

Report on the specimens of family Alepisauridae (Teleostei: Aulopiformes) deposited in the Department of Zoology, The University Museum, The University of Tokyo

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Abstract

The collection of Alepisauridae (Teleostei: Aulopiformes) deposited in the Department of Zoology, the University Museum, the University of Tokyo (ZUMT) were re-identified in the present study. In total 30 specimens of three genera of four species were found from the collection. No types are known for this family in ZUMT collection.

Introduction

The fish collection of families Alepisauridae (Teleostei: Aulopiformes) which preserved in the Department of Zoology, The University Museum, The University of Tokyo (ZUMT) were re-identified in the present study. *Anotopterus* and *Omosudis* were previously recognized to be independent families Anotopteridae and Omosudidae, respectively. However, Davis (2010) revealed that these genera form a monophyletic clade based on morphology and genetic analysis, and suggested to treat them as a single family. The specimens of the family were re-identified by the first author, and listed below.

Materials and Methods

The specimens of Alepisauridae in ZUMT were re-identified in the present study, generally following Nakabo and Kai (2013) and Sutton et al. (2020), and confirmation of at least one diagnostic character. 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 Alepisauridae in ZUMT

During this research, 30 specimens of three genera of four species of Alepisauridae were found from the ZUMT collection. Almost half of the specimens are Dr. Abe's collection, and unfortunately most of the specimens lacking data except for two specimens. No types are known for this family in ZUMT collection.

Alepisauridae ミズウオ科
Alepisaurus Lowe, 1833 ミズウオ属
Alepisaurus ferox Lowe, 1833 ミズウオ

- ZUMT 16178:** 1040.0 mm SL, Urakawa (浦河), Hokkaido, Apr. 1925, J. Katsuki (勝木重太郎).
- ZUMT 21702:** 998.0 mm SL, Tsunoore (角折), Ota (太田), Kashima (Kashima), Hitachinokuni (常陸国: presently Ibaraki Pref.), T. Murayama (村山忠吉).
- ZUMT 21984:** 910.0 mm SL, near Wakayama, Wakayama Pref., Jan. 1920.
- ZUMT 25391:** 1191.3 mm SL, 300 mile east of Nojima Cape (野島岬), Boso Peninsula (房総半島), Chiba Pref., 20 Jan. 1930, S. Suzuki (鈴木 新), Fukushima Prefectural Fisheries Experiment Station at Onahama.
- ZUMT 48379:** 841.5 mm SL, off south of Hawaiian Islands, 18 Aug. 1955, M. Shinohara (篠原 勝) boarded on training vessel of Toyama Prefectural Fisheries Highschool (富山県立水産高等学校練習船).
- ZUMT 48598:** 855.0 mm SL, Indian Ocean, 28 Mar. 1956, Z. Maekawa (前川善四郎) and T. Suzuki (鈴木貞次郎).
- ZUMT 62769** (Fig. 1): 1119.5 mm SL, northern coast of Miho Peninsula (三保半島), Shizuoka Pref., 17 Feb. 2022, K. Koeda (小枝圭太) and A. Teramura (手良村知功), stranded.
- ZUMT ABE 10635:** 1340.7 mm SL, Hokuyo (北洋: northern Pacific Ocean, Okhotsk and Bering seas), probably station number "C29".
- ZUMT ABE 10703:** 1090.0 mm SL, off Miyako (宮古), Iwate Pref., 4 May 1956, local name "Mizu-sawara".
- ZUMT ABE 61-1214:** 1055.7 mm SL, Manazuru (真鶴), Kanagawa Pref., 15 Aug. to 31 Dec. 1961.
- ZUMT 63840:** 854.0 mm SL; **ZUMT 63841:** 1100.0 mm SL; **ZUMT ABE 9724:** 959.0 mm SL; **ZUMT ABE 9725:** 723.7 mm SL; **ZUMT ABE 9726:** 546.2 mm SL; **ZUMT ABE 9727:** 1028.3 mm SL; **ZUMT ABE 59-100** (wooden tag 240): 1020.0 mm SL; **ZUMT ABE 59-101:** 1010.0 mm SL, locality unknown.

Anotopterus Zugmayer, 1911 ミズウオダマシ属
Anotopterus nikparini Kukuev, 1998 ミズウオダマシ

ZUMT 38999: 832.0 mm SL, off Kamchatskaya, Pacific Fisheries Research Office (太平洋漁業調査室) at Masago (真砂), Hakodate (函館), Hokkaido.

ZUMT ABE 59-94: 909.0 mm SL; **ZUMT ABE 59-95** (wooden tag 252): 590.5 mm SL; **ZUMT ABE 59-96** (wooden tag 80): 716.4 mm SL; **ZUMT ABE 59-97**: 594.0 mm SL; **ZUMT ABE 59-98**: 421.0 mm SL; **ZUMT ABE 59-99** (wooden tag 503): 735.0 mm SL, locality unknown.

Anotopterus vorax (Regan, 1913)

ZUMT 63620: 545.0 mm SL, South Pacific (63° S, 121° E), 1947 to 1977, probably donated by T. Abe (阿部宗明).

Remarks: Collection data was written on a scrap of notebook of Tokai Regional Fisheries Research Laboratory which Dr. Abe belonged from 1947 to 1977.

Omosudis Günther, 1887 キバハダカ属
Omosudis lowii Günther, 1887 キバハダカ

ZUMT 48946: 6 Aug. 1956, Z. Maekawa and T. Suzuki.

ZUMT 49094: 81.1 mm SL; **ZUMT 49095**: 62.0 mm SL, Voldate Island, 31 Jan. 1955, Z. Maekawa and T. Suzuki.

Remarks: On the ZUMT specimen ledger, ZUMT 49096 is also registered as *O. lowii*, but could not find during our investigation.

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Figure 1. Fresh specimen of *Alepisaurus ferox*: ZUMT 62769, 1119.5 mm SL, northern coast of Miho Peninsular, Shizuoka Pref., 17 Feb. 2022, K. Koeda and A. Teramura, stranded.