sides of the mandible, respectively), were well match with the original description. In addition, the total length of the specimen was 1410 mm, and was almost same as the original description. Although, this specimen lacking collection data on the ZUMT specimen ledger, “sketch number 365” in Tanaka’s handwriting. From these facts, it was judged to be a holotype of *Lepidorhinus kinbei* Tanaka, 1918 (ICZN Art. 73.1.2).

Compagno (1984) reported *Lepidorhinus kinbei* Tanaka, 1918 as a junior synonym for *Centrophorus squamosus* (Bonnaterre, 1788) with a question mark. As a result of examination of the holotype ZUMT 12349 of *Lepidorhinus kinbei* Tanaka, 1918, the morphology of the holotype was well corresponded with known diagnosis of *Centrophorus squamosus* (Bonnaterre, 1788).

The scientific name of this species is names in honor of the collector Kinbe. The original spelling "*hinbei*" is considered as a misspelling of "*kinbei*" and is an incorrect original spelling. Incorrect spelling is corrected from "*hinbei*" to "*kinbei*" (ICZN Art. 31.1.1, 32.5.1).

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。しかし、今回の調査の過程で ZUMT コレクションにある大型の頭部と尾鰭の残る皮が発見された (ZUMT 12349、台帳には Squalidae と記録されている)。この標本を調べた結果、各鰭の形態と鱗の形状、さらに歯列数は上顎の右側 16 本、左側 17 本、下顎の右側 13 本、左側 14 本と原記載に書かれた特徴とよく一致した。また、全長は 1410 mm であり、これも概ね一致する。また、標本台帳には産地に関する情報がなかったものの、田中自筆で「写生 365 号」と書かれていた。これらのことから *Lepidorhinus kinbei* Tanaka, 1918 のホロタイプと判断した (ICZN Art. 73.1.2)。

Compagno (1984)は、*Lepidorhinus kinbei* Tanaka, 1918 をモミジザメ *Centrophorus squamosus* (Bonnaterre, 1788)のジュニアシノニムとして疑問符をつけて報告した。今回、発見された *L. kinbei* のホロタイプ ZUMT 12349 を観察した結果、その形態はモミジザメ *Centrophorus squamosus* (Bonnaterre, 1788)の識別的特徴と良く一致した。

本種の学名は、採集者の金兵衛 (Kinbe) に由来している。原綴り”hinbei”は、”kinbei”のスペルミスと見なされ、不正な原綴りとなる。不正な原綴りは”hinbei” は”kinbei”にと修正される (ICZN Art. 31.1.1, 32.5.1)。

- Current status: Synonym of *Centrophorus squamosus* (Bonnaterre, 1788) モミジザメ
- Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the World. An annotated and illustrated catalogue of shark species known to date. Part 1 - Hexanchiformes to Lamniformes. viii + 249 pp.
- 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. 2428 pp. [Nakabo, T. (ed.). 2013. Fishes of Japan with pictorial keys to the species, I-III, third edition. Tokai University Press, Hadano. xlix + 2428 pp. (In Japanese)]
- Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology*, 88 (3): 837-1037.

Etmopteridae カラスザメ科

Centroscyllium kamoharai Abe, 1966 ハダカカスミザメ

- Original description: Abe (1966): 190, figs. 1-8.
- Abe, T. 1966. Description of a new squaloid shark, *Centroscyllium kamoharai*, from Japan. *Japanese Journal of Ichthyology*, 13 (4): 190-198.
- Holotype (lost): ZUMT 52310 (female), off Yaizu (Suruga Bay), Shizuoka Pref., Japan, deep-water line-fishing; 8 Sept. 1964.
- Paratype (lost): ZUMT 52311(1, female), same locality as holotype; 26 Nov. 1964.
- Paratype (lost): ZUMT 52312 (1, female), same locality as holotype; Feb. 1964.

- Current status: Valid as *Centroscyllium kamoharai* Abe, 1966 ハダカカスミザメ
- Compagno, L. J. V. 1984. FAO species catalogue. Vol. 4. Sharks of the World. An annotated and illustrated catalogue of shark species known to date. Part 1 - Hexanchiformes to Lamniformes. i-viii + 1-249.
- Ebert, D. A., White, W. T., Ho, H.-C., Last, P. R., Nakaya, K., Séret, B., Straube, N., Naylor, G. J. P. and de Carvalho, M. R. 2013. An annotated checklist of the chondrichthyans of Taiwan. *Zootaxa*, 3752 (1): 279-386.
- Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology*, 88 (3): 837-1037.

Somniosidae オンデンザメ科
Heteroscymnus longus Tanaka, 1912 カエルザメ

Original description: Tanaka (1912): 102, pl. 26.

田中茂穂. 1912. 日本産魚類図説, 6: 87–108, pls. 25–30. (Tanaka, S. 1912. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 6: 87–108, pls. 25–30. [In Japanese and English])

Holotype (lost): ZUMT 3204 (female), Tokyo Market (Sagami Bay?), Tokyo, Japan.

Remarks: The original description specified ZUMT 3204 as the holotype. The specimen is lost.
原記載はホロタイプに ZUMT 3204 を指定した。標本は紛失している。

Current status: Valid as *Somniosus longus* (Tanaka, 1912) カエルザメ

Yano, K., Stevens, J. D. and Compagno, L. J. V. 2004. A review of the systematics of the sleeper shark genus *Somniosus* with redescrptions of *Somniosus (Somniosus) antarcticus* and *Somniosus (Rhinoscymnus) longus* (Squaliformes: Somniosidae). Ichthyological Research, 51 (4): 360–373.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Torpediniformes シビレエイ目
Torpedinidae ヤマトシビレエイ科
Tetronarcine tokionis Tanaka, 1908= ***Tetronarce tokionis*** Tanaka, 1908

Original description: Tanaka (1908): 2, figured.

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 917 (female, 95 cm TL, specimen A), Tokyo Market, Tokyo, Japan; 19 Dec. 1905.

Paratypes (lost): ZUMT uncatalogued (1, female, 80 cm TL, specimen B), off Misaki (Sagami Bay), Kanagawa Pref., Japan; 11 Mar. 1906.

Paratype (lost): ZUMT uncatalogued (1, female, 81 cm TL, specimen C), off Odawara (Sagami Bay), Kanagawa Pref., Japan; 12 Mar. 1904.

Remarks: The original description was based on 3 specimens containing holotype ZUMT 917. Other than ZUMT 917, there is no record in the ZUMT specimen ledger. These specimens are regarded as lost.

Tanaka (1908: 3) referred to two species, *T. occidentalis* and *T. californica*, of North America from Jordan and Evermann (1896. Fishes of North and Middle America. Part 1: 77). The spelling of the genus is unknown because the genus name was abbreviated. However, the genus name of Jordan and Evermann (1896: 77) quoted is *Tetronarce*, and are meaning that Tanaka (1908: 2) mistakenly spelled *Tetronarce* as *Tetronarcine*. Even if it is published in combination with such an incorrect spelling of the genus name (here, an error), it is considered to be published in combination with the correct original spelling of the genus name (ICZN Art. 11.9.3.2). A legitimate modified name replaces the incorrect original spelling and retains the authorship and date of the scientific name at the time of establishment as the correct original spelling (ICZN Art. 19.2).

原記載はホロタイプ ZUMT 917 を含む 3 標本を基にした。ZUMT 917 以外、ZUMT 標本台帳に記録はない。これらの標本は紛失している。

田中 (1908: 3) は、原記載の中で Jordan and Evermann (1896. Fishes of North and Middle America. Part 1: 77) の北米産 *T. occidentalis* と *T. californica* の 2 種を参考にした。属名が省略されているため、その属のつづりは不明である。引用した Jordan and Evermann (1896: 77) の属名は *Tetronarce* である。田中 (1908: 2) は誤って *Tetronarce* のつづりを *Tetronarcine* と綴った。このような属名の不正な綴り (ここでは、誤記) に結合して公表されたとしても、属名の正しい原綴りに結合して公表されたものと見なされる (ICZN Art. 11.9.3.2)。正当な修正名は、不正な原綴りに取って代わり、正しい原綴りとして設立時の学名の著者権と日付を保持する (ICZN Art. 19.2.)

Current status: Valid as *Tetronarce tokionis* Tanaka, 1908 ヤマトシビレエイ

de Carvalho, M. R., Stehmann, M. F. W. and Manilo, L. G. 2002. *Torpedo adenensis*, a new species of electric ray from the Gulf of Aden, with comments on nominal species of *Torpedo* from the western Indian Ocean, Arabian Sea, and adjacent areas (Chondrichthyes: Torpediniformes: Torpedinidae). *American Museum Novitates*, 3369: 1–34.

Haas, D. L. and Ebert, D. A. 2006. *Torpedo formosa* sp. nov., a new species of electric ray (Chondrichthyes: Torpediniformes: Torpedinidae) from Taiwan. *Zootaxa*, 1320: 1–14.

Ebert, D. A., White, W. T., Ho, H.-C., Last, P. R., Nakaya, K., Séret, B., Straube, N., Naylor, G. J. P. and de Carvalho, M. R. 2013. An annotated checklist of the chondrichthyans of Taiwan. *Zootaxa*, 3752 (1): 279–386.

萬代あゆみ・松沼瑞樹・本村浩之. 2017. 日本初記録のヤマトシビレエイ科魚類ツキミシビレエイ (新称) *Tetronarce formosa* と本種の標徴に関する新知見, および近縁種との形態比較. *魚類学雑誌*, 64 (2): 157–170. (Bandai A., M. Matsunuma and H. Motomura. 2017. First records of the electric ray *Tetronarce formosa* (Torpediniformes: Torpedinidae) from Japan, with a revised species' diagnosis and comparisons with congeners. *Japanese Journal of Ichthyology*, 64 (2): 157–170. [In Japanese with English abstract])

Rajiformes ガンギエイ目
Arhynchobatidae ヒトツビレカスベ科
Bathyraja pseudoisotrachys Ishihara & Ishiyama, 1985 ソコガンギエイ

Original description: Ishihara and Ishiyama (1985): 165, figs. 18 (A–B).

Ishihara, H. and R. Ishiyama. 1985. Two new North Pacific skates (Rajidae) and a revised key to *Bathyraja* in the area. Japanese Journal of Ichthyology, 32 (2): 143–179.

Holotype (available): ZUMT 14571 (male), off Muroran, Hokkaido, Japan; collected by Jutaro Katsukui.

Current status: Valid as *Bathyraja pseudoisotrachys* Ishihara & Ishiyama, 1985 ソコガンギエイ
田中茂穂. 1927. 日本産魚類図説, 35: 645–676, pls. 154–155. (Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 35: 645–676, pls. 154–155. [In Japanese and English])

Ebert, D. A. and L. J. V. Compagno. 2007. Biodiversity and systematics of skates (Chondrichthyes: Rajiformes: Rajoidei). Environmental Biology of Fishes, 80 (2–3): 111–124.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Raja kujiensis Tanaka, 1916 クジカスベ

Original description: Tanaka (1916): 173.

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 (lost): ZUMT uncatalogued, off Kuji, Iwate Pref., Japan.

Remarks: There is no holotype designated by the original description. There is no specimen in the ZUMT specimen ledger which match with the original description.

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見当たらない。

Current status: Valid as *Rhinoraja kujiensis* (Tanaka, 1916) クジカスベ

- Stevenson, D. E., Orr, J. W., Hoff, G. R. and McEachran, J. D. 2004. *Bathyraja mariposa*: a new species of skate (Rajidae: Arhynchobatinae) from the Aleutian Islands. *Copeia*, 2004 (2): 305–314.
- Ebert, D. A. and Compagno, L. J. V. 2007. Biodiversity and systematics of skates (Chondrichthyes: Rajiformes: Rajoidei). *Environmental Biology of Fishes*, 80 (2–3): 111–124.
- Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. *Publications of the Seto Marine Biological Laboratory*, 43: 40–91.

Rajidae ガンギエイ科
Raja karagea Tanaka, 1927 サメカラゲア

Original description: Tanaka (1927): 784.

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. Maruzen, Tokyo. Vol. 40: 757–784, pls. 167–169. [In Japanese and English])

Holotype (available): ZUMT 13853 (male), Kesen, Rikuzen, Iwate Pref., Japan; donated by G. Toba.

Paratype (available): ZUMT 14570 (1, male), Muroran, Hokkaido, Japan; Mar. 1925.

Remarks: "*Raja tobae* Tanaka, 1927" has been replaced with "*Raja karagea* Tanaka, 1927" because it has the same primary name as "*Raja tobae* Tanaka, 1916". (ICZN 57.2 72.8)

「サメカラゲア *Raja tobae* Tanaka, 1927」は、「トバカスベ *Raja tobae* Tanaka, 1916」の一次同名のため代用名として「*Raja karagea* Tanaka, 1927」に置換された。(ICZN 57.2 72.8)

Current status: Synonym of *Okamejei kenojei* (Bürger in Müller & Henle, 1841) コモンカスベ 田中茂穂. 1927. 日本産魚類図説, 35: 645–676, pls. 154–155. (Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 35: 645–676, pls. 154–155. [In Japanese and English])

Ishihara, H. 1987. Revision of the western North Pacific species of the genus *Raja*. *Japanese Journal of Ichthyology*, 34 (3): 241–285.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. *Publications of the Seto Marine Biological Laboratory*, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology*, 88 (3): 837–1037.

Raja katsukii Tanaka, 1927 サラサカスベ

Original description: Tanaka (1927): 662, pl. 154 (figs. 426–428).

田中茂穂. 1927. 日本産魚類図説, 35: 645–676, pls. 154–155. (Tanaka, S. 1927. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 35: 645–676, pls. 154–155. [In Japanese and English]).

Holotype (available): ZUMT 13755 (female), western Mutsu, Aomori Pref., Japan.

Current status: Synonym of *Okamejei kenojei* (Bürger in Müller & Henle, 1841) コモンカスベ

Ishihara, H. 1987. Revision of the western North Pacific species of the genus *Raja*. Japanese Journal of Ichthyology, 34 (3): 241–285.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Dyldin, Yu. V. and Orlov, A. M. 2018. An annotated list of cartilaginous fishes (Chondrichthyes: Elasmobranchii, Holocephali) of the coastal waters of Sakhalin Island and the adjacent southern part of the Sea of Okhotsk. Journal of Ichthyology, 58 (2): 158–180.

Raja tobae Tanaka, 1916 トバカスベ, ザンギエ

Original description: Tanaka (1916): 313.

田中茂穂. 1916. 日本産魚類の一新種. 動物学雑誌, 28 (334): 313–314. (Tanaka, S. 1916. A new species of Japanese fish. Zoological Magazine Tokyo, 28 (334): 313–314. [In Japanese])

Lectotype (lost): ZUMT 7443 (male), Toba, Mie Pref., Japan; July 1916; collected by Shigeo Tanaka and Mansaku Kobayashi. (志摩國鳥羽 大正 5 年 7 月 田中茂穂および小林萬作採集)

Paralectotype (lost): ZUMT 7446 (1: female), same as holotype.

Remarks: The original description was based on two specimens, male and female. From the records in the ZUMT specimen ledger, males of ZUMT 7443 and females of ZUMT 7446 were applicable. These specimens are syntypes (ICZN Art. 72.4.1.1, 73.2.). The Figures and descriptions of the fishes of Japan (25–26: 453–455, pl. 124–126) by Tanaka (1917) designated

the male ZUMT 7443 as a holotype and re-described and illustrated this specimen together with the female specimen ZUMT 7446. The act of selecting a specific specimen from this syntype as the name-bearing type (here, the holotype) is regarded as the designation of the lectotype (ICZN 74.5). Therefore, ZUMT 7443 and ZUMT 7446 are regarded as lectotype and paralectotype, respectively. Unfortunately, however, the specimen has not been located at this time, and was judged to have been lost.

原記載は雄と雌の2標本に基づいて記載した。ZUMT 標本台帳の記録から ZUMT 7443 の雄と ZUMT 7446 の雌が該当した。これらの標本はシントタイプとなる (ICZN Art. 72.4.1.1, 73.2)。田中 (1917) の日本産魚類図説 (25–26: 453–455, pl. 124–126) は、雄の ZUMT 7443 をホロタイプに指定し、雌の ZUMT 7446 とともに再記載し、図示した。この行為は、シント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)。したがって、ZUMT 7443 はレクトタイプに、ZUMT 7446 はパラレクトタイプとなる (ICZN Art. 73.2.2)。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 *Okamejei kenojei* (Bürger in Müller & Henle, 1841) コモンカスベ
田中茂穂. 1917. 日本産魚類図説, 25: 441–454, pls. 121–125. (Tanaka, S. 1917. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 25: 441–454, pls. 121–125. [In Japanese and English])

田中茂穂. 1917. 日本産魚類図説, 26: 455–474, pls. 126–130. (Tanaka, S. 1917. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 26: 455–474, pls. 126–130. [In Japanese and English])

Ishihara, H. 1987. Revision of the western North Pacific species of the genus *Raja*. Japanese Journal of Ichthyology, 34 (3): 241–285.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Chimaeriformes ギンザメ目

Chimaeridae ギンザメ科

Chimaera jordani Tanaka, 1905

Original description: Tanaka (1905): 2, pl. 1 (fig. 1).

Tanaka, S. 1905. On two new species of *Chimaera*. Journal of the College of Science, Imperial University, Tokyo, 20 (11): 1–14, pls. 1–2.

Syntype (lost): ZUMT 915 (1, male), off Inatori (Sagami Sea), Izu Peninsula, Shizuoka Pref. Japan; donated by A. Owston 13 Feb. 1905. (♂ Type 伊豆沖 [伊豆と大島の間] 明治 38 年 2 月 13 日 オーストン氏寄贈)

Syntype (lost): ZUMT 915 (1, female), Tokyo Market, Japan; Feb. 1905. (♀ Type 明治 38 年 2 月 東京市場)

Non-type (lost): ZUMT 915 (1, immature female), Tokyo Market, Japan; Feb. 1905. (♀ not type 明治 38 年 2 月 東京市場)

Remarks: The original measurement table is based on a total of 16 individuals, including 4 males and 12 females, including specimens borrowed from Mr. Alan Owston. Two specimens, one male and one female, were registered as types in the ZUMT collection. These 16 specimens are syntypes (ICZN Art. 72.4.1.1, 73.2). ZUMT 915 is a specimen that matches *Chimaera jordani* Tanaka from the records in the ZUMT specimen ledger. The three specimens of ZUMT 915 are "♂ Type off Izu (between Izu and Oshima), donated by Mr. Owston on February 13, 1905", "♀ Type February 1905. Tokyo Market" and "♀ not type February 1905 Tokyo Market".

The figure published in Tanaka (1911)'s Figures and descriptions of the fishes of Japan (3: 42–44, pl. 10, fig. 31) is a male specimen collected by Mr. Owston and is the same as the original figure. It is not holotype designation. Unfortunately, however, these specimens have not been located at this time, and was judged to have been lost.

原記載の測定表には、アラン・オーストン氏から借用した標本を含む雄 4 個体、雌 12 個体の計 16 個体に基づいている。雌雄各 1 個体の 2 標本がタイプとして ZUMT コレクションに登録された。これらの 16 標本はシントタイプである (ICZN Art. 72.4.1.1, 73.2)。

ZUMT 915 は、ZUMT 標本台帳の記録から *Chimaera jordani* Tanaka に一致した標本である。ZUMT 915 の 3 標本は、「♂ Type 伊豆沖 (伊豆と大島の間) 明治 38 年 2 月 13 日 オーストン氏寄贈」、「♀ Type 明治 38 年 2 月 東京市場」、「♀ not type 明治 38 年 2 月 東京市場」である。

田中 (1911) の日本産魚類図 (3: 42–44, pl. 10, fig. 31) に掲載した図は、オーストン氏採集の雄の標本で原記載の図と同じである。ホロタイプの指定ではない。ただし残念ながら、現時点でこれら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 *Chimaera jordani* Tanaka, 1905 ジョルダンギンザメ

田中茂穂. 1911. 日本産魚類図, 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. Vol. 2: 19–34, pls. 6–10. [In Japanese and English])

田中茂穂. 1911. 日本産魚類図, 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. Vol. 3: 35–50, pls. 11–15. [In Japanese and English])

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Chimaera mitsukurii Dean, 1904

Original description: Dean (1904): 6, pl. 1 (figs. 1–2).

Dean, B. 1904. Notes on *Chimaera*. Two Japanese species, *C. phantasma* Jordan and Snyder and *C. mitsukurii* n. s., and their egg cases. Journal of the College of Science. Imperial University, Tokyo, 19 (3): 1–9, pl. 1.

Syntype (lost): ZUMT 1457 (1, adult male), off Misaki (Sagami Bay), Kanagawa Pref., Japan; June 1901; presented by B. Dean.

Syntype (lost): ZUMT 1473 (2, egg cases), Sengenzuka, off Misaki (Sagami Bay), Kanagawa Pref., Japan; Jan. 1897; collected by Kumakichi Aoki. (千間塚内 明治 30 年 1 月 青木熊吉採集)

Remarks: There is no holotype designation in the original description. In the original description, one adult male and two egg cases were registered in ZUMT, and an immature female and two egg cases were registered in Columbia University. These specimens are syntypes (ICZN Art. 72.4.1.1, 73.2). In the records of the ZUMT specimen ledger, the adult male ZUMT 1457 and the two egg cases ZUMT 1473 were applicable. The ZUMT 1457 record in the ZUMT specimen ledger says "♂ Type". Unfortunately, however, these specimens have not been located at this time, and was judged to have been lost.

原記載にはホロタイプの指定がない。原記載では、ZUMT に雄の成魚 1 個体と卵殻 2 個が、コロンビア大学に雌未成魚と卵殻 2 個が登録された。これらの標本はシントタイプである (ICZN Art. 72.4.1.1, 73.2)。ZUMT 標本台帳の記録では、雄成魚の ZUMT 1457 と卵殻 2 個の ZUMT 1473 が該当した。ZUMT 標本台帳の ZUMT 1457 の記録には、「♂ Type」と書かれている。ただし残念ながら、現時点でこれら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 *Hydrolagus mitsukurii* (Jordan & Snyder, 1904) アカギンザメ Jordan, D. S. and Snyder, J. O. 1904. On the species of white chimaera from Japan. Proceedings of the United States National Museum, 27 (1356): 223–226.

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Chimaera owstoni Tanaka, 1905

Original description: Tanaka (1905): 10, pl. 1 (figs. 2–3).

Tanaka, S. 1905. On two new species of *Chimaera*. Journal of the College of Science. Imperial University, Tokyo 20 (11): 1–14, pls. 1–2.

Lectotype (lost): ZUMT 916 (male), Tokyo Market, Japan; Mar. 22, 1906; collected by Shigeho Tanaka.

Paralectotype (lost): ZUMT 916 (1, female), same as lectotype.

Remarks: There is no holotype designation in the original description. Since the description is based on one male and one female, these are syntypes (ICZN Art. 72.4.1.1, 73.2). From the record of the ZUMT specimen ledger, it was described that the corresponding ZUMT 916 included two individuals, male (type) and female. In Tanaka's (1911) Figures and descriptions of the fishes of Japan (1: 18–19, pl. 5, figs. 17–18), a male ZUMT 916 was selected as the holotype and re-described. This act is regarded as the designation of the lectotype, not the selection of the name-bearing type (here, the holotype) from the syntypes (ICZN 74.5). The female of the specimen ZUMT 916 is of the paralectotype (ICZN Art. 73.2.2). Unfortunately, however, these specimens have not been located at this time, and was judged to have been lost.

原記載にはホロタイプの指定がない。記載は、雄1個体と雌1個体に基づいているため、これらはシントタイプとなる (ICZN Art. 72.4.1.1, 73.2)。ZUMT 標本台帳の記録から該当した ZUMT 916 には雄 (type) と雌の2個体が含まれる記述であった。

田中 (1911) の日本産魚類図説 (1: 18–19, pl. 5, figs. 17–18) では、ホロタイプに ZUMT 916 の雄を選定し、再記載した。この行為は、シントタイプの中から担名タイプ (ここでは、ホロタイプ) の選定ではなく、レクトタイプの指定と見なされる (ICZN 74.5)。標本 ZUMT 916 の雌は、パラレクトタイプとなる (ICZN Art. 73.2.2)。ただし残念ながら、現時点でこれら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 *Chimaera owstoni* Tanaka, 1905 シロブチギンザメ

田中茂穂. 1911. 日本産魚類図説, 1: 1–18, pls. 1–5. (Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 1: 1–18, pls. 1–5. [In Japanese and English])

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Didier, D. A., Last, P. R. and White, W. T. 2008. Three new species of the genus *Chimaera* Linnaeus (Chimariformes: Chimaeridae) from Australia. In: Descriptions of new Australian Chondrichthyans. CSIRO Marine and Atmospheric Research Paper, 22: 327–339.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Chimaera spilota Tanaka, 1908

Original description: Tanaka (1908): 15.

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 961 (female, 57 cm TL, as Specimen B), off Miyako, Japan; 1903; donated by Y. Wakiya in 1906.

Paratype (lost): ZUMT 954 (1, female, as Specimen A), off Miyako, Iwate Pref., Japan; 1903.

Paratype (lost): ZUMT uncatalogued (1, male, as Specimen C), locality and date unknown.

Remarks: This type series consists of three specimens from off the coast of Rikuchu Miyako, two females and one male of unknown origin. ZUMT 961 (female, 57 cm TL) was specified as the holotype. In the records of the ZUMT specimen ledger, ZUMT 961 had only the scientific name, and ZUMT 954 had holotype specimen data. In addition, there is a note written as "Be careful with this (ZUMT 954) and ZUMT 961. Or replace the specimens with each other." This suggests the replacement of ZUMT 954 and ZUMT 961 specimens. Changed the collection data of the specimen. Unfortunately, however, these specimens have not been located at this time, and was judged to have been lost.

この種のタイプシリーズは、陸中宮古沖から雌2個体と産地不明の雄1個体の3標本である。ホロタイプにZUMT 961 (female, 57 cm TL)を指定した。ZUMT 標本台帳の記録では、ZUMT 961 は学名のみ、ZUMT 954 にはホロタイプの標本データがあった。さらに「これ(ZUMT 954)とZUMT 961 には注意。或いは標本を互いに入れ替えるべし」との書き込みがある。これはZUMT 954 とZUMT 961 の標本の入れ替えを示唆したものである。標本の採集データを変更した。ただし残念ながら、現時点でこれら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 *Hydrolagus barbouri* (Garman, 1908) ココノホシギンザメ

田中茂穂. 1908. 魚類雑話 (三十一) ココノホシギンザメの学名変更. 動物学雑誌, 20 (236): 201.

田中茂穂. 1911. 日本産魚類図説, 1: 1–18, pls. 1–5. (Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 1: 1–18, pls. 1–5. [In Japanese and English])

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Rhinochimaeridae テングギンザメ科
Anteliochimaera chaetirhamphus Tanaka, 1909

Original description: Tanaka (1909): 7, pl. 1.

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 2155 (male), outside of Okinose, off Misaki (Sagami Bay), Kanagawa Pref., Japan, depth 400 fathoms; Dec. 1908; collected by Kumakichi Aoki. (沖の瀬外側、400 尋 明治 41 年 12 月 青木熊吉採集)

Remarks: The original description specified ZUMT 2155 as the holotype. Unfortunately, however, this 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 2155 を指定した。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 *Harriotta chaetirhamphus* (Tanaka, 1909) アズマギンザメ

田中茂穂. 1911. 日本産魚類図説, 1: 1–18, pls. 1–5. (Tanaka, S. 1911. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 1: 1–18, pls. 1–5. [In Japanese and English])

Okamura, O. and Machida, Y. 1986. Additional records of fishes from Kochi Prefecture, Japan. Memoirs of the Faculty of Science, Kochi University (Ser. D) (Biology), 7: 17–41.

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Nakayama, N., Matsunuma, M. and Endo, H. 2019. A preliminary review and in situ observations of the spookfish genus *Harriotta* (Holocephali: Rhinochimaeridae). Ichthyological Research, 67 (1): 82–91.

Harriotta pacifica Mitsukuri, 1895 テングギンザメ

Original description: (Mitsukuri, 1895): 97, pl. 16.

Mitsukuri, K. 1895. On a new genus of the chimaeroid group *Hariotta*. Zoological Magazine Tokyo, 7 (80): 97–98, pl. 16.

Syntype (lost): ZUMT 1453 (1, female), off Kurihama, Yokosuka City, Kanagawa Pref., Uraga Strait, Japan. Apr. 19, 1883.

Syntype (lost): ZUMT 1454 (1, male), Sengenzuka, off Misaki (Sagami Bay), Kanagawa Pref., Japan, 450 fathoms; collected with longline (Mutsu Nawa); purchased from Kumakichi Aoki. (千間塚、三崎 明治 31 年 5 月 4 日 延縄 (ムツ縄) にて採集、450 尋。青木熊吉より購入)

Remarks: There is no holotype designation in the original description. There were two records in the ZUMT specimen ledger, ZUMT 1453 (1, female type) and ZUMT 1454 (1, male cotype), which matched the original name. These specimens are syntypes (ICZN Art. 72.4.1.1, 73.2). Unfortunately, however, this specimen has not been located at this time, and was judged to have been lost. Didier and Nakaya (1999) designated the neotype as CBM-ZF 6140 (Natural History Museum and Institute, Chiba, Japan).

原記載にホロタイプ指定がない。ZUMT 標本台帳の記録には、原記載名に一致した ZUMT 1453 (1, female type) と ZUMT 1454 (1, male cotype) の 2 つがあった。これらの標本はシタイプである (ICZN Art. 72.4.1.1, 73.2)。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。Didier and Nakaya (1999) は、ネオタイプに CBM-ZF 6140 (Natural History Museum and Institute, Chiba, Japan) を指定した。

Current status: Valid as *Rhinochimaera pacifica* (Mitsukuri, 1895) テングギンザメ

箕作佳吉. 1895. ギンザメの 1 新属に就いて. 動物学雑誌, 7 (80): 182–184, pl. 16.

Dean, B. 1904 Notes on the long-snouted chimaeroid of Japan, *Rhinochimaera* (*Harriotta*) *Pacifica* (Garman) Mitsukuri. Journal of the College of Science. Imperial University, Tokyo, 19 (4): 1–20, 2 pls.

田中茂穂. 1914. 日本産魚類図説, 16: 263–278, pls. 76–80. (Tanaka, S. 1914. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 16: 263–278, pls. 76–80. [In Japanese and English])

Didier, D. A. 1995. Phylogenetic systematics of extant chimaeroid fishes (Holocephali, Chimaeroidei). American Museum Novitates, 3119: 1–86.

Didier, D. A. and Nakaya, K. 1999. Redescription of *Rhinochimaera pacifica* (Mitsukuri) and first record of *R. africana* Compagno, Stehmann & Ebert from Japan (Chimaeriformes: Rhinochimaeridae). Ichthyological Research, 46 (2): 139–152.

Dyldin, Yu. V. 2015. Annotated checklist of the sharks, batoids and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali) from waters of Russia and adjacent areas. Publications of the Seto Marine Biological Laboratory, 43: 40–91.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. Journal of Fish Biology, 88 (3): 837–1037.

Acipenseriformes チョウザメ目

Acipenseridae チョウザメ科

Acipenser kikuchii Jordan & Snyder, 1901

Original description: Jordan and Snyder (1901): 302, pl. 15 (figs. 1–2).

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 (available): ZUMT 946 (stuffed), off Misaki (Sagami Bay), Kanagawa Pref., Japan; May 1895; collected with gill-net; collected by Kumakichi Aoki.

Remarks: The original description is based on only one specimen without information of catalog number. In the ZUMT specimen ledger, ZUMT 946 is the only specimen whose scientific name and collection data matched with the original description. ZUMT 946 closely matches the stuffed specimen in the original figure (pl. 15, figs. 1–2). This specimen is judged as holotype.

原記載は1標本のみに基づいている。ZUMT 946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 946は、原記載の図 (pl. 15, figs. 1–2) のはく製標本によく一致するため、この標本をホロタイプと判断した。

Current status: Synonym of *Acipenser sinensis* Gray, 1835 カラチョウザメ

Birstein, V. J. and W. E. Bemis. 1997. How many species are there within the genus *Acipenser*?. *Environmental Biology of Fishes*, 48 (1–4): 157–163.

Takeuchi, T. 1979. Description of two acipenserid fishes, *Acipenser sinensis* Gray and *A. kikuchii* Jordan et Snyder, recorded from Sagami Bay. *Annual Report of Keikyu Aburatsubo Marine Park*, 10: 20–25 (in Japanese).

Acipenser multiscutatus Tanaka, 1908

Original description: Tanaka (1908): 21, pl. 2 (fig. 1)

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 955 (stuffed), 7 miles off Ukedo-Hama, Province of Iwaki, Japan; 21 May 1905; collected with gill-net. (福島県磐城請戸浜沖、刺し網、1905年5月21日)

Remarks: The original description specified the holotype as ZUMT 955. The holotype is a stuffed specimen that larger than 2 m standard length and is not found in the ZUMT collection. In addition to the holotype, the original description states "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." There is no information about them.

原記載はホロタイプを ZUMT 955 に指定した。ホロタイプは標準体長 2 m を超えるはく製標本であり、ZUMT コレクションには見当たらない。また、原記載にはホロタイプの他に次の様に述べている「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.」が、それらに関する情報はない。

Current status: Synonym of *Acipenser schrenckii* Brandt, 1869 アムールチョウザメ

- 田中茂穂. 1912. 日本産魚類図説. 7: 109–128, pls. 31–35. (Tanaka, S. 1912. Figures and descriptions of the fishes of Japan including Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and Southern Sakhalin. Vol. 7: 109–128, pls. 31–35. [In Japanese and English])
- Masuda, H., Amaoka, K., Araga, C., Uyeno, T. and Yoshino, T. 1984. The fishes of the Japanese Archipelago. Tokyo (Tokai University Press). Text: i–xxii + 1–437, Atlas: pls. 1–370.
- Dyldin, Yu. V. and Orlov, A. M. 2016. Ichthyofauna of fresh and brackish waters of Sakhalin Island: an annotated list with taxonomic comments: 1. Petromyzontidae--Clupeidae families. *Journal of Ichthyology*, 56 (4): 534–555.

Collection of the previous fish type catalog

Fish types deposited in the Department of Zoology, The University Museum, The University of Tokyo - Part 1: Anguilliformes

Masahiro Aizawa, Keita Koeda, Harutaka Hata, Kazuo Sakamoto, Rei Ueshima

The University Museum, The University of Tokyo Material Reports, 128: 137–149.

Ophichthidae ウミヘビ科

Ophichthus roseus Tanaka, 1917 バラヘビウナギ

Original description: Tanaka (1917): 39.

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])

Syntype (available): ZUMT 7485, Tokyo Market, Japan. (東京市場)

Syntype (lost): ZUMT 7486, Tokyo Market, Japan.

Remarks: There is no holotype designation in the original description. ZUMT 7485 and ZUMT 7486 are two specimens whose scientific names and collected data match the records in the ZUMT specimen ledger. In the record of ZUMT specimen ledger of ZUMT 7485, there is an addition to "7485 type" written by Tanaka. This writing is not necessarily evidence that the ZUMT 7485 is fixed to the holotype (ICZN Art. 72.4.7). Therefore, these specimens are syntypes (ICZN Art. 72.4.1.1). Tanaka (1927) reports this species as a synonym for *Ophichthus urolophus* (Temminck & Schlegel, 1846). The figure (pl. 170, fig. 471) posted is ZUMT 7485.

原記載にホロタイプの指定がない。ZUMT 7485 と ZUMT 7486 は、ZUMT 標本台帳の記録に学名と採集データが一致する 2 標本である。ZUMT 7485 の ZUMT 標本台帳には、田中の書いた「7485 タイプ」との加筆がある。この書き込みは、ZUMT 7485 がホロタイプに固定されているという証拠であるとは限らない (ICZN Art. 72.4.7)。そのため、これらの標本はシントタイプである (ICZN Art. 72.4.1.1)。田中 (1927) は本種を *Ophichthus urolophus* (Temminck & Schlegel, 1846) のシノニムとして報告している。掲載された図 (pl. 170, fig. 471) は、ZUMT 7485 である。