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# Annotated checklist of marine and estuarine fishes of Yaku-shima Island, Kagoshima, southern Japan

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**Abstract** An annotated checklist of marine and estuarine fishes of Yaku-shima Island, Kagoshima Prefecture, southern Japan, was compiled from field and literature surveys. All registered specimens previously recorded from Yaku-shima Island in published papers were re-examined. A total of 951 species (382 genera, 112 families, 24 orders), including 374 species that represent the first reliable records from the island on the basis of collected specimens, are listed with citation of literature, registration numbers, sizes, localities in the island, nomenclatural and taxonomic remarks, and color photographs if available. A new Japanese name is proposed for a bythitid, *Alionematichthys piger*. Zoogeographical implications of the Yaku-shima Island ichthyofauna are discussed.

**Key words:** fish fauna, checklist, Yaku-shima Island, Kagoshima, Japan, Kuroshio Current.

## Introduction

In 1904–1905, Mr. Robert Anderson, who was a graduate student of Stanford University and usually studied birds, collected fishes from Yaku-shima and Tanega-shima Islands, Kagoshima, Japan. His collection was sent to the United States National Museum and Stanford University. In 1906 Jordan and Starks reported 20 species of fishes, including seven new species, from these islands on the basis of Anderson's collection. Thirteen of the 20 species were described on the basis of specimens from Yaku-shima Island, and these are currently deposited at the Museum Support Center of the Smithsonian Institution National Museum of Natural History, Suitland (formerly United States National Museum) and the California Academy of Sciences, San Francisco (all

fish specimens moved from Stanford University around 1969). These represent the oldest available fish specimens from Yaku-shima Island.

After Jordan and Starks (1906), no comprehensive reports on fishes from Yaku-shima Island were published for nearly 70 years until 1975. Arai and Ida (1975) reported 143 species from Yaku-shima and Tanega-shima Islands, 80 species of which were collected from Kusugawa on the northeast coast of Yaku-shima Island. Although Arai and Ida's (1975) report was based on collected specimens, they gave no indication of voucher specimens, including registration numbers. However, most of their specimens were in fact deposited at the National Museum of Nature and Science, Tokyo.

Recently, several reports on fishes from Yaku-

shima Island (e.g., Ichikawa et al., 1992; Kuniyasu, 1999; Matsumoto, 2001) were published by local divers and nature guides. These were based on underwater investigations, including underwater observations, photographs and movies, and observation at local fish markets. Ichikawa et al. (1992) provided a list of 580 species from Yaku-shima and Kuchierabu-shima Islands (the latter is located off the northwest of Yaku-shima Island), including freshwater fishes and species reported by Arai and Ida (1975). Ichikawa et al. (1992) gave only Japanese and scientific names and 14 underwater photographs but no information on observed fish sizes, localities, water depth, or specimens of species listed. Subsequently, Kuniyasu (1999) reported 333 species from Kurio on the southwest coast of Yaku-shima Island on the basis of underwater observation; he also did not collect any specimens. Matsumoto (2001–2005) published a series of underwater photographs of various Yaku-shima fish families, viz., Chaetodontidae (2001), Pomacanthidae (2002), Muraenidae (2004a), and Pomacentridae (2004b, 2005), but he also did not collect any specimens.

Since Yaku-shima Island is very important and interesting zoogeographically (see below), we made three large-scale Yaku-shima Expeditions in 2008–2009 (8–13 August 2008, 28 October–4 November 2008, and 25 July–1 August 2009) to elucidate the island's ichthyofauna and to clarify the influence of the Kuroshio Current on the ichthyofauna of southern Japan. In the expeditions and several small-scale surveys during this study, 4,386 specimens of 457 species of marine and estuarine fishes were collected, with 374 of the 457 species representing the first records from the island based on collected specimens.

This paper provides a list of 951 species of marine and estuarine fishes (382 genera, 112 families and 24 orders) occurring off Yaku-shima Island on the basis of published papers, underwater photographs, and collected specimens, along with color photographs where available. Previously reported specimens from Yaku-shima (Jordan and Starks, 1906; Arai and Ida, 1975) were re-identified during this study. The zoogeographical implications of the Yaku-shima Island ichthyofauna are discussed.

## **Yaku-shima Island and Kuroshio Current**

Yaku-shima Island is located at 30°20'N, 130°32'E, ca. 60 km off south-southwest of Osumi Peninsula, Kagoshima Prefecture, southern Kyushu, Japan. The island, roughly circular in shape and with an area of ca. 505 km<sup>2</sup> and several mountains more than 1,000 m in height (highest 1,936 m), is the largest island in the Osumi Islands (and the ninth largest island in Japan). The Osumi Islands, including Tanega-shima, Yaku-shima, and Kuchierabu-jima Islands, are often treated as a part of the Ryukyu Islands, but the Ryukyu Islands are biogeographically defined as islands of Amami-oshima and southward. Yaku-shima Island, formed mostly of granite, has very limited flatlands and in its entirety appears as one large, steep mountain, with the mountain slope continuing under the sea. Thus, shallow waters, coral reefs and sandy beaches are very limited; most coastal areas are occupied by rocky reefs. Although such a monotonous environment in the coastal areas of an oceanic island generally results in a decrease in fish species diversity, Yaku-shima Island has a relatively higher diversity because the island faces a warm, strong water current, the Kuroshio Current, which brings tropical fishes from the south.

The Kuroshio Current flows from off the east of the Philippines to the Pacific coast of southern Japan, via Taiwan and west of the Ryukyu Islands (Fig. 1). The northwardly flowing current off the west of the Ryukyu Islands turns to the east and flows through the Tokara Islands (located between Yaku-shima and Amami-oshima Islands) (Lee et al., 2001). The current then turns north again toward the Pacific coasts of the islands of Kyushu, Shikoku, and Honshu (the main island of Japan) (Kamachi et al., 2004).

The Tokara Islands consist of 12 small islands in a row extending ca. 160 km north to south. There are two flow paths of the Kuroshio Current through the Tokara Islands (Chaen and Ichikawa, 2001): the more southerly route takes the current across the island chain from west to east around Nakano-shima Island; and the other, more northerly, route flows along the southern coast of Yaku-shima Island. The current alternates between the two flow paths on a 30–50 days cycle. Changes in



**Fig. 1.** Map of the East China Sea (from Kyushu to Taiwan) with the major water currents.

the flow path influence other minor water currents in the area, especially the Osumi Branch Current flowing between Yaku-shima Island and the southern tip of Osumi Peninsula. During a period when the Kuroshio Current flows around Yaku-shima Island, the Osumi Branch Current flows northeastward from Yaku-shima Island to Osumi Peninsula, but during a period when the Kuroshio Current takes its more southerly route, the direction of the Osumi Branch current is irregularly reversed to southwestward. So, the water currents around Yaku-shima Island are complex, with the flow rates and directions changing with seasons, water temperatures, and winds. These factors produce a unique ichthyofauna off the island.

### Materials and methods

The systematic arrangement of families follows Nelson (2006). Scientific names generally followed Nakabo (2002) and Eschmeyer and Fricke (2009), with some modifications by recent

published or unpublished taxonomic studies. Species in families are arranged in alphabetical order by species name. Standard Japanese names (abbreviated as Jpn name) generally follow Nakabo (2002), and are transliterated using the Hepburn system. Each species record was compiled from voucher specimens and literature sources related to marine and estuarine fishes, including freshwa-



**Fig. 2.** Map of Yaku-shima Island. Names of places and rivers given in this map are used in text.

ter fishes collected from estuaries. Each voucher specimen includes registration number, number of specimens registered if more than one, standard length [abbreviated as SL; sometimes total length (TL) or disc width (DW)], and locality on Yaku-shima Island (Fig. 2). The list of specimens is followed by literature cited. Most specimens used in previously published papers were re-identified in this study, and information on SL and locality of the re-examined specimens are provided.

Specimens collected during the 2008–2009 Yaku-shima Expeditions have been deposited at collections of Laboratory of Marine Biology, Faculty of Science, Kochi University, Kochi, Japan (BSKU), Fisheries Research Laboratory, Mie University, Shima, Japan (FRLM), Kagoshima University Museum, Kagoshima, Japan (KAUM), Kanagawa Prefectural Museum of Natural History, Odawara, Japan (KPM), Division of Fisheries Sciences, Faculty of Agriculture, University of Miyazaki, Miyazaki, Japan (MUFS), and National Museum of Nature and Science, Tokyo, Japan (NSMT). Other collections referred in this study are as follows: Biological Laboratory, Akasaka Imperial Palace, Imperial Household, Tokyo, Japan (BLIP), California Academy of Sciences, San Francisco, USA (CAS and SU), Kyushu University Museum, Fukuoka, Japan (KYUM), Osaka Museum of Natural History, Osaka, Japan (OMNH), Museum Support Center of the Smithsonian Institution National Museum of Natural History, Suitland, USA (USNM), and University Museum, University of Tokyo, Tokyo, Japan (ZUMT).

### Checklist

#### ORDER ORECTOLOBIFORMES

##### FAMILY ORECTOLOBIDAE

*Orectolobus japonicus* Regan, 1906

[Jpn name: Ose] (Fig. 3)

Ichikawa et al. (1992): Yaku-shima Island.

##### FAMILY HEMISCYLLIIDAE

*Chiloscyllium punctatum* Müller and Henle, 1838

[Jpn name: Inuzame]

Ichikawa et al. (1992): Yaku-shima Island.



Fig. 3. *Orectolobus japonicus* (off Isso, 8 m, 18 Jan. 2010, S. Harasaki).

#### FAMILY RHINCODONTIDAE

*Rhincodon typus* Smith, 1828

[Jpn name: Jimbezame]

Ichikawa et al. (1992): Yaku-shima Island.

#### ORDER LAMNIFORMES

##### FAMILY ALOPIIIDAE

*Alopias pelagicus* Nakamura, 1935

[Jpn name: Nitari]

Ichikawa et al. (1992): Yaku-shima Island.

##### FAMILY CETORHINIDAE

*Cetorhinus maximus* (Gunnerus, 1765)

[Jpn name: Ubazame]

Ichikawa et al. (1992): Yaku-shima Island.

##### FAMILY LAMNIDAE

*Isurus oxyrinchus* Rafinesque, 1810

[Jpn name: Aozame]

Ichikawa et al. (1992): Yaku-shima Island.

#### ORDER CARCHARHINIFORMES

##### FAMILY PROSCYLLIIDAE

*Galeocerdo cuvier* (Péron and Lesueur, 1822)

[Jpn name: Itachizame]

Ichikawa et al. (1992): Yaku-shima Island.

*Proscyllium venustum* (Tanaka, 1912)

[Jpn name: Hyozame]

Ichikawa et al. (1992): Yaku-shima Island.

***Triænodon obesus* (Rüppell, 1837)**

[Jpn name: Nemuribuka]

Ichikawa et al. (1992): Yaku-shima Island.

**FAMILY SPHYRNIDAE*****Sphyrna lewini* (Griffith and Smith, 1834)**

[Jpn name: Akashumokuzame]

Ichikawa et al. (1992): Yaku-shima Island.

**ORDER MYLIOBATIFORMES****FAMILY DASYATIDAE*****Dasyatis akajei* (Müller and Henle, 1841)**

[Jpn name: Akaei]

Ichikawa et al. (1992): Yaku-shima Island.

***Dasyatis kuhlii* (Müller and Henle, 1841)**

[Jpn name: Yakkoei] (Fig. 4)

MUFS 25616, 719.5 mm DW, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.

Fig. 4. *Dasyatis kuhlii* (MUFS 25616, 719.5 mm DW).**FAMILY MYLIOBATIDAE*****Aetobatus narinari* (Euphrasen, 1790)**

[Jpn name: Madaratobie]

Ichikawa et al. (1992): Yaku-shima Island.

**ORDER ELOPIFORMES****FAMILY ELOPIDAE*****Elops hawaiensis* Regan, 1909**

[Jpn name: Karaiwashi]

Ichikawa et al. (1992): Yaku-shima Island.

**FAMILY MEGALOPIDAE*****Megalops cyprinoides* (Broussonet, 1782)**

[Jpn name: Isegoi] (Fig. 5)

KAUM-I. 24677, 120.8 mm SL, Ambo;

KAUM-I. 24678, 61.4 mm SL, Ambo.

Fig. 5. *Megalops cyprinoides* (KAUM-I. 24677, 120.8 mm SL, preserved specimen).**FAMILY ALBULIDAE*****Albula forsteri* Valenciennes, 1847**

[Jpn name: Sotoiwashi] (Fig. 6)

Ichikawa et al. (1992): Yaku-shima Island. Hidaka et al. (2004): Isso.

Remarks: Hidaka et al. (2008) regarded *Albula argenteus* (Schneider, 1801) as a junior synonym of *Albula forsteri*.Fig. 6. *Albula forsteri* (off Isso; after Hidaka et al., 2004).**ORDER ANGUILLIFORMES****FAMILY ANGUILLIDAE*****Anguilla bicolor pacifica* Schmidt, 1928**

[Jpn name: Nyuginiaunagi] (Fig. 7)

Yamamoto et al. (2000): 19 specimens from Miyanoura—NSMT-PL 100, 46.5–51.5 mm TL; OMHN-P 11281, 48.4 mm TL; OMHN-P 11282, 47.5 mm TL; OMHN-P 11283, 48.4 mm TL; OMHN-P 11284, 48.1 mm TL; OMHN-P 11285–11287, 49.9–50.3 mm TL; OMHN-P 11288, 51.0 mm TL. Yamamoto et al. (2001): 19 specimens, same with Yamamoto et al. (2000).



**Fig. 7.** *Anguilla bicolor pacifica* (OMHN-P 11288, 51.0 mm TL).

***Anguilla japonica*** Temminck and Schlegel, 1846  
[Jpn name: Unagi] (Fig. 8)

MUFS 25451, 121.6 mm SL, Kurio.  
Jordan and Starks (1906): USNM 53542, 2 specimens, 247.1–256.5 mm SL, mouth of Miyanoura River. Ichikawa et al. (1992): Yaku-shima Island. Yamamoto et al. (2001): 1710 specimens, Miyanoura (uncataloged at Kyushu University Museum).



**Fig. 8.** *Anguilla japonica* (MUFS 25451, 121.6 mm SL, preserved specimen).

***Anguilla marmorata*** Quoy and Gaimard, 1824  
[Jpn name: Ounagi] (Fig. 9)

KYUM-PI-2541, 92.0 mm TL, mouth of Kurio River.

Ichikawa et al. (1992): Yaku-shima Island. Yamamoto et al. (2001): 340 specimens, Miyanoura (uncataloged at Kyushu University Museum).



**Fig. 9.** *Anguilla marmorata* (KYUM-PI-2541, 92.0 mm TL, preserved specimen).

#### FAMILY MURAENIDAE

***Echidna nebulosa*** (Ahl, 1789)  
[Jpn name: Kumoutsubo] (Fig. 10)

FRLM 34742, 123.9 mm SL, Kurio; KAUM-I. 11345, 113.5 mm SL, Kurio; KAUM-I. 11346, 119.9 mm SL, Kurio; KAUM-I. 11560, 111.6 mm SL, Ambo; KAUM-I. 21731, 222.4 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004a): Mugio.



**Fig. 10.** *Echidna nebulosa* (KAUM-I. 21731, 222.4 mm SL).

***Echidna polyzona*** (Richardson, 1845)  
[Jpn name: Shimaarashiuutsubo] (Fig. 11)  
KAUM-I. 11559, 210.6 mm SL, Ambo;  
KPM-NI 22503, 129.5 mm TL, Yudomari.



**Fig. 11.** *Echidna polyzona* (KAUM-I. 11559, 210.6 mm SL).

***Enchelycore schismatorhynchus*** (Bleeker, 1853)  
[Jpn name: Hidautsubo] (Fig. 12)

KAUM-I. 20238, 366.3 mm SL, Kurio.



**Fig. 12.** *Enchelycore schismatorhynchus* (KAUM-I. 20238, 366.3 mm SL, preserved specimen).

***Gymnomuraena zebra*** (Shaw, 1797)  
[Jpn name: Zeburautsubo]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004a): Yudomari.

***Gymnothorax chilosipilus*** Bleeker, 1864

[Jpn name: Minamiutsubo] (Fig. 13)

KAUM-I. 11299, 131.5 mm SL, Yudomari; NSMT-P 68026, 150.6 mm SL, Onoaida; NSMT-P 95398, 343.1 mm SL, Haruo.



**Fig. 13.** *Gymnothorax chilosipilus* (KAUM-I. 11299, 131.5 mm SL).

***Gymnothorax chlorostigma*** (Kaup, 1856)

[Jpn name: Hanabirautsubo]

Matsumoto (2004a): Kurio.

Remarks: *Gymnothorax chlorostigma* was synonymized with *Gymnothorax meleagris* by Böhlke and Randall (2000), but Hatooka (2002) regarded the former as a valid species.

***Gymnothorax enigmaticus*** McCosker and Randall, 1982

[Jpn name: Shimautsubo] (Fig. 14)

KAUM-I. 11347, 105.5 mm SL, Kurio.



**Fig. 14.** *Gymnothorax enigmaticus* (KAUM-I. 11347, 105.5 mm SL).

***Gymnothorax fimbriatus*** (Bennett, 1832)

[Jpn name: Herigoishiutsubo] (Fig. 15)

KAUM-I. 11130, 171.2 mm SL, Yudomari; KAUM-I. 11216, 154.5 mm SL, Kurio; KAUM-I. 11554, 398.9 mm SL, Ambo; KAUM-I. 11555, 402.1 mm SL, Ambo; KAUM-I. 11556, 424.2 mm SL, Ambo; KAUM-I. 11557, 320.9 mm SL, Ambo; KAUM-I. 11561, 150.5 mm SL, Ambo; KAUM-I. 11562, 178.2 mm SL, Ambo; KAUM-I. 21733, 338.4 mm SL, Kurio; KAUM-I. 21798, 132.0 mm SL, Kurio; KPM-NI 22502, 222.8 mm TL, Yudomari; NSMT-P 95417, 782.7 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2004a): Isso.



**Fig. 15.** *Gymnothorax fimbriatus* (KPM-NI 22502, 222.8 mm TL).

***Gymnothorax flavimarginatus*** (Rüppell, 1830)

[Jpn name: Gomautsubo] (Fig. 16)

FRLM 34684, 109.4 mm SL, Kurio; KAUM-I. 11191, 98.9 mm SL, Kurio; KAUM-I. 11339, 98.9 mm SL, Kurio; KAUM-I. 11599, 233.0 mm SL, Ambo; KAUM-I. 20234, 56.3 mm SL, Kurio; KAUM-I. 20235, 209.0 mm SL, Kurio; KAUM-I. 20236, 134.9 mm SL, Kurio; KAUM-I. 20237, 105.4 mm SL, Kurio; KAUM-I. 21806, 281.0 mm SL, Kurio; NSMT-P 95416, 447.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2004a, as *Gymnothorax lavimarginatus*): Yudomari.



**Fig. 16.** *Gymnothorax flavimarginatus* (KAUM-I. 20235, 209.0 mm SL).

***Gymnothorax isingteena*** (Richardson, 1845)

[Jpn name: Nisegoishiutsubo] (Fig. 17)

Ichikawa et al. (1992, as *Gymnothorax melanospilos*): Yaku-shima Island. Matsumoto (2004a): Kurio.

Remarks: Böhlke and McCosker (2001) regarded *Gymnothorax melanospilos* (Bleeker, 1855) as a junior synonym of *Gymnothorax isingteena*, but Hatooka (2002) treated the former as a valid species.



Fig. 17. *Gymnothorax isingteena* (off Isso, 10 m, 24 Dec. 2009, S. Harazaki).

***Gymnothorax kidako*** (Temminck and Schlegel, 1847)

[Jpn name: Utsubo]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004a): Yudomari.

***Gymnothorax melanospilos*** (Bleeker, 1855)

[Jpn name: Dokuutsubo]

Ichikawa et al. (1992, as *Gymnothorax javanicus*): Yaku-shima Island. Kuniyasu (1999, as *Gymnothorax javanicus*): Kurio. Matsumoto (2004a): Kurio.

***Gymnothorax melatremus*** Schultz, 1953

[Jpn name: Himeutsubo]

Matsumoto (2004a): Nagata.

***Gymnothorax meleagris*** (Shaw, 1795)

[Jpn name: Wakautsubo] (Fig. 18)

FRLM 34743, 418.1 mm SL, Kurio; KAUM-I. 11140, 233.9 mm SL, Kurio; KAUM-I. 11200, 277.5 mm SL, Kurio; KAUM-I. 11284, 255.0 mm SL, Yudomari; KAUM-I. 11340, 457.9 mm SL, Kurio; KAUM-I. 11390, 457.9 mm SL, Kurio; KAUM-I. 11460, 179.3 mm SL, Isso; KAUM-I. 11461, 216.4 mm SL, Isso; KAUM-I. 11462, 341.6 mm SL, Isso; KAUM-I. 11480, 294.1 mm SL, Isso; KAUM-I. 11558, 347.2 mm SL, Ambo; KAUM-I. 20239, 372.7 mm SL, Kurio; KAUM-I. 21730, 475.7 mm SL, Kurio; KAUM-I. 21752, 475.3 mm SL, Kurio; KAUM-I. 21799, 83.1 mm SL, Kurio; KAUM-I. 21800, 88.8 mm SL, Kurio; KAUM-I. 22818, 99.2 mm SL, Kurio; KAUM-I. 22819, 75.7 mm SL, Kurio; NSMT-P 68025, 229.8 mm SL, Miyanoura; NSMT-P 95419, 370.0 mm SL, Kurio; NSMT-P 95420, 393.9 mm SL, Kurio; NSMT-P 95421, 390.4 mm SL, Kurio; NSMT-P 95422, 2 specimens, 303.0–326.1 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004a): Mugio.



Fig. 18. *Gymnothorax meleagris* (KAUM-I. 11340, 457.9 mm SL).

***Gymnothorax nudivomer*** (Günther, 1867)

[Jpn name: Adeutsubo]

Matsumoto (2004a): Isso.

***Gymnothorax pictus*** (Ahl, 1789)

[Jpn name: Aseutsubo] (Fig. 19)

KAUM-I. 11552, 518.0 mm SL, Ambo;  
KAUM-I. 11553, 371.0 mm SL, Ambo; KAUM-I. 21801, 104.7 mm SL, Kurio.



Fig. 19. *Gymnothorax pictus* (KAUM-I. 21801, 104.7 mm SL).

***Gymnothorax thyrsoideus*** (Richardson, 1845)

[Jpn name: Sabiutsubo] (Fig. 20)

KAUM-I. 21732, 258.4 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004a):  
Isso.



Fig. 20. *Gymnothorax thyrsoideus* (KAUM-I. 21732, 258.4 mm SL).



Fig. 21. *Muraena pardalis* (KAUM-I. 11298, 74.9 mm SL).



Fig. 22. *Rhinomuraena quaesita* (upper: off Isso, 18 m, 2 Mar. 2005, S. Harazaki; lower: off Isso, 12 m, 3 Mar. 2005, S. Harazaki).

***Gymnothorax undulatus*** (Lacepède, 1803)

[Jpn name: Namiutsubo]

Matsumoto (2004a): Isso.

***Gymnothorax zonipectis*** Seale, 1906

[Jpn name: Hireobiutsubo]

Matsumoto (2004a): Isso.

***Muraena pardalis*** (Temminck and Schlegel, 1846)

[Jpn name: Torautsubo] (Fig. 21)

KAUM-I. 11298, 74.9 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2004a): Hirauchi.

***Rhinomuraena quaesita*** Garman, 1888

[Jpn name: Hanahigeutsubo] (Fig. 22)

Matsumoto (2004a): Isso.

***Scuticaria tigrina*** (Lesson, 1828)

[Jpn name: Moyokikaiutsubo]

Matsumoto (2004a): Isso.

***Uropterygius macrocephalus*** (Bleeker, 1865)

[Jpn name: Hoshikikaiutsubo] (Fig. 23)

KAUM-I. 11402, 63.4 mm SL, Kurio.



**Fig. 23.** *Uropterygius macrocephalus* (KAUM-I. 11402, 63.4 mm SL).

***Uropterygius micropterus*** (Bleeker, 1852)  
[Jpn name: Amikikaiutsubo] (Fig. 24)

NSMT-P 77568, 294.6 mm TL, Kurio.

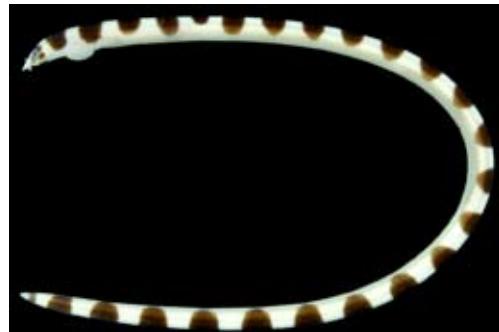


**Fig. 24.** *Uropterygius micropterus* (NSMT-P 77568, 294.6 mm TL).

#### FAMILY OPHICHTHIDAE

***Leiuranus semicinctus*** (Lay and Bennett, 1839)  
[Jpn name: Soraumihebi] (Fig. 25)  
KAUM-I. 11600, 213.0 mm SL, Ambo.

***Myrichthys colubrinus*** (Boddaert, 1781)  
[Jpn name: Shimaumihebi]  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 25.** *Leiuranus semicinctus* (KAUM-I. 11600, 213.0 mm SL).

#### ***Myrichthys maculosus*** (Cuvier, 1816)

[Jpn name: Goishiumihebi]  
Ichikawa et al. (1992, as *Myrichthys aki*):  
Yaku-shima Island.

Remarks: *Myrichthys aki* Tanaka 1917 is a junior synonym of *Myrichthys maculosus*.

#### ***Pisodonophis cancrivorus*** (Richardson, 1848)

[Jpn name: Minamihotateumihebi]  
Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY CONRIDAE

***Conger japonicus*** Bleeker, 1879  
[Jpn name: Kuroanago] (Fig. 26)

KAUM-I. 20110, 277.5 mm SL, Yudomari.  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 26.** *Conger japonicus* (KAUM-I. 20110, 277.5 mm SL).

***Heteroconger hassi*** (Klausewitz and Eibl-Eibesfeldt, 1959)  
[Jpn name: Chin-anago] (Fig. 27)

#### ORDER CLUPEIFORMES

FAMILY CLUPEIDAE  
***Sardinops melanostictus*** (Temminck and Schlegel, 1846)  
[Jpn name: Maiwashi]  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 27.** *Heteroconger hassi* (off Isso, 16 m, 19 Jan. 2010, S. Harazaki).

***Spratelloides gracilis*** (Temminck and Schlegel, 1846)  
[Jpn name: Kibinago]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999, as *Spratelloides* sp.): Kurio.  
MOSC (2002): Isso, Ambo and Kurio.

#### FAMILY CHANIDAE

***Chanos chanos*** (Forsskål, 1775)

[Jpn name: Sabahi]

Senta and Hirai (1981): 65 specimens, less than 16 mm TL, Miyanoura.

#### ORDER SILURIFORMES

##### FAMILY PLOTOSIDAE

***Plotosus japonicus*** Yoshino and Kishimoto, 2008  
[Jpn name: Gonzu] (Fig. 28)

KAUM-I. 11165, 68.4 mm SL, Kurio;  
KAUM-I. 11286, 133.1 mm SL, Yudomari;  
KAUM-I. 11624, 128.6 mm SL, Yudomari;  
KAUM-I. 11625, 60.6 mm SL, Yudomari;  
KAUM-I. 11626, 113.2 mm SL, Yudomari;  
KAUM-I. 11627, 118.2 mm SL, Yudomari;  
KAUM-I. 11628, 115 mm SL, Yudomari;

KAUM-I. 11629, 61.9 mm SL, Yudomari;  
KAUM-I. 11630, 58.5 mm SL, Yudomari;  
KAUM-I. 11631, 59.7 mm SL, Yudomari;  
KAUM-I. 11632, 58.0 mm SL, Yudomari;  
KAUM-I. 11633, 57.7 mm SL, Yudomari;  
KAUM-I. 11634, 59.4 mm SL, Yudomari;  
KAUM-I. 11635, 57.5 mm SL, Yudomari;  
KAUM-I. 11636, 60.9 mm SL, Yudomari;  
KAUM-I. 11637, 62.6 mm SL, Yudomari;  
KAUM-I. 11638, 62.1 mm SL, Yudomari;  
KAUM-I. 11639, 61.2 mm SL, Yudomari;  
KAUM-I. 11640, 60.4 mm SL, Yudomari;  
KAUM-I. 11641, 63.0 mm SL, Yudomari;  
KAUM-I. 11642, 59.3 mm SL, Yudomari;  
KAUM-I. 11643, 57.7 mm SL, Yudomari;  
KAUM-I. 11644, 61.9 mm SL, Yudomari;  
KAUM-I. 11645, 58.5 mm SL, Yudomari;  
KAUM-I. 11646, 57.0 mm SL, Yudomari;  
KAUM-I. 11647, 56.2 mm SL, Yudomari;  
KAUM-I. 11648, 54.3 mm SL, Yudomari;  
KAUM-I. 11649, 59.7 mm SL, Yudomari;  
KAUM-I. 11650, 60.4 mm SL, Yudomari;  
KAUM-I. 20091, 141.5 mm SL, Yudomari;  
KAUM-I. 20144, 153.0 mm SL, Yudomari;  
KAUM-I. 21753, 58.9 mm SL, Kurio; NSMT-P 91358, 70 mm SL, Yudomari; NSMT-P 91359, 65 specimens, 23–70 mm SL, Yudomari; NSMT-P 91379, 30 mm SL, Kurio; NSMT-P 91499, 32 specimens, 31–134 mm SL, Kurio; NSMT-P 91501, 71 mm SL, Kurio.

Arai and Ida (1975, as *Plotosus anguillicaudatus*): Kusugawa (one specimen was reported, but not found at NSMT). Ichikawa et al. (1992, as *Plotosus lineatus*): Yaku-shima Island. Kuniyasu (1999, as *Plotosus lineatus*): Kurio.



**Fig. 28.** *Plotosus japonicus* (KAUM-I. 11625, 60.6 mm SL).

**ORDER OSMERIFORMES****FAMILY OSMERIDAE***Plecoglossus altivelis altivelis* Temminck and Schlegel, 1846

[Jpn name: Ayu]

Ichikawa et al. (1992): Yaku-shima Island.  
 Yonezawa (2003b): Isso, Miyanoura, Ambo and Kurio Rivers.

**ORDER AULOPIFORMES****Family SYNODONTIDAE***Saurida gracilis* (Quoy and Gaimard, 1824)

[Jpn name: Madaraeso] (Fig. 29)

FRLM 34708, 167.3 mm SL, Yudomari.  
 Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.

Fig. 29. *Saurida gracilis* (FRLM 34708, 167.3 mm SL).*Synodus dermatogenys* Fowler, 1912

[Jpn name: Minamiakaeso] (Fig. 30)

KAUM-I. 11301, 135.5 mm SL, Yudomari;  
 KAUM-I. 11302, 144.4 mm SL, Yudomari.  
 Kuniyasu (1999, as *Synodus variegatus*): Kurio.

Fig. 30. *Synodus dermatogenys* (KAUM-I. 11301, 135.5 mm SL).*Synodus fuscus* Tanaka, 1917

[Jpn name: Sunaeso] (Fig. 31)

BSKU 96635, 104.3 mm SL, Isso.

Fig. 31. *Synodus fuscus* (BSKU 96635, 104.3 mm SL).*Synodus jaculum* Russell and Cressey, 1979

[Jpn name: Oguroeso]

Kuniyasu (1999): Kurio.

*Synodus ulae* Schultz, 1953

[Jpn name: Akaeso] (Fig. 32)

KPM-NI 24258, 185.2 mm SL, Yoshida; NS-MT-P 58106, 139.5 mm SL, Kusugawa; NSMT-P 96391, 165.7 mm SL, mouth of Tainoko River.

Ichikawa et al. (1992): Yaku-shima Island.

Fig. 32. *Synodus ulae* (KPM-NI 24258, 185.2 mm SL).*Synodus variegatus* (Lacepède, 1803)

[Jpn name: Hitosujieso]

Kuniyasu (1999, as *Synodus englemani*): Kurio.

Remarks: Kuniyasu's (1999) identification is uncertain.

*Trachinocephalus myops* (Forster, 1801)

[Jpn name: Okieso]

Ichikawa et al. (1992): Yaku-shima Island.

**ORDER LAMPRIFORMES****FAMILY LAMPRIDAE***Lampris guttatus* (Brünnich, 1788)

[Jpn name: Akamambo] (Fig. 33)

KAUM-I. 24997, ca. 1000 mm SL, off Isso (preserved caudal fin only).

Remarks: This specimen was collected by hand on 29 May 2007 from water surface off Isso (30°46'N, 130°47'E) where the fish drifted in a state of suspended animation.



**Fig. 33.** *Lampris guttatus* (KAUM-I. 24997, preserved caudal fin only).

## ORDER GADIFORMES

### FAMILY MACROURIDAE

***Hymenocephalus lethonemus*** Jordan and Gilbert, 1904  
[Jpn name: Itodara] (Fig. 34)

NSMT-P 94418, 5 specimens, 129.2–172.7 mm (lacking posterior portion of caudal peduncle), off east of Yaku-shima Island.



**Fig. 34.** *Hymenocephalus lethonemus* (NSMT-P 94418, 129.2 mm, preserved specimen).

### ***Nezumia condylura*** Jordan and Gilbert, 1904

[Jpn name: Nezumidara] (Fig. 35)

NSMT-P 94557, 2 specimens, 127.3–149.0 mm (lacking posterior portion of caudal peduncle), off east of Yaku-shima Island.



**Fig. 35.** *Nezumia condylura* (NSMT-P 94557, 149.0 mm, preserved specimen).

## ORDER OPHIDIIFORMES

### FAMILY OPHIDIIDAE

***Brotula multibarbata*** Temminck and Schlegel, 1846  
[Jpn name: Itachiuo]

Ichikawa et al. (1992): Yaku-shima Island.

### FAMILY BYTHITIDAE

***Alionematichthys piger*** (Alcock, 1890)  
[New Jpn name: Hadakaryukyuitachiuo] (Fig. 36)

Møller et al. (2008): KAUM-I. 11482, 58.6 mm SL, Isso; KAUM-I. 11483, 52.1 mm SL, Isso.

Remarks: Møller et al. (2008) redescribed *Dinematicichthys piger* Alcock as a member of *Alionematichthys*, based on 2288 specimens, including several specimens from the Ryukyu Islands, two of which were collected from Yaku-shima Island. The Yaku-shima specimens represent the northernmost records of the species. A new standard Japanese name, Hadaka-ryukyu-itachiuo, is proposed here for the species because it can easily be distinguished from *A. riukiuensis*, a congener co-occurring in Japan, by lacking scales above the opercular spine (vs. scales present in the latter).



**Fig. 36.** *Alionematichthys piger* (KAUM-I. 11482, 58.6 mm SL, preserved specimen).

### ***Alionematichthys riukiuensis*** (Aoyagi, 1954)

[Jpn name: Ryukyuitachiuo] (Fig. 37)

Møller et al. (2008): KAUM-I. 11459, 62.7 mm SL, Isso; KAUM-I. 11484, 56.4 mm SL, Isso.

Remarks: This species, previously classified in the genus *Dinematicichthys*, was transferred to a new genus, *Alionematichthys*, by Møller et al. (2008).



**Fig. 37.** *Alionemathichys riukiuensis* (KAUM-I. 11459, 62.7 mm SL).

***Diancistrus fuscus* (Fowler, 1946)**

[Jpn name: Sangoitachiuo] (Fig. 38)

KAUM-I. 11279, 54.3 mm SL, Yudomari.

Remarks: This species has been regarded as a species of *Brotulina* (e.g., Nielsen et al., 1999; Nakabo, 2002), but Schwarzhans et al. (2005) considered it a species of *Diancistrus*.



**Fig. 38.** *Diancistrus fuscus* (KAUM-I. 11279, 54.3 mm SL).

**ORDER LOPHIIFORMES**

**Family ANTENNARIIDAE**

***Antennarius commerson* (Latreille, 1804)**

[Jpn name: Omonkaeruanko] (Fig. 39)

Ichikawa et al. (1992, as *Antennarius moluccensis*): Yaku-shima Island.

***Antennarius maculatus* (Desjardins, 1840)**

[Jpn name: Kumadorikaeruanko] (Fig. 40)

***Antennarius pictus* (Shaw, 1794)**

[Jpn name: Irokaeruanko] (Fig. 41)

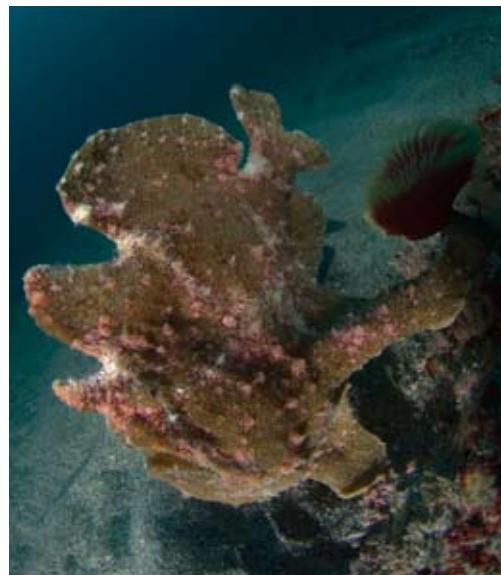
KAUM-I. 20230, 50.6 mm SL, Kurio.

***Histrio histrio* (Linnaeus, 1758)**

[Jpn name: Hanaokoze] (Fig. 42)

KPM-NI 24779, 14.9 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 39.** *Antennarius commerson* (off Isso, 25 m, 8 Apr. 2007, S. Harazaki).



**Fig. 40.** *Antennarius maculatus* (off Isso, 5 m, 28 Apr. 2007, S. Harazaki).



**Fig. 41.** *Antennarius pictus* (KAUM-I. 20230, 50.6 mm SL).



**Fig. 42.** *Histrio histrio* (upper: KPM-NI 24779, 14.9 mm SL; lower: off Isso, 1 m, 8 Apr. 2007, S. Harazaki).

## ORDER MUGILIFORMES

### FAMILY MUGILIDAE

#### *Chelon macrolepis* (Smith, 1846)

[Jpn name: Kobora] (Fig. 43)

KAUM-I. 11157, 106.9 mm SL, Kurio; KAUM-I. 11319, 33.8 mm SL, Ambo; KAUM-I. 11768, 24.0 mm SL, Nagakubo; KAUM-I. 15587, 48.7 mm SL, Yaku-shima Island; KAUM-I. 24683, 41.9 mm SL, mouth of Kurio River; KAUM-I. 24684, 42.0 mm SL, mouth of Kurio River; KAUM-I. 24685, 41.4 mm SL, mouth of Kurio River; NSMT-P 91597, 62 mm SL, Nagakubo; NSMT-P 91598, 7 specimens, 33–76 mm SL, Nagakubo; NSMT-P 91665, 97 mm SL, Kurio; NSMT-P 91666, 4 specimens, 61–101 mm SL, Kurio; NSMT-P 91669, 108.5 mm SL, Kurio.



**Fig. 43.** *Chelon macrolepis* (KAUM-I. 11157, 106.9 mm SL, preserved specimen).

#### *Crenimugil crenilabis* (Forsskål, 1775)

[Jpn name: Furaibora] (Fig. 44)

KAUM-I. 11159, 85.9 mm SL, Kurio; KAUM-I. 11173, 43.3 mm SL, Kurio; KAUM-I. 11174, 35.9 mm SL, Kurio; KAUM-I. 20540, 40.3 mm SL, Yudomari; NSMT-P 91667, 79.3 mm SL, Kurio.

Arai and Ida (1975): NSMT-P 17814, 52.0 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 44.** *Crenimugil crenilabis* (NSMT-P 91667, 79.3 mm SL).

#### *Ellochelon vaigiensis* (Quoy and Gaimard, 1825)

[Jpn name: Onibora]

Arai and Ida (1975, as *Chelon vaigiensis*): Kusugawa [two specimens (20–36 mm TL) were reported, but not found at NSMT].

#### *Moolgarda engeli* (Bleeker 1858-59)

[Jpn name: Monnashibora] (Fig. 45)

KAUM-I. 24736, 25.3 mm SL, mouth of Kurio River; KAUM-I. 24737, 26.0 mm SL, mouth of Kurio River; KAUM-I. 24742, 22.0 mm SL, mouth of Kurio River.



**Fig. 45.** *Moolgarda engeli* (KAUM-I. 24736, 25.3 mm SL, preserved specimen).

***Moolgarda perusii*** (Valenciennes, 1836)

[Jpn name: Nan-yobora] (Fig. 46)

KAUM-I. 24738, 25.2 mm SL, mouth of Kurio River; KAUM-I. 24739, 23.4 mm SL, mouth of Kurio River; KAUM-I. 24740, 22.1 mm SL, mouth of Kurio River; KAUM-I. 24741, 24.4 mm SL, mouth of Kurio River.



**Fig. 46.** *Moolgarda perusii* (KAUM-I. 24741, 24.4 mm SL, preserved specimen).

NSMT-P 91598, 7 specimens, 31.5–75.0 mm SL, Nagakubo; NSMT-P 91665, 95.7 mm SL, Kurio; NSMT-P 91666, 3 specimens, 88.9–99.7 mm SL, Kurio.

Ichikawa et al. (1992); Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 48.** *Mugil cephalus cephalus* (KAUM-I. 20064, 131.9 mm SL).

***Moolgarda seholi*** (Forsskål, 1775)

[Jpn name: Taiwammenada] (Fig. 47)

KAUM-I. 11321, 54.1 mm SL, Nagakubo; KAUM-I. 21739, 27.3 mm SL, Kurio; KAUM-I. 21740, 26.3 mm SL, Kurio; KAUM-I. 24735, 27.4 mm SL, mouth of Kurio River.



**Fig. 47.** *Moolgarda seholi* (KAUM-I. 11321, 54.1 mm SL).

**ORDER ATHERINIFORMES****FAMILY ATERINIDAE*****Atherinomorus lacunosus*** (Forster, 1801)

[Jpn name: Yakushimaiwashi] (Fig. 49)

KPM-NI 23005, 127.8 mm SL, mouth of Nagata River.

Jordan and Starks (1906), Kimura et al. (2007): SU 9354, holotype of *Atherina morrissi* Jordan and Starks, 1906, 102 mm SL, Yaku-shima Island.



**Fig. 49.** *Atherinomorus lacunosus* (KPM-NI 23005, 127.8 mm SL).

***Mugil cephalus cephalus*** Linnaeus, 1758

[Jpn name: Bora] (Fig. 48)

KAUM-I. 11769, 23.0 mm SL, Nagakubo; KAUM-I. 15417, 136.4 mm SL, Yaku-shima Island; KAUM-I. 15418, 74.4 mm SL, Yaku-shima Island; KAUM-I. 15425, 137.0 mm SL, Yaku-shima Island; KAUM-I. 15428, 102.8 mm SL, Yaku-shima Island; KAUM-I. 20064, 131.9 mm SL, Yudomari; KAUM-I. 24686, 79.2 mm SL, Ambo; KAUM-I. 24687, 71.1 mm SL, Ambo; KPM-NI 24659, 293.0 mm SL, mouth of Ambo River; NSMT-P 91597, 61.5 mm SL, Nagakubo;

***Atherion elymus*** Jordan and Starks, 1901

[Jpn name: Mugiiwashi] (Fig. 50)

BSKU 96892, 29.3 mm SL, Kurio; FRLM 34645, 30.2 mm SL, Kurio; FRLM 34646, 30.4 mm SL, Kurio; FRLM 34647, 34.5 mm SL, Kurio; FRLM 34648, 33.9 mm SL, Kurio; FRLM 34649, 31.0 mm SL, Kurio; FRLM 34650, 49 specimens, 20.2–31.9 mm SL, Kurio; FRLM 34671, 23.3 mm SL, Kurio; FRLM 34720, 34.2

mm SL, Kurio; KAUM-I. 11403, 35.2 mm SL, Kurio Beach; KAUM-I. 11405, 29.4 mm SL, Kurio Beach; KAUM-I. 11406, 27.9 mm SL, Kurio Beach; KAUM-I. 11412, 24.2 mm SL, Kurio Beach; KAUM-I. 11414, 29.8 mm SL, Kurio; KAUM-I. 20250, 25.7 mm SL, Kurio; KAUM-I. 20334, 35.7 mm SL, Isso; KAUM-I. 20335, 29.7 mm SL, Isso; KAUM-I. 20336, 34.7 mm SL, Isso; KAUM-I. 20337, 29.7 mm SL, Isso; KAUM-I. 20338, 28.7 mm SL, Isso; KAUM-I. 21830, 28.7 mm SL, Kurio; KAUM-I. 23549, 28.6 mm SL, Kurio.



**Fig. 50.** *Atherion elymus* (KAUM-I. 20250, 25.7 mm SL).

#### ***Hypoatherina valenciennaei* (Bleeker, 1853)**

[Jpn name: Togoroiwashi]

Ichikawa et al. (1992): Yaku-shima Island.

### **ORDER BELONIFORMES**

#### **FAMILY EXOCOETIDAE**

##### ***Cheilopogon agoo* (Temminck and Schlegel, 1846)**

[Jpn name: Tobiuo] (Fig. 51)

Jordan and Starks (1906): USNM 53535, 259.7 mm SL, Yaku-shima Island. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 51.** *Cheilopogon agoo* (USNM 53535, 259.7 mm SL, preserved specimen).

##### ***Cheilopogon cyanopterus* (Valenciennes, 1847)**

[Jpn name: Karasutobiuo] (Fig. 52)

NSMT-P 95149, 264.1 mm SL, Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 52.** *Cheilopogon cyanopterus* (NSMT-P 95149, 264.1 mm SL).

##### ***Cheilopogon pinnatibarbus japonicus* (Franz, 1910)**

[Jpn name: Hamatobiuo] (Fig. 53)

NSMT-P 64314, 294.8 mm SL, Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 53.** *Cheilopogon pinnatibarbus japonicus* (NSMT-P 64314, 294.8 mm SL, preserved specimen).

##### ***Cheilopogon furcatus furcatus* (Mitchill, 1815)**

[Jpn name: Omenatsutobi] (Fig. 54)

NSMT-P 95150, 278.6 mm SL, Yaku-shima Island; NSMT-P 95151, 288.2 mm SL, Yaku-shima Island.

Remarks: This species has been regarded as *Cypselurus antoncichi* Woods and Schultz, 1953 by numerous authors, but Parin (2009) recently synonymized it with *C. furcatus*.



**Fig. 54.** *Cheilopogon furcatus furcatus* (NSMT-P 95150, 278.6 mm SL).

*Cypselurus furcatus fisunovi* (Parin and Belyanina, 1998)  
[Jpn name: Shirofuchitobiuo]

KAUM-I. 8368, 201.6 mm SL, Yaku-shima Island.

*Cypselurus heterurus doederleini* (Steindachner, 1887)  
[Jpn name: Tsukushitobiuo]  
Ichikawa et al. (1992): Yaku-shima Island.

*Cypselurus poecilopterus* (Valenciennes, 1847)  
[Jpn name: Ayatobiuo] (Fig. 55)  
KAUM-I. 21944, 162.7 mm SL, Yaku-shima Island; NSMT-P 95152, 162.6 mm SL, Yaku-shima Island; NSMT-P 95153, 2 specimens, 165.5–171.9 mm SL, Yaku-shima Island.  
Ichikawa et al. (1992): Yaku-shima Island.



Fig. 55. *Cypselurus poecilopterus* (KAUM-I. 21944, 162.7 mm SL).

*Exocoetus monocirrhus* Richardson, 1846  
[Jpn name: Hagaromotobiuo]  
Ichikawa et al. (1992): Yaku-shima Island.

*Hirundichthys speculiger* (Valenciennes, 1847)  
[Jpn name: Ninojitobiuo] (Fig. 56)  
KAUM-I. 15868, 46.0 mm SL, off northwest of Yaku-shima Island; KAUM-I. 15895, 62.8 mm SL, off northwest of Yaku-shima Island; KAUM-I. 15921 83.7 mm SL, off northwest of Yaku-shima Island.



Fig. 56. *Hirundichthys speculiger* (KAUM-I. 15895, 62.8 mm SL, preserved specimen).

*Parexocoetus brachypterus brachypterus* (Richardson, 1846)  
[Jpn name: Tsumaritobiuo]  
Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY HEMIRAMPHIDAE

*Euleptorhamphus viridis* (van Hasselt, 1823)  
[Jpn name: Tozayori]  
Ichikawa et al. (1992): Yaku-shima Island.

*Hemiramphus lutkei* Valenciennes, 1847  
[Jpn name: Nan-yosayori]  
Ichikawa et al. (1992): Yaku-shima Island.

*Oxyporhamphus micropterus micropterus* (Valenciennes, 1847)  
[Jpn name: Sayloritobiuo]  
Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY BELONIDAE

*Abelennes hians* (Valenciennes, 1846)  
[Jpn name: Hamadatsu]  
Ichikawa et al. (1992): Yaku-shima Island.

*Platybelone argalus platyura* (Bennett, 1832)  
[Jpn name: Himedatsu]  
Ichikawa et al. (1992): Yaku-shima Island.

*Tylosurus acus melanotus* (Bleeker, 1850)  
[Jpn name: Tenjikudatsu] (Fig. 57)  
KAUM-I. 1898, 131.2 mm SL, Yudomari; KPM-NI 24669, 714.8 mm SL, Onoaida.  
Ichikawa et al. (1992): Yaku-shima Island.



Fig. 57. *Tylosurus acus melanotus* (KPM-NI 24669, 714.8 mm SL).

*Tylosurus crocodilus crocodilus* (Péron and Lesueur, 1821)  
[Jpn name: Okizayori] (Fig. 58)

KAUM-I. 11141, 182.3 mm SL, Kurio; KAUM-I. 25228, 482.2 mm SL, Onoaida; KPM-NI 24664, 419.0 mm SL, mouth of Nagata River; KPM-NI 24668, 746.6 mm SL, Onoaida; KPM-NI 24670, 613.6 mm SL, Onoaida; NSMT-P 96079, 412.7 mm SL, Ambo.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 58.** *Tylosurus crocodilus crocodilus* (KPM-NI 24664, 419.0 mm SL).

#### FAMILY SCOMBERESOCIDAE

*Cololabis saira* (Brevoort 1856)

[Jpn name: Samma]

Ichikawa et al. (1992): Yaku-shima Island.

#### ORDER BERYCIFORMES

##### FAMILY MONOCENTRIDAE

*Monocentris japonica* (Houttuyn, 1782)

[Jpn name: Matsukasaou]

Ichikawa et al. (1992): Yaku-shima Island.

##### FAMILY HOLOCENTRIDAE

*Myripristis berndti* Jordan and Evermann, 1903

[Jpn name: Akamatsukasa]

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.

*Myripristis botche* Cuvier, 1829

[Jpn name: Urokomatsukasa]

Kuniyasu (1999): Kurio.

*Myripristis kuhnee* Valenciennes, 1831

[Jpn name: Kuroobimatsukasa]

Kuniyasu (1999): Kurio.

*Myripristis murdjan* (Forsskål, 1775)

[Jpn name: Yogorematsukasa] (Fig. 59)

KAUM-I. 11463, 108.0 mm SL, Isso.



**Fig. 59.** *Myripristis murdjan* (KAUM-I. 11463, 108.0 mm SL).

*Myripristis violacea* Bleeker, 1851

[Jpn name: Seguromatsukasa] (Fig. 60)



**Fig. 60.** *Myripristis violacea* (off Isso, 6 m, 29 Dec. 2008, S. Harazaki).

*Ostichthys japonicus* (Cuvier, 1829)

[Jpn name: Ebisudai] (Fig. 61)

KAUM-I. 7411, 308.4 mm SL, Yaku-shima Island.



**Fig. 61.** *Ostichthys japonicus* (KAUM-I. 7411, 308.4 mm SL).

*Sargocentron caudimaculatum* (Rüppell, 1838)

[Jpn name: Kurakakeebisu]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

*Sargocentron diadema* (Lacepède, 1802)

[Jpn name: Nijiebisu] (Fig. 62)

BSKU 96594, 112.7 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 62.** *Sargocentron diadema* (BSKU 96594, 112.7 mm SL, preserved specimen).



**Fig. 64.** *Sargocentron melanospilos* (NSMT-P 77634, 202.0 mm SL).

***Sargocentron ittodai* (Jordan and Fowler, 1902)**

[Jpn name: Teriebisu] (Fig. 63)

FRLM 34728, 149.1 mm SL, Kurio; KAUM-I. 11271, 148.7 mm SL, Yudomari; KAUM-I. 11342, 161.6 mm SL, Kurio; KAUM-I. 20021, 113.2 mm SL, Yudomari; KAUM-I. 20323, 132.2 mm SL, Kurio; KAUM-I. 24227, 134.9 mm SL, Onoaida; KPM-NI 24941, 139.7 mm SL, Onoaida; NSMT-P 95400, 149.5 mm SL, Miyanoura; NSMT-P 95410, 3 specimens, 135.3–145.4 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 63.** *Sargocentron ittodai* (KAUM-I. 20021, 113.2 mm SL).

***Sargocentron praslin* (Lacepède, 1802)**

[Jpn name: Kuroobiebisu] (Fig. 65)

KAUM-I. 11531, 44.5 mm SL, Ambo; NSMT-P 95414, 187.1 mm SL, Kurio; NSMT-P 95437, 115.8 mm SL, Haruo.

Arai and Ida (1975, as *Holocentrus ruber*): NSMT-P 58120, 76.2 mm SL, Kusugawa; NSMT-P 58136, 77.0 mm SL, Kusugawa.



**Fig. 65.** *Sargocentron praslin* (upper: KAUM-I. 11531, 44.5 mm SL; lower: NSMT-P 95414, 187.1 mm SL).

***Sargocentron melanospilos* (Bleeker, 1858)**

[Jpn name: Sumitsukikanoko] (Fig. 64)

NSMT-P 77634, 202.0 mm SL, Nanase.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Sargocentron punctatissimum* (Cuvier, 1829)**

[Jpn name: Hoshiebisu] (Fig. 66)

FRLM 34729, 117.5 mm SL, Kurio; KAUM-I. 11255, 131.0 mm SL, Yudomari; KAUM-I. 11341, 129.5 mm SL, Kurio; MUFS 25545, 130.4 mm SL, Yudomari; NSMT-P 91502, 126 mm SL, Kurio; NSMT-P 91503, 2 specimens, 115–117 mm SL, Kurio; NSMT-P 95412, 2 specimens, 101.8–126.2 mm SL, Kurio; NSMT-P 95456, 45.4 mm SL, Haruo.



Fig. 66. *Sargocentron punctatissimum* (KAUM-I. 11255, 131.0 mm SL).

***Sargocentron spiniferum* (Forsskål, 1775)**

[Jpn name: Togariebisu] (Fig. 67)

FRLM 34721, 297.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 67. *Sargocentron spiniferum* (FRLM 34721, 297.0 mm SL).

**ORDER ZEIFORMES**

FAMILY PARAZENIDAE

***Parazen pacificus* Kamohara, 1935**

[Jpn name: Benimatodai] (Fig. 68)

USNM 118007, 128.4 mm SL, Yaku-shima Island.



Fig. 68. *Parazen pacificus* (USNM 118007, 128.4 mm SL, preserved specimen).

**ORDER GASTEROSTEIFORMES**

FAMILY SOLENOSTOMIDAE

***Solenostomus cyanopterus* Bleeker, 1854**

[Jpn name: Kamisoriuo] (Fig. 69)



Fig. 69. *Solenostomus cyanopterus* (off Isso, 15 m, 17 June 2009, S. Harazaki).

***Solenostomus paradoxus* (Pallas, 1770)**

[Jpn name: Nishikifuraiuo] (Fig. 70)



Fig. 70. *Solenostomus paradoxus* (off Isso, 6 m, 29 Dec. 2008, S. Harazaki).

## FAMILY SYNGNATHIDAE

***Corythoichthys amplexus*** Dawson and Randall, 1975  
 [Jpn name: Obiishiyoji]  
 Kuniyasu (1999): Kurio.

***Corythoichthys haematopterus*** (Bleeker, 1851)

[Jpn name: Ishiyoji] (Fig. 71)  
 KAUM-I. 20342, 97.2 mm SL, Isso; KPM-NI 22572, 103.1 mm SL, Isso.



Fig. 71. *Corythoichthys haematopterus* (KAUM-I. 20342, 97.2 mm SL).

***Corythoichthys schultzi*** Herald, 1953

[Jpn name: Kuchinagaishiyoji]  
 Kuniyasu (1999): Kurio.

***Choeroichthys sculptus*** (Günther, 1870)

[Jpn name: Chigoyoji] (Fig. 72)  
 KAUM-I. 21772, 57.2 mm SL, Kurio; KPM-NI 24903, 67.0 mm SL, Kurio; KPM-NI 24904, 60.5 mm SL, Kurio.



Fig. 72. *Choeroichthys sculptus* (KAUM-I. 21772, 57.2 mm SL).

***Doryrhamphus excisus excisus*** Kaup, 1856

[Jpn name: Hibashiyoji] (Fig. 73)  
 KAUM-I. 11324, 56.8 mm SL, Nagakubo; KAUM-I. 11533, 48.6 mm SL, Ambo; KAUM-I. 21831, 51.7 mm SL, Kurio; NSMT-P 95453, 52.1 mm SL, Haruo.

Arai and Ida (1975, as *Doryrhamphus melanopleura*): Kusugawa (one specimen was reported, but not found at NSMT).



Fig. 73. *Doryrhamphus excisus excisus* (KAUM-I. 11324, 56.8 mm SL).

***Doryrhamphus japonicus*** Araga and Yoshino, 1975

[Jpn name: Nokogiryoji] (Fig. 74)  
 KAUM-I. 11196, 72.2 mm SL, Kurio; KAUM-I. 11323, 65.0 mm SL, Nagakubo; KAUM-I. 20541, 70.8 mm SL, Yudomari; KAUM-I. 20542, 62.2 mm SL, Yudomari; KAUM-I. 21802, 54.7 mm SL, Kurio.



Fig. 74. *Doryrhamphus japonicus* (KAUM-I. 11323, 65.0 mm SL).

***Dunckerocampus dactyliophorus*** (Bleeker, 1853)

[Jpn name: Oiran-yoji] (Fig. 75)  
 BSKU 96541, 134.5 mm SL, Yudomari.



Fig. 75. *Dunckerocampus dactyliophorus* (BSKU 96541, 134.5 mm SL).

***Hippocampus bargibanti*** Whitley 1970

[Jpn name: None] (Fig. 76)  
 Remarks: This species has been recorded along the Pacific coast of Japan, and the Izu, Ogasawara, and Ryukyu Islands (Senou et al., 2002, 2006a). No specimens have been collected from Yaku-shima Island, although this species is relatively common in the island in depths of 25–30 m.

***Hippocampus histrix*** Kaup, 1856

[Jpn name: Ibaratatsu]  
 Ichikawa et al. (1992): Yaku-shima Island.

***Hippocampus kelloggi*** Jordan and Snyder, 1901

[Jpn name: Oumiuma] (Fig. 77)  
 KAUM-I. 21741, 208.7 mm, mouth of Ambo River.



**Fig. 76.** *Hippocampus bargibanti* (off Isso, 25 m, 17 June 2004, S. Harazaki).

***Hippocampus kuda*** Bleeker, 1852

[Jpn name: Kuroumuma] (Fig. 77)

BSKU 96574, 214.1 mm, Yudomari; KPM-NI 22507, 164.3 mm, Yudomari.



**Fig. 77.** Left: *Hippocampus kelloggi* (KAUM-I. 21741, 208.7 mm); right: *H. kuda* (KPM-NI 22507, 164.3 mm).

***Hippichthys spicifer*** (Rüppell, 1838)

[Jpn name: Kawayoiji] (Fig. 78)

KAUM-I. 21593, 107.0 mm SL, mouth of Ambo River; KAUM-I. 21594, 107.7 mm SL, mouth of Ambo River; NSMT-P 77932, 90.8 mm SL, mouth of Ambo River.



**Fig. 78.** *Hippichthys spicifer* (KAUM-I. 21594, 107.7 mm SL).

***Micrognathus andersonii*** (Bleeker, 1858)

[Jpn name: Kammuriyoji] (Fig. 79)

KAUM-I. 11532, 62.7 mm SL, Ambo; KAUM-I. 21735, 92.8 mm SL, Kurio; KAUM-I. 21773, 66.1 mm SL, Kurio; KAUM-I. 21774, 46.6 mm SL, Kurio; KPM-NI 22573, 56.4 mm SL, Isso.

Arai and Ida (1975, as *Micrognathus brevirostris*): NSMT-P 17833, 46.5 mm SL, Kusugawa.



**Fig. 79.** *Micrognathus andersonii* (upper: KAUM-I. 21774, 46.6 mm SL; lower: KAUM-I. 21773, 66.1 mm SL).

***Microphis brachyurus brachyurus*** (Bleeker, 1853)

[Jpn name: Tenguyoji] (Fig. 80)

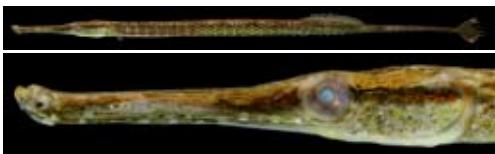
KAUM-I. 21763, 120.3 mm SL, Ambo; KAUM-I. 21764, 99.5 mm SL, Ambo; KAUM-I. 24682, 101.1 mm SL, Ambo; KAUM-I. 25198, 129.1 mm SL, mouth of Nagata River; KAUM-I. 25199, 101.0 mm SL, mouth of Nagata River.

***Phoxocampus belcheri*** (Kaup, 1856)

[Jpn name: Boyoji] (Fig. 81)

KPM-NI 24796, 28.7 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 80.** *Microphis brachyurus brachyurus* (KAUM-I. 21763, 120.3 mm SL).



**Fig. 81.** *Phoxocampus belcheri* (KPM-NI 24796, 28.7 mm SL).

#### *Phoxocampus diacanthus* (Schultz, 1943)

[Jpn name: Hachijoboyoji] (Fig. 82)

KPM-NI 22574, 55.4 mm SL, Isso.



**Fig. 82.** *Phoxocampus diacanthus* (KPM-NI 22574, 55.4 mm SL).

#### FAMILY AULOSTOMIDAE

##### *Aulostomus chinensis* (Linnaeus, 1766)

[Jpn name: Herayagara]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

#### FAMILY FISTULARIIDAE

##### *Fistularia commersonii* Rüppell, 1838

[Jpn name: Aoyagara] (Fig. 83)

KAUM-I. 11203, 388.4 mm SL, Kurio;  
KAUM-I. 11328, 369.6 mm SL, Nagakubo;  
KAUM-I. 11654, 464.1 mm SL, Ambo; KAUM-I. 20147, 493.9 mm SL, Yudomari; KAUM-I. 20148, 537.9 mm SL, Yudomari; KAUM-I. 20149, 714.2 mm SL, Yudomari; KAUM-I. 20183, 528 mm SL, Yudomari; NSMT-P 91352, 179 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Isso.



**Fig. 83.** *Fistularia commersonii* (KAUM-I. 11203, 388.4 mm SL).

#### FAMILY CENTRISCIDAE

##### *Aeoliscus strigatus* (Günther, 1861)

[Jpn name: Hekoauyu] (Fig. 84)

KAUM-I. 20090, 97.4 mm SL, Yudomari.  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 84.** *Aeoliscus strigatus* (KAUM-I. 20090, 97.4 mm SL).

#### ORDER SCORPAENIFORMES

#### FAMILY DACTYLOPTERIDAE

##### *Dactyloptena orientalis* (Cuvier, 1829)

[Jpn name: Semihobo]

Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY APISTIDAE

##### *Apistus carinatus* (Bloch and Schneider, 1801)

[Jpn name: Hachi]

SU 25235, 94.2 mm SL, off southeast of Yaku-shima Island.

#### FAMILY SCORPAENIDAE

##### *Dendrochirus brachypterus* (Cuvier, 1829)

[Jpn name: Shimahimeyamanokami] (Fig. 85)

KAUM-I. 20160, 24.8 mm SL, Yudomari.



**Fig. 85.** *Dendrochirus brachypterus* (KAUM-I. 20160, 24.8 mm SL).

***Dendrochirus zebra* (Cuvier, 1829)**

[Jpn name: Kirimmino] (Fig. 86)

KAUM-I. 20107, 88.6 mm SL, Yudomari; KAUM-I. 20162, 44.0 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

**Fig. 86.** *Dendrochirus zebra* (KAUM-I. 20107, 88.6 mm SL).***Parascorpaena aurita* (Rüppell, 1838)**

[Jpn name: Chiburunettaifusakasago] (Fig. 87)

KAUM-I. 20102, 56.6 mm SL, Yudomari; KPM-NI 24783, 22.1 mm SL, Kurio.

Motomura et al. (2009): BSKU 96650, 116.1 mm SL, Isso.

Remarks: This species was first recorded from East Aisa by Motomura et al. (2009) on the basis of 56 specimens. One of these, BSKU 96650, represents the northernmost record of the species.

**Fig. 87.** *Parascorpaena aurita* (KAUM-I. 20102, 56.6 mm SL).***Parascorpaena mossambica* (Peters, 1855)**

[Jpn name: Nettaifusakasago] (Fig. 88)

KAUM-I. 11145, 55.5 mm SL, Kurio; KAUM-I. 11227, 36.5 mm SL, Kurio; KAUM-I. 11228, 37.6 mm SL, Kurio; KAUM-I. 11229, 41.3 mm SL, Kurio; KAUM-I. 11376, 37.7 mm SL, Kurio; KAUM-I. 11455, 56.9 mm SL, Isso; KAUM-I. 11584, 37.7 mm SL, Ambo; KAUM-I. 20242, 30.8 mm SL, Kurio; KAUM-I. 20264, 19.8 mm SL, Kurio; KAUM-I. 21703, 30.8 mm SL, Kurio; KAUM-I. 21706, 20.7 mm SL, Kurio; KAUM-I. 21707, 18.5 mm SL, Kurio; KAUM-I. 21709, 17.4 mm SL, Kurio.

Arai and Ida (1975, as *Scorpaena zanzibarensis*): Kusugawa [one specimen (129 mm TL) was reported, but not found at NSMT].**Fig. 88.** *Parascorpaena mossambica* (KAUM-I. 11376, 37.7 mm SL).***Pterois antennata* (Bloch, 1787)**

[Jpn name: Nettaiminokasago]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Pterois lunulata* Temminck and Schlegel, 1843**

[Jpn name: Minokasago]

Ichikawa et al. (1992): Yaku-shima Island.

***Pterois radiata* Cuvier, 1829**

[Jpn name: Kimiokoze] (Fig. 89)

KAUM-I. 11312, 76.8 mm SL, Yudomari; KAUM-I. 11513, 72.5 mm SL, Ambo; KAUM-I. 21713, 29.4 mm SL, Kurio; NSMT-P 95428, 67.6 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 89.** *Pterois radiata* (KAUM-I. 11513, 72.5 mm SL).

***Pterois volitans*** (Linnaeus, 1758)  
[Jpn name: Hanaminokasago] (Fig. 90)  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 90.** *Pterois volitans* (off Isso, 12 m, 16 May 2008, S. Harazaki).

***Scorpaenodes guamensis*** (Quoy and Gaimard, 1824)  
[Jpn name: Guamukasago] (Fig. 91)  
KAUM-I. 11582, 66.7 mm SL, Ambo;  
KAUM-I. 21702, 43.2 mm SL, Kurio; NSMT-P  
95433, 37.3 mm SL, Haruo.

Arai and Ida (1975): NSMT-P 17830, 2 speci-  
mens, 20.8–38.7 mm SL, Kusugawa.

***Scorpaenodes littoralis*** (Tanaka, 1917)  
[Jpn name: Isokasago] (Fig. 92)  
KPM-NI 22547, 22.4 mm SL, Kurio.



**Fig. 91.** *Scorpaenodes guamensis* (KAUM-I. 21702, 43.2 mm SL).



**Fig. 92.** *Scorpaenodes littoralis* (KPM-NI 22547, 22.4 mm SL).

***Scorpaenodes parvipinnis*** (Garrett, 1864)  
[Jpn name: Himesangokasago] (Fig. 93)  
KAUM-I. 20324, 58.8 mm SL, Kurio.



**Fig. 93.** *Scorpaenodes parvipinnis* (KAUM-I. 20324, 58.8 mm SL).

***Scorpaenodes scaber*** (Ramsay and Ogilby, 1886)  
[Jpn name: Sangokasago] (Fig. 94)

KAUM-I. 11581, 71.1 mm SL, Ambo;  
KAUM-I. 11583, 63.7 mm SL, Ambo; KAUM-I.  
20093, 33.0 mm SL, Yudomari; KAUM-I. 20094,  
34.8 mm SL, Yudomari; KAUM-I. 20152, 20.4  
mm SL, Yudomari; KAUM-I. 20213, 17.8 mm  
SL, Yudomari; KAUM-I. 20241, 31.7 mm SL,  
Kurio; KAUM-I. 21704, 29.9 mm SL, Kurio;  
KAUM-I. 21705, 22.7 mm SL, Kurio; KAUM-

I. 21708, 17.6 mm SL, Kurio; KAUM-I. 21710, 16.4 mm SL, Kurio; KAUM-I. 21711, 16.2 mm SL, Kurio; KPM-NI 22536, 12.3 mm SL, Yudomari.



**Fig. 94.** *Scorpaenodes scaber* (upper: KPM-NI 22536, 12.3 mm SL; lower: KAUM-I. 11583, 63.7 mm SL).

***Scorpaenopsis cirrosa*** (Thunberg, 1793)

[Jpn name: Onikasago]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

Remarks: Ichikawa et al.'s (1992) and Kuniyasu's (1999) *S. cirrosa* are most likely to be *S. ramaraoi*.

***Scorpaenopsis diabolus*** (Cuvier, 1829)

[Jpn name: Niraikasago] (Fig. 96)

KAUM-I. 11143, 96.6 mm SL, Kurio; KAUM-I. 11186, 90.7 mm SL, Kurio; KAUM-I. 11580, 92.8 mm SL, Ambo; KAUM-I. 21676, 146.8 mm SL, Kurio.



**Fig. 96.** *Scorpaenopsis diabolus* (KAUM-I. 21676, 146.8 mm SL).

***Scorpaenodes quadrispinosus*** Greenfield and Matsuura, 2002  
[Jpn name: Atsuhimesangokasago] (Fig. 95)

Motomura et al. (2010): KAUM-I. 11469, 75.5 mm SL, Isso; KAUM-I. 11475, 80.9 mm SL, Isso.

Remarks: This species was reported as the first records from Japan by Motomura et al. (2010) on the basis of specimens from Amami-oshima and Yaku-shima Islands.



**Fig. 95.** *Scorpaenodes quadrispinosus* (KAUM-I. 11475, 80.9 mm SL).

***Scorpaenopsis neglecta*** Heckel, 1837

[Jpn name: Satsumakasago] (Fig. 97)

KAUM-I. 11377, 32.4 mm SL, Kurio; KAUM-I. 22817, 20.0 mm SL, Kurio; KPM-NI 22516, 17.4 mm SL, Yudomari.

Arai and Ida (1975, as *Scorpaenopsis gibbosa*): Kusugawa [one specimen (57 mm TL) was reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 97.** *Scorpaenopsis neglecta* (KAUM-I. 11377, 32.4 mm SL).

*Scorpaenopsis ramaraoi* Randall and Eschmeyer, 2002

[Jpn name: Inukasago] (Fig. 98)

KAUM-I. 20108, 136.7 mm SL, Yudomari; KAUM-I. 25232, 163.5 mm SL, Ambo; KPM-NI 22515, 23.1 mm SL, Yudomari.

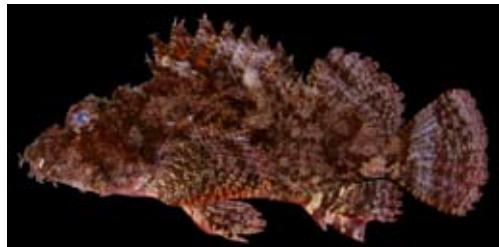


Fig. 98. *Scorpaenopsis ramaraoi* (KAUM-I. 25232, 163.5 mm SL).

*Sebastapistes cyanostigma* (Bleeker, 1856)

[Jpn name: Kasurifusakasago] (Fig. 99)

KAUM-I. 11456, 40.1 mm SL, Isso; NSMT-P 95431, 47.1 mm SL, Haruo; NSMT-P 95432, 3 specimens, 36.2–43.2 mm SL, Haruo.



Fig. 99. *Sebastapistes cyanostigma* (KAUM-I. 11456, 40.1 mm SL).

*Sebastapistes fowleri* (Pietschmann, 1934)

[Jpn name: Puchifusakasago] (Fig. 100)

Motomura and Senou (2009): BLIP 36670069, 21.1 mm SL, Isso; BLIP 36670070, 29.4 mm SL, Isso.

Remarks: Motomura and Senou (2009) reported this species as the first records from East Asia (Taiwan and Japan) on the basis of 20 specimens, including two Yaku-shima Island specimens.



Fig. 100. *Sebastapistes fowleri* (BLIP 36670070, 29.4 mm SL; M. Aizawa).

*Sebastapistes strongia* (Cuvier, 1829)

[Jpn name: Madara fusakasago] (Fig. 101)

BSKU 96563, 53.8 mm SL, Yudomari; BSKU 96570, 13.7 mm SL, Yudomari; BSKU 96571, 22.5 mm SL, Yudomari; KAUM-I. 20095, 41.4 mm SL, Yudomari; KAUM-I. 20096, 52.3 mm SL, Yudomari; KAUM-I. 20189, 54.4 mm SL, Yudomari; KAUM-I. 20190, 52.3 mm SL, Yudomari; KAUM-I. 20191, 37.7 mm SL, Yudomari; KAUM-I. 20212, 13.9 mm SL, Yudomari; KAUM-I. 20214, 15.2 mm SL, Yudomari; KAUM-I. 21712, 14.2 mm SL, Kurio; KPM-NI 22517, 19.7 mm SL, Yudomari; KPM-NI 22518, 18.8 mm SL, Yudomari; KPM-NI 22586, 8.7 mm SL, Isso.

Ichikawa et al. (1992, as *Scorpaena bynoensis*): Yaku-shima Island.



Fig. 101. *Sebastapistes strongia* (KAUM-I. 20096, 52.3 mm SL).

*Taenianotus triacanthus* Lacepède, 1802

[Jpn name: Hadaka haokoze] (Fig. 102)



**Fig. 102.** *Taenianotus triacanthus* (off Isso, 20 m, 19 Jan. 2010, S. Harazaki).

#### FAMILY SEBASTIDAE

*Sebastiscus albofasciatus* (Lacepède, 1802)

[Jpn name: Ayamekasago] (Fig. 103)

KAUM-I. 20852, 211.5 mm SL, off Yaku-shima Island.



**Fig. 103.** *Sebastiscus albofasciatus* (KAUM-I. 20852, 211.5 mm SL).

#### FAMILY TETRAROGIDAE

*Ablabys taenianotus* (Cuvier, 1829)

[Jpn name: Tsumajirookoze] (Fig. 104)

KAUM-I. 23010, 70.1 mm SL, Kurio; KPM-NI 22557, 17.6 mm SL, Kurio.



**Fig. 104.** *Ablabys taenianotus* (KAUM-I. 23010, 70.1 mm SL).

#### *Minous quincarinatus* (Fowler, 1943)

[Jpn name: Itookooze] (Fig. 105)

USNM 117906, 73.4 mm SL, off northeast of Yaku-shima Island.

Fowler (1943): USNM 99515, holotype of *Paraminous quincarinatus*, 74.7 mm SL, off northeast of Yaku-shima Island.



**Fig. 105.** *Minous quincarinatus* (USNM 117906, 73.4 mm SL, preserved specimen).

#### *Synanceia verrucosa* Bloch and Schneider, 1801

[Jpn name: Onidarumaokoze] (Fig. 106)

KAUM-I. 21682, 23.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 106.** *Synanceia verrucosa* (KAUM-I. 21682, 23.3 mm SL).

## FAMILY TRIGLIDAE

***Chelidonichthys spinosus*** (McClelland, 1844)  
[Jpn name: Hobo]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY PLATYCEPHALIDAE

***Inegocia* sp.**

[Jpn name: Wanigochi]

Ichikawa et al. (1992, as *Inegocia guttata*):  
Yaku-shima Island.

Remarks: Imamura and Yoshino (2009) regarded that specimens previously identified as *I. guttata* from the East and South China Seas are an undescribed species.

## ORDER PERCIFORMES

## FAMILY AMBASSIDAE

***Ambassis miops*** Günther, 1872

[Jpn name: Sesujitakasagoishimochi] (Fig. 107)

KAUM-I. 11502, 18.9 mm SL, mouth of Miyanoura River; KAUM-I. 11509, 19.6 mm SL, mouth of Miyanoura River; KAUM-I. 11510, 17.2 mm SL, mouth of Miyanoura River; KAUM-I. 21737, 17.0 mm SL, Kurio; KAUM-I. 21738, 19.0 mm SL, Kurio; KAUM-I. 24688, 35.8 mm SL, mouth of Kurio River; KAUM-I. 24689, 44.3 mm SL, Ambo.

Yonezawa (2003c): Yaku-shima Island.

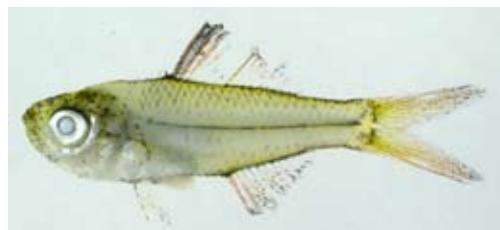


Fig. 107. *Ambassis miops* (KAUM-I. 21737, 17.0 mm SL).

***Ambassis urotaenia*** Bleeker, 1852

[Jpn name: Takasagoishimochi] (Fig. 108)

KAUM-I. 24690, 47.4 mm SL, mouth of Kurio River; KAUM-I. 24691, 46.4 mm SL, mouth of Kurio River; KAUM-I. 24692, 43.5 mm SL, mouth of Kurio River; KAUM-I. 24693, 43.0 mm

SL, mouth of Kurio River; KAUM-I. 24694, 39.5 mm SL, mouth of Kurio River; KAUM-I. 24695, 39.4 mm SL, mouth of Kurio River.



Fig. 108. *Ambassis urotaenia* (KAUM-I. 24691, 46.4 mm SL, preserved specimen).

## FAMILY PERCICHTHYIDAE

***Lateolabrax latus*** Katayama, 1957

[Jpn name: Hirasuzuki] (Fig. 109)

KAUM-I. 25203, 257.3 mm SL, mouth of Nagata River; KPM-NI 24246, 165.2 mm SL, mouth of Nagata River; KPM-NI 24247, 162.5 mm SL, mouth of Nagata River.

Ichikawa et al. (1992): Yaku-shima Island.  
Yonezawa (2003c): Yaku-shima Island.



Fig. 109. *Lateolabrax latus* (KPM-NI 24246, 165.2 mm SL).

## FAMILY ACROPOMATIDAE

***Malakichthys elegans*** Matsubara and Yamaguti, 1943

[Jpn name: Nagaomehata] (Fig. 110)

USNM 117989, 100.3 mm SL, Yaku-shima Island.

## FAMILY SERRANIDAE

***Belonoperca chabanaudi*** Fowler and Bean, 1930

[Jpn name: Yamisuzuki] (Fig. 111)



**Fig. 110.** *Malakichthys elegans* (USNM 117989, 100.3 mm SL, preserved specimen).



**Fig. 111.** *Belonoperca chabanaudi* (off Isso, 15 m, 8 Nov. 2009, S. Harazaki).

***Cephalopholis argus*** Bloch and Schneider, 1801

[Jpn name: Aonomehata] (Fig. 112)

KAUM-I. 11162, 19.2 mm SL, Kurio; KPM-NI 24784, 53.8 mm SL, Kurio; MUFS 25575, 76.2 mm SL, Kurio; NSMT-P 77629, 362.3 mm SL, Nanase.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 112.** *Cephalopholis argus* (upper: KAUM-I. 11162, 19.2 mm SL; lower: NSMT-P 77629, 362.3 mm SL).

***Cephalopholis miniata*** (Forsskål, 1775)

[Jpn name: Yukatahata] (Fig. 113)

FRLM 34701, 274.1 mm SL, Yaku-shima Island; KAUM-I. 11622, 252.0 mm SL, Isso; NSMT-P 95761, 158.0 mm SL, Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 113.** *Cephalopholis miniata* (upper: NSMT-P 95761, 158.0 mm SL; lower: FRLM 34701, 274.1 mm SL).

***Cephalopholis sonnerati*** (Valenciennes, 1828)

[Jpn name: Azahata] (Fig. 114)

KAUM-I. 16275, 229.2 mm SL, off east of Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 114.** *Cephalopholis sonnerati* (KAUM-I. 16275, 229.2 mm SL).

***Cephalopholis urodetata*** (Forster, 1801)

[Jpn name: Nijihata] (Fig. 115)

KAUM-I. 11454, 194.7 mm SL, Isso; NS-MT-P 77644, 167.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.**Fig. 115.** *Cephalopholis urodetata* (KAUM-I. 11454, 194.7 mm SL).***Epinephelus areolatus*** (Forsskål 1775)

[Jpn name: Omonhata] (Fig. 116)

FRLM 34702, 290.8 mm SL, Yaku-shima Island.

**Fig. 116.** *Epinephelus areolatus* (FRLM 34702, 290.8 mm SL).***Epinephelus bontoides*** (Bleeker, 1855)

[Jpn name: Shiranuihata] (Fig. 117)

NSMT-P 96549, 288.6 mm SL, Nagata; NS-MT-P 96550, 317.1 mm SL, Nagata.

Kuriwa et al. (2008): NSMT-P 77624, 336 mm SL, mouth of Miyanoura River.

Remarks: Kuriwa et al. (2008) reported this species as the first Japanese record on the basis of a single specimen (NSMT-P 77624) from the mouth of the Miyanoura River. Subsequently two additional specimens (NSMT-P 96549 and

96550) were collected from Nagata, northwestern Yaku-shima Island. This species has currently been known only from Yaku-shima Island in Japanese waters.

**Fig. 117.** *Epinephelus bontoides* (NSMT-P 96549, 288.6 mm SL).***Epinephelus bruneus*** Bloch, 1793

[Jpn name: Kue]

Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus caeruleopunctatus*** (Bloch, 1790)

[Jpn name: Hakutenhata] (Fig. 118)

FRLM 34722, 361.2 mm SL, Kurio; KAUM-I. 11535, 204.2 mm SL, Ambo; NSMT-P 91953, 390 mm SL, Nanase.

Arai and Ida (1975): NSMT-P 58131, 52.1 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island.

**Fig. 118.** *Epinephelus caeruleopunctatus* (KAUM-I. 11535, 204.2 mm SL).***Epinephelus coioides*** (Hamilton, 1822)

[Jpn name: Chairomaruhata] (Fig. 119)

NSMT-P 77627, 206.1 mm SL, mouth of Miyanoura River.

Kuniyasu (1999): Kurio.



**Fig. 119.** *Epinephelus coioides* (NSMT-P 77627, 206.1 mm SL).



**Fig. 120.** *Epinephelus fasciatus* (KAUM-I. 11363, 207.8 mm SL).

***Epinephelus cyanopodus* (Richardson, 1846)**

[Jpn name: Tsuchihozeroi]

Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus fasciatus* (Forsskål, 1775)**

[Jpn name: Akahata] (Fig. 120)

FRLM 34730, 225.8 mm SL, Kurio; KAUM-I. 11363, 207.8 mm SL, Kurio; NSMT-P 77631, 222.5 mm SL, Nanase; NSMT-P 91170, 223 mm SL, off east of Yaku-shima Island; NSMT-P 91171, 249 mm SL, off east of Yaku-shima Island; NSMT-P 91172, 222 mm SL, off east of Yaku-shima Island; NSMT-P 91173, 249 mm SL, off east of Yaku-shima Island; NSMT-P 91174, 235 mm SL, off east of Yaku-shima Island; NSMT-P 91175, 249 mm SL, off east of Yaku-shima Island; NSMT-P 91176, 240 mm SL, off east of Yaku-shima Island; NSMT-P 91177, 236 mm SL, off east of Yaku-shima Island; NSMT-P 91341, 263 mm SL, off north of Yaku-shima Island; NSMT-P 91342, 309 mm SL, off north of Yaku-shima Island; NSMT-P 91343, 244 mm SL, off north of Yaku-shima Island; NSMT-P 91344, 298 mm SL, off north of Yaku-shima Island; NSMT-P 91345, 284 mm SL, off north of Yaku-shima Island; NSMT-P 91346, 278 mm SL, off north of Yaku-shima Island; NSMT-P 91955, 232 mm SL, Nanase; NSMT-P 91956, 193 mm SL, Nanase; NSMT-P 91957, 235 mm SL, Nanase; NSMT-P 91958, 252 mm SL, Hirauchi; NSMT-P 91959, 266 mm SL, Hirauchi; NSMT-P 96386, 232.3 mm SL, Kurio; NSMT-P 96387, 227.0 mm SL, Kurio; NSMT-P 96548, 239.5 mm SL, Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Epinephelus hexagonatus* (Forster, 1801)**

[Jpn name: Ishigakihata] (Fig. 121)

BSKU 96599, 119.6 mm SL, Kurio; NSMT-P 95413, 146.2 mm SL, Kurio.



**Fig. 121.** *Epinephelus hexagonatus* (BSKU 96599, 119.6 mm SL).

***Epinephelus howlandi* (Günther, 1873)**

[Jpn name: HIREGUROHATA]

Kuniyasu (1999): Kurio.

***Epinephelus maculatus* (Bloch, 1790)**

[Jpn name: Shirobuchihata] (Fig. 122)

BSKU 96643, 119.3 mm SL, Isso.  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 122.** *Epinephelus maculatus* (BSKU 96643, 119.3 mm SL).

***Epinephelus malabaricus*** (Bloch and Schneider, 1801)  
[Jpn name: Yaitohata] (Fig. 123)  
NSMT-P 77625, 305.3 mm SL, mouth of Miyanoura River.  
Ichikawa et al. (1992): Yaku-shima Island.



Fig. 123. *Epinephelus malabaricus* (NSMT-P 77625, 305.3 mm SL).

***Epinephelus melanostigma*** Schultz, 1953  
[Jpn name: Sumitsukihata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus merra*** Bloch, 1793  
[Jpn name: Kammonhata] (Fig. 124)  
KAUM-I. 11620, 123.1 mm SL, Ambo;  
KAUM-I. 20051, 111.4 mm SL, Yudomari;  
MUFS 25621, 190 mm SL, Kurio; NSMT-P 91964, 214 mm SL, Isso.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Isso.



Fig. 124. *Epinephelus merra* (NSMT-P 91964, 214 mm SL).

***Epinephelus morrhua*** (Valenciennes, 1833)  
[Jpn name: Hokihata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus ongus*** (Bloch, 1790)  
[Jpn name: Namihata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus polyphekadion*** (Bleeker, 1849)  
[Jpn name: Madarahata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus quoyanus*** (Valenciennes, 1830)  
[Jpn name: Moyohata] (Fig. 125)  
KAUM-I. 20042, 81.2 mm SL, Yudomari.



Fig. 125. *Epinephelus quoyanus* (KAUM-I. 20042, 81.2 mm SL).

***Epinephelus septemfasciatus*** (Thunberg, 1793)  
[Jpn name: Mahata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Epinephelus tauvina*** (Forsskål, 1775)  
[Jpn name: Hitomihata] (Fig. 126)  
KAUM-I. 11356, 136.4 mm SL, Kurio; NSMT-P 77630, 329.2 mm SL, Nanase; NSMT-P 91954, 352 mm SL, Nanase.



Fig. 126. *Epinephelus tauvina* (KAUM-I. 11356, 136.4 mm SL).

***Epinephelus tukula*** Morgans, 1959  
[Jpn name: Kasurihata]  
Ichikawa et al. (1992): Yaku-shima Island.

***Grammistes sexlineatus* (Thunberg, 1792)**

[Jpn name: Nunosarashi] (Fig. 127)

BSKU 96678, 33.4 mm SL, Kurio; FRLM 34674, 74.3 mm SL, Kurio; FRLM 34732, 75.4 mm SL, Kurio; FRLM 34735, 61.6 mm SL, Kurio; KAUM-I. 11125, 15.6 mm SL, Kurio; KAUM-I. 11139, 86.8 mm SL, Kurio; KAUM-I. 11603, 72.8 mm SL, Ambo; KAUM-I. 20251, 32.5 mm SL, Kurio; KAUM-I. 20313, 57.2 mm SL, Kurio; KAUM-I. 21666, 67.9 mm SL, Kurio; KAUM-I. 21835, 13.0 mm SL, Kurio; KAUM-I. 21869, 82.8 mm SL, Kurio; KAUM-I. 21870, 77.8 mm SL, Kurio; KAUM-I. 21871, 17.1 mm SL, Kurio; KAUM-I. 23540, 13.0 mm SL, Kurio; MUFS 25562, 52.5 mm SL, Kurio; MUFS 25563, 82.7 mm SL, Kurio; NSMT-P 95443, 75.9 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 127. *Grammistes sexlineatus* (upper: KAUM-I. 11125, 15.6 mm SL; middle: KAUM-I. 20251, 32.5 mm SL; lower: KAUM-I. 11139, 86.8 mm SL).

***Liopropoma susumi* (Jordan and Seale, 1906)**

[Jpn name: Kosujianasuzuki] (Fig. 128)

KPM-NI 22544, 44.4 mm SL, Kurio.



Fig. 128. *Liopropoma susumi* (KPM-NI 22544, 44.4 mm SL).

***Plectranthias kamii* Randall, 1980**

[Jpn name: Izuhananadai] (Fig. 129)

KAUM-I. 1654, 236.1 mm SL, Yaku-shima Island; KAUM-I. 1655, 196.2 mm SL, Yaku-shima Island.



Fig. 129. *Plectranthias kamii* (KAUM-I. 1654, 236.1 mm SL).

***Plectranthias yamakawai* Yoshino, 1972**

[Jpn name: Amamihanadai]

Ichikawa et al. (1992): Yaku-shima Island.

***Plectropomus laevis* (Lacepède, 1801)**

[Jpn name: Kokuhan-ara]

Ichikawa et al. (1992): Yaku-shima Island.

***Plectropomus leopardus* (Lacepède, 1802)**

[Jpn name: Sujiara]

Ichikawa et al. (1992): Yaku-shima Island.

***Pogonoperca punctata* (Valenciennes, 1830)**

[Jpn name: Agohata] (Fig. 130)

KAUM-I. 11386, 11.8 mm SL, Kurio; KPM-NI 24799, 12.8 mm SL, Kurio.

Remarks: These specimens may be juveniles of *Grammistes sexlineatus*.



**Fig. 130.** *Pogonoperca punctata* (KAUM-I. 11386, 11.8 mm SL).

***Pseudanthias bicolor*** (Randall, 1979)  
[Jpn name: Futairohanagoi] (Fig. 131)



**Fig. 131.** *Pseudanthias bicolor* (upper: off Isso, 20 m, 8 Apr. 2007, S. Harazaki; lower: off Isso, 20 m, 16 May 2008, S. Harazaki).

***Pseudanthias fasciatus*** (Kamohara, 1954)  
[Jpn name: Sujihanadai] (Fig. 132)

***Pseudanthias lori*** (Lubbock and Randall, 1976)  
[Jpn name: Akaboshihanagoi] (Fig. 133)

***Pseudanthias pascalus*** (Jordan and Tanaka, 1927)  
[Jpn name: Hanagoi]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 132.** *Pseudanthias fasciatus* (off Isso, 35 m, 21 Sept. 2004, S. Harazaki).



**Fig. 133.** *Pseudanthias lori* (off Nagata, 45 m, 19 Nov. 2009, S. Harazaki).

***Pseudanthias pleurotaenia*** (Bleeker, 1857)  
[Jpn name: Sumirenagahanadai] (Fig. 134)



**Fig. 134.** *Pseudanthias pleurotaenia* (off Isso, 20 m, 4 Mar. 2005, S. Harazaki).

***Pseudanthias squamipinnis*** (Peters, 1855)

[Jpn name: Kingyohanadai] (Fig. 135)

KAUM-I. 21788, 27.8 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.



**Fig. 135.** *Pseudanthias squamipinnis* (KAUM-I. 21788, 27.8 mm SL).

***Serranocirrhitus latus*** Watanabe, 1949

[Jpn name: Hanagombe] (Fig. 137)



**Fig. 137.** *Serranocirrhitus latus* (off Isso, 20 m, 4 Mar. 2005, S. Harazaki).

***Pseudanthias* sp.**

[Jpn name: Benihanadai] (Fig. 136)

Remarks: This species has been recorded along the Pacific coast of southern Japan and the Ryukyu Islands (Senou, 2002). It is relatively common at Yaku-shima Island (deeper than 20 m).



**Fig. 136.** *Pseudanthias* sp. (upper: off Isso, 20 m, 2 Mar. 2005, S. Harazaki; lower: off Isso, 35 m, 15 July 2005, S. Harazaki).

***Triso dermopterus*** (Temminck and Schlegel, 1842)

[Jpn name: Tobihata]

Ichikawa et al. (1992): Yaku-shima Island.

***Variola albimarginata*** Baissac, 1953

[Jpn name: Ojirobarahata]

Kuniyasu (1999): Kurio.

***Variola louti*** (Forsskål, 1775)

[Jpn name: Barahata]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

## FAMILY PSEUDOCHROMIDAE

***Labracinus cyclophthalmus*** (Müller and Troschel, 1849)

[Jpn name: Megisu] (Fig. 138)

KAUM-I. 11132, 28.3 mm SL, Kurio;  
KAUM-I. 11285, 93.2 mm SL, Yudomari;  
KAUM-I. 11524, 127.0 mm SL, Ambo; KAUM-I. 11589, 87.1 mm SL, Ambo; KAUM-I. 20083, 87.9 mm SL, Yudomari; KAUM-I. 20087, 101.3 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Pictichromis porphyrea*** (Lubbock and Goldman, 1974)

[Jpn name: Kurenainisesuzume] (Fig. 139)

***Pseudochromis cyanotaenia*** Bleeker, 1857

[Jpn name: Ryukyunisesuzume] (Fig. 140)

BSKU 96603, 41.0 mm SL, Kurio.

Kuniyasu (1999): Kurio.



**Fig. 138.** *Labracinus cyclophthalma* (upper: KAUM-I. 11132, 28.3 mm SL; middle: KAUM-I. 11589, 87.1 mm SL; lower: KAUM-I. 11524, 127.0 mm SL).



**Fig. 139.** *Pictichromis porphyrea* (off Isso, 5 m, 21 Aug. 2004, S. Harazaki).



**Fig. 140.** *Pseudochromis cyanotaenia* (BSKU 96603, 41.0 mm SL).

***Pseudochromis luteus* Aoyagi, 1943**

[Jpn name: Koganenesesuzume] (Fig. 141)

FRLM 34738, 45.7 mm SL, Kurio; KAUM-I. 11161, 43.9 mm SL, Kurio; KAUM-I. 11362, 33.3 mm SL, Kurio; KAUM-I. 11485, 45.5 mm SL, Isso; KAUM-I. 11537, 24.2 mm SL, Ambo; KAUM-I. 20245, 32.3 mm SL, Kurio; KAUM-I. 20329, 43.8 mm SL, Isso; MUFS 25593, 41.5 mm SL, Kurio; MUFS 25601, 32.3 mm SL, Kurio; NSMT-P 91672, 28 mm SL, Kurio.



**Fig. 141.** *Pseudochromis luteus* (upper: KAUM-I. 11362, 33.3 mm SL; middle: KAUM-I. 11161, 43.9 mm SL; lower: off Kurio, 10 m, 21 July 2006, S. Harazaki).

***Pseudochromis marshallensis* Schultz, 1953**

[Jpn name: Hoshinisesuzume] (Fig. 142)

KAUM-I. 11275, 43.5 mm SL, Yudomari; KAUM-I. 11296, 51.4 mm SL, Yudomari; KAUM-I. 11618, 44.2 mm SL, Ambo.

**FAMILY PLESIOPIDAE**

***Acanthoplesiops psilogaster* Hardy, 1985**

[Jpn name: Fuchidoritanabatauo] (Fig. 143)

KAUM-I. 11126, 15.7 mm SL, Kurio; KAUM-I. 11369, 16.3 mm SL, Kurio; KAUM-I.



**Fig. 142.** *Pseudochromis marshallensis* (KAUM-I. 11296, 51.4 mm SL).



**Fig. 144.** *Assessor randalli* (upper: off Isso, 5 m, 9 Oct. 2006, S. Harazaki; lower: KAUM-I. 20288, 36.9 mm SL).



**Fig. 143.** *Acanthoplesiops psilogaster* (KAUM-I. 11369, 16.3 mm SL).

KAUM-I. 21865, 20.7 mm SL, Kurio; KPM-NI 22575, 30.5 mm SL, Isso; MUFS 25598, 33.1 mm SL, Kurio; MUFS 25599, 35.0 mm SL, Kurio; MUFS 25600, 24.6 mm SL, Kurio.



**Fig. 145.** *Belonepterygion fasciolatum* (KAUM-I. 11364, 32.7 mm SL).

#### *Assessor randalli* Allen and Kuiter, 1976

[Jpn name: Tsubametanabatau] (Fig. 144)

KAUM-I. 20288, 36.9 mm SL, Kurio.

#### *Belonepterygion fasciolatum* (Ogilby, 1889)

[Jpn name: Togetanabatau] (Fig. 145)

FRLM 34740, 40.3 mm SL, Kurio; KAUM-I. 11364, 32.7 mm SL, Kurio; KAUM-I. 11365, 22.3 mm SL, Kurio; KAUM-I. 11366, 22.8 mm SL, Kurio; KAUM-I. 11367, 19.7 mm SL, Kurio; KAUM-I. 11368, 21.3 mm SL, Kurio; KAUM-I. 11653, 35.0 mm SL, Ambo; KAUM-I. 11746, 20.8 mm SL, Ambo; KAUM-I. 20193, 25.9 mm SL, Yudomari; KAUM-I. 20244, 34.7 mm SL, Kurio; KAUM-I. 21864, 21.3 mm SL, Kurio;

#### *Callopleiops altivelis* (Steindachner, 1903)

[Jpn name: Shimofuritanabatau]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Plesiops coeruleolineatus*** Rüppell, 1835

[Jpn name: Tanabatauo] (Fig. 146)

KAUM-I. 11520, 42.6 mm SL, Ambo;  
 KAUM-I. 11579, 51.3 mm SL, Ambo; KPM-NI  
 22519, 26.8 mm SL, Yudomari.

Arai and Ida (1975, as *Plesiops melas*):  
 NSMT-P 17831, 2 specimens, 38.8–61.6 mm SL,  
 Kusugawa.



Fig. 146. *Plesiops coeruleolineatus* (KAUM-I. 11579, 51.3 mm SL).

## FAMILY PRIACANTHIDAE

***Cookeolus japonicus*** (Cuvier, 1829)

[Jpn name: Chikamekintoki]

Ichikawa et al. (1992): Yaku-shima Island.

***Heteropriacanthus cruentatus*** (Lacepède, 1801)

[Jpn name: Gomahirekintoki] (Fig. 147)

FRLM 34713, 231.1 mm SL, Yudomari.



Fig. 147. *Heteropriacanthus cruentatus* (FRLM 34713, 231.1 mm SL).

***Priacanthus hamrur*** (Forsskål, 1775)

[Jpn name: Hosekikintoki] (Fig. 148)

KAUM-I. 21946, 260.6 mm SL, Yaku-shima  
 Island.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.



Fig. 148. *Priacanthus hamrur* (KAUM-I. 21946, 260.6 mm SL).

## FAMILY APOGONIDAE

***Apogon amboinensis*** Bleeker, 1853

[Jpn name: Amamiishimochi] (Fig. 149)

Yoshida and Motomura (2009), Yoshida et al. (2010): KAUM-I. 21588, 53.5 mm SL, mouth of Ambo River; KAUM-I. 21589, 49.0 mm SL, mouth of Ambo River. Yoshida et al. (2010): mouth of Isso River.



Fig. 149. *Apogon amboinensis* (KAUM-I. 21589, 49.0 mm SL).

***Apogon angustatus*** (Smith and Radcliffe, 1911)

[Jpn name: Usujimaishimochi] (Fig. 150)

Yoshida et al. (2010): KAUM-I. 20268, 17.8 mm SL, Kurio; KAUM-I. 21721, 14.3 mm SL, Kurio.

***Apogon apogonides*** (Bleeker, 1856)

[Jpn name: Aohanatenjikudai] (Fig. 151)

Yoshida et al. (2010): Isso.

***Apogon aureus*** (Lacepède, 1802)

[Jpn name: Aosujitenjikudai] (Fig. 152)

Ichikawa et al. (1992): Yaku-shima Island.  
 Yoshida et al. (2010): BSKU 96634, 63.3 mm SL, Isso.



**Fig. 150.** *Apogon angustatus* (off Isso; from Yoshida et al., 2010).



**Fig. 153.** *Apogon caudicinctus* (KAUM-I. 21765, 33.8 mm SL).



**Fig. 151.** *Apogon apogonides* (off Isso; from Yoshida et al., 2010).



**Fig. 152.** *Apogon aureus* (BSKU 96634, 63.3 mm SL).



**Fig. 154.** *Apogon chrysotaenia* (off Isso; from Yoshida et al., 2010).

***Apogon cookii*** Macleay, 1881

[Jpn name: Sujishimochi] (Fig. 155)

Yoshida et al. (2010): KAUM-I. 11207, 27.3 mm SL, Kurio; KAUM-I. 21714, 31.0 mm SL, Kurio; KAUM-I. 21715, 28.0 mm SL, Kurio; KAUM-I. 21716, 22.0 mm SL, Kurio; KAUM-I. 21717, 18.0 mm SL, Kurio; NSMT-P 91664, 76.0 mm SL, Kurio.

***Apogon caudicinctus*** Randall and Smith, 1988

[Jpn name: Koyariishimochi] (Fig. 153)

Yoshida et al. (2010): KAUM-I. 21765, 33.8 mm SL, Kurio.

***Apogon crassiceps*** Garman, 1903

[Jpn name: Akafujitenjikudai] (Fig. 156)

Yoshida et al. (2010): BSKU 96552, 27.2 mm SL, Yudomari; KAUM-I. 11445, 37.4 mm SL, Isso; KAUM-I. 20159, 20.3 mm SL,



**Fig. 155.** *Apogon cookii* (KAUM-I. 11207, 27.3 mm SL).

Yudomari; KAUM-I. 20196, 42.5 mm SL, Yudomari; KAUM-I. 20205, 22.8 mm SL, Yudomari; KAUM-I. 20206, 17.0 mm SL, Yudomari; KAUM-I. 20249, 24.9 mm SL, Kurio; KAUM-I. 20331, 34.3 mm SL, Isso; KAUM-I. 21767, 29.2 mm SL, Kurio; KAUM-I. 21768, 27.2 mm SL, Kurio; KPM-NI 22513, 24.4 mm SL, Yudomari; KPM-NI 22546, 28.4 mm SL, Kurio.

**Remarks:** All previous records of *A. crassiceps* “Akane-tenjikudai” in Japanese waters (e.g., Hayashi, 2002) were based on mis-identifications of a species of the *A. talboti* group (Yoshida et al., 2010).



**Fig. 156.** *Apogon crassiceps* (KAUM-I. 20331, 34.3 mm SL).

Yoshida et al. (2010): FRLM 34706, 103.7 mm SL, Yudomari; KAUM-I. 11124, 99.2 mm SL, Ambo Port; KAUM-I. 11440, 46.5 mm SL, Isso; KAUM-I. 11441, 47.5 mm SL, Isso; KAUM-I. 11442, 46.5 mm SL, Isso; KAUM-I. 11443, 52.7 mm SL, Isso; KAUM-I. 11444, 44.5 mm SL, Isso; KAUM-I. 11446, 48.7 mm SL, Isso; KAUM-I. 11447, 43.9 mm SL, Isso; KAUM-I. 11448, 41.2 mm SL, Isso; KAUM-I. 11449, 41.5 mm SL, Isso; KAUM-I. 11450, 51.6 mm SL, Isso; KAUM-I. 11451, 52.1 mm SL, Isso; KAUM-I. 11452, 51.9 mm SL, Isso; KAUM-I. 20071, 85.7 mm SL, Yudomari; KAUM-I. 20072, 62 mm SL, Yudomari; KAUM-I. 20343, 56 mm SL, Isso; KAUM-I. 21751, 91.9 mm SL, Ambo Port; KAUM-I. 25234, 78.1 mm SL, Ambo Port; MUFS 25446, 92.7 mm SL, Ambo Port; MUFS 25447, 85.4 mm SL, Ambo Port; MUFS 25448, 70.9 mm SL, Ambo Port; MUFS 25449, 69.2 mm SL, Ambo Port; MUFS 25450, 69.4 mm SL, Ambo Port.



**Fig. 157.** *Apogon doederleini* (KAUM-I. 11124, 99.2 mm SL).

#### *Apogon doederleini* Jordan and Snyder, 1901

[Jpn name: Osujiishimochi] (Fig. 157)

KPM-NI 24942, 91.2 mm SL, Onoaida; NSMT-P 91664, 74.3 mm SL, Kurio; NSMT-P 95410, 2 specimens, 81.6–90.0 mm SL, Miyanoura; NSMT-P 95422, 6 specimens, 67.0–90.5 mm SL, Miyanoura Port.

Arai and Ida (1975): NSMT-P 17815, 74.0 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

#### *Apogon endekataenia* Bleeker, 1852

[Jpn name: Kosujiishimochi] (Fig. 158)

Ichikawa et al. (1992): Yaku-shima Island. Yoshida et al. (2010): KAUM-I. 21786, 26.8 mm SL, Isso.

#### *Apogon exostigma* (Jordan and Starks, 1906)

[Jpn name: Yukataishimochi] (Fig. 159)

Yoshida et al. (2010): BSKU 96553, 45.8 mm SL, Yudomari; KPM-NI 22551, 28.1 mm SL, Kurio.



**Fig. 158.** *Apogon endekataenia* (KAUM-I. 21786, 26.8 mm SL).



**Fig. 161.** *Apogon fraenatus* (off Isso; from Yoshida et al., 2010).



**Fig. 159.** *Apogon exostigma* (BSKU 96553, 45.8 mm SL).

*erythrinus* Snyder, 1904 an endemic species to the Hawaiian Islands, and some Japanese specimens previously identified as *A. erythrinus* were his new species, *A. indicus* (see Yoshida et al., 2010).



**Fig. 162.** *Apogon indicus* (NSMT-P 95448, 32.9 mm SL, preserved specimen).



**Fig. 160.** *Apogon fasciatus* (off Isso; from Yoshida et al., 2010).

#### *Apogon kallopterus* Bleeker, 1856

[Jpn name: Kasuriishimochi] (Fig. 163)

Kuniyasu (1999): Kurio. Yoshida et al. (2010): Isso.



**Fig. 163.** *Apogon kallopterus* (off Isso; from Yoshida et al., 2010).

***Apogon fraenatus*** Valenciennes, 1832  
[Jpn name: Hitosujiishimochi] (Fig. 161)

Yoshida et al. (2010): Isso.

***Apogon indicus*** Greenfield, 2001  
[Jpn name: Ryukyuishimochi] (Fig. 162)  
Yoshida et al. (2010): NSMT-P 95448, 32.9 mm SL, Haruo.

Remarks: Greenfield (2001) considered *A.*

***Apogon kominatoensis*** Ebina, 1935

[Jpn name: Kominatotenjikudai] (Fig. 164)

Yoshida et al. (2010): BSKU 96655, 29.7 mm SL, Isso; FRLM 34709, 38.3 mm SL, Yudomari; KAUM-I. 11133, 29.0 mm SL, Kurio; KAUM-I. 11290, 37.7 mm SL, Yudomari; KAUM-I. 11291, 42.3 mm SL, Yudomari; KAUM-I. 11652, 27.9 mm SL, Ambo; KAUM-I. 20041, 40.2 mm SL, Yudomari; KAUM-I. 20248, 39.3 mm SL, Kurio; KAUM-I. 20259, 41.3 mm SL, Kurio; KAUM-I. 20260, 41.2 mm SL, Kurio; KAUM-I. 20261, 32.7 mm SL, Kurio; KAUM-I. 20332, 35.4 mm SL, Isso; KAUM-I. 21766, 27.1 mm SL, Kurio; NSMT-P 91356, 40 mm SL, Yudomari; NSMT-P 91357, 37 mm SL, Yudomari; NSMT-P 95461, 36.7 mm SL, Haruo.

Remarks: Many Japanese authors (e.g., Hayashi, 2002) have used a name, *A. coccineus* Rüppell, 1838, for this species. However, *A. coccineus* has been regarded as a western Indian Ocean species (Randall, 2005; Yoshida et al., 2010).



Fig. 164. *Apogon kominatoensis* (KAUM-I. 20332, 35.4 mm SL).

***Apogon moluccensis*** Valenciennes, 1832

[Jpn name: Sehoshitenjikudai] (Fig. 165)

Yoshida et al. (2010): BSKU 96640, 46.8 mm SL, Isso; KAUM-I. 20378, 43.1 mm SL, Isso.

Remarks: Many Japanese authors (e.g., Hayashi, 2002) have used a name, *A. ventrifasciatus* Allen et al., 1994, for this species. However, Fraser et al. (2002) regarded *A. ventrifasciatus* as a junior synonym of *A. moluccensis*.



Fig. 165. *Apogon moluccensis* (KAUM-I. 20378, 43.1 mm SL).

***Apogon nigrofasciatus*** Lachner, 1953

[Jpn name: Minamifutosujiishimochi] (Fig. 166)

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Yoshida et al. (2010): BSKU 96605, 58.9 mm SL, Kurio.



Fig. 166. *Apogon nigrofasciatus* (BSKU 96605, 58.9 mm SL).

***Apogon notatus*** (Houttuyn, 1782)

[Jpn name: Kurohoshiishimochi] (Fig. 167)

Jordan and Starks (1906): whereabouts of a single specimen from Yaku-shima Island is unknown. Yoshida et al. (2010): Isso.



Fig. 167. *Apogon notatus* (off Isso; from Yoshida et al., 2010).

***Apogon novemfasciatus*** Cuvier, 1828

[Jpn name: Tasujiishimochi] (Fig. 168)

Kuniyasu (1999); Kurio. Yoshida et al. (2010): KAUM-I. 21759, 33.7 mm SL, Ambo.



Fig. 168. *Apogon novemfasciatus* (KAUM-I. 21759, 33.7 mm SL).



Fig. 170. *Apogon cf properuptus* (KAUM-I. 20112, 32.3 mm SL).

***Apogon parvulus*** (Smith and Radcliffe, 1912)

[Jpn name: Neontenjikudai]

Ichikawa et al. (1992): Yaku-shima Island.

***Apogon cf properuptus*** (Whitley, 1964), dotted type [Jpn name: “kinsen-ishimochi, dotto-gata”] (Fig. 169)

Yoshida et al. (2010): KAUM-I. 21789, 37.8 mm SL, Isso; KAUM-I. 21790, 40.2 mm SL, Isso; KAUM-I. 21791, 36.6 mm SL, Isso; KAUM-I. 21792, 35.1 mm SL, Isso.



Fig. 169. *Apogon cf properuptus* (KAUM-I. 21790, 40.2 mm SL).

***Apogon selas*** Randall and Hayashi, 1990

[Jpn name: Nagareboshi]

Kuniyasu (1999): Kurio.

***Apogon seminigracaudus*** Greenfield, 2007

[Jpn name: Ogurotenjikudai] (Fig. 171)

Yoshida et al. (2010): KAUM-I. 21785, 26.8 mm SL, Isso.

Remarks: Japanese specimens previously identified as *Apogon fuscus* Quoy and Gaimard, 1825 (or *Nectamia fusca*) were described by Greenfield (2007) as a new species, *A. seminigracaudus*.



Fig. 171. *Apogon seminigracaudus* (KAUM-I. 21785, 26.8 mm SL, Isso).

***Apogon semiornatus*** Peters, 1876

[Jpn name: Yamitenjikudai] (Fig. 172)

Yoshida et al. (2010): Isso.

***Apogon taeniophorus*** Regan, 1908

[Jpn name: Misujitenjikudai] (Fig. 173)

Arai and Ida (1975, as *A. endekataenia*): NSMT-P 17846, 4 specimens, 28.8–68.0 mm SL, Kusugawa. Yoshida et al. (2010): BSKU



**Fig. 172.** *Apogon semiornatus* (off Isso; from Yoshida et al., 2010).

96641, 37.8 mm SL, Isso; FRLM 34677, 47.2 mm SL, Kurio; KAUM-I. 11171, 59.3 mm SL, Kurio; KAUM-I. 11358, 76.9 mm SL, Kurio; KAUM-I. 11359, 76.1 mm SL, Kurio; KAUM-I. 20208, 28.2 mm SL, Yudomari; KAUM-I. 20240, 76.8 mm SL, Kurio; KAUM-I. 20341, 90.4 mm SL, Isso; KAUM-I. 20344, 88.8 mm SL, Isso; KAUM-I. 21718, 15.5 mm SL, Kurio; KAUM-I. 21719, 16.6 mm SL, Kurio; KAUM-I. 21720, 14.8 mm SL, Kurio; KAUM-I. 25227, 87.4 mm SL, Nagata; KPM-NI 22577, 21.8 mm SL, Isso; KPM-NI 22578, 25.8 mm SL, Isso; MUFS 25595, 57.7 mm SL, Kurio; MUFS 25596, 56.6 mm SL, Kurio; MUFS 25597, 63.1 mm SL, Kurio; NSMT-P 17846, 4 specimens: 28.8–68.0 mm SL, Kusugawa; NSMT-P 91351, 45.9 mm SL, Yudomari; NSMT-P 91682, 3 specimens: 58.4–69.3 mm SL, Kurio; NSMT-P 95459, 2 specimens: 32.6–84.6 mm SL, Haruo; NSMT-P 95463, 87.8 mm SL, Hirauchi.

Remarks: Yoshida et al. (2010) regarded Mabuchi et al.'s (2004) "spotted type of Misujitenjikudai" as *A. taeniophorus*.



**Fig. 173.** *Apogon taeniophorus* (KAUM-I. 11359, 76.1 mm SL).

***Apogon cf taeniophorus*** Regan, 1908, lined type [Jpn name: "misujitenjikudai, rain-gata"] (Fig. 174)

Yoshida et al. (2010): KPM-NI 22579, 25.1 mm SL, Isso.

Remarks: The specimen is identified as Mabuchi et al.'s (2004) "lined type of Misujitenjikudai". Taxonomic status of this species is still unknown.



**Fig. 174.** *Apogon cf taeniophorus* (KPM-NI 22579, 25.1 mm SL).

***Apogonichthyooides timorensis*** (Bleeker, 1854)  
[Jpn name: Kakureishimochi] (Fig. 175)

Yoshida et al. (2010): KAUM-I. 20076, 59.9 mm SL, Yudomari; KPM-NI 22542, 29.0 mm SL, Yudomari; KPM-NI 22580, 21.9 mm SL, Isso.



**Fig. 175.** *Apogonichthyooides timorensis* (KAUM-I. 20076, 59.9 mm SL).

***Archamia fucata*** (Cantor, 1849)

[Jpn name: Sumitsukiatohikitenjikudai] (Fig. 176)

BSKU 96549, 50.6 mm SL, Yudomari; KAUM-I. 20044, 49.5 mm SL, Yudomari; KAUM-I. 20074, 53.3 mm SL, Yudomari; KAUM-I. 20075, 73.5 mm SL, Yudomari.

Remarks: *Archamia dispilus* Lachner, 1951 was recently synonymized with *A. fucata* by Gon and Randall (2003).



**Fig. 176.** *Archamia fucata* (KAUM-I. 20075, 73.5 mm SL).

***Cheilodipterus macrodon* (Lacepède, 1802)**

[Jpn name: Ryukyuyaraishimochi] (Fig. 178)

Arai and Ida (1975, as *Cheilodipterus lineatus*): Kusugawa [two specimens (107–118 mm TL) were reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Yoshida et al. (2010): BSKU 96548, 58.7 mm SL, Yudomari; KAUM-I. 11453, 70.5 mm SL, Isso.



**Fig. 178.** *Cheilodipterus macrodon* (BSKU 96548, 58.7 mm SL).

***Cheilodipterus artus* Smith, 1961**

[Jpn name: Kasumiyaraishimochi]

Yoshida et al. (2010): Isso.

Remarks: Hayashi's (2002) *C. subulatus* was re-identified as *C. artus* (see Yoshida et al., 2010).

***Cheilodipterus intermedius* Gon, 1993**

[Jpn name: Sudareyaraishimochi] (Fig. 177)

Yoshida et al. (2010): Isso.

Remarks: Hayashi's (2002) *C. artus* was re-identified as *C. intermedius* (see Yoshida et al., 2010).



**Fig. 177.** *Cheilodipterus intermedius* (upper: young; lower: adult; off Isso; from Yoshida et al., 2010).

***Cheilodipterus quinquelineatus* Cuvier, 1828**

[Jpn name: Yaraishimochi] (Fig. 179)

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Yoshida et al. (2010): KAUM-I. 11289, 50.0 mm SL, Yudomari; KAUM-I. 20049, 80.3 mm SL, Yudomari; KAUM-I. 20068, 101.9 mm SL, Yudomari; KAUM-I. 20070, 85.8 mm SL, Yudomari; KAUM-I. 20073, 42.0 mm SL, Yudomari; KAUM-I. 20535, 65.5 mm SL, Yudomari; KPM-NI 22511, 40.0 mm SL, Yudomari.



**Fig. 179.** *Cheilodipterus quinquelineatus* (KAUM-I. 11289, 50.0 mm SL).

***Foa brachygramma* (Jenkins, 1903)**

[Jpn name: Taiwammatoishimochi] (Fig. 180)

Yoshida et al. (2010): Isso.



**Fig. 180.** *Foa brachygramma* (off Isso; from Yoshida et al., 2010).

***Fowleria isostigma* (Jordan and Seale, 1906)**

[Jpn name: Nahamatoishimochi] (Fig. 181)

Yoshida et al. (2010): BSKU 96573, 17.0 mm SL, Yudomari.



**Fig. 181.** *Fowleria isostigma* (BSKU 96573, 17.0 mm SL).

***Fowleria cf marmorata* (Alleyne and Macleay, 1877)**

[Jpn name: Obishibori] (Fig. 182)

Yoshida et al. (2010): KAUM-I. 21784, 39.8 mm SL, Isso.

Remarks: The specimen was identified as *F. marmorata*, but differed from published meristic data for *F. marmorata* in having 6 or 7 pored lateral-line scales (vs. 10–13 in the latter) (see Yoshida et al., 2010).



**Fig. 182.** *Fowleria cf marmorata* (KAUM-I. 21784, 39.8 mm SL).

***Fowleria variegata* (Valenciennes, 1832)**

[Jpn name: Shibori] (Fig. 183)

Yoshida et al. (2010): BSKU 96547, 33.8 mm SL, Yudomari; KPM-NI 22505, 28.8 mm SL, Yudomari.



**Fig. 183.** *Fowleria variegata* (KPM-NI 22505, 28.8 mm SL).

***Neamia octospina* Smith and Radcliffe, 1912**

[Jpn name: Yatsutogetenjikudai] (Fig. 184)

Yoshida et al. (2010): Isso.



**Fig. 184.** *Neamia octospina* (off Isso; from Yoshida et al., 2010).

*Nectamia bandanensis* (Bleeker, 1854)

[Jpn name: Bandaishimochi] (Fig. 185)

Yoshida et al. (2010): BSKU 96538, 66.0 mm SL, Yudomari; KAUM-I. 20069, 67.8 mm SL, Yudomari.

Remarks: Fraser (2008) allocated this species to *Nectamia* from *Apogon*.



**Fig. 185.** *Nectamia bandanensis* (BSKU 96538, 66.0 mm SL).



**Fig. 187.** *Rhabdamia gracilis* (off Isso; from Yoshida et al., 2010).

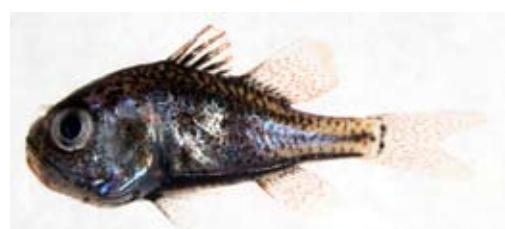
*Pseudamia gelatinosa* Smith, 1956

[Jpn name: Numeritenjikudai] (Fig. 186)

Yoshida et al. (2010): BSKU 96540, 42.9 mm SL, Yudomari; KAUM-I. 20120, 31.2 mm SL, Yudomari; KAUM-I. 20163, 16.4 mm SL, Yudomari; KAUM-I. 20164, 21.0 mm SL, Yudomari; KAUM-I. 20165, 14.9 mm SL, Yudomari; KAUM-I. 20166, 16.5 mm SL, Yudomari; KPM-NI 22529, 18.7 mm SL, Yudomari.



**Fig. 186.** *Pseudamia gelatinosa* (BSKU 96540, 42.9 mm SL).



**Fig. 188.** *Siphamia majimai* (KAUM-I. 20158, 20.3 mm SL).

*Siphamia tubulata* (Weber, 1909)

[Jpn name: Inazumahikariishimochi] (Fig. 189)

Yoshida et al. (2010): Isso.



**Fig. 189.** *Siphamia tubulata* (off Isso; from Yoshida et al., 2010).

*Rhabdamia gracilis* (Bleeker, 1856)

[Jpn name: Sukashitenjikudai] (Fig. 187)

Yoshida et al. (2010): Isso.

***Siphamia versicolor*** (Smith and Radcliffe, 1911)

[Jpn name: Hikariishimochi]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY MALACANTHIDAE

***Hoplolatilus cuniculus*** Randall and Dooley, 1974

[Jpn name: Okinawasangoamadai] (Fig. 190)

**Fig. 190.** *Hoplolatilus cuniculus* (off Nagata, 40 m, 5 June 2009, S. Harazaki).

55 m off Kume-jima Island in 1999 (KPM-NR 29578). The photograph of the species taken at Yaku-shima Island represents the first record of *H. fronticinctus* from the island. This species is relatively common in depths of more than 50 m off Yaku-shima Island. Specimens of the species have never been collected from Japanese waters.

**Fig. 191.** *Hoplolatilus fronticinctus* (off Nagata, 60 m, 28 Nov. 2009, S. Harazaki).***Hoplolatilus fronticinctus*** (Günther, 1887)

[Jpn name: None] (Fig. 191)

Remarks: The photographed individual has the following characters: caudal fin forked; opercular spine smaller than pupil diameter; depth of posterior margin of maxilla less than pupil diameter; dorsal fin with 10 spines and 13 soft rays; anal fin with two spines and 12 soft rays; a blue saddle-shaped blotch on caudal peduncle dorsally; a blue band from snout to eye; dorsal and anal fins yellowish, with bluish green basally and pink distally; and caudal fin yellowish, with bluish green stripes along upper and lower margins. These characters agree with description of *H. fronticinctus* given by Dooley (1999). This species is distributed in the Indo-West Pacific, and has been known from the Philippines to the Solomon Islands in the western Pacific (Dooley, 1999). Recently, Senou et al. (2006b) reported juveniles of this species as *Hoplolatilus* sp. from Izu-oshima Island on the basis of underwater photographs (KPM-NR 31560, 62592). A juvenile of this species was also photographed at a depth of

***Malacanthus brevirostris*** Guichenot, 1848

[Jpn name: Yaseamadai]

Ichikawa et al. (1992): Yaku-shima Island.

***Malacanthus latovittatus*** (Lacepède, 1801)

[Jpn name: Kitsuneamadai]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

## FAMILY CORYPHAEINIDAE

***Coryphaena hippurus*** Linnaeus, 1758

[Jpn name: Shiira]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY RACHYCENTRIDAE

***Rachycentron canadum*** (Linnaeus, 1766)

[Jpn name: Sugi]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY ECHENEIDAE

***Echeneis naucrates*** Linnaeus, 1758

[Jpn name: Kobanzame]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

## FAMILY CARANGIDAE

*Alectis ciliaris* (Bloch, 1787)

[Jpn name: Itohikiaji]

Ichikawa et al. (1992): Yaku-shima Island.

*Carangoides fulvoguttatus* (Forsskål, 1775)

[Jpn name: Hoshikaiwari]

Ichikawa et al. (1992): Yaku-shima Island.

*Carangoides orthogrammus* (Jordan and Gilbert, 1882)

[Jpn name: Nan-yokaiwari] (Fig. 192)

NSMT-P 91960, 357.6 mm SL, Hirauchi.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 192.** *Carangoides orthogrammus* (NSMT-P 91960, 357.6 mm SL).



**Fig. 193.** *Caranx melampygus* (upper: KAUM-I. 11272, 125.3 mm SL; lower: NSMT-P 77628, 459.8 mm SL).



**Fig. 194.** *Caranx papuensis* (KAUM-I. 24696, 44.8 mm SL, preserved specimen).

*Caranx ignobilis* (Forsskål, 1775)

[Jpn name: Ronin-aji]

Ichikawa et al. (1992): Yaku-shima Island.

*Caranx melampygus* Cuvier, 1833

[Jpn name: Kasumiaji] (Fig. 193)

KAUM-I. 11272, 125.3 mm SL, Yudomari; NSMT-P 77628, 459.8 mm SL, Nanase.

Ichikawa et al. (1992): Yaku-shima Island.

*Caranx papuensis* Alleyne and Macleay, 1877

[Jpn name: Onihiraaji] (Fig. 194)

KAUM-I. 24696, 44.8 mm SL, mouth of Ku-rio River.

*Caranx sexfasciatus* Quoy and Gaimard, 1825

[Jpn name: Gingameaji] (Fig. 195)

KAUM-I. 11273, 107.8 mm SL, Yudomari; KAUM-I. 25224, 162.8 mm SL, Nagata; KAUM-I. 25225, 170.2 mm SL, Nagata; KAUM-I. 25226, 165.7 mm SL, Nagata; KPM-NI 24257, 131.8

mm SL, mouth of Nagata River; KPM-NI 24274, 149.9 mm SL, mouth of Miyanoura River; KPM-NI 24277, 242.4 mm SL, mouth of Miyanoura River; KPM-NI 24281, 123.3 mm SL, mouth of Nagata River; KPM-NI 24661, 146.7 mm SL, mouth of Nagata River; KPM-NI 24662, 154.3 mm SL, mouth of Nagata River; KPM-NI 24673, 177.1 mm SL, Onoaida; KPM-NI 24674, 160.3 mm SL, Onoaida; KPM-NI 24675, 162.2 mm SL, Onoaida; NSMT-P 77582, 288.8 mm SL, Nagata; NSMT-P 77664, 170.5 mm SL, Miyanoura; NSMT-P 77665, 161.0 mm SL, Miyanoura; NSMT-P 91370, 115 mm SL, Yudomari; NSMT-P 96014, 263.0 mm SL, mouth of Miyanoura River; NSMT-P 96390, 156.5 mm SL, mouth of Tainoko River.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 195.** *Caranx sexfasciatus* (KPM-NI 24277, 242.4 mm SL).



**Fig. 197.** *Decapterus macrosoma* (NSMT-P 76550, 285.9 mm SL, preserved specimen).

***Decapterus macarellus* (Cuvier, 1833)**

[Jpn name: Kusayamoro] (Fig. 196)

FRLM 34662, 252.5 mm SL, off Ambo; FRLM 34663, 316.0 mm SL, off Ambo; FRLM 34664, 282.1 mm SL, off Ambo; FRLM 34665, 274.5 mm SL, off Ambo; FRLM 34666, 292.0 mm SL, off Ambo; FRLM 34667, 299.7 mm SL, off Ambo; FRLM 34668, 268.7 mm SL, off Ambo; FRLM 34669, 275.5 mm SL, off Ambo; FRLM 34670, 275.5 mm SL, off Ambo; FRLM 34704, 360.1 mm SL, Yaku-shima Island; KAUM-I. 11254, 364.3 mm SL, Yaku-shima Island; NSMT-P 76551, 247.9 mm SL, south of Yaku-shima Island; NSMT-P 76552, 4 specimens, 253.4–275.5 mm SL, south of Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 196.** *Decapterus macarellus* (KAUM-I. 11254, 364.3 mm SL).



**Fig. 198.** *Decapterus tabl* (NSMT-P 76549, 302.2 mm SL, preserved specimen).

***Elagatis bipinnulata* (Quoy and Gaimard, 1825)**

[Jpn name: Tsumuburi] (Fig. 199)

NSMT-P 91962, 459.6 mm SL, Hirauchi; NSMT-P 91963, 432.5 mm SL, Hirauchi. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 199.** *Elagatis bipinnulata* (NSMT-P 91962, 459.6 mm SL).

***Decapterus macrosoma* Bleeker, 1851**

[Jpn name: Moro] (Fig. 197)

NSMT-P 76550, 7 specimens, 222.2–285.9 mm SL, south of Yaku-shima Island.

***Decapterus muroadsi* (Temminck and Schlegel, 1844)**

[Jpn name: Muroaji]

Ichikawa et al. (1992): Yaku-shima Island.

***Naucrates ductor* (Linnaeus, 1758)**

[Jpn name: Burimodoki]

Ichikawa et al. (1992): Yaku-shima Island.

***Pseudocaranx dentex* (Bloch and Schneider, 1801)**

[Jpn name: Shimaaji]

Ichikawa et al. (1992): Yaku-shima Island.

***Scomberoides lysan*** (Forskål, 1775)

[Jpn name: Ikekatsuo]

Ichikawa et al. (1992): Yaku-shima Island.

***Selar crumenophthalmus*** (Bloch, 1793)

[Jpn name: Meaji]

Ichikawa et al. (1992): Yaku-shima Island.

***Seriola dumerili*** (Risso, 1810)

[Jpn name: Kampachi] (Fig. 200)

KPM-NI 24273, 170.8 mm SL, Ambo; KPM-NI 24275, 176.3 mm SL, mouth of Ambo River.

Ichikawa et al. (1992): Yaku-shima Island.

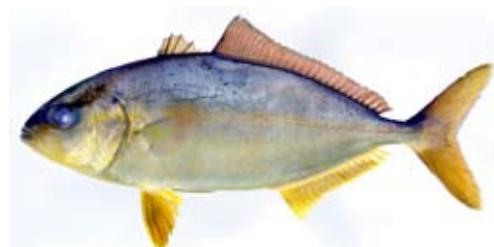


Fig. 200. *Seriola dumerili* (KPM-NI 24273, 170.8 mm SL).

***Seriola lalandii*** Valenciennes, 1833

[Jpn name: Hiramasa]

Ichikawa et al. (1992): Yaku-shima Island.

***Seriola quinqueradiata*** Temminck and Schlegel, 1845

[Jpn name: Buri]

Ichikawa et al. (1992): Yaku-shima Island.

***Seriola rivoliana*** Valenciennes, 1833

[Jpn name: Hirenagakampachi]

Ichikawa et al. (1992): Yaku-shima Island.

***Trachinotus baillonii*** (Lacepède, 1801)

[Jpn name: Koban-aji] (Fig. 201)

KAUM-I. 11408, 11.9 mm SL, Kurio; KAUM-I. 15414, 105.6 mm SL, Yaku-shima Island; KPM-NI 24667, 258.0 mm SL, Onoaida.

Ichikawa et al. (1992): Yaku-shima Island.



Fig. 201. *Trachinotus baillonii* (KPM-NI 24667, 258.0 mm SL).

***Trachurus japonicus*** (Temminck and Schlegel, 1844)

[Jpn name: Maaji]

Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY BRAMIDAE

***Pteraclis aesticola*** (Jordan and Snyder, 1901)

[Jpn name: Benten-uo] (Fig. 202)

Senou and Kanno (2004): Isso.



Fig. 202. *Pteraclis aesticola* (off Isso; after Senou and Kanno, 2004).

#### FAMILY LUTJANIDAE

***Apriom virescens*** Valenciennes, 1830

[Jpn name: Aochibiki] (Fig. 203)

NSMT-P 91961, 441.4 mm SL, Hirauchi.

Ichikawa et al. (1992): Yaku-shima Island.

***Etelis coruscans*** Valenciennes, 1862

[Jpn name: Hamadai] (Fig. 204)

KAUM-I. 21947, 271.4 mm SL, Yaku-shima Island.

***Trachinotus blochii*** (Lacepède, 1801)

[Jpn name: Marukoban]

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 203.** *Aprion virescens* (NSMT-P 91961, 441.4 mm SL).



**Fig. 204.** *Etelis coruscans* (KAUM-I. 21947, 271.4 mm SL).



**Fig. 205.** *Lutjanus argentimaculatus* (upper: KAUM-I. 20303, 66.7 mm SL; lower: KAUM-I. 25229, 208.5 mm SL).



**Fig. 206.** *Lutjanus bengalensis* (off Isso, 20 m, 16 Jan. 2010, S. Harazaki).



**Fig. 207.** *Lutjanus bohar* (NSMT-P 77718, 630 mm SL).

#### ***Lutjanus bengalensis* (Bloch, 1790)**

[Jpn name: Bengarufuedai] (Fig. 206)

#### ***Lutjanus bohar* (Forsskål, 1775)**

[Jpn name: Barafuedai] (Fig. 207)

NSMT-P 77718, 630 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

#### ***Lutjanus decussatus* (Cuvier, 1828)**

[Jpn name: Amimefuedai]

Ichikawa et al. (1992): Yaku-shima Island.

#### ***Lutjanus fulviflamma* (Forsskål, 1775)**

[Jpn name: Nisekurohoshifuedai] (Fig. 208)

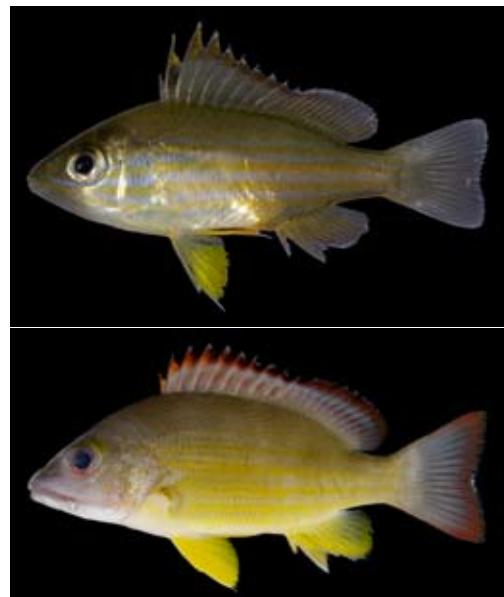
KAUM-I. 11486, 56.4 mm SL, mouth of Miyanoura River; KAUM-I. 21761, 76.7 mm SL, mouth of Ambo River; KPM-NI 24251, 99.6 mm

SL, mouth of Nagata River; KPM-NI 24660, 76.2 mm SL, mouth of Nagata River.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 208.** *Lutjanus fulviflamma* (KAUM-I. 21761, 76.7 mm SL).



**Fig. 209.** *Lutjanus fulvus* (upper: KAUM-I. 20325, 26.4 mm SL; lower: KAUM-I. 25048, 81.2 mm SL).

***Lutjanus fulvus*** (Forster, 1801)

[Jpn name: Okifuedai] (Fig. 209)

KAUM-I. 11404, 111.7 mm SL, mouth of Ambo River; KAUM-I. 20309, 77.9 mm SL, mouth of Kurio River; KAUM-I. 20325, 26.4 mm SL, mouth of Kurio River; KAUM-I. 25048, 81.2 mm SL, mouth of Nagata River; KAUM-I. 25233, 147.5 mm SL, Ambo; KPM-NI 22571, 21.7 mm SL, mouth of Kurio River.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 210.** *Lutjanus gibbus* (MUFS 25530, 158.6 mm SL).

***Lutjanus gibbus*** (Forsskål, 1775)

[Jpn name: Himefuedai] (Fig. 210)

MUFS 25530, 158.6 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Lutjanus kasmira*** (Forsskål, 1775)

[Jpn name: Yosujifuedai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Lutjanus monostigma*** (Cuvier, 1828)

[Jpn name: Ittenfuedai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Lutjanus quinquefasciatus*** (Bloch, 1790)

[Jpn name: Rokusenfuedai] (Fig. 211)

NSMT-P 77654, 126.2 mm SL, Nagata.

Ichikawa et al. (1992, as *Lutjanus spilurus*):  
Yaku-shima Island.

***Lutjanus rivulatus*** (Cuvier, 1828)

[Jpn name: Namifuedai]

Kuniyasu (1999): Kurio.

***Lutjanus russellii*** (Bleeker, 1849)

[Jpn name: Kurohoshifuedai] (Fig. 212)

KAUM-I. 11504, 19.6 mm SL, mouth of Miyanoura River.

Kuniyasu (1999): Kurio.



**Fig. 211.** *Lutjanus quinquelineatus* (NSMT-P 77654, 126.2 mm SL).



**Fig. 213.** *Lutjanus stellatus* (KAUM-I. 21760, 75.9 mm SL).



**Fig. 212.** *Lutjanus russellii* (KAUM-I. 11504, 19.6 mm SL).



**Fig. 214.** *Macolor macularis* (off Isso, 18 m, 25 Aug. 2004, S. Harazaki).

***Lutjanus sebae* (Cuvier, 1816)**

[Jpn name: Sennendai]

Ichikawa et al. (1992): Yaku-shima Island.

***Lutjanus stellatus* Akazaki, 1983**

[Jpn name: Fuedai] (Fig. 213)

KAUM-I. 21760, 75.9 mm SL, mouth of Ambo River; KAUM-I. 21762, 80.4 mm SL, mouth of Ambo River; KAUM-I. 25048, 81.2 mm SL, mouth of Nagata River; MUFS 25564, 34.8 mm SL, Kurio; NSMT-P 77651, 203 mm SL, Nagata.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Macolor macularis* Fowler, 1931**

[Jpn name: Hohosujitarumi] (Fig. 214)

***Macolor niger* (Forsskål, 1775)**

[Jpn name: Madaratarumi]

Ichikawa et al. (1992): Yaku-shima Island.

***Paracaeusio caerulea* (Katayama, 1934)**

[Jpn name: Aodai]

Ichikawa et al. (1992): Yaku-shima Island.

***Paracaeusio kusakarii* Abe, 1960**

[Jpn name: Shimaao dai]

Ichikawa et al. (1992): Yaku-shima Island.

***Paracaeusio xanthura* (Bleeker, 1869)**

[Jpn name: Umeiro] (Fig. 215)

FRLM 34698, 249.5 mm SL, Yaku-shima Island; FRLM 34699, 247.0 mm SL, Yaku-shima Island; KAUM-I. 11252, 264.2 mm SL, Yaku-shima Island; KAUM-I. 11253, 267.7 mm SL, Yaku-shima Island; MUFS 25523, 260.9 mm SL, Yaku-shima Island; MUFS 25524, 255.5 mm SL,

Yaku-shima Island; MUFS 25525, 245.8 mm SL,  
Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 215.** *Paracaesio xanthura* (KAUM-I. 11253, 267.7 mm SL).

#### FAMILY LOBOTIDAE

***Lobotes surinamensis*** (Bloch, 1790)

[Jpn name: Matsudai] (Fig. 217)

KAUM-I. 21776, 53.6 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 217.** *Lobotes surinamensis* (KAUM-I. 21776, 53.6 mm SL).

#### FAMILY CAESIONIDAE

***Caesio teres*** Seale, 1906

[Jpn name: Umeiromodoki] (Fig. 216)

BSKU 96649, 26.1 mm SL, Isso; FRLM  
34725, 277.7 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 216.** *Caesio teres* (FRLM 34725, 277.7 mm SL).

#### FAMILY GERREIDAE

***Gerres equulus*** Temminck and Schlegel, 1844

[Jpn name: Kurosagi] (Fig. 218)

KPM-NI 24276, 208.6 mm SL, mouth of  
Miyanoura River; KPM-NI 24658, 203.6 mm  
SL, mouth of Miyanoura River; NSMT-P 96392,  
192.7 mm SL, mouth of Miyanoura River.



**Fig. 218.** *Gerres equulus* (KPM-NI 24658, 203.6 mm SL).

***Pterocaesio digramma*** (Bleeker, 1864)

[Jpn name: Takasago]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Pterocaesio tile*** (Cuvier, 1830)

[Jpn name: Kumasa-sahanamuro]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Gerres filamentosus*** Cuvier, 1829

[Jpn name: Itohikisagi] (Fig. 219)

KAUM-I. 11488, 42.2 mm SL, mouth of Miyanoura River; KAUM-I. 11497, 42.4 mm SL,  
mouth of Miyanoura River; KAUM-I. 24699,

62.3 mm SL, mouth of Kurio River; KAUM-I. 24700, 46.6 mm SL, mouth of Kurio River; KAUM-I. 24701, 43.7 mm SL, mouth of Kurio River; KAUM-I. 24702, 24.1 mm SL, mouth of Kurio River; KAUM-I. 24703, 23.1 mm SL, mouth of Kurio River; KAUM-I. 24704, 22.6 mm SL, mouth of Kurio River; KAUM-I. 24705, 20.1 mm SL, mouth of Kurio River.



**Fig. 219.** *Gerres filamentosus* (KAUM-I. 11488, 42.2 mm SL).

***Parapristipoma trilineatum*** (Thunberg, 1793)

[Jpn name: Isaki]

Ichikawa et al. (1992): Yaku-shima Island.

***Plectorhinchus chaetodonoides*** Lacepède, 1801

[Jpn name: Chochokoshodai] (Fig. 221)

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 221.** *Plectorhinchus chaetodonoides* (off Ioso, 6 m, 11 Apr. 2007, S. Harazaki).

***Gerres oyena*** (Forsskål, 1775)

[Jpn name: Minamikurosagi] (Fig. 220)

KAUM-I. 11409, 11.0 mm SL, Kurio Beach;  
KAUM-I. 11411, 8.5 mm SL, Kurio Beach.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

Remarks: Previous records of *G. oyena* from Yaku-shima Island possibly included *G. equulus*.



**Fig. 220.** *Gerres oyena* (KAUM-I. 11409, 11.0 mm SL).

***Plectorhinchus chrysotaenia*** (Bleeker, 1855)

[Jpn name: Nijikoshodai]

Kuniyasu (1999): Kurio.

***Plectorhinchus cinctus*** (Temminck and Schlegel, 1843)

[Jpn name: Koshodai]

Ichikawa et al. (1992): Yaku-shima Island.

***Plectorhinchus flavomaculatus*** (Cuvier, 1830)

[Jpn name: Osharekoshodai] (Fig. 222)

NSMT-P 77642, 267.6 mm SL, mouth of Kurio River.

Kuniyasu (1999): Kurio.



**Fig. 222.** *Plectorhinchus flavomaculatus* (NSMT-P 77642, 267.6 mm SL).

## FAMILY HAEMULIDAE

***Diagramma picta picta*** (Thunberg, 1792)

[Jpn name: Korodai]

Ichikawa et al. (1992, as *Plectorhinchus pictus*): Yaku-shima Island.

Remarks: Johnson et al. (2001) regarded it as a valid subspecies.

***Plectorhinchus gibbosus* (Lacepède, 1802)**

[Jpn name: Kurokoshodai] (Fig. 223)

KAUM-I. 24706, 75.9 mm SL, mouth of Kurio River; KPM-NI 24266, 331.3 mm SL, mouth of Miyanoura River; NSMT-P 77639, 359.4 mm SL, Kurio.

Ichikawa et al. (1992, as *Plectorhinchus niger*): Yaku-shima Island. Yonezawa (2003c): Yaku-shima Island. Matsunuma et al. (2009): mouth of Miyanoura River.



Fig. 223. *Plectorhinchus gibbosus* (NSMT-P 77639, 359.4 mm SL).

***Plectorhinchus lessonii* (Cuvier, 1830).**

[Jpn name: Hiregurokoshodai] (Fig. 224)

FRLM 34694, 266.1 mm SL, Kurio; NSMT-P 77633, 282.0 mm SL, Nanase.

Kuniyasu (1999): Kurio.



Fig. 224. *Plectorhinchus lessonii* (FRLM 34694, 266.1 mm SL).

***Plectorhinchus lineatus* (Linnaeus, 1758)**

[Jpn name: Ayakoshodai]

Ichikawa et al. (1992, as *Plectorhinchus goldmammi*): Yaku-shima Island.

***Plectorhinchus picus* (Cuvier, 1828)**

[Jpn name: Ajiakoshodai] (Fig. 225)

NSMT-P 91951, 443 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 225. *Plectorhinchus picus* (NSMT-P 91951, 443 mm SL).

***Plectorhinchus vittatus* (Linnaeus, 1758)**

[Jpn name: Musujikoshodai] (Fig. 226)

FRLM 34723, 349.0 mm SL, Kurio; NSMT-P 77632, 300.6 mm SL, Nanase.

Ichikawa et al. (1992, as *Plectorhinchus diagrammus*): Yaku-shima Island. Kuniyasu (1999, as *Plectorhinchus orientalis*): Kurio.

Remarks: This species has currently been regarded as a senior synonym of *Plectorhinchus orientalis* (Bloch, 1793).



Fig. 226. *Plectorhinchus vittatus* (NSMT-P 77632, 300.6 mm SL).

***Pomadasys quadrilineatus* Shen and Lin, 1984**

[Jpn name: Sujimizoisaki] (Fig. 227)

Senou and Harazaki (2004): Isso. Matsunuma et al. (2009): KAUM-I. 25047, 103.8 mm SL, mouth of Nagata River; underwater photographs, Nagata and mouth of Miyanoura River.



**Fig. 227.** *Pomadasys quadrilineatus* (KAUM-I. 25047, 103.8 mm SL).



**Fig. 229.** *Pentapodus aureofasciatus* (upper two from Motomura and Harazaki, 2007; lower two: KAUM-I. 285, male, 158.5 mm SL and KAUM-I. 14137, female, 156.0 mm SL).



**Fig. 228.** *Parascolopsis eriomma* (KAUM-I. 7410, 242.0 mm SL).

**Pentapodus aureofasciatus** Russell, 2001  
[Jpn name: Yakushimakitsuneuo] (Fig. 229)  
KAUM-I. 14137, 156.0 mm SL, Shitoko.  
Motomura and Harazaki (2007): KAUM-I. 35, 150.0 mm SL, Shitoko; KAUM-I. 285, 158.5 mm SL, off Isso. Motomura and Sakurai (2008): KAUM-I. 285, 158.5 mm SL, off Isso.

**Pentapodus caninus** (Cuvier, 1830)  
[Jpn name: Kitsuneuo] (Fig. 230)  
Motomura and Harazaki (2007): off Isso.

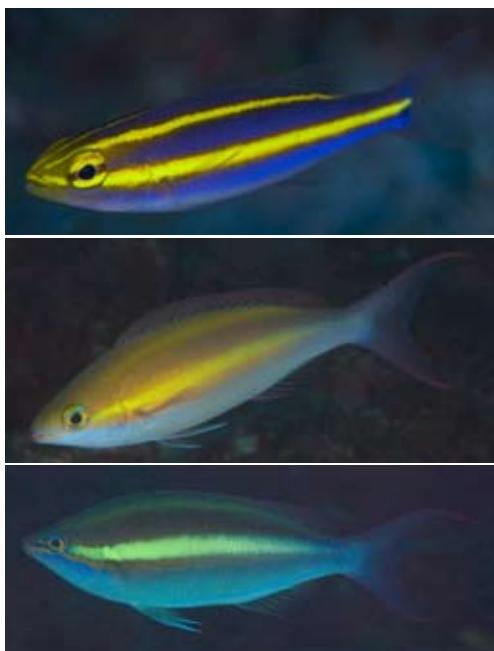
**Pentapodus nagasakiensis** (Tanaka, 1915)  
[Jpn name: Itotamagashira]  
Ichikawa et al. (1992): Yaku-shima Island.

**Scolopsis affinis** Peters, 1877  
[Jpn name: Himetamagashira] (Fig. 231)

**Scolopsis bilineata** (Bloch, 1793)  
[Jpn name: Futasujitamagashira] (Fig. 232)  
KAUM-I. 11334, 164.7 mm SL, Kurio;  
KPM-NI 24259, 143.4 mm SL, Yoshida.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

**Scolopsis lineata** Quoy and Gaimard, 1824  
[Jpn name: Yokoshimatamagashira]  
Ichikawa et al. (1992, as *Scolopsis cancellatus*): Yaku-shima Island. Kuniyasu (1999): Kurio.

**Scolopsis monogramma** (Cuvier, 1830)  
[Jpn name: Hitosujitamagashira] (Fig. 233)



**Fig. 230.** *Pentapodus caninus* (off Isso; from Motomura and Harazaki, 2007).



**Fig. 233.** *Scolopsis monogramma* (off Isso, 15 m, 15 July 2009, S. Harazaki).



**Fig. 231.** *Scolopsis affinis* (off Isso, 15 m, 15 July 2009, S. Harazaki).



**Fig. 232.** *Scolopsis bilineata* (KPM-NI 24259, 143.4 mm SL).



**Fig. 234.** *Scolopsis trilineata* (off Isso, 9 m, 16 Oct. 2009, S. Harazaki).

#### *Scolopsis trilineata* Kner, 1868

[Jpn name: None] (Fig. 234)

Remarks: The underwater photograph shows that the fish has scales dorsally on the head reaching forward only to above the middle of the eye; a forked caudal fin; and a body gray dorsally, silvery white ventrally, with distinct stripes on the dorsal and upper lateral surfaces of the body. The dorsal head squamation and color pattern of the photographed individual agree with those of *Scolopsis trilineata* given by Russell (2001) and Randall (2005).

This species has been known in the western Pacific, only from Taiwan to Tonga and Australia (Shen, 1997; Russell, 2001; Randall, 2005); thus the photographed individual taken at Yaku-shima Island represents the first record of the species from Japan and the northermernonst record for the species. No other individuals have been observed in the island.

## FAMILY LETHRINIDAE

***Gnathodentex aureolineatus*** (Lacepède, 1802)

[Jpn name: Nokogiridai]

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.

***Gymnocranius euanus*** (Günther, 1879)

[Jpn name: Shirodai]

Ichikawa et al. (1992, as *Gymnocranius af-*  
*finis*): Yaku-shima Island.

***Gymnocranius griseus*** (Temminck and Schlegel, 1843)

[Jpn: Meichidai] (Fig. 235)

MUFS 25519, 254.0 mm SL, Yaku-shima Island; MUFS 25520, 316.3 mm SL, Yaku-shima Island; MUFS 25521, 366.0 mm SL, Yaku-shima Island; MUFS 25522, 300.0 mm SL, Yaku-shima Island.

Remarks: This name has been applied to more than one species and is under investigation by Y. Iwatsuki (MUFS) and his colleagues. The Yaku-shima Island specimens also include several morphotypes.



Fig. 235. *Gymnocranius griseus* (MUFS 25519, 254.0 mm SL).

***Lethrinus harak*** (Forsskål, 1775)

[Jpn name: Matofuefuki]

Ichikawa et al. (1992): Yaku-shima Island.

***Lethrinus nebulosus*** (Forsskål, 1775)

[Jpn name: Hamafuefuki] (Fig. 236)

NSMT-P 95399, 179.6 mm SL, Miyanoura.

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.



Fig. 236. *Lethrinus nebulosus* (NSMT-P 95399, 179.6 mm SL, preserved specimen).

***Lethrinus rubrioperculatus*** Sato, 1978

[Jpn name: Hoakuchibi] (Fig. 237)

FRLM 34700, 347.1 mm SL, Yaku-shima Island; KAUM-I. 11249, 338.2 mm SL, Yaku-shima Island.



Fig. 237. *Lethrinus rubrioperculatus* (FRLM 34700, 347.1 mm SL).

***Lethrinus atkinsoni*** Seale, 1910

[Jpn name: Isofuefuki]

Ichikawa et al. (1992, as *Lethrinus mahsena*):  
Yaku-shima Island.

***Lethrinus haematopterus*** Temminck and Schlegel, 1844

[Jpn name: Fuefukidai]

Ichikawa et al. (1992): Yaku-shima Island.

***Monotaxis grandoculis*** (Forsskål, 1775)

[Jpn name: Yokoshimakurodai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

## FAMILY SPARIDAE

***Acanthopagrus schlegelii*** (Bleeker, 1854)

[Jpn name: Kurodai] (Fig. 238)

KAUM-I. 11487, 62.3 mm SL, mouth of Mi-

yanoura River; KAUM-I. 11498, 52.2 mm SL, mouth of Miyanoura River; KAUM-I. 11499, 60.4 mm SL, mouth of Miyanoura River; NSMT-P 77927, 215 mm SL, Kurio; NSMT-P 77928, 400 mm SL, Kurio; NSMT-P 95760, 342.0 mm SL, mouth of Miyanoura River; NSMT-P 96013, 217.5 mm SL, mouth of Nagata River; NSMT-P 96388, 314.6 mm SL, mouth of Miyanoura River; NSMT-P 96389, 383.1 mm SL, mouth of Miyanoura River.

Ichikawa et al. (1992): Yaku-shima Island. Shinomiya and Yonezawa (2002): Yaku-shima Island. Yonezawa (2003c): Yaku-shima Island.



**Fig. 238.** *Acanthopagrus schlegelii* (NSMT-P 95760, 342.0 mm SL).

#### *Acanthopagrus sivicolus* Akazaki, 1962

[Jpn name: Minamikurodai] (Fig. 239)

NSMT-P 77929, 325 mm SL, Kurio.  
Kuniyasu (1999): Kurio.



**Fig. 239.** *Acanthopagrus sivicolus* (NSMT-P 77929, 325 mm SL).

#### *Dentex hypselosomus* Bleeker, 1854

[Jpn name: Kidaï]

KAUM-I. 21945, 179.6 mm SL, Yaku-shima Island.

Ichikawa et al. (1992, as *Dentex tumifrons*): Yaku-shima Island.

Remarks: Ichikawa et al. (1992) mentioned that their *D. tumifrons* (= *D. hypselosomus*) might be Kibireakarenko, *Dentex* sp. (= *D. abei*).

#### *Pagrus major* (Temminck and Schlegel, 1843)

[Jpn name: Madai]

Ichikawa et al. (1992): Yaku-shima Island.

#### *Rhabdosargus sarba* (Forsskål, 1775)

[Jpn name: Hedai] (Fig. 240)

KPM-NI 24663, 99.2 mm SL, mouth of Miyanoura; NSMT-P 91952, 303 mm SL, mouth of Kurio River.

Ichikawa et al. (1992, as *Sparus sarba*): Yaku-shima Island.



**Fig. 240.** *Rhabdosargus sarba* (NSMT-P 91952, 303 mm SL).

#### FAMILY POLYNEMIDAE

##### *Polydactylus plebeius* (Broussonet, 1782)

[Jpn name: Tsubamekonoshiro] (Fig. 241)

KAUM-I. 10701, 47.6 mm SL, Nagakubo;  
KAUM-I. 10702, 47.7 mm SL, Nagakubo;  
KAUM-I. 10703, 47.8 mm SL, Nagakubo;  
KAUM-I. 10704, 47.9 mm SL, Nagakubo;  
KAUM-I. 10705, 47.1 mm SL, Nagakubo;  
KAUM-I. 11410, 41.3 mm SL, Kurio Beach; NSMT-P 77729, 41.0 mm SL, Nagakubo; NSMT-P 77730, 48.2 mm SL, Nagakubo; NSMT-P 77731, 41.6 mm SL, Nagakubo; NSMT-P 77732, 44.5

mm SL, Nagakubo;

Ichikawa et al. (1992, as *Polydactylus plebejus*): Yaku-shima Island.



**Fig. 241.** *Polydactylus plebeius* (KAUM-I. 11410, 41.3 mm SL).

#### FAMILY MULLIDAE

***Mulloidichthys flavolineatus*** (Lacepède, 1801)

[Jpn name: Montsukiakahimeji] (Fig. 242)

KAUM-I. 20053, 113.1 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 242.** *Mulloidichthys flavolineatus* (KAUM-I. 20053, 113.1 mm SL).

***Mulloidichthys vanicolensis*** (Valenciennes, 1831)

[Jpn name: Akahimeji] (Fig. 243)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Parupeneus barberinoides*** (Bleeker, 1852)

[Jpn name: Indohimeji] (Fig. 244)

Ichikawa et al. (1992): Yaku-shima Island.

Remarks: This species occurs in depths of 10–15 m at Yaku-shima Island.



**Fig. 243.** *Mulloidichthys vanicolensis* (off Isso, 8 m, 19 Jan. 2010, S. Harazaki).



**Fig. 244.** *Parupeneus barberinoides* (off Isso, 12 m, 17 Jan. 2010, S. Harazaki).

***Parupeneus barberinus*** (Lacepède, 1801)

[Jpn name: Osujihimeji] (Fig. 245)

KAUM-I. 11293, 31.2 mm SL, Yudomari;  
KAUM-I. 20045, 57.1 mm SL, Yudomari;  
KAUM-I. 20046, 58.1 mm SL, Yudomari;  
KAUM-I. 20132, 65.4 mm SL, Yudomari;  
KAUM-I. 20154, 49.8 mm SL, Yudomari;  
KAUM-I. 20188, 88.9 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 245.** *Parupeneus barberinus* (KAUM-I. 20045, 57.1 mm SL).

***Parupeneus ciliatus*** (Lacepède, 1802)

[Jpn name: Horaihimeji] (Fig. 246)

FRLM 34736, 81.8 mm SL, Kurio; KAUM-I. 11164, 74.1 mm SL, Kurio; KAUM-I. 11283, 94.5 mm SL, Yudomari; KAUM-I. 11612, 84.4 mm SL, Ambo; KAUM-I. 11613, 104.4 mm SL, Ambo; KAUM-I. 20048, 103.2 mm SL, Yudomari; KAUM-I. 20115, 81.0 mm SL, Yudomari; KAUM-I. 20116, 109.9 mm SL, Yudomari; KAUM-I. 20117, 121.8 mm SL, Yudomari; KAUM-I. 20118, 82.3 mm SL, Yudomari; KAUM-I. 20119, 115.5 mm SL, Yudomari; KAUM-I. 20126, 74.4 mm SL, Yudomari; KAUM-I. 20127, 77.1 mm SL, Yudomari; KAUM-I. 20128, 79.9 mm SL, Yudomari; KAUM-I. 20129, 84.9 mm SL, Yudomari; KAUM-I. 20130, 91.4 mm SL, Yudomari; KAUM-I. 20131, 102.4 mm SL, Yudomari; KAUM-I. 20133, 93.6 mm SL, Yudomari; KAUM-I. 20134, 94.1 mm SL, Yudomari; KAUM-I. 20135, 104.8 mm SL, Yudomari; KAUM-I. 20136, 103.4 mm SL, Yudomari; KAUM-I. 20137, 99.9 mm SL, Yudomari; KAUM-I. 20155, 81.9 mm SL, Yudomari; KAUM-I. 20156, 94.1 mm SL, Yudomari; KAUM-I. 20187, 133.9 mm SL, Yudomari; KAUM-I. 21699, 69.3 mm SL, Kurio; KAUM-I. 21700, 67.2 mm SL, Kurio; KAUM-I. 21701, 79.0 mm SL, Kurio; KAUM-I. 21779, 44.0 mm SL, Kurio; KAUM-I. 21780, 84.2 mm SL, Kurio; KAUM-I. 21781, 76.9 mm SL, Kurio; MUFS 25533, 61.5 mm SL, Yudomari; MUFS 25534, 61.0 mm SL, Yudomari; MUFS 25535, 66.1 mm SL, Yudomari; MUFS 25536, 69.6 mm SL, Yudomari; MUFS 25537, 71.0 mm SL, Yudomari; MUFS 25538, 68.3 mm SL, Yudomari; MUFS 25539, 69.1 mm SL, Yudomari; MUFS 25540, 72.0 mm SL, Yudomari; MUFS 25541, 69.1 mm SL, Yudomari; MUFS 25542, 79.6 mm SL, Yudomari; MUFS 25543, 77.0 mm SL, Yudomari; MUFS 25544, 97.9 mm SL, Yudomari; MUFS 25576, 69.3 mm SL, Kurio; NSMT-P 17832, 27.5 mm SL, Kusugawa; NSMT-P 77621, 223.2 mm SL, mouth of Kurio River; NSMT-P 95434, 96.4 mm SL, Haruo.

Kuniyasu (1999): Kurio.



Fig. 246. *Parupeneus ciliatus* (upper: KAUM-I. 20048, 103.2 mm SL; lower: NSMT-P 77621, 223.2 mm SL).

***Parupeneus cyclostomus*** (Lacepède, 1801)

[Jpn name: Marukuchihimeji] (Fig. 247)

FRLM 34726, 354.7 mm SL, Kurio; KAUM-I. 20339, 84.4 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 247. *Parupeneus cyclostomus* (KAUM-I. 20339, 84.4 mm SL).

***Parupeneus indicus*** (Shaw, 1803)

[Jpn name: Kobanhimeji] (Fig. 248)

BSKU 96564, 54.9 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 248.** *Parupeneus indicus* (BSKU 96564, 54.9 mm SL).

***Parupeneus multifasciatus*** (Quoy and Gaimard, 1825)  
[Jpn name: Ojisan] (Fig. 249)

KAUM-I. 11261, 150.0 mm SL, Yudomari; KAUM-I. 20054, 174.1 mm SL, Yudomari; KAUM-I. 21943, 209.8 mm SL, Yaku-shima Island; KAUM-I. 25200, 130.8 mm SL, Isso; KAUM-I. 25205, 161.0 mm SL, Onoaida; MUFS 25527, 160.4 mm SL, Yudomari; MUFS 25528, 148.4 mm SL, Yudomari; MUFS 25529, 160.2 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 249.** *Parupeneus multifasciatus* (KAUM-I. 11261, 150.0 mm SL).

***Parupeneus pleurostigma*** (Bennett, 1831)  
[Jpn name: Ryukyu himeji]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Parupeneus spilurus*** (Bleeker, 1854)

[Jpn name: Okinahimeji] (Fig. 250)

FRLM 34703, 273.1 mm SL, Yaku-shima Island; FRLM 34724, 297.4 mm SL, Kurio; KAUM-I. 11250, 285.9 mm SL, Yaku-shima Island; KAUM-I. 11251, 293.8 mm SL, Yaku-

shima Island; MUFS 25526, 295.8 mm SL, Yaku-shima Island.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 250.** *Parupeneus spilurus* (MUFS 25526, 295.8 mm SL).

***Parupeneus trifasciatus*** (Lacepède, 1801)  
[Jpn name: Futasujihimeji]

Ichikawa et al. (1992, as *Parupeneus bifasciatus*): Yaku-shima Island.

***Upeneus tragula*** Richardson, 1846

[Jpn name: Yomehimeji] (Fig. 251)

Remarks: Although this species is common in depths of less than 10 m at Yaku-shima Island, no specimens have been collected.



**Fig. 251.** *Upeneus tragula* (off Isso, 10 m, 17 Jan. 2010, S. Harazaki).

**FAMILY PEMPHERIDAE**

***Parapriacanthus ransonneti*** Steindachner, 1870  
[Jpn name: Kimmemodoki]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Pempheris japonica*** Döderlein, 1883

[Jpn name: Tsumagurohatampo]

Arai and Ida (1975): Kusugawa [two specimens (85–90 mm TL) were reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Pempheris schwenkii*** Bleeker, 1855

[Jpn name: Minamihatampo] (Fig. 252)

KAUM-I. 11383, 34.0 mm SL, Kurio; KAUM-I. 11387, 13.3 mm SL, Kurio.

Kuniyasu (1999): Kurio.



Fig. 252. *Pempheris schwenkii* (KAUM-I. 11383, 34.0 mm SL).

25641, 52.8 mm SL, Kurio; MUFS 25642, 56.5 mm SL, Kurio; MUFS 25643, 57.4 mm SL, Kurio; MUFS 25644, 65.6 mm SL, Kurio; MUFS 25645, 60.3 mm SL, Kurio; MUFS 25646, 58.8 mm SL, Kurio; MUFS 25647, 82.3 mm SL, Kurio; MUFS 25648, 84.2 mm SL, Kurio; MUFS 25649, 90.0 mm SL, Kurio; MUFS 25650, 88.7 mm SL, Kurio; MUFS 25651, 81.0 mm SL, Kurio; MUFS 25652, 89.9 mm SL, Kurio; MUFS 25653, 87.2 mm SL, Kurio; MUFS 25654, 91.0 mm SL, Kurio; MUFS 25655, 87.0 mm SL, Kurio; MUFS 25656, 95.6 mm SL, Kurio; MUFS 25657, 95.9 mm SL, Kurio; MUFS 25658, 91.0 mm SL, Kurio; MUFS 25659, 101.5 mm SL, Kurio; MUFS 25660, 96.8 mm SL, Kurio; MUFS 25661, 117.7 mm SL, Kurio; MUFS 25662, 119.5 mm SL, Kurio; MUFS 25663, 110.3 mm SL, Kurio; MUFS 25664, 104.4 mm SL, Kurio; MUFS 25665, 44.2 mm SL, Kurio; MUFS 25666, 51.8 mm SL, Kurio; MUFS 25667, 79.2 mm SL, Kurio; MUFS 25668, 98.6 mm SL, Kurio; MUFS 25669, 121.4 mm SL, Kurio; NSMT-P 91372, 102 mm SL, Kurio; NSMT-P 91373, 45 specimens, 42–112 mm SL, Kurio.

***Pempheris* sp.**

[Jpn name: Ryukyuhatampo] (Fig. 253)

FRLM 34733, 103.9 mm SL, Kurio; KAUM-I. 11357, 106.1 mm SL, Kurio; MUFS 25612, 41.4 mm SL, Kurio; MUFS 25613, 63.5 mm SL, Kurio; MUFS 25614, 99.1 mm SL, Kurio; MUFS 25615, 125.5 mm SL, Kurio; MUFS 25622, 36.2 mm SL, Kurio; MUFS 25623, 41.7 mm SL, Kurio; MUFS 25624, 41.0 mm SL, Kurio; MUFS 25625, 41.0 mm SL, Kurio; MUFS 25626, 41.3 mm SL, Kurio; MUFS 25627, 40.4 mm SL, Kurio; MUFS 25628, 41.8 mm SL, Kurio; MUFS 25629, 36.1 mm SL, Kurio; MUFS 25630, 39.1 mm SL, Kurio; MUFS 25631, 40.8 mm SL, Kurio; MUFS 25632, 42.2 mm SL, Kurio; MUFS 25633, 39.8 mm SL, Kurio; MUFS 25634, 40.4 mm SL, Kurio; MUFS 25635, 46.6 mm SL, Kurio; MUFS 25636, 40.6 mm SL, Kurio; MUFS 25637, 40.7 mm SL, Kurio; MUFS 25638, 43.0 mm SL, Kurio; MUFS 25639, 54.5 mm SL, Kurio; MUFS 25640, 54.0 mm SL, Kurio; MUFS



Fig. 253. *Pempheris* sp. (KAUM-I. 11357, 106.1 mm SL).

## FAMILY MONODACTYLIDAE

***Monodactylus argenteus*** (Linnaeus, 1758)

[Jpn name: Himetsubameuo] (Fig. 254)

BSKU 96629, 18.6 mm SL, mouth of Kurio River; KAUM-I. 11490, 29.4 mm SL, mouth of Miyanoura River; KAUM-I. 11492, 25.0 mm SL, mouth of Miyanoura River; KAUM-I. 11493, 27.5 mm SL, mouth of Miyanoura River; KAUM-

I. 11494, 21.2 mm SL, mouth of Miyanoura River; KAUM-I. 11495, 26.7 mm SL, mouth of Miyanoura River; KAUM-I. 11496, 30.5 mm SL, mouth of Miyanoura River; KAUM-I. 24707, 39.5 mm SL, mouth of Kurio River; KAUM-I. 24708, 13.9 mm SL, Ambo.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 254.** *Monodactylus argenteus* (KAUM-I. 11490, 29.4 mm SL).

#### FAMILY KYPHOSIDAE

***Girella leonina*** (Richardson, 1846)

[Jpn name: Kuromejina] (Fig. 255)

BSKU 96667, 106.0 mm SL, Kurio; FRLM 34673, 71.6 mm SL, Kurio; FRLM 34680, 70.6 mm SL, Kurio; KAUM-I. 11150, 73.7 mm SL, Kurio; KAUM-I. 21874, 74.1 mm SL, Kurio; KAUM-I. 21875, 77.5 mm SL, Kurio; KAUM-I. 22814, 79.9 mm SL, Kurio; KAUM-I. 22815, 135.9 mm SL, Kurio; MUFS 25452, 63.5 mm SL, Kurio; MUFS 25453, 52.9 mm SL, Kurio; MUFS 25454, 53.9 mm SL, Kurio; MUFS 25455, 52.6 mm SL, Kurio; MUFS 25456, 56.9 mm SL, Kurio; MUFS 25457, 63.4 mm SL, Kurio; MUFS 25458, 55.1 mm SL, Kurio; MUFS 25459, 59.4 mm SL, Kurio; MUFS 25460, 51.3 mm SL, Kurio; MUFS 25461, 59.1 mm SL, Kurio; MUFS 25462, 51.9 mm SL, Kurio; MUFS 25463, 59.8

mm SL, Kurio; MUFS 25464, 58.6 mm SL, Kurio; MUFS 25465, 52.7 mm SL, Kurio; MUFS 25466, 55.7 mm SL, Kurio; MUFS 25467, 55.5 mm SL, Kurio; MUFS 25468, 57.5 mm SL, Kurio; MUFS 25469, 56.3 mm SL, Kurio; MUFS 25470, 56.8 mm SL, Kurio; MUFS 25471, 58.4 mm SL, Kurio; MUFS 25472, 57.5 mm SL, Kurio; MUFS 25473, 49.3 mm SL, Kurio; MUFS 25474, 59.3 mm SL, Kurio; MUFS 25475, 61.5 mm SL, Kurio; MUFS 25476, 53.2 mm SL, Kurio; MUFS 25477, 68.7 mm SL, Kurio; MUFS 25478, 61.9 mm SL, Kurio; MUFS 25479, 53.2 mm SL, Kurio; MUFS 25480, 82.6 mm SL, Kurio; MUFS 25481, 60.1 mm SL, Kurio; MUFS 25565, 53.7 mm SL, Kurio; MUFS 25566, 54.2 mm SL, Kurio; MUFS 25567, 64.7 mm SL, Kurio; MUFS 25568, 66.7 mm SL, Kurio; MUFS 25569, 66.9 mm SL, Kurio; MUFS 25570, 66.6 mm SL, Kurio; NSMT-P 91378, 34 mm SL, Kurio; NSMT-P 91498, 20 specimens, 39–59 mm SL, Kurio; NSMT-P 91500, 60 mm SL, Kurio; NSMT-P 91602, 4 specimens, 13–51 mm SL, Nakakubo.

Ichikawa et al. (1992, as *Girella melanichthys*): Yaku-shima Island. Kuniyasu (1999): Kurio. Yagishita and Nakabo (2000): ZUMT 40460, 105.3 mm SL, Yaku-shima Island; ZUMT 41089, 107.2 mm SL, Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.

Remarks: Although species of the genus *Girella* has often been classified as the family Girellidae, we treat the species as a member of the family Kyphosidae (subfamily Girellinae), following Nelson's (2006) classification.



**Fig. 255.** *Girella leonina* (KAUM-I. 11150, 73.7 mm SL).

***Girella mezina*** Jordan and Starks, 1907

[Jpn name: Okinamejina] (Fig. 256)

BSKU 96668, 96.0 mm SL, Kurio; FRLM 34672, 78.0 mm SL, Kurio; FRLM 34678, 99.3 mm SL, Kurio; FRLM 34679, 94.6 mm SL, Kurio; KAUM-I. 11152, 108.7 mm SL, Kurio; KAUM-I. 20150, 78.2 mm SL, Kurio; KAUM-I. 20161, 62.7 mm SL, Kurio; KAUM-I. 22810, 107.0 mm SL, Kurio; KAUM-I. 22811, 94.6 mm SL, Kurio; KAUM-I. 22812, 119.2 mm SL, Kurio; KAUM-I. 22813, 119.0 mm SL, Kurio; NSMT-P 91496, 82 mm SL, Kurio; NSMT-P 91497, 14 specimens, 37–78 mm SL, Kurio; NSMT-P 95438, 110.2 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Yagishita and Nakabo (2000): ZUMT 39800, 128.8 mm SL, Yaku-shima Island; ZUMT 39801, 153.8 mm SL, Yaku-shima Island. MOSC (2002): Yaku-shima Island.

Fig. 256. *Girella mezina* (KAUM-I. 11152, 108.7 mm SL).***Girella punctata*** Gray, 1835

[Jpn name: Mejina]

Ichikawa et al. (1992): Yaku-shima Island. Yagishita and Nakabo (2000): ZUMT 40461, 70.0 mm SL, Yaku-shima Island. MOSC (2002): Yaku-shima Island.

***Kyphosus bigibbus*** Lacepède, 1801

[Jpn name: Notoisuzumi] (Fig. 257)

KPM-NI 22926, 118.9 mm SL, Koseda.

***Kyphosus cinerascens*** (Forsskål, 1775)

[Jpn name: Tenjikuisaki]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

Fig. 257. *Kyphosus bigibbus* (KPM-NI 22926, 118.9 mm SL).***Kyphosus pacificus*** Sakai and Nakabo, 2004

[Jpn name: Minamiisuzumi]

Ichikawa et al. (1992, as *Kyphosus bigibbus*): Yaku-shima Island. Kuniyasu (1999, as *Kyphosus* sp.): Kurio.

***Kyphosus vaigiensis*** (Quoy and Gaimard, 1825)

[Jpn name: Isuzumi] (Fig. 258)

MUFS 25531, 135.6 mm SL, Yudomari.

Ichikawa et al. (1992, as *Kyphosus lembus*): Yaku-shima Island. Kuniyasu (1999): Kurio.

Fig. 258. *Kyphosus vaigiensis* (MUFS 25531, 135.6 mm SL).***Microcanthus strigatus*** (Cuvier, 1831)

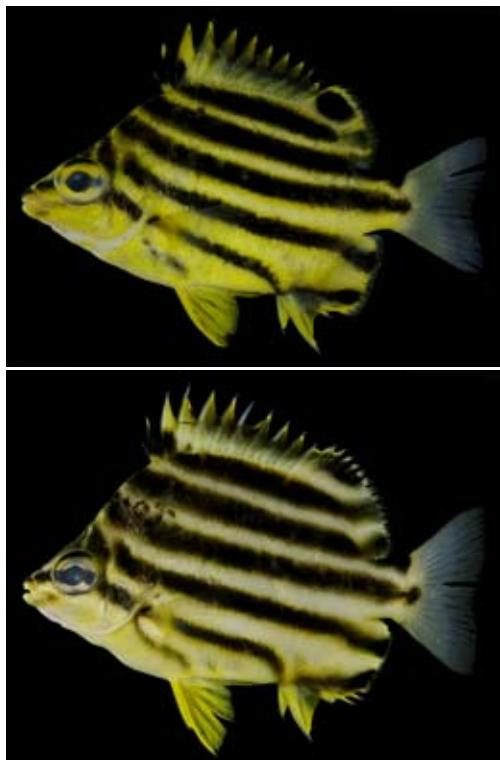
[Jpn name: Kagokakidai] (Fig. 259)

KAUM-I. 11128, 56.2 mm SL, Kurio; KAUM-I. 11154, 51.2 mm SL, Kurio; KAUM-I. 20062, 79.9 mm SL, Yudomari; KAUM-I. 20063, 85.3 mm SL, Yudomari; KAUM-I. 25201, 82.6 mm SL, mouth of Nagata River.

Jordan and Starks (1906): Miyanoura [one specimen (35 mm TL) was reported, but not found

at CAS or USNM]. Arai and Ida (1975): Kusugawa (one specimen was reported, but not found at NSMT). Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo, Kurio.

Remarks: Although this species has often been classified as the family Microcanthidae, we treat the species as a member of the family Kyphosidae (subfamily Microcanthinae), following Nelson's (2006) classification.



**Fig. 259.** *Microcanthus strigatus* (upper: KAUM-I. 11128, 56.2 mm SL; lower: KAUM-I. 25201, 82.6 mm SL).

#### FAMILY CHAETODONTIDAE

***Chaetodon argentatus*** Smith and Radcliffe, 1911  
[Jpn name: Kagamichochou] (Fig. 260)

BSKU 96600, 74.9 mm SL, Kurio.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001):  
Yaku-shima Island.



**Fig. 260.** *Chaetodon argentatus* (BSKU 96600, 74.9 mm SL).

#### ***Chaetodon auriga*** Forsskål, 1775

[Jpn name: Togechochou] (Fig. 261)

KAUM-I. 11199, 139.6 mm SL, Kurio;  
KAUM-I. 11606, 52.9 mm SL, Ambo; KAUM-I.  
11657, 34.9 mm SL, Ambo; KAUM-I. 20031,  
53.8 mm SL, Yudomari; KAUM-I. 20032, 50.6  
mm SL, Yudomari; KAUM-I. 20033, 50.3 mm  
SL, Yudomari; KAUM-I. 20034, 49.0 mm SL,  
Yudomari; KAUM-I. 20036, 60.0 mm SL, Yudo-  
mari; KAUM-I. 20038, 21.9 mm SL, Yudomari;  
KAUM-I. 20282, 65.4 mm SL, Kurio; KAUM-I.  
21852, 21.3 mm SL, Kurio; KAUM-I. 21853,  
23.2 mm SL, Kurio; MUFS 25610, 39.1 mm SL,  
Kurio; NSMT-P 95441, 79.5 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001):  
Yaku-shima Island. MOSC (2002): Yaku-shima  
Island.



**Fig. 261.** *Chaetodon auriga* (KAUM-I. 11199, 139.6 mm SL).

***Chaetodon auripes*** Jordan and Snyder, 1901

[Jpn name: Chochouo] (Fig. 262)

BSKU 96663, 49.9 mm SL, Kurio; BSKU 96664, 51.2 mm SL, Kurio; KAUM-I. 11168, 43.9 mm SL, Kurio; KAUM-I. 11292, 23.2 mm SL, Yudomari; KAUM-I. 11607, 44.6 mm SL, Ambo; KAUM-I. 11608, 42.5 mm SL, Ambo; KAUM-I. 11658, 21.6 mm SL, Ambo; KAUM-I. 11659, 40.8 mm SL, Ambo; KAUM-I. 20035, 44.0 mm SL, Yudomari; KAUM-I. 20037, 46.0 mm SL, Yudomari; KAUM-I. 20283, 59.5 mm SL, Kurio; KAUM-I. 21667, 29.5 mm SL, Kurio; KAUM-I. 21668, 35.7 mm SL, Kurio; KAUM-I. 21669, 30.8 mm SL, Kurio; KAUM-I. 21670, 30.1 mm SL, Kurio; KAUM-I. 21672, 31.2 mm SL, Kurio; KAUM-I. 21673, 51.3 mm SL, Kurio; KAUM-I. 21845, 29.0 mm SL, Kurio; KAUM-I. 21846, 27.9 mm SL, Kurio; KAUM-I. 21847, 28.3 mm SL, Kurio; KAUM-I. 21848, 32.8 mm SL, Kurio; KAUM-I. 21849, 28.0 mm SL, Kurio; KAUM-I. 21850, 22.4 mm SL, Kurio; MUFS 25552, 18.1 mm SL, Yudomari; MUFS 25553, 21.7 mm SL, Yudomari; MUFS 25557, 37.5 mm SL, Yudomari; MUFS 25558, 37.6 mm SL, Yudomari; MUFS 25559, 42.9 mm SL, Yudomari; MUFS 25560, 18.9 mm SL, Yudomari; MUFS 25577, 25.0 mm SL, Kurio; MUFS 25578, 10.8 mm SL, Kurio; MUFS 25579, 24.8 mm SL, Kurio; MUFS 25580, 30.2 mm SL, Kurio; MUFS 25581, 31.8 mm SL, Kurio; MUFS 25582, 33.7 mm SL, Kurio; MUFS 25583, 33.4 mm SL, Kurio; MUFS 25584, 37.9 mm SL, Kurio; MUFS 25585, 38.3 mm SL, Kurio; MUFS 25586, 39.5 mm SL, Kurio; MUFS 25587, 40.0 mm SL, Kurio; MUFS 25588, 37.8 mm SL, Kurio; MUFS 25590, 45.9 mm SL, Kurio; MUFS 25591, 48.2 mm SL, Kurio; MUFS 25592, 47.4 mm SL, Kurio; NSMT-P 77741, 24.8 mm SL, Nagakubo; NSMT-P 77742, 18.1 mm SL, Nagakubo; NSMT-P 77743, 15.3 mm SL, Nagakubo; NSMT-P 91581, 46.0 mm SL, Kurio; NSMT-P 91659, 4 specimens, 22.2–45.2 mm SL, Kurio; NSMT-P 95440, 83.3 mm SL, Haruo.

Arai and Ida (1975, as *Chaetodon collaris*): NSMT-P 17861, 39.2 mm SL, Kusugawa; NSMT-P 58093, 51.5 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



Fig. 262. *Chaetodon auripes* (KAUM-I. 11168, 43.9 mm SL).

***Chaetodon baronessa*** Cuvier, 1829

[Jpn name: Mikadochochouo]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2001): Yaku-shima Island.

***Chaetodon bennetti*** Cuvier, 1831

[Jpn name: Umizukichochouo]

Kuniyasu (1999): Kurio. Matsumoto (2001): Shitoko and Miyanoura.

***Chaetodon citrinellus*** Cuvier, 1831

[Jpn name: Gomachochouo] (Fig. 263)

KAUM-I. 11194, 36.6 mm SL, Kurio; KAUM-I. 11201, 60.6 mm SL, Kurio. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island.

***Chaetodon ephippium*** Cuvier, 1831

[Jpn name: Segurochochouo]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2001): Yaku-shima Island.

***Chaetodon kleinii*** Bloch, 1790

[Jpn name: Mizorechochouo]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island.



**Fig. 263.** *Chaetodon citrinellus* (KAUM-I. 11194, 36.6 mm SL).



**Fig. 264.** *Chaetodon lunula* (KAUM-I. 11169, 42.5 mm SL).

#### *Chaetodon lineolatus* Cuvier, 1831

[Jpn name: Nisefuraichochouo]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001):  
Yaku-shima Island.

#### *Chaetodon lunula* (Lacepède, 1802)

[Jpn name: Chohan] (Fig. 264)

BSKU 96665, 58.4 mm SL, Kurio; BSKU 96666, 63.7 mm SL, Kurio; FRLM 34695, 161.4 mm SL, Kurio; FRLM 34710, 52.3 mm SL, Yudomari; KAUM-I. 11169, 42.5 mm SL, Kurio; KAUM-I. 20030, 44.7 mm SL, Yudomari; KAUM-I. 20284, 67.7 mm SL, Kurio; KAUM-I. 20285, 54.0 mm SL, Kurio; KAUM-I. 21671, 25.1 mm SL, Kurio; KAUM-I. 21844, 47.3 mm SL, Kurio; MUFS 25554, 22.8 mm SL, Yudomari; MUFS 25555, 35.9 mm SL, Yudomari; MUFS 25556, 38.6 mm SL, Yudomari; MUFS 25589, 44.1 mm SL, Kurio; MUFS 25617, 39.2 mm SL, Kurio.

Arai and Ida (1975): NSMT-P 58123, 47.0 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island. MOSC (2002): Yaku-shima Island.

#### *Chaetodon lunulatus* Quoy and Gaimard, 1825

[Jpn name: Misujichochoou] (Fig. 265)

KAUM-I. 20039, 16.9 mm SL, Yudomari;  
KAUM-I. 20078, 34.3 mm SL, Yudomari;  
KAUM-I. 20201, 19.8 mm SL, Yudomari.

Ichikawa et al. (1992, as *Chaetodon trifasciatus*): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2001, as *Chaetodon trifasciatus*): Yaku-shima Island.



**Fig. 265.** *Chaetodon lunulatus* (KAUM-I. 20078, 34.3 mm SL).

#### *Chaetodon melanotus* Bloch and Schneider, 1801

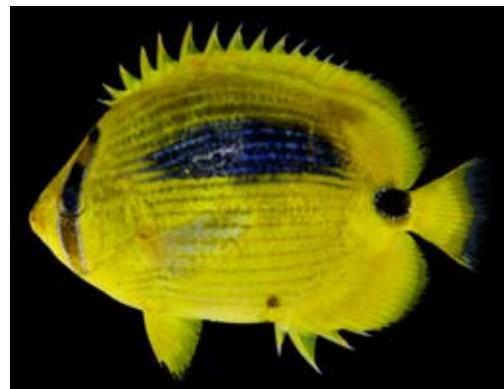
[Jpn name: Akebonochochoou] (Fig. 266)

KAUM-I. 11337, 40.7 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2001): Yaku-shima Island.



**Fig. 266.** *Chaetodon melannotus* (KAUM-I. 11337, 40.7 mm SL).



**Fig. 267.** *Chaetodon plebeius* (KAUM-I. 11335, 122.0 mm SL).

***Chaetodon meyeri*** Bloch and Schneider, 1801

[Jpn name: Ogichochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2001): Kurio, Shitoko and Miyanoura.

***Chaetodon nippon*** Steindachner and Döderlein, 1883

[Jpn name: Shirakodai]

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2001): Yaku-shima Island.

***Chaetodon ornatus*** Cuvier, 1831

[Jpn name: Hanagurochochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001): Kurio and Isso.

***Chaetodon plebeius*** Cuvier, 1831

[Jpn name: Sumitsukitonosamadai] (Fig. 267)

KAUM-I. 11335, 122.0 mm SL, Kurio; NS-MT-P 77580, 132 mm SL, Nagata.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island.

***Chaetodon punctatofasciatus*** Cuvier, 1831

[Jpn name: Shichisenchochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2001): Yaku-shima Island.

***Chaetodon rafflesii*** Bennett, 1830

[Jpn name: Amichochoou] (Fig. 268)

BSKU 96554, 27.2 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2001): Yaku-shima Island.



**Fig. 268.** *Chaetodon rafflesii* (BSKU 96554, 27.2 mm SL).

***Chaetodon reticulatus*** Cuvier, 1831

[Jpn name: Hakutenkatagi]

Matsumoto (2001): Isso.

***Chaetodon speculum*** Cuvier, 1831

[Jpn name: Tonosamadai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2001): Yaku-shima Island.

***Chaetodon trifascialis*** Quoy and Gaimard, 1825

[Jpn name: Yarikatagi]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001):  
 Yaku-shima Island.

***Chaetodon ulietensis*** Cuvier, 1831

[Jpn name: Sudarechochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2001): Yaku-shima Island.

***Chaetodon unimaculatus*** Bloch, 1787

[Jpn name: Ittenchochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001): Ku-  
 rio and Shitoko.

***Chaetodon vagabundus*** Linnaeus, 1758

[Jpn name: Furaichochochouou] (Fig. 269)

KAUM-I. 11160, 27.0 mm SL, Kurio;  
 KAUM-I. 11195, 27.8 mm SL, Kurio; KAUM-I.  
 11604, 82.1 mm SL, Ambo; KAUM-I. 11605,  
 77.7 mm SL, Ambo; KAUM-I. 11660, 36.7  
 mm SL, Ambo; KAUM-I. 11661, 33.5 mm SL,  
 Ambo; KAUM-I. 20025, 63.7 mm SL, Yudomari;  
 KAUM-I. 20026, 51.6 mm SL, Yudomari;  
 KAUM-I. 20027, 57.5 mm SL, Yudomari;  
 KAUM-I. 20028, 66.1 mm SL, Yudomari;  
 KAUM-I. 20029, 40.2 mm SL, Yudomari;  
 KAUM-I. 21851, 28.6 mm SL, Kurio; MUFS  
 25561, 34.2 mm SL, Yudomari; NSMT-P 91586,  
 23 mm SL, Yudomari; NSMT-P 95442, 71.7 mm  
 SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001):  
 Yaku-shima Island.

***Chaetodon wiebeli*** Kaup, 1863

[Jpn name: Tsukichochouou]

Matsumoto (2001): Yaku-shima Island.

***Chaetodon xanthurus*** Bleeker, 1857

[Jpn name: Amimechochouou]

Matsumoto (2001): Yaku-shima Island.



Fig. 269. *Chaetodon vagabundus* (KAUM-I. 11660, 36.7 mm SL).

***Forcipiger flavissimus*** Jordan and McGregor, 1898

[Jpn name: Fueyakkodai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001, as  
*Forcipiger longirostris*): Yaku-shima Island.

***Hemitaurichthys polylepis*** (Bleeker, 1857)

[Jpn name: Kasumichochouou]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2001): Yaku-shima Island.

***Heniochus acuminatus*** (Linnaeus, 1758)

[Jpn name: Hatatatedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2001): Yaku-shima Island.

***Heniochus chrysostomus*** Cuvier, 1831

[Jpn name: Minamihatatatedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001): Ku-  
 rio and Isso.

***Heniochus diphreutes*** Jordan, 1903

[Jpn name: Murehatatatedai]

Kuniyasu (1999): Kurio. Matsumoto (2001):  
 Isso.

***Heniochus monoceros*** Cuvier, 1831

[Jpn name: Onihatatatedai] (Fig. 270)

KAUM-I. 11522, 46.2 mm SL, Ambo;  
 KAUM-I. 21843, 51.1 mm SL, Kurio; KAUM-I. 23523, 41.8 mm SL, Ambo; NSMT-P 77660, 137.0 mm SL, Miyanoura.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001): Kurio.



Fig. 270. *Heniochus monoceros* (upper: KAUM-I. 11522, 46.2 mm SL; lower: NSMT-P 77660, 137.0 mm SL).

***Heniochus singularis*** Smith and Radcliffe, 1911

[Jpn name: Shimahatatatedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2001): Kurio.

***Heniochus varius*** (Cuvier, 1829)

[Jpn name: Tsunohatatatedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2001):  
 Yaku-shima Island.

## FAMILY POMACANTHIDAE

***Apolemichthys trimaculatus*** (Cuvier, 1831)

[Jpn name: Shiten-yakko] (Fig. 271)

NSMT-P 91965, 160.0 mm SL, Isso

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2002):  
 Yaku-shima Island.



Fig. 271. *Apolemichthys trimaculatus* (NSMT-P 91965, 160.0 mm SL).

***Centropyge bicolor*** (Bloch, 1787)

[Jpn name: Somewakeyakko]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2002): Yaku-shima Island.

***Centropyge ferrugata*** Randall and Burgess, 1972

[Jpn name: Akaharayakko] (Fig. 272)

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2002): Yaku-shima Island.

***Centropyge heraldi*** Woods and Schultz, 1953

[Jpn name: Herarudokoganeyakko]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2002): Yaku-shima Island.



**Fig. 272.** *Centropyge ferrugata* (off Isso, 3 m, 4 Mar. 2005, S. Harazaki).



**Fig. 273.** *Centropyge vrolikii* (NSMT-P 58105, 77.3 mm SL, preserved specimen).



**Fig. 274.** *Genicanthus lamarck* (off Isso, 20 m, 19 Jan. 2010, S. Harazaki).

#### *Centropyge tibicen* (Cuvier, 1831)

[Jpn name: Aburayakko]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2002):  
Yaku-shima Island.

#### *Centropyge venusta* (Yasuda and Tominaga, 1969)

[Jpn name: Sumireyakko]

Matsumoto (2002, as *Holacanthus venustus*):  
Yaku-shima Island.

Remarks: The generic name of this species has been confused, having been listed as *Centropyge*, *Holacanthus*, *Paracentropyge*, and *Sumireyakko* in various publications over the last 20 years. We follow Myers' (1999) and Pyle's (2001) generic placement for the species.

#### *Centropyge vrolikii* (Bleeker, 1853)

[Jpn name: Namerayakko] (Fig. 273)

Arai and Ida (1975): NSMT-P 58105, 77.3 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2002, as *Centropyge vrolicki*): Yaku-shima Island.

#### *Genicanthus lamarck* (Lacepède, 1802)

[Jpn name: Tatejimayakko] (Fig. 274)

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2002): Yaku-shima Island.

#### *Genicanthus melanospilos* (Bleeker, 1857)

[Jpn name: Yaitoyakko]

Matsumoto (2002): Yaku-shima Island.

#### *Genicanthus semifasciatus* (Kamohara, 1934)

[Jpn name: Tosayakko]

Matsumoto (2002): Yaku-shima Island.

#### *Genicanthus watanabei* (Yasuda and Tominaga, 1970)

[Jpn name: Hirenagayakko] (Fig. 275)



**Fig. 275.** *Genicanthus watanabei* (off Nagata, 25 m, 15 June 2009, S. Harazaki).

***Pomacanthus imperator* (Bloch, 1787)**

[Jpn name: Tatejimakinchakudai] (Fig. 276)

KAUM-I. 20109, 171.8 mm SL, Yudomari; NSMT-P 77648, 182.9 mm SL, Nagata; NSMT-P 91369, 2 specimens, 13.7–14.2 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2002): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



Fig. 276. *Pomacanthus imperator* (KAUM-I. 20109, 171.8 mm SL).

shima Island. Kuniyasu (1999): Kurio. Matsumoto (2002): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



Fig. 277. *Pomacanthus semicirculatus* (upper: KAUM-I. 11209, 13.6 mm SL; middle: KAUM-I. 11525, 61.5 mm SL; lower: KAUM-I. 11262, 85.1 mm SL).

***Pomacanthus semicirculatus* (Cuvier, 1831)**

[Jpn name: Sazanamiyakko] (Fig. 277)

FRLM 34696, 235.3 mm SL, Kurio; FRLM 34731, 74.8 mm SL, Kurio; KAUM-I. 11131, 13.1 mm SL, Kurio; KAUM-I. 11197, 70.3 mm SL, Kurio; KAUM-I. 11209, 13.6 mm SL, Kurio; KAUM-I. 11262, 85.1 mm SL, Yudomari; KAUM-I. 11295, 47.6 mm SL, Yudomari; KAUM-I. 11525, 61.5 mm SL, Ambo; KAUM-I. 11609, 65.1 mm SL, Ambo; KAUM-I. 20082, 94.7 mm SL, Yudomari; KAUM-I. 20280, 19.4 mm SL, Kurio; KAUM-I. 20281, 88.5 mm SL, Kurio; KAUM-I. 21842, 108.2 mm SL, Kurio; KAUM-I. 21872, 43.4 mm SL, Kurio; KAUM-I. 21873, 22.6 mm SL, Kurio; MUFS 25572, 10.7 mm SL, Kurio; MUFS 25573, 48.1 mm SL, Kurio; MUFS 25574, 67.1 mm SL, Kurio; NSMT-P 77659, 198 mm SL, Miyanoura; NSMT-P 95439, 102.8 mm SL, Haruo.

Arai and Ida (1975): NSMT-P 58129, 33.5 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-

***Pygoplites diacanthus* (Boddaert, 1772)**

[Jpn name: Nishikiyakko]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2002): Yaku-shima Island.

## FAMILY PENTACEROTIDAE

*Eviotias acutirostris* (Temminck and Schlegel, 1844)  
[Jpn name: Tengudai]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY TERAPONTIDAE

*Terapon jarbua* (Forsskål, 1775)  
[Jpn name: Kotohiki] (Fig. 278)

KAUM-I. 11211, 14.1 mm SL, Kurio; KAUM-I. 11489, 45.2 mm SL, mouth of Miyanoura River; KAUM-I. 11500, 27.2 mm SL, mouth of Miyanoura River; KAUM-I. 11501, 25.0 mm SL, mouth of Miyanoura River; KAUM-I. 11781, 5 specimens, 11.5–15.3 mm SL, mouth of Miyanoura River; KAUM-I. 20050, 63.6 mm SL, Yudomari; KAUM-I. 24709, 50.1 mm SL, mouth of Kurio River; KAUM-I. 24710, 42.1 mm SL, Ambo; KPM-NI 24278, 233.7 mm SL, mouth of Miyanoura River; KPM-NI 24307, 69.2 mm SL, mouth of Nagata River; MUFS 25442, 11.8 mm SL, Matsumine; NSMT-P 77637, 91.5 mm SL, Ambo; NSMT-P 77992, 11.8 mm SL, mouth of Ambo River.

Ichikawa et al. (1992): Yaku-shima Island.



Fig. 278. *Terapon jarbua* (KAUM-I. 11489, 45.2 mm SL).

## FAMILY KUHLIIDAE

*Kuhlia marginata* (Cuvier, 1829)  
[Jpn name: Yugoi] (Fig. 279)

KAUM-I. 11541, 32.7 mm SL, Ambo; KAUM-I. 11550, 36.9 mm SL, Ambo; KAUM-I. 11551, 36.6 mm SL, Ambo; KAUM-I. 15415, 70.8 mm SL, Yaku-shima Island; KAUM-I. 15419, 59.4 mm SL, Yaku-shima Island; KAUM-I. 15421, 46.0 mm SL, Yaku-shima Island;

KAUM-I. 15423, 53.2 mm SL, Yaku-shima Island; KAUM-I. 15424, 61.3 mm SL, Yaku-shima Island; KAUM-I. 15426, 47.1 mm SL, Yaku-shima Island; KAUM-I. 15427, 59.9 mm SL, Yaku-shima Island; KAUM-I. 15429, 46.5 mm SL, Yaku-shima Island; KAUM-I. 15430, 50.7 mm SL, Yaku-shima Island; KAUM-I. 15431, 53.5 mm SL, Yaku-shima Island; KAUM-I. 15432, 46.6 mm SL, Yaku-shima Island; KAUM-I. 15433, 44.4 mm SL, Yaku-shima Island; KAUM-I. 15434, 62.6 mm SL, Yaku-shima Island; KAUM-I. 15435, 58.9 mm SL, Yaku-shima Island; KAUM-I. 15438, 46.3 mm SL, Yaku-shima Island; KAUM-I. 15439, 52.3 mm SL, Yaku-shima Island; KAUM-I. 15440, 44.4 mm SL, Yaku-shima Island; KAUM-I. 15446, 48.9 mm SL, Yaku-shima Island; KAUM-I. 15447, 48.8 mm SL, Yaku-shima Island; KAUM-I. 15448, 47.2 mm SL, Yaku-shima Island; KAUM-I. 15449, 47.2 mm SL, Yaku-shima Island; KAUM-I. 15450, 53.2 mm SL, Yaku-shima Island; KAUM-I. 15451, 50.5 mm SL, Yaku-shima Island; KAUM-I. 15452, 49.0 mm SL, Yaku-shima Island; KAUM-I. 15453, 28.3 mm SL, Yaku-shima Island; KAUM-I. 15454, 51.4 mm SL, Yaku-shima Island; KAUM-I. 15455, 46.2 mm SL, Yaku-shima Island; KAUM-I. 15456, 6.1 mm SL, Yaku-shima Island; KAUM-I. 15457, 60.0 mm SL, Yaku-shima Island; KAUM-I. 15459, 53.1 mm SL, Yaku-shima Island; KAUM-I. 15461, 50.2 mm SL, Yaku-shima Island; KAUM-I. 15462, 44.4 mm SL, Yaku-shima Island; KAUM-I. 15465, 44.8 mm SL, Yaku-shima Island; KAUM-I. 15466, 49.5 mm SL, Yaku-shima Island; KAUM-I. 15467, 53.2 mm SL, Yaku-shima Island; KAUM-I. 15468, 44.5 mm SL, Yaku-shima Island; KAUM-I. 15470, 49.1 mm SL, Yaku-shima Island; KAUM-I. 15472, 48.1 mm SL, Yaku-shima Island; KAUM-I. 15582, 57.7 mm SL, Yaku-shima Island; KAUM-I. 15583, 55.4 mm SL, Yaku-shima Island; KAUM-I. 15584, 52.3 mm SL, Yaku-shima Island; KAUM-I. 15586, 57.4 mm SL, Yaku-shima Island; KAUM-I. 15588, 54.9 mm SL, Yaku-shima Island; KAUM-I. 15589, 44.8 mm SL, Yaku-shima Island; KAUM-I. 15591, 55.2 mm SL, Yaku-shima Island; KAUM-I. 15592, 47.0 mm SL, Yaku-shima Island; KAUM-I. 15594,

46.7 mm SL, Yaku-shima Island; KAUM-I. 15595, 53.9 mm SL, Yaku-shima Island; KAUM-I. 15596, 48.5 mm SL, Yaku-shima Island; KAUM-I. 15599, 47.4 mm SL, Yaku-shima Island; KAUM-I. 15600, 44.8 mm SL, Yaku-shima Island; KAUM-I. 15602, 46.6 mm SL, Yaku-shima Island; KAUM-I. 15633, 46.3 mm SL, Yaku-shima Island; KAUM-I. 15645, 45.2 mm SL, Yaku-shima Island; KAUM-I. 15646, 32.5 mm SL, Yaku-shima Island; KAUM-I. 25049, 78.4 mm SL, Ambo River.



**Fig. 279.** *Kuhlia marginata* (KAUM-I. 25049, 78.4 mm SL).

rio; MUFS 25501, 39.6 mm SL, Kurio; MUFS 25502, 43.2 mm SL, Kurio; MUFS 25503, 42.3 mm SL, Kurio; MUFS 25504, 42.1 mm SL, Kurio; MUFS 25505, 41.7 mm SL, Kurio; MUFS 25506, 42.0 mm SL, Kurio; MUFS 25507, 42.4 mm SL, Kurio; MUFS 25508, 43.2 mm SL, Kurio; MUFS 25509, 40.0 mm SL, Kurio; MUFS 25510, 47.8 mm SL, Kurio; MUFS 25511, 49.8 mm SL, Kurio; NSMT-P 91367, 106 mm SL, Yudomari; NSMT-P 91368, 12 specimens, 49–110 mm SL, Yudomari; NSMT-P 91653, 41 mm SL, Kurio; NSMT-P 91654, 25 specimens, 16–44 mm SL, Kurio; NSMT-P 91683, 15 specimens, 16–52 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 280.** *Kuhlia mugil* (KAUM-I. 11166, 65.7 mm SL).

#### *Kuhlia mugil* (Forster, 1801)

[Jpn name: Gin-yugoi] (Fig. 280)

FRLM 34675, 59.5 mm SL, Kurio; KAUM-I. 11116, 19.3 mm SL, Matsumine; KAUM-I. 11117, 18.9 mm SL, Matsumine; KAUM-I. 11166, 65.7 mm SL, Kurio; KAUM-I. 11259, 137.2 mm SL, Yudomari; KAUM-I. 11388, 18.0 mm SL, Kurio; KAUM-I. 21876, 27.6 mm SL, Kurio; MUFS 25435, 17.6 mm SL, Matsumine; MUFS 25482, 46.0 mm SL, Kurio; MUFS 25483, 47.7 mm SL, Kurio; MUFS 25484, 47.4 mm SL, Kurio; MUFS 25485, 45.3 mm SL, Kurio; MUFS 25486, 43.6 mm SL, Kurio; MUFS 25487, 51.7 mm SL, Kurio; MUFS 25488, 42.9 mm SL, Kurio; MUFS 25489, 40.9 mm SL, Kurio; MUFS 25490, 41.9 mm SL, Kurio; MUFS 25491, 47.9 mm SL, Kurio; MUFS 25492, 46.7 mm SL, Kurio; MUFS 25493, 46.7 mm SL, Kurio; MUFS 25494, 42.1 mm SL, Kurio; MUFS 25495, 43.6 mm SL, Kurio; MUFS 25496, 42.7 mm SL, Kurio; MUFS 25497, 44.9 mm SL, Kurio; MUFS 25498, 40.0 mm SL, Kurio; MUFS 25499, 40.7 mm SL, Kurio; MUFS 25500, 47.8 mm SL, Ku-

#### FAMILY OPLEGNATHIDAE

##### *Oplegnathus fasciatus* (Temminck and Schlegel, 1844)

[Jpn name: Ishidai]

Ichikawa et al. (1992): Yaku-shima Island. MOSC (2002): Isso.

##### *Oplegnathus punctatus* (Temminck and Schlegel, 1844)

[Jpn name: Ishigakidai] (Fig. 281)

NSMT-P 77649, 220 mm SL, Nagata; NSMT-P 77650, 310 mm SL, Nagata.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso.

#### FAMILY CIRRHITIDAE

##### *Cirrhitichthys aprinus* (Cuvier, 1829)

[Jpn name: Minamigombe]

Ichikawa et al. (1992): Yaku-shima Island.



Fig. 281. *Oplegnathus punctatus* (NSMT-P 77649, 220 mm SL).



Fig. 283. *Cirrhitichthys pinnulatus* (NSMT-P 95436, 119.4 mm SL, preserved specimen).

*Cirrhilichthys aureus* (Temminck and Schlegel, 1842)  
[Jpn name: Okigombe] (Fig. 282)



Fig. 282. *Cirrhilichthys aureus* (off Ioso, 25 m, 24 June 2005, S. Harazaki).



Fig. 284. *Oxycirrhitichthys typus* (off Nagata, 30 m, 15 June 2009, S. Harazaki).

*Cirrhilichthys falco* Randall, 1963  
[Jpn name: Sarasagombe]  
Kuniyasu (1999): Kurio.

*Cirrhitichthys pinnulatus* (Forster, 1801)  
[Jpn name: Isogombe] (Fig. 283)  
NSMT-P 95436, 119.4 mm SL, Haruo.  
Jordan and Starks (1906, as *Cirrhitichthys marmoratus*): SU 9785, 119.5 mm SL, Yaku-shima Island. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Hayashi (2002): Yaku-shima Island.

Remarks: Jordan and Starks (1906) reported this species as the first record from Japan on the basis of the Yaku-shima specimen.

*Paracirrhitichthys arcatus* (Cuvier, 1829)  
[Jpn name: Meganegombe]  
Ichikawa et al. (1992): Yaku-shima Island.

*Paracirrhitichthys forsteri* (Schneider, 1801)  
[Jpn name: Hoshigombe]  
Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

FAMILY CHEILODACTYLIDAE  
*Goniistius zebra* (Döderlein, 1883)  
[Jpn name: Migimaki] (Fig. 285)  
NSMT-P 77662, 206 mm SL, Miyanoura.  
Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 285.** *Goniistius zebra* (NSMT-P 77662, 206 mm SL).

***Goniistius zonatus*** (Cuvier, 1830)

[Jpn name: Takanohadai] (Fig. 286)

KAUM-I. 11523, 131.2 mm SL, Ambo; KAUM-I. 20067, 111.5 mm SL, Yudomari; KAUM-I. 21841, 128.9 mm SL, Kurio; KAUM-I. 22820, 122.0 mm SL, Kurio; NSMT-P 77652, 288 mm SL, Nagata; NSMT-P 95411, 120.7 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 286.** *Goniistius zonatus* (KAUM-I. 11523, 131.2 mm SL).

**FAMILY POMACENTRIDAE**

***Abudefduf bengalensis*** (Bloch, 1787)

[Jpn name: Tenjikusuzumedai]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Isso.

***Abudefduf notatus*** (Day, 1870)

[Jpn name: Isosuzumedai] (Fig. 287)

FRML 34683, 27.0 mm SL, Kurio; KAUM-I. 11147, 33.1 mm SL, Kurio; KAUM-I. 21770, 21.6 mm SL, Kurio; KAUM-I. 25058, 28.6 mm

SL, Ambo; MUFS 25436, 14 mm SL, Matsumine; NSMT-P 91495, 38 mm SL, Kurio; NSMT-P 91655, 8 specimens, 14–33 mm SL, Kurio; NSMT-P 91679, 27 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Yaku-shima Island.



**Fig. 287.** *Abudefduf notatus* (KAUM-I. 25058, 28.6 mm SL).

***Abudefduf septemfasciatus*** (Cuvier, 1830)

[Jpn name: Shichisensuzumedai] (Fig. 288)

Arai and Ida (1975): NSMT-P 17862, 32.5 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Kurio.



**Fig. 288.** *Abudefduf septemfasciatus* (NSMT-P 17862, 32.5 mm SL, preserved specimen).

***Abudefduf sexfasciatus*** (Lacepède, 1801)

[Jpn name: Rokusensuzumedai] (Fig. 289)

BSKU 96671, 51.0 mm SL, Kurio; BSKU 96672, 47.4 mm SL, Kurio; BSKU 96673, 48.8 mm SL, Kurio; KAUM-I. 11208, 24.4 mm SL, Kurio; KAUM-I. 11222, 13.8 mm SL, Kurio; KAUM-I. 11269, 36.9 mm SL, Yudomari;

KAUM-I. 11602, 50.0 mm SL, Ambo; KAUM-I. 20057, 66.5 mm SL, Yudomari; KAUM-I. 20058, 64.5 mm SL, Yudomari; KAUM-I. 20059, 70.1 mm SL, Yudomari; KAUM-I. 20228, 46.4 mm SL, Kurio; KAUM-I. 21679, 73.4 mm SL, Kurio; KAUM-I. 22808, 5 specimens, 21.8–28.9 mm SL, Kurio; KAUM-I. 23533, 16.1 mm SL, Ambo.

Arai and Ida (1975): Kusugawa [three specimens (49–53 mm TL) were reported, but not found at NSMT]. Ichikawa et al. (1992, as *Abudefduf coelestinus*): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2004b): Isso.



**Fig. 289.** *Abudefduf sexfasciatus* (KAUM-I. 20228, 46.4 mm SL).

#### *Abudefduf sordidus* (Forsskål, 1775)

[Jpn name: Shimasuzumedai] (Fig. 290)

KAUM-I. 11129, 25.5 mm SL, Kurio; KAUM-I. 11130, 27.6 mm SL, Kurio; KAUM-I. 11146, 17.0 mm SL, Kurio; KAUM-I. 11148, 32.3 mm SL, Kurio; KAUM-I. 11151, 77.6 mm SL, Kurio; KAUM-I. 22809, 4 specimens, 18.6–30.0 mm SL, Kurio; KAUM-I. 25064, 20.4 mm SL, Ambo; MUFS 25437, 14.8 mm SL, Matsumine; NSMT-P 77566, 25.5 mm SL, Kurio; NSMT-P 77744, 23.8 mm SL, Nagakubo; NSMT-P 77745, 19.7 mm SL, Nagakubo; NSMT-P 77746, 16.0 mm SL, Nagakubo; NSMT-P 77747, 15.3 mm SL, Nagakubo; NSMT-P 91355, 17 mm SL, Yudomari; NSMT-P 91607, 6 specimens, 14–24 mm SL, Nagakubo; NSMT-P 91658, 16 specimens, 11–20 mm SL, Kurio; NSMT-P 91680, 24 mm SL, Kurio; NSMT-P 95466, 65.5 mm SL, Hirauchi.

Arai and Ida (1975): NSMT-P 17835, 4 specimens, 16.7–22.8 mm SL, Kusugawa (only

a single specimen was listed). Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Miyanoura.



**Fig. 290.** *Abudefduf sordidus* (KAUM-I. 11151, 77.6 mm SL).

#### *Abudefduf vaigiensis* (Quoy and Gaimard, 1825) [Jpn name: Oyabitcha] (Fig. 291)

BSKU 96674, 39.8 mm SL, Kurio; BSKU 96675, 43.5 mm SL, Kurio; BSKU 96676, 44.8 mm SL, Kurio; KAUM-I. 11127, 30.6 mm SL, Kurio; KAUM-I. 11287, 106.9 mm SL, Yudomari; KAUM-I. 20060, 39.5 mm SL, Yudomari; KAUM-I. 20229, 38.7 mm SL, Kurio; KAUM-I. 21680, 35.4 mm SL, Kurio; KAUM-I. 21681, 23.2 mm SL, Kurio; KAUM-I. 21900, 5 specimens, 22.2–36.7 mm SL, Kurio; KAUM-I. 21901, 5 specimens, 23.1–37.7 mm SL, Kurio; KAUM-I. 21902, 5 specimens, 21.2–35.7 mm SL, Kurio; KAUM-I. 21903, 5 specimens, 15.8–34.0 mm SL, Kurio; KAUM-I. 21904, 5 specimens, 22.5–31.5 mm SL, Kurio; KAUM-I. 21905, 5 specimens, 19.7–23.7 mm SL, Kurio; KAUM-I. 21906, 5 specimens, 19.0–28.0 mm SL, Kurio; KAUM-I. 21907, 5 specimens, 22.5–38.4 mm SL, Kurio; KAUM-I. 22805, 5 specimens, 21.5–38.3 mm SL, Kurio; KAUM-I. 22806, 5 specimens, 22.0–27.0 mm SL, Kurio; KAUM-I. 22807, 5 specimens, 21.7–35.1 mm SL, Kurio; KAUM-I. 25056, 17.0 mm SL, Kurio; MUFS 25549, 94.0 mm SL, Yudomari; MUFS 25550, 107.1 mm SL, Yudomari; MUFS 25551, 111.8 mm SL, Yudomari; NSMT-P 17806, 32 specimens, 12.1–38.6

mm SL, Kusugawa; NSMT-P 17841, 2 specimens, 21.3–27.8 mm SL, Kusugawa; NSMT-P 91348, 10 mm SL, Yudomari; NSMT-P 91349, 3 specimens, 16–65 mm SL, Yudomari; NSMT-P 91362, 12 specimens, 95–103 mm SL, Yudomari; NSMT-P 91580, 3 specimens, 18–70 mm SL, Kurio; NSMT-P 91657, 15 specimens, 17–27 mm SL, Kurio; NSMT-P 91681, 98 specimens, 14–35 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2004b): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 291.** *Abudesdus vaigiensis* (KAUM-I. 20229, 38.7 mm SL).

***Amblyglyphidodon aureus*** (Cuvier 1830)  
[Jpn name: Yamabukisuzumedai] (Fig. 292)



**Fig. 292.** *Amblyglyphidodon aureus* (off Isso, 25 m, 17 Aug. 2004, S. Harazaki).

***Amblyglyphidodon curacao*** (Bloch, 1787)

[Jpn name: Kurakaosuzumedai]

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2005): Tsumoi.

***Amblyglyphidodon leucogaster*** (Bleeker, 1847)

[Jpn name: Namisuzumedai] (Fig. 293)

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2005): Isso.



**Fig. 293.** *Amblyglyphidodon leucogaster* (off Isso, 12 m, 4 Mar. 2005, S. Harazaki).

***Amphiprion clarkii*** (Bennett, 1830)

[Jpn name: Kumanomi] (Fig. 294)

FRLM 34705, 72.9 mm SL, Yudomari; KAUM-I. 11457, 36.0 mm SL, Isso; KAUM-I. 11465, 115.6 mm SL, Isso; KAUM-I. 11466, 103.9 mm SL, Isso; KAUM-I. 11617, 53.4 mm SL, Ambo; KAUM-I. 20111, 28.2 mm SL, Yudomari; KAUM-I. 20330, 32.6 mm SL, Isso; KAUM-I. 20340, 88.3 mm SL, Isso.

Arai and Ida (1975): Kusugawa (two specimens were reported, but not found at NSMT). Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2004b): Isso. MOSC (2002): Isso, Ambo and Kurio.

***Amphiprion perideraion*** Bleeker, 1855

[Jpn name: Hanabirakumanomi] (Fig. 295)

Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Miyanoura.



Fig. 294. *Amphiprion clarkii* (FRLM 34705, 72.9 mm SL).



Fig. 295. *Amphiprion periderion* (off Isso, 5 m, 21 June 2004, S. Harazaki).



Fig. 296. *Chromis albicauda* (upper: young, off Isso, 30 m, 26 Dec. 2006, S. Harazaki; lower: adult, off Isso, 20 m, 29 June 2006, S. Harazaki).



Fig. 297. *Chromis analis* (upper: young, off Isso, 25 m, 10 Dec. 2007, S. Harazaki; middle: subadult, off Isso, 30 m, 10 Dec. 2007, S. Harazaki; lower: adult, off Isso, 20 m, 4 July 2007, S. Harazaki).

***Chromis albicauda* Allen and Erdmann, 2009**

[Jpn name: "koganesuzumedai"] (Fig. 296)

Matsumoto (2004b): Yaku-shima Island.

Remarks: "Koganesuzumedai" has long been considered to include two distinct species in Japan. Recently, Allen and Erdmann (2009) described *C. albicauda* as a new species, closely related to *C. analis*, and they included Japan in the distributional range of *C. albicauda*. Matsumoto (2004b) mentioned that the two species occur at Yaku-shima Island.

***Chromis analis* (Cuvier, 1830)**

[Jpn name: "koganesuzumedai"] (Fig. 297)

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2004b): Yaku-shima Island.

Remarks: see account of *C. albicauda*.

***Chromis atripes* Fowler and Bean, 1928**

[Jpn name: HIREGURUSUZUMEDAI] (Fig. 298)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Ku-  
rio.



**Fig. 298.** *Chromis atripes* (off Isso, 18 m, 4 Mar. 2005, S. Harazaki).

***Chromis flavomaculatus*** Kamohara, 1960

[Jpn name: Kihoshisuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Ku-  
rio.

***Chromis lepidolepis*** Bleeker, 1877

[Jpn name: Sasasuzumedai]

Kuniyasu (1999): Kurio. Matsumoto (2004b):  
Isso.

***Chromis leucura*** Gilbert, 1905

[Jpn name: Fukamisuzumedai]

Matsumoto (2004b): Isso.

***Chromis marginifer*** Fowler, 1946

[Jpn name: Shikokusuzumedai] (Fig. 300)

KAUM-I. 20289, 49.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b):  
Tsumoi.



**Fig. 300.** *Chromis marginifer* (KAUM-I. 20289, 49.3 mm SL).



**Fig. 299.** *Chromis delta* (off Isso, 25 m, 4 Mar. 2005, S. Harazaki).

***Chromis notata notata*** (Temminck and Schlegel, 1843)

[Jpn name: Suzumedai]

Matsumoto (2004b): Tsumoi.

***Chromis ovatiformis*** Fowler, 1946

[Jpn name: Marusuzumedai] (Fig. 301)

Matsumoto (2004b, as *Chromis ovatiformes*):  
Shitoko.



**Fig. 301.** *Chromis ovatiformis* (off Isso, 18 m, 4 Mar. 2005, S. Harazaki).



**Fig. 302.** *Chromis retrofasciata* (upper: off Isso, 12 m, 9 Nov. 2008, S. Harazaki; lower: off Isso, 10 m, 5 Oct. 2006, S. Harazaki).



**Fig. 303.** *Chromis ternatensis* (off Isso, 7 m, 4 Mar. 2005, S. Harazaki).

***Chromis ternatensis*** (Bleeker, 1856)  
[Jpn name: Kaburayasuzumedai] (Fig. 303)

Matsumoto (2004b): Isso.

***Chromis vanderbilti*** Fowler, 1941  
[Jpn name: Himesuzumedai]  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Kurio.

***Chromis viridis*** (Cuvier, 1830)  
[Jpn name: Debasuzumedai]  
Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2004b): Shitoko.

***Chromis weberi*** Fowler and Bean, 1928  
[Jpn name: Takasagosuzumedai]  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Kurio.

***Chromis xanthuria*** (Bleeker, 1854)  
[Jpn name: Monsuzumedai] (Fig. 304)  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Kurio.



**Fig. 304.** *Chromis xanthura* (off Isso, 10 m, 25 Feb. 2005, S. Harazaki).

95454, 47.1 mm SL, Haruo.

Ichikawa et al. (1992, as *Chrysiptera leucopoma*): Yaku-shima Island. Kuniyasu (1999, as *Chrysiptera leucopoma*): Kurio. Matsumoto (2005): Shitoko.

Remarks: *Chrysiptera leucopoma* (Cuvier, 1830) was regarded by Allen and Bailey (2002) and Randall (2005) as a junior synonym of *Chrysiptera brownriggii*.



**Fig. 306.** *Chrysiptera brownriggii* (upper: KAUM-I. 11134, 20.9 mm SL; lower: NSMT-P 95454, 47.1 mm SL, preserved specimen).



**Fig. 305.** *Chrysiptera biocellata* (upper: off Isso, 2 m, 26 Feb. 2005, S. Harazaki; lower: NSMT-P 17853, 37.7 mm SL, preserved specimen).



**Chrysiptera brownriggii** (Bennett, 1828)  
[Jpn name: Miyakokisensuzumedai] (Fig. 306)

KAUM-I. 11134, 20.9 mm SL, Kurio;  
KAUM-I. 21778, 13.4 mm SL, Kurio; KAUM-I. 23534, 11.7 mm SL, Ambo; KAUM-I. 23535, 10.1 mm SL, Ambo; KPM-NI 24785, 39.0 mm SL, Kurio; KPM-NI 24786, 58.8 mm SL, Kurio;  
NSMT-P 91663, 11 mm SL, Kurio; NSMT-P

**Chrysiptera caeruleolineata** (Allen, 1973)  
[Jpn name: Aosujisuzumedai] (Fig. 307)



**Fig. 307.** *Chrysiptera caeruleolineata* (off Nagata, 40 m, 5 June 2009, S. Harazaki).

*Chrysiptera cyanea* (Quoy and Gaimard, 1825)

[Jpn name: Rurisuzumedai] (Fig. 308)

KAUM-I. 11192, 33.3 mm SL, Kurio;  
 KAUM-I. 21665, 72.9 mm SL, Kurio; NSMT-P  
 93173, 12.0 mm SL, Kurio.

Arai and Ida (1975, as *Abudefduf assimilis*):  
 Kusugawa [one specimens (48 mm TL) was re-  
 ported, but not found at NSMT]. Ichikawa et al.  
 (1992): Yaku-shima Island. Matsumoto (2005):  
 Miyanoura.



**Fig. 308.** *Chrysiptera cyanea* (KAUM-I. 11192, 33.3 mm SL).

*Chrysiptera glauca* (Cuvier, 1830)

[Jpn name: Nezusuzumedai] (Fig. 309)

KAUM-I. 11136, 15.5 mm SL, Kurio;  
 KAUM-I. 11343, 43.6 mm SL, Kurio; KAUM-I.  
 11770, 18.0 mm SL, Nagakubo; KAUM-I. 21665,  
 72.9 mm SL, Kurio; NSMT-P 91684, 20 mm SL,  
 Kurio.

Arai and Ida (1975): NSMT-P 17843, 2 speci-  
 mens, 34.9–41.3 mm SL, Kusugawa. Ichikawa et  
 al. (1992): Yaku-shima Island. Matsumoto (2005):  
 Yudomari.

*Chrysiptera parasema* (Fowler, 1918)

[Jpn name: Shirikirurisuzumedai]

Ichikawa et al. (1992, as *Chrysiptera hemi-*  
*cyanea*): Yaku-shima Island. Matsumoto (2005):  
 Yaku-shima Island.

*Chrysiptera rex* (Snyder, 1909)

[Jpn name: Remonsuzumedai] (Fig. 310)

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2005): Tsumoi.



**Fig. 309.** *Chrysiptera glauca* (upper: off Isso, 2 m, 16 May 2008, S. Harazaki; middle: KAUM-I. 11136, 15.5 mm SL; lower: KAUM-I. 21665, 72.9 mm SL).



**Fig. 310.** *Chrysiptera rex* (off Isso, 6 m, 4 Mar. 2005, S. Harazaki).

*Chrysiptera starcki* (Allen, 1973)

[Jpn name: Senakirurisuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2005): Senroku.

***Chrysiptera tricincta*** (Allen and Randall, 1974)

[Jpn name: Misujisuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
Matsumoto (2005): Isso.***Chrysiptera unimaculata*** (Cuvier, 1830)

[Jpn name: Ichimonsuzumedai] (Fig. 311)

KAUM-I. 11135, 20.6 mm SL, Kurio;  
 KAUM-I. 11314, 12.5 mm SL, Yudomari;  
 KAUM-I. 20151, 16.5 mm SL, Yudomari;  
 KAUM-I. 20185, 12.4 mm SL, Yudomari;  
 KAUM-I. 20194, 54.5 mm SL, Yudomari;  
 KAUM-I. 21663, 57.4 mm SL, Kurio; KAUM-I.  
 21664, 40.5 mm SL, Kurio; KAUM-I. 25057, 31.6  
 mm SL, Ambo; KPM-NI 22528, 11.7 mm SL, Yu-  
 domari; NSMT-P 91594, 13 mm SL, Nagakubo.

Arai and Ida (1975): NSMT-P 17844, 6 speci-  
 mens, 26.7–42.0 mm SL, Kusugawa. Ichikawa et  
 al. (1992): Yaku-shima Island. Kuniyasu (1999):  
 Kurio. Matsumoto (2005): Isso.

***Dascyllus aruanus*** (Linnaeus, 1758)

[Jpn name: Misujiryukyusuzumedai] (Fig. 312)

BSKU 96556, 16.5 mm SL, Yudomari;  
 KAUM-I. 20104, 32.6 mm SL, Yudomari;  
 KAUM-I. 20203, 17.5 mm SL, Yudomari;  
 KAUM-I. 20204, 14.3 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
 Matsumoto (2004b): Tsumoi.

***Dascyllus reticulatus*** (Richardson, 1846)

[Jpn name: Futasujiryukyusuzumedai] (Fig. 313)

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2004b):  
 Tsumoi.

***Dascyllus trimaculatus*** (Rüppell, 1829)

[Jpn name: Mitsuboshikurosuzumedai] (Fig. 314)

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2004b): Mi-  
 yanoura.

***Neoglyphidodon melas*** (Cuvier, 1830)

[Jpn name: Kurosuzumedai] (Fig. 315)

Ichikawa et al. (1992, as *Paraglyphidodon*  
*melas*): Yaku-shima Island.

Remarks: Adults of this species are very rare  
 at Yaku-shima Island.



Fig. 311. *Chrysiptera unimaculata* (upper: KAUM-I. 11135, 20.6 mm SL; middle: KAUM-I. 25057, 31.6 mm SL; lower: KAUM-I. 21664, 40.5 mm SL).



Fig. 312. *Dascyllus aruanus* (KAUM-I. 20104, 32.6 mm SL).



Fig. 313. *Dascyllus reticulatus* (off Isso, 12 m, 3 Mar. 2005, S. Harazaki).



Fig. 314. *Dascyllus trimaculatus* (off Isso, 15 m, 19 Jan. 2010, S. Harazaki).



Fig. 315. *Neoglyphidodon melas* (off Isso, 5 m, 11 June 2006, S. Harazaki).

***Neoglyphidodon nigroris* (Cuvier, 1830)**

[Jpn name: Hirenagasuzumedai] (Fig. 316)

BSKU 96633, 77.4 mm SL, Isso; BSKU 96543, 39.7 mm SL, Yudomari; KAUM-I. 11274, 68.9 mm SL, Yudomari; KAUM-I. 11282, 79.5 mm SL, Yudomari; KAUM-I. 20113, 31.2 mm SL, Yudomari; KPM-NI 22508, 42.8 mm SL, Yudomari; MUFS 25532, 91.4 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2005): Isso.



Fig. 316. *Neoglyphidodon nigroris* (upper: BSKU 96543, 39.7 mm SL; middle: KAUM-I. 20113, 31.2 mm SL; lower: KPM-NI 22508, 42.8 mm SL).

***Neopomacentrus taeniurus* (Bleeker, 1856)**

[Jpn name: Ribonsuzumedai]

Kuniyasu (1999): Kurio.

*Neopomacentrus cyanomos* (Bleeker, 1856)

[Jpn name: Kuroribonsuzumedai]

Kuniyasu (1999): Kurio.

*Plectroglyphidodon dickii* (Liénard, 1839)

[Jpn name: Ishigakisuzumedai] (Fig. 317)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Ku-  
rio.

Remarks: This species is common at Yaku-shima Island and usually occurs in depths of less than 5 m.



**Fig. 317.** *Plectroglyphidodon dickii* (upper: off Yudomari, 5 m, 9 Nov. 2008, S. Harazaki; middle: off Yudomari, 5 m, 9 Nov. 2008, S. Harazaki; lower: off Nagata, 5 m, 16 Sept. 2004, S. Harazaki).

*Plectroglyphidodon johnstonianus* Fowler and Ball, 1924

[Jpn name: Rurimeishigakisuzumedai] (Fig. 318)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Ku-  
rio.

**Fig. 318.** *Plectroglyphidodon johnstonianus* (off Isso, 7 m, 10 Nov. 2008, S. Harazaki).

*Plectroglyphidodon lacrymatus* (Quoy and Gaimard, 1825)

[Jpn name: Rurihoshisuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2004b): Tsumoi.*Plectroglyphidodon leucozonus* (Bleeker, 1859)

[Jpn name: Hakusensuzumedai] (Fig. 319)

FRLM 34734, 78.6 mm SL, Kurio; KAUM-I. 11144, 81.8 mm SL, Kurio; KAUM-I. 11344, 12.8 mm SL, Kurio; KAUM-I. 11351, 77.3 mm SL, Kurio; KAUM-I. 20226, 54.2 mm SL, Kurio; KAUM-I. 20227, 53.8 mm SL, Kurio; NSMT-P 17850, 30.7 mm SL, Kusugawa; NSMT-P 91504, 78 mm SL, Kurio; NSMT-P 91505, 4 specimens, 57–74 mm SL, Kurio; NSMT-P 95415, 86.9 mm SL, Kurio; NSMT-P 95435, 82.3 mm SL, Haruo; NSMT-P 95458, 48.6 mm SL, Haruo.

Arai and Ida (1975, as *Abudefduf leucozonus*): NSMT-P 58092, 2 specimens, 40.7–45.4 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Matsumoto (2004b): Yaku-shima Island.



Fig. 319. *Plectroglyphidodon leucozonus* (upper: off Isso, 2 m, 26 Feb. 2005, S. Harazaki; lower: KAUM-I. 11144, 81.8 mm SL).

***Pomacentrus alexanderae*** Evermann and Seale, 1907  
[Jpn name: Montsukisuzumedai] (Fig. 320)

Kuniyasu (1999): Kurio.



Fig. 320. *Pomacentrus alexanderae* (off Isso, 18 m, 4 Mar. 2005, S. Harazaki).

***Pomacentrus amboinensis*** Bleeker 1868  
[Jpn name: Nisenettaisuzumedai] (Fig. 321)  
Kuniyasu (1999): Kurio. Matsumoto (2005):  
Tsumoi.



Fig. 321. *Pomacentrus amboinensis* (off Isso, 6 m, 4 Mar. 2005, S. Harazaki).

***Pomacentrus bankanensis*** Bleeker, 1853  
[Jpn name: Meganesuzumedai] (Fig. 322)  
KAUM-I. 20103, 32.6 mm SL, Yudomari;  
KAUM-I. 20202, 26.1 mm SL, Yudomari.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2005): Shi-  
toko.



Fig. 322. *Pomacentrus bankanensis* (upper: off Isso, 5 m, 25 Feb. 2005, S. Harazaki; lower: KAUM-I. 20103, 32.6 mm SL).

***Pomacentrus chrysurus*** Cuvier, 1830

[Jpn name: Ojirosuzumedai] (Fig. 323)

BSKU 96539, 68.5 mm SL, Yudomari;  
 KAUM-I. 11590, 56.0 mm SL, Ambo; KAUM-I.  
 11616, 57.3 mm SL, Ambo; KAUM-I. 20077,  
 56.7 mm SL, Yudomari; KPM-NI 22509, 28.8  
 mm SL, Yudomari.

Matsumoto (2005): Isso.



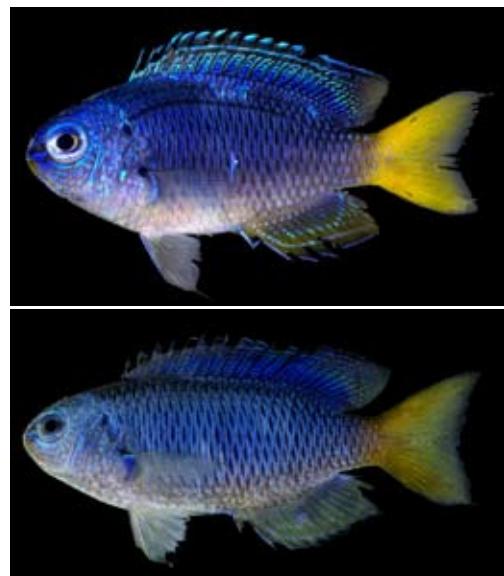
**Fig. 323.** *Pomacentrus chrysurus* (upper: off Isso, 5 m, 3 Mar. 2005, S. Harazaki; middle: KPM-NI 22509, 28.8 mm SL; lower: BSKU 96539, 68.5 mm SL).

***Pomacentrus coelestis*** Jordan and Starks, 1901

[Jpn name: Sorasuzumedai] (Fig. 324)

KAUM-I. 11267, 55.6 mm SL, Yudomari;  
 KAUM-I. 20043, 47.8 mm SL, Yudomari;  
 KAUM-I. 20328, 35.6 mm SL, Isso.

Arai and Ida (1975): NSMT-P 17864, 55.3 mm SL, Kusugawa. Matsumoto (2005): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 324.** *Pomacentrus coelestis* (upper: KAUM-I. 20328, 35.6 mm SL; lower: KAUM-I. 11267, 55.6 mm SL).

***Pomacentrus lepidogenys*** Fowler and Bean, 1928

[Jpn name: Asadosuzumedai] (Fig. 325)

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2005): Tsu-moi.

***Pomacentrus moluccensis*** Bleeker, 1853

[Jpn name: Nettaisuzumedai] (Fig. 326)

Arai and Ida (1975): Kusugawa (one specimen was reported, but not found at NSMT). Kuniyasu (1999): Kurio. Matsumoto (2005): Isso.

***Pomacentrus nagasakiensis*** Tanaka, 1917

[Jpn name: Nagasakisuzumedai] (Fig. 327)

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. Matsumoto (2005): Ku-rio (as *Neoglyphidodon meias*) and Isso.



**Fig. 325.** *Pomacentrus lepidogenys* (off Isso, 6 m, 4 Mar. 2005, S. Harazaki).



**Fig. 326.** *Pomacentrus moluccensis* (off Isso, 7 m, 4 Mar. 2005, S. Harazaki).



**Fig. 327.** *Pomacentrus nagasakiensis* (off Isso, 7 m, 26 Feb. 2005, S. Harazaki).



**Fig. 328.** *Pomacentrus nigromarginatus* (off Isso, 18 m, 4 Mar. 2005, S. Harazaki).

***Pomacentrus philippinus*** Evermann and Seale, 1907  
[Jpn name: Firipinsuzumedai] (Fig. 329)  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Matsumoto (2005): Tsu-moi.



**Fig. 329.** *Pomacentrus philippinus* (off Isso, 7 m, 4 Mar. 2005, S. Harazaki).

***Pomacentrus nigromarginatus*** Allen, 1973  
[Jpn name: Nisemontsukisuzumedai] (Fig. 328)

***Pomacentrus vaiuli*** Jordan and Seale, 1906

[Jpn name: Kuromeganesuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2005): Miyanoura. MOSC (2002): Isso, Ambo and Kurio.



Fig. 331. *Stegastes obreptus* (off Isso, 5 m, 22 Jan. 2010, S. Harazaki).

***Pomacentrus* sp.**

[Jpn name: Minamiisosuzumedai]

Matsumoto (2005): Yoshida.

***Pomachromis richardsoni*** (Snyder, 1909)

[Jpn name: Okinawasuzumedai]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2005): Tsumoi.

***Stegastes altus*** (Okada and Ikeda, 1937)

[Jpn name: Sedakasuzumedai] (Fig. 330)

NSMT-P 95457, 35.6 mm SL, Haruo; NSMT-P 95464, 101.1 mm SL, Hirauchi; NSMT-P 95465, 101.3 mm SL, Hirauchi.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. Matsumoto (2005): Yoshida.



Fig. 330. *Stegastes altus* (NSMT-P 95465, 101.3 mm SL, preserved specimen).

***Stegastes fasciolatus*** (Ogilby, 1889)

[Jpn name: Fuchidorisuzumedai]

Kuniyasu (1999): Kurio.

***Stegastes obreptus*** (Whitley, 1948)

[Jpn name: Aisuzumedai] (Fig. 331)

***Teixeirichthys jordani*** (Rutter, 1897)

[Jpn name: Sujisuzumedai] (Fig. 332)

Remarks: Very rare; only a single individual (Fig. 332) was observed for recent six years at Yaku-shima Island.



Fig. 332. *Teixeirichthys jordani* (off Isso, 20 m, 1 July 2005, S. Harazaki).

## FAMILY LABRIDAE

***Anampsese caeruleopunctatus*** Rüppell, 1829

[Jpn name: Buchisusukibera] (Fig. 333)

KAUM-I. 11205, 24.1 mm SL, Kurio;  
 KAUM-I. 11467, 199.1 mm SL, Isso; NSMT-P 58125, 43.2 mm SL, Kusugawa.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.

Remarks: NSMT-P 58125 (43.2 mm SL) was collected by Arai and Ida's (1975) Yaku-shima survey, but it was not listed in Arai and Ida (1975).

***Anampsese geographicus*** Valenciennes, 1840

[Jpn name: Mushibera]

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.

***Anampsese melanurus*** Bleeker, 1857

[Jpn name: Kurofuchisusukibera]

Ichikawa et al. (1992): Yaku-shima Island.

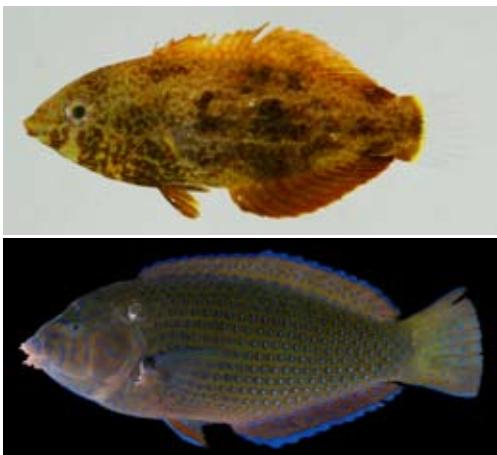


Fig. 333. *Anampsese caeruleopunctatus* (upper: KAUM-I. 11205, 24.1 mm SL; lower: KAUM-I. 11467, 199.1 mm SL).

*Anampsese meleagrides* Valenciennes, 1840

[Jpn name: Hokutobera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 334. *Anampsese neoguinaicus* (off Isso, 15 m, 12 June 2004, S. Harazaki).

*Anampsese neoguinaicus* Bleeker, 1878

× *Anampsese twistii* Bleeker, 1856

[Jpn name: None] (Fig. 335)

Remarks: A hybrid individual; many individuals have been observed at Yaku-shima Island.

*Anampsese twistii* Bleeker, 1856

[Jpn name: Hoshisukibera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 335. *Anampsese neoguinaicus* × *A. twistii* (off Isso, 15 m, 8 Sept. 2006, S. Harazaki).

*Bodianus anthioides* (Bennett, 1832)

[Jpn name: Hiodoshibera] (Fig. 336)



Fig. 336. *Bodianus anthioides* (off Isso, 20 m, 11 Oct. 2005, S. Harazaki).

*Bodianus axillaris* (Bennett, 1832)

[Jpn name: Sumitsukibera] (Fig. 337)

Arai and Ida (1975): NSMT-P 58108, 38.3 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 337. *Bodianus axillaris* (NSMT-P 58108, 38.3 mm SL, preserved specimen).

***Bodianus bilunulatus*** (Lacepède, 1801)

[Jpn name: Kitsunebera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Bodianus bimaculatus*** Allen, 1973

[Jpn name: Futahoshikitsunebera] (Fig. 338)

Fig. 338. *Bodianus bimaculatus* (off Isso, 30 m, 28 May 2009, S. Harazaki).***Bodianus diana*** (Lacepède, 1801)

[Jpn name: Montsukibera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Bodianus loxozonus*** (Snyder, 1908)

[Jpn name: Hiregurobera]

Ichikawa et al. (1992, as *Bodianus hirsutus*):  
Yaku-shima Island.***Bodianus mesothorax*** (Bloch and Schneider, 1801)

[Jpn name: Kesagakebera] (Fig. 339)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.Remarks: Common in depths of 10–15 m at  
Yaku-shima Island.Fig. 339. *Bodianus mesothorax* (off Isso, 15 m, 17 Jan. 2010, S. Harazaki).***Bodianus oxycephalus*** (Bleeker, 1862)

[Jpn name: Kitsunedai]

Ichikawa et al. (1992): Yaku-shima Island.

***Bodianus perditio*** (Quoy and Gaimard, 1834)

[Jpn name: Takibera]

Ichikawa et al. (1992): Yaku-shima Island.

***Cheilinus chlorurus*** (Bloch, 1791)

[Jpn name: Akatemmochinou] (Fig. 340)

KPM-NI 22526, 16.0 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.Remarks: *C. chlorurus* is similar to *C. trilobatus* at juvenile stages. The former may be distinguished from the latter by having numerous small white spots on the anteroventral surface of the body.Fig. 340. *Cheilinus chlorurus* (KPM-NI 22526, 16.0 mm SL).***Cheilinus trilobatus*** Lacepède, 1801

[Jpn name: Mitsubamochinou] (Fig. 341)

BSKU 96551, 34.4 mm SL, Yudomari;  
KAUM-I. 20086, 55.1 mm SL, Yudomari;  
KAUM-I. 20197, 36.3 mm SL, Yudomari;  
KAUM-I. 20327, 28.9 mm SL, Isso.Fig. 341. *Cheilinus trilobatus* (KAUM-I. 20086, 55.1 mm SL).***Cheilinus undulatus*** Rüppell, 1835

[Jpn name: Meganemochinou]

Ichikawa et al. (1992): Yaku-shima Island.

**Cheilio inermis** (Forsskål, 1775)

[Jpn name: Kamasubera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

**Choerodon fasciatus** (Günther, 1867)

[Jpn name: Shichisembera]

Ichikawa et al. (1992, as *Lienardella fasciata*):  
Yaku-shima Island.

**Choerodon jordani** (Snyder, 1908)

[Jpn name: Kurakakebera] (Fig. 342)



Fig. 342. *Choerodon jordani* (off Isso, 12 m, 11 Sept. 2009, S. Harazaki).

**Cirrhilabrus exquisitus** Smith, 1957

[Jpn name: Nishikiitohikibera]

Kuniyasu (1999): Kurio.

**Cirrhilabrus katherinae** Randall, 1992

[Jpn name: Goishiitohikibera] (Fig. 343)



Fig. 343. *Cirrhilabrus katherinae* (off Isso, 15 m, 27 Aug. 2007, S. Harazaki).

**Cirrhilabrus katoi** Senou and Hirata, 2000

[Jpn name: Kurenaaitohikibera] (Fig. 344)



Fig. 344. *Cirrhilabrus katoi* (off Isso, 35 m, 15 Apr. 2005, S. Harazaki).

**Cirrhilabrus lyukyuensis** Ishikawa 1904

[Jpn name: Kuroheriitohikibera]

Ichikawa et al. (1992, as *Cirrhilabrus cyanopleura*): Yaku-shima Island. Kuniyasu (1999, as *Cirrhilabrus cyanopleura*): Kurio.

Remarks: Allen et al. (2008) provisionally regarded *C. lyukyuensis* as a valid species, rather than a junior synonym of *C. cyanopleura* (Bleeker, 1851).

**Cirrhilabrus lunatus** Randall and Masuda, 1991

[Jpn name: Tsukinowaitohikibera] (Fig. 345)



Fig. 345. *Cirrhilabrus lunatus* (off Isso, 35 m, 13 Dec. 2006, S. Harazaki).

**Cirrhilabrus melanomarginatus** Randall and Shen, 1978

[Jpn name: Tomoshibiitohikibera] (Fig. 346)

Kuniyasu (1999, as *Cirrhilabrus lanceolatus*): Kurio.

Remarks: Kuniyasu's (1999: photo 4-middle) *Cirrhilabrus lanceolatus* Randall and Masuda, 1991 (Yariitohikibera) is herein re-identified as *Cirrhilabrus melanomarginatus*.



**Fig. 346.** *Cirrhilabrus melanomarginatus* (off Isso, 5 m, 22 July 2004, S. Harazaki).



**Fig. 348.** *Cirrhilabrus temminckii* (upper and lower: off Isso, 25 m, 22 Dec. 2006, S. Harazaki).

***Cirrhilabrus rubrimarginatus*** Randall, 1992  
[Jpn name: Benihireitohikibera] (Fig. 347)



**Fig. 347.** *Cirrhilabrus rubrimarginatus* (off Isso, 35 m, 21 Dec. 2004, S. Harazaki).



**Fig. 349.** *Cirrhilabrus* sp. 1 (upper: off Isso, 35 m, 9 Aug. 2004, S. Harazaki; lower: off Isso, 35 m, 10 Sept. 2007, S. Harazaki).

***Cirrhilabrus temminckii*** Bleeker, 1853  
[Jpn name: Itohikibera] (Fig. 348)

***Cirrhilabrus* sp. 1**  
[Jpn name: None] (Fig. 349)

Remarks: This species is undescribed. Common in depths of deeper than 30 m at Yaku-shima Island.

***Cirrhilabrus* sp. 2**  
[Jpn name: None] (Fig. 350)

Remarks: This species is similar to *C. katherinae*, but differs from the latter in having a blue stripe along the lateral line (often disappearing with condition). Currently known only from the Ryukyu Islands and Yaku-shima Island.

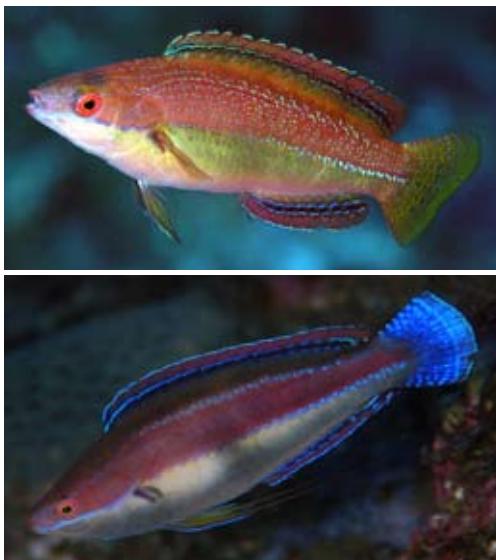


Fig. 350. *Cirrhitichthys* sp. 2 (upper and lower: off Isso, 25 m, 22 Dec. 2006, S. Harazaki).

***Coris batuensis*** (Bleeker, 1856–57)

[Jpn name: Shichisemmusumebera]

Kuniyasu (1999, as *Coris variegata*): Kurio.

***Coris dorsomacula*** Fowler, 1908

[Jpn name: Sujibera]

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.

***Coris gaimard*** (Quoy and Gaimard, 1824)

[Jpn name: Tsuyubera] (Fig. 352)

KAUM-I. 20304, 13.7 mm SL, Kurio;

KAUM-I. 25204, 214.5 mm SL, Nagata.

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.



Fig. 352. *Coris gaimard* (upper: KAUM-I. 20304, 13.7 mm SL; lower: KAUM-I. 25204, 214.5 mm SL).



Fig. 351. *Coris aygula* (upper: KAUM-I. 11591, 112.6 mm SL; lower: NSMT-P 77653, 290 mm SL).

***Epibulus insidiator*** (Pallas, 1770)

[Jpn name: Gichibera] (Fig. 353)



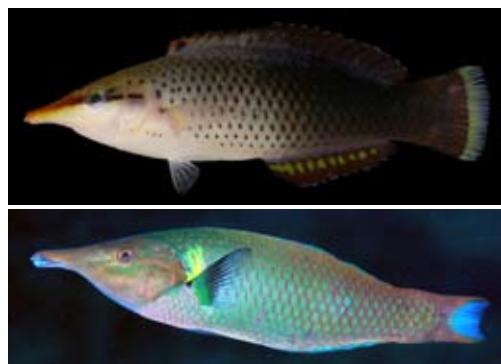
Fig. 353. *Epibulus insidiator* (off Isso, 15 m, 24 June 2009, S. Harazaki).

***Gomphosus varius*** Lacepède, 1801

[Jpn name: Kugibera] (Fig. 354)

KAUM-I. 11587, 73.8 mm SL, Ambo; NSMT-P 95445, 70.7 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.

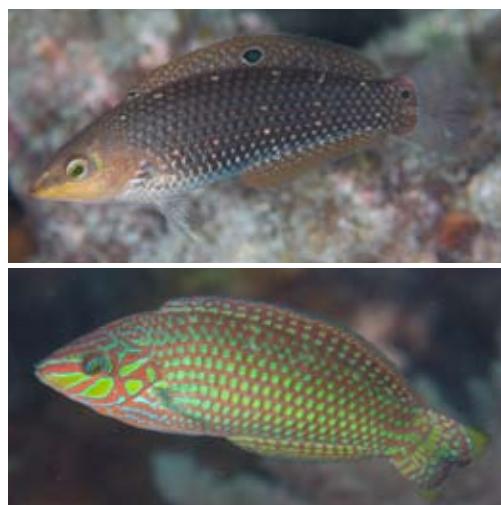


**Fig. 354.** *Gomphosus varius* (upper: KAUM-I. 11587, 73.8 mm SL; lower: off Isso, 6 m, 22 Jan. 2010, S. Harazaki).

***Halichoeres argus*** (Bloch and Schneider, 1801)

[Jpn name: Kumadorikyusen] (Fig. 355)

Remarks: Common in depths of less than 3 m at Yaku-shima Island, but no specimens have been collected from the island.



**Fig. 355.** *Halichoeres argus* (upper: female, off Isso, 3 m, 4 Oct. 2007, S. Harazaki; lower: male, same data as upper image).

***Halichoeres biocellatus*** Schultz, 1960

[Jpn name: Nishikikyusen]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Halichoeres chrysus*** Randall, 1981

[Jpn name: Koganekyusen]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Halichoeres hortulanus*** (Lacepède, 1801)

[Jpn name: Tokarabera] (Fig. 356)

BSKU 96609, 33.1 mm SL, Kurio; KAUM-I. 11308, 32.6 mm SL, Yudomari; KAUM-I. 21771, 22.4 mm SL, Kurio; NSMT-P 77991, 14.1 mm SL, Kurio; NSMT-P 95467, 58.5 mm SL, Hirauchi.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 356.** *Halichoeres hortulanus* (BSKU 96609, 33.1 mm SL).

***Halichoeres margaritaceus*** (Valenciennes, 1839)

[Jpn name: Akanijibera] (Fig. 357)

KPM-NI 24797, 13.8 mm SL, Kurio.

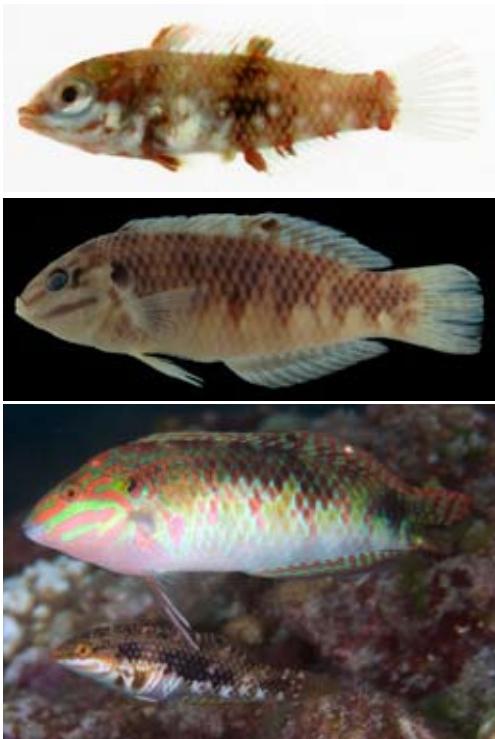
Arai and Ida (1975): NSMT-P 58095, 77.1 mm SL, Kusugawa; NSMT-P 58096, 48.6 mm SL, Kusugawa. Kuniyasu (1999): Kurio.

***Halichoeres marginatus*** Rüppell, 1835

[Jpn name: Kanokobera] (Fig. 358)

KAUM-I. 11384, 17.8 mm SL, Kurio; KAUM-I. 21742, 24.9 mm SL, Kurio; KAUM-I. 21743, 21.5 mm SL, Kurio; KPM-NI 24905, 13.6 mm SL, Kurio.

Arai and Ida (1975, as *Halichoeres notopsis*, Hakusembera): NSMT-P 58098, 37.7 mm SL, Kusugawa; NSMT-P 58126, 42.2 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 357.** *Halichoeres margaritaceus* (upper: KPM-NI 24797, 13.8 mm SL; middle: NSMT-P 58095, 77.1 mm SL, preserved specimen; lower: male and female just before spawning, off Isso, 4 m, 21 Apr. 2009, S. Harazaki).



**Fig. 358.** *Halichoeres marginatus* (KAUM-I. 11384, 17.8 mm SL).



**Fig. 359.** *Halichoeres melanochir* (NSMT-P 91661, 14 mm SL, preserved specimen).



**Fig. 360.** *Halichoeres melanurus* (KPM-NI 22501, 77.4 mm SL).

***Halichoeres nebulosus* (Valenciennes, 1839)**

[Jpn name: Inazumabera] (Fig. 361)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 361.** *Halichoeres nebulosus* (male and female just before spawning, off Isso, 4 m, 21 Apr. 2009, S. Harazaki).

***Halichoeres melanochir* Fowler and Bean, 1928**

[Jpn name: Munatembera] (Fig. 359)

NSMT-P 91661, 14.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Halichoeres melanurus* (Bleeker, 1851)**

[Jpn name: Kazarikyusen] (Fig. 360)

KPM-NI 22501, 77.4 mm SL, Yudomari.

***Halichoeres orientalis* Randall, 1999**

[Jpn name: Tsukibera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Halichoeres prosopeion* (Bleeker, 1853)**

[Jpn name: Munatemberadamashi] (Fig. 362)

Kuniyasu (1999): Kurio.

Remarks: Relatively rare at Yaku-shima Island.



**Fig. 362.** *Halichoeres prosopeion* (off Isso, 10 m, 6 July 2006, S. Harazaki).

***Hemigymnus melapterus* (Bloch, 1791)**

[Jpn name: Tarekuchibera] (Fig. 364)

BSKU 96580, 12.2 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 364.** *Hemigymnus melapterus* (BSKU 96580, 12.2 mm SL).

***Halichoeres richmondi* Fowler and Bean, 1928**

[Jpn name: Goshikikyusen]

Kuniyasu (1999): Kurio.

***Halichoeres scapularis* (Bennett, 1831)**

[Jpn name: Seitembera]

Ichikawa et al. (1992): Yaku-shima Island.

***Halichoeres trimaculatus* (Quoy and Gaimard, 1834)**

[Jpn name: Mitsuboshikyusen] (Fig. 363)

KAUM-I. 11138, 125.3 mm SL, Kurio; KAUM-I. 11597, 138.9 mm SL, Ambo; KAUM-I. 11614, 115.0 mm SL, Ambo; KAUM-I. 11615, 106.3 mm SL, Ambo.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 363.** *Halichoeres trimaculatus* (KAUM-I. 11138, 125.3 mm SL).

***Hologymnosus annulatus* (Lacepède, 1801)**

[Jpn name: Namerabera] (Fig. 365)

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.



**Fig. 365.** *Hologymnosus annulatus* (upper: off Isso, 5 m, 20 Jan. 2010, S. Harazaki; lower: off Isso, 15 m, 5 Nov. 2004, S. Harazaki).

***Hemigymnus fasciatus* (Bloch, 1792)**

[Jpn name: Shimatarekuchibera]

Arai and Ida (1975): Kusugawa [one specimen (33 mm SL) was reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Hologymnosus doliatus* (Lacepède, 1801)**

[Jpn name: Shirotasukibera]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Hologymnosus rhodonotus*** Randall and Yamakawa, 1988  
[Jpn name: Ayatasukibera] (Fig. 366)



Fig. 366. *Hologymnosus rhodonotus* (off Isso, 35 m, 3 Mar. 2005, S. Harazaki).

***Iniistius aneitensis*** (Günther, 1862)  
[Jpn name: Hagehirabera] (Fig. 367)



Fig. 367. *Iniistius aneitensis* (off Isso, 25 m, 6 Sept. 2006, S. Harazaki).

***Iniistius pavo*** (Valenciennes, 1840)  
[Jpn name: Hoshitensu] (Fig. 368)

BSKU 96611, 21.5 mm SL, Kurio; NSMT-P 95405, 135.3 mm SL, Yaku-shima Island; NSMT-P 95406, 125.3 mm SL, Yaku-shima Island.

Ichikawa et al. (1992, as *Xyrichtys pavo*):  
Yaku-shima Island.

Remarks: Randall and Earle (2002) allocated  
this species to *Iniistius* from *Xyrichtys*.

***Iniistius pentadactylus*** (Linnaeus, 1758)  
[Jpn name: Hirabera]

Ichikawa et al. (1992, as *Xyrichtys pentadactylus*): Yaku-shima Island.

Remarks: Randall et al. (2002) considered this  
species to belong to *Iniistius*.



Fig. 368. *Iniistius pavo* (BSKU 96611, 21.5 mm SL).

***Iniistius twistii*** (Bleeker, 1856)

[Jpn name: Hinomarutensu] (Fig. 369)

NSMT-P 95402, 145.5 mm SL, Yaku-shima  
Island; NSMT-P 95403, 3 specimens, 126.6–  
126.7 mm SL, Yaku-shima Island; NSMT-P  
95404, 174.4 mm SL, Yaku-shima Island.

Ichikawa et al. (1992, as *Xyrichtys twistii*):  
Yaku-shima Island.

Remarks: Randall et al. (2002) considered this  
species to belong to *Iniistius*.



Fig. 369. *Iniistius twistii* (NSMT-P 95402, 145.5 mm SL).

***Iniistius sp.***

[Jpn name: None] (Fig. 370)

NSMT-P 95407, 149.4 mm SL, Yaku-shima  
Island; NSMT-P 95408, 2 specimens, 138.3–  
139.1 mm SL, Yaku-shima Island.

Remarks: These specimens are similar to  
*Iniistius celebicus* (Bleeker, 1856) in coloration.  
However, the former has small scales widely cov-  
ering from the mouth to behind the eye, whereas *I.  
celebicus* has a few scales only just below the eye.  
These Yaku-shima specimens probably represent  
an undescribed species.



**Fig. 370.** *Iniistius* sp. (NSMT-P 95407, 149.4 mm SL).



**Fig. 372.** *Labroides dimidiatus* (upper: KAUM-I. 11458, 26.7 mm SL; lower: KAUM-I. 11193, 54.7 mm SL).

***Labroides bicolor*** Fowler and Bean, 1928

[Jpn name: Somewakebera] (Fig. 371)

BSKU 96651, 10.1 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 371.** *Labroides bicolor* (BSKU 96651, 10.1 mm SL).



**Fig. 373.** *Labropsis manabei* (upper: off Isso, 10 m, 12 June 2006, S. Harazaki; lower: off Isso, 12 m, 20 Jan. 2010, S. Harazaki).



**Fig. 374.** *Macropharyngodon meleagris* (NSMT-P 58111, 43.3 mm SL, preserved specimen).

***Labropsis manabei*** Schmidt, 1931

[Jpn name: Manabebera] (Fig. 373)

***Macropharyngodon meleagris*** (Valenciennes, 1839)

[Jpn name: Nodogurobera] (Fig. 374)

Arai and Ida (1975, as *Macropharyngodon pardalis*, Goishibera): NSMT-P 17837, 31.9 mm SL, Kusugawa; NSMT-P 58111, 43.3 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.

Arai and Ida (1975, as *Macropharyngodon pardalis*, Goishibera): NSMT-P 17837, 31.9 mm SL, Kusugawa; NSMT-P 58111, 43.3 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Macropharyngodon moyeri*** Shepard and Meyer, 1978  
[Jpn name: Usubanodogurobera] (Fig. 375)

Remarks: This species occurs in depths of 10–15 m at Yaku-shima Island.



Fig. 375. *Macropharyngodon moyeri* (off Yoshida, 15 m, 8 June 2006, S. Harazaki).

***Macropharyngodon negrosensis*** Herre, 1932  
[Jpn name: Sejironodogurobera]  
Kuniyasu (1999): Kurio.

***Novaculichthys taeniurus*** (Lacepède, 1801)  
[Jpn name: Obitensumodoki]  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Oxycheilinus bimaculatus*** (Valenciennes, 1840)  
[Jpn name: Takobera] (Fig. 376)  
FRLM 34707, 92.0 mm SL, Yudomari;  
KAUM-I. 11256, 98.0 mm SL, Yudomari;  
KAUM-I. 11257, 97.0 mm SL, Yudomari;  
KAUM-I. 20061, 53.4 mm SL, Yudomari; MUFS  
25548, 101 mm SL, Yudomari.

Ichikawa et al. (1992, as *Cheilinus bimaculatus*): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 376. *Oxycheilinus bimaculatus* (KAUM-I. 11256, 98.0 mm SL).

***Oxycheilinus digrammus*** (Lacepède, 1801)  
[Jpn name: Hohosujimochinou]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Oxycheilinus unifasciatus*** (Steets, 1877)  
[Jpn name: Hitosujimochinou] (Fig. 377)  
KAUM-I. 25206, 188.0 mm SL, Onoaida.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 377. *Oxycheilinus unifasciatus* (KAUM-I. 25206, 188.0 mm SL).

***Paracheilinus carpenteri*** Randall and Lubbock, 1981  
[Jpn name: Kujakubera] (Fig. 378)



Fig. 378. *Paracheilinus carpenteri* (off Isso, 30 m, 5 July 2006, S. Harazaki).

***Pseudocheilinus evanidus*** Jordan and Evermann, 1903  
[Jpn name: Himenisemochinou]

Ichikawa et al. (1992): Yaku-shima Island.

***Pseudocheilinus hexataenia* (Bleeker, 1857)**

[Jpn name: Nisemochinou]

Arai and Ida (1975): Kusugawa [one specimen (23 mm TL) was reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 380. *Pseudojuloides mesostigma* (off Nagata, 45 m, 19 Nov. 2009, S. Harazaki).

***Pseudocheilinus octotaenia* Jenkins, 1901**

[Jpn name: Yasujinisechinou]

Ichikawa et al. (1992): Yaku-shima Island.

***Pseudocoris philippina* (Fowler and Bean 1928)**

[Jpn name: Shiratakibera] (Fig. 379)



Fig. 379. *Pseudocoris philippina* (off Isso, 35 m, 26 Apr. 2004, S. Harazaki).

***Pseudocoris yamashiroi* (Schmidt, 1930)**

[Jpn name: Yamashirobera]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Pseudodax moluccanus* (Valenciennes, 1840)**

[Jpn name: Budaibera]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Pseudojuloides mesostigma* Randal and Randall, 1981**

[Jpn name: Sumitsukiogurobera] (Fig. 380)

***Pseudojuloides severnsi* Bellwood and Randall, 2000**

[Jpn name: Aosuijogurobera] (Fig. 381)

Remarks: Common in deeper than 30 m at Yaku-shima Island.



Fig. 381. *Pseudojuloides severnsi* (upper: off Isso, 35 m, 4 Mar. 2005, S. Harazaki; lower: off Isso, 35 m, 3 Mar. 2005, S. Harazaki).

***Pseudolabrus sieboldi* Mabuchi and Nakabo, 1997**

[Jpn name: Hoshisasanohabera] (Fig. 382)

KAUM-I. 11370, 59.0 mm SL, Kurio; KAUM-I. 21775, 54.9 mm SL, Kurio.

Kuniyasu (1999, as *Pseudolabrus japonicus*): Kurio.

Remarks: Kuniyasu's (1999) *Pseudolabrus japonicus* is probably *P. sieboldi*, rather than *P. eoethinus* (Richardson, 1846).

***Pteragogus enneacanthus* (Bleeker, 1853)**

[Jpn name: None] (Fig. 383)

Remarks: A common Japanese species, *Pteragogus aurigarius* (Richardson, 1845), is replaced with *P. enneacanthus* at Yaku-shima Island. Although the latter is common in depths of 5–10 m at Yaku-shima Island, no specimens have been collected.



**Fig. 382.** *Pseudolabrus sieboldi* (KAUM-I. 21775, 54.9 mm SL).



**Fig. 383.** *Pteragogus enneacanthus* (off Isso, 10 m, 3 June 2005, S. Harazaki).

***Stethojulis bandanensis* (Bleeker, 1851)**

[Jpn name: Akaobibera] (Fig. 384)

KAUM-I. 11156, 29.1 mm SL, Kurio; KAUM-I. 11307, 45.1 mm SL, Yudomari; KAUM-I. 21796, 30.2 mm SL, Kurio; KPM-NI 24792, 17.1 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 384.** *Stethojulis bandanensis* (KAUM-I. 11307, 45.1 mm SL).

***Stethojulis strigiventer* (Bennett, 1833)**

[Jpn name: Harasujibera] (Fig. 385)

KAUM-I. 11155, 37.9 mm SL, Kurio; KAUM-I. 11311, 33.9 mm SL, Yudomari; KAUM-I. 11322, 56.8 mm SL, Nagakubo;

KAUM-I. 11539, 15.0 mm SL, Ambo; KAUM-I. 11540, 16.2 mm SL, Ambo; KAUM-I. 20089, 77.2 mm SL, Yudomari; KAUM-I. 20114, 34.9 mm SL, Yudomari; KAUM-I. 20123, 75.4 mm SL, Yudomari; KAUM-I. 20124, 66.0 mm SL, Yudomari; KAUM-I. 20125, 87.0 mm SL, Yudomari; KAUM-I. 20198, 33.4 mm SL, Yudomari; KAUM-I. 21747, 22.6 mm SL, Kurio; KAUM-I. 21749, 18.0 mm SL, Kurio; KAUM-I. 21750, 11.9 mm SL, Kurio.

Arai and Ida (1975, as *Stethojulis interrupta*, Kaminaribera): NSMT-P 17807, 5 specimens, 33.9–40.8 mm SL, Kusugawa; NSMT-P 58097, 47.4 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 385.** *Stethojulis strigiventer* (upper: KAUM-I. 20114, 34.9 mm SL; lower: KAUM-I. 11322, 56.8 mm SL).

***Stethojulis terina* Jordan and Snyder, 1902**

[Jpn name: Kaminaribera] (Fig. 386)

KAUM-I. 20105, 64.0 mm SL, Yudomari; KAUM-I. 20273, 53.6 mm SL, Kurio; KAUM-I. 21797, 29.7 mm SL, Kurio.

Arai and Ida (1975, as *Stethojulis interrupta*): NSMT-P 58132, 56.5 mm SL, Kusugawa. Ichikawa et al. (1992, as *Stethojulis interrupta terina*): Yaku-shima Island. Kuniyasu (1999, as *Stethojulis interrupta terina*): Kurio.

***Stethojulis trilineata* (Bloch and Schneider, 1801)**

[Jpn name: Onibera] (Fig. 387)

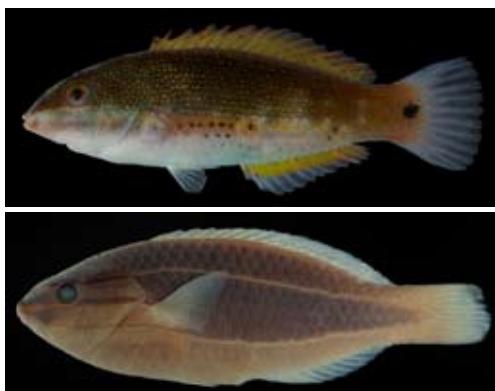
FRLM 34737, 49.7 mm SL, Kurio; KAUM-I. 11158, 36.0 mm SL, Kurio; KAUM-I. 11382,



**Fig. 386.** *Stethojulis terina* (upper: KAUM-I. 20273, 53.6 mm SL; lower: KAUM-I. 20105, 64.0 mm SL).

29.0 mm SL, Kurio; KAUM-I. 11393, 21.3 mm SL, Kurio; KAUM-I. 11396, 23.2 mm SL, Kurio; KAUM-I. 21746, 24.0 mm SL, Kurio; KAUM-I. 21793, 39.7 mm SL, Kurio; NSMT-P 91662, 26 mm SL, Kurio; NSMT-P 91676, 2 specimens, 19–23 mm SL, Kurio.

Arai and Ida (1975, as *Stethojulis interrupta*, Kaminaribera): NSMT-P 17805, 15 specimens, 22.1–67.7 mm SL, Kusugawa; NSMT-P 58099, 44.1 mm SL, Kusugawa; NSMT-P 58136, 108.3 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 387.** *Stethojulis trilineata* (upper: KAUM-I. 11158, 36.0 mm SL; lower: NSMT-P 58136, 108.3 mm SL, preserved specimen).

### *Terelabrus* sp.

[Jpn name: None] (Fig. 388)

Remarks: The photographed individual can be distinguished from *Terelabrus* sp. reported from Hachijo-jima Island (Senou et al., 2002) and Izu-oshima Island (Senou et al., 2006b) and *Terelabrus rubrovittatus* Randall and Fourmanoir, 1998 by having a yellow stripe between red stripes on the lateral surface of the body (vs. yellow stripe absent in the latter two species). Photographed individuals taken off Kume-jima Island, Japan, and Bali, Indonesia (deposited at KPM Fish Image Database) are identified here as the same species with the Yaku-shima Island individual. The species is common around 60 m at Yaku-shima Island.



**Fig. 388.** *Terelabrus* sp. (off Nagata, 60 m, 28 Nov. 2009, S. Harazaki).

### *Thalassoma amblycephalum* (Bleeker, 1856)

[Jpn name: Kogashirabera] (Fig. 389)

KAUM-I. 20265, 18.5 mm SL, Kurio; KAUM-I. 20266, 23.9 mm SL, Kurio; KAUM-I. 20275, 21.7 mm SL, Kurio; KAUM-I. 21736, 22.4 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 389.** *Thalassoma amblycephalum* (KAUM-I. 20275, 21.7 mm SL).

### *Suezichthys gracilis* (Steindachner and Döderlein, 1887)

[Jpn name: Itobera]

Kuniyasu (1999): Kurio.

***Thalassoma cupido*** (Temminck and Schlegel, 1845)

[Jpn name: Nishikibera] (Fig. 390)

BSKU 96662, 104.4 mm SL, Kurio; KAUM-I. 11142, 96.0 mm SL, Kurio; KAUM-I. 11394, 23.4 mm SL, Kurio; KAUM-I. 11619, 42.4 mm SL, Ambo; KAUM-I. 20121, 97.3 mm SL, Yudomari; KAUM-I. 20122, 105.6 mm SL, Yudomari; KAUM-I. 20231, 77.4 mm SL, Kurio; KAUM-I. 20232, 66.1 mm SL, Kurio; KAUM-I. 20233, 57.4 mm SL, Kurio; KAUM-I. 21692, 51.7 mm SL, Kurio; KAUM-I. 21693, 38.8 mm SL, Kurio; KAUM-I. 21694, 28.2 mm SL, Kurio; KAUM-I. 21884, 50.0 mm SL, Kurio; KAUM-I. 21885, 54.0 mm SL, Kurio; KAUM-I. 21886, 58.0 mm SL, Kurio; KAUM-I. 21887, 54.9 mm SL, Kurio; KAUM-I. 21888, 52.0 mm SL, Kurio; KAUM-I. 21889, 52.6 mm SL, Kurio; KAUM-I. 21890, 51.2 mm SL, Kurio; KAUM-I. 21891, 47.4 mm SL, Kurio; KAUM-I. 21892, 10 specimens, 25.2–36.6 mm SL, Kurio; KAUM-I. 21893, 10 specimens, 29.8–39.5 mm SL, Kurio; KAUM-I. 21894, 5 specimens, 39.5–45.4 mm SL, Kurio; KAUM-I. 21895, 5 specimens, 40.9–44.9 mm SL, Kurio; KAUM-I. 21896, 5 specimens, 40.4–47.6 mm SL, Kurio; KAUM-I. 21897, 4 specimens, 45.3–54.3 mm SL, Kurio; KAUM-I. 21898, 5 specimens, 43.6–52.3 mm SL, Kurio; KAUM-I. 21899, 68.8 mm SL, Kurio; MUFS 25433, 46.1 mm SL, Matsumine; NSMT-P 91360, 119 mm SL, Yudomari; NSMT-P 91361, 105 mm SL, Yudomari; NSMT-P 91506, 20 specimens, 28–93 mm SL, Kurio; NSMT-P 91582, 5 specimens, 39–65 mm SL, Kurio; NSMT-P 91590, 10 specimens, 47–94 mm SL, Yudomari; NSMT-P 91660, 12 specimens, 33–58 mm SL, Kurio; NSMT-P 91678, 16 specimens, 28–63 mm SL, Kurio; NSMT-P 95468, 98.6 mm SL, Hirauchi.

Jordan and Starks (1906): USNM 53536, 46 specimens, 16.1–118.4 mm SL, Miyanoura. Arai and Ida (1975): NSMT-P 17809, 19 specimens, 35.4–118.9 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.

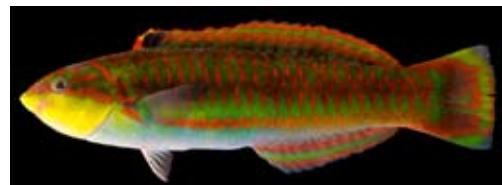


Fig. 390. *Thalassoma cupido* (KAUM-I. 11142, 96.0 mm SL).

***Thalassoma hardwicke*** (Bennett, 1830)

[Jpn name: Senasujibera] (Fig. 391)

BSKU 96681, 32.5 mm SL, Kurio; FRLM 34739, 41.0 mm SL, Kurio; KAUM-I. 11204, 30.6 mm SL, Kurio; KAUM-I. 11309, 32.0 mm SL, Yudomari; KAUM-I. 11381, 32.3 mm SL, Kurio; KAUM-I. 11385, 14.2 mm SL, Kurio; KAUM-I. 20272, 47.6 mm SL, Kurio; NSMT-P 91507, 27 mm SL, Kurio; NSMT-P 91508, 2 specimens, 17–18 mm SL, Kurio; NSMT-P 91509, 20 mm SL, Kurio; NSMT-P 91677, 4 specimens, 22–35 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 391. *Thalassoma hardwicke* (KAUM-I. 20272, 47.6 mm SL).

***Thalassoma jansenii*** (Bleeker, 1856)

[Jpn name: Yansennishikibera]

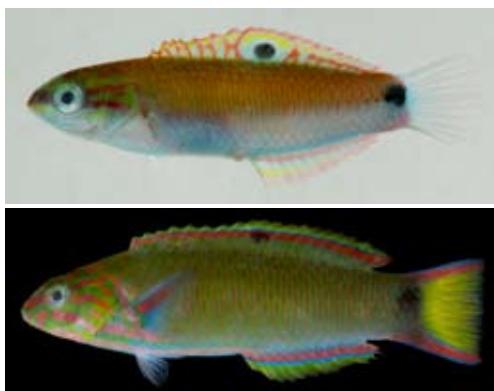
Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Thalassoma lunare*** (Linnaeus, 1758)

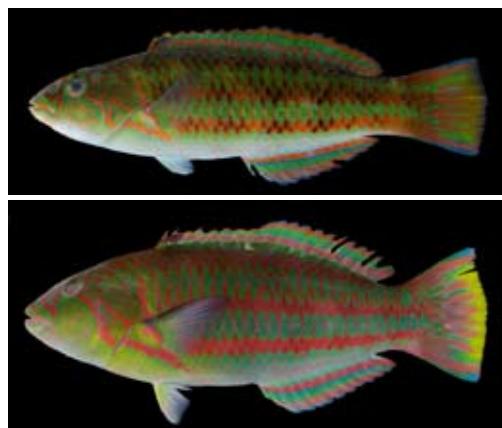
[Jpn name: Otomebera] (Fig. 392)

KAUM-I. 11206, 22.4 mm SL, Kurio; KAUM-I. 11585, 70.0 mm SL, Ambo.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 392.** *Thalassoma lunare* (upper: KAUM-I. 11206, 22.4 mm SL; lower: KAUM-I. 11585, 70.0 mm SL).



**Fig. 394.** *Thalassoma purpureum* (upper: KAUM-I. 11260, 90.8 mm SL; lower: KAUM-I. 25231, 197.0 mm SL).

#### *Thalassoma lutescens* (Lay and Bennett, 1839)

[Jpn name: Yamabukibera] (Fig. 393)

Arai and Ida (1975): Kusugawa [one specimens (86 mm SL) was reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 393.** *Thalassoma lutescens* (off Isso, 15 m, 20 Jan. 2010, S. Harazaki).

#### *Thalassoma purpureum* (Forsskål, 1775)

[Jpn name: Kinubera] (Fig. 394)

KAUM-I. 11260, 90.8 mm SL, Yudomari; KAUM-I. 21748, 18.8 mm SL, Kurio; KAUM-I. 21795, 32.7 mm SL, Kurio; KAUM-I. 25223, 210.1 mm SL, Onoaida; KAUM-I. 25231, 197.0 mm SL, Isso; KPM-NI 24671, 147.1 mm SL, Onoaida; KPM-NI 24672, 195.2 mm SL, Onoaida; NSMT-P 17836, 29.0 mm SL, Kusugawa.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

#### *Thalassoma quinquevittatum* (Lay and Bennett, 1839)

[Jpn name: Hakobera]

Kuniyasu (1999): Kurio.

#### *Thalassoma trilobatum* (Lacepède, 1801)

[Jpn name: Ryugubera]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

#### FAMILY SCARIDAE

##### *Calotomus carolinus* (Valenciennes, 1840)

[Jpn name: Taiwambudai]

Arai and Ida (1975, as *Cryptotomus spinidens*): Kusugawa [one specimen (118 mm TL) was reported, but not found at NSMT]. Kuniyasu (1999): Kurio.

##### *Calotomus japonicus* (Valenciennes, 1840)

[Jpn name: Budai] (Fig. 395)

NSMT-P 77657, 250.0 mm SL, Miyanoura.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.

##### *Cetoscarus bicolor* (Rüppell, 1829)

[Jpn name: Irobudai]

Ichikawa et al. (1992, as *Bolbometopon bicolor*): Yaku-shima Island. Kuniyasu (1999): Kurio.



Fig. 395. *Calotomus japonicus* (NSMT-P 77657, 250.0 mm SL).

***Chlorurus bowersi*** (Snyder, 1909)

[Jpn name: Omonhagebudai]

Kuniyasu (1999): Kurio.

***Chlorurus frontalis*** (Valenciennes, 1840)

[Jpn name: Onihagebudai] (Fig. 396)

FRLM 34714, 339.7 mm SL, Yudomari.

Ichikawa et al. (1992, as *Scarus frontalis*):  
Yaku-shima Island.



Fig. 396. *Chlorurus frontalis* (FRLM 34714, 339.7 mm SL).

***Chlorurus japanensis*** (Bloch, 1789)

[Jpn name: Shijukara] (Fig. 397)

FRLM 34718, 267.1 mm SL, Yudomari.

Ichikawa et al. (1992, as *Scarus pyrrhurus*):  
Yaku-shima Island.



Fig. 397. *Chlorurus japanensis* (FRLM 34718, 267.1 mm SL).

***Chlorurus microrhinos*** (Bleeker, 1854)

[Jpn name: Nan-yobudai]

Ichikawa et al. (1992, as *Scarus gibbus*):  
Yaku-shima Island. Kuniyasu (1999): Kurio.

***Chlorurus sordidus*** (Forsskål, 1775)

[Jpn name: Hagebudai]

Ichikawa et al. (1992, as *Scarus sordidus*):  
Yaku-shima Island. Kuniyasu (1999): Kurio.

***Scarus chameleon*** Choat and Randall, 1986

[Jpn name: Kamereombudai] (Fig. 398)



Fig. 398. *Scarus chameleon* (off Isso, 6 m, 14 Feb. 2010, S. Harazaki).

***Scarus dimidiatus*** Bleeker, 1859

[Jpn name: Kawaribudai] (Fig. 399)



Fig. 399. *Scarus dimidiatus* (off Isso, 8 m, 6 Nov. 2007, S. Harazaki).

***Scarus festivus*** Valenciennes, 1840

[Jpn name: Tsukinowabudai]

Ichikawa et al. (1992): Yaku-shima Island.

***Scarus forsteni*** (Bleeker, 1861)

[Jpn name: Ichimonjibudai] (Fig. 400)

FRLM 34715, 328.2 mm SL, Yudomari;  
FRLM 34716, 331.5 mm SL, Yudomari; NSMT-P  
77655, 247 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Isso,  
Ambo and Kurio.



**Fig. 400.** *Scarus forsteni* (upper: FRLM 34715, 328.2 mm SL; lower: FRLM 34716, 331.5 mm SL).

***Scarus ghobban*** Forsskål, 1775

[Jpn name: Hibudai] (Fig. 403)

KAUM-I. 20056, 100.0 mm SL, Yudomari; KAUM-I. 20065, 122.9 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 403.** *Scarus ghobban* (KAUM-I. 20056, 100.0 mm SL).

***Scarus frenatus*** Lacepède, 1802

[Jpn name: Amimebudai] (Fig. 401)

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 401.** *Scarus frenatus* (off Isso, 10 m, 18 Jan. 2010, S. Harazaki).

***Scarus hypselopterus*** Bleeker, 1853

[Jpn name: Kibirebudai]

Kuniyasu (1999): Kurio.

***Scarus niger*** Forsskål, 1775

[Jpn name: Buchibudai] (Fig. 404)

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 404.** *Scarus niger* (off Isso, 6 m, 22 Jan. 2010, S. Harazaki).

***Scarus fuscocaudalis*** Randall and Myers, 2000

[Jpn name: Ogurobudai] (Fig. 402)



**Fig. 402.** *Scarus fuscocaudalis* (off Isso, 15 m, 15 Mar. 2006, S. Harazaki).

***Scarus ovifrons*** Temminck and Schlegel, 1846

[Jpn name: Aobudai] (Fig. 405)

KAUM-I. 11137, 134.7 mm SL, Kurio; KAUM-I. 11149, 31.6 mm SL, Kurio; KAUM-I. 11153, 16.4 mm SL, Kurio; KAUM-I. 11264, 23.9 mm SL, Yudomari; KAUM-I. 11265, 43.1 mm SL, Yudomari; KAUM-I. 11297, 40.9 mm SL, Yudomari; KAUM-I. 11310, 28.4 mm SL, Yudomari; NSMT-P 91365, 33.0 mm SL, Yudo-

mari; NSMT-P 95430, 89.9 mm SL, Haruo.  
Ichikawa et al. (1992): Yaku-shima Island.



Fig. 405. *Scarus ovifrons* (upper: KAUM-I. 11265, 43.1 mm SL; lower: KAUM-I. 11137, 134.7 mm SL).

***Scarus prasiognathos* Valenciennes, 1840**

[Jpn name: Nishikibudai] (Fig. 406)

KAUM-I. 11327, 26.7 mm SL, Nagakubo;  
NSMT-P 91510, 25 mm SL, Kurio; NSMT-P  
95429, 89.7 mm SL, Haruo.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Scarus psittacus* Forsskål, 1775**

[Jpn name: Oumubudai] (Fig. 407)

KAUM-I. 11464, 126.4 mm SL, Isso.

***Scarus quoyi* Valenciennes, 1840**

[Jpn name: Remombudai]

Kuniyasu (1999): Kurio.

***Scarus rivulatus* Valenciennes, 1840**

[Jpn name: Sujibudai] (Fig. 408)

NSMT-P 77656, 340.0 mm SL, Miyanoura.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Scarus rubroviolaceus* Bleeker, 1847**

[Jpn name: Nagabudai]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

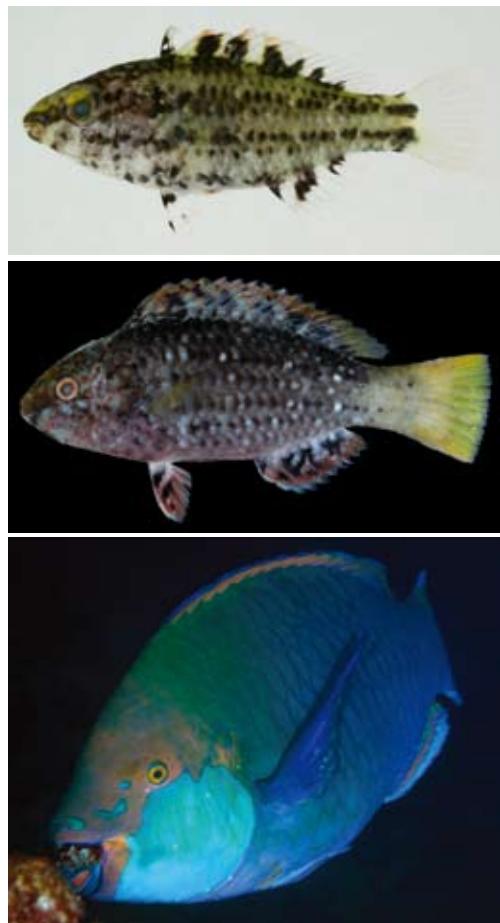


Fig. 406. *Scarus prasiognathos* (upper: KAUM-I. 11327, 26.7 mm SL; middle: NSMT-P 95429, 89.7 mm SL; lower: off Isso, 6 m, 15 Feb. 2010, S. Harazaki).

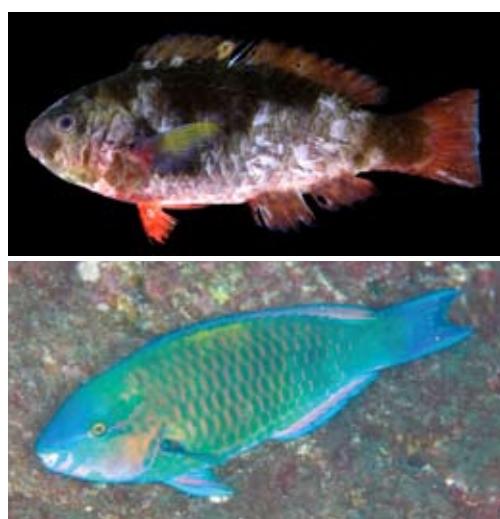


Fig. 407. *Scarus psittacus* (upper: KAUM-I. 11464, 126.4 mm SL; lower: off Isso, 8 m, 14 Feb. 2010, S. Harazaki).



**Fig. 408.** *Scarus rivulatus* (NSMT-P 77656, 340.0 mm SL).

***Scarus schlegeli* (Bleeker, 1861)**

[Jpn name: Obibudai] (Fig. 409)

FRLM 34717, 256.3 mm SL, Yudomari; KAUM-I. 20092, 40.3 mm SL, Yudomari; NSMT-P 77641, 263 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 409.** *Scarus schlegeli* (upper: KAUM-I. 20092, 40.3 mm SL; middle: FRLM 34717, 256.3 mm SL; lower: NSMT-P 77641, 263 mm SL).

**FAMILY CHAMPSODONTIDAE**

***Champsodon* sp.**

[Jpn name: Wanigisu-zoku]

Jordan and Starks (1906, as *Champsodon vorax*): A single specimen, its whereabouts unknown, Miyanoura.

Remarks: Jordan and Starks (1906) reported *Champsodon vorax* Günther, 1867 on the basis of a single specimen, but *C. vorax* has never been recorded from Japanese waters and the specimen's whereabouts is unknown. Thus we treat it as *Champsodon* sp.

**FAMILY PINGUIPEDIDAE**

***Parapercis clathrata* Ogilby, 1910**

[Jpn name: Yotsumetoragisu] (Fig. 410)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 410.** *Parapercis clathrata* (off Isso, 10 m, 13 Feb. 2010, S. Harazaki).

***Parapercis cylindrica* (Bloch, 1792)**

[Jpn name: Dandaratoragisu] (Fig. 411)

BSKU 96550, 62.7 mm SL, Yudomari; BSKU 96567, 99.7 mm SL, Yudomari; KAUM-I. 20052, 114.4 mm SL, Yudomari; KAUM-I. 20088, 97.2 mm SL, Yudomari; KAUM-I. 21695, 46.5 mm SL, Kurio; KPM-NI 22541, 72.4 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 411.** *Parapercis cylindrica* (BSKU 96550, 62.7 mm SL).

***Parapercis kamoharai*** Schultz, 1966

[Jpn name: Kamoharatoragisu]

Kuniyasu (1999): Kurio.

***Parapercis millepunctata*** (Günther, 1860)

[Jpn name: Wanuketoragisu] (Fig. 412)

KAUM-I. 11468, 145.1 mm SL, Isso.

Ichikawa et al. (1992, as *Parapercis cephalopunctata*): Yaku-shima Island.

Remarks: *Parapercis cephalopunctata* (Seale, 1901) is a junior synonym of *Parapercis millepunctata* (see Randall, 2005).



**Fig. 412.** *Parapercis millepunctata* (KAUM-I. 11468, 145.1 mm SL).



**Fig. 414.** *Parapercis natator* (off Isso, 35 m, 23 Aug. 2004, S. Harazaki; upper and lower, male and female respectively).

***Parapercis multiplicata*** Randall, 1984

[Jpn name: Sangotoragisu] (Fig. 413)



**Fig. 413.** *Parapercis multiplicata* (off Isso, 15 m, 1 Oct. 2004, S. Harazaki).

***Parapercis pacifica*** Imamura and Yoshino, 2007

[Jpn name: Ogurotoragisu] (Fig. 415)

Ichikawa et al. (1992, as *Parapercis polyophthalma*): Yaku-shima Island. Kuniyasu (1999): Kurio. Motomura and Sakurai (2008): Isso.

Remarks: Imamura and Yoshino (2007) regarded that *Parapercis polyophthalma* (Cuvier, 1829) is a junior synonym of an Indian Ocean species, *Parapercis hexophthalma* (Cuvier, 1829).



**Fig. 415.** *Parapercis pacifica* (off Isso; from Motomura and Sakurai, 2008).

***Parapercis natator*** Randall, Senou and Yoshino, 2008

[Jpn name: Oyogitoragisu] (Fig. 414)

Randall et al. (2008): KPM-NR 88527, Yaku-shima Island; KPM-NR 88528, Yaku-shima Island.

***Parapercis schauinslandii*** (Steindachner, 1900)

[Jpn name: Hawaitoragisu] (Fig. 416)



**Fig. 416.** *Parapercis schauinslandii* (off Isso, 30 m, 13 Apr. 2005, S. Harazaki).

***Parapercis snyderi*** Jordan and Starks, 1905

[Jpn name: Koraitoragisu] (Fig. 417)



**Fig. 417.** *Parapercis snyderi* (off Isso, 30 m, 18 Oct. 2005, S. Harazaki).

***Parapercis tetracantha*** (Lacepède, 1801)

[Jpn name: Madaratoragisu] (Fig. 418)

KAUM-I. 20286, 71.0 mm SL, Kurio;  
KAUM-I. 25202, 136.2 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 418.** *Parapercis tetracantha* (upper: KAUM-I. 20286, 71.0 mm SL; lower: KAUM-I. 25202, 136.2 mm SL).

FAMILY TRICHONOTIDAE

***Trichonotus* sp.**

[Jpn name: Beragimpo] (Fig. 419)

BSKU 96645, 44.9 mm SL, Isso; BSKU 96646, 108.4 mm SL, Isso; BSKU 96647, 43.8 mm SL, Isso; BSKU 96648, 30.0 mm SL, Isso; KAUM-I. 20380, 86.5 mm SL, Isso; KAUM-I. 20381, 95.5 mm SL, Isso; KAUM-I. 20382, 127.6 mm SL, Isso; KPM-NI 22584, 87.9 mm SL, Isso.

Ichikawa et al. (1992, as *Trichonotus setigerus*): Yaku-shima Island. Kuniyasu (1999, as *Trichonotus setiger*): Kurio.

Remarks: This species currently identified as *Trichonotus setiger* by many authors has been studied by E. Katayama of Kochi University, Japan.



**Fig. 419.** *Trichonotus* sp. (upper: KAUM-I. 20382, male, 127.6 mm SL; lower: KAUM-I. 20381, female, 95.5 mm SL).

FAMILY CREEDIIDAE

***Limnichthys fasciatus*** Waite, 1904

[Jpn name: Tobigimpo] (Fig. 420)

KPM-NI 22548, 40.7 mm SL, Kurio.

Kuniyasu (1999): Kurio.



**Fig. 420.** *Limnichthys fasciatus* (KPM-NI 22548, 40.7 mm SL).

***Limnichthys orientalis*** Yoshino, Kon and Okabe, 1999  
[Jpn name: Sangotobigimpo] (Fig. 421)

BSKU 96616, 22.3 mm SL, Kurio; KAUM-I. 20312, 14.4 mm SL, Kurio.

Remarks: This species was originally described from the Yaeyama Islands and Kuchierabu Island. No specimens have been recorded from Japanese waters since the original description.



Fig. 421. *Limnichthys orientalis* (BSKU 96616, 22.3 mm SL).

#### FAMILY URANOSCOPIIDAE

***Uranoscopus bicinctus*** Temminck and Schlegel, 1843  
[Jpn name: Meganeuo] (Fig. 422)



Fig. 422. *Uranoscopus bicinctus* (off Isso, 25 m, 3 June 2006, S. Harazaki).

#### FAMILY TRIPTYGYIIDAE

***Enneapterygius bahasa*** Fricke, 1997  
[Jpn name: Gomafuhebigimpo] (Fig. 423)

NSMT-P 95450, 30.9 mm SL, Haruo.

Kuniyasu (1999, as *Enneapterygius hemimelas*): Kurio.

Remarks: “Gomafuhebigimpo” has long been treated as *E. hemimelas* by Japanese authors (e.g., Hayashi, 2002). Shimojyo and Hayashi (2000) and Motomura et al. (2005) reidentified the Japanese *E. hemimelas* as *E. bahasa*.



Fig. 423. *Enneapterygius bahasa* (NSMT-P 95450, 30.9 mm SL, preserved specimen).

***Enneapterygius ethostoma*** (Jordan and Snyder, 1902)  
[Jpn name: Hebigimpo] (Fig. 424)

BSKU 96582, 25.1 mm SL, Yudomari; BSKU 96688, 31.2 mm SL, Kurio; BSKU 96689, 31.6 mm SL, Kurio; BSKU 96883, 23.4 mm SL, Kurio; BSKU 96884, 24.0 mm SL, Kurio; BSKU 96885, 24.9 mm SL, Kurio; BSKU 96886, 21.7 mm SL, Kurio; KAUM-I. 3071, 27.3 mm SL, Isso; KAUM-I. 3074, 41.5 mm SL, Hirauchi; KAUM-I. 3075, 39.7 mm SL, Hirauchi; KAUM-I. 3076, 42.8 mm SL, Hirauchi; KAUM-I. 3077, 40.1 mm SL, Hirauchi; KAUM-I. 11115, 29.6 mm SL, Matsumine; KAUM-I. 11230, 40.4 mm SL, Kurio; KAUM-I. 11231, 44.3 mm SL, Kurio; KAUM-I. 11232, 29.4 mm SL, Kurio; KAUM-I. 11233, 27.9 mm SL, Kurio; KAUM-I. 11234, 29.1 mm SL, Kurio; KAUM-I. 11235, 25.4 mm SL, Kurio; KAUM-I. 11236, 32.4 mm SL, Kurio; KAUM-I. 11237, 26.4 mm SL, Kurio; KAUM-I. 11238, 28.7 mm SL, Kurio; KAUM-I. 11239, 26.6 mm SL, Kurio; KAUM-I. 11315, 25.8 mm SL, Yudomari; KAUM-I. 11316, 17.4 mm SL, Yudomari; KAUM-I. 11317, 24.5 mm SL, Yudomari; KAUM-I. 11526, 23.2 mm SL, Ambo; KAUM-I. 11527, 24.9 mm SL, Ambo; KAUM-I. 11528, 16.8 mm SL, Ambo; KAUM-I. 11538, 21.0 mm SL, Ambo; KAUM-I. 11572, 21.4 mm SL, Ambo; KAUM-I. 11573, 22.6 mm SL, Ambo; KAUM-I. 11574, 21.6 mm SL, Ambo; KAUM-I. 11575, 22.1 mm SL, Ambo; KAUM-I. 11576, 24.2 mm SL, Ambo; KAUM-I. 11728, 42.7 mm SL, Kurio; KAUM-I. 11729, 42.6 mm SL, Kurio; KAUM-I. 11730, 43.2 mm SL, Kurio; KAUM-I. 11747, 42.8 mm SL, Kurio; KAUM-I. 11748, 28.9 mm SL, Kurio; KAUM-I. 11749, 28.3 mm SL, Kurio; KAUM-I. 11750, 26.8 mm SL, Kurio; KAUM-I. 11751, 27.4 mm SL, Kurio; KAUM-I. 11752, 26.3 mm SL, Kurio; KAUM-I. 11753, 25.9 mm SL, Kurio; KAUM-I. 11754, 27.3 mm SL, Kurio; KAUM-I. 11755, 25.5 mm SL, Kurio; KAUM-I. 11756, 24.7 mm SL, Kurio; KAUM-I. 11757, 24.3 mm SL, Kurio; KAUM-I. 11758, 26.3 mm SL, Kurio; KAUM-I. 11759, 24.3 mm SL, Kurio; KAUM-I. 11760, 25.2 mm SL, Kurio; KAUM-I. 11761, 20.6 mm SL, Kurio; KAUM-I. 11762, 17.3 mm SL, Kurio; KAUM-I. 21616, 22.7 mm SL, Kurio; KAUM-I. 21617, 41.0 mm SL, Kurio; KAUM-I. 21618, 43.4 mm SL, Kurio;

KAUM-I. 21619, 29.3 mm SL, Kurio; KAUM-I. 21620, 21.3 mm SL, Kurio; KAUM-I. 21621, 26.8 mm SL, Kurio; KAUM-I. 21622, 27.2 mm SL, Kurio; KAUM-I. 21623, 26.9 mm SL, Kurio; KAUM-I. 21624, 27.0 mm SL, Kurio; KAUM-I. 21625, 24.4 mm SL, Kurio; KAUM-I. 21626, 19.3 mm SL, Kurio; KAUM-I. 21629, 26.6 mm SL, Kurio; KAUM-I. 21630, 25.7 mm SL, Kurio; KAUM-I. 21631, 25.6 mm SL, Kurio; KAUM-I. 21632, 28.1 mm SL, Kurio; KAUM-I. 21633, 25.0 mm SL, Kurio; KAUM-I. 21634, 24.3 mm SL, Kurio; KAUM-I. 21635, 21.2 mm SL, Kurio; KAUM-I. 21636, 26.7 mm SL, Kurio; KAUM-I. 21637, 24.4 mm SL, Kurio; KAUM-I. 21638, 22.2 mm SL, Kurio; KAUM-I. 21639, 38.9 mm SL, Kurio; KAUM-I. 21640, 27.9 mm SL, Kurio; KAUM-I. 21641, 27.8 mm SL, Kurio; KAUM-I. 21642, 26.4 mm SL, Kurio; KAUM-I. 21643, 41.4 mm SL, Kurio; KAUM-I. 21644, 23.5 mm SL, Kurio; KAUM-I. 21645, 20.9 mm SL, Kurio; KAUM-I. 21646, 20.6 mm SL, Kurio; KAUM-I. 21647, 25.0 mm SL, Kurio; KAUM-I. 21648, 24.4 mm SL, Kurio; KAUM-I. 21649, 22.0 mm SL, Kurio; KAUM-I. 21650, 24.2 mm SL, Kurio; KAUM-I. 21651, 22.9 mm SL, Kurio; KAUM-I. 21652, 23.6 mm SL, Kurio; KAUM-I. 21653, 26.3 mm SL, Kurio; KAUM-I. 21654, 24.5 mm SL, Kurio; KAUM-I. 21655, 20.0 mm SL, Kurio; KAUM-I. 21656, 21.5 mm SL, Kurio; KAUM-I. 21657, 22.2 mm SL, Kurio; KAUM-I. 21660, 22.0 mm SL, Kurio; KAUM-I. 21794, 25.3 mm SL, Kurio; KAUM-I. 21822, 22.2 mm SL, Kurio; KAUM-I. 21825, 28.0 mm SL, Kurio; KAUM-I. 21826, 24.0 mm SL, Kurio; KAUM-I. 21859, 26.6 mm SL, Kurio; KAUM-I. 21860, 22.8 mm SL, Kurio; KAUM-I. 21861, 21.7 mm SL, Kurio; KAUM-I. 21862, 26.3 mm SL, Kurio; KAUM-I. 21863, 23.8 mm SL, Kurio; KAUM-I. 23541, 23.3 mm SL, Kurio; KAUM-I. 23542, 20.9 mm SL, Kurio; NSMT-P 77911, 29.2 mm SL, Kurio; NSMT-P 77912, 26.7 mm SL, Kurio; NSMT-P 77913, 24.0 mm SL, Kurio; NSMT-P 77914, 24.5 mm SL, Kurio; NSMT-P 77915, 23.0 mm SL, Kurio; NSMT-P 77916, 21.4 mm SL, Kurio; NSMT-P 77917, 6 specimens, 9.8–15.7 mm SL, Kurio; NSMT-P 91364, 23.8 mm SL, Yudomari; NSMT-P 91382, 4 specimens, 18.5–24.7 mm SL, Kurio; NSMT-P 91579, 45 specimens, 22.0–31.1

mm SL, Kurio.

Arai and Ida (1975, as *Tripterygion ethostoma*): NSMT-P 17834, 16 specimens, 17.4–36.1 mm SL, Kusugawa. Ichikawa et al. (1992, as *Enneapterygius ethostoma*): Yaku-shima Island.

Remarks: The specific name *ethostoma* is in error because the original description used the name, *ethostoma*, as a noun in apposition (Motomura et al., 2005), although many authors have used the former for the species.



Fig. 424. *Enneapterygius ethostoma* (upper: KAUM-I. 21643, 41.4 mm SL; lower: off Isso, 6 m, 29 Jan. 2007, S. Harazaki).

#### *Enneapterygius hemimelas* (Kner and Steindachner, 1867) [Jpn name: Akegoromohebigimpo] (Fig. 425)

Meguro and Motomura (2010): KAUM-I. 11353, 19.3 mm SL, Kurio; KAUM-I. 11354, 18.7 mm SL, Kurio; KAUM-I. 11355, 21.0 mm SL, Kurio; KAUM-I. 21659, 22.8 mm SL, Kurio.

Remarks: Previous Japanese records of *E. hemimelas* were based on mis-identifications of *E. bahasa* or *E. flavoccipitis* Shen, 1994 and true *E. hemimelas* was reported from Yaku-shima Island by Meguro and Motomura (2010) as the first Japanese records of the species.

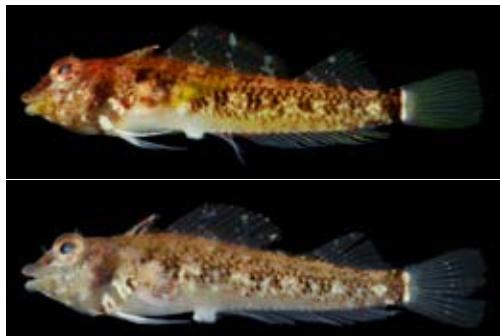
#### *Enneapterygius leucopunctatus* Shen, 1994 [Jpn name: Hakutenhebigimpo] (Fig. 426)

Endo et al. (2010): KAUM-I. 21837, 26.4 mm SL, Kurio; KAUM-I. 21838, 25.2 mm SL, Kurio.



**Fig. 425.** *Enneapterygius hemimelas* (KAUM-I. 11353, 19.3 mm SL).

Remarks: Fricke (1997) synonymized *E. leucopunctatus* with *E. vexillarius* Fowler, 1946, but Chiang and Chen (2008) regarded the former as a valid species. Endo et al. (2010) reported *E. leucopunctatus* as the first records from Japan on the basis of 17 specimens, including two specimens from Yaku-shima Island.



**Fig. 426.** *Enneapterygius leucopunctatus* (upper: KAUM-I. 21838, male, 25.2 mm SL; lower: KAUM-I. 21837, female, 26.4 mm SL).

#### *Enneapterygius philippinus* (Peters, 1868)

[Jpn name: Kusagimpo] (Fig. 427)

BSKU 96620, 23.0 mm SL, Kurio; KAUM-I. 11244, 20.9 mm SL, Kurio; KAUM-I. 11245, 19.8 mm SL, Kurio; KAUM-I. 11246, 24.2 mm SL, Kurio; KAUM-I. 11247, 23.8 mm SL, Kurio; KAUM-I. 11248, 19.7 mm SL, Kurio; KAUM-I. 11421, 20.7 mm SL, Kurio; KAUM-I. 11422, 21.9 mm SL, Kurio; KAUM-I. 11423, 20.7 mm SL, Kurio; KAUM-I. 11529, 22.6 mm SL, Ambo; KAUM-I. 11577, 19.9 mm SL, Ambo; KAUM-I. 11578, 16.8 mm SL, Ambo; KAUM-I. 21627, 20.7 mm SL, Kurio; KAUM-I. 21628, 22.5 mm

SL, Kurio; KAUM-I. 21658, 23.0 mm SL, Kurio; KAUM-I. 21820, 22.5 mm SL, Kurio; KAUM-I. 21821, 22.1 mm SL, Kurio; KAUM-I. 21823, 27.5 mm SL, Kurio; KAUM-I. 21824, 26.1 mm SL, Kurio; KAUM-I. 21827, 21.6 mm SL, Kurio; KAUM-I. 21828, 21.8 mm SL, Kurio; KAUM-I. 21836, 28.3 mm SL, Kurio; KAUM-I. 21839, 21.9 mm SL, Kurio; KAUM-I. 21856, 23.0 mm SL, Kurio; KAUM-I. 25055, 23.4 mm SL, Kurio; NSMT-P 63688, 20.9 mm SL, Kusugawa.

Remarks: Although this species has long been treated as *E. minutus* (Günther, 1877) (e.g., Yoshino, 1984; Fricke, 1994a, b; Hayashi, 2002), Fricke (1997) regarded it as a junior synonym of *E. philippinus*.



**Fig. 427.** *Enneapterygius philippinus* (upper: KAUM-I. 11244, 20.9 mm SL; middle: off Shitoko, 1 m, 13 Dec. 2009, S. Harazaki; lower: off Haruta, 1 m, 30 May, 2008, S. Harazaki).

***Enneapterygius tutuilae* Jordan and Seale, 1906**

[Jpn name: Segurohebigimpo] (Fig. 428)

KAUM-I. 4041, 17.5 mm SL, Isso; KAUM-I. 4043, 13.6 mm SL, Isso; KAUM-I. 4044, 15.0 mm SL, Isso; KAUM-I. 4045, 11.0 mm SL, Isso; KAUM-I. 4046, 16.9 mm SL, Isso; KAUM-I. 4047, 19.1 mm SL, Isso; KAUM-I. 4048, 15.3 mm SL, Isso; KAUM-I. 4049, 11.7 mm SL, Isso; KAUM-I. 4050, 18.3 mm SL, Isso; KAUM-I. 4051, 12.0 mm SL, Isso; KAUM-I. 4052, 16.3 mm SL, Isso; KAUM-I. 4053, 17.3 mm SL, Isso; KAUM-I. 4054, 19.3 mm SL, Isso; KAUM-I. 4055, 18.5 mm SL, Isso; KAUM-I. 4057, 18.0 mm SL, Isso; KAUM-I. 4058, 20.6 mm SL, Isso; KAUM-I. 4059, 19.4 mm SL, Isso; KAUM-I. 4060, 12.5 mm SL, Isso; KAUM-I. 4062, 19.3 mm SL, Isso; KAUM-I. 4063, 15.1 mm SL, Isso; KAUM-I. 4069, 14.2 mm SL, Isso; KAUM-I. 4070, 18.0 mm SL, Isso; KAUM-I. 4071, 16.9 mm SL, Isso; KAUM-I. 4074, 17.4 mm SL, Isso; KAUM-I. 4075, 18.0 mm SL, Isso; KAUM-I. 4076, 18.4 mm SL, Isso; KAUM-I. 4080, 13.9 mm SL, Isso; KAUM-I. 4081, 20.1 mm SL, Isso; KAUM-I. 4083, 12.0 mm SL, Isso; KAUM-I. 4167, 17.7 mm SL, Isso; KAUM-I. 4169, 17.3 mm SL, Isso; KAUM-I. 4170, 14.7 mm SL, Isso; KAUM-I. 4171, 18.6 mm SL, Isso; KAUM-I. 4172, 13.5 mm SL, Isso; KAUM-I. 4174, 8.7 mm SL, Isso; KAUM-I. 4177, 11.6 mm SL, Isso; KAUM-I. 4179, 19.8 mm SL, Isso; KAUM-I. 21807, 14.3 mm SL, Isso; KAUM-I. 21808, 16.5 mm SL, Isso; KAUM-I. 21809, 17.2 mm SL, Isso; KAUM-I. 21810, 16.4 mm SL, Isso; KAUM-I. 21811, 16.9 mm SL, Isso.

Remarks: "Shimahirehebigimpo" (*E. mirabilis* Fricke, 1994) was first recorded from Japan by Shimojyo and Hayashi (2000). However, characters of Shimojyo and Hayashi's (2000) *E. mirabilis* are within the variation of characters for *E. tutuilae*; thus, their *E. mirabilis* is most likely to be identified as *E. tutuilae* (M. Meguro, unpub. data).

***Enneapterygius* sp. 1**

[Jpn name: None] (Fig. 429)

BSKU 96623, 22.9 mm SL, Kurio; BSKU 96630, 21.6 mm SL, Kurio; BSKU 96887, 21.9 mm SL, Kurio; BSKU 96888, 19.3 mm SL, Ku-



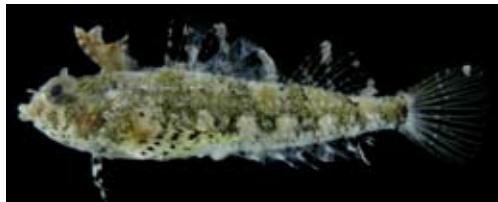
**Fig. 428.** *Enneapterygius tutuilae* (upper: KAUM-I. 4071, 16.9 mm SL; lower: same individual with the above, KAUM-I. 4071, off Isso, 7 m, 26 Apr. 2007, S. Harazaki).

rio; BSKU 96889, 20.8 mm SL, Kurio; KAUM-I. 11352, 28.4 mm SL, Kurio; KAUM-I. 11429, 25.5 mm SL, Kurio; KAUM-I. 11430, 27.4 mm SL, Kurio; KAUM-I. 11431, 21.4 mm SL, Kurio; KAUM-I. 11470, 21.4 mm SL, Isso; KAUM-I. 11471, 20.1 mm SL, Isso; KAUM-I. 11477, 21.0 mm SL, Isso; KAUM-I. 11479, 20.3 mm SL, Isso; KAUM-I. 11743, 27.5 mm SL, Kurio; KAUM-I. 11744, 22.2 mm SL, Kurio; KAUM-I. 11745, 19.2 mm SL, Kurio; KAUM-I. 21662, 21.4 mm SL, Kurio; KAUM-I. 23544, 19.3 mm SL, Kurio; KPM-NI 22581, 21.4 mm SL, Isso.

Remarks: This species is similar to *E. bahasa* and *E. erythrosomus* Shen, 1994 in overall body appearance and general coloration, with distinct black blotches on the pectoral-fin base. However, *Enneapterygius* sp. 1 has a single symphyseal mandibular pore, whereas *E. bahasa* has 2–8 pores. The body, including head and fins, of mature males of *Enneapterygius* sp. 1 is uniformly black, but the trunk of mature male *E. bahasa* is never black. *Enneapterygius* sp. 1 is most likely to be *E. erythrosomus* (currently known only from Taiwan; Chiang and Chen, 2008), but comparison of mature male coloration of the two is required.



**Fig. 429.** *Enneapterygius* sp. 1 (upper: KAUM-I. 11352, 28.4 mm SL; middle: off Isso, 6 m, 16 Mar. 2009, S. Harazaki; lower: off Yoshida, 4 m, 1 Apr. 2005, S. Harazaki).



**Fig. 430.** *Enneapterygius* sp. 2 (upper: KAUM-I. 4168, 20.1 mm SL; lower: same individual with the above, KAUM-I. 4168, off Isso, 1.5 m, 27 Apr. 2007, S. Harazaki).



**Fig. 431.** *Enneapterygius* sp. 3 (upper: KAUM-I. 21815, 16.2 mm SL; middle: off Isso, 6 m, 19 Feb. 2006, S. Harazaki; lower: off Isso, 5 m, 18 Oct. 2009, S. Harazaki).

### *Enneapterygius* sp. 2

[Jpn name: None] (Fig. 430)

KAUM-I. 3069, 24.8 mm SL, Isso; KAUM-I. 3070, 15.6 mm SL, Isso; KAUM-I. 4056, 16.2 mm SL, Isso; KAUM-I. 4061, 19.9 mm SL, Isso; KAUM-I. 4064, 11.0 mm SL, Isso; KAUM-I. 4082, 11.9 mm SL, Isso; KAUM-I. 4168, 20.1 mm SL, Isso.

Remarks: This species is probably undescribed.

### *Enneapterygius* sp. 3

[Jpn name: None] (Fig. 431)

KAUM-I. 21815, 16.2 mm SL, Isso; KAUM-I. 21819, 19.3 mm SL, Isso.

Remarks: This species is probably an undescribed species.

***Enneapterygius* sp. 4**

[Jpn name: None] (Fig. 432)

KAUM-I. 4040, 16.7 mm SL, Isso; KAUM-I. 4042, 19.2 mm SL, Isso; KAUM-I. 4065, 15.6 mm SL, Isso; KAUM-I. 4068, 22.7 mm SL, Isso; KAUM-I. 4072, 12.8 mm SL, Isso; KAUM-I. 4073, 16.8 mm SL, Isso; KAUM-I. 4077, 13.2 mm SL, Isso; KAUM-I. 4078, 9.0 mm SL, Isso; KAUM-I. 4079, 13.6 mm SL, Isso; KAUM-I. 4173, 12.5 mm SL, Isso; KAUM-I. 4175, 15.8 mm SL, Isso; KAUM-I. 4176, 21.1 mm SL, Isso; KAUM-I. 4178, 16.5 mm SL, Isso; KAUM-I. 21812, 16.9 mm SL, Isso; KAUM-I. 21813, 15.7 mm SL, Isso; KAUM-I. 21814, 16.2 mm SL, Isso; KAUM-I. 21816, 16.5 mm SL, Isso; KAUM-I. 21817, 15.1 mm SL, Isso; KAUM-I. 21818, 14.2 mm SL, Isso.

Remarks: This species is an undescribed species closely related to *E. tutuilae*, and is to be described by Meguro et al. (in prep.).

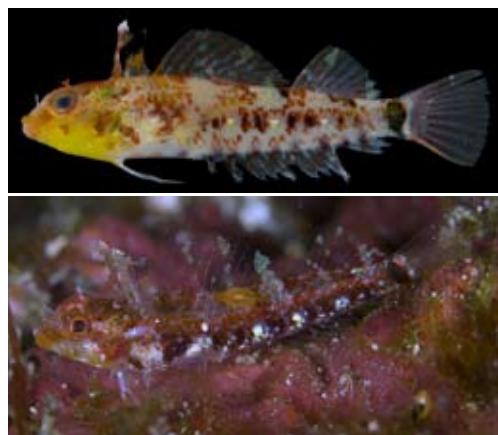


Fig. 432. *Enneapterygius* sp. 4 (upper: KAUM-I. 21814, 16.2 mm SL; lower: KAUM-I. 4042, off Isso, 30 m, 22 Apr. 2007, S. Harazaki).

***Enneapterygius* sp. 5**

[Jpn name: None] (Fig. 433)

BSKU 96619, 26.5 mm SL, Kurio; BSKU 96622, 23.2 mm SL, Kurio; KAUM-I. 3069, 25.3 mm SL, Isso; KAUM-I. 3072, 29.5 mm SL, Isso; KAUM-I. 21661, 23.7 mm SL, Kurio.

Remarks: This species is similar to *E. leucopunctatus* in overall body appearance and meristic ranges of the two completely overlap. However, the two species can be distinguished by

coloration of mature males, including black and white vertical bands at the caudal-fin base (see Figs. 420, 427). *Enneapterygius* sp. 5 is most likely to be an undescribed species, and is currently studied by H. Endo (BSKU) and his colleagues.

***Helcogramma inclinata* (Fowler, 1946)**

[Jpn name: Ayahebigimpo] (Fig. 434)

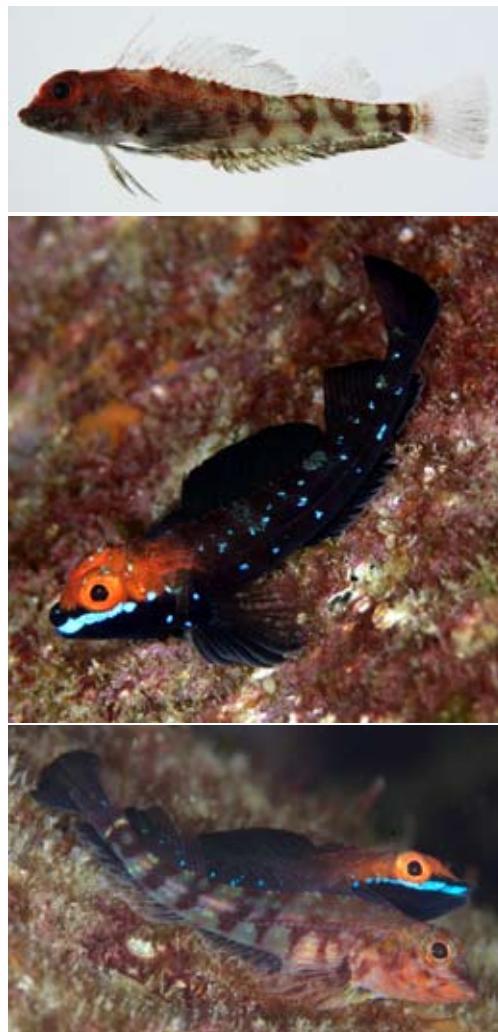
BSKU 96558, 35.4 mm SL, Yudomari; BSKU 96572, 33.1 mm SL, Yudomari; BSKU 96637, 33.7 mm SL, Isso; BSKU 96638, 34.9 mm SL, Isso; BSKU 96679, 29.4 mm SL, Kurio; BSKU 96680, 37.5 mm SL, Kurio; KAUM-I. 34, 45.0 mm SL, Isso; KAUM-I. 11189, 42.7 mm SL, Kurio; KAUM-I. 11190, 41.4 mm SL, Kurio; KAUM-I. 11242, 43.1 mm SL, Kurio; KAUM-I. 11243, 41.0 mm SL, Kurio; KAUM-I. 11424, 50.4 mm SL, Kurio; KAUM-I. 11425, 50.1 mm SL, Kurio; KAUM-I. 11426, 33.7 mm SL, Kurio; KAUM-I. 11427, 30.6 mm SL, Kurio; KAUM-I. 11428, 24.3 mm SL, Kurio; KAUM-I. 11472, 24.7 mm SL, Isso; KAUM-I. 11473, 22.4 mm SL, Isso; KAUM-I. 11474, 29.5 mm SL, Isso; KAUM-I. 11478, 22.8 mm SL, Isso; KAUM-I. 11731, 50.4 mm SL, Kurio; KAUM-I. 11732, 45.1 mm SL, Kurio; KAUM-I. 11733, 36.3 mm SL, Kurio; KAUM-I. 11734, 31.1 mm SL, Kurio; KAUM-I. 11735, 29.1 mm SL, Kurio; KAUM-I. 11736, 26.5 mm SL, Kurio; KAUM-I. 11737, 25.2 mm SL, Kurio; KAUM-I. 11738, 24.2 mm SL, Kurio; KAUM-I. 11763, 31.5 mm SL, Kurio; KAUM-I. 20192, 28.5 mm SL, Yudomari; KAUM-I. 20209, 36.2 mm SL, Yudomari; KAUM-I. 20210, 21.3 mm SL, Yudomari; KAUM-I. 20348, 28.4 mm SL, Isso; KAUM-I. 20349, 20.4 mm SL, Isso; KAUM-I. 20350, 29.9 mm SL, Isso; KAUM-I. 20351, 39.1 mm SL, Isso; KAUM-I. 21857, 24.0 mm SL, Kurio; KAUM-I. 21858, 21.7 mm SL, Kurio; NSMT-P 95423, 45.2 mm SL, Hirauchi; NSMT-P 95452, 49.3 mm SL, Haruo; NSMT-P 95447, 44.5 mm SL, Haruo.

Kuniyasu (1999, as *Helcogramma fuscopinnata*): Kurio. Motomura et al. (2006): KAUM-I. 34, 45.0 mm SL, Isso. Motomura (2007): Yoshida.

Remarks: Motomura et al. (2006) assessed Japanese name for this species and described new diagnostic characters of the species.



**Fig. 433.** *Enneapterygius* sp. 5 (upper to lower: BSKU 96622, male, 23.2 mm SL; BSKU 96619, female, 26.5 mm SL; KAUM-I. 3072, 29.5 mm SL, off Isso, 5 Feb. 2006, S. Harazaki; last two images: off Hirauchi, 2 m, 16 Feb. 2005, S. Harazaki).



**Fig. 434.** *Helcogramma inclinata* (upper: BSKU 96558, 35.4 mm SL; middle: off Yoshida, after Motomura et al., 2006; lower: off Yoshida, 5 m, 1 Apr. 2005, S. Harazaki).

***Helcogramma obtusirostre* (Klunzinger, 1871)**  
[Jpn name: Kuromasuku] (Fig. 435)

BSKU 96621, 24.7 mm SL, Kurio; KAUM-I. 11240, 18.2 mm SL, Kurio; KAUM-I. 11241, 14.5 mm SL, Kurio; KAUM-I. 11361, 27.2 mm SL, Kurio; KAUM-I. 11432, 24.3 mm SL, Kurio; KAUM-I. 11433, 21.7 mm SL, Kurio; KAUM-I. 11739, 23.6 mm SL, Kurio; KAUM-I. 11740, 20.1 mm SL, Kurio; KAUM-I. 11741, 20.6 mm SL, Kurio; KAUM-I. 11742, 21.8 mm SL, Kurio; KAUM-I. 11764, 21.3 mm SL, Kurio; KAUM-

I. 11765, 20.5 mm SL, Kurio; KAUM-I. 11766, 19.9 mm SL, Kurio; KAUM-I. 23543, 20.8 mm SL, Kurio; NSMT-P 77916, 21.4 mm SL, Kurio; NSMT-P 91381, 43.2 mm SL, Kurio;

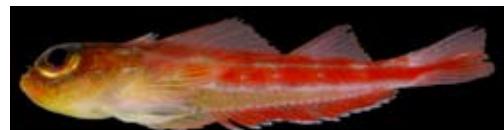
Remarks: Hayashi (2002) described this species as *H. obtusirostris* in error (instead of *H. obtusirostre*).



**Fig. 435.** *Helcogramma obtusirostre* (upper: KAUM-I. 11361, 27.2 mm SL; middle: off Yoshida, 3 m, 22 Feb. 2006, S. Harazaki; lower: off Isso, 3 m, 27 Nov. 2004, S. Harazaki).



**Fig. 436.** *Helcogramma rhinoceros* (upper: male, off Yoshida, 3 m, 19 Oct. 2009, S. Harazaki; lower: female, off Yoshida, 3 m, 17 Jan. 2010, S. Harazaki).



**Fig. 437.** *Helcogramma striata* (upper: KAUM-I. 20174, 20.9 mm SL; lower: off Isso, 10 m, 9 Feb. 2009, S. Harazaki).

### *Helcogramma rhinoceros* Hansen, 1986 [Jpn name: Tenguhebigimpo] (Fig. 436)

**Helcogramma striata** Hansen, 1986  
[Jpn name: Tatejimahebigimpo] (Fig. 437)  
KAUM-I. 20174, 20.9 mm SL, Yudomari.  
Kuniyasu (1999): Kurio.

### *Norfolkia brachylepis* (Schultz, 1960) [Jpn name: Kokutennisehebigimpo] (Fig. 438)

KAUM-I. 11398, 43.8 mm SL, Kurio;  
KAUM-I. 11399, 38.0 mm SL, Kurio; KAUM-I. 11400, 35.1 mm SL, Kurio; KAUM-I. 11401, 26.8 mm SL, Kurio; KAUM-I. 11438, 21.2 mm SL, Kurio; KAUM-I. 11439, 26.8 mm SL, Kurio.



Fig. 438. *Norfolkia brachylepis* (KAUM-I. 11398, 43.8 mm SL).

***Norfolkia thomasi* Whitley, 1964**

[Jpn name: Nisehebigimpo] (Fig. 439)

KAUM-I. 3073, 24.6 mm SL, Isso; KAUM-I. 20257, 25.5 mm SL, Kurio; KPM-NI 22554, 32.5 mm SL, Kurio.



Fig. 439. *Norfolkia thomasi* (KAUM-I. 20257, 25.5 mm SL).

***Ucla xenogrammus* Holleman, 1993**

[Jpn name: Kasurihebigimpo] (Fig. 440)



Fig. 440. *Ucla xenogrammus* (upper: off Isso, 10 m, 16 Jan. 2010, S. Harazaki; lower: off Isso, 10 m, 17 Jan. 2010, S. Harazaki).

**FAMILY BLENNIIDAE**

***Andamia tetradactylus* (Bleeker, 1858)**

[Jpn name: Yodarekake] (Fig. 441)

KPM-NI 22758, 60.2 mm SL, Isso; KPM-NI 22759, 57.7 mm SL, Isso; KPM-NI 22767, 39.9 mm SL, Isso; KPM-NI 22768, 50.6 mm SL, Isso; KPM-NI 22854, 48.7 mm SL, Isso; KPM-NI 22855, 54.5 mm SL, Isso; KPM-NI 22856, 55.3 mm SL, Isso; KPM-NI 22857, 43.4 mm SL, Isso; KPM-NI 22858, 58.6 mm SL, Isso; KPM-NI 22863, 44.3 mm SL, Isso; KPM-NI 22864, 56.1 mm SL, Isso; KPM-NI 22865, 65.5 mm SL, Isso; KPM-NI 22866, 65.0 mm SL, Isso; KPM-NI 22928, 61.6 mm SL, Isso; KPM-NI 22929, 72.0 mm SL, Isso; KPM-NI 22930, 79.2 mm SL, Isso; KPM-NI 22937, 68.5 mm SL, Isso; KPM-NI 22938, 81.6 mm SL, Isso; NSMT-P 77622, 87.7 mm SL, mouth of Kurio River; NSMT-P 77623, 73.1 mm SL, mouth of Kurio River.

MOSC (2002): Isso.



Fig. 441. *Andamia tetradactylus* (upper: KPM-NI 22937, male, 68.5 mm SL; lower: KPM-NI 22856, female, 55.3 mm SL).

***Aspidontus dussumieri* (Valenciennes, 1836)**

[Jpn name: Kurosujigimpo]

Ichikawa et al. (1992): Yaku-shima Island.

***Aspidontus taeniatus taeniatus* Quoy and Gaimard, 1834**

[Jpn name: Nisekurosujigimpo]

Ichikawa et al. (1992): Yaku-shima Island.

***Blenniella chrysospilos* (Bleeker, 1857)**

[Jpn name: Montsukikaeruu] (Fig. 442)

***Blenniella periophthalmus* (Valenciennes, 1836)**

[Jpn name: Hanakaeruu] (Fig. 443)

KPM-NI 22884, 90.7 mm SL, Ambo.



**Fig. 442.** *Blenniella chrysospilos* (off Isso, 5 m, 16 May 2008, S. Harazaki).



**Fig. 443.** *Blenniella periophthalmus* (KPM-NI 22884, 90.7 mm SL).

***Cirripectes filamentosus*** (Alleyne and Macleay, 1877)  
[Jpn name: Oborogetategamikaeruu] (Fig. 444)

Murase et al. (2009): KAUM-I. 11586, 52.5 mm SL, Ambo.

Remarks: This specimen from Yaku-shima Island was reported by Murase et al. (2009) as the first Japanese record and northernmost record in the western Pacific Ocean of *C. filamentosus*.



**Fig. 444.** *Cirripectes filamentosus* (KAUM-I. 11586, 52.5 mm SL).

***Cirripectes kuwamurai*** Fukao, 1984

[Jpn name: Sujitategamikaeruu]  
Kuniyasu (1999): Kurio.

***Cirripectes polyzona*** (Bleeker, 1868)

[Jpn name: Minokaeruu]  
Kuniyasu (1999): Kurio.

***Ecsenius bicolor*** (Day, 1888)

[Jpn name: Futairokaeruu]  
Ichikawa et al. (1992): Yaku-shima Island.

***Ecsenius lineatus*** Klausewitz, 1962

[Jpn name: Hitosujigimpo]  
Kuniyasu (1999): Kurio.

***Ecsenius midas*** Starck, 1969

[Jpn name: Hanadaigimpo] (Fig. 445)

Remarks: In Japanese waters, this species has been recorded only from southern part of the Ryukyu Island. The photograph (Fig. 439) represents the northernmost record for the species. Relatively rare at Yaku-shima Island; subadults were observed at 15 m off Kurio and 10 m off Nagata by S. Harazaki.



**Fig. 445.** *Ecsenius midas* (off Isso, 25 m, 15 July 2009, S. Harazaki).

***Ecsenius namiyei*** (Jordan and Evermann, 1902)  
[Jpn name: Niramigimpo] (Fig. 446)

***Ecsenius oculus*** Springer, 1971  
[Jpn name: Goishigimpo] (Fig. 447)



Fig. 446. *Ecsenius namiyei* (off Isso, 10 m, 11 Sept. 2009, S. Harazaki).



Fig. 447. *Ecsenius oculus* (off Nagata, 5 m, 19 Nov. 2009, S. Harazaki).

***Ecsenius yaeyamaensis* (Aoyagi, 1954)**

[Jpn name: Ishigakikaeruuo] (Fig. 448)

BSKU 96568, 22.9 mm SL, Yudomari.  
Kuniyasu (1999): Kurio.



Fig. 448. *Ecsenius yaeyamaensis* (BSKU 96568, 22.9 mm SL).

***Enchelyurus kraussii* (Klunzinger, 1871)**

[Jpn name: Kurogimpo] (Fig. 449)

NSMT-P 95451, 26.0 mm SL, Haruo.  
Arai and Ida (1975): NSMT-P 17860, 23.6 mm SL, Kusugawa.



Fig. 449. *Enchelyurus kraussii* (upper: NSMT-P 17860, 23.6 mm SL, preserved specimen; lower: NSMT-P 95451, 26.0 mm SL, preserved specimen).

***Entomacrodus caudofasciatus* (Regan, 1909)**

[Jpn name: Aomongimpo] (Fig. 450)

NSMT-P 95444, 40.2 mm SL, Haruo.



Fig. 450. *Entomacrodus caudofasciatus* (NSMT-P 95444, 40.2 mm SL).

***Entomacrodus striatus* (Valenciennes, 1836)**

[Jpn name: Sujigimpo] (Fig. 451)

KAUM-I. 20255, 61.7 mm SL, Kurio;  
KAUM-I. 20269, 65.3 mm SL, Kurio; NSMT-P 91374, 60 mm SL, Kurio.



Fig. 451. *Entomacrodus striatus* (KAUM-I. 20269, 65.3 mm SL).

***Entomacrodus thalassinus thalassinus* (Jordan and Seale, 1906)**

[Jpn name: Gotenkaeruuo] (Fig. 452)

KPM-NI 24787, 30.9 mm SL, Kurio; KPM-NI 24788, 35.8 mm SL, Kurio.



**Fig. 452.** *Entomacrodus thalassinus thalassinus* (KPM-NI 24788, 35.8 mm SL).



**Fig. 454.** *Istiblennius edentulus* (upper: KAUM-I. 11338, male, 108.5 mm SL; lower: KAUM-I. 11530, female, 67.5 mm SL).

***Istiblennius dussumieri* (Valenciennes, 1836)**

[Jpn name: Kaeruuomodoki] (Fig. 453)

KAUM-I. 25051, 51.6 mm SL, Kurio; KAUM-I. 25059, 35.0 mm SL, Ambo; KPM-NI 23023, 53.4 mm SL, Kurio; NSMT-P 77740, 73.7 mm SL, Nagakubo.



**Fig. 453.** *Istiblennius dussumieri* (upper: KAUM-I. 25051, male, 51.6 mm SL; lower: KAUM-I. 25059, female, 35.0 mm SL).

***Istiblennius enosimae* (Jordan and Snyder, 1902)**

[Jpn name: Kaeruuo] (Fig. 455)

KAUM-I. 11325, 31.4 mm SL, Nagakubo; KAUM-I. 11417, 12.4 mm SL, Kurio; KAUM-I. 11420, 25.4 mm SL, Kurio; KAUM-I. 11684, 23.6 mm SL, Ambo; KAUM-I. 20254, 97.7 mm SL, Kurio; KAUM-I. 20258, 101.8 mm SL, Kurio; KAUM-I. 21805, 112.0 mm SL, Kurio; NSMT-P 91350, 83 mm SL, Yudomari; NSMT-P 91605, 80 mm SL, Nagakubo; NSMT-P 95462, 24.4 mm SL, Haruo.

Jordan and Starks (1906, as *Salarias enosimae*): SU 9779, 2 specimens, 93.4–124.9 mm SL, Miyanoura. Ichikawa et al. (1992): Yaku-shima Island.

Remarks: Jordan and Starks (1906) referred to “numerous specimens collected at Miyanoura, Yakushima, and at Tanegashima”, but only two specimens from Yaku-shima Island exist at the California Academy of Sciences.



**Fig. 455.** *Istiblennius enosimae* (KAUM-I. 21805, 112.0 mm SL).

***Istiblennius lineatus*** (Valenciennes, 1836)

[Jpn name: Senkaeruu] (Fig. 456)

KPM-NI 24798, 30.0 mm SL, Kurio; NSMT-P 77990, 5 specimens, 20.2–28.0 mm SL, Kurio.

Arai and Ida (1975): Kusugawa [one specimen (46 mm TL) was reported, but not found at NSMT].

Fig. 456. *Istiblennius lineatus* (KPM-NI 24798, 30.0 mm SL).***Meiacanthus atrodorsalis*** (Günther, 1877)

[Jpn name: Ogonnijigimpo]

Ichikawa et al. (1992): Yaku-shima Island.

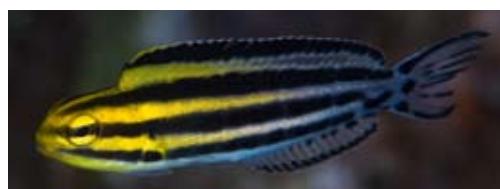
***Meiacanthus ditrema*** Smith-Vaniz, 1976

[Jpn name: Satsukigimpo]

Kuniyasu (1999): Kurio.

***Meiacanthus grammistes*** (Valenciennes, 1836)

[Jpn name: Higenijigimpo] (Fig. 457)

Fig. 457. *Meiacanthus grammistes* (off Isso, 6 m, 5 Nov. 2007, S. Harazaki).***Meiacanthus kamoharai*** Tomiyama, 1956

[Jpn name: Kamoharagimpo] (Fig. 458)

KAUM-I. 20145, 53.5 mm SL, Yudomari; KAUM-I. 20146, 30.9 mm SL, Yudomari; KPM-NI 22543, 42.5 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

Fig. 458. *Meiacanthus kamoharai* (KAUM-I. 20145, 53.5 mm SL).***Nannosalarias nativitatus*** (Regan, 1909)

[Jpn name: Hinagimpo] (Fig. 459)

Fig. 459. *Nannosalarias nativitatus* (off Nagata, 4 m, 5 June 2009, S. Harazaki).***Omobranchus loxozonous*** (Jordan and Starks, 1906)

[Jpn name: Kumogimpo] (Fig. 460)

KAUM-I. 11534, 46.1 mm SL, Ambo; KAUM-I. 11569, 45.4 mm SL, Ambo; KAUM-I. 11570, 44.4 mm SL, Ambo; KAUM-I. 11571, 49.5 mm SL, Ambo; KAUM-I. 11662, 41.8 mm SL, Ambo; KAUM-I. 11667, 45.1 mm SL, Ambo; KAUM-I. 11668, 43.9 mm SL, Ambo; KAUM-I. 11669, 42.9 mm SL, Ambo; KAUM-I. 11670, 41.8 mm SL, Ambo; KAUM-I. 11671, 43.7 mm SL, Ambo; KAUM-I. 11672, 36.7 mm SL, Ambo; KAUM-I. 11673, 39.6 mm SL, Ambo; KAUM-I. 11674, 36.8 mm SL, Ambo; KAUM-I. 11675, 35.9 mm SL, Ambo; KAUM-I. 11676, 34.9 mm SL, Ambo; KAUM-I. 11677, 34.4 mm SL, Ambo; KAUM-I. 11678, 29.5 mm SL, Ambo; KAUM-I. 11679, 19.1 mm SL, Ambo; KAUM-I. 11680, 24.2 mm SL, Ambo; KAUM-I. 11681, 21.3 mm SL, Ambo; KAUM-I. 11682, 18.6 mm SL, Ambo; KAUM-I. 11683, 21.6 mm SL, Ambo; KAUM-I. 11685, 44.6 mm SL, Ambo; KAUM-I. 11686, 38.7 mm SL, Ambo; KAUM-I. 11687, 34.9 mm SL, Ambo; KAUM-I. 11688, 39.2 mm SL, Ambo;

KAUM-I. 11689, 39.2 mm SL, Ambo; KAUM-I. 11690, 29.9 mm SL, Ambo; KAUM-I. 11691, 32.1 mm SL, Ambo; KAUM-I. 11692, 40.0 mm SL, Ambo; KAUM-I. 11693, 36.1 mm SL, Ambo; KAUM-I. 22831, 40.5 mm SL, Ambo; KAUM-I. 22832, 39.8 mm SL, Ambo; KAUM-I. 22833, 38.3 mm SL, Ambo; KAUM-I. 22834, 37.9 mm SL, Ambo; KAUM-I. 22835, 37.5 mm SL, Ambo; KAUM-I. 22836, 36.7 mm SL, Ambo; KAUM-I. 22838, 43.7 mm SL, Kurio; KAUM-I. 22839, 47.3 mm SL, Kurio; KAUM-I. 22840, 49.8 mm SL, Kurio; KAUM-I. 23468, 42.1 mm SL, Kurio; KAUM-I. 23469, 44.4 mm SL, Kurio; KAUM-I. 23470, 47.4 mm SL, Kurio; KAUM-I. 23532, 18.7 mm SL, Ambo; NSMT-P 77567, 48.2 mm SL, Kurio; NSMT-P 77752, 23.5 mm SL, Nagakubo; NSMT-P 77779, 54.8 mm SL, Kurio. Arai and Ida (1975): NSMT-P 17817, 3 specimens, 35.8–49.0 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 460.** *Omobranchus loxozonus* (KAUM-I. 11570, 44.4 mm SL).



**Fig. 461.** *Petroscirtes mitratus* (BSKU 96555, 31.5 mm SL).

#### *Plagiotremus rhinorhynchos* (Bleeker, 1852)

[Jpn name: Minamigimpo] (Fig. 462)

Arai and Ida (1975, as *Runula rhinorhynchos*): NSMT-P 17848, 40.6 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 462.** *Plagiotremus rhinorhynchos* (NSMT-P 17848, 40.6 mm SL, preserved specimen).

#### *Petroscirtes breviceps* (Valenciennes, 1836)

[Jpn name: Nijigimpo]

Ichikawa et al. (1992): Yaku-shima Island.

#### *Petroscirtes mitratus* Rüppell, 1830

[Jpn name: Hatatategimpo] (Fig. 461)

BSKU 96555, 31.5 mm SL, Yudomari; KAUM-I. 20022, 52 mm SL, Yudomari; KAUM-I. 20023, 43 mm SL, Yudomari.

#### *Plagiotremus laudandus laudandus* (Whitley, 1961)

[Jpn name: Inasegimpo]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

#### *Plagiotremus tapeinosoma* (Bleeker, 1857)

[Jpn name: Tenkurosujigimpo]

Ichikawa et al. (1992): Yaku-shima Island.

#### *Praealticus margaritarius* (Snyder, 1908)

[Jpn name: Tamagimpo] (Fig. 463)

KAUM-I. 11221, 57.0 mm SL, Kurio; KAUM-I. 11224, 55.2 mm SL, Kurio; KAUM-I. 11225, 60.1 mm SL, Kurio; KAUM-I. 11226, 59.4 mm SL, Kurio; KAUM-I. 11418, 32.6 mm SL, Kurio; KAUM-I. 11419, 25.1 mm SL, Kurio; KAUM-I. 11695, 47.4 mm SL, Ambo; KAUM-I. 11696, 40.7 mm SL, Ambo; KAUM-I. 11697, 42.8 mm SL, Ambo; KAUM-I. 11698, 36.5 mm SL, Ambo; KAUM-I. 11699, 41.0 mm SL, Ambo; KAUM-I. 20274, 49.5 mm SL, Kurio; KAUM-I. 21745, 28.4 mm SL, Kurio; KAUM-I. 22822, 67.7 mm SL, Ambo; KAUM-I. 22823, 64.7 mm SL, Ambo; KAUM-I. 22824, 55.7 mm SL, Ambo; KAUM-I. 22825, 58.6 mm SL, Ambo; KAUM-I. 22826, 57.1 mm SL, Ambo; KAUM-I. 22827,

56.0 mm SL, Ambo; KAUM-I. 22828, 52.3 mm SL, Ambo; KAUM-I. 22829, 51.2 mm SL, Ambo; KAUM-I. 22830, 44.0 mm SL, Ambo; KAUM-I. 23585, 60.3 mm SL, Kurio; KAUM-I. 23586, 52.8 mm SL, Kurio; KAUM-I. 23587, 55.4 mm SL, Kurio; KAUM-I. 23588, 54.8 mm SL, Kurio; KAUM-I. 23589, 66.0 mm SL, Kurio; KAUM-I. 23590, 49.4 mm SL, Kurio; KAUM-I. 23591, 53.3 mm SL, Kurio; KAUM-I. 23592, 50.3 mm SL, Kurio; KAUM-I. 23593, 60.7 mm SL, Kurio; KAUM-I. 23594, 50.3 mm SL, Kurio; KAUM-I. 23595, 65.2 mm SL, Kurio; KAUM-I. 23596, 47.1 mm SL, Kurio; KAUM-I. 23597, 58.4 mm SL, Kurio; KAUM-I. 23598, 54.0 mm SL, Kurio; KAUM-I. 23599, 60.1 mm SL, Kurio; KAUM-I. 23600, 49.0 mm SL, Kurio; KAUM-I. 23601, 50.0 mm SL, Kurio; KAUM-I. 23602, 52.4 mm SL, Kurio; KAUM-I. 23603, 55.7 mm SL, Kurio; KAUM-I. 23604, 55.2 mm SL, Kurio; KAUM-I. 23605, 48.4 mm SL, Kurio; KAUM-I. 23606, 49.8 mm SL, Kurio; KAUM-I. 23607, 40.7 mm SL, Kurio; KAUM-I. 23608, 41.8 mm SL, Kurio; KAUM-I. 23609, 47.7 mm SL, Kurio; KAUM-I. 23610, 45.7 mm SL, Kurio; KAUM-I. 23611, 49.1 mm SL, Kurio; KAUM-I. 23612, 45.6 mm SL, Kurio; KAUM-I. 23613, 47.8 mm SL, Kurio; KAUM-I. 23614, 52.0 mm SL, Kurio; KAUM-I. 24850, 56.1 mm SL, Kurio; KAUM-I. 24851, 64.1 mm SL, Kurio; KAUM-I. 24852, 66.2 mm SL, Kurio; KAUM-I. 24853, 53.6 mm SL, Kurio; KAUM-I. 24854, 51.8 mm SL, Kurio; KAUM-I. 24855, 58.5 mm SL, Kurio; KAUM-I. 24856, 61.1 mm SL, Kurio; KAUM-I. 24857, 53.7 mm SL, Kurio; KAUM-I. 24858, 64.2 mm SL, Kurio; KAUM-I. 24859, 50.5 mm SL, Kurio; KAUM-I. 24860, 48.5 mm SL, Kurio; KAUM-I. 24861, 53.0 mm SL, Kurio; KAUM-I. 24862, 53.2 mm SL, Kurio; KAUM-I. 24863, 54.7 mm SL, Kurio; KAUM-I. 24864, 48.8 mm SL, Kurio; KAUM-I. 24865, 47.7 mm SL, Kurio; KAUM-I. 24866, 57.6 mm SL, Kurio; KAUM-I. 24867, 62.0 mm SL, Kurio; KAUM-I. 24868, 53.4 mm SL, Kurio; KAUM-I. 24869, 60.4 mm SL, Kurio; KAUM-I. 24870, 59.1 mm SL, Kurio; KAUM-I. 24871, 51.3 mm SL, Kurio; KAUM-I. 24872, 53.6 mm SL, Kurio; KAUM-I. 24873, 72.5 mm SL, Kurio; KAUM-I. 24874, 65.2 mm SL, Kurio; KAUM-I. 24875, 60.7 mm SL, Kurio; KAUM-I. 24876, 59.7 mm SL, Kurio; KAUM-I. 24877, 60.8 mm SL, Kurio; KAUM-I. 24878, 60.2 mm SL, Kurio; KAUM-I. 24879, 58.5 mm SL, Kurio; KAUM-I. 24880, 65.5 mm SL, Kurio; KAUM-I. 24881, 55.8 mm SL, Kurio; KAUM-I. 24882, 57.4 mm SL, Kurio; KAUM-I. 24883, 63.0 mm SL, Kurio; KAUM-I. 24884, 62.1 mm SL, Kurio; KAUM-I. 24885, 59.0 mm SL, Kurio; KAUM-I. 24886, 54.2 mm SL, Kurio; KAUM-I. 24887, 56.3 mm SL, Kurio; KAUM-I. 24888, 59.8 mm SL, Kurio; KAUM-I. 24889, 51.7 mm SL, Kurio; KAUM-I. 24890, 53.1 mm SL, Kurio; KAUM-I. 24891, 54.2 mm SL, Kurio; KAUM-I. 24892, 58.6 mm SL, Kurio; KAUM-I. 24893, 56.0 mm SL, Kurio; KAUM-I. 24894, 48.7 mm SL, Kurio; KAUM-I. 24895, 55.8 mm SL, Kurio; KAUM-I. 24896, 51.1 mm SL, Kurio; KAUM-I. 24897, 54.8 mm SL, Kurio; KAUM-I. 24898, 50.3 mm SL, Kurio; KAUM-I. 24899, 48.9 mm SL, Kurio; KAUM-I. 24900, 54.5 mm SL, Kurio; KAUM-I. 24901, 62.6 mm SL, Kurio; KAUM-I. 24902, 56.7 mm SL, Kurio; KAUM-I. 24903, 45.5 mm SL, Kurio; KAUM-I. 24904, 44.7 mm SL, Kurio; KAUM-I. 24905, 49.5 mm SL, Kurio; KAUM-I. 24906, 41.2 mm SL, Kurio; KAUM-I. 24907, 46.7 mm SL, Kurio; KAUM-I. 24908, 49.1 mm SL, Kurio; KAUM-I. 24909, 52.2 mm SL, Kurio; KAUM-I. 24910, 43.8 mm SL, Kurio; KAUM-I. 24911, 49.0 mm SL, Kurio; KAUM-I. 24912, 42.2 mm SL, Kurio; KAUM-I. 24913, 42.5 mm SL, Kurio; KAUM-I. 24914, 45.1 mm SL, Kurio; KAUM-I. 24915, 45.5 mm SL, Kurio; KAUM-I. 24916, 49.5 mm SL, Kurio; KAUM-I. 24917, 49.7 mm SL, Kurio; KAUM-I. 24918, 50.4 mm SL, Kurio; KAUM-I. 24919, 50.7 mm SL, Kurio; KAUM-I. 24920, 42.3 mm SL, Kurio; KAUM-I. 24921, 43.9 mm SL, Kurio; KAUM-I. 24922, 53.3 mm SL, Kurio; KAUM-I. 24923, 43.3 mm SL, Kurio; KAUM-I. 24924, 53.2 mm SL, Kurio; KAUM-I. 24925, 45.3 mm SL, Kurio; KAUM-I. 24926, 57.7 mm SL, Kurio; KAUM-I. 24927, 48.6 mm SL, Kurio; KAUM-I. 24928, 51.3 mm SL, Kurio; KAUM-I. 24929, 50.2 mm SL, Kurio; KAUM-I. 24930, 43.1 mm SL, Kurio; KAUM-I. 24931, 52.2 mm SL, Kurio; KAUM-I. 24932, 47.9 mm SL, Kurio; KAUM-I. 24933, 45.2 mm SL, Kurio; MUFS 25512, 48.0 mm SL, Kurio; MUFS 25513, 62.0 mm SL, Kurio; NSMT-P 77735, 55.5

mm SL, Nagakubo; NSMT-P 77736, 58.4 mm SL, Nagakubo; NSMT-P 77737, 40.3 mm SL, Nagakubo; NSMT-P 77775, 45.6 mm SL, Kurio; NSMT-P 91363, 47 mm SL, Yudomari; NSMT-P 91371, 60 specimens, 22–59 mm SL, Kurio; NSMT-P 91583, 5 specimens, 29–47 mm SL, Kurio; NSMT-P 91604, 8 specimens, 38–58 mm SL, Nagakubo; NSMT-P 91612, 68 specimens, 16–55 mm SL, Kurio; NSMT-P 91674, 6 specimens, 16–25 mm SL, Kurio; USNM 313686, 19 specimens, 39.1–63.3 mm SL, Miyanoura.

Arai and Ida (1975): NSMT-P 17811, 16 specimens, 23.3–50.7 mm SL, Kusugawa; NSMT-P 17829, 2 specimens, 58.5–63.0 mm SL, Kusugawa; NSMT-P 17857, 3 specimens, 47.1–60.1 mm SL, Kusugawa. MOSC (2002): Ambo and Kurio.



**Fig. 463.** *Praealticus margaritarius* (KAUM-I. 11221, 57.0 mm SL).

#### *Praealticus striatus* Bath, 1992

[Jpn name: Kabukigimpo] (Fig. 464)

FRLM 34688, 53.0 mm SL, Kurio; KAUM-I. 11217, 65.0 mm SL, Kurio.



**Fig. 464.** *Praealticus striatus* (KAUM-I. 11217, female, 65.0 mm SL).

#### *Praealticus tanegasimae* (Jordan and Starks, 1906)

[Jpn name: Tanegimpo] (Fig. 465)

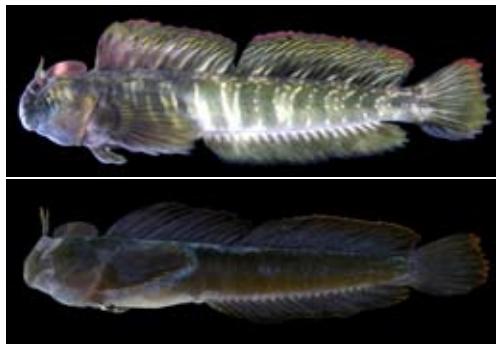
FRLM 34685, 73.7 mm SL, Kurio; FRLM 34686, 73.3 mm SL, Kurio; FRLM 34687, 61.1

mm SL, Kurio; FRLM 34691, 48.5 mm SL, Kurio; FRLM 34692, 62.2 mm SL, Kurio; FRLM 34693, 52.0 mm SL, Kurio; KAUM-I. 11219, 75.8 mm SL, Kurio; KAUM-I. 11220, 62.6 mm SL, Kurio; KAUM-I. 11223, 59.9 mm SL, Kurio; KAUM-I. 23550, 74.8 mm SL, Kurio; KAUM-I. 23551, 81.6 mm SL, Kurio; KAUM-I. 23552, 77.3 mm SL, Kurio; KAUM-I. 23553, 67.2 mm SL, Kurio; KAUM-I. 23554, 64.5 mm SL, Kurio; KAUM-I. 23555, 66.2 mm SL, Kurio; KAUM-I. 23556, 73.7 mm SL, Kurio; KAUM-I. 23557, 66.8 mm SL, Kurio; KAUM-I. 23558, 69.0 mm SL, Kurio; KAUM-I. 23559, 69.2 mm SL, Kurio; KAUM-I. 23560, 60.3 mm SL, Kurio; KAUM-I. 23561, 64.3 mm SL, Kurio; KAUM-I. 23562, 57.2 mm SL, Kurio; KAUM-I. 23563, 57.1 mm SL, Kurio; KAUM-I. 23564, 65.1 mm SL, Kurio; KAUM-I. 23565, 68.7 mm SL, Kurio; KAUM-I. 23566, 54.2 mm SL, Kurio; KAUM-I. 23567, 60.7 mm SL, Kurio; KAUM-I. 23568, 62.2 mm SL, Kurio; KAUM-I. 23569, 53.0 mm SL, Kurio; KAUM-I. 23570, 59.8 mm SL, Kurio; KAUM-I. 23571, 54.4 mm SL, Kurio; KAUM-I. 23572, 58.1 mm SL, Kurio; KAUM-I. 23573, 55.5 mm SL, Kurio; KAUM-I. 23574, 57.5 mm SL, Kurio; KAUM-I. 23575, 51.1 mm SL, Kurio; KAUM-I. 23576, 61.8 mm SL, Kurio; KAUM-I. 23577, 55.3 mm SL, Kurio; KAUM-I. 23578, 59.4 mm SL, Kurio; KAUM-I. 23579, 60.6 mm SL, Kurio; KAUM-I. 23580, 62.6 mm SL, Kurio; KAUM-I. 23581, 56.3 mm SL, Kurio; KAUM-I. 23582, 51.3 mm SL, Kurio; KAUM-I. 23583, 58.1 mm SL, Kurio; KAUM-I. 23584, 50.6 mm SL, Kurio; KPM-NI 22879, 65.1 mm SL, Ambo; NSMT-P 77738, 41.0 mm SL, Nagakubo; NSMT-P 77739, 57.2 mm SL, Nagakubo; NSMT-P 77988, 44.3 mm SL, Kurio; NSMT-P 91377, 36 specimens, 25–76 mm SL, Kurio; NSMT-P 91603, 10 specimens, 50–65 mm SL, Nagakubo; NSMT-P 91613, 178 specimens, 25–85 mm SL, Kurio.

Jordan and Starks (1906, as *Salarias tanegasimae*): SU 14690, 3 specimens, 50.7–63.2 mm SL, Miyanoura; USNM 53537, 6 specimens, 45.0–68.3 mm SL, Miyanoura. Arai and Ida (1975): NSMT-P 17818, 8 specimens, 33.2–82.4 mm SL, Kusugawa; NSMT-P 17965, 5 specimens, 61.3–70.4 mm SL, Kusugawa; NSMT-P 58100, 50.2 mm SL, Kusugawa; NSMT-P 58104,

2 specimens, 50.1–57.8 mm SL, Kusugawa.

Remarks: The original description of *S. tanegasimae* by Jordan and Starks (1906) stated that specimens were collected from Tanegashima and Yakushima. The holotype and seven paratypes were from Tanega-shima Island. The six Yakushima Island specimens registered as USNM 53537 are non-types.



**Fig. 465.** *Praealticus tanegasimae* (upper: KPM-NI 22879, male, 65.1 mm SL; lower: KAUM-I. 11219, male, 75.8 mm SL).

#### *Rhabdoblennius nitidus* (Günther, 1861)

[Jpn name: Rousokugimpo] (Fig. 466)

BSKU 96685, 44.2 mm SL, Kurio; BSKU 96686, 45.2 mm SL, Kurio; BSKU 96687, 40.8 mm SL, Kurio; FRLM 34689, 29.3 mm SL, Kurio; FRLM 34690, 42.6 mm SL, Kurio; FRLM 34697, 60.4 mm SL, Kurio; KAUM-I. 11212, 15.7 mm SL, Kurio; KAUM-I. 11779, 51.9 mm SL, Nagakubo; KAUM-I. 11780, 51.6 mm SL, Nagakubo; KAUM-I. 20256, 53.7 mm SL, Kurio; KAUM-I. 20270, 60.7 mm SL, Kurio; KAUM-I. 20271, 55.1 mm SL, Kurio; KAUM-I. 21689, 41.0 mm SL, Kurio; KAUM-I. 21690, 44.4 mm SL, Kurio; KAUM-I. 21744, 28.4 mm SL, Kurio; KAUM-I. 23471, 48.1 mm SL, Kurio; KAUM-I. 23472, 52.5 mm SL, Kurio; KAUM-I. 23473, 57.4 mm SL, Kurio; KAUM-I. 23474, 50.0 mm SL, Kurio; KAUM-I. 23475, 42.1 mm SL, Kurio; KAUM-I. 23476, 26.9 mm SL, Kurio; KAUM-I. 23477, 49.9 mm SL, Kurio; KAUM-I. 23478, 48.6 mm SL, Kurio; KAUM-I. 23479, 47.4 mm SL, Kurio; KAUM-I. 23480, 53.7 mm SL, Kurio; KAUM-I. 23481, 63.1 mm SL, Kurio; KAUM-

I. 23482, 43.3 mm SL, Kurio; KAUM-I. 23483, 50.9 mm SL, Kurio; KAUM-I. 23484, 52.0 mm SL, Kurio; KAUM-I. 23485, 52.3 mm SL, Kurio; KAUM-I. 23486, 45.1 mm SL, Kurio; KAUM-I. 23487, 48.9 mm SL, Kurio; KAUM-I. 23488, 48.4 mm SL, Kurio; KAUM-I. 23489, 27.7 mm SL, Kurio; KAUM-I. 23490, 40.9 mm SL, Kurio; KAUM-I. 23491, 46.1 mm SL, Kurio; KAUM-I. 23492, 44.7 mm SL, Kurio; KAUM-I. 23493, 56.4 mm SL, Kurio; KAUM-I. 23494, 50.6 mm SL, Kurio; KAUM-I. 23495, 44.9 mm SL, Kurio; KAUM-I. 23496, 33.3 mm SL, Kurio; KAUM-I. 23497, 46.1 mm SL, Kurio; KAUM-I. 23498, 56.1 mm SL, Kurio; KAUM-I. 23499, 54.1 mm SL, Kurio; KAUM-I. 23500, 47.1 mm SL, Kurio; KAUM-I. 23501, 48.0 mm SL, Kurio; KAUM-I. 23502, 56.6 mm SL, Kurio; KAUM-I. 23503, 32.8 mm SL, Kurio; KAUM-I. 23504, 52.2 mm SL, Kurio; KAUM-I. 23505, 60.3 mm SL, Kurio; KAUM-I. 23506, 38.1 mm SL, Kurio; KAUM-I. 23507, 42.8 mm SL, Kurio; KAUM-I. 23508, 48.6 mm SL, Kurio; KAUM-I. 23509, 45.3 mm SL, Kurio; KAUM-I. 23510, 47.6 mm SL, Kurio; KAUM-I. 23511, 53.9 mm SL, Kurio; KAUM-I. 23512, 47.2 mm SL, Kurio; KAUM-I. 23513, 51.3 mm SL, Kurio; KAUM-I. 23514, 40.6 mm SL, Kurio; KAUM-I. 23515, 44.7 mm SL, Kurio; KAUM-I. 23516, 52.2 mm SL, Kurio; KAUM-I. 23517, 42.5 mm SL, Kurio; KAUM-I. 23518, 28.0 mm SL, Kurio; KAUM-I. 23519, 32.8 mm SL, Kurio; KAUM-I. 23520, 42.5 mm SL, Kurio; KAUM-I. 23521, 46.7 mm SL, Kurio; KAUM-I. 23522, 75.2 mm SL, Kurio; MUFS 25514, 57.2 mm SL, Kurio; NSMT-P 77748, 50.8 mm SL, Nagakubo; NSMT-P 77749, 52.5 mm SL, Nagakubo; NSMT-P 77750, 45.9 mm SL, Nagakubo; NSMT-P 77751, 3 specimens, 13.7–21.6 mm SL, Nagakubo; NSMT-P 91376, 41 specimens, 25–62 mm SL, Kurio; NSMT-P 91584, 26 specimens, 28–66 mm SL, Kurio; NSMT-P 91611, 39 specimens, 25–56 mm SL, Kurio; NSMT-P 91673, 15 mm SL, Kurio.

Jordan and Starks (1906 as *Blennius ellipes*): USNM 61164, 4 paratypes of *Blennius ellipes*, 35.5–48.9 mm SL, Yaku-shima Island. Arai and Ida (1975): NSMT-P 17839 (as *Istiblennius biltonensis*, Hohogurogimpo), 42.1 mm SL, Kusugawa; NSMT-P 17856, 7 specimens, 31.3–61.2 mm

SL, Kusugawa; NSMT-P 58103, 51.5 mm SL, Kusugawa.

Remarks: Bath (2004) regarded *Blennius elipes* Jordan and Starks, 1906 (= *Rhabdoblennius ellipes*) as a junior synonym of *Salarias nitidus*.

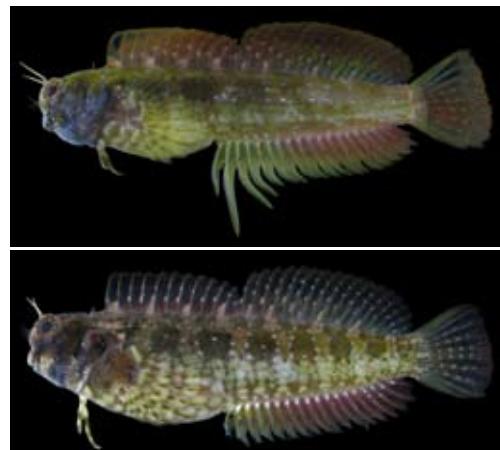


**Fig. 466.** *Rhabdoblennius nitidus* (KAUM-I. 20271, 55.1 mm SL).

### *Salarias sinuosus* Snyder, 1908

[Jpn name: Hirenagakaeruu] (Fig. 468)

KPM-NI 22872, 44.8 mm SL, Ambo; KPM-NI 22873, 43.4 mm SL, Ambo; KPM-NI 22874, 47.7 mm SL, Ambo; KPM-NI 22886, 47.7 mm SL, Ambo; KPM-NI 22932, 42.4 mm SL, Ambo; KPM-NI 24791, 47.2 mm SL, Kurio; KPM-NI 24794, 23.8 mm SL, Kurio.



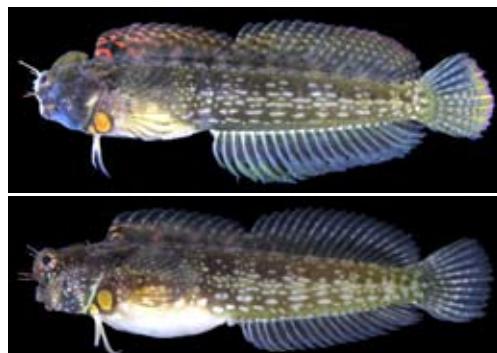
**Fig. 468.** *Salarias sinuosus* (upper: KPM-NI 22932, male, 42.4 mm SL; lower: KPM-NI 22886, female, 47.7 mm SL).

### *Salarias luctuosus* Whitley, 1929

[Jpn name: Shimagimpo] (Fig. 467)

KAUM-I. 11313, 32.4 mm SL, Yudomari; KAUM-I. 11651, 56.8 mm SL, Ambo; KAUM-I. 11663, 52.5 mm SL, Ambo; KAUM-I. 11664, 49.4 mm SL, Ambo; KAUM-I. 11665, 48.1 mm SL, Ambo; KAUM-I. 11666, 33.1 mm SL, Ambo; KAUM-I. 11702, 20.6 mm SL, Ambo; KAUM-I. 11703, 22.8 mm SL, Ambo; KAUM-I. 11704, 21.4 mm SL, Ambo; KAUM-I. 11705, 21.6 mm SL, Ambo; KAUM-I. 21829, 68.7 mm SL, Kurio; KAUM-I. 22837, 45.9 mm SL, Kurio; KPM-NI 22883, 45.0 mm SL, Ambo; KPM-NI 22887, 60.5 mm SL, Ambo; NSMT-P 91375, 53 mm SL, Kurio.

Arai and Ida (1975): NSMT-P 17810, 15 specimens, 27.4–64.2 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 467.** *Salarias luctuosus* (upper: KPM-NI 22887, male, 60.5 mm SL; lower: KPM-NI 22883, female, 45.0 mm SL).

### FAMILY CHAENOPSIDAE

#### *Neoclinus bryope* (Jordan and Snyder, 1902)

[Jpn name: Kokegimpo]

Aizawa (2002): Yaku-shima Island.

#### *Neoclinus nudus* Stephens and Springer, 1971

[Jpn name: Hadakakokegimpo] (Fig. 469)



**Fig. 469.** *Neoclinus nudus* (off Isso, 8 m, 11 June 2007, S. Harazaki).

***Neoclinus* sp.**

[Jpn name: None] (Fig. 470)

Remarks: This species is very similar to *Neoclinus chihiroe* Fukao, 1987, but differs from the latter in several aspects, including the number of cephalic sensory pores; currently studied by A. Murase of Tokyo University of Marine Science and Technology.



Fig. 470. *Neoclinus* sp. (off Onoaida, 8 m, 2 Mar. 2005, S. Harazaki).

## FAMILY GOBIESOCIDAE

***Conidens laticephalus* (Tanaka, 1909)**

[Jpn name: Ankoubauo] (Fig. 471)

KAUM-I. 11210, 17.7 mm SL, Kurio;  
KAUM-I. 11294, 23.9 mm SL, Yudomari;  
KAUM-I. 11413, 20.0 mm SL, Kurio; KAUM-I.  
21833, 25.8 mm SL, Kurio; KAUM-I. 22816,  
24.8 mm SL, Kurio.

Arai and Ida (1975): Kusugawa [three specimens (25–56 mm TL) were reported, but not found at NSMT].



Fig. 471. *Conidens laticephalus* (KAUM-I. 11210, 17.7 mm SL).

***Lepadichthys frenatus* Waite, 1904**

[Jpn name: Misakiubauo] (Fig. 472)

BSKU 96653, 42.0 mm SL, Isso; BSKU 96654, 12.2 mm SL, Isso; FRLM 34741, 27.2 mm SL, Kurio; KAUM-I. 11163, 29.2 mm SL, Kurio; KAUM-I. 11266, 51.1 mm SL, Yudomari; KAUM-I. 11330, 25.7 mm SL, Nagakubo; KAUM-I. 11621, 44.0 mm SL, Ambo; KAUM-I. 20276, 37.8 mm SL, Kurio; KAUM-I. 21757, 29.7 mm SL, Kurio; KAUM-I. 21758, 31.9 mm SL, Kurio; KAUM-I. 21832, 29.3 mm SL, Kurio; MUFS 25605, 29.9 mm SL, Kurio; MUFS 25606, 30.3 mm SL, Kurio; MUFS 25607, 29.6 mm SL, Kurio; NSMT-P 91670, 29 mm SL, Kurio; NSMT-P 91671, 16 mm SL, Kurio; NSMT-P 95455, 45.6 mm SL, Haruo.

Arai and Ida (1975): NSMT-P 58109, 57.4 mm SL, Kusugawa; NSMT-P 58118, 54.3 mm SL, Kusugawa; NSMT-P 58121, 44.0 mm SL, Kusugawa.

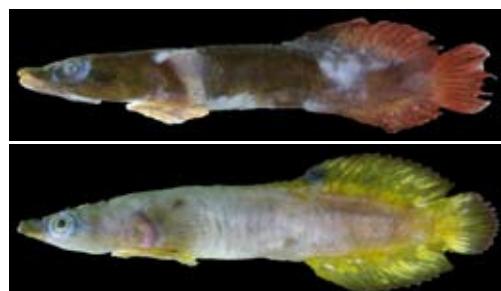


Fig. 472. *Lepadichthys frenatus* (upper: KAUM-I. 11163, 29.2 mm SL; lower: KAUM-I. 11266, 51.1 mm SL).

***Pherallodus indicus* (Weber, 1913)**

[Jpn name: Hosoubauo] (Fig. 473)

KAUM-I. 11391, 14.1 mm SL, Kurio.



**Fig. 473.** *Pherallodus indicus* (KAUM-I. 11391, 14.1 mm SL).

#### FAMILY CALLIONYMIDAE

***Callionymus curvicornis*** Valenciennes, 1837

[Jpn name: Nezumigochi] (Fig. 474)

USNM 111598, 88.6 mm SL, off southeast of Yaku-shima Island.

Remarks: This species has often been treated as *Callionymus richardsoni* Bleeker, 1854, *Repomucenus richardsonii*, or *Repomucenus curvicornis*.



**Fig. 474.** *Callionymus curvicornis* (USNM 111598, 88.6 mm SL, preserved specimen).

***Diplogrammus goramensis*** (Bleeker, 1858)

[Jpn name: Minamikobunumeri]

Kuniyasu (1999): Kurio.

***Diplogrammus xenicus*** (Jordan and Thompson, 1914)

[Jpn name: Kobunumeri] (Fig. 475)

BSKU 96602, 83.6 mm SL, Kurio; BSKU 96657, 62.9 mm SL, Isso; BSKU 96658, 40.8 mm SL, Isso; BSKU 96610, 36.5 mm SL, Kurio; KAUM-I. 20379, 84.2 mm SL, Isso.



**Fig. 475.** *Diplogrammus xenicus* (upper: BSKU 96610, 36.5 mm SL; lower: KAUM-I. 20379, 84.2 mm SL).

***Minysynchiropus kiyoeae*** (Fricke and Zaizer, 1983)

[Jpn name: Himeteguri]

Kuniyasu (1999): Kurio.

Remarks: This species has often been treated as *Synchiropus kiyoeae* Fricke and Zaizer, 1983.

***Neosynchiropus ocellatus*** (Pallas, 1770)

[Jpn name: Kouwanteguri] (Fig. 476)

KAUM-I. 21769, 32.0 mm SL, Kurio; KPM-NI 24906, 11.6 mm SL, Kurio.

Arai and Ida (1975, as *Synchiropus ocellatus*): NSMT-P 58116, 40.5 mm SL, Kusugawa; NSMT-P 58130, 44.8 mm SL, Kusugawa; NSMT-P 58137, 40.8 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island.

Remarks: This species has often been treated as *Synchiropus ocellatus*.



**Fig. 476.** *Neosynchiropus ocellatus* (KAUM-I. 21769, 32.0 mm SL).

***Paradiplogrammus enneactis*** (Bleeker, 1879)

[Jpn name: Kogatahanabinumeri]

Kuniyasu (1999): Kurio.

Remarks: This species has often been treated as *Callionymus enneactis*.

#### FSMILY ELEOTRIDAE

***Butis amboinensis*** (Bleeker, 1853)

[Jpn name: Yaeyamanokogirihaze] (Fig. 477)

KAUM-I. 11503, 20.9 mm SL, mouth of Miyanoura River.



**Fig. 477.** *Butis amboinensis* (KAUM-I. 11503, 20.9 mm SL).

***Eleotris acanthopoma*** Bleeker, 1853

[Jpn name: Chichibumodoki] (Fig. 478)

BSKU 96881, 71.0 mm SL, Kurio; BSKU 96882, 38.4 mm SL, Kurio; KAUM-I. 11202, 77.5 mm SL, mouth of Kurio River; KAUM-I. 11303, 92.0 mm SL, Yudomari; KAUM-I. 11304, 63.0 mm SL, Yudomari; KAUM-I. 11715, 36.8 mm SL, mouth of Miyanoura River; KAUM-I. 11771, 23.0 mm SL, mouth of Miyanoura River; KAUM-I. 11772, 25.5 mm SL, mouth of Miyanoura River; KAUM-I. 20298, 37.9 mm SL, mouth of Kurio River; KAUM-I. 20318, 36.8 mm SL, mouth of Kurio River; KAUM-I. 20321, 92.9 mm SL, mouth of Kurio River; KAUM-I. 20322, 77 mm SL, mouth of Kurio River; KAUM-I. 20370, 36.9 mm SL, mouth of Kurio River; KAUM-I. 21597, 38.8 mm SL, mouth of Ambo River; KAUM-I. 21598, 73.3 mm SL, mouth of Ambo River; KAUM-I. 21599, 54.3 mm SL, mouth of Ambo River; KAUM-I. 21600, 47.9 mm SL, mouth of Ambo River; KAUM-I. 24711, 49.0 mm SL, mouth of Kurio River; KAUM-I. 24712, 25.8 mm SL, mouth of Kurio River; KAUM-I. 24713, 22.0 mm SL, mouth of Kurio River; KAUM-I. 24714, 19.3 mm SL, mouth of Kurio River; KAUM-I. 24715, 42.4 mm SL, mouth of Kurio River; KAUM-I. 24716, 31.9 mm SL, mouth of Kurio River; KAUM-I. 24717, 30.3 mm SL, mouth of Kurio River; MUFS 25443, 13.5 mm SL, Matsumine.



Fig. 478. *Eleotris acanthopoma* (KAUM-I. 20298, 37.9 mm SL).

## FAMILY XENISTHMIDAE

***Xenisthmus* sp.**

[Jpn name: None] (Fig. 479)

KPM-NI. 22558, 18.0 mm SL, Kurio.

Remarks: The Yaku-shima specimen is similar to *X. polyonotus* (Klunzinger, 1871), but differs in having the vertical bars on the lateral surface

of the body not reaching to the ventral, yellowish ventrolateral body surface, and a dark band across the dorsal and anal fins.



Fig. 479. *Xenisthmus* sp. (KPM-NI. 22558, 18.0 mm SL).

## FAMILY GOBIIDAE

***Acentrogobius audax*** Smith, 1959

[Jpn name: Nisetsumugihaze] (Fig. 480)

BSKU 96627, 39.5 mm SL, mouth of Kurio River.



Fig. 480. *Acentrogobius audax* (BSKU 96627, 39.5 mm SL).

***Acentrogobius suluensis*** (Herre, 1927)

[Jpn name: Hohogurosujihaze] (Fig. 481)

KPM-NI 22568, 30.4 mm SL, mouth of Kurio River.



Fig. 481. *Acentrogobius suluensis* (KPM-NI 22568, 30.4 mm SL).

*Amblyeleotris fontanesii* (Bleeker, 1852)

[Jpn name: Nyudodatehaze] (Fig. 482)



Fig. 482. *Amblyeleotris fontanesii* (off Isso, 12 m, 18 Oct. 2009, S. Harazaki).

*Amblyeleotris japonica* Takagi, 1957

[Jpn name: Datehaze] (Fig. 483)

KAUM-I. 20141, 44.3 mm SL, Yudomari.



Fig. 483. *Amblyeleotris japonica* (KAUM-I. 20141, 44.3 mm SL).

*Amblyeleotris periophthalma* (Bleeker, 1853)

[Jpn name: Dandaradatehaze] (Fig. 484)



Fig. 484. *Amblyeleotris periophthalma* (off Isso, 18 m, 28 Mar. 2004, S. Harazaki).

*Amblyeleotris wheeleri* (Polunin and Lubbock, 1977)

[Jpn name: Kubiakahaze]

Ichikawa et al. (1992, as *Amblyeleotris fasciata*): Yaku-shima Island. Kuniyasu (1999): Kurio. Suzuki and Shibukawa (2004): Yaku-shima Island.

*Amblygobius linki* Herre, 1927

[Jpn name: Wakakesarasahaze] (Fig. 485)

Ogihara et al. (2009): mouth of Ambo River.



Fig. 485. *Amblygobius linki* (mouth of Ambo River; after Ogihara et al., 2009).

*Amblygobius nocturnus* (Herre, 1945)

[Jpn name: Hohobenisarasahaze] (Fig. 486)

KAUM-I. 11277, 24.8 mm SL, Yudomari; KPM-NI 22539, 20.6 mm SL, Yudomari.

Remarks: These specimens are probably the same as *Amblygobius* sp. A of Suzuki and Shibukawa (2004).



Fig. 486. *Amblygobius nocturnus* (KPM-NI 22539, 20.6 mm SL).

*Amblygobius phalaena* (Valenciennes, 1837)

[Jpn name: Sarasahaze] (Fig. 487)

BSKU 96545, Yudomari; BSKU 96624, mouth of Kurio River; KAUM-I. 20024, 40.8 mm SL, Yudomari; KAUM-I. 20055, 99.7 mm

SL, Yudomari; KAUM-I. 20084, 91.1 mm SL, Yudomari; KAUM-I. 20153, 39.4 mm SL, Yudomari; KAUM-I. 20195, 45.5 mm SL, Yudomari; KAUM-I. 20217, 30.4 mm SL, Yudomari; KAUM-I. 20316, 39.8 mm SL, mouth of Kurio River; KAUM-I. 20319, 33.4 mm SL, Kurio; KAUM-I. 20320, 38.8 mm SL, Kurio; KAUM-I. 20536, 38 mm SL, Yudomari; KAUM-I. 21603, 101.2 mm SL, mouth of Ambo River; KPM-NI 22540, 68.6 mm SL, Yudomari.

Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 487.** *Amblygobius phalaena* (KAUM-I. 20055, 99.7 mm SL).

KAUM-I. 11389, 12.3 mm SL, Kurio; KAUM-I. 11514, 29.0 mm SL, Ambo; KAUM-I. 20157, 25.4 mm SL, Yudomari; KAUM-I. 20173, 23 mm SL, Yudomari; KAUM-I. 20218, 25.4 mm SL, Yudomari; KAUM-I. 20219, 21.4 mm SL, Yudomari; KAUM-I. 20220, 19.8 mm SL, Yudomari; KAUM-I. 20538, 26.6 mm SL, Yudomari; KAUM-I. 21754, 18.9 mm SL, Kurio; KAUM-I. 21787, 31.6 mm SL, Isso; KAUM-I. 21867, 21.2 mm SL, Kurio; KAUM-I. 23530, 18.9 mm SL, Ambo; KAUM-I. 23531, 30.5 mm SL, Ambo; KPM-NI 22525, 21.3 mm SL, Yudomari.



**Fig. 489.** *Asterropteryx semipunctata* (upper: KAUM-I. 11258, 37.3 mm SL; lower: KPM-NI 22525, 21.3 mm SL).



**Fig. 488.** *Amblygobius* sp. (off Isso, 4 m, 20 Oct. 2007, S. Harazaki).

#### *Asterropteryx semipunctata* Rüppell, 1830

[Jpn name: Hoshihaze] (Fig. 489)

BSKU 96576, 20.6 mm SL, Yudomari; KAUM-I. 11258, 37.3 mm SL, Yudomari;

#### *Awaous ocellaris* (Broussonet, 1782)

[Jpn name: Minamihaze]

Suzuki and Shibukawa (2004): Yaku-shima Island.

#### *Bathygobius coalitus* (Bennett, 1832)

[Jpn name: Kuroyahazuhaze] (Fig. 490)

KAUM-I. 11184, 25.7 mm SL, Kurio; KAUM-I. 11329, 15.7 mm SL, Nagakubo; KAUM-I. 11331, 15.1 mm SL, Nagakubo;

KAUM-I. 25052, 32.8 mm SL, Kurio; NSMT-P 77570, 40.0 mm SL, Kurio; NSMT-P 77572, 50.6 mm SL, Kurio; NSMT-P 77573, 61.7 mm SL, Kurio; NSMT-P 77574, 52.0 mm SL, Kurio; NSMT-P 77575, 45.8 mm SL, Kurio; NSMT-P 77576, 38.2 mm SL, Kurio; NSMT-P 77577, 34.6 mm SL, Kurio; NSMT-P 77578, 36.1 mm SL, Kurio; NSMT-P 91578, 24.3 mm SL, Kurio.

Suzuki and Shibukawa (2004): Yaku-shima Island.

Remarks: *Bathygobius padangensis* (Bleeker, 1851) has recently regarded as a junior synonym of *Bathygobius coalitus* by Hoese and Larson (2006).



**Fig. 490.** *Bathygobius coalitus* (KAUM-I. 11331, 15.1 mm SL).

33.2 mm SL, Kurio; NSMT-P 77919, 36.9 mm SL, Kurio; NSMT-P 77920, 33.2 mm SL, Kurio; NSMT-P 77921, 25.5 mm SL, Kurio; NSMT-P 77922, 19.8 mm SL, Kurio; NSMT-P 77923, 19.7 mm SL, Kurio; NSMT-P 77924, 14.7 mm SL, Kurio; NSMT-P 77925, 24.2 mm SL, Kurio.



**Fig. 491.** *Bathygobius cocosensis* (KAUM-I. 11118, 22.6 mm SL).

#### *Bathygobius cotticeps* (Steindachner, 1879)

[Jpn name: Sujikumohaze] (Fig. 491)

KAUM-I. 11118, 22.6 mm SL, Matsumine; KAUM-I. 11179, 31.4 mm SL, Kurio; KAUM-I. 11182, 21.5 mm SL, Kurio; KAUM-I. 11378, 34.1 mm SL, Kurio; KAUM-I. 11379, 31.1 mm SL, Kurio; KAUM-I. 11380, 26.8 mm SL, Kurio; KAUM-I. 11773, 24.9 mm SL, mouth of Miyanoura River; KAUM-I. 20537, 31.7 mm SL, Yudomari; KAUM-I. 21697, 27.7 mm SL, Kurio; KAUM-I. 23545, 22.4 mm SL, Kurio; KAUM-I. 23546, 27.9 mm SL, Kurio; KAUM-I. 23547, 30.5 mm SL, Kurio; KAUM-I. 23548, 26.3 mm SL, Kurio; KAUM-I. 25053, 29.6 mm SL, Kurio; KAUM-I. 25054, 26.7 mm SL, Kurio; NSMT-P 17845, 43.7 mm SL, Kusugawa; NSMT-P 17858, 4 specimens, 27.8–31.5 mm SL, Kusugawa; NSMT-P 77571, 35.5 mm SL, Kurio; NSMT-P 77719, 30.4 mm SL, Kurio; NSMT-P 77720, 36.7 mm SL, Kurio; NSMT-P 77721, 27.4 mm SL, Kurio; NSMT-P 77722, 30.1 mm SL, Kurio; NSMT-P 77723, 26.2 mm SL, Kurio; NSMT-P 77724, 29.4 mm SL, Kurio; NSMT-P 77918,

#### *Bathygobius cotticeps* (Steindachner, 1879)

[Jpn name: Kusabihaze] (Fig. 492)

KAUM-I. 11114, 15.4 mm SL, Matsumine; KPM-NI 22931, 63.0 mm SL, Isso; MUFS 25619, 30.4 mm SL, Kurio.



**Fig. 492.** *Bathygobius cotticeps* (upper: KAUM-I. 11114, 15.4 mm SL; lower: KPM-NI 22931, 63.0 mm SL).

#### *Bathygobius cyclopterus* (Valenciennes, 1837)

[Jpn name: Yahazuhaze] (Fig. 493)

KAUM-I. 11183, 21.5 mm SL, Kurio; KAUM-I. 11517, 30.4 mm SL, Ambo; KAUM-I. 21803, 21.3 mm SL, Kurio; KPM-NI 24907, 8.6 mm SL, Kurio; KPM-NI 24908, 13.2 mm SL, Kurio; NSMT-P 17838, 34.1 mm SK, Kusugawa; NSMT-P 77926, 51.6 mm SL, Kurio; NSMT-P

91623, 30 mm SL, Kurio; NSMT-P 91623, 28.7 mm SL, Kurio; NSMT-P 91624, 28.2 mm SL, Kurio.

Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 493.** *Bathygobius cyclopterus* (KAUM-I. 11517, 30.4 mm SL).



**Fig. 495.** *Bryaninops natans* (off Isso, 12 m, 16 Sept. 2006, S. Harazaki).

#### ***Bathygobius fuscus* (Rüppell, 1830)**

[Jpn name: Kumohaze] (Fig. 494)

KAUM-I. 11185, 54.7 mm SL, Kurio; KAUM-I. 11521, 47.0 mm SL, Ambo; KAUM-I. 21854, 61.5 mm SL, Kurio; NSMT-P 77778, 35.6 mm SL, Kurio; NSMT-P 91626, 25.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 494.** *Bathygobius fuscus* (KAUM-I. 11521, 47.0 mm SL).

#### ***Bathygobius hongkongensis* (Fowler, 1931)**

[Jpn name: Kurohoshiyahazuhaze]

Akihito et al. (2002): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.

#### ***Bryaninops natans* Larson, 1985**

[Jpn name: Akamehaze] (Fig. 495)

#### ***Bryaninops yongei* (Davis and Cohen, 1969)**

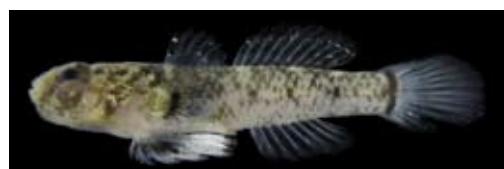
[Jpn name: Garasuhaze]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

#### ***Cabillus tongarevae* (Fowler, 1927)**

[Jpn name: Yorimehaze] (Fig. 496)

KPM-NI 24793, 21.3 mm SL, Kurio.



**Fig. 496.** *Cabillus tongarevae* (KPM-NI 24793, 21.3 mm SL).

#### ***Cabillus* sp.**

[Jpn name: None] (Fig. 497)

KAUM-I. 11180, 20.0 mm SL, Kurio; KAUM-I. 21729, 20.6 mm SL, Kurio; KAUM-I. 21756, 14.4 mm SL, Kurio.

Remarks: These specimens were identified as *Cabillus* sp. 3 of Suzuki and Shibukawa (2004).



**Fig. 497.** *Cabillus* sp. (KAUM-I. 11180, 20.0 mm SL).

***Callogobius hasseltii* (Bleeker, 1851)**

[Jpn name: Okinawahaze] (Fig. 498)

BSKU 96593, 15.0 mm SL, Yudomari; BSKU 96596, 17.0 mm SL, Yudomari; KAUM-I. 20178, 19.4 mm SL, Yudomari; KAUM-I. 20179, 14.7 mm SL, Yudomari; KAUM-I. 20180, 19.8 mm SL, Yudomari; KAUM-I. 20181, 18.7 mm SL, Yudomari; KAUM-I. 20215, 17 mm SL, Yudomari; KAUM-I. 20216, 21 mm SL, Yudomari; KPM-NI 22523, 21.4 mm SL, Yudomari.



Fig. 498. *Callogobius hasseltii* (KAUM-I. 20181, 18.7 mm SL).

KAUM-I. 11320, 50.0 mm SL, Nagakubo; KAUM-I. 11326, 45.2 mm SL, Nagakubo; KAUM-I. 11333, 42.1 mm SL, Nagakubo; KAUM-I. 20368, 41.4 mm SL, mouth of Kurio River; KAUM-I. 20369, 28.5 mm SL, mouth of Kurio River; KPM-NI 22564, 47.5 mm SL, mouth of Kurio River; NSMT-P 91595, 48.6 mm SL, Nagakubo; NSMT-P 91596, 50.0 mm SL, Nagakubo.



Fig. 500. *Callogobius tanegasimae* (upper: KAUM-I. 11333, 42.1 mm SL; lower: KPM-NI 22564, 47.5 mm SL).

***Callogobius okinawae* (Snyder, 1908)**

[Jpn name: Namerahaze] (Fig. 499)

KAUM-I. 11178, 43.3 mm SL, Kurio; KAUM-I. 11188, 48.2 mm SL, Kurio; KAUM-I. 11215, 11.2 mm SL, Kurio; KAUM-I. 11332, 10.7 mm SL, Nagakubo; NSMT-P 77726, 31.8 mm SL, Kurio; NSMT-P 77727, 25.6 mm SL, Kurio; NSMT-P 77728, 33.1 mm SL, Kurio; NSMT-P 77776, 43.7 mm SL, Kurio; NSMT-P 77777, 58.4 mm SL, Kurio; NSMT-P 91625, 30.5 mm SL, Kurio.

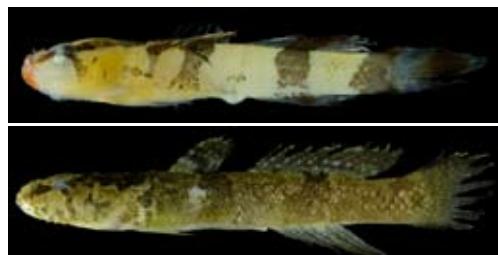


Fig. 499. *Callogobius okinawae* (upper: KAUM-I. 11215, 11.2 mm SL; lower: KAUM-I. 11178, 43.3 mm SL).

***Callogobius* sp. 1**

[Jpn name: None] (Fig. 501)

KPM-NI 22535, 13.8 mm SL, Yudomari.

Remarks: This individual is a close relative of *Callogobius maculipinnis* (Fowler, 1918).



Fig. 501. *Callogobius* sp. 1 (KPM-NI 22535, 13.8 mm SL).

***Callogobius* sp. 2**

[Jpn name: None]

Suzuki and Shibukawa (2004, as *Callogobius* sp. 1): Yaku-shima Island.

***Callogobius* sp. 3**

[Jpn name: None]

Suzuki and Shibukawa (2004, as *Callogobius* sp. 3): Yaku-shima Island.

***Callogobius tanegasimae* (Snyder, 1908)**

[Jpn name: Tanehaze] (Fig. 500)

KAUM-I. 11318, 54.2 mm SL, Nagakubo;

***Chaenogobius annularis*** Gill, 1859

[Jpn name: Agohaze] (Fig. 502)

KAUM-I. 11122, 42.2 mm SL, Matsumine.  
 Suzuki and Shibukawa (2004): Yaku-shima  
 Island.



Fig. 502. *Chaenogobius annularis* (KAUM-I. 11122, 42.2 mm SL).



Fig. 504. *Cryptocentrus albidorsus* (BSKU 96642, 38.9 mm SL).



Fig. 505. *Cryptocentrus caeruleomaculatus* (KAUM-I. 20139, 40.7 mm SL).

***Clariger exilis*** Snyder, 1911

[Jpn name: Shimofurisejirohaze] (Fig. 503)

KAUM-I. 11397, 19.3 mm SL, Kurio;  
 KAUM-I. 11536, 17.5 mm SL, Ambo; KAUM-I.  
 11701, 20.9 mm SL, Ambo.

Arai and Ida (1975): Kusugawa [one specimen (23 mm TL) were reported, but not found at NSMT]. Akihito et al. (2002): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



Fig. 503. *Clariger exilis* (KAUM-I. 11536, 17.5 mm SL).

***Cryptocentrus nigrocellatus*** (Yanagisawa, 1978)

[Jpn name: Kurohoshihaze] (Fig. 506)

BSKU 96604, 67.1 mm SL, Kurio; BSKU  
 96659, 44.7 mm SL, Isso; KAUM-I. 20377, 70.2  
 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.



Fig. 506. *Cryptocentrus nigrocellatus* (KAUM-I. 20377, 70.2 mm SL).

***Cristatogobius lophius*** Herre, 1927

[Jpn name: Tosakahaze]

Yonezawa (2003a): a fishing port, Yaku-shima  
 Island. Suzuki and Shibukawa (2004): Yaku-  
 shima Island.

***Cryptocentrus albidorsus*** (Yanagisawa, 1978)

[Jpn name: Shiroobihaze] (Fig. 504)

BSKU 96642, 38.9 mm SL, Isso.

***Cryptocentrus caeruleomaculatus*** (Herre, 1933)

[Jpn name: Takanohahaze] (Fig. 505)

BSKU 96546, 45.4 mm SL, Yudomari;  
 KAUM-I. 20139, 40.7 mm SL, Yudomari.

***Discordipinna griessingeri*** Hoese and Fourmanoir, 1978

[Jpn name: Homurahaze] (Fig. 507)

KPM-NI 22514, 18.0 mm SL, Yudomari.

***Drombus* sp.**

[Jpn name: Kurokohaze] (Fig. 508)

BSKU 96631, 47.3 mm SL, mouth of Kurio  
 River; KAUM-I. 20302, 33.3 mm SL, mouth  
 of Kurio River; KAUM-I. 20371, 34.9 mm SL,  
 mouth of Kurio River; KAUM-I. 20372, 35.4 mm  
 SL, mouth of Kurio River; KAUM-I. 20373, 32.2  
 mm SL, mouth of Kurio River; KAUM-I. 20374,  
 33.1 mm SL, mouth of Kurio River; KAUM-



**Fig. 507.** *Discordipinna griessingeri* (KPM-NI 22514, 18.0 mm SL).

I. 20375, 23.8 mm SL, mouth of Kurio River; KAUM-I. 21601, 49.5 mm SL, mouth of Ambo River; KPM-NI 22565, 34.3 mm SL, mouth of Kurio River; KPM-NI 22566, 35.2 mm SL, mouth of Kurio River.

Suzuki and Shibukawa (2004): Yaku-shima Island.

Remarks: These individuals appear to be the species identified as *Drombus* sp. A of Suzuki and Shibukawa (2004).



**Fig. 508.** *Drombus* sp. (upper: KAUM-I. 20302, 33.3 mm SL; lower: KPM-NI 22565, 34.3 mm SL).

#### *Eviota abax* (Jordan and Snyder, 1901) [Jpn name: Isohaze] (Fig. 509)

BSKU 96586, 19.1 mm SL, Yudomari; BSKU 96587, 14.9 mm SL, Yudomari; BSKU 96589, 15.5 mm SL, Yudomari; KAUM-I. 11175, 30.5 mm SL, Kurio; KAUM-I. 11278, 27.4 mm SL, Yudomari; KAUM-I. 11372, 27.8 mm SL, Kurio; KAUM-I. 11373, 17.0 mm SL,

Kurio; KAUM-I. 11518, 17.4 mm SL, Ambo; KAUM-I. 11519, 15.2 mm SL, Ambo; KAUM-I. 20353, 21 mm SL, Yudomari; KAUM-I. 20354, 20.9 mm SL, Yudomari; KAUM-I. 20355, 18.6 mm SL, Yudomari; KAUM-I. 20356, 19.7 mm SL, Yudomari; KAUM-I. 20357, 17.1 mm SL, Yudomari; KAUM-I. 20358, 19.4 mm SL, Yudomari; KAUM-I. 20359, 17.5 mm SL, Yudomari; KAUM-I. 20360, 15.6 mm SL, Yudomari; KAUM-I. 20361, 16 mm SL, Yudomari; KAUM-I. 20362, 16.6 mm SL, Yudomari; KAUM-I. 20363, 15.7 mm SL, Yudomari; KAUM-I. 20364, 15.3 mm SL, Yudomari; KAUM-I. 20365, 14.7 mm SL, Yudomari; KAUM-I. 20366, 14.4 mm SL, Yudomari; KAUM-I. 25061, 27.3 mm SL, Ambo; KAUM-I. 25062, 25.6 mm SL, Ambo; KAUM-I. 25063, 21.2 mm SL, Ambo; KPM-NI 22530, 18.6 mm SL, Yudomari; KPM-NI 22531, 16.6 mm SL, Yudomari; KPM-NI 22585, 12.6 mm SL, Isso; NSMT-P 91593, 15 mm SL, Nakakubo; NSMT-P 91614, 33 mm SL, Kurio; NSMT-P 91615, 22 specimens, 9–32 mm SL, Kurio.

Arai and Ida (1975): Kusugawa (five specimens were reported, but not found at NSMT). Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 509.** *Eviota abax* (KPM-NI 22530, 18.6 mm SL).

#### *Eviota distigma* Jordan and Seale, 1906 [Jpn name: Kobitoisohaze] (Fig. 510)

BSKU 96890, 17.8 mm SL, Kurio; BSKU 96891, 17.6 mm SL, Kurio; KAUM-I. 11276, 15.3 mm SL, Yudomari.

#### *Eviota epiphanes* Jenkins, 1903 [Jpn name: Midorihaze]

Arai and Ida (1975): Kusugawa [seven specimens (21–23 mm TL) were reported, but not found at NSMT].



**Fig. 510.** *Eviota distigma* (KAUM-I. 11276, 15.3 mm SL).

***Eviota japonica*** Jewett and Lachner, 1983

[Jpn name: Minamiisohaze] (Fig. 511)

KAUM-I. 11177, 18.8 mm SL, Kurio; KAUM-I. 11214, 13.2 mm SL, Kurio; KAUM-I. 11700, 17.3 mm SL, Ambo; KAUM-I. 23536, 16.9 mm SL, Ambo; NSMT-P 91685, 30 mm SL, Kurio; NSMT-P 91686, 10 specimens, 09–29 mm SL, Kurio.



**Fig. 511.** *Eviota japonica* (KAUM-I. 11177, 18.8 mm SL).

***Eviota melasma*** Lachner and Karnella, 1980

[Jpn name: Akahoshiisohaze]

Kuniyasu (1999): Kurio.

***Eviota pellucida*** Larson, 1976

[Jpn name: Shiroobiisohaze]

Suzuki and Shibukawa (2004): Yaku-shima Island.

***Eviota prasina*** (Klunzinger, 1871)

[Jpn name: Nan-youmidorihaze] (Fig. 512)

BSKU 96585, 18.5 mm SL, Yudomari; BSKU 96590, 14.6 mm SL, Yudomari; KAUM-I. 11176, 22.0 mm SL, Kurio; KAUM-I. 11374, 18.4 mm SL, Kurio; KAUM-I. 11375, 15.2 mm SL, Kurio; KAUM-I. 11392, 15.8 mm SL, Kurio; KAUM-I. 11395, 15.8 mm SL, Kurio; KAUM-I. 11415, 17.5 mm SL, Kurio; KAUM-I. 11416, 10.9 mm

SL, Kurio; KAUM-I. 20267, 17.1 mm SL, Kurio; KAUM-I. 21722, 17.8 mm SL, Kurio; KAUM-I. 21723, 17.4 mm SL, Kurio; KAUM-I. 21724, 13.5 mm SL, Kurio; KAUM-I. 21725, 15.5 mm SL, Kurio; KAUM-I. 21726, 23.2 mm SL, Kurio; KAUM-I. 21727, 16.7 mm SL, Kurio; KAUM-I. 21728, 14.0 mm SL, Kurio; KAUM-I. 21834, 20.0 mm SL, Kurio; KAUM-I. 21868, 10.9 mm SL, Kurio; KAUM-I. 23537, 15.9 mm SL, Kurio; KAUM-I. 23538, 19.1 mm SL, Kurio; KAUM-I. 23539, 17.2 mm SL, Kurio; KPM-NI 22532, 20.1 mm SL, Yudomari; KPM-NI 22533, 15.5 mm SL, Yudomari; NSMT-P 91383, 19.3 mm SL, Kurio; NSMT-P 91384, 4 specimens, 11.0–17.3 mm SL, Kurio; NSMT-P 91628, 3 specimens, 15.1–18.2 mm SL, Kurio; NSMT-P 91687, 58 specimens, 10.2–21.6 mm SL, Kurio.



**Fig. 512.** *Eviota prasina* (KPM-NI 22532, 20.1 mm SL).

***Eviota sebreei*** Jordan and Seale, 1906

[Jpn name: Kurosujiiisohaze] (Fig. 513)

KPM-NI 22534, 14.5 mm SL, Yudomari.



**Fig. 513.** *Eviota sebreei* (KPM-NI 22534, 14.5 mm SL).

***Eviota* sp.**

[Jpn name: None] (Fig. 514)

BSKU 96579, 28.1 mm SL, Yudomari; KAUM-I. 20175, 15.7 mm SL, Yudomari; KPM-NI 22538, 18.7 mm SL, Yudomari.

Remarks: T. Suzuki of Amagasaki Senior High School has prepared the manuscript for this species as the first Japanese records, based on specimens from Iriomote-jima, Amami-oshima and Yaku-shima Islands.



**Fig. 514.** *Eviota* sp. (upper: KAUM-I. 20175, 15.7 mm SL; lower: KPM-NI 22538, 18.7 mm SL).

***Favonigobius reichei*** (Bleeker, 1853)

[Jpn name: Minamihimehaze]

Suzuki and Shibukawa (2004): Yaku-shima Island.

***Feia* sp.**

[Jpn name: None]

Suzuki and Shibukawa (2004): Yaku-shima Island.

***Flabelligobius* sp. 1**

[Jpn name: Hotatetsunohaze] (Fig. 516)

Remarks: Same species with *Flabelligobius* sp. A of Suzuki and Shibukawa (2004).



**Fig. 516.** *Flabelligobius* sp. 1 (off Isso, 20 m, 14 July 2006, S. Harazaki).

***Exyrias puntang*** (Bleeker, 1851)

[Jpn name: Inkohaze] (Fig. 515)

BSKU 96625, 41.2 mm SL, mouth of Kurio River; BSKU 96876, 48.5 mm SL, Kurio; BSKU 96877, 26.5 mm SL, Kurio; BSKU 96878, 85.7 mm SL, Kurio; BSKU 96879, 19.5 mm SL, Kurio; KAUM-I. 20299, 33 mm SL, mouth of Kurio River; KAUM-I. 20300, 34.5 mm SL, mouth of Kurio River; KAUM-I. 20301, 32.2 mm SL, mouth of Kurio River; KAUM-I. 20317, 41.7 mm SL, mouth of Kurio River; KAUM-I. 20367, 36.9 mm SL, mouth of Kurio River; KAUM-I. 21604, 67.2 mm SL, mouth of Ambo River; KAUM-I. 21605, 68.8 mm SL, mouth of Ambo River; KAUM-I. 21606, 89.6 mm SL, mouth of Ambo River; KPM-NI 22563, 84.0 mm SL, mouth of Kurio River.



**Fig. 515.** *Exyrias puntang* (KAUM-I. 20301, 32.2 mm SL).

***Flabelligobius* sp. 2**

[Jpn name: None] (Fig. 517)

Remarks: Probably same species with *Flabelligobius* sp. 4 of Suzuki and Shibukawa (2004).



**Fig. 517.** *Flabelligobius* sp. 2 (off Isso, 35 m, 15 Sept. 2007, S. Harazaki).

***Fusigobius duospilus*** Hoes and Reader, 1985

[Jpn name: Sehoshisankakuuhaze] (Fig. 518)

KAUM-I. 20278, 24.9 mm SL, Kurio;  
 KAUM-I. 20279, 30 mm SL, Kurio; KPM-NI  
 22550, 35.5 mm SL, Kurio.



Fig. 518. *Fusigobius duospilus* (KPM-NI 22550, 35.5 mm SL).

***Fusigobius gracilis*** (Randall, 2001)

[Jpn name: Sesujisankakuuhaze]

Kuniyasu (1999, as *Fusigobius* sp.): Kurio.***Fusigobius humeralis*** (Randall, 2001)

[Jpn name: Kataboshisankakuuhaze] (Fig. 519)

BSKU 96561, 24.5 mm SL, Yudomari;  
 KAUM-I. 20176, 14.8 mm SL, Yudomari;  
 KAUM-I. 20177, 21.7 mm SL, Yudomari;  
 KAUM-I. 20277, 23.3 mm SL, Kurio; KPM-NI  
 22524, 21.0 mm SL, Yudomari.



Fig. 519. *Fusigobius humeralis* (KAUM-I. 20277, 23.3 mm SL).

***Fusigobius inframaculatus*** (Randall, 1994)

[Jpn name: Hatataatesankakuuhaze] (Fig. 520)

BSKU 96601, 47.6 mm SL, Kurio; KAUM-I.  
 20253, 42.7 mm SL, Kurio; KPM-NI 22549, 48.1  
 mm SL, Kurio.

Ichikawa et al. (1992, as *Fusigobius longispinus*): Yaku-shima Island. Kuniyasu (1999): Kurio.  
 Suzuki and Shibukawa (2004): Yaku-shima Island.



Fig. 520. *Fusigobius inframaculatus* (KPM-NI 22549,  
 48.1 mm SL).

***Fusigobius neophytus*** (Günther, 1877)

[Jpn name: Sankakuuhaze] (Fig. 521)

BSKU 96544, 40.7 mm SL, Yudomari; BSKU  
 96597, 22.9 mm SL, Yudomari; KAUM-I. 20140,  
 45.2 mm SL, Yudomari; KAUM-I. 20252, 47.7  
 mm SL, Kurio; KPM-NI 22512, 38.1 mm SL,  
 Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Su-  
 zuki and Shibukawa (2004): Yaku-shima Island.



Fig. 521. *Fusigobius neophytus* (KAUM-I. 20252, 47.7 mm SL).

***Glossogobius biocellatus*** (Valenciennes)

[Jpn name: Hitomiuhaze] (Fig. 522)

BSKU 96626, 43.9 mm SL, mouth of Kurio  
 River; KAUM-I. 11508, 34.9 mm SL, mouth of  
 Miyanoura River; KAUM-I. 21590, 53.5 mm SL,  
 mouth of Ambo River; KAUM-I. 21591, 65.4  
 mm SL, mouth of Ambo River; KAUM-I. 21592,  
 68.8 mm SL, mouth of Ambo River; KPM-NI  
 22567, 37.5 mm SL, mouth of Kurio River.

Remarks: This species has often been treated  
 as a member of *Psammogobius* (*P. biocellatus*).

***Glossogobius circumspectus*** (Macleay, 1883)

[Jpn name: Sudareurohaze] (Fig. 523)

BSKU 96628, 44.4 mm SL, mouth of Kurio  
 River; BSKU 96880, 19.8 mm SL, Kurio; KAUM-  
 I. 20297, 40.6 mm SL, mouth of Kurio River.



**Fig. 522.** *Glossogobius biocellatus* (KAUM-I. 11508, 34.9 mm SL).



**Fig. 523.** *Glossogobius circumspectus* (KAUM-I. 20297, 40.6 mm SL).

Isso; KAUM-I. 20534, 55 mm SL, Yudomari; KPM-NI 22552, 33.9 mm SL, Kurio; KPM-NI 22576, 30.5 mm SL, Isso.

Kuniyasu (1999, as *Gnatholepis scapulostigma*): Kurio.

Remarks: *Gnatholepis scapulostigma* Herre, 1953 was recently recognized as a junior synonym of *Gnatholepis cauerensis cauerensis* by Randall and Greenfield (2001).



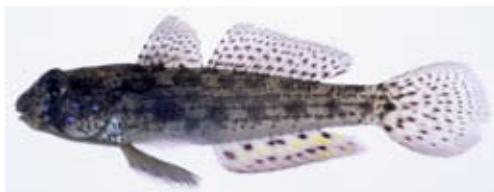
**Fig. 525.** *Gnatholepis cauerensis cauerensis* (KAUM-I. 11305, 47.2 mm SL).

#### *Gnatholepis anjerensis* (Bleeker, 1851)

[Jpn name: Omonhaze] (Fig. 524)

KAUM-I. 11181, 18.7 mm SL, Kurio; KAUM-I. 20169, 24 mm SL, Yudomari; KAUM-I. 20170, 17.1 mm SL, Yudomari; KAUM-I. 20171, 18.9 mm SL, Yudomari; KAUM-I. 21691, 49.1 mm SL, Kurio; KPM-NI 22522, 25.5 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 524.** *Gnatholepis anjerensis* (KPM-NI 22522, 25.5 mm SL).

#### *Gobiodon atrangulatus* Garman, 1903

[Jpn name: Seakakobanhaze] (Fig. 526)

BSKU 96613, 19.6 mm SL, Kurio.

Arai and Ida (1975): Kusugawa [five specimens (20–30 mm TL) were reported, but not found at NSMT]. Akihito et al. (2002): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 526.** *Gobiodon atrangulatus* (BSKU 96613, 19.6 mm SL).

#### *Gnatholepis cauerensis cauerensis* (Bleeker, 1853)

[Jpn name: Kataboshiomonhaze] (Fig. 525)

KAUM-I. 11305, 47.2 mm SL, Yudomari; KAUM-I. 11306, 47.1 mm SL, Yudomari; KAUM-I. 11595, 38.5 mm SL, Ambo; KAUM-I. 11601, 47.5 mm SL, Ambo; KAUM-I. 20222, 25.6 mm SL, Yudomari; KAUM-I. 20305, 16.1 mm SL, Kurio; KAUM-I. 20352, 27.6 mm SL,

#### *Gobiodon oculolineatus* Wu, 1979

[Jpn name: Kumadorikobanhaze] (Fig. 527)

BSKU 96575, 19.3 mm SL, Yudomari.



**Fig. 527.** *Gobiodon oculolineatus* (BSKU 96575, 19.3 mm SL).

***Gobiodon quinquestrigatus* (Valenciennes, 1837)**

[Jpn name: Futairosangohaze] (Fig. 528)

BSKU 96592, 16.3 mm SL, Yudomari; BSKU 96595, 23.4 mm SL, Yudomari; KAUM-I. 20182, 24.8 mm SL, Yudomari.

Arai and Ida (1975): Kusugawa (eight specimens were reported, but not found at NSMT). Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 528.** *Gobiodon quinquestrigatus* (BSKU 96595, 23.4 mm SL).

***Gobiodon* sp.**

[Jpn name: Akatenkobanhaze]

Arai and Ida (1975, as *Gobiodon rivulatus rivulatus*): Kusugawa (two specimens were reported, but not found at NSMT).

***Gobiopsis arenaria* (Snyder, 1908)**

[Jpn name: Isagohaze] (Fig. 529)

KAUM-I. 11516, 23.6 mm SL, Ambo.



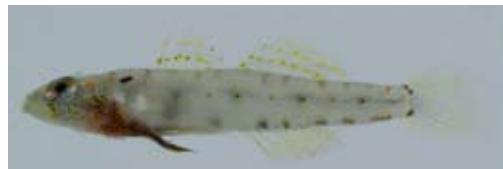
**Fig. 529.** *Gobiopsis arenaria* (KAUM-I. 11516, 23.6 mm SL).

***Grallenia arenicola* Shibukawa and Iwata, 2007**

[Jpn name: Sazarehaze] (Fig. 530)

KAUM-I. 21840, 16.2 mm SL, Isso.

Remarks: This specimen is tentatively identified as *G. arenicola*, but further examination is needed.



**Fig. 530.** *Grallenia arenicola* (KAUM-I. 21840, 16.2 mm SL).

***Gymnogobius petschiliensis* (Rendahl, 1924)**

[Jpn name: Sumiukigori] (Fig. 531)

NSMT-P 29120, 12 specimens, 42.5–65.7 mm SL, Yaku-shima Island; NSMT-P 29368, 53.2 mm SL, Yaku-shima Island.

Akihito et al. (2002, as *Gymnogobius* sp. 1): Yaku-shima Island. Yonezawa (2003c): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 531.** *Gymnogobius petschiliensis* (NSMT-P 29120, 42.5 mm SL, preserved specimen).

***Gymnogobius urotaenia* (Hilgendorf 1879)**

[Jpn name: Ukipori]

Ichikawa et al. (1992, as *Chaenogobius urotaenia*): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.

***Istigobius decoratus* (Herre, 1927)**

[Jpn name: Hoshikazarihaze] (Fig. 532)

BSKU 96560, 29.1 mm SL, Yudomari; BSKU 96636, 64.5 mm SL, Isso; KAUM-I. 11592, 71.5 mm SL, Ambo; KAUM-I. 11593, 58.9 mm SL, Ambo; KAUM-I. 11594, 34.3 mm SL, Ambo;

KAUM-I. 20138, 59.0 mm SL, Yudomari; KAUM-I. 20221, 32.8 mm SL, Yudomari; KPM-NI 22553, 24.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 532.** *Istigobius decoratus* (KAUM-I. 11592, 71.5 mm SL).



**Fig. 534.** *Lotilia graciliosa* (off Isso, 18 m, 25 June 2006, S. Harazaki).

#### *Istigobius ornatus* (Rüppell, 1830)

[Jpn name: Kazarihaze] (Fig. 533)

NSMT-P 77569, 62.8 mm SL, Kurio.

Kuniyasu (1999): Kurio.



**Fig. 533.** *Istigobius ornatus* (NSMT-P 77569, 62.8 mm SL).

#### *Istigobius rigilius* (Herre, 1953)

[Jpn name: Madarakazarihaze]

Kuniyasu (1999): Kurio.

#### *Lotilia graciliosa* Klausewitz 1960

[Jpn name: Odorihaze] (Fig. 534)

#### *Luciogobius guttatus* Gill, 1859

[Jpn name: Mimizuhaze]

Suzuki and Shibukawa (2004): Yaku-shima Island.

#### *Luciogobius platycephalus* Shiogaki and Dotsu, 1976

[Jpn name: Yarimimizuhaze] (Fig. 535)

KAUM-I. 11563, 34.2 mm SL, Ambo.



**Fig. 535.** *Luciogobius platycephalus* (KAUM-I. 11563, 34.2 mm SL).

#### *Luciogobius* sp.

[Jpn name: None] (Fig. 536)

NSMT-P 29062, 2 specimens, 42.7–50.5 mm SL, Kusugawa; NSMT-P 29101, 56.4 mm SL, Isso; NSMT-P 29369, 42.1 mm SL, Kusugawa.

Suzuki and Shibukawa (2004, as *Luciogobius* sp. 2): Yaku-shima Island.



**Fig. 536.** *Luciogobius* sp. (NSMT-P 29369, 42.1 mm SL, preserved specimen).

#### *Oxyurichthys cornutus* McCulloch and Waite, 1918

[Jpn name: Kamahirematsugehaze] (Fig. 537)

KPM-NI 22569, 32.2 mm SL, mouth of Kurio River.



**Fig. 537.** *Oxyurichthys cornutus* (KPM-NI 22569, 32.2 mm SL).

#### *Pandaka* sp.

[Jpn name: Gomahaze] (Fig. 538)

KAUM-I. 11213, 16.7 mm SL, Kurio; KAUM-I. 11506, 16.7 mm SL, mouth of Miyanoura River; KAUM-I. 11774, 17.8 mm SL, mouth of Miyanoura River; KAUM-I. 11775, 13.2 mm SL, mouth of Miyanoura River; KAUM-I. 11776, 16.5 mm SL, mouth of Miyanoura River; KAUM-I. 11777, 14.5 mm SL, mouth of Miyanoura River; KAUM-I. 11778, 15.9 mm SL, mouth of Miyanoura River; NSMT-P 29477, 4 specimens, 14.2–16.4 mm SL, mouth of Miyanoura River; NSMT-P 67099, 9 specimens, 9.4–12.2 mm SL, mouth of Kurio River; NSMT-P 67101, 36 specimens, 10.9–13.3 mm SL, mouth of Miyanoura River.

Ichikawa et al. (1992, as *Pandaka lidwilli*): Yaku-shima Island. Yonezawa (2003c, as *Pandaka lidwilli*): Yaku-shima Island. Mukai et al. (2004): 4 specimens, Yaku-shima Island (used for molecular analysis). Suzuki and Shibukawa (2004): Yaku-shima Island.

Remarks: These individuals appear to be the species identified as *Pandaka* sp. A of Suzuki and Shibukawa (2004).



**Fig. 538.** *Pandaka* sp. (KAUM-I. 11506, 16.7 mm SL).

#### *Paragobiodon echinocephalus* (Rüppell, 1830)

[Jpn name: Darumahaze] (Fig. 539)

BSKU 96565, 24.3 mm SL, Yudomari.



**Fig. 539.** *Paragobiodon echinocephalus* (BSKU 96565, 24.3 mm SL).

#### *Paragobiodon lacunicolus* (Kendall and Goldsborough, 1911)

[Jpn name: Pandadarumahaze] (Fig. 540)

BSKU 96591, 11.1 mm SL, Yudomari.



**Fig. 540.** *Paragobiodon lacunicolus* (upper: BSKU 96591, 11.1 mm SL; lower: off Isso, 6 m, 23 June 2006, S. Harazaki).

#### *Paragobiodon modestus* (Regan, 1908)

[Jpn name: Yogoredarumahaze] (Fig. 541)

BSKU 96581, 12.0 mm SL, Yudomari; KAUM-I. 20172, 10.9 mm SL, Yudomari; KAUM-I. 20184, 11.1 mm SL, Yudomari; KPM-NI 22527, 11.1 mm SL, Yudomari.

#### *Paragobiodon xanthosoma* (Bleeker, 1852)

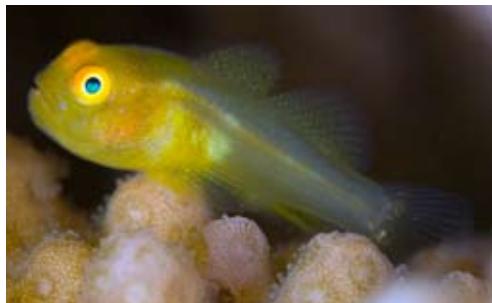
[Jpn name: Akanedarumahaze] (Fig. 542)



**Fig. 541.** *Paragobiodon modestus* (BSKU 96581, 12.0 mm SL).



**Fig. 544.** *Pleurosicya micheli* (KAUM-I. 21782, 19.8 mm SL).



**Fig. 542.** *Paragobiodon xanthosoma* (off Isso, 10 m, 4 Sept. 2006, S. Harazaki).



**Fig. 545.** *Pleurosicya mossambica* (BSKU 96607, 20.5 mm SL).

***Periophthalmus argentilineatus*** Valenciennes, 1837  
[Jpn name: Minamitohihaze] (Fig. 543)

KAUM-I. 20308, 36.1 mm SL, mouth of Kurio River.

Yonezawa (2003c): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 543.** *Periophthalmus argentilineatus* (KAUM-I. 20308, 36.1 mm SL).

#### ***Priolepis cincta* (Regan, 1908)**

[Jpn name: Benkeihaze] (Fig. 546)

BSKU 96669, 40.6 mm SL, Kurio; BSKU 96670, 40.1 mm SL, Kurio; FRLM 34682, 36.9 mm SL, Kurio; KAUM-I. 11187, 40.5 mm SL, Kurio; KAUM-I. 11371, 49.9 mm SL, Kurio; KAUM-I. 11437, 29.3 mm SL, Kurio; KAUM-I. 20287, 40.2 mm SL, Kurio; KAUM-I. 20294, 21.7 mm SL, Yudomari; KAUM-I. 20539, 35.8 mm SL, Yudomari; KPM-NI 22556, 19.6 mm SL, Kurio; MUFS 25602, 43.7 mm SL, Kurio; MUFS 25603, 48.9 mm SL, Kurio; MUFS 25604, 53.3 mm SL, Kurio; NSMT-P 91616, 29 mm SL, Kurio; NSMT-P 91675, 6 specimens, 31–49 mm SL, Kurio.

Arai and Ida (1975, as *Quisquilius eugenius*, Benkeihaze): NSMT-P 58110, 34.0 mm SL, Kusugawa; NSMT-P 58114, 45.9 mm SL, Kusugawa.



**Fig. 546.** *Priolepis cincta* (KAUM-I. 20287, 40.2 mm SL).

***Pleurosicya micheli*** Fourmanoir, 1971  
[Jpn name: Akasujiumitakehaze] (Fig. 544)

KAUM-I. 21782, 19.8 mm SL, Kurio.

***Pleurosicya mossambica*** Smith, 1959  
[Jpn name: Sebosiumitakehaze] (Fig. 545)

BSKU 96584, 13.1 mm SL, Yudomari; BSKU 96607, 20.5 mm SL, Kurio; KAUM-I. 20168, 13.6 mm SL, Yudomari.

Kuniyasu (1999): Kurio.

**Priolepis fallacincta** Winterbottom and Burridge, 1993  
[Jpn name: Kobenkeihaze] (Fig. 547)  
KPM-NI 22504, 12.2 mm SL, Yudomari.



**Fig. 547.** *Priolepis fallacincta* (KPM-NI 22504, 12.2 mm SL).

**Priolepis inhaca** (Smith, 1949)  
[Jpn name: Amimebenkeihaze] (Fig. 548)  
KAUM-I. 20295, 10.7 mm SL, Yudomari;  
KPM-NI 22537, 18.3 mm SL, Yudomari.



**Fig. 548.** *Priolepis inhaca* (KPM-NI 22537, 18.3 mm SL).

**Priolepis nocturna** (Smith, 1957)  
[Jpn name: Izayoibenkeihaze] (Fig. 549)



**Fig. 549.** *Priolepis nocturna* (off Isso, 20 m, 8 Nov. 2008, S. Harazaki).

**Priolepis semidoliata** (Valenciennes, 1837)  
[Jpn name: Irezumihaze] (Fig. 550)  
BSKU 96559, 21.2 mm SL, Yudomari; BSKU 96569, 15.8 mm SL, Yudomari; KAUM-I. 20167, 20.2 mm SL, Yudomari; KAUM-I. 20223, 18.8

mm SL, Yudomari; KAUM-I. 20224, 21.2 mm SL, Yudomari; KAUM-I. 20225, 17.1 mm SL, Yudomari; KAUM-I. 20291, 13.3 mm SL, Yudomari; KAUM-I. 20292, 14.3 mm SL, Yudomari; KAUM-I. 20293, 10.3 mm SL, Yudomari; KAUM-I. 21696, 25.7 mm SL, Kurio; KAUM-I. 21866, 16.1 mm SL, Kurio; KPM-NI 22521, 19.4 mm SL, Yudomari; MUFS 25620, 17.1 mm SL, Kurio.

Arai and Ida (1975): Kusugawa [three specimens (24–39 mm TL) were reported, but not found at NSMT]. Suzuki and Shibukawa (2004): Yaku-shima Island.



**Fig. 550.** *Priolepis semidoliata* (BSKU 96559, 21.2 mm SL).

**Redigobius bikolanus** (Herre, 1927)  
[Jpn name: Hinahaze] (Fig. 551)

KAUM-I. 11507, 20.0 mm SL, mouth of Miyanoura River; KAUM-I. 11549, 29.7 mm SL, Ambo; KAUM-I. 11564, 30.9 mm SL, Ambo; KAUM-I. 17850, 15.2 mm SL, mouth of Isso River; KAUM-I. 20326, 14.3 mm SL, mouth of Kurio River; KAUM-I. 21607, 27.6 mm SL, mouth of Ambo River; KAUM-I. 21608, 25.8 mm SL, mouth of Ambo River; KAUM-I. 21609, 25.4 mm SL, mouth of Ambo River; KAUM-I. 21610, 25.5 mm SL, mouth of Ambo River; KAUM-I. 21611, 23.4 mm SL, mouth of Ambo River; KAUM-I. 21612, 12.3 mm SL, mouth of Ambo River; KPM-NI 22570, 16.3 mm SL, mouth of Kurio River.

**Rhinogobius giurinus** (Rutter, 1897)  
[Jpn name: Gokurakuhaze] (Fig. 552)

KAUM-I. 11714, 45.3 mm SL, mouth of Miyanoura River; KAUM-I. 11716, 35.7 mm SL, mouth of Miyanoura River; KAUM-I. 15463,



**Fig. 551.** *Redigobius bikolanus* (KAUM-I. 11507, 20.0 mm SL).

59.3 mm SL, Yaku-shima Island; KAUM-I. 15471, 27.5 mm SL, Yaku-shima Island; KAUM-I. 21595, 58.0 mm SL, mouth of Ambo River; NSMT-P 77780, 50.8 mm SL, mouth of Ambo River; NSMT-P 77781, 78.5 mm SL, mouth of Ambo River; NSMT-P 77782, 68.4 mm SL, mouth of Ambo River; NSMT-P 77783, 54.5 mm SL, mouth of Ambo River; NSMT-P 77784, 62.3 mm SL, mouth of Ambo River; NSMT-P 77785, 59.0 mm SL, mouth of Ambo River; NSMT-P 77786, 58.3 mm SL, mouth of Ambo River; NSMT-P 77787, 58.5 mm SL, mouth of Ambo River; NSMT-P 77788, 56.4 mm SL, mouth of Ambo River; NSMT-P 77789, 54.6 mm SL, mouth of Ambo River; NSMT-P 77790, 66.2 mm SL, mouth of Ambo River; NSMT-P 77791, 54.7 mm SL, mouth of Ambo River; NSMT-P 77792, 53.5 mm SL, mouth of Ambo River; NSMT-P 77793, 50.8 mm SL, mouth of Ambo River; NSMT-P 77794, 80.8 mm SL, mouth of Ambo River; NSMT-P 77795, 71.6 mm SL, mouth of Kurio River; NSMT-P 77796, 60.9 mm SL, mouth of Kurio River; NSMT-P 77797, 67.3 mm SL, mouth of Kurio River; NSMT-P 77798, 62.2 mm SL, mouth of Kurio River; NSMT-P 77799, 56.6 mm SL, mouth of Kurio River; NSMT-P 77800, 57.9 mm SL, mouth of Kurio River; NSMT-P 77801, 46.3 mm SL, mouth of Kurio River;.

Jordan and Starks (1906, as *Rhinogobius hadropterus*): numerous specimens, but their whereabouts unknown, mouth of Miyanoura River.



**Fig. 552.** *Rhinogobius giurinus* (NSMT-P 77799, 56.6 mm SL).

### ***Rhinogobius* sp. DA**

[Jpn name: Kuroyoshinobori] (Fig. 553)

KAUM-I. 11120, 25.5 mm SL, Matsumine; KAUM-I. 11121, 30.6 mm SL, Matsumine; KAUM-I. 11543, 43.9 mm SL, Ambo; KAUM-I. 11544, 40.2 mm SL, Ambo; KAUM-I. 11545, 41.5 mm SL, Ambo; KAUM-I. 11546, 44.3 mm SL, Ambo; KAUM-I. 11547, 33.7 mm SL, Ambo; KAUM-I. 11548, 60.0 mm SL, Ambo; KAUM-I. 11566, 50.4 mm SL, Ambo; KAUM-I. 11567, 56.1 mm SL, Ambo; KAUM-I. 11568, 39.3 mm SL, Ambo; MUFS 25439, 28.3 mm SL, Matsumine.



**Fig. 553.** *Rhinogobius* sp. DA (KAUM-I. 11543, 43.9 mm SL).

### ***Stiphodon percnopterygionus* Watson and Chen, 1998**

[Jpn name: Nan-youbouzuhaze] (Fig. 554)

KAUM-I. 11542, 24.2 mm SL, Ambo; KAUM-I. 11565, 49.0 mm SL, Ambo.



**Fig. 554.** *Stiphodon percnopterygionus* (KAUM-I. 11542, 24.2 mm SL).

### ***Stonogobiops nematodes* Hoese and Randall, 1982**

[Jpn name: Hirenaganejirimbo] (Fig. 555)

### ***Sueviota* sp.**

[Jpn name: None] (Fig. 556)

KPM-NI 22560, 15.0 mm SL, Kurio.

Remarks: This specimen was identified as *Sueviota* sp. 1 of Suzuki and Shibukawa (2004).



**Fig. 555.** *Stonogobiops nematodes* (off Isso, 30 m, 25 Aug. 2006, S. Harazaki).



**Fig. 557.** *Tridentiger kuroiwae* (KAUM-I. 21596, 81.4 mm SL, preserved specimen).



**Fig. 556.** *Sueviota* sp. (KPM-NI 22560, 15.0 mm SL).



**Fig. 558.** *Trimma anaima* (off Isso, 30 m, 29 Apr. 2009, S. Harazaki).

***Tridentiger kuroiwae*** Jordan and Tanaka, 1927  
[Jpn name: Naganogori] (Fig. 557)

KAUM-I. 11694, 70.0 mm SL, mouth of Miyanoura River; KAUM-I. 11706, 44.2 mm SL, mouth of Miyanoura River; KAUM-I. 11707, 40.9 mm SL, mouth of Miyanoura River; KAUM-I. 11708, 54.4 mm SL, mouth of Miyanoura River; KAUM-I. 11709, 57.4 mm SL, mouth of Miyanoura River; KAUM-I. 11710, 40.9 mm SL, mouth of Miyanoura River; KAUM-I. 11711, 70.1 mm SL, mouth of Miyanoura River; KAUM-I. 11712, 38.7 mm SL, mouth of Miyanoura River; KAUM-I. 11713, 29.8 mm SL, mouth of Miyanoura River; KAUM-I. 21596, 81.4 mm SL, mouth of Ambo River; KAUM-I. 21602, 48.4 mm SL, mouth of Ambo River; KAUM-I. 23528, 79.9 mm SL, mouth of Ambo River; KAUM-I. 23529, 66.3 mm SL, mouth of Ambo River.

Yonezawa (2003c): Yaku-shima Island. Suzuki and Shibukawa (2004): Yaku-shima Island.

***Trimma anaima*** Winterbottom, 2000  
[Jpn name: Himeniramibenihaze] (Fig. 558)

***Trimma annosum*** Winterbottom, 2003  
[Jpn name: Pegasusubenihihaze] (Fig. 559)  
BSKU 96583, 16.1 mm SL, Yudomari; KAUM-I. 20306, 16.3 mm SL, Kurio; KPM-NI 22520, 21.5 mm SL, Yudomari.

Remarks: Suzuki et al. (2008) reported *T. annosum* from Iriomote-jima and Hachijo-jima Islands as the first Japanese records for the species.



**Fig. 559.** *Trimma annosum* (KPM-NI 22520, 21.5 mm SL).

***Trimma caesiura*** Jordan and Seale, 1906  
[Jpn name: Benihaze] (Fig. 560)  
KAUM-I. 11436, 26.9 mm SL, Kurio.



**Fig. 560.** *Trimma caesiura* (KAUM-I. 11436, 26.9 mm SL).

*Trimma stobbsi* Winterbottom, 2001

[Jpn name: None] (Fig. 563)



**Fig. 563.** *Trimma stobbsi* (off Isso, 25 m, 3 Dec. 2007, S. Harazaki).

*Trimma macrophthalma* (Tomiyama, 1936)

[Jpn name: Omehaze]  
Kuniyasu (1999): Kurio.

*Trimma naudei* Smith, 1957

[Jpn name: Chigobenihaze] (Fig. 561)  
BSKU 96614, 12.7 mm SL, Kurio.



**Fig. 561.** *Trimma naudei* (BSKU 96614, 12.7 mm SL).

*Trimma tevegae* Cohen and Davis, 1969

[Jpn name: Aogihaze] (Fig. 564)  
BSKU 96612, 28.3 mm SL, Kurio.  
Remarks: *T. caudomaculata* Yoshino and Araga, 1975 is a junior synonym of *T. tevegae*.



**Fig. 564.** *Trimma tevegae* (BSKU 96612, 28.3 mm SL).

*Trimma okinawae* (Aoyagi, 1949)

[Jpn name: Okinawabenihaze] (Fig. 562)  
KAUM-I. 20040, 22.9 mm SL, Yudomari.  
Kuniyasu (1999): Kurio.



**Fig. 562.** *Trimma okinawae* (KAUM-I. 20040, 22.9 mm SL).

*Trimma* sp. 1

[Jpn name: None] (Fig. 565)

BSKU 96608, 18.7 mm SL, Kurio; KAUM-I. 20307, 12.3 mm SL, Kurio; KAUM-I. 20314, 10.8 mm SL, Kurio; KAUM-I. 20315, 9.4 mm SL, Kurio; KPM-NI 22559, 20.1 mm SL, Kurio.

Remarks: These individuals appear to be the species identified as *Trimma* sp. 2 of Suzuki and Shibukawa (2004). D. Hoese at the Australian Museum, Sydney, has prepared a manuscript for this undescribed species.



**Fig. 565.** *Trimma* sp. 1 (upper: KPM-NI 22559, 20.1 mm SL; lower: off Isso, 10 m, 19 Jan. 2010, S. Harazaki).



**Fig. 567.** *Trimmatom* sp. 2 (upper: KPM-NI 22562, 10.7 mm SL; lower: KPM-NI 22561, 12.9 mm SL).

### *Trimmatom* sp. 1

[Jpn name: None] (Fig. 566)

BSKU 96639, 15.1 mm SL, Isso; BSKU 96656, 19.8 mm SL, Isso; BSKU 96660, 9.8 mm SL, Isso; BSKU 96661, 13.6 mm SL, Isso.

Suzuki and Shibukawa (2004, as *Trimmatom* sp. A): Yaku-shima Island.

Remarks: These individuals appear to be the species identified as *Trimmatom* sp. A of Suzuki and Shibukawa (2004).



**Fig. 566.** *Trimmatom* sp. 1 (BSKU 96639, 15.1 mm SL).

### *Trimmatom* sp. 2

[Jpn name: None] (Fig. 567)

KPM-NI 22561, 12.9 mm SL, Kurio; KPM-NI 22562, 10.7 mm SL, Kurio.

Remarks: T. Suzuki of Amagasaki Senior High School is studying this species on the basis of specimens from Iriomote-jima and Yaku-shima Islands.

*Valenciennea longipinnis* (Lay and Bennett, 1839)  
[Jpn name: Sazanamihaze] (Fig. 568)

KAUM-I. 11596, 132.1 mm SL, Ambo;  
KAUM-I. 21755, 19.7 mm SL, Kurio.



**Fig. 568.** *Valenciennea longipinnis* (KAUM-I. 11596, 132.1 mm SL).

### *Valenciennea sexguttata* (Valenciennes, 1837)

[Jpn name: Mizutamahaze]

Kuniyasu (1999): Kurio.

### *Valenciennea strigata* (Broussonet, 1782)

[Jpn name: Akahachihaze]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Suzuki and Shibukawa (2004): Yaku-shima Island.

### *Vanderhorstia* sp.

[Jpn name: None] (Fig. 569)

Remarks: The photographed individuals appears to be the same species with Randall (2007)'s *Vanderhorstia* sp. (fig. 1, BPBM 36706, 33 mm SL, Bali, Indonesia).



**Fig. 569.** *Vanderhorstia* sp. (off Isso, 12 m, 2 Oct. 2007, S. Harazaki).



**Fig. 571.** *Nemateleotris decora* (off Nagata, 35 m, 16 May 2008, S. Harazaki).

#### FAMILY MICRODESMIDAE

***Navigobius dewa*** Hoses and Motomura, 2009

[Jpn name: None] (Fig. 570)

Remarks: This species was described on the basis of three specimens from Kagoshima Bay, Kyushu, Japan, and also reported from Amami-oshima Island (underwater observation). Figure 570 represents the first record of the species from Yaku-shima Island.



**Fig. 570.** *Navigobius dewa* (off Nagata, 45 m, 19 Nov. 2009, S. Harazaki).

***Nemateleotris decora*** Randall and Allen, 1973

[Jpn name: Akebonohaze] (Fig. 571)

***Nemateleotris magnifica*** Fowler, 1938

[Jpn name: Hataitatehaze]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. Suzuki and Shibukawa (2004): Yaku-shima Island.

***Parioglossus dotui*** Tomiyama, 1958

[Jpn name: Satsukihaze] (Fig. 572)

KAUM-I. 11515, 29.4 mm SL, Ambo;  
KAUM-I. 11717, 25.0 mm SL, MB; KAUM-I.  
11718, 24.5 mm SL, mouth of Miyanoura River;

KAUM-I. 11719, 24.5 mm SL, mouth of Miyanoura River; KAUM-I. 11720, 23.0 mm SL, mouth of Miyanoura River; KAUM-I. 11721, 23.8 mm SL, mouth of Miyanoura River; KAUM-I. 11722, 23.7 mm SL, mouth of Miyanoura River; KAUM-I. 11723, 25.3 mm SL, mouth of Miyanoura River; KAUM-I. 11724, 17.9 mm SL, mouth of Miyanoura River; KAUM-I. 11725, 23.5 mm SL, mouth of Miyanoura River; KAUM-I. 11726, 20.7 mm SL, mouth of Miyanoura River; KAUM-I. 11727, 22.4 mm SL, mouth of Miyanoura River; KAUM-I. 11767, 30.5 mm SL, Nagakubo; KAUM-I. 21613, 22.5 mm SL, mouth of Ambo River; KAUM-I. 21614, 19.5 mm SL, mouth of Ambo River; KAUM-I. 21615, 23.7 mm SL, mouth of Ambo River.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 572.** *Parioglossus dotui* (KAUM-I. 11515, 29.4 mm SL).

***Ptereoleotris evides* (Jordan and Hubbs, 1925)**

[Jpn name: Kuroyurihaze]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Ptereoleotris grammica grammica* Randall and Lubbock, 1982**  
[Jpn name: Sujikuroyurihaze] (Fig. 573)



**Fig. 573.** *Ptereoleotris grammica grammica* (off Nagata, 45 m, 19 Nov. 2009, S. Harazaki).

***Ptereoleotris hanae* (Jordan and Snyder, 1901)**

[Jpn name: Hanahaze]

Ichikawa et al. (1992): Yaku-shima Island.

***Ptereoleotris heteroptera* (Bleeker, 1855)**

[Jpn name: Ogurokuroyurihaze] (Fig. 574)

BSKU 96615, 35.0 mm SL, Kurio.



**Fig. 574.** *Ptereoleotris heteroptera* (BSKU 96615, 35.0 mm SL).

FAMILY EPHIPPIDAE

***Platax orbicularis* (Forsskål, 1775)**

[Jpn name: Nan-yotsubameuo] (Fig. 575)

KAUM-I. 11360, 54.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
MOSC (2002): Isso and Kurio.

***Platax teira* (Forsskål, 1775)**

[Jpn name: Tsubameuo] (Fig. 576)

NSMT-P 77658, 216.0 mm SL, Miyanoura.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 575.** *Platax orbicularis* (KAUM-I. 11360, 54.3 mm SL).



**Fig. 576.** *Platax teira* (NSMT-P 77658, 216.0 mm SL).

## FAMILY SCATOPHAGIDAE

***Scatophagus argus*** (Linnaeus, 1766)  
 [Jpn name: Kurohoshimanjyudai] (Fig. 577)  
 KAUM-I. 21734, 20.2 mm SL, Kurio.



Fig. 577. *Scatophagus argus* (KAUM-I. 21734, 20.2 mm SL).

## FAMILY SIGANIDAE

***Siganus argenteus*** (Quoy and Gaimard, 1825)  
 [Jpn name: Hanaaigo] (Fig. 578)  
 NSMT-P 77638, 268.0 mm SL, Kurio.  
 Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.

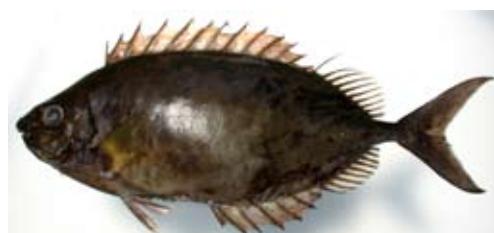


Fig. 578. *Siganus argenteus* (NSMT-P 77638, 268.0 mm SL).

***Siganus fuscescens*** (Houttuyn, 1782)

[Jpn name: Aigo]  
 Ichikawa et al. (1992): Yaku-shima Island.

Remarks: Ichikawa et al. (1992) mentioned their *Siganus fuscescens* might be *Siganus canaliculatus* (Park, 1797).

***Siganus spinus*** (Linnaeus, 1758)

[Jpn name: Amiaigo]  
 Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio.

***Siganus vermiculatus*** (Valenciennes, 1835)

[Jpn name: Mushikuiwaigo]  
 Kuniyasu (1999): Kurio.

***Siganus woodlandi*** Randall and Kulbicki, 2005

[Jpn name: Sedakahanaaigo] (Fig. 579)  
 NSMT-P 91950, 321.0 mm SL, Kurio.  
 Kuniyasu (1999, as *Siganus* sp.): Kurio.



Fig. 579. *Siganus woodlandi* (NSMT-P 91950, 321.0 mm SL).

## FAMILY ZANCLIDAE

***Zanclus cornutus*** (Linnaeus, 1758)  
 [Jpn name: Tsunodashi] (Fig. 580)

FRLM 34711, 67.1 mm SL, Yudomari;  
 KAUM-I. 11198, 106.4 mm SL, Kurio; KAUM-I. 20097, 74.4 mm SL, Yudomari; KAUM-I. 20098, 77.9 mm SL, Yudomari; KAUM-I. 20099, 70.3 mm SL, Yudomari; KAUM-I. 20100, 71.2 mm SL, Yudomari; KAUM-I. 20101, 79.3 mm SL, Yudomari; NSMT-P 77579, 111 mm SL, Nagata; NSMT-P 91353, 2 specimens, 59–60 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
 Kuniyasu (1999): Kurio. MOSC (2002): Isso and Kurio.

## FAMILY ACANTHURIDAE

***Acanthurus bariene*** Lesson, 1831  
 [Jpn name: Kanranhagi]

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 580.** *Zanclus cornutus* (KAUM-I. 11198, 106.4 mm SL).



**Fig. 581.** *Acanthurus dussumieri* (KAUM-I. 21777, 54.2 mm SL).

***Acanthurus maculiceps* (Ahl, 1923)**

[Jpn name: Irezuminiza]

Arai and Ida (1975): Kusugawa [one specimen (90 mm TL) was reported, but not found at NSMT]. Ichikawa et al. (1992): Yaku-shima Island.

***Acanthurus mata* Cuvier, 1829**

[Jpn name: Hiraniza]

Ichikawa et al. (1992, as *Acanthurus bleekeri*): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Acanthurus nigricans* (Linnaeus, 1758)**

[Jpn name: Meganekurohagi]

Ichikawa et al. (1992, as *Acanthurus glauco-pareius*): Yaku-shima Island.

***Acanthurus nigricauda* Duncker and Mohr, 1929**

[Jpn name: Kuromontsuki]

Kuniyasu (1999): Kurio.

***Acanthurus nigrofuscus* (Forsskål, 1775)**

[Jpn name: Naganiza] (Fig. 582)

KAUM-I. 11280, 66.7 mm SL, Yudomari; KAUM-I. 11348, 69.1 mm SL, Kurio; MUFS 25571, 69.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Acanthurus olivaceus* Bloch and Schneider, 1801**

[Jpn name: Montsukihagi] (Fig. 583)

NSMT-P 77643, 263.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.

***Acanthurus blochii* Valenciennes, 1835**

[Jpn name: Osujikurohagi]

Kuniyasu (1999): Kurio.

***Acanthurus dussumieri* Valenciennes, 1835**

[Jpn name: Nisekanranhagi] (Fig. 581)

FRLM 34712, 160.5 mm SL, WP; FRLM 34719, 257.0 mm SL, WP; KAUM-I. 11270, 79.8 mm SL, Yudomari; KAUM-I. 11588, 87.2 mm SL, Ambo; KAUM-I. 21777, 54.2 mm SL, Kurio; NSMT-P 77661, 224 mm SL, Miyanoura; NSMT-P 91588, 37 mm SL, Yudomari; NSMT-P 91589, 3 specimens, 84–98 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Acanthurus leucopareius* (Jenkins, 1903)**

[Jpn name: Sujikurohagi]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Acanthurus lineatus* (Linnaeus, 1758)**

[Jpn name: Nijihagi]

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 582.** *Acanthurus nigrofucus* (KAUM-I. 11280, 66.7 mm SL).



**Fig. 584.** *Acanthurus triostegus* (KAUM-I. 11268, 56.4 mm SL).



**Fig. 583.** *Acanthurus olivaceus* (NSMT-P 77643, 263.0 mm SL).

***Acanthurus pyroferus*** Kittlitz, 1834

[Jpn name: Kuroguchiniza]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Acanthurus triostegus*** (Linnaeus, 1758)

[Jpn name: Shimahagi] (Fig. 584)

FRLM 34676, 46.0 mm SL, Kurio; FRLM 34681, 29.2 mm SL, Kurio; KAUM-I. 11170, 44.7 mm SL, Kurio; KAUM-I. 11268, 56.4 mm SL, Yudomari; KAUM-I. 11611, 57.4 mm SL, Ambo; KAUM-I. 21877, 39.3 mm SL, Kurio; KAUM-I. 21878, 45.8 mm SL, Kurio; KAUM-I. 21879, 46.2 mm SL, Kurio; NSMT-P 91587, 43 mm SL, Yudomari; NSMT-P 91656, 2 specimens, 27–58 mm SL, Kurio.

Arai and Ida (1975): NSMT-P 58115, 46.1 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

***Acanthurus xanthopterus*** Valenciennes, 1835

[Jpn name: Kurohagi]

Ichikawa et al. (1992): Yaku-shima Island.

***Ctenochaetus binotatus*** Randall, 1955

[Jpn name: Kokutensazanamihagi]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Ctenochaetus striatus*** (Quoy and Gaimard, 1825)

[Jpn name: Sazanamihagi] (Fig. 585)

KAUM-I. 11281, 57.4 mm SL, Yudomari;  
KAUM-I. 11350, 59.8 mm SL, Kurio; MUFS  
25611, 55.3 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 585.** *Ctenochaetus striatus* (KAUM-I. 11281, 57.4 mm SL).

***Naso annulatus*** (Quoy and Gaimard, 1825)

[Jpn name: Himetenguhagi]

Kuniyasu (1999): Kurio.

***Naso brachycentron*** (Valenciennes, 1835)

[Jpn name: Onitenguhagi]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Naso brevirostris*** (Cuvier, 1829)

[Jpn name: Tsumaritenguhagi]

Kuniyasu (1999): Kurio.

***Naso hexacanthus*** (Bleeker, 1855)

[Jpn name: Tenguhagimodoki]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Naso lituratus*** (Forster, 1801)

[Jpn name: Miyakotenguhagi]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Naso lopezi*** Herre, 1927

[Jpn name: Nagatenguhagimodoki]

Kuniyasu (1999): Kurio.

***Naso maculatus*** Randall and Struhsaker, 1981

[Jpn name: Gomatenguhagimodoki]

Ichikawa et al. (1992): Yaku-shima Island.

I. 21882, 45.1 mm SL, Kurio; KAUM-I. 21883, 44.5 mm SL, Kurio; NSMT-P 77635, 382.0 mm SL, Miyanoura.

Arai and Ida (1975, as *Prionurus microlepidotus*): Kusugawa (four specimens were reported, but not found at NSMT). Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.***Naso unicornis*** (Forsskål, 1775)

[Jpn name: Tenguhagi] (Fig. 586)

KAUM-I. 11598, 398.2 mm SL, Ambo; NSMT-P 77581, 330.0 mm SL, Nagata.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.***Paracanthurus hepatus*** (Linnaeus, 1766)

[Jpn name: Nan-youhagi]

Ichikawa et al. (1992): Yaku-shima Island.

***Prionurus scalprum*** Valenciennes, 1835

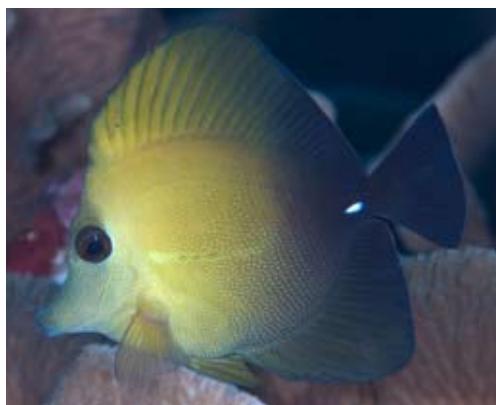
[Jpn name: Nizadai] (Fig. 587)

KAUM-I. 11167, 60.7 mm SL, Kurio;  
KAUM-I. 11263, 93.4 mm SL, Yudomari;  
KAUM-I. 11349, 66.8 mm SL, Kurio; KAUM-I.  
11610, 80.0 mm SL, Ambo; KAUM-I. 20081,  
116.7 mm SL, Yudomari; KAUM-I. 21674, 57.5  
mm SL, Kurio; KAUM-I. 21675, 49.6 mm SL,  
Kurio; KAUM-I. 21880, 66.6 mm SL, Kurio;  
KAUM-I. 21881, 51.3 mm SL, Kurio; KAUM-Fig. 587. *Prionurus scalprum* (upper: KAUM-I. 11167, 60.7 mm SL; lower: NSMT-P 77635, 382.0 mm SL).

***Zebrasoma scopas* (Cuvier, 1829)**

[Jpn name: Gomahagi] (Fig. 588)

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 588.** *Zebrasoma scopas* (off Isso, 6 m, 17 Jan. 2010, S. Harazaki).

***Zebrasoma veliferum* (Bloch, 1795)**

[Jpn name: Hirenagahagi] (Fig. 589)

NSMT-P 77640, 280.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 589.** *Zebrasoma veliferum* (NSMT-P 77640, 280.0 mm SL).

FAMILY SPHYRAENIDAE

***Sphyraena barracuda* (Edwards, 1771)**

[Jpn name: Onikamasu] (Fig. 590)

KAUM-I. 11407, 21.1 mm SL, Kurio Beach;  
KAUM-I. 11505, 47.6 mm SL, mouth of Miyanoura River; KAUM-I. 25230, 260.5 mm SL, mouth of Miyanoura River; KPM-NI 24272, 218.0 mm SL, mouth of Nagata River.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 590.** *Sphyraena barracuda* (upper: KAUM-I. 11505, 47.6 mm SL; lower: KAUM-I. 25230, 260.5 mm SL).

***Sphyraena flavicauda* Rüppell, 1838**

[Jpn name: Taiwankamasu] (Fig. 591)

KPM-NI 24955, 283.0 mm SL, mouth of Ambo River; NSMT-P 77645, 277 mm SL, mouth of Kurio River; NSMT-P 77646, 278 mm SL, mouth of Kurio River; NSMT-P 77647, 313 mm SL, mouth of Kurio River.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 591.** *Sphyraena flavicauda* (KPM-NI 24955, 283.0 mm SL).

***Sphyraena pinguis* Günther, 1874**

[Jpn name: Akakamasu]

Ichikawa et al. (1992, as *Sphyraena obtusata*):  
Yaku-shima Island.

## SCOMBRIDAE

*Acanthocybium solandri* (Cuvier, 1832)

[Jpn name: Kamasusawara]

Ichikawa et al. (1992): Yaku-shima Island.

*Auxis rochei rochei* (Risso, 1810)

[Jpn name: Marusoda]

Ichikawa et al. (1992, as *Auxis rochei*): Yaku-shima Island.*Auxis thazard thazard* (Lacepède, 1800)

[Jpn name: Hirasoda]

Ichikawa et al. (1992, as *Auxis thazard*): Yaku-shima Island.*Euthynnus affinis* (Cantor, 1849)

[Jpn name: Suma]

Ichikawa et al. (1992): Yaku-shima Island.

*Gymnosarda unicolor* (Rüppell, 1836)

[Jpn name: Isomaguro]

Ichikawa et al. (1992): Yaku-shima Island.

*Katsuwonus pelamis* (Linnaeus, 1758)

[Jpn name: Katsuo]

Ichikawa et al. (1992): Yaku-shima Island.

*Rastrelliger kanagurta* (Cuvier, 1816)

[Jpn name: Gurukuma]

Ichikawa et al. (1992): Yaku-shima Island.

*Sarda orientalis* (Temminck and Schlegel, 1844)

[Jpn name: Hagatsuo]

Ichikawa et al. (1992): Yaku-shima Island.

*Scomber australasicus* Cuvier, 1832

[Jpn name: Gomasaba]

Ichikawa et al. (1992): Yaku-shima Island.

*Scomber japonicus* Houttuyn, 1782

[Jpn name: Masaba]

Ichikawa et al. (1992): Yaku-shima Island.

*Thunnus albacares* (Bonnaterre, 1788)

[Jpn name: Kihada]

Ichikawa et al. (1992): Yaku-shima Island.

*Thunnus obesus* (Lowe 1839)

[Jpn name: Mebachi]

Ichikawa et al. (1992): Yaku-shima Island.

## ISTIOPHORIDAE

*Istiophorus platypterus* (Shaw, 1792)

[Jpn name: Bashokajiki]

Ichikawa et al. (1992): Yaku-shima Island.

## ORDER PLEURONECTIFORMES

## FAMILY PARALICHTHYIDAE

*Paralichthys olivaceus* (Temminck and Schlegel, 1846)

[Jpn name: Hirame]

Ichikawa et al. (1992): Yaku-shima Island.

## FAMILY BOTHIDAE

*Arnoglossus japonicus* Hubbs, 1915

[Jpn name: Nihondarumagarei] (Fig. 592)

Hubbs (1915): USNM 75671, holotype of *Arnoglossus japonicus*, 74.7 mm SL, off southeast of Yaku-shima Island.

**Fig. 592.** *Arnoglossus japonicus* (USNM 75671, holotype, 74.7 mm SL, preserved specimen).

*Bothus pantherinus* (Rüppell, 1830)

[Jpn name: Togedarumagarei] (Fig. 593)

BSKU 96644, 130.8 mm SL, Isso; KAUM-I. 20376, 150.7 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island.

*Crossorhombus kobensis* (Jordan and Starks, 1906)

[Jpn name: Kobedarumagarei] (Fig. 594)

USNM 77187, 3 specimens, 55.4–91.1 mm SL, off southeast of Yaku-shima Island.



**Fig. 593.** *Bothus pantherinus* (BSKU 96644, 130.8 mm SL).



**Fig. 594.** *Crossoverbus kobensis* (USNM 77187, 91.1 mm SL, preserved specimen).

***Engyprosopon xystrias* Hubbs, 1915**

[Jpn name: Nisedarumagarei] (Fig. 595)

Hubbs (1915): USNM 75672, holotype of *Engyprosopon xystrias*, 68.2 mm SL, off south-east of Yaku-shima Island.



**Fig. 595.** *Engyprosopon xystrias* (USNM 75672, holotype, 68.2 mm SL, preserved specimen).

FAMILY SOLEIDAE

***Aseraggodes* sp.**

[Jpn name: Musumeushinoshita] (Fig. 596)

BSKU 96617, 43.4 mm SL, Kurio; KAUM-I. 20247, 41.7 mm SL, Kurio.

Remarks: Randall and Desoutter-Meniger (2007) allocated some species of *Parachirus* to *Aseraggodes*. We regard that the present species also belongs to *Aseraggodes*.



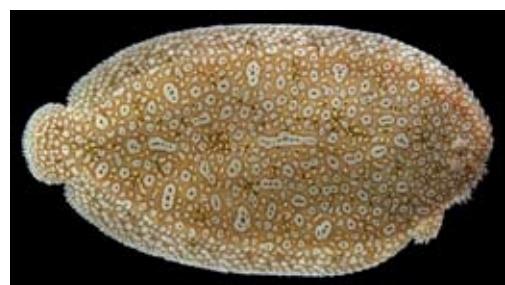
**Fig. 596.** *Aseraggodes* sp. (KAUM-I. 20247, 41.7 mm SL).

***Pardachirus pavoninus* (Lacepède, 1802)**

[Jpn name: Minamiushinoshita] (Fig. 597)

BSKU 96632, 199.2 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.

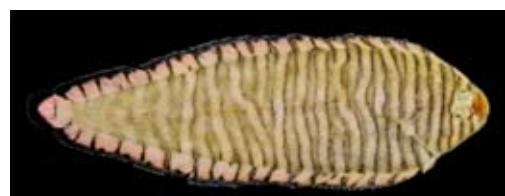


**Fig. 597.** *Pardachirus pavoninus* (BSKU 96632, 199.2 mm SL).

***Soleichthys heterorhinos* (Bleeker, 1856)**

[Jpn name: Sazanamiushinoshita] (Fig. 598)

KAUM-I. 20333, 45.1 mm SL, Isso; KPM-NI 22510, 53.9 mm SL, Yudomari.



**Fig. 598.** *Soleichthys heterorhinos* (KAUM-I. 20333, 45.1 mm SL).

***Synaptura marginata*** Boulenger, 1900

[Jpn name: Amamiushinoshita]

Ichikawa et al. (1992): Yaku-shima Island.

**ORDER TETRAODONTIFORMES**

**FAMILY TRIACANTHIDAE**

***Triacanthus biaculeatus*** (Bloch, 1786)

[Jpn name: Gima]

Ichikawa et al. (1992): Yaku-shima Island.

**FAMILY BALISTIDAE**

***Balistapus undulatus*** (Park, 1797)

[Jpn name: Kumadori]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Balistoides conspicillum*** (Bloch and Schneider, 1801)

[Jpn name: Mongarakawahagi] (Fig. 599)

KAUM-I. 20066, 128.7 mm SL, Yudomari;  
NSMT-P 77619, 188 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 599. *Balistoides conspicillum* (KAUM-I. 20066, 128.7 mm SL).

***Balistoides viridescens*** (Bloch and Schneider, 1801)

[Jpn name: Gomamongara] (Fig. 600)

Arai and Ida (1975, as *Balistes flavimarginatus*, Kiherimongara): NSMT-P 58127, 38.1 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.

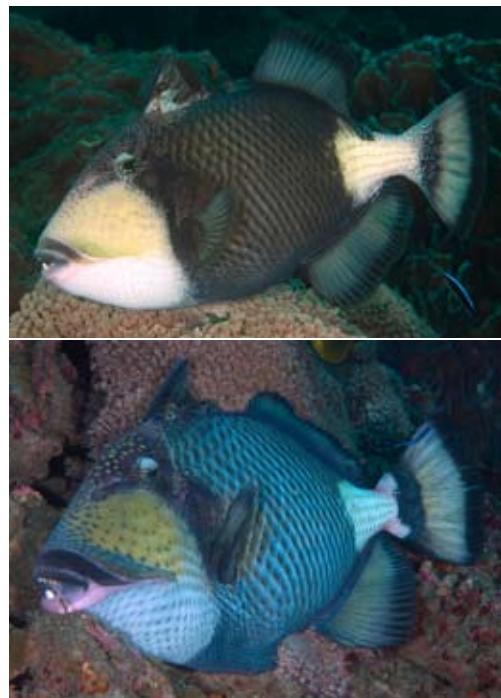


Fig. 600. *Balistoides viridescens* (upper and lower: off Isso, 12 m, 17 Jan. 2010, S. Harazaki).

***Canthidermis maculata*** (Bloch, 1786)

[Jpn name: Amimongara] (Fig. 601)

KPM-NI 24795, 54.8 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



Fig. 601. *Canthidermis maculata* (KPM-NI 24795, 54.8 mm SL).

***Melichthys vidua*** (Richardson, 1845)

[Jpn name: Kuromongara]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Odonus niger*** (Rüppell, 1836)

[Jpn name: Akamongara]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Pseudobalistes flavidmarginatus*** (Rüppell, 1829)

[Jpn name: Kiherimongara] (Fig. 602)

NSMT-P 77565, 34.8 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 602.** *Pseudobalistes flavidmarginatus* (upper: NSMT-P 77565, 34.8 mm SL; lower: off Isso, 12 m, 17 Jan. 2010, S. Harazaki).



**Fig. 603.** *Pseudobalistes fuscus* (off Isso, 15 m, 20 Jan. 2010, S. Harazaki).



**Fig. 604.** *Rhinecanthus aculeatus* (KAUM-I. 21677, 27.6 mm SL).

***Rhinecanthus rectangulus*** (Bloch and Schneider, 1801)

[Jpn name: Tasukimongara]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Yaku-shima Island.

***Pseudobalistes fuscus*** (Bloch and Schneider, 1801)

[Jpn name: Isomongara] (Fig. 603)

***Rhinecanthus aculeatus*** (Linnaeus, 1758)

[Jpn name: Murasamemongara] (Fig. 604)

KAUM-I. 21677, 27.6 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Yaku-shima Island.

***Rhinecanthus verrucosus*** (Linnaeus, 1758)

[Jpn name: Kurakakemongara] (Fig. 605)

KAUM-I. 20047, 49.8 mm SL, Yudomari;  
KAUM-I. 20246, 28.8 mm SL, Kurio; KAUM-I. 21678, 33.7 mm SL, Kurio; KAUM-I. 21683, 31.0 mm SL, Kurio; KAUM-I. 21684, 28.9 mm SL, Kurio; KAUM-I. 21685, 31.6 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Isso, Ambo and Kurio.



**Fig. 605.** *Rhinecanthus verrucosus* (KAUM-I. 20047, 49.8 mm SL).



**Fig. 607.** *Sufflamen chrysopterum* (KAUM-I. 11336, 133.8 mm SL).

***Sufflamen bursa*** (Bloch and Schneider, 1801)

[Jpn name: Musumehagi] (Fig. 606)

BSKU 96598, 127.9 mm SL, Kurio; KAUM-I. 20290, 35.1 mm SL, Kurio; KAUM-I. 20311, 138.5 mm SL, Kurio; MUFS 25517, 152.5 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 606.** *Sufflamen bursa* (KAUM-I. 20290, 35.1 mm SL).

***Sufflamen fraenatum*** (Latreille, 1804)

[Jpn name: Meganehagi] (Fig. 608)

KAUM-I. 25207, 163.2 mm SL, Onoaida.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



**Fig. 608.** *Sufflamen fraenatum* (KAUM-I. 25207, 163.2 mm SL).

***Sufflamen chrysopterum*** (Bloch and Schneider, 1801)

[Jpn name: Tsumajiromongara] (Fig. 607)

KAUM-I. 11336, 133.8 mm SL, Kurio; NSMT-P 77663, 146.9 mm SL, Miyanoura.

Arai and Ida (1975): NSMT-P 58107, 62.6 mm SL, Kusugawa; NSMT-P 58128, 44.2 mm SL, Kusugawa.

FAMILY MONACANTHIDAE

***Aluterus monoceros*** (Linnaeus, 1758)

[Jpn name: Usubahagi]

Ichikawa et al. (1992): Yaku-shima Island.

***Aluterus scriptus*** (Osbeck, 1765)

[Jpn name: Soushihagi] (Fig. 609)

NSMT-P 77620, 437.0 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 609. *Aluterus scriptus* (NSMT-P 77620, 437.0 mm SL).

*Cantherhines pardalis* (Rüppell, 1837)  
[Jpn name: Amimeumazurahagi] (Fig. 612)  
MUFS 25516, 102.1 mm SL, Kurio.  
Kuniyasu (1999): Kurio.



Fig. 612. *Cantherhines pardalis* (MUFS 25516, 102.1 mm SL).



Fig. 610. *Brachalutereres ulvarum* (off Isso, 18 m, 23 June 2009, S. Harazaki).

*Chaetodermis penicilligera* (Cuvier, 1816)  
[Jpn name: Higehagi]  
Ichikawa et al. (1992): Yaku-shima Island.

*Paralutereres prionurus* (Bleeker, 1851)  
[Jpn name: Nokogirihagi] (Fig. 613)  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.



Fig. 611. *Cantherhines dumerili* (FRLM 34727, 189.1 mm SL).



Fig. 613. *Paralutereres prionurus* (off Isso, 5 m, 19 Jan. 2010, S. Harazaki).

*Paramonacanthus japonicus* (Tilesius, 1809)  
[Jpn name: Yosogi] (Fig. 614)



Fig. 614. *Paramonacanthus japonicus* (off Isso, 12 m, 1 Sept. 2009, S. Harazaki).

**Pervagor janthinosoma** (Bleeker, 1854)  
[Jpn name: Nishikikawahagi] (Fig. 615)  
BSKU 96562, 74.2 mm SL, Yudomari;  
KAUM-I. 20079, 66.8 mm SL, Yudomari.  
Ichikawa et al. (1992): Yaku-shima Island.

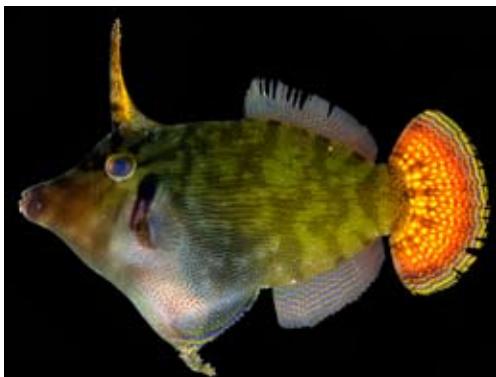


Fig. 615. *Pervagor janthinosoma* (KAUM-I. 20079, 66.8 mm SL).

**Pervagor melanocephalus** (Bleeker, 1853)  
[Jpn name: Nuriwakekawahagi]  
Kuniyasu (1999): Kurio.

**Thamnaconus modestus** (Günther, 1877)  
[Jpn name: Umazurahagi]  
Ichikawa et al. (1992): Yaku-shima Island.

#### FAMILY OSTRACIIDAE

**Lactoria cornuta** (Linnaeus, 1758)  
[Jpn name: Kongoufugu]  
Ichikawa et al. (1992): Yaku-shima Island.

**Lactoria diaphana** (Bloch and Schneider, 1801)  
[Jpn name: Umisuzume]  
Ichikawa et al. (1992): Yaku-shima Island.

**Lactoria fornasini** (Bianconi, 1846)  
[Jpn name: Shimaumisuzume]  
Ichikawa et al. (1992): Yaku-shima Island.

**Ostracion cubicus** Linnaeus, 1758  
[Jpn name: Minamihakofugu] (Fig. 616)  
KAUM-I. 20106, 42.4 mm SL, Yudomari;  
NSMT-P 95449, 21.6 mm SL, Haruo.  
Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio. MOSC (2002): Isso and Kurio.

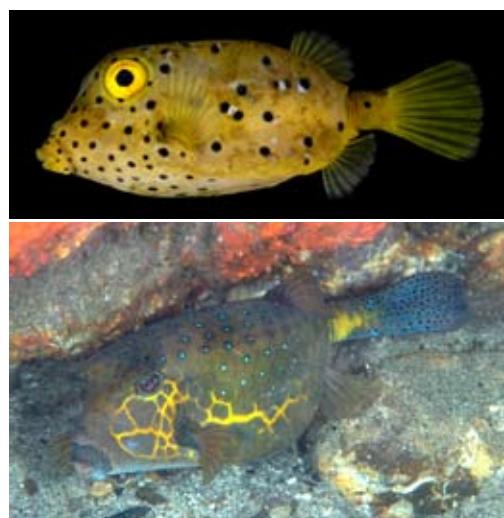


Fig. 616. *Ostracion cubicus* (upper: KAUM-I. 20106, 42.4 mm SL; lower: off Isso, 10 m, 12 Dec. 2006, S. Harazaki).

**Ostracion immaculatus** Temminck and Schlegel, 1850  
[Jpn name: Hakofugu] (Fig. 617)

KAUM-I. 11481, 147.7 mm SL, Isso.  
Arai and Ida (1975, as *Ostracion tuberculatus*): NSMT-P 58124, 2 specimens, 26.0–26.9 mm SL, Kusugawa. Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 617.** *Ostracion immaculatus* (KAUM-I. 11481, 147.7 mm SL).

***Ostracion meleagris meleagris*** Shaw, 1796

[Jpn name: Kurohakofugu]

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

FAMILY TETRAODONTIDAE

***Arothron firmamentum*** (Temminck and Schlegel, 1850)

[Jpn name: Hoshifugu]

Ichikawa et al. (1992): Yaku-shima Island.

***Arothron hispidus*** (Linnaeus, 1758)

[Jpn name: Sazanamifugu] (Fig. 618)

BSKU 96677, 77.0 mm SL, Kurio; KAUM-I. 11123, 17.7 mm SL, Matsumine; KAUM-I. 11172, 51.9 mm SL, Kurio; KAUM-I. 11655, 66.2 mm SL, Ambo; KAUM-I. 11656, 57.9 mm SL, Ambo; KAUM-I. 20085, 95.5 mm SL, Yudomari; KAUM-I. 21804, 41.6 mm SL, Kurio; MUFS 25440, 12.8 mm SL, Matsumine; MUFS 25608, 32.0 mm SL, Kurio; MUFS 25609, 40.6 mm SL, Kurio; NSMT-P 91354, 59 mm SL, Yudomari; NSMT-P 91591, 33 mm SL, Nagakubo; NSMT-P 91592, 2 specimens, 14–15 mm SL, Nagakubo.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 618.** *Arothron hispidus* (KAUM-I. 11172, 51.9 mm SL).

***Arothron nigropunctatus*** (Bloch and Schneider, 1801)

[Jpn name: Kokutenfugu]

Ichikawa et al. (1992): Yaku-shima Island.

***Arothron stellatus*** (Bloch and Schneider, 1801)

[Jpn name: Moyofugu] (Fig. 619)



**Fig. 619.** *Arothron stellatus* (off Isso, 10 m, 11 July 2006, S. Harazaki).

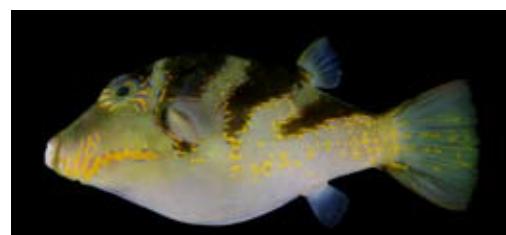
***Canthigaster axiologus*** Whitley, 1933

[Jpn name: Hanakinchakufugu] (Fig. 620)

KAUM-I. 11476, 59.9 mm SL, Isso; KAUM-I. 20080, 77.2 mm SL, Yudomari; KAUM-I. 20346, 64.6 mm SL, Isso; NSMT-P 93180, 68.7 mm SL, Yudomari.

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

Remarks: This species has long been regarded as *Canthigaster coronata* (Vaillant and Sauvage, 1875). However, Randall et al. (2008) reviewed *C. cornuta* and divided it into three species, *C. cornuta* (Hawaiian Islands), *C. axiologus* Whitley, 1933 (western Pacific), and their new species, *C. cyanospilota* (Indian Ocean and Red Sea). The Yaku-shima specimens are herein identified as *C. axiologus*.



**Fig. 620.** *Canthigaster axiologus* (KAUM-I. 11476, 59.9 mm SL).

***Canthigaster janthinoptera* (Bleeker, 1855)**

[Jpn name: Shiborikinchakufugu] (Fig. 621)

BSKU 96606, 60.4 mm SL, Kurio; KAUM-I.  
20296, 51 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 621.** *Canthigaster janthinoptera* (KAUM-I. 20296, 51 mm SL).

***Canthigaster rivulata* (Temminck and Schlegel, 1850)**

[Jpn name: Kitamakura] (Fig. 622)

KAUM-I. 11288, 73.6 mm SL, Yudomari.  
Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 622.** *Canthigaster rivulata* (KAUM-I. 11288, 73.6 mm SL).

***Canthigaster valentini* (Bleeker, 1853)**

[Jpn name: Shimakinchakufugu] (Fig. 623)

Ichikawa et al. (1992): Yaku-shima Island.  
Kuniyasu (1999): Kurio.

***Lagocephalus gloveri* Abe and Tabeta, 1983**

[Jpn name: Kurosabafugu]

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 623.** *Canthigaster valentini* (off Isso, 10 m, 12 Jan. 2010, S. Harazaki).

***Lagocephalus lagocephalus oceanicus* Jordan and Evermann, 1903**

[Jpn name: Kumasakafugu]

Ichikawa et al. (1992): Yaku-shima Island.

***Lagocephalus sceleratus* (Gmelin, 1789)**

[Jpn name: Senninfugu]

Ichikawa et al. (1992): Yaku-shima Island.

***Sphoeroides pachygaster* (Müller and Troschel, 1848)**

[Jpn name: Yoritofugu]

Ichikawa et al. (1992): Yaku-shima Island.

***Takifugu niphobles* (Jordan and Snyder, 1901)**

[Jpn name: Kusafugu] (Fig. 624)

KAUM-I. 11491, 64.3 mm SL, mouth of Miyanoura River; KAUM-I. 15416, 103.4 mm SL, Yaku-shima Island; KAUM-I. 15436, 62.9 mm SL, Yaku-shima Island; KAUM-I. 15585, 61.4 mm SL, Yaku-shima Island; KAUM-I. 15590, 74.0 mm SL, Yaku-shima Island; KAUM-I. 23524, 50.1 mm SL, mouth of Ambo River; KAUM-I. 23525, 49.1 mm SL, mouth of Ambo River; KAUM-I. 23526, 39.5 mm SL, mouth of Ambo River; KAUM-I. 23527, 40.6 mm SL, mouth of Ambo River; NSMT-P 77583, 90 mm SL, mouth of Ambo River; NSMT-P 77584, 111.7 mm SL, mouth of Ambo River; NSMT-P 77585, 83 mm SL, mouth of Ambo River; NSMT-P 77586, 79 mm SL, mouth of Ambo River; NSMT-P 77587, 78 mm SL, mouth of Ambo River; NSMT-P 77588, 86 mm SL, mouth of Ambo River; NSMT-P 77589, 73 mm SL, mouth of Ambo River; NSMT-P 77590, 80 mm SL, mouth of Ambo River; NSMT-P 77591, 82 mm SL, mouth of Ambo River; NSMT-P 77592, 69 mm SL, mouth of Ambo River; NSMT-P 77593, 72 mm SL, mouth of Ambo River; NSMT-P 77594, 69

mm SL, mouth of Ambo River; NSMT-P 77595, 73 mm SL, mouth of Ambo River; NSMT-P 77596, 71 mm SL, mouth of Ambo River; NSMT-P 77597, 36 mm SL, mouth of Ambo River; NSMT-P 77598, 34 mm SL, mouth of Ambo River; NSMT-P 77599, 31 mm SL, mouth of Ambo River; NSMT-P 77600, 25 mm SL, mouth of Ambo River; NSMT-P 77601, 30 mm SL, mouth of Ambo River; NSMT-P 77602, 29 mm SL, mouth of Ambo River; NSMT-P 77603, 23 mm SL, mouth of Ambo River; NSMT-P 77604, 27 mm SL, mouth of Ambo River; NSMT-P 77605, 31 mm SL, mouth of Ambo River; NSMT-P 77606, 30 mm SL, mouth of Ambo River; NSMT-P 77607, 26 mm SL, mouth of Ambo River; NSMT-P 77608, 21 mm SL, mouth of Ambo River; NSMT-P 77609, 29 mm SL, mouth of Ambo River; NSMT-P 77610, 22 mm SL, mouth of Ambo River; NSMT-P 77611, 24 mm SL, mouth of Ambo River; NSMT-P 77612, 25 mm SL, mouth of Ambo River; NSMT-P 77613, 21 mm SL, mouth of Ambo River; NSMT-P 77614, 20 mm SL, mouth of Ambo River; NSMT-P 77615, 24 mm SL, mouth of Ambo River; NSMT-P 77616, 25 mm SL, mouth of Ambo River; NSMT-P 77617, 21 mm SL, mouth of Ambo River; NSMT-P 77618, 18.7 mm SL, mouth of Ambo River; NSMT-P 77733, 30 mm SL, Nagakubo; NSMT-P 77734, 28 mm SL, Nagakubo; NSMT-P 77773, 30 mm SL, Kurio; NSMT-P 77774, 28 mm SL, Kurio.

Ichikawa et al. (1992): Yaku-shima Island.



**Fig. 624.** *Takifugu niphobles* (KAUM-I. 11491, 64.3 mm SL).

#### FAMILY DIODONTIDAE

***Chilomycterus reticulatus*** (Linnaeus, 1758)

[Jpn name: Ishigakifugu] (Fig. 625)

MUFS 25518, 288.2 mm SL, Kurio.

Ichikawa et al. (1992, as *Chilomycterus affinis*): Yaku-shima Island. Kuniyasu (1999): Kurio.



**Fig. 625.** *Chilomycterus reticulatus* (MUFS 25518, 288.2 mm SL).

***Diodon eydouxii*** Brissout and Barneville, 1846

[Jpn name: Yaseharisemon]

Ichikawa et al. (1992): Yaku-shima Island.

***Diodon holocanthus*** Linnaeus, 1758

[Jpn name: Harisemon] (Fig. 626)

KAUM-I. 11512, 165.0 mm SL, Ambo; KAUM-I. 15714, 18.5 mm SL, off northwest of Yaku-shima Island; KAUM-I. 15861, 20.0 mm SL, off northwest of Yaku-shima Island; KAUM-I. 15862, 19.3 mm SL, off northwest of Yaku-shima Island; KAUM-I. 15873, 17.2 mm SL, off northwest of Yaku-shima Island; KAUM-I. 20345, 135.7 mm SL, Isso.

Ichikawa et al. (1992): Yaku-shima Island. Kuniyasu (1999): Kurio. MOSC (2002): Isso and Kurio.



**Fig. 626.** *Diodon holocanthus* (KAUM-I. 11512, 165.0 mm SL).

***Diodon hystrix*** Linnaeus, 1758

[Jpn name: Nezumifugu] (Fig. 627)

KAUM-I. 11511, 291.6 mm SL, Ambo.

Ichikawa et al. (1992): Yaku-shima Island.

Kuniyasu (1999): Kurio.

**Fig. 627.** *Diodon hystrix* (KAUM-I. 11511, 291.6 mm SL).***Diodon liturosus*** Shaw, 1804

[Jpn name: Hitozuraharisembon]

Ichikawa et al. (1992): Yaku-shima Island.

**Discussion**

In this study, 951 fish species were confirmed to occur in the marine and estuarine waters of Yaku-shima Island, with 374 and 89 species representing the first records from the island based on collected specimens and underwater photographs respectively. The most speciose families of fishes in Yaku-shima Island are listed in Table 1. The top 24 families comprise 75.6% of the total fish fauna. The Gobiidae and Labridae are clearly the dominant families, with a total of 208 species representing more than one-fifth of total fish fauna.

Senou et al. (2006a: table 1; 2007: table 1) ranked the most speciose families of Ie-jima Island and the Miyako Group, the Ryukyu Islands. There are no major differences in the ranking and number of species for most families among Yaku-shima Island, Ie-jima Island, and the Miyako Group. In fact, the top eight families occurring in Yaku-shima and Ie-jima Islands were identical in ranking (one to eight: Gobiidae, Labridae, Pomacentridae, Apogonidae, Serranidae, Blenniidae, Chaetodontidae, and Acanthuridae), and the percentage of the total fish fauna that these families represent are similar (48.5% in Yaku-shima Island vs. 53.6% in Ie-jima Island). On the

other hand, there are noteworthy differences in the family ranking between Yaku-shima Island and the Sagami Sea (Senou et al., 2006b: Table 1 and revised table as erratum attached to reprint). The Sagami Sea is located off the Pacific coast of central Honshu, Japan, and Yaku-shima Island is located almost midway (based on latitude) between the Sagami Sea and the Ryukyu Islands (Iejima Island and the Miyako Group). Whereas the Pomacentridae was ranked as the fifth most speciose family occurring in the Sagami Sea, with 2.9% of total fish fauna, the family was ranked third in the lists of fishes of Yaku-shima and Iejima Islands, and the Miyako Group, with 6.9–9.6% of the total fish fauna. Apogonidae, the fourth ranked family in Yaku-shima and Iejima Islands, and the Miyako Group, was ranked eighth in the Sagami Sea. These two families are primarily tropical fishes.

In addition, although the Myctophidae and Cottidae were listed as the fourteenth and fifteenth most speciose families respectively in the Sagami Sea, they were not listed from Yaku-shima and Iejima Islands, and the Miyako Group. The former was not recorded from Yaku-shima and Iejima

**Table 1.** Most speciose families of fishes in Yaku-shima Island.

Family	Number of species	% of total fish fauna
Gobiidae	110	11.6
Labridae	98	10.3
Pomacentridae	66	6.9
Apogonidae	45	4.7
Serranidae	43	4.5
Blenniidae	38	4.0
Chaetodontidae	34	3.6
Acanthuridae	28	2.9
Muraenidae	24	2.5
Scaridae	24	2.5
Carangidae	23	2.4
Lutjanidae	21	2.2
Scorpaenidae	20	2.1
Tripterygiidae	18	1.9
Syngnathidae	16	1.7
Balistidae	14	1.5
Pomacanthidae	14	1.5
Holocentridae	13	1.4
Tetraodontidae	13	1.4
Haemulidae	12	1.3
Mullidae	12	1.3
Scombridae	12	1.3
Monacanthidae	11	1.2
Exocoetidae	10	1.1
<b>Subtotal</b>	<b>719</b>	<b>75.6</b>
<b>Other 87 families</b>	<b>232</b>	<b>24.4</b>
<b>Total</b>	<b>951</b>	<b>100.0</b>

Islands, and the Miyako Group, because no deep-water or offshore fisheries exist there. The latter is a primarily temperate and cold water family and does not occur in Yaku-shima Island and southward.

These results indicate that the fish fauna of Yaku-shima Island is more similar to that of the Ryukyu Islands, rather than the Sagami Sea, although cluster analyses of UPGMA (Senou et al., 2006b: fig. 11) showed that there are two distinctive biogeographical regions in Japanese waters: one is the Japanese mainland and associated islands, including the Sagami Sea and Yaku-shima Island, and the other is the Ryukyu Islands. Because Senou et al.'s (2006b) analysis incorporated only 567 species from Yaku-shima Island (mostly based on a list by Ichikawa et al., 1992), similarities between the fish faunas of Yaku-shima Island and the Ryukyu Islands at least family composition level were probably underestimated. The Kuroshio Current flows from off the east of the Philippines to the Pacific coast of southern Japan, via Taiwan and west of the Ryukyu Islands, and regularly reaches along the coast of Yaku-shima Island (Fig. 1). The similarity between the fish faunas of Yaku-shima Island and the Ryukyu Islands is most likely caused by transportation of tropical fishes, such as the above mentioned families Apogonidae and Pomacentridae, by the Kuroshio Current from Taiwan or China to Yaku-shima Island.

However, some temperate species that occur off the Japanese mainland (and often off Taiwan) and do not occur in the Ryukyu Islands, are well established in Yaku-shima Island. For example, *Acanthoplesiops psilogaster* (Plesiopidae), *Parupeneus spilurus* (Mullidae), *Istiblennius enosimae* (Blenniidae), *Parapercis kamoharai* (Pinguipedidae), *Amblyeleotris fontanesii* (Gobiidae), *Pandaka* sp. (Gobiidae), and *Gymnogobius petschiliensis* (Gobiidae) are quite common at Yaku-shima Island, but no records of these species have been published from the Ryukyu Islands. Furthermore, Yaku-shima Island is the southern distributional limit of *Plecoglossus altivelis altivelis* (Osmeridae), a diadromous species widely distributed around the Japanese mainland, and this species is replaced with *Plecoglossus altivelis*

*ryukyuensis* in the Ryukyu Islands. Occurrence of such species in Yaku-shima Island may be caused by the transportation of fishes (especially at larval and juvenile stages) from southern Kyushu by the Osumi Branch Current that irregularly occurs between Osumi Peninsula and Yaku-shima Island, and some species possibly from Taiwan by the Kuroshio Current (Fig. 1).

In southern Japan, several species are known to have speciated in the north and south of the Tokara Islands (e.g., Senou et al., 2006b), resulting in two sister species being allopatrically distributed in the Japanese mainland with associated islands, including Yaku-shima Island (north of the Tokara Islands), and the Ryukyu Islands (south of the Tokara Islands). However, our surveys unexpectedly revealed that, in some cases, two sister species occur sympatrically at Yaku-shima Island. For example, two closely related gerreids, *Gerres equulus* (primarily distributed around the Japanese mainland) and *G. oyena* (Ryukyu Islands); two sparids, *Acanthopagrus schlegelii* (Japanese mainland) and *A. sivicolus* (Ryukyu Islands); and two ostraciids, *Ostracion immaculatus* (Japanese mainland) and *O. cubicus* (Ryukyu Islands) occur at Yaku-shima Island. This is the first discovery in southern Japan where two primarily allopatric sister species in several families occur at the same island.

As mentioned above, the marine and estuarine fish fauna of Yaku-shima Island is composed of a mixture of fishes primarily distributed in the Japanese mainland (and Taiwan) and the Ryukyu Islands, indicating that the species composition in Yaku-shima Island is clearly accounted for by the location of the island relative to the Kuroshio Current. The Kuroshio Current around Yaku-shima Island works not only as a kind of conveyor belt for fishes of the Ryukyu Islands and Taiwan but also as a strong barrier for fishes of the Japanese mainland. The latter role of the current inhibits fishes of Yaku-shima Island from extending their distribution southward to the Ryukyu Islands.

Incidentally, we found that some species considered to be relatively rare or observed sporadically in Japanese waters, have considerably large populations around Yaku-shima Island. For example, *Pomadasys quadrilineatus* (Haemulidae)

and *Pentapodus aureofasciatus* (Nemipteridae) form numerous schools, each with more than 100 individuals, and were observed throughout the year at various life stages off Yaku-shima Island (Motomura and Harazaki, 2007; Matsunuma et al., 2009). Although these species are common in Taiwan and Yaku-shima Island, they have only sporadically been collected and never observed in schools off the Pacific coast of the Japanese mainland. This suggests that the Yaku-shima Island populations of these species probably originated in Taiwan and/or adjacent waters, and most of the sporadically collected individuals along the Japanese mainland may have been supplied from the established populations at Yaku-shima Island. So, Yaku-shima Island appears to be a major source of some tropical fish supply to the Pacific coast of the Japanese mainland.

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