

Annotated Checklist of Deep-sea Fishes from the Pacific Coast off Tohoku District, Japan

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Abstract: An inventory of deep-sea fishes from the Pacific side of the Tohoku District is presented on the basis of specimens collected in the years 2005-2007 and a literature survey. A total of 496 species in 118 families are listed with collection records and/or taxonomic remarks. A new Japanese name was established for *Diceratias trilobus*.

Key words: deep-water fishes, fish fauna, distribution, Tohoku District

Introduction

The Tohoku (meaning northeast in Japanese) District is a northern part of Honshu Island, Japan. The Pacific side is washed by the cold Oyashio Current from the north and warm Kuroshio Current from the south, resulting in good fishing grounds for a scomberesocid *Cololabis saira*, a gadid *Gadus macrocephalus* and several scorpaenids (e.g., *Sebastolobus macrochir*). These fishes have been well investigated, as fisheries resources, by the Tohoku National Fisheries Research Institute and Aomori, Iwate, Miyagi, Fukushima and Ibaraki Experimental Stations.

Research on the deep-sea fish fauna of Pacific side of the Tohoku District began with the work of Mead and Taylor (1953) who reported 23 species including a new species from midwaters off Miyagi and Iwate prefectures. Maruyama (1970, 1971) reported a total of 106 deep-sea species from Iwate Prefecture based on specimens deposited in the Iwate Fisheries Experimental Station. Amaoka *et al.* (1983) made large scaled bottom trawl surveys and documented 109 demersal species with detailed descriptions and color photographs, including 3 new species. Shinohara *et al.* (1996) made a list of 178 species collected by bottom trawls carried by the Tohoku National Fisheries Research Institute. Balanov *et al.* (2009) reported 142 mesopelagic deep-sea fishes captured by midwater trawls. In addition to these studies, many new and rare species have been reported since 1996 (e.g., Kido and Shinohara, 1997; Shinohara and Matsuura, 1998; Endo and Shinohara, 1999; Sakurai and Shinohara, 2008).

In the period from 2005 to 2008, the National Museum of Nature and Science and Tohoku National Fisheries Institute conducted trawl surveys on the Pacific side of Tohoku District (off Aomori, Iwate, Miyagi, Fukushima and Ibaraki prefectures) at depths of 150-2000 m using the R/V *Wakataka-maru* of the Fisheries Research Agency (FRA). The specimens and literature survey

revealed that at least 496 species (327 genera) belonging to 118 families and 28 orders occur in deep-waters of below 200 m.

Comparisons of the deep-water fish faunas of the Tohoku District, Suruga Bay (Shinohara and Matsuura, 1997), Tosa Bay (Shinohara *et al.*, 2001) and the Ryukyu Islands (Shinohara *et al.*, 2005; Shinohara and Anderson, 2007) show slightly larger number of species from the Tohoku District than Suruga Bay (483 species) and fewer than Tosa Bay (599 species) and Ryukyu Islands (644 species). The Pacific side of the Tohoku District is unique because of high number of species of the Zoarcidae (20 species vs. 2 species in Suruga Bay, 4 species in Tosa Bay and 2 species in the Ryukyu Islands), the Agonidae (12 vs. 3, 1 and 0, respectively) and the Cottidae (9 vs. 5, 4 and 0). On the other hand, this area can be characterized by smaller number of species of the Triglidae (5 vs. 13 in Suruga Bay, 28 in Tosa Bay and 24 in the Ryukyu Islands) and the Ophidiidae (7 vs. 11, 16 and 18).

Materials and Methods

Fishes were collected by the R/V *Wakataka-maru* using otter trawl nets and dredges. The collection localities are shown in Fig. 1 and Table 1. All specimens are deposited in the National Museum of Nature and Science, Tokyo (NSMT).

Systematic arrangement of taxa follows Nelson (1994). Author(s) and year of each scientific name follows the Catalog of Fishes on the website of the California Academy of Sciences, USA (<http://research.calacademy.org/research/ichthyology/catalog/fishcatsearch.html>). Number of specimens is indicated in parentheses following each station number.

We examined the following literature sources for deep-sea fishes occurring below 200 m; Keys to the Fishes and Fish-like Animals of Japan (Okada and Matsubara, 1938); Fish Morphology and Hierarchy (Matsubara, 1955); Fishes from the North-eastern Sea of Japan and the Okhotsk Sea off Hokkaido (Amaoka *et al.*, 1983); The Fishes of the Japanese Archipelago, 2nd edition (Masuda *et al.*, 1988); The Fishes of Northern Japan (Amaoka *et al.*, 1995); Fishes of Japan with Pictorial Keys to the Species, 2nd edition (Nakabo, 2000a); Sea Fishes of Japan, 3rd edition (Okamura and Amaoka, 2001); Fishes of Japan with Pictorial Keys to the Species, English edition (Nakabo, 2002a); Field Guide of the Fishes from the Tohoku District, North-eastern Waters of Japan (Kitagawa *et al.*, 2008). In addition to these major sources, revisional papers for individual taxonomic groups were examined (e.g., Okamura, 1970; Kawaguchi and Shimizu, 1978; Toyoshima, 1985). In the literature survey, we recorded localities given with significant accuracy (e.g., off Miyagi Prefecture, off Kinkazan) and excluded vague ones such as "northern Japan." Our research area ranges from the Pacific side off Aomori Prefecture to Ibaraki Prefecture (Fig. 1) including Kashima-nada Sea.

Species List

Order Myxiniiformes

Family Myxinidae

Myxine garmani Jordan and Snyder, 1901 [Japanese name: Hosonutaunagi]

Myxine garmani: Funabashi, 1998; Shioyaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-05-GH380D (2), WA-06-G410 (2).

Eptatretus atami (Dean, 1904) [Japanese name: Kuronutaunagi]

Paramyxine atami: Funabashi, 1998; Iwata, 2000.

Eptatretus okinoseanus (Dean, 1904) [Japanese name: Murasakinutaunagi] (Fig. 2A)

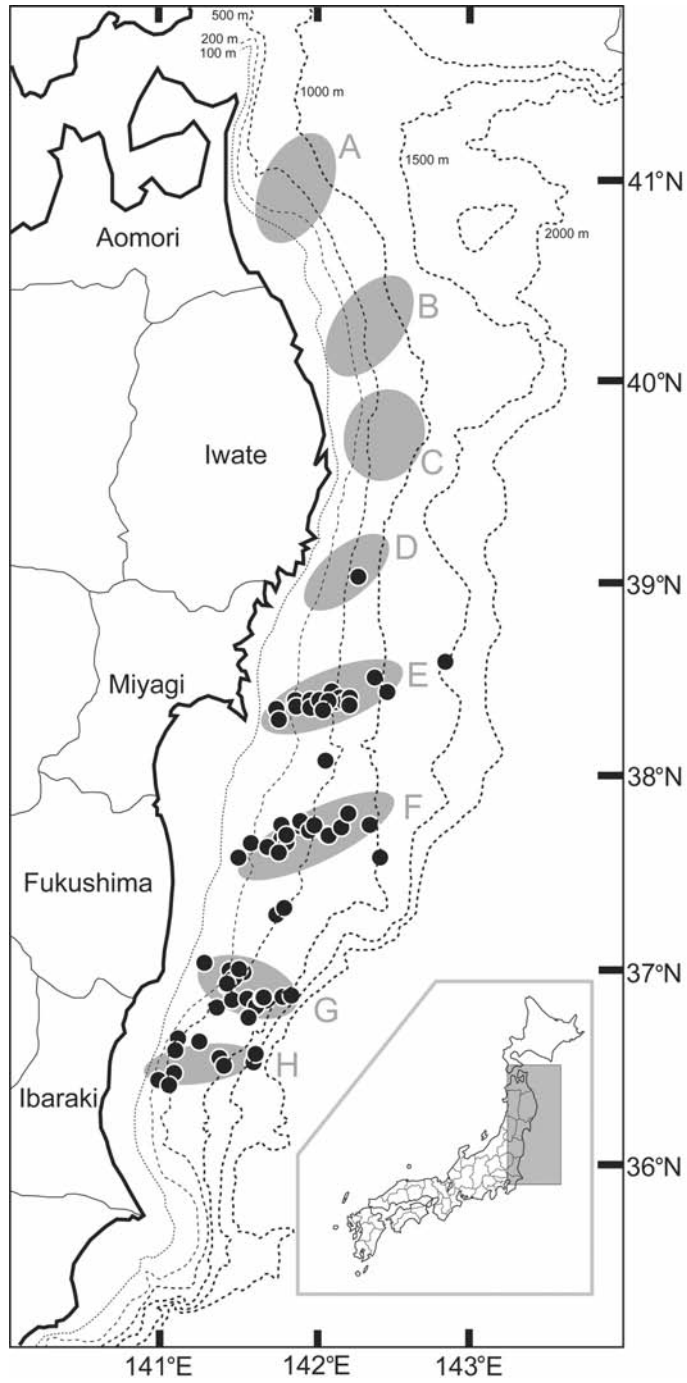


Fig. 1. Study area (shaded rectangle) and the R/V *Watakata-maru* sampling stations (solid circles) in the Tohoku District, Japan. A-H show the yearly survey areas of the R/V *Watakata-maru*.

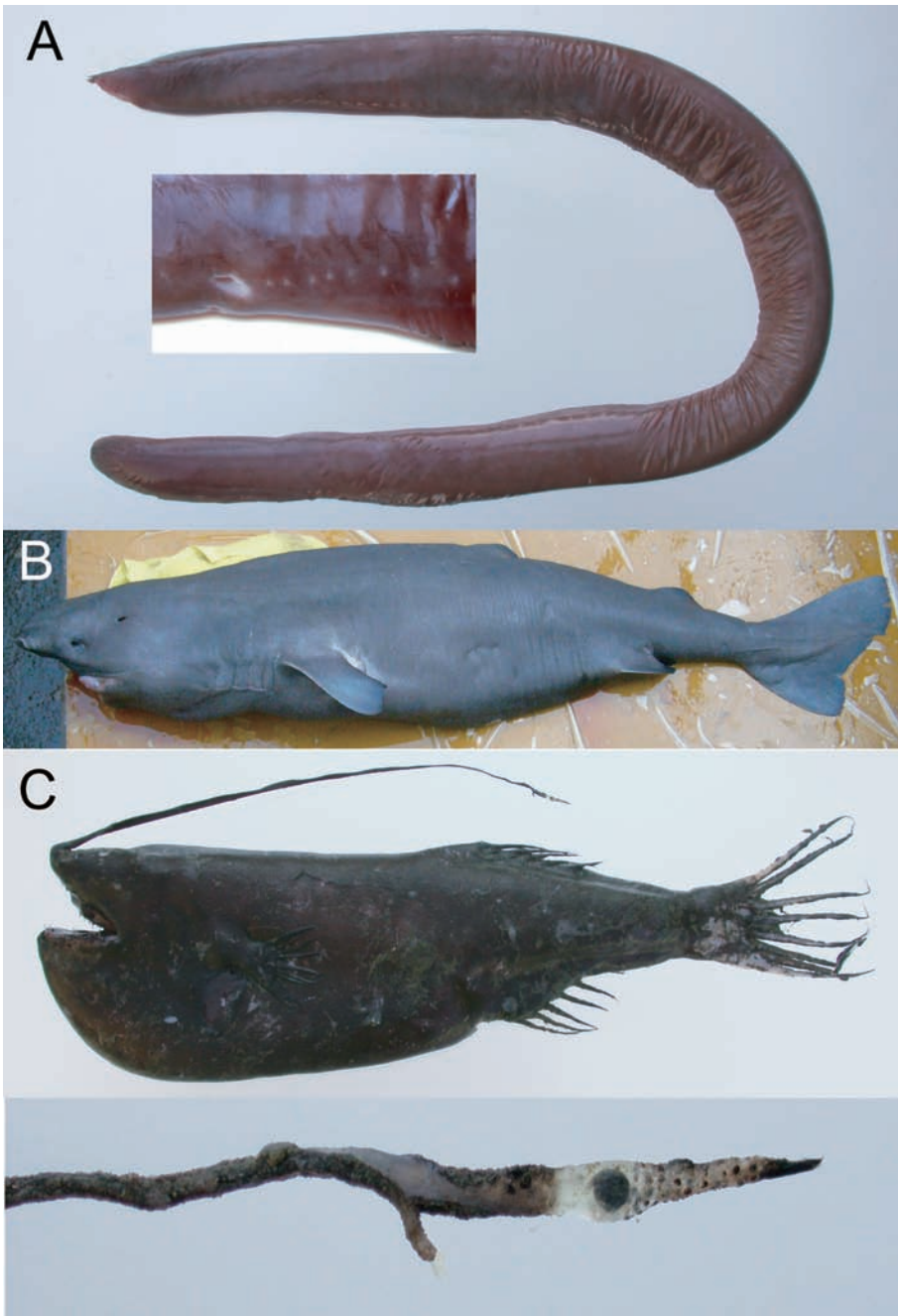


Fig. 2. Rare fishes collected by the R/V *Wakataka-maru* during 2005-2007. A, *Eptatretus okinoseanus* (Myxinidae), NSMT-P 77900, 83 cm total length (TL), inset shows a gill aperture and slime pores; B, *Somniosus pacificus* (Dalatiidae), NSMT-P 78207, ca. 150 cm TL; C, *Gigantactis vanhoeffeni* (Gigantactidae) and escal bulb, NSMT-P 79567, 31.5 cm standard length.

Table 1. Trawl and dredge(*) stations of the R/V *Wakataka-maru* in 2005–2007.

Station no.	Position in	Position out	Depths (m)	Date
WA-05-E480	38°22.63'N, 142°05.28'E	38°20.91'N, 142°05.97'E	482–483	25 Oct. 2005
WA-05-E650	38°22.99'N, 142°10.65'E	38°20.92'N, 142°10.57'E	657–658	26 Oct. 2005
WA-05-EF450	No data	38°02.23'N, 142°04.86'E	454	18 Nov. 2005
WA-05-G280	36°55.42'N, 141°24.87'E	38°20.93'N, 141°24.16'E	277–279	29 Oct. 2005
WA-05-G750	36°46.15'N, 141°35.35'E	38°20.95'N, 141°34.74'E	750–750	10 Nov. 2005
WA-05-G900	36°49.86'N, 141°40.98'E	38°20.96'N, 141°40.53'E	901–901	10 Nov. 2005
WA-05-GH380D*	36°38.97'N, 141°14.25'E	No data	378	12 Nov. 2005
WA-05-H150	36°29.89'N, 140°57.04'E	38°20.94'N, 140°58.14'E	154–156	30 Oct. 2005
WA-06-D650	39°02.41'N, 142°14.75'E	39°03.56'N, 142°14.91'E	646–663	18 Oct. 2006
WA-06-E150	38°20.03'N, 141°44.46'E	38°18.24'N, 141°44.07'E	154–151	5 Nov. 2006
WA-06-E210	38°22.23'N, 141°51.30'E	38°23.99'N, 141°51.55'E	209–212	5 Nov. 2006
WA-06-E250	38°23.27'N, 141°53.89'E	38°21.62'N, 141°54.09'E	242–244	5 Nov. 2006
WA-06-E280	38°21.75'N, 141°56.42'E	38°23.59'N, 141°56.59'E	275–275	4 Nov. 2006
WA-06-E310	38°23.15'N, 141°58.17'E	38°21.48'N, 141°58.44'E	305–309	4 Nov. 2006
WA-06-E350	38°22.22'N, 142°00.67'E	38°23.99'N, 142°00.29'E	349–350	4 Nov. 2006
WA-06-E380	38°23.40'N, 142°01.57'E	38°21.94'N, 142°02.33'E	377–382	4 Nov. 2006
WA-06-E410	38°23.67'N, 142°02.55'E	38°22.14'N, 142°03.27'E	406–409	3 Nov. 2006
WA-06-E425	38°24.23'N, 142°02.95'E	38°24.92'N, 142°02.74'E	423–423	4 Nov. 2006
WA-06-E450	38°23.51'N, 142°03.99'E	38°25.24'N, 142°03.61'E	448–451	3 Nov. 2006
WA-06-E510	38°22.63'N, 142°06.29'E	38°23.89'N, 142°05.73'E	514–506	3 Nov. 2006
WA-06-F280	37°35.71'N, 141°41.02'E	37°37.51'N, 141°40.90'E	277–284	29 Oct. 2006
WA-06-F310	37°36.77'N, 141°43.66'E	37°36.08'N, 141°43.61'E	313–309	29 Oct. 2006
WA-06-F380	37°38.47'N, 141°50.54'E	37°40.07'N, 141°50.61'E	386–379	30 Oct. 2006
WA-06-F410	37°42.96'N, 141°53.93'E	37°44.58'N, 141°53.56'E	411–411	30 Oct. 2006
WA-06-F425	37°44.01'N, 141°54.82'E	37°42.28'N, 141°55.05'E	425–424	30 Oct. 2006
WA-06-F480	37°41.70'N, 141°58.98'E	37°39.88'N, 141°59.02'E	483–478	31 Oct. 2006
WA-06-F510	37°38.58'N, 142°01.11'E	37°39.78'N, 142°01.38'E	503–511	31 Oct. 2006
WA-06-F550	37°42.06'N, 142°04.07'E	37°40.91'N, 142°04.73'E	546–551	31 Oct. 2006
WA-06-F650	37°42.87'N, 142°09.65'E	37°43.98'N, 142°09.05'E	654–651	31 Oct. 2006
WA-06-F750	37°47.30'N, 142°12.20'E	37°48.09'N, 142°11.96'E	749–747	1 Nov. 2006
WA-06-F900	37°46.22'N, 142°18.93'E	37°45.73'N, 142°19.10'E	904–909	1 Nov. 2006
WA-06-F1500	37°36.29'N, 142°33.59'E	37°35.99'N, 142°33.50'E	1515–1513	1 Nov. 2006
WA-06-FG425	37°17.80'N, 141°46.21'E	37°19.53'N, 141°46.55'E	426–425	10 Nov. 2006
WA-06-FG450	37°18.81'N, 141°47.19'E	37°20.50'N, 141°47.50'E	449–444	10 Nov. 2006
WA-06-FG510	37°16.53'N, 141°49.98'E	37°17.61'N, 141°50.23'E	511–512	10 Nov. 2006
WA-06-G310	36°56.22'N, 141°26.93'E	36°54.75'N, 141°26.52'E	301–315	26 Oct. 2006
WA-06-G380	36°53.36'N, 141°27.44'E	36°54.52'N, 141°28.91'E	384–377	27 Oct. 2006
WA-06-G410	36°56.57'N, 141°33.19'E	36°58.05'N, 141°34.42'E	414–411	27 Oct. 2006
WA-06-G425	36°53.19'N, 141°29.24'E	36°52.05'N, 141°27.59'E	428–420	27 Oct. 2006
WA-06-G480	36°51.23'N, 141°29.16'E	36°50.01'N, 141°27.74'E	481–483	28 Oct. 2006
WA-06-G510	36°51.37'N, 141°30.11'E	36°52.13'N, 141°31.16'E	508–508	28 Oct. 2006
WA-06-G650	36°50.20'N, 141°34.27'E	36°50.92'N, 141°35.18'E	648–648	28 Oct. 2006
WA-06-G900	36°50.21'N, 141°41.32'E	36°49.44'N, 141°40.73'E	907–910	11 Nov. 2006
WA-06-G1200	36°51.80'N, 141°47.99'E	36°51.33'N, 141°47.57'E	1207–1200	11 Nov. 2006
WA-06-GH280	36°41.45'N, 141°12.31'E	36°39.99'N, 141°10.98'E	278–278	17 Nov. 2006
WA-06-GH380	36°40.37'N, 141°15.64'E	36°38.90'N, 141°14.50'E	377–381	16 Nov. 2006
WA-06-H250	36°31.39'N, 140°59.89'E	36°29.80'N, 140°58.80'E	243–246	12 Nov. 2006
WA-06-H280	36°30.79'N, 141°00.21'E	36°29.36'N, 140°59.13'E	282–279	13 Nov. 2006
WA-06-H380	36°30.10'N, 141°01.76'E	36°28.69'N, 141°00.57'E	385–378	12 Nov. 2006
WA-06-H410	36°30.94'N, 141°03.10'E	36°32.34'N, 141°04.30'E	413–407	13 Nov. 2006
WA-06-H510	36°30.28'N, 141°04.92'E	36°31.12'N, 141°05.89'E	508–510	14 Nov. 2006
WA-06-H550	36°31.77'N, 141°08.69'E	36°32.62'N, 141°09.78'E	561–557	14 Nov. 2006
WA-06-H1500	36°36.11'N, 141°36.14'E	36°35.88'N, 141°36.05'E	1478–1475	15 Nov. 2006
WA-07-E150	38°18.46'N, 141°44.08'E	38°20.01'N, 141°44.53'E	150–154	23 Oct. 2007
WA-07-E210	38°21.78'N, 141°51.15'E	38°23.31'N, 141°51.39'E	207–210	23 Oct. 2007

Table 1. (Continued)

Station no.	Position in	Position out	Depths (m)	Date
WA-07-E250	38°23.16'N, 141°53.88'E	38°21.31'N, 141°54.13'E	241-244	23 Oct. 2007
WA-07-E280	38°21.53'N, 141°56.38'E	38°23.37'N, 141°56.79'E	275-280	23 Oct. 2007
WA-07-E350	38°20.39'N, 142°01.67'E	38°21.97'N, 142°00.96'E	351-351	24 Oct. 2007
WA-07-E380	38°23.48'N, 142°01.58'E	38°21.99'N, 142°02.41'E	377-382	30 Oct. 2007
WA-07-E410	38°22.13'N, 142°03.32'E	38°23.78'N, 142°02.55'E	408-406	24 Oct. 2007
WA-07-E425	38°24.21'N, 142°02.98'E	38°25.89'N, 142°02.62'E	422-424	5 Nov. 2007
WA-07-E510	38°23.82'N, 142°05.78'E	38°22.73'N, 142°06.10'E	506-506	25 Oct. 2007
WA-07-E550	38°22.71'N, 142°07.40'E	38°23.88'N, 142°07.23'E	549-549	25 Oct. 2007
WA-07-E650	38°23.16'N, 142°10.67'E	38°22.13'N, 142°10.59'E	656-656	25 Oct. 2007
WA-07-E750	38°22.24'N, 142°13.95'E	38°23.09'N, 142°14.38'E	753-754	25 Oct. 2007
WA-07-E900	38°30.03'N, 142°21.73'E	38°29.50'N, 142°21.53'E	900-896	26 Oct. 2007
WA-07-E1200	38°23.52'N, 142°31.76'E	38°24.05'N, 142°31.78'E	1198-1204	26 Oct. 2007
WA-07-E1500	38°32.20'N, 142°48.04'E	38°34.72'N, 142°48.02'E	1499-1502	26 Oct. 2007
WA-07-F150	37°35.30'N, 141°33.25'E	37°36.85'N, 141°33.92'E	153-163	29 Oct. 2007
WA-07-F210	37°36.90'N, 141°35.85'E	37°38.55'N, 141°36.09'E	213-211	29 Oct. 2007
WA-07-F280	37°35.67'N, 141°40.99'E	37°37.51'N, 141°40.75'E	277-282	29 Oct. 2007
WA-07-F350	37°37.44'N, 141°47.36'E	37°39.11'N, 141°47.31'E	356-352	30 Oct. 2007
WA-07-F380	37°38.33'N, 141°50.53'E	37°39.97'N, 141°50.59'E	388-380	30 Oct. 2007
WA-07-F410	37°42.93'N, 141°53.94'E	37°44.62'N, 141°53.59'E	412-411	30 Oct. 2007
WA-07-F480	37°40.17'N, 141°59.00'E	37°41.74'N, 141°59.00'E	480-485	4 Nov. 2007
WA-07-F510	37°38.29'N, 142°01.09'E	37°39.42'N, 142°01.18'E	506-508	4 Nov. 2007
WA-07-G150	36°59.63'N, 141°17.40'E	37°00.51'N, 141°17.66'E	151-151	2 Nov. 2007
WA-07-G210	36°57.00'N, 141°22.68'E	36°58.29'N, 141°23.75'E	210-209	2 Nov. 2007
WA-07-G380	36°53.31'N, 141°27.37'E	36°54.47'N, 141°28.80'E	385-376	2 Nov. 2007
WA-07-G350	36°56.31'N, 141°30.90'E	36°57.49'N, 141°31.27'E	371-358	3 Nov. 2007
WA-07-G900	36°49.88'N, 141°40.96'E	36°49.44'N, 141°40.49'E	903-894	31 Oct. 2007
WA-07-G1200	36°51.78'N, 141°47.86'E	36°51.42'N, 141°47.57'E	1202-1202	31 Oct. 2007
WA-07-G1500	36°51.10'N, 141°51.14'E	36°51.37'N, 141°51.58'E	1514-1513	31 Oct. 2007
WA-07-H750	36°34.13'N, 141°21.16'E	36°33.70'N, 141°20.27'E	756-747	1 Nov. 2007
WA-07-H900	36°30.91'N, 141°21.09'E	36°30.55'N, 141°20.51'E	901-899	1 Nov. 2007
WA-07-H1500	36°35.82'N, 141°36.04'E	36°36.14'N, 141°35.86'E	1473-1433	1 Nov. 2007

Eptatretus okinoseanus: Funabashi, 1998.

WA-06-G510 (1).

Order Chimaeriformes

Family Chimaeridae

Chimaera phantasma Jordan and Snyder, 1900 [Japanese name: Ginzame]

Chimaera phantasma: Funabashi, 1998; Kitagawa *et al.*, 2008.

WA-07-E650 (2).

Hydrolagus barbouri (Garman, 1908) [Japanese name: Kokonohoshiginzame]

Chimaera barbouri: Okada and Matsubara, 1938.

Bathyalopex barbouri: Matsubara, 1955.

Hydrolagus barbouri: Shiogaki, 1982; Shirai, 1983; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-FG450 (1).

Hydrolagus purpureus (Gilbert, 1905) [Japanese name: Murasakiginzame]

Hydrolagus purpureus: Shirai, 1983; Nakabo, 2000b, 2002b.

Family Rhinochimaeridae

Harriotta releighana Goode and Bean, 1895 [Japanese name: Azumaginzame]

Harriotta releighana: Shiogaki, 1982; Shiogaki *et al.*, 2004.

Rhinochimaera africana Compagno, Stehmann and Ebert, 1990 [Japanese name: Kurotenguginzame]

Rhinochimaera africana: Nakabo, 2000b, 2002b.

Rhinochimaera pacifica (Mitsukuri, 1895) [Japanese name: Tenguginzame]

Rhinochimaera pacifica: Shiogaki, 1982; Shirai, 1983; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Order Carcharhiniformes

Family Scyliorhinidae

Apristurus fedorovi Dolganov, 1983 [Japanese name: Arameherazame]

Apristurus fedorovi: Amaoka *et al.*, 1995; Nakaya, 2001; Kitagawa *et al.*, 2008.

Apristurus macrorhynchus (Tanaka, 1909) [Japanese name: Nagaherazame]

Apristurus macrorhynchus: Shiogaki, 1982; Shiogaki *et al.*, 2004.

Family Carcharhinidae

Carcharhinus falciformis (Müller and Henle, 1839) [Japanese name: Kurotogarizame]

Carcharhinus falciformis: Kitagawa *et al.*, 2008.

Order Hexanchiformes

Family Chlamydoselachidae

Chlamydoselachus anguineus Garman, 1884 [Japanese name: Rabuka]

Chlamydoselachus anguineus: Funabashi, 1998.

Family Hexanchidae

Heptranchias perlo (Bonnaterre, 1788) [Japanese name: Edoaburazame]

Heptranchias perlo: Funabashi, 1998.

Hexanchus griseus (Bonnaterre, 1788) [Japanese name: Kagurazame]

Hexanchus griseus: Funabashi, 1998.

Order Squaliformes

Family Dalatiidae

Subfamily Etmopterinae

Centroscyllium ritteri Jordan and Fowler, 1903 [Japanese name: Kasumizame]

Centroscyllium ritteri: Matsubara, 1955; Shiogaki, 1982; Shirai, 1983; Funabashi, 1998; Nakaya, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-FG425 (1), WA-07-F510 (2).

Etmopterus lucifer Jordan and Snyder, 1902 [Japanese name: Fujikujira]

Etmopterus lucifer: Shiogaki, 1982; Shirai, 1983; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E410 (2).

Etmopterus pusillus (Lowe, 1839) [Japanese name: Karasuzame]

Etmopterus pusillus: Funabashi, 1998.

WA-06-G510 (2).

Etmopterus unicolor (Engelhardt, 1912) [Japanese name: Nisekarasuzame]

Etmopterus unicolor: Shirai, 1983; Funabashi, 1998; Hatooka, 2000, 2002; Nakaya, 2001;

Kitagawa *et al.*, 2008.

WA-06-G900 (2), WA-07-H900 (1).

Subfamily Somniosinae

Scymnodon squamulosus (Günter, 1877) [Japanese name: Biroudozame]

Scymnodon squamulosus: Shirai, 1983.

Zameus squamulosus: Nakaya, 2001.

Somniosus pacificus Bigelow and Schroeder, 1944 [Japanese name: Ondenzame] (Fig. 2B)

Somniosus pacifica: Shiogaki, 1982.

Somniosus pacificus: Funabashi, 1998; Shiogaki *et al.*, 2004.

WA-06-H510 (1).

Subfamily Dalatiinae

Dalatias licha (Bonnaterre, 1788) [Japanese name: Yoroizame]

Dalatias licha: Funabashi, 1998.

Isistius brasiliensis (Quoy and Gaimard, 1824) [Japanese name: Darumazame]

Isistius brasiliensis: Funabashi, 1998; Kitagawa *et al.*, 2008.

Family Centrophoridae

Centrophorus atromarginatus Garman, 1913 [Japanese name: Aizame]

Centrophorus atromarginatus: Funabashi, 1998.

Centrophorus squamulosus Günther, 1877 [Japanese name: Momijizame]

Centrophorus squamulosus: Shirai, 1983.

Centrophorus squamosus: Funabashi, 1998; Hatooka, 2000, 2002; Nakaya, 2001.

Deania calcea (Lowe, 1839) [Japanese name: Heratsunozame]

Deania calaea: Kitagawa *et al.*, 2008.

Family Squalidae

Squalus acanthias Linnaeus, 1758 [Japanese name: Aburatsunozame]

Squalus acanthias: Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Squalus brevirostris Tanaka, 1917 [Japanese name: Tsumaritsunozame]

Squalus brevirostris: Shiogaki *et al.*, 2004.

Squalus mitsukurii Jordan and Snyder *in* Jordan and Fowler, 1903 [Japanese name: Futotsunozame]

Squalus mitsukurii: Yano, 2001.

Order Squatiniformes
Family Squatinidae

Squatina nebulosa Regan, 1906 [Japanese name: Korozame]
Squatina nebulosa: Funabashi, 1998; Yano, 2001.

Order Rajiformes
Suborder Torpedinoidei
Family Torpedinidae

Torpedo tokionis (Tanaka, 1908) [Japanese name: Yamatoshibireei]
Torpedo tokionis: Shiogaki, 1982; Nakaya, 1983; Amaoka *et al.*, 1995; Funabashi, 1998; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Rajidae

Amblyraja badia (Garman, 1899) [Japanese name: Mitsuboshikasube]
Raja badia: Amaoka *et al.*, 1995.
Amblyraja badia: Hatooka *et al.*, 2000, 2002; Kitagawa *et al.*, 2008.
Raja (Amblyraja) badia: Ishihara, 2001.

Bathyraja abyssicola (Gilbert, 1896) [Japanese name: Chihirokasube]
Bathyraja abyssicola: Nakaya, 1983; Ishihara and Ishiyama, 1985; Amaoka *et al.*, 1995; Hatooka *et al.*, 2000, 2002; Ishihara, 2001; Kitagawa *et al.*, 2008.

Bathyraja aleutica (Gilbert, 1896) [Japanese name: Aryushankasube]
Bathyraja aleutica: Shiogaki, 1982; Nakaya, 1983; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Bathyraja andriashevi Dolganov, 1985 [Japanese name: Hosomekasube]
Bathyraja andriashevi: Dolganov, 1985; Hatooka *et al.*, 2000, 2002.

Bathyraja bergi Dolganov, 1983 [Japanese name: Sokogangiei]
Bathyraja bergi: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Bathyraja diplotaenia (Ishiyama, 1952) [Japanese name: Ribonkasube]
Bathyraja diplotaenia: Shiogaki, 1982; Nakaya, 1983; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-07-F510 (1).

Bathyraja fedorovi Dolganov, 1983 [Japanese name: Fedorofukasube]
Bathyraja fedorovi: Amaoka *et al.*, 1995; Hatooka *et al.*, 2000, 2002.

Bathyraja isotrachys (Günther, 1877) [Japanese name: Charenjākasube]
Bathyraja isotrachys: Shiogaki, 1982; Ishihara and Ishiyama, 1985; Ishihara, 2001; Kitagawa *et al.*, 2008.

WA-07-G1500 (2).

Bathyraja matsubaraei (Ishiyama, 1952) [Japanese name: Matsubaraei]
Bathyraja matsubaraei: Shiogaki, 1982; Nakaya, 1983; Amaoka *et al.*, 1995; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Bathyraja caeluronigricans: Shiogaki, 1982; Nakaya, 1983; Amaoka *et al.*, 1995.

WA-06-G1200 (2), WA-06-G650 (1), WA-07-H900 (1), WA-07-G1500 (2).

Bathyraja trachouros (Ishiyama, 1958) [Japanese name: Zarakasube]
Bathyraja trachouros: Hatooka *et al.*, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G410 (1).

Bathyraja tzinovskii Dolganov, 1983 [Japanese name: Chinofusukikasube]

Bathyraja tzinovskii: Dolganov, 1985; Amaoka *et al.*, 1995; Hatooka *et al.*, 2000, 2002.

Dipturus kwangtungensis (Chu, 1960) [Japanese name: Gangiei]

Raja kwangtungensis: Amaoka *et al.*, 1995; Funabashi, 1998.

Raja (Dipturus) kwangtungensis: Ishihara, 2001.

Dipturus kwangtungensis: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Dipturus tengu (Jordan and Fowler, 1903) [Japanese name: Tengukasube]

Raja tengu: Shiogaki, 1982; Funabashi, 1998.

Dipturus tengu: Shiogaki *et al.*, 2004.

WA-06-G425 (1).

Rhinoraja kujiensis (Tanaka, 1916) [Japanese name: Kujikasube]

Raja kujiensis: Okada and Matsubara, 1938.

Rhinoraja kujiensis: Matsubara, 1955; Shiogaki, 1982; Funabashi, 1998; Shiogaki *et al.*, 2004.

Rhinoraja longicauda Ishiyama, 1952 [Japanese name: Onagakasube]

Rhinoraja longicauda: Shiogaki, 1982; Nakaya, 1983; Asahida, 1992; Funabashi, 1998;

Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G425 (1), WA-07-G350 (2), WA-07-G380 (1), WA-07-F410 (1), WA-07-F510 (1).

Order Albuliformes

Suborder Albuloidei

Family Albulidae

Pterothrissus gissu Hilgendorf, 1877 [Japanese name: Gisu]

Pterothrissus gissu: Shiogaki, 1982; Shirai, 1983; Sato *et al.*, 1987; Shinohara *et al.*, 1996;

Funabashi, 1998; Shiogaki *et al.*, 2004; Balanov *et al.*, 2009.

WA-06-E280 (1), WA-07-E210 (6).

Suborder Notacanthoidei

Family Halosauridae

Aldrovandia affinis (Günther, 1877) [Japanese name: Tokagegisu]

Aldrovandia affinis: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Halosauropsis macrochir (Günther, 1878) [Japanese name: Kuroobitokagegisu]

Halosauropsis macrochir: Shinohara *et al.*, 1996.

WA-07-H900 (1).

Family Notacanthidae

Lipogenys gillii Goode and Bean, 1895 [Japanese name: Tanukisokogisu]

Lipogenys gillii: Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Lipogenys gilli [sic]: Ohta, 2001.

Notacanthus abbotti Fowler, 1934 [Japanese name: Kitsunesokogisu]

Notacanthus macrorhynchus: Maruyama, 1971; Shiogaki, 1982.

Notacanthus abbotti: Shiogaki *et al.*, 2004.

Notacanthus chemnitzii Bloch, 1788 [Japanese name: Kurosokogisu]

Notacanthus fascidens: Matsubara, 1938, 1955; Maruyama, 1971.

Notacanthus chemnitzii: Shiogaki, 1982; Yabe, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Notacanthus chemnitzii: Nakabo, 2002b.

WA-05-G750 (1), WA-06-G650 (1), WA-06-FG510 (1), WA-07-E550 (2).

Polyacanthonotus challengerii (Vaillant, 1888) [Japanese name: Sokogisu]

Polyacanthonotus challengerii: Yabe, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

WA-07-E1500 (6).

Order Anguilliformes

Family Synaphobranchidae

Ilyophis brunneus Gilbert, 1891 [Japanese name: Ryuukyuuhoraanago]

Ilyophis brunneus: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Simenchelys parasiticus Gill in Goode and Bean, 1879 [Japanese name: Kongouanago]

Simenchelys dofleini: Matsubara, 1955.

Simenchelys parasiticus: Shiogaki, 1982; Sakamoto, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-05-G750 (3).

Synaphobranchus affinis Günther, 1877 [Japanese name: Horaanago]

Synaphobranchus affinis: Shiogaki, 1982; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Synaphobranchus bathybius Günther, 1877 [Japanese name: Sokoanago]

Histiobranchus bathybius: Asano, 1988; Shiogaki, 1982.

Synaphobranchus bathybius: Shiogaki *et al.*, 2004.

Synaphobranchus brevidorsalis Günther, 1887 [Japanese name: Motosodeanago]

Synaphobranchus brevidorsalis: Shinohara *et al.*, 1996.

Synaphobranchus kaupii Johnson, 1862 [Japanese name: Irakoanago]

Synaphobranchus kaupii: Matsubara, 1955; Shiogaki, 1982; Sakamoto, 1983; Shinohara *et al.*, 1996; Okamura, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E410 (2).

Synaphobranchus sp. [Japanese name: Sodeanago]

WA-05-G750 (1).

Family Ophichthidae

Subfamily Ophichthinae

Ophichthus urolophus (Temminck and Schlegel, 1846) [Japanese name: Susoumihebi]

Ophichthus urolophus: Funabashi, 1998.

Ophisurus macrorhynchus Bleeker, 1853 [Japanese name: Dainanumihebi]

Ophisurus macrorhynchus: Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Derichthyidae

Derichthys serpentinus Gill, 1884 [Japanese name: Kubinagaanago]

Derichthys serpentinus: Imamura *et al.*, 2005; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Nessorhamphus danae Schmidt, 1931 [Japanese name: Kaizokuheraanago]

Nessorhamphus danae: Balanov *et al.*, 2009.

Nessorhamphus ingolfianus (Schmidt, 1912) [Japanese name: Heraanago]
Nessorhamphus ingolfianus: Kitagawa *et al.*, 2008.

Family Nemichthyidae

Avocettina infans (Günther, 1878) [Japanese name: Kuroshigiunagi]
Avocettina infans: Sakamoto, 1983; Asano, 1988; Shinohara *et al.*, 1996; Asano, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Nemichthys scolopaceus Richardson, 1848 [Japanese name: Shigiunagi]
Nemichthys scolopaceus: Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-06-F425 (1).

Family Congridae

Acromycter nezumi (Asano, 1958) [Japanese name: Himoanago]
Acromycter nezumi: Kitagawa *et al.*, 2008.
 WA-06-H380 (1).

Ariosoma meeki (Jordan and Snyder, 1900) [Japanese name: Gotenanago]
Ariosoma meeki: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Gnathophis nystromi nystromi (Jordan and Snyder, 1901) [Japanese name: Ginanago]
Gnathophis nystromi nystromi: Asahida, 1992; Funabashi, 1998; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Nettastomatidae

Nettastoma parviceps Günther, 1877 [Japanese name: Kuzuanago]
Nettastoma parviceps: Sakamoto, 1983; Kitagawa *et al.*, 2008.
 WA-06-F650 (1).

Saurenehelys fierasfer (Jordan and Snyder, 1901) [Japanese name: Itoanago]
Saurenehelys fierasfer: Shinohara *et al.*, 1996; Hatooka, 2000, 2002.

Venefica tentaculata Garman, 1899 [Japanese name: Kiserukuzuanago]
Venefica tentaculata: Sakamoto, 1983; Asano, 1988, 2001; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Hatooka, 2000, 2002; Kitagawa *et al.*, 2008.
 WA-07-G1500 (1).

Family Serrivomeridae

Serrivomer lanceolatoides (Schmidt, 1916) [Japanese name: Nisenokobaunagi]
Serrivomer lanceolatoides: Balanov *et al.*, 2009.

Serrivomer sector Garman, 1899 [Japanese name: Motonokobaunagi]
Serrivomer sector: Shinohara *et al.*, 1996; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004.

Order Saccopharyngiformes

Family Eurypharyngidae

Eurypharynx pelecanoioides Vailant, 1882 [Japanese name: Fukuounagi] (Fig. 79565)
Eurypharynx pelecanoioides: Shiogaki, 1982; Sakamoto, 1983; Shinohara *et al.*, 1996; Hato-

oka, 2000, 2002; Ohta, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
WA-07-G1500 (1), WA-07-H1500 (1).

Order Osmeriformes

Family Argentinidae

Glossanodon semifasciatus (Kishinouye, 1904) [Japanese name: Nigisu]

Glossanodon semifasciatus: Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Microstomatidae

Nansenia ardesiaca Jordan and Thompson, 1914 [Japanese name: Ginzakeiwashi]

Nansenia ardesiaca: Shinohara *et al.*, 1996; Aizawa and Hatooka, 2000; Kitagawa *et al.*, 2008.

WA-07-E550 (2), WA-07-E900 (1).

Nansenia sanrikuensis Kanayama and Amaoka in Amaoka *et al.*, 1983 [Japanese name: Kurosakeiwashi]

Nansenia sanrikuensis: Kanayama and Amaoka, 1983; Amaoka *et al.*, 1995; Aizawa and Hatooka, 2000, 2002; Horikawa, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Bathylagidae

Bathylagus pacificus Gilbert, 1890 [Japanese name: Yasesokoiwashi]

Bathylagus pacificus: Shiogaki, 1982; Kanayama, 1983; Shinohara *et al.*, 1996; Aizawa and Hatooka, 2000; Aizawa, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-06-F1500 (1), WA-07-E510 (1), WA-07-E1500 (2).

Dolicholagus longirostris (Maul, 1948) [Japanese name: Ginsokoiwashi]

Dolicholagus longirostris: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-06-E380 (1).

Leuroglossus schmidti Rass, 1955 [Japanese name: Togariichimonjiiwashi]

Leuroglossus schmidti: Shinohara *et al.*, 1996; Aizawa and Hatooka, 2000; Aizawa, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-E480 (2), WA-06-E510 (1).

Lipolagus ochotensis (Schmidt, 1938) [Japanese name: Sokoiwashi]

Bathylagus nakazawai: Mead and Taylor, 1953; Matsubara, 1955.

Bathylagus ochotensis: Shiogaki, 1982; Kanayama, 1983.

Lipolagus ochotensis: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Melanolagus bericoides (Borodin, 1929) [Japanese name: Nettaisokoiwashi]

Melanolagus bericoides: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-E1500 (1).

Pseudobathylagus milleri Jordan and Gilbert in Jordan and Evermann, 1898 [Japanese name: Kurosokoiwashi]

Bathylagus milleri: Shiogaki, 1982; Kanayama, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996;

Pseudobathylagus milleri: Aizawa and Hatooka, 2000, 2002; Aizawa, 2001; Shiogaki *et al.*,

2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-06-F750 (1), WA-07-G900 (1).

Family Opisthoproctidae

Bathylychnops exilis Cohen, 1958 [Japanese name: Mukashidemenigisu]

Bathylychnops exilis [sic]: Funabashi, 1998.

Bathylychnops exilis: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Dolichopteryx minuscula Fukui and Kitagawa, 2006 [Japanese name: Hinademenigisu]

Dolichopteryx sp.: Funabashi, 1998; Aizawa, 2000, 2002.

Dolichopteryx minuscula: Fukui and Kitagawa, 2006; Balanov *et al.*, 2009.

Macropinna microstoma Chapman, 1939 [Japanese name: Demenigisu]

Macropinna microstoma: Aizawa, 2000, 2001, 2002; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-G900 (1).

Winteria telescopa Brauer, 1901 [Japanese name: Kurodemenigisu]

Winteria telescopa: Balanov *et al.*, 2009.

Family Leptochilichthyidae

Leptochilichthys microlepis Machida and Shiogaki, 1988 [Japanese name: Oniiwashi]

Leptochilichthys sp.: Shiogaki, 1982.

Leptochilichthys microlepis: Machida and Shiogaki, 1988; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004.

Family Alepocephalidae

Alepocephalus australis barnardi (Norman, 1930) [Japanese name: Aramekonnyakuiwashi]

Alepocephalus australis barnardi: Amaoka, 1983, 1988; Nakabo, 2000b, 2002b.

WA-07-G1500 (1).

Alepocephalus longirostris Okamura and Kawanishi *in* Okamura and Kitajima, 1984 [Japanese name: Marukonnyakuiwashi]

Alepocephalus longirostris: Shinohara *et al.*, 1996.

Alepocephalus umbriceps Jordan and Thompson, 1914 [Japanese name: Konnyakuiwashi]

Alepocephalus umbriceps: Shiogaki, 1982; Amaoka, 1983, 1988; Amaoka *et al.*, 1995; Shiogaki *et al.*, 2004.

Bajacalifornia erimoensis Amaoka and Abe, 1977 [Japanese name: Ukeguchiiwashi]

Bajacalifornia erimoensis: Shiogaki, 1982; Amaoka, 1983, 1988; Nakabo, 2000b, 2002b; Okamura, 2001; Kitagawa *et al.*, 2008.

Bajacalifornia megalops: Amaoka *et al.*, 1995 (misidentification); Shiogaki *et al.*, 2004.

WA-07-E1200 (3).

Talismania antillarum (Goode and Bean, 1896) [Japanese name: Nokobaiwashi]

Talismania antillarum: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Talismania filamentosa Okamura and Kawanishi *in* Okamura and Kitajima, 1984 [Japanese name: Mizuhikiiwashi]

Talismania longifilis: Shiogaki *et al.*, 2004.

Photostylus pycnopterus Beebe, 1933 [Japanese name: Ukeguchitsubuiwashi]

Photostylus pycnopterus: Balanov *et al.*, 2009.

Family Platytroctidae

- Holtbyrnia innesi*** (Fowler, 1934) [Japanese name: Kantaihanameiwashi]
Holtbyrnia innesi: Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
- Maulisia acuticeps*** Sazonov, 1976 [Japanese name: Ochibahanameiwashi]
Maulisia acuticeps: Okamoto *et al.*, 2008.
- Maulisia argipalla*** Matsui and Rosenblatt, 1979 [Japanese name: Kuzuboshihanameiwashi]
Maulisia argipalla: Okamoto *et al.*, 2007; Balanov *et al.*, 2009.
- Sagamichthys abei*** Parr, 1953 [Japanese name: Hanameiwashi]
Sagamichthys abei: Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-07-E510 (1), WA-07-E1500 (1).

Order Stomiiformes

Suborder Gonostomatoidei

Family Gonostomatidae

- Cyclothone atraria*** Gilbert, 1905 [Japanese name: Onihadaka]
Cyclothone atraria: Shiogaki, 1982; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
- Diplophos orientalis*** Matsubara, 1940 [Japanese name: Yumehadaka]
Diplophos orientalis: Balanov *et al.*, 2009.
- Diplophos taenia*** Günther, 1873 [Japanese name: Nettareiyumehadaka]
Diplophos taenia: Shinohara *et al.*, 1996; Aizawa, 2000, 2002; Kitagawa *et al.*, 2008.
 WA-07-E410 (2).
- Gonostoma atlanticum*** Norman, 1930 [Japanese name: Tsumariyokoeso]
Gonostoma atlanticum: Balanov *et al.*, 2009.
- Sigmops elongatum*** (Günther, 1878) [Japanese name: Ooyokoeso]
Gonostoma elongatum: Asahida, 1992; Shinohara *et al.*, 1996; Aizawa, 2000, 2002.
Sigmops elongatum: Aizawa, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Sigmops gracile*** (Günther, 1878) [Japanese name: Yokoeso]
Gonostoma gracile: Mead and Taylor, 1953; Shiogaki, 1982; Shinohara *et al.*, 1996;
Sigmops gracile: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-06-D650 (2), WA-07-E410 (3), WA-07-E650 (3).

Family Sternoptychidae

Subfamily Maurolicinae

- Maurolicus japonicus*** Ishikawa, 1915 [Japanese name: Kyuurieso]
Maurolicus japonicus: Mead and Taylor, 1953; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008;
 Balanov *et al.*, 2009.
Maurolicus muelleri: Amaoka *et al.*, 1995; Shinohara *et al.*, 1996;
 WA-05-H150 (1), WA-07-E210 (4).

Subfamily Sternoptychinae

- Argyropelecus aculeatus*** Valenciennes in Cuvier and Valenciennes, 1850 [Japanese name: Togari-muneeso]
Argyropelecus aculeatus: Shiogaki, 1982; Shinohara *et al.*, 1996; Aizawa, 2000, 2001, 2002;

Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-07-E380 (2), WA-07-E410 (1).

Argyropelecus affinis Garman, 1899 [Japanese name: Nagamuneso]

Argyropelecus affinis: Shiogaki, 1982; Shinohara *et al.*, 1996; Aizawa, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Argyropelecus hemigymnus Cocco, 1829 [Japanese name: Tenganmuneeso]

Argyropelecus hemigymnus: Aizawa, 2000, 2001, 2002.

Argyropelecus sladeni Regan, 1908 [Japanese name: Teonoeso]

Argyropelecus sladeni: Aizawa, 2000, 2002.

Polyipnus matsubarae Schultz, 1961 [Japanese name: Hoshihouneneso]

Polyipnus matsubarae: Aizawa, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-07-E280 (1), WA-07-F380 (1).

Polyipnus stereope Jordan and Starks, 1904 [Japanese name: Katahouneneso]

Polyipnus stereope: Kitagawa *et al.*, 2008.

Sternoptyx diaphana Hermann, 1781 [Japanese name: Muneeso]

Sternoptyx diaphana: Mead and Taylor, 1953; Maruyama, 1970; Shiogaki, 1982; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-07-E900 (1), WA-07-E1500 (3).

Sternoptyx pseudobscura Baird, 1971 [Japanese name: Muneesomodoki]

Sternoptyx pseudobscura: Shinohara *et al.*, 1996; Aizawa, 2000, 2001, 2002; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-G750 (1), WA-06-D650 (1), WA-07-E650 (1), WA-07-E750 (1).

Family Phosichthyidae

Ichthyococcus elongatus Imai, 1941 [Japanese name: Shinjueso]

Ichthyococcus elongatus: Shinohara *et al.*, 1996; Aizawa, 2000, 2001, 2002; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-06-G310 (1), WA-07-E350 (1), WA-07-E550 (1).

Polymetme elongatus (Matsubara, 1938) [Japanese name: Ryuuguuhadaka]

Polymetme elongatus: Shinohara *et al.*, 1996.

WA-06-E380 (2), WA-06-F550 (1)

Vinciguerria nimbaria (Jordan and Williams in Jordan and Starks, 1895) [Japanese name: Yabeukieso]

Vinciguerria nimbaria: Balanov *et al.*, 2009.

Family Stomiidae Subfamily Astronesthinae

Astronesthes cyanea (Brauer, 1902) [Japanese name: Nisekurotokagegisu]

Astronesthes cyaneus: Shiogaki, 1982.

Astronesthes cyanea: Shinohara *et al.*, 1996.

Astronesthes indica Brauer, 1902 [Japanese name: Hohojirotokagegisu]

Astronesthes indica: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Astronesthes indopacificus Parin and Borodulina, 1977 [Japanese name: Kurotokagegisu]

Astronesthes indopacificus: Parin and Borodulina, 1977; Balanov *et al.*, 2009.

Astronesthes indopacifica: Aizawa, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Borostomias pacificus (Imai, 1941) [Japanese name: Futatsuboshieso]

Borostomias pacificus: Balanov *et al.*, 2009.

WA-06-E280 (1).

Heterophotus ophistoma Regan and Trewavas, 1929 [Japanese name: Ootokagehadaka]

Heterophotus ophistoma: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Neonesthes capensis (Gilchrist and von Bonde, 1924) [Japanese name: Namidatokagegisu]

Neonesthes capensis: Funabashi, 1998; Aizawa, 2000, 2002.

Rhadinesthes decimus (Zugmayer, 1911) [Japanese name: Yasetokagegisu]

Rhadinesthes decimus: Funabashi, 1998; Aizawa, 2000, 2002.

Subfamily Stomiinae

Chauliodus macouni Bean, 1890 [Japanese name: Higashihouraiieso]

Chauliodus macouni: Yamamoto, 1983; Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-G750 (5), WA-07-E650 (1), WA-07-G1500 (1).

Chauliodus sloani Bloch and Schneider, 1801 [Japanese name: Houraieso]

Chauliodus sloani: Shiogaki, 1982; Asahida, 1992; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-E410 (2), WA-07-E510 (1), WA-07-E750 (4), WA-07-G900 (1).

Macrostomias pacificus Fedorov and Melchikova, 1971 [Japanese name: Hosowanitokagegisu]

Macrostomias pacificus: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Macrostomias pacificus [sic]: Kitagawa *et al.*, 2008.

Stomias affinis Günther, 1887 [Japanese name: Wanitokagegisu]

Stomias affinis: Shiogaki, 1982; Aizawa, 2000, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G650 (1), WA-07-E380 (1), WA-07-G1200 (2).

Stomias nebulosus Alcock, 1889 [Japanese name: Yoroihoshieso]

Stomias nebulosus: Shiogaki, 1982; Funabashi, 1998; Aizawa, 2000; Shiogaki *et al.*, 2004.

WA-07-F350 (1).

Subfamily Melanostomiinae

Bathophilus pawneeii Parr, 1927 [Japanese name: Hosogingaeso]

Bathophilus pawneeii: Balanov *et al.*, 2009.

Echostoma barbatum Lowe, 1843 [Japanese name: Murasakihoshieso]

Echostoma barbatum: Shinohara *et al.*, 1996; Aizawa, 2000, 2001, 2002; Balanov *et al.*, 2009.

Eustomias interruptus Clarke, 1999 [Japanese name: Chobihigehoshieso]

Eustomias interruptus: Aizawa, 2000, 2002.

Eustomias dendriticus: Aizawa, 2001.

Eustomias orientalis Gibbs, Clarke and Gomon, 1983 [Japanese name: Dainichihoshieso]

Eustomias orientalis: Aizawa, 2000, 2001, 2002.

Eustomias sp. [Japanese name: Inuhoshieso]

Eustomias sp.: Aizawa, 2000, 2002.

Eustomias sp.1: Aizawa, 2001

Flagellostomias boureei (Zugmayer, 1913) [Japanese name: Muchihoshieso]

Flagellostomias boureei: Aizawa, 2000, 2002.

Leptostomias multifilis Imai, 1941 [Japanese name: Yarihoshieso]

Leptostomias multifilis: Aizawa, 2000, 2002; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-07-E1200 (1).

Melanostomias melanops Brauer, 1902 [Japanese name: Shirohigehoshieso]

Melanostomias melanops: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Melanostomias pauciradius Matsubara, 1938 [Japanese name: Kantentokagegisu]

Melanostomias pauciradius: Aizawa, 2000, 2002; Balanov *et al.*, 2009.

Melanostomias valdiviae Brauer, 1902 [Japanese name: Barudibiahoshieso]

Melanostomias valdiviae: Aizawa, 2000, 2002.

Opostomias mitsuui Imai, 1941 [Japanese name: Mitsuihoshieso]

Opostomias mitsuui: Mead and Taylor, 1953; Yamamoto, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Funabashi, 1998; Aizawa, 2000, 2001, 2002; Balanov *et al.*, 2009.

WA-07-H750 (1), WA-07-E1500 (1), WA-07-G1500 (1), WA-07-H1500 (1)

Pachystomias microdon (Günther, 1878) [Japanese name: Kurenaihoshieso]

Pachystomias microdon: Balanov *et al.*, 2009.

WA-07-E900 (1), WA-07-G1200 (1).

Photonectes albipennis (Döderlein, 1882) [Japanese name: Hoteieso]

Photonectes albipennis: Shinohara *et al.*, 1996; Funabashi, 1998; Aizawa, 2000, 2002; Kitagawa *et al.*, 2008.

WA-06-E310 (1).

Photonectes margarita (Goode and Bean, 1896) [Japanese name: Hiregurohoteieso]

Photonectes margarita: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.

Tactostoma macropus Bolin, 1939 [Japanese name: Hadakahoteieso]

Tactostoma macropus: Matsubara, 1955; Shiogaki, 1982; Yamamoto, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Aizawa, 2000, 2001, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-E750 (2), WA-07-E1200 (2).

Thysanactis dentex Regan and Trewavas, 1930 [Japanese name: Mayakashihoshieso]

Thysanactis dentex: Aizawa, 2000, 2002.

Subfamily Idiacanthinae

Idiacanthus antrostomus Gilbert, 1890 [Japanese name: Mitsumatayariuo]

Idiacanthus antrostomus: Shiogaki, 1982; Yamamoto, 1983; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-E550 (1).

Subfamily Malacosteinae

Malacosteus niger Ayres, 1848 [Japanese name: Ookuchihoshieso]

Malacosteus niger: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.

Photostomias guernei Collett, 1889 [Japanese name: Houkiboshieso]

Photostomias guernei: Shiogaki, 1982; Aizawa, 2000, 2001, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009

Order Ateleopodiformes

Family Ateleopodidae

Ateleopus japonicus Bleeker, 1853 [Japanese name: Shachiburi]

- Ateleopus japonicus*: Funabashi, 1998; Aizawa, 2000, 2002; Mochizuki, 2001.
Ateleopus purpureus Tanaka, 1915 [Japanese name: Murasakishachiburi]
Ateleopus purpureus: Matsubara, 1955; Aizawa, 2000, 2002.
Ateleopus tanabensis Tanaka, 1918 [Japanese name: Tanabeshachiburi]
Ateleopus tanabensis: Shinohara *et al.*, 1996; Aizawa, 2000, 2002; Mochizuki, 2001; Kitagawa *et al.*, 2008.

Order Aulopiformes
 Suborder Chlorophthalmoidei
 Family Chlorophthalmidae

- Chlorophthalmus acutifrons*** Hiyama, 1940 [Japanese name: Tomomehikari]
Chlorophthalmus acutifrons: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
Chlorophthalmus albatrossis Jordan and Starks, 1904 [Japanese name: Aomeeso]
Chlorophthalmus albatrossis: Kitagawa *et al.*, 2008.
Chlorophthalmus borealis Kuronuma and Yamaguchi, 1941 [Japanese name: Maruaomeeso]
Chlorophthalmus borealis: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004.
 WA-07-E250 (1).

Family Ipnopidae

- Bathypterois atricolor*** Alcock, 1896 [Japanese name: Itohikiwashi]
Bathypterois atricolor: Yamamoto, 1983; Shinohara *et al.*, 1996.

Family Scopelarchidae

- Benthalbella dentata*** (Chapman, 1939) [Japanese name: Tsumaridemeeso]
Benthalbella dentata: Yamamoto, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Nakabo, 2000b, 2002b; Miya, 2001; Balanov *et al.*, 2009.
 WA-05-G750 (1), WA-07-E1500 (2).
Benthalbella linguidens (Mead and Böhlke, 1953) [Japanese name: Demeeso]
Scopeloarchus linguidens: Mead and Taylor, 1953; Matsubara, 1955.
Benthalbella linguidens: Shiogaki, 1982; Yamamoto, 1983; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Miya, 2001; Okamoto *et al.*, 2004; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-05-G750 (1).
Scopelarchus analis (Brauer, 1902) [Japanese name: Demeesodamashi]
Scopelarchus analis: Balanov *et al.*, 2009.
Scopelarchus michaelsarsi Koefoed, 1955 [Japanese name: Mikaeruhoshieso]
Scopelarchus michaelsarsi: Balanov *et al.*, 2009.

Family Notosudidae

- Scopelosaurus adleri*** (Fedorov, 1967) [Japanese name: Sankakufudeeso]
Scopelasurus adleri: Balanov *et al.*, 2009.
Scopelosaurus harryi (Mead in Mead and Taylor, 1953) [Japanese name: Harifudeeso]
Luciosudis harryi: Mead and Taylor, 1953.

- Scopelosaurus harryi*: Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
Scopelosaurus hoedti Bleeker, 1860 [Japanese name: Hikarifudeeso]
Scopelosaurus hoedti: Kitagawa *et al.*, 2008.

Suborder Alepisauroidi
 Family Paralepididae

- Arctozenus risso*** (Bonaparte, 1840) [Japanese name: Hikarieso]
Notolepis rissoi: Funabashi, 1998; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.
Arctozenus risso: Balanov *et al.*, 2009.
 Remarks. We followed Mecklenburg *et al.* (2002) for the scientific name.
- Lestidiops ringens*** (Jordan and Gilbert, 1880) [Japanese name: Kitanamehadaka]
Lestidiops ringens: Okamoto *et al.*, 2006; Balanov *et al.*, 2009.
- Lestidiops jayakari*** (Boulenger, 1889) [Japanese name: Shironamehadaka]
Lestidiops jayakari: Balanov *et al.*, 2009.
- Lestidiops sphyraenopsis*** Hubbs, 1916 [Japanese name: Yasehadakaeso]
Stemonosudis molesta: Yamamoto, 1983.
Lestidiops sphyraenopsis: Funabashi, 1998; Nakabo, 2000b, 2002b; Okamura, 2001; Balanov *et al.*, 2009.
- Lestidium prolixum*** Harry, 1953 [Japanese name: Namehadaka]
Lestidium prolixum: Funabashi, 1998.
- Lestrolepis intermedia*** (Poey, 1868) [Japanese name: Futasujinamehadaka]
Lestrolepis intermedia: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-06-F280 (1).
- Paralepis atlantica*** Krøyer, 1868 [Japanese name: Kusabiurokoeso]
Paralepis atlantica: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Anotopteridae

- Anotopterus pharao*** Zugmayer, 1911 [Japanese name: Mizuuodamashi]
Anotopterus pharao: Balanov *et al.*, 2009.

Family Evermannellidae

- Coccorella atlantica*** (Parr, 1928) [Japanese name: Yarieso]
Coccorella atlantica: Balanov *et al.*, 2009.
- Odontostomops normalops*** (Parr, 1928) [Japanese name: Mukashiyarieso]
Odontostomops normalops: Balanov *et al.*, 2009.

Family Omosudidae

- Omosudis lowii*** Günther, 1887 [Japanese name: Kibahadaka]
Omosudis lowei: Funabashi, 1998; Nakabo, 2002b
Omosudis lowii: Nakabo, 2000b.

Family Alepisauridae

- Alepisaurus ferox*** Lowe, 1833 [Japanese name: Mizuuo]

Alepisaurus ferox: Shiogaki, 1982; Nakaya, 1983; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Order Myctophiformes

Family Neoscopelidae

Neoscopelus macrolepidotus Johnson, 1863 [Japanese name: Sotooriiwashi]

Neoscopelus macrolepidotus: Maruyama, 1970; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-G380 (1).

Scopelengys tristis Alcock, 1890 [Japanese name: Kurogoiwashi]

Scopelengys tristis: Balanov *et al.*, 2009.

Family Myctophidae

Bolinichthys distophax Johnson, 1975 [Japanese name: Futomikazukihadaka]

Bolinichthys distophax: Balanov *et al.*, 2009.

Bolinichthys longipes (Brauer, 1906) [Japanese name: Hosomikazukihadaka]

Bolinichthys longipes: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.

Centrobranchus brevirostris Becker, 1964 [Japanese name: Butahadaka]

Centrobranchus brevirostris: Shiogaki, 1982; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004.

Ceratoscopelus warmingii (Lütken, 1892) [Japanese name: Gokouhadaka]

Ceratoscopelus townsendi: Mead and Taylor, 1953; Maruyama, 1970.

Ceratoscopelus warmingi: Shiogaki, 1982; Watanabe *et al.*, 1999.

Ceratoscopelus warmingii: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Ceratoscopelus warmingi [sic]: Okamura, 2001.

WA-07-E350 (1), WA-07-E425 (30).

Diaphus fulgens (Brauer, 1904) [Japanese name: Kobitohadaka]

Diaphus nanus: Mead and Taylor, 1953.

Diaphus garmani Gilbert, 1906 [Japanese name: Hirohadaka]

Diaphus latus: Mead and Taylor, 1953.

Diaphus gigas Gilbert, 1913 [Japanese name: Suitouhadaka]

Diaphus gigas: Kawaguchi and Shimizu, 1978; Sawada, 1983; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Kitagawa *et al.*, 2008.

WA-07-E350 (2).

Diaphus kuroshio Kawaguchi and Nafpaktitis, 1978 [Japanese name: Kuroshiohadaka]

Diaphus kuroshio: Kawaguchi and Shimizu, 1978; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

WA-07-E350 (1).

Diaphus metopoclampus (Cocco, 1829) [Japanese name: Daikokuhadaka]

Diaphus metopoclampus: Kawaguchi and Shimizu, 1978; Nakabo, 2000b, 2002b.

Diaphus mollis Tåning, 1928 [Japanese name: Otomehadaka]

Diaphus mollis: Balanov *et al.*, 2009.

Diaphus perspicillatus (Ogilby, 1989) [Japanese name: Shirohanahadaka]

Diaphus perspicillatus: Kawaguchi and Shimizu, 1978; Balanov *et al.*, 2009.

WA-07-H750 (1).

Diaphus phillipsi Fowler, 1934 [Japanese name: Chigirehadaka]

- Diaphus phillipsi*: Shinohara *et al.*, 1996.
- Diaphus regani*** Tåning, 1932 [Japanese name: Agarihadaka]
Diaphus regani: Kawaguchi and Shimizu, 1978; Funabashi, 1998; Nakabo, 2000b, 2002b.
- Diaphus schmidti*** Tåning, 1932 [Japanese name: Takahadaka]
Diaphus schmidti: Funabashi, 1998; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.
- Diaphus signatus*** Gilbert, 1908 [Japanese name: Bôhadaka]
Diaphus signatus: Nakabo, 2000b, 2002b.
- Diaphus suborbitalis*** Weber, 1913 [Japanese name: Senhadaka]
Diaphus suborbitalis: Shinohara *et al.*, 1996.
- Diaphus theta*** Eigenmann and Eigenmann, 1890 [Japanese name: Todohadaka]
Diaphus theta: Maruyama, 1970; Kawaguchi and Shimizu, 1978; Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Watanabe *et al.*, 1999; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-05-F480 (1), WA-06-F410 (1), WA-07-E350 (1), WA-07-E425 (32).
- Diaphus watasei*** Jordan and Starks, 1904 [Japanese name: Hadakaiwashi]
Diaphus watasei: Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-07-E380 (1).
- Electrona risso*** (Cocco, 1829) [Japanese name: Darumahadaka]
Electrona risso: Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Hygophum reinhardtii*** (Lütken, 1892) [Japanese name: Dongurihadaka]
Hygophum reinhardtii: Shiogaki *et al.*, 2004.
- Lampadena luminosa*** (Garman, 1899) [Japanese name: Kagamiiwashi]
Lampadena luminosa: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.
- Lampadena urophaos*** Paxton, 1963 [Japanese name: Hotarubihadaka]
Lampanyctus urophaos: Watanabe *et al.*, 1999; Balanov *et al.*, 2009.
- Lampadena yaquinae*** (Coleman and Nafpaktitis, 1972) [Japanese name: Sankouhadaka]
Lampadena yaquinae: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
 WA-06-F1500 (1), WA-07-E1500 (1).
- Lampanyctus acanthurus*** Wisner, 1974 [Japanese name: Oomenijihadaka]
Lampanyctus acanthurus: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
- Lampanyctus alatus*** Goode and Bean, 1896 [Japanese name: Tomihadaka]
Lampanyctus alatus: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.
- Lampanyctus festivus*** Tåning, 1928 [Japanese name: Nijihadaka]
Lampanyctus festivus: Mead and Taylor, 1953; Nakabo, 2000b, 2002b.
- Lampanyctus jordani*** Gilbert, 1913 [Japanese name: Mamehadaka]
Lampanyctus jordani: Mead and Taylor, 1953; Maruyama, 1970; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Okamura, 2001; Shiogaki *et al.*, 2004; Uchikawa *et al.*, 2008; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-07-E410 (2).
- Lampanyctus niger*** (Günther, 1887) [Japanese name: Tongarihadaka]
Lampanyctus niger: Balanov *et al.*, 2009.
- Lampanyctus nobilis*** Tåning, 1928 [Japanese name: Hosotongarihadaka]
Lampanyctus nobilis: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
- Lampanyctus simulator*** Wisner, 1971 [Japanese name: Hosomamehadaka]
Lampanyctus simulator: Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
- Lampanyctus steinbecki*** Bolin, 1939 [Japanese name: Sustainhadaka]

- Lampanyctus steinbecki*: Balanov *et al.*, 2009.
- Lampanyctus tenuiformis*** (Brauer, 1906) [Japanese name: Nettareijihadaka]
Lampanyctus tenuiformis: Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Lampanyctus* sp.** [Japanese name: Namitogehadaka]
Lampanyctus sp.: Nakabo, 2000b, 2002b.
- Lobianchia gemellarii*** (Cocco, 1838) [Japanese name: Hakutouhadaka]
Lobianchia gemellarii: Nakabo, 2000b, 2002b.
- Myctophum asperum*** Richardson, 1845 [Japanese name: Arahadaka]
Myctophum asperum: Mead and Taylor, 1953; Matsubara, 1955; Maruyama, 1970; Shiohaki, 1982; Shinohara *et al.*, 1996; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-06-F380 (1), WA-07-E210 (1), WA-07-E350 (2), WA-07-E425 (47), WA-07-E650 (1).
- Myctophum nitidulum*** Garman, 1899 [Japanese name: Susukihadaka]
Myctophum affine: Mead and Taylor, 1953; Matsubara, 1955; Maruyama, 1970.
Myctophum nitidulum: Shiohaki, 1982; Asahida, 1992; Shinohara *et al.*, 1996; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-07-E425 (4).
- Myctophum orientale*** (Gilbert, 1913) [Japanese name: Usuhadaka]
Myctophum orientale: Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-06-G310 (2).
- Myctophum spinosum*** (Steindachner, 1867) [Japanese name: Ibarahadaka]
Myctophum spinosum: Funabashi, 1998; Nakabo, 2000b, 2002b.
- Nannobranchium regale*** (Gilbert, 1892) [Japanese name: Mikadohadaka]
Lampanyctus regalis: Sawada, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999.
Nannobranchium regale: Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Nannobranchium* sp.** [Japanese name: Hirenashitongarihadaka]
Nannobranchium sp.: Nakabo, 2000b, 2002b.
- Notoscopelus japonicus*** (Tanaka, 1908) [Japanese name: Ookuchiiwashi]
Notoscopelus japonicus: Mead and Taylor, 1953; Shiohaki, 1982; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Uchikawa *et al.*, 2002; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
Notoscopelus elongatus: Maruyama, 1970
- Notoscopelus resplendens*** (Richardson, 1845) [Japanese name: Isaribihadaka]
Notoscopelus resplendens: Mead and Taylor, 1953; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Balanov *et al.*, 2009.
- Protomyctophum crockeri*** (Bolin, 1939) [Japanese name: Mukashihadaka]
Protomyctophum crockeri: Nakabo, 2000b, 2002b.
- Protomyctophum thompsoni*** (Chapman, 1944) [Japanese name: Oomehadaka]
Elecrona arctica: Maruyama, 1970.
Protomyctophum thompsoni: Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Nakabo, 2000b, 2002b; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-05-E480 (1).
- Stenobranchius leucopsarus*** (Eigenmann and Eigenmann, 1890) [Japanese name: Kohirehadaka]
Lampanyctus leucopsarus: Mead and Taylor, 1953; Maruyama, 1970.
Stenobranchius leucopsarus: Sawada, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-07-E425 (1), WA-07-F350 (1).

Stenobranchius nannochir (Gilbert, 1890) [Japanese name: Sekkihadaka]

Stenobranchius nannochir: Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Symbolophorus californiensis (Eigenmann and Eigenmann, 1889) [Japanese name: Nagahadaka]

Myctophum californiense: Mead and Taylor, 1953; Maruyama, 1970.

Symbolophorus californiensis: Shiogaki, 1982; Shinohara *et al.*, 1996; Watanabe *et al.*, 1999; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Symbolophorus sp.: Sawada, 1983.

WA-06-E450 (1), WA-07-E425 (1), WA-07-E550 (1), WA-07-E650 (1), WA-07-F510 (4), WA-07-G900 (19), WA-07-H900 (1), WA-07-G1500 (1).

Symbolophorus evermanni (Gilbert, 1905) [Japanese name: Magarihadaka]

Symbolophorus evermanni: Shiogaki, 1982; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004.

WA-06-H380 (1), WA-07-E380 (1), WA-07-E510 (1).

Taaningichthys minimus (Tåning, 1928) [Japanese name: Kurohadaka]

Taaningichthys minimus: Balanov *et al.*, 2009.

Tarletonbeania taylori Mead, 1953 [Japanese name: Hokuyouhadaka]

Tarletonbeania taylori: Mead and Taylor, 1953; Maruyama, 1970; Shiogaki, 1982; Watanabe *et al.*, 1999; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Order Lampridiformes

Family Lophotidae

Lophotus capellei Temminck and Schlegel, 1845 [Japanese name: Akanamada]

Lophotus capellei: Asahida, 1992; Shiogaki *et al.*, 2004.

Family Trachipteridae

Desmodema lorum Rosenblatt and Butler, 1977 [Japanese name: Okifurisodeuo]

Desmodema lorum: Amaoka *et al.*, 1995.

Desmodema polystictum (Ogilby, 1898) [Japanese name: Furisodeuo]

Desmodema polystictum: Yabe, 1983; Asahida, 1992; Shiogaki *et al.*, 2004.

Trachipterus ishikawae Jordan and Snyder, 1901 [Japanese name: Sakegashira]

Trachipterus ishikawai [sic]: Maruyama, 1971.

Trachipterus ishikawae: Shiogaki, 1982; Funabashi, 1998; Asahida, 1992; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Trachipterus trachypterus (Gmelin, 1789) [Japanese name: Tengaihata]

Trachipterus iris: Maruyama, 1971.

Trachipterus trachypterus: Shiogaki, 1982; Imamura and Ishito, 1997; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Regalecidae

Regalecus russellii (Cuvier, 1816) [Japanese name: Ryuuguunotsukai]

Regalecus ruselli [sic]: Maruyama, 1971.

Regalecus russellii: Asahida, 1992; Shiogaki *et al.*, 2004.

WA-07-F280 (1).

Order Polymixiiformes
Family Polymixiidae

Polymixia japonica Günther, 1877 [Japanese name: Ginmedai]

Polymixia japonica: Kitagawa *et al.*, 2008.

Polymixia longispina Deng, Xiong and Zhan, 1983 [Japanese name: Kiraraginme]

Polymixia longispina: Shinohara *et al.*, 1996.

Order Ophidiiformes
Family Ophidiidae

Homostolus acer Smith and Radcliffe in Radcliffe, 1913 [Japanese name: Itohikiitachiuo]

Remarks. Kitagawa *et al.* (2008) reported a color photograph of the specimen from the Tohoku District under the incorrect name *Monomitopus kumae* (H. Imamura, personal communication).

Hoplobrotula armata (Temminck and Schlegel, 1846) [Japanese name: Yoroitachiuo]

Hoplobrotula armata: Maruyama, 1971; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Neobythites sivicolus (Jordan and Snyder, 1901) [Japanese name: Shioitachiuo]

Neobythites sivicola: Funabashi, 1998.

Neobythites stigmatosus Machida in Okamura and Kitajima, 1984 [Japanese name: Shimaitachiuo]

Neobythites stigmatosus: Kitagawa *et al.*, 2008.

Porogadus guentheri Jordan and Fowler, 1902 [Japanese name: Taraitachiuo]

Porogadus guentheri: Machida, 2001.

Porogadus miles Goode and Bean, 1885 [Japanese name: Kowatogetaraitachiuo]

Porogadus sp.: Amaoka, 1983.

Porogadus miles: Machida and Amaoka, 1990.

Spectrunculus grandis (Günther, 1877) [Japanese name: Sokobouzu]

Spectrunculus grandis: Machida *et al.*, 1987; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004.

Order Gadiformes
Family Macrouridae
Subfamily Macrouroidinae

Squalogadus modificatus Gilbert and Hubbs, 1916 [Japanese name: Bakedara]

Squalogadus modificatus: Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Okamura, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Subfamily Macrourinae

Abyssicola macrochir (Günther, 1877) [Japanese name: Tenagadara]

Abyssicola macrochir: Okamura, 1970; Shiogaki, 1982; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G650 (3), WA-06-H550 (1), WA-06-E425 (1), WA-07-E280 (2), WA-07-E350 (1).

Bathygadus antrodes (Jordan and Starks, 1904) [Japanese name: Anadara]

Bathygadus antrodes: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

WA-07-G900 (1), WA-07-E1500 (1).

- Caelorinchus japonicus*** (Temminck and Schlegel, 1846) [Japanese name: Toujin]
Coelorhynchus gilberti: Maruyama, 1971.
Coelorinchus japonicus: Funabashi, 1998.
- Caelorinchus kishinouyei*** Jordan and Snyder, 1900 [Japanese name: Mugurahige]
Caelorinchus kishinouyei: Shiogaki *et al.*, 2004.
- Coelorinchus gilberti*** Jordan and Hubbs, 1925 [Japanese name: Onihige]
Coelorhynchus gilberti: Okamura, 1970; Shiogaki, 1982; Sawada, 1983.
Coelorinchus gilberti: Asahida, 1992; Shinohara *et al.*, 1996.
Caelorinchus gilberti: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-06-H550 (1), WA-07-F480 (5).
- Coelorinchus kamoharai*** Matsubara, 1943 [Japanese name: Ichimonjihige]
Coelorinchus kamoharai: Shinohara *et al.*, 1996.
- Coryphaenoides acrolepis*** (Bean, 1884) [Japanese name: Ibarahige]
Coryphaenoides acrolepis: Okamura, 1970; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
Nematonwrus acrolepis [sic]: Maruyama, 1971.
 WA-07-E1500 (1).
- Coryphaenoides armatus*** (Hector, 1875) [Japanese name: Yoroidara]
Coryphaenoides armatus: Endo and Okamura, 1992.
- Coryphaenoides cinereus*** (Gilbert, 1896) [Japanese name: Karafutosokodara]
Coryphaenoides cinereus: Okamura, 1970, 2001; Sawada, 1983; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-07-E1500 (1).
- Coryphaenoides filamentosus*** Okamura, 1970 [Japanese name: Hokuyousokodara]
Coryphaenoides filamentosus: Okamura, 1970; Nakabo, 2000b, 2002b.
- Coryphaenoides longifilis*** Günther, 1877 [Japanese name: Himodara]
Coryphaenoides longifilis: Okamura, 1970; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-06-G900 (1).
- Coryphaenoides marginatus*** Steindachner and Döderlein, 1887 [Japanese name: Heridara]
Coryphaenoides marginatus: Kitagawa *et al.*, 2008.
- Coryphaenoides nasutus*** Günther, 1877 [Japanese name: Hanasokodara]
Coryphaenoides nasutus: Okamura, 1970; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-06-F650 (1), WA-07-E650 (1).
- Coryphaenoides pectoralis*** (Gilbert, 1892) [Japanese name: Munedara]
Coryphaenoides pectoralis: Okamura, 1970, 2001; Shiogaki, 1982; Sawada, 1983; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
Nematonurus pectoralis: Maruyama, 1971.
Albatrossia pectoralis: Shinohara *et al.*, 1996.
 WA-06-F650 (1), WA-06-F1500 (2), WA-07-E1500 (1).
- Coryphaenoides yaquinae*** Iwamoto and Stein, 1974 [Japanese name: Shinkaiyoroidara]
Coryphaenoides yaquinae: Endo and Okamura, 1992.
- Hymenocephalus lethonemus*** Jordan and Gilbert in Jordan and Starks, 1904 [Japanese name: Ito-dara]
Hymenocephalus lethonemus: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.
 WA-07-G380 (5).
- Hymenocephalus striatissimus*** Jordan and Gilbert in Jordan and Starks, 1904 [Japanese name:

Sujidara]

Hymenocephalus striatissimus: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

WA-06-H410 (4).

Nezumia condylura Jordan and Gilbert in Jordan and Starks, 1904 [Japanese name: Nezumidara]

Nezumia condylura: Kitagawa *et al.*, 2008.

WA-06-H410 (4).

Nezumia propinqua (Gilbert and Cramer, 1897) [Japanese name: Kiherinezumidara]

Nezumia propinqua: Shinohara *et al.*, 1996.

Nezumia proxima (Smith and Radcliffe in Radcliffe, 1912) [Japanese name: Higosokodara]

Nezumia proxima: Sawada, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Kitagawa *et al.*, 2008.

WA-06-F650 (1).

Ventrifossa garmani (Jordan and Gilbert in Jordan and Starks, 1904) [Japanese name: Sagami-sokodara]

Ventrifossa garmani: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Ventrifossa japonica (Matsubara, 1943) [Japanese name: Kagamihige]

Ventrifossa japonica: Kitagawa *et al.*, 2008.

Ventrifossa misakia (Jordan and Gilbert in Jordan and Starks, 1904) [Japanese name: Misakisokodara]

Ventrifossa misakia: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

WA-07-G380 (5).

Family Moridae

Antimora microlepis Bean, 1890 [Japanese name: Kanadadara]

Antimora microlepis: Maruyama, 1971; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Endo, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-07-E650 (1), WA-07-E1500 (1).

Halargyreus johnsonii Günther, 1862 [Japanese name: Karasudara]

Halargyreus johnsonii: Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Endo, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Physiculus japonicus Hilgendorf, 1879 [Japanese name: Chigodara]

Physiculus japonicus: Maruyama, 1971; Shiogaki, 1982; Sawada, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Balanov *et al.*, 2009.

Physiculus maximowiczi: Kitagawa *et al.*, 2008.

WA-06-E410 (1).

Laemonema longipes Schmidt, 1938 [Japanese name: Itohikidara]

Laemonema longipes: Maruyama, 1971; Shiogaki, 1982; Sawada, 1983; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-EF450 (1), WA-07-E550 (1), WA-07-E650 (1).

Lepidion schmidti Svetovidov, 1936 [Japanese name: Kitanokurodara]

Lepidion schmidti: Sawada, 1983; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Endo, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Lotella phycis (Temminck and Schlegel, 1846) [Japanese name: Isoainame]

Lotella phycis: Funabashi, 1998.

Family Melanonidae

Melanonus zugmayeri Norman, 1930 [Japanese name: Kawarihiredara]

Melanonus zugmayeri: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
WA-07-E750 (1).

Family Bregmacerotidae

Bregmaceros japonicus Tanaka, 1908 [Japanese name: Saiuo]

Bregmaceros japonicus: Maruyama, 1971; Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008;
Balanov *et al.*, 2009.
WA-06-H250 (2).

Family Merlucciidae

Merluccius australis (Hutton, 1872) [Japanese name: Hitachidara]

Merluccius australis: Abe and Fubanabashi, 1993; Funabashi, 1998; Nakabo, 2000b, 2002b.

Merluccius productus (Ayres, 1855) [Japanese name: Shiroganedara]

Merluccius productus: Endo and Kitagawa, 2006; Kitagawa *et al.*, 2008.

Family Gadidae

Gadus macrocephalus Tilesius, 1810 [Japanese name: Madara]

Gadus macrocephalus [sic]: Maruyama, 1971.

Gadus macrocephalus: Shiogaki, 1982; Shirai, 1983; Sato *et al.*, 1987; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Endo, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E410 (2).

Theragra chalcogramma (Pallas, 1814) [Japanese name: Suketoudara]

Theragra chalcogramma: Maruyama, 1971; Shiogaki, 1982; Sato *et al.*, 1987; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Nakabo, 2000b, 2002b; Endo, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA06-GH310 (2), WA-06-GH380 (2).

Order Lophiiformes

Suborder Lophioidei

Family Lophiidae

Lophiomus setigerus (Vahl, 1797) [Japanese name: Ankou]

Lophiomus setigerus: Maruyama, 1971; Sato *et al.*, 1987; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004.

Lophius litulon (Jordan, 1902) [Japanese name: Kiankou]

Lophius litulon: Maruyama, 1971; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004;
Kitagawa *et al.*, 2008.

WA-07-E150(1).

Suborder Ogcocephaloidei

Family Chaunacidae

Chaunax abei Le Danois, 1978 [Japanese name: Midorifusaankou]

Chaunax abei: Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et*

al., 2008.

Chaunax fimbriatus Hilgendorf, 1879 [Japanese name: Honfusaankou]

Chaunax fimbriatus: Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Ogcocephalidae

Coelophrys bradburyae Endo and Shinohara, 1999 [Japanese name: Wakatakayumesokogutsu]

Coelophrys bradburyae: Endo and Shinohara, 1999; Yamada, 2000, 2002; Shiogaki *et al.*, 2004; Balanov *et al.*, 2009.

Dibranchus japonicus Amaoka and Toyoshima, 1981 [Japanese name: Sokogutsu]

Dibranchus japonicus: Amaoka, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Yamada, 2000, 2001, 2002; Kitagawa *et al.*, 2008.

Halieutaea stellata (Vahl, 1797) [Japanese name: Akagutsu]

Halieutaea stellata: Shiogaki, 1982; Funabashi, 1998; Yamada, 2000, 2001, 2002; Shiogaki *et al.*, 2004.

Family Melanocetidae

Melanocetus johnsoni Günther, 1864 [Japanese name: Perikanankou]

Melanocetus johnsoni: Amaoka, 1983; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Amaoka, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Himantolophidae

Himantolophus borealis Kharin, 1984 [Japanese name: Kitachouchinankou]

Himantolophus borealis: Kharin, 1984; Nakabo, 2000b, 2002b.

Himantolophus sagamius (Tanaka, 1918) [Japanese name: Chouchinankou]

Himantolophus groenlandicus: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008

Himantolophus sagaminus: Balanov *et al.*, 2009.

Remarks. Although Nakabo (2002) used *Himantolophus groenlandicus* Reinhardt, 1837 for this species, we followed Bertelsen and Krefft (1988) here.

Family Diceratiidae

Diceratias trilobus Balushkin and Fedrov, 1986 [New Japanese name: Sanyouchouchinankou]

Diceratias trilobus: Balushkin and Fedrov, 1986; Pietsch *et al.*, 2006.

Remarks. Holotype of this species was collected from the east of Honshu Island, Japan (38°20.7'N, 142°31.9'N) in 1975 (Balushkin and Fedorov, 1986; Pietsch *et al.*, 2006), but Nakabo (2002a) didn't include it in Japanese fishes. We established a new Japanese name by its escal character.

Family Oneirodidae

Bertella idiomorpha Pietsch, 1973 [Japanese name: Baterusenankou]

Bertella idiomorpha: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.

Chaenophryne draco Beebe, 1932 [Japanese name: Rakudaankou]

Chaenophryne draco: Balanov *et al.*, 2009.

Chaenophryne longiceps Regan, 1925 [Japanese name: Kurozumerakudaankou]

Chaenophryne longiceps: Balanov *et al.*, 2009.

Oneirodes bulbosus Chapman, 1939 [Japanese name: Yumeankou]

Oneirodes bulbosus: Balanov *et al.*, 2009.

Oneirodes thompsoni (Schultz, 1934) [Japanese name: Togerakudaankou]

Oneirodes acanthias: Maruyama, 1971; Shiogaki, 1982.

Oneirodes thompsoni: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Ceratiidae

Ceratias holboelli Krøyer, 1845 [Japanese name: Biwaankou]

Ceratias holboelli: Maruyama, 1971; Asahida, 1992; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Cryptopsaras couesii Gill, 1883 [Japanese name: Mitsukurienagachouchinankou]

Cryptopsaras couesi: Maruyama, 1971; Abe and Funabashi, 1992; Funabashi, 1998.

Cryptopsaras couesii: Kitagawa *et al.*, 2008.

WA-06-E425 (1), WA-07-F380 (1).

Family Gigantactinidae

Gigantactis elsmanni Bertelsen, Pietsch and Lavenberg, 1981 [Japanese name: Rôsumoguraankou]

Gigantactis elsmanni: Amaoka, 1983, 1988, 2001; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Gigantactis gargantua Bertelsen, Pietsch and Lavenberg, 1981 [Japanese name: Onagamoguraankou]

Gigantactis gargantua: Amaoka, 1983, 1988, 2001; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Gigantactis perlatus Beebe and Crane, 1947 [Japanese name: Andonmoguraankou]

Gigantactis perlatus: Amaoka, 1983, 1988; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Gigantactis vanhoeffeni Brauer, 1902 [Japanese name: Shidaankou] (Fig. 2C)

WA-07-G1500 (1).

Gigantactis vanhoeffeni: Maruyama, 1970; Amaoka, 1983, 1988, 2001; Asahida, 1992; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Family Linophrynidae

Linophryne densiramus Imai, 1941 [Japanese name: Oniankou]

Linophryne densiramus: Shinohara *et al.*, 1996.

Linophryne indica (Brauer, 1902) [Japanese name: Indooniankou]

Linophryne indica: Shinohara *et al.*, 1996; Balanov *et al.*, 2009.

Order Stephanoberyciformes

Family Melamphaidae

Melamphaes lugubris Gilbert, 1891 [Japanese name: Honkabutouo]

Melamphaes lugubris: Amaoka *et al.*, 1995; Aizawa, 2000, 2002; Balanov *et al.*, 2009.

- Melamphaes polylepis*** Ebeling, 1962 [Japanese name: Urokokabutou]
Melamphaes polylepis: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Poromitra crassiceps*** (Günther, 1878) [Japanese name: Kabutou]
Polromitra (Melamphaes) crassiceps [sic]: Maruyama, 1971.
Poromitra crassiceps: Shiogaki, 1982; Amaoka, 1983; Amaoka *et al.*, 1995; Aizawa, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
- Scopeloberyx opisthopterus*** (Parr, 1933) [Japanese name: Himetatekabutou]
Scopeloberyx opisthopterus: Aizawa, 2000, 2002; Kitagawa *et al.*, 2008.
- Scopeloberyx robustus*** (Günther, 1887) [Japanese name: Tatekabutou]
Scopeloberyx robustus: Aizawa, 2000; Balanov *et al.*, 2009.
- Scopelogadus mizolepis mizolepis*** (Günther, 1878) [Japanese name: Yoroiginme]
Scopelogadus mizolepis mizolaepis: Aizawa, 2000, 2002.

Family Rondelettiidae

- Rondeletia loricata*** Abe and Hotta, 1963 [Japanese name: Akachokkikujirauo]
Rondeletia loricata: Shinohara *et al.*, 1996; Aizawa, 2000, 2002; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-05-G900 (1), WA-05-G750 (1), WA-06-H1500 (1), WA-07-E750 (1), WA-07-E1500 (1), WA-07-G1200 (2), WA-07-H1500 (1).

Family Barbourisiidae

- Barbourisia rufa*** Parr, 1945 [Japanese name: Akakujirauodamashi]
Barbourisia rufa: Shiogaki, 1982; Amaoka, 1983; Asahida, 1992; Aizawa, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Family Cetomimidae

- Cetostoma regani*** Zugmayer, 1914 [Japanese name: Hosomikujirauo]
Cetostoma regani: Amaoka, 1983, 1988; Amaoka *et al.*, 1995.
Cetomimus regani: Aizawa, 2000, 2002; Amaoka, 2001.
- Ditropichthys storeri*** (Goode and Bean, 1895) [Japanese name: Sumikujirauo]
Ditropichthys storei: Shinohara *et al.*, 1996.

Order Beryciformes

Suborder Trachichthyoidei

Family Anoplogastridae

- Anoplogaster cornuta*** (Valenciennes *in* Cuvier and Valenciennes, 1833) [Japanese name: Onikinme]
Anoplogaster cornuta: Shiogaki, 1982; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Hayashi, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.
 WA-07-G1200 (1).

Family Diretmidae

- Diretmichthys parini*** (Post and Quero, 1981) [Japanese name: Nakamuraginme]

Diretmus argenteus: Maruyama, 1971; Shiogaki, 1982; Amaoka, 1983.

Diretmoides parini: Amaoka *et al.*, 1995.

Diretmichthys parini: Hayashi, 2000, 2002; Shimizu, 2001; Shiogaki *et al.*, 2004.

Family Trachichthyidae

Gephyroberyx japonicus (Döderlein in Steindachner and Döderlein, 1883) [Japanese name: Hashikinme]

Gephyroberyx japonicus: Funabashi, 1998; Shiogaki *et al.*, 2004.

Gephyroberyx darwinii: Kitagawa *et al.*, 2008.

Hoplostethus japonicus Hilgendorf, 1879 [Japanese name: Hiuchidai]

Hoplostethus japonicus: Takahashi *et al.*, 2003; Kitagawa *et al.*, 2008.

Suborder Berycoidei

Family Berycidae

Beryx decadactylus Cuvier in Cuvier and Valenciennes, 1829 [Japanese name: Nanyoukinme]

Beryx decadactylus: Maruyama, 1971; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Beryx splendens Lowe, 1834 [Japanese name: Kinmedai]

Beryx splendens: Maruyama, 1971; Shiogaki, 1982; Amaoka, 1983; Sato *et al.*, 1987; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Order Zeiformes

Family Macrurocyttidae

Zenion japonicum Kamohara, 1934 [Japanese name: Sokomatoudai]

Zenion japonicum: Kitagawa *et al.*, 2008.

WA-06-F280 (1).

Family Zeidae

Cyttopsis rosea (Lowe, 1843) [Japanese name: Kagomatoudai]

Cyttopsis rosea: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Zenopsis nebulosa (Temminck and Schlegel, 1845) [Japanese name: Kagamidai]

Zenopsis nebulosa: Maruyama, 1971; Shiogaki, 1982; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

Zeus faber Linnaeus, 1758 [Japanese name: Matoudai]

Zeus japonicus: Maruyama, 1971; Shiogaki, 1982.

Zeus faber: Asahida, 1992; Funabashi, 1998; Inada, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Oreosomatidae

Allocyttus verrucosus (Gilchrist, 1906) [Japanese name: Oomematoudai]

Allocyttus verrucosus: Maruyama, 1970, 1971; Kido, 1983; Asahida, 1992; Amaoka *et al.*, 1995; Kitagawa *et al.*, 2008.

Allocyttus varrucosus [sic]: Funabashi, 1998.

Family Grammicolepididae

Xenolepidichthys dalgleishi Gilchrist, 1922 [Japanese name: Hishimatoudai]

Xenolepidichthys dalgleishi: Kitagawa *et al.*, 2008.

Order Gasterosteiformes

Family Macroramphosidae

Macroramphosus scolopax (Linnaeus, 1758) [Japanese name: Sagifue]

Macroramphosus sagifue: Maruyama, 1971.

Macroramphosus japonicus: Maruyama, 1971.

Macroramphosus scolopax: Shiogaki, 1982; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Macroramphosus scolopax: Funabashi, 1998.

WA-07-G150 (7), WA-07-E210 (2).

Order Scorpaeniformes

Suborder Scorpaenoidei

Family Scorpaenidae

Ectreposebastes imus Garman, 1899 [Japanese name: Kurokasago]

Ectreposebastes imus: Maruyama, 1970; Kanayama, 1983; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-E750 (1).

Helicolenus hilgendorfi (Döderlein in Steindachner and Döderlein, 1884) [Japanese name: Yumekasago]

Helicolenus hilgendorfi: Maruyama, 1971; Shiogaki, 1982; Sato *et al.*, 1987; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Hozukius emblemarius (Jordan and Starks, 1904) [Japanese name: Houzuki]

Hozukius emblemarius: Kanayama, 1983; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Pontinus macrocephalus (Sauvage, 1882) [Japanese name: Hiodoshi]

Pontinus macrocephalus: Funabashi, 1998.

Scorpaena izensis Jordan and Starks, 1904 [Japanese name: Izukasago]

Scorpaena izensis: Shiogaki, 1982.

Scorpaena neglecta: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes alutus (Gilbert, 1890) [Japanese name: Arasukamenuke]

Sebastes alutus: Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Sebastes aleutianus (Jordan and Evermann, 1898) [Japanese name: Aramenuke]

Sebastes aleutianus: Kitagawa *et al.*, 2008.

Sebastes baramenuke (Wakiya, 1917) [Japanese name: Baramenuke]

Sebastes baramenuke: Okada and Matsubara, 1938.

Sebastes baramenuke: Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes borealis Barsukov, 1970 [Japanese name: Hireguromenuke]

Sebastes borealis: Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Ishida, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes flammeus (Jordan and Starks, 1904) [Japanese name: Sankoumenuke]

Sebastes flameus [sic]: Maruyama, 1971.

Sebastes flammeus: Shiogaki, 1982; Kanayama, 1983; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes glaucus Hilgendorf, 1880 [Japanese name: Kuromenuke]

Sebastes glaucus: Amaoka, 1988; Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Sebastes iracundus Jordan and Starks, 1904 [Japanese name: Oosaga]

Sebastodes iracundus: Okada and Matsubara, 1938.

Sebastes iracundus: Maruyama, 1971; Shiogaki, 1982; Kanayama, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-F480 (1).

Sebastes itinus (Jordan and Starks, 1904) [Japanese name: Yanagimebaru]

Sebastes stinus [sic]: Maruyama, 1971.

Sebastes itinus: Sato *et al.*, 1987; Amaoka, 1988; Amaoka *et al.*, 1995; Funabashi, 1998; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Sebastes matsubarae Hilgendorf, 1880 [Japanese name: Akoudai]

Sebastes matsubarai: Maruyama, 1971.

Sebastes matsubarae: Shiogaki, 1982; Sato *et al.*, 1987; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes owstoni (Jordan and Thompson, 1914) [Japanese name: Hatsume]

Sebastes owstoni: Okada and Matsubara, 1938; Maruyama, 1971; Shiogaki, 1982; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G310 (1), WA-06-E280 (2)

Sebastes scythropus (Jordan and Snyder, 1900) [Japanese name: Ukeguchimebaru]

Sebastes scythropus: Funabashi, 1998; Nakabo, 2000b, 2002b; Ishida, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastes steindachneri Hilgendorf, 1880 [Japanese name: Yanaginomai]

Sebastes steindachneri: Okada and Matsubara, 1938; Shiogaki, 1982; Amaoka *et al.*, 1995; Ishida, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Sebastiscus tertius (Barsukov and Chen, 1978) [Japanese name: Ukkarikasago]

Sebastiscus tertius: Okada and Matsubara, 1938; Shiogaki, 1982; Nakabo, 2000b, 2002b.

Sebastolobus alacanus Bean, 1890 [Japanese name: Arasukakichiji]

Sebastolobus alacanus: Kitagawa *et al.*, 2008.

Sebastolobus macrochir (Günther, 1877) [Japanese name: Kichiji]

Sebastolobus macrochir: Maruyama, 1971; Shiogaki, 1982; Kanayama, 1983; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Ishida, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Setarches guentheri Johnson, 1862 [Japanese name: Shirokasago]

Setarches guentheri: Funabashi, 1998.

Setarches longimanus (Alcock, 1894) [Japanese name: Akakasago]

Setarches longimanus: Funabashi, 1998; Nakabo, 2000b, 2002b.

WA-06-F310 (1).

Family Triglidae
Subfamily Triglinae

Chelidonichthys spinosus (McClelland, 1844) [Japanese name: Houbou]

Chelidonichthys kumu: Maruyama, 1971.

Chelidonichthys spinosus: Shiogaki, 1982; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Lepidotrigla abyssalis Jordan and Starks, 1904 [Japanese name: Sokokanagashira]

Lepidotrigla abyssalis: Kitagawa *et al.*, 2008.

Lepidotrigla guentheri Hilgendorf, 1879 [Japanese name: Kanado]

Lepidotrigla guentheri: Maruyama, 1971; Shiogaki, 1982.

Lepidotrigla guentheri: Funabashi, 1998; Shiogaki *et al.*, 2004.

Lepidotrigla microptera Günther, 1873 [Japanese name: Kanagashira]

Lepidotrigla microptera: Shiogaki, 1982; Sato *et al.*, 1987; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Pterygotrigla hemisticta (Temminck and Schlegel, 1843) [Japanese name: Sokohoubou]

Pterygotrigla hemisticta: Funabashi, 1998.

Subfamily Peristediinae

Peristedion nierstraszi Weber, 1913 [Japanese name: Herikihoubou]

Peristedion nierstraszi: Funabashi, 1998.

Peristedion orientale Temminck and Schlegel, 1843 [Japanese name: Kihoubou]

Peristedion orientale: Shiogaki, 1982; Funabashi, 1998; Kawai *et al.*, 2003; Shiogaki *et al.*, 2004.

Satyrichthys amiscus (Jordan and Starks, 1904) [Japanese name: Higekihoubou]

Satyrichthys amiscus: Funabashi, 1998; Kawai *et al.*, 2003.

Scalicus amiscus: Kitagawa *et al.*, 2008.

WA-06-G310 (1).

Satyrichthys engyceros (Günther, 1872) [Japanese name: Sokokihoubou]

Satyrichthys engyceros: Kawai *et al.*, 2003.

Suborder Anoplopomatoidei

Family Anoplopomatidae

Anoplopoma fimbria (Pallas, 1814) [Japanese name: Gindara]

Anoplopoma fimbria [sic]: Maruyama, 1971.

Anoplopoma fimbria: Asahida, 1992; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Erilepis zonifer (Lockington, 1880) [Japanese name: Aburabouzu]

Erilepis zonifer [sic]: Maruyama, 1971.

Erilepis zonifer: Shiogaki, 1982; Mitani *et al.*, 1986; Asahida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Suborder Cottoidei

Family Ereuniidae

Ereunias grallator Jordan and Snyder, 1901 [Japanese name: Torikajika]

Ereunias grallator: Shiogaki *et al.*, 2004.

Marukawichthys ambulator Sakamoto, 1931 [Japanese name: Marukawakajika]

Marukawichthys ambulator: Maruyama, 1971; Shiogaki, 1982; Shinohara *et al.*, 1996; Naka-bo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-07-F150 (1), WA-07-E280 (1).

Family Cottidae

- Astrocottus leprops*** Bolin, 1936 [Japanese name: Hosourokokajika]
Astrocottus leprops: Shinohara *et al.*, 1996.
- Cottiusculus schmidtii*** Jordan and Starks, 1904 [Japanese name: Kinkajika]
Cottiusculus schmidtii: Okada and Matsubara, 1938; Shiogaki, 1982; Amaoka *et al.*, 1995; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-07-E210 (1), WA-07-F210 (2).
- Hemilepidotus gilberti*** Jordan and Starks, 1904 [Japanese name: Yokosujikajika]
Hemilepidotus gilberti: Shiogaki, 1982; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
Hemilepidotus jordani: Shinohara *et al.*, 1996 (misidentification).
 Remarks. Although Shinohara *et al.* (1996: 176) listed *Hemilepidotus jordani* from the Pacific coast off Iwate Prefecture at depths of 257-269 m, the specimen (NSMT-P 48167) was reidentified as *Hemilepidotus gilberti*. This indicates the most southern record for the species.
- Icelus cataphractus*** (Pavlenko, 1910) [Japanese name: Koorikajika]
Icelus spiniger spiniger: Maruyama, 1971; Shiogaki, 1982.
Icelus cataphractus: Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b; Yabe, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-06-E250 (1), WA-06-E280 (1), WA-07-E280 (1).
- Phasmatocottus ctenopterygius*** Bolin, 1936 [Japanese name: Kushibirekajika]
Phasmatocottus ctenopterygius: Bolin, 1936; Okada and Matsubara, 1938; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.
- Ricuzenius pinetorum*** Jordan and Starks, 1904 [Japanese name: Matsukajika]
Ricuzenius pinetorum: Okada and Matsubara, 1938; Shiogaki, 1982; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-07-F210 (2).
- Stlengis misakia*** (Jordan and Starks, 1904) [Japanese name: Urokokajika]
Stlengis misakia: Yabe, 2001; Kitagawa *et al.*, 2008.
- Triglops szepticus*** Gilbert, 1896 [Japanese name: Niramikajika]
Triglops szepticus: Shiogaki, 1982; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004.
- Zesticelus ochotensis*** Yabe, 1995 [Japanese name: Ohotsukusokokajika]
Zesticelus ochotensis: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Family Hemitripteridae

- Hemitripterus villosus*** (Pallas, 1814) [Japanese name: Kemushikajika]
Hemitripterus villosus: Okada and Matsubara, 1938; Maruyama, 1971; Sato *et al.*, 1987; Asahida, 1992; Amaoka *et al.*, 1995; Funabashi, 1998; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
 WA-06-H280 (1), WA-07-E250 (1), WA-07-G210 (1).

Family Agonidae

- Aspidophoroides monopterygius*** (Bloch, 1786) [Japanese name: Tatetokubire]
Aspidophoroides monopterygius: Kitagawa *et al.*, 2008.
- Anoplagonus occidentalis*** Lindberg, 1950 [Japanese name: Nisenametokubire]
Anoplagonus occidentalis: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*,

2008.

Bathyagonus nigripinnis Gilbert, 1890 [Japanese name: Sokotokubire]

Bathyagonus nigripinnis: Imamura and Kitagawa, 1999; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Bothragonus occidentalis Lindberg, 1935 [Japanese name: Saitokubire]

Bothragonus occidentalis: Kanayama, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Freemanichthys thompsoni (Jordan and Gilbert in Jordan and Evermann, 1898) [Japanese name: Yasetokubire]

Podothecus thompsoni: Maruyama, 1971; Shiogaki, 1982.

Freemanichthys thompsoni: Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b.

Hypsagonus quadricornis (Cuvier in Cuvier and Valenciennes, 1829) [Japanese name: Tsunoshachiuo]

Hypsagonus quadricornis: Amaoka *et al.*, 1995; Nakabo, 2000b, 2002b.

Leptagonus leptorhynchus (Gilbert, 1896) [Japanese name: Tengutokubire]

Leptagonus leptorhynchus: Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Occella iburia (Jordan and Starks, 1904) [Japanese name: Saburou]

Occa iburia: Maruyama, 1971.

Occella iburia: Shiogaki, 1982; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-07-F150 (5), WA-07-E210 (1).

Percis japonicus (Pallas, 1769) [Japanese name: Inugochi]

Percis japonica: Maruyama, 1971.

Percis japonicus: Kanayama, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Podothecus sachi (Jordan and Snyder, 1901) [Japanese name: Tokubire]

Podothecus sachi: Okada and Matsubara, 1938; Maruyama, 1971; Shiogaki, 1982; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Podothecus sturiooides (Guichenot, 1869) [Japanese name: Sametokubire]

Podothecus sturiooides: Kanayama, 2001.

Tilesina gibbosa Schmidt in Jordan and Starks, 1904 [Japanese name: Onishachiuo]

Tilesina gibbosa: Shiogaki, 1982; Nakabo, 2000b, 2002b; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Psychrolutidae

Dasycottus setiger Bean, 1890 [Japanese name: Ganko]

Dasycottus setiger: Maruyama, 1971; Shiogaki, 1982; Yabe, 1983; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E280 (1), WA-06-G510 (2), WA-06-G380 (1), WA-06-FG425 (1), WA-07-E550 (1).

Ebinania brephocephala (Jordan and Starks, 1903) [Japanese name: Bouzukaajika]

Cottunculus brephocephalus: Okada and Matsubara, 1938.

Ebinania brephocephala: Funabashi, 1998; Yabe, 2001.

Ebinania vermiculata Sakamoto, 1932 [Japanese name: Akadonko]

Ebinania vermiculata: Maruyama, 1971; Shiogaki, 1982; Yabe, 1983; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G380 (1), WA-06-H510 (1), WA-06-E310 (1), WA-07-G380 (1).

Psychrolutes phrictus Stein and Bond, 1978 [Japanese name: Nyuudoukajika]

Psychrolutes phrictus: Yabe, 1983, 2001; Shinohara *et al.*, 1996; Yabe, 2001; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-05-G750 (1), WA-06-F750 (1), WA-06-G900 (2).

Malacocottus zonurus Bean, 1890 [Japanese name: Kobushikajika]

Malacocottus zonurus: Yabe, 1983; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E280 (1), WA-06-F280 (1), WA-06-G380 (1).

Family Cyclopteridae

Aptocyclus ventricosus (Pallas, 1769) [Japanese name: Hoteiuo]

Cycloperichthys ventricosus: Okada and Matsubara, 1938.

Aptocyclus ventricosus: Maruyama, 1971; Shiogaki, 1982; Kido, 1983; Asahida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Balanov *et al.*, 2009.

WA-07-H750 (1), WA-07-H1500 (1).

Family Liparidae

Careproctus cypselurus (Jordan and Gilbert in Jordan and Evermann, 1898) [Japanese name: Aibikunin]

Careproctus cypselurus: Kido, 1983; Shinohara *et al.*, 1996; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Careproctus furcellus Gilbert and Burke, 1912 [Japanese name: Ogurokonnyakuuo]

Careproctus furcellus: Shiogaki *et al.*, 2004.

Careproctus marginatus Kido, 1988 [Japanese name: Hiregurokonnyakuuo]

Careproctus marginatus: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

WA-06-H1500 (1), WA-06-F550 (1).

Careproctus melanurus Gilbert, 1892 [Japanese name: Higashikonnyakuuo]

Careproctus melanurus: Kido and Shinohara, 1997; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Careproctus nigricans Schmidt, 1950 [Japanese name: Yogorekonnyakuuo]

Careproctus nigricans: Shinohara *et al.*, 1996.

Careproctus rastrinus Gilbert and Burke, 1912 [Japanese name: Sakebikunin]

Careproctus pellucidus: Okada and Matsubara, 1938; Maruyama, 1971; Shiogaki, 1982.

Careproctus rastrinus: Ida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Kido, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-G410 (2).

Careproctus rotundifrons Sakurai and Shinohara, 2008 [Japanese name: Himekonnyakuuo]

Careproctus rotundifrons: Sakurai and Shinohara, 2008.

Crystallichthys matsushimae (Jordan and Snyder, 1902) [Japanese name: Abachan]

Crystallias matsushimae: Okada and Matsubara, 1938; Shiogaki, 1982.

Crystallichthys matsushimae: Maruyama, 1971; Shinohara *et al.*, 1996; Kido, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E410 (2).

Liparis ochotensis Schmidt, 1904 [Japanese name: Isagobikunin]

Liparis ochotensis: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Liparis tessellatus (Gilbert and Burke, 1912) [Japanese name: Bikunin]

Liparis tessellatus: Maruyama, 1971; Shiogaki, 1982; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Nakabo, 2000b, 2002b; Kido, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Nectoliparis pelagicus Gilbert and Burke, 1912 [Japanese name: Kantenuo]

Nectoliparis pelagicus: Shinohara *et al.*, 1996.

Paraliparis atramentatus Gilbert and Burke, 1912 [Japanese name: Inkiuo]

Paraliparis atramentatus: Maruyama, 1971.

Paraliparis barbulifer (Gilbert, 1896) [Japanese name: Shirohigekonnyakuuo]

Rhinoliparis barbulifer: Okada and Matsubara, 1938; Maruyama, 1971.

Paraliparis barbulifer: Shinohara *et al.*, 1996; Kitagawa *et al.*, 2008.

Paraliparis grandis Schmidt, 1950 [Japanese name: Hirainkiuo]

Paraliparis grandis: Imamura *et al.*, 2000; Nakabo, 2000b, 2002b; Kitagawa *et al.*, 2008.

Order Perciformes
Suborder Percoidei
Family Acropomatidae

Doederleinia berycoides (Hilgendorf, 1879) [Japanese name: Akamutsu]

Doederleinia berycoides: Maruyama, 1971; Shiogaki, 1982; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E150 (1).

Howella parini Fedoryako, 1976 [Japanese name: Kushisumikuiuo]

Howella parini: Balanov *et al.*, 2009.

Howella zina Fedoryako, 1976 [Japanese name: Togekushisumikuiuo]

WA-06-G650 (2).

Malakichthys griseus Döderlein in Steindachner and Döderlein, 1883 [Japanese name: Oomehata]

Malakichthys griseus: Funabashi, 1998.

Nippon spinosus Cuvier in Cuvier and Valenciennes, 1828 [Japanese name: Ara]

Nippon spinosus: Maruyama, 1971; Shiogaki, 1982; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004.

Stereolepis doederleini Lindberg and Krasnyukova, 1969 [Japanese name: Ookuchiishinagi]

Stereolepis doederleini: Shiogaki, 1982; Sato *et al.*, 1987; Asahida, 1992; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Synagrops japonicus (Döderlein in Steindachner and Döderlein, 1883) [Japanese name: Sumikuiuo]

Synagrops japonicus: Funabashi, 1998; Kitagawa *et al.*, 2008.

Family Priacanthidae

Cookeolus japonicus (Cuvier in Cuvier and Valenciennes, 1829) [Japanese name: Chikamekintoki]

Priacanthus boops: Maruyama, 1971; Shiogaki, 1982.

Cookeolus boops: Sato *et al.*, 1987; Asahida, 1992; Imamura, 1997; Funabashi, 1998.

Cookeolus japonicus: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Priacanthus macracanthus Cuvier in Cuvier and Valenciennes, 1829 [Japanese name: Kintokidai]

Priacanthus macracanthus: Maruyama, 1971; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Pomatomidae

Scombrops boops (Houttuyn, 1782) [Japanese name: Mutsu]

Scombrops boops: Maruyama, 1971; Shiogaki, 1982; Asahida, 1992; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Scombrops gilberti (Jordan and Snyder, 1901) [Japanese name: Kuromutsu]

Scombrops gilberti: Funabashi, 1998; Mochizuki, 2001.

Family Bramidae

Brama japonica Hilgendorf, 1878 [Japanese name: Shimagatsuo]

Brama raii: Maruyama, 1971.

Brama japonica: Shiogaki, 1982; Asahida, 1992; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Pteraclis aesticola (Jordan and Snyder, 1901) [Japanese name: Bentenuo]

Bentenia aesticola: Okada and Matsubara, 1938; Maruyama, 1971; Imamura, 1997.

Pteraclis aesticola: Funabashi, 1998.

Pterycombus petersii (Hilgendorf, 1878) [Japanese name: Ryugunohime]

Pterycombus petersii: Kitagawa *et al.*, 2008.

Taractichthys steindachneri (Döderlein in Steindachner and Döderlein, 1883) [Japanese name: Hirejiromanzaio]

Taractichthys steindachneri: Funabashi, 1998.

Family Caristiidae

Caristius macropus (Bellotti, 1903) [Japanese name: Yaegisu]

Caristius maoropus [sic]: Maruyama, 1971.

Caristius macropus: Shiogaki, 1982; Amaoka, 1983; Imamura, 1997; Miyahara, 2001.

Platyberyx macropus: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Emmelichthyidae

Emmelichthys struhsakeri Heemstra and Randall, 1977 [Japanese name: Rôso kuchibiki]

Emmelichthys struhsakeri: Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Erythrocles schlegelii (Richardson, 1846) [Japanese name: Hachibiki]

Erythrocles schlegelii: Funabashi, 1998; Miyahara *et al.*, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Pentacerotidae

Pentaceros japonicus Steindachner, 1883 [Japanese name: Tsubodai]

Pentaceros japonicus: Imamura, 1997; Funabashi, 1998; Kitagawa *et al.*, 2008.

Pseudopentaceros wheeleri Hardy, 1983 [Japanese name: Kusakaritsubodai]

Pseudopentaceros whelleri [sic]: Imamura, 1997.

Remarks. Imamura (1997) added *Pseudopentaceros wheeleri* to the perciform fish fauna of Pacific coast of Tohoku District based on Maruyama (1971) who had listed the species from Iwate Prefecture with a question mark as “? Kusakaritsubodai Peudopentaceros richardsoni (Smith).”

Suborder Zoarcoidei
Family Zoarcidae

- Andriashevia aptera*** Fedorov and Neelov, 1978 [Japanese name: Choujagenge]
Andriashevia aptera: Fedorov and Neelov, 1978; Hatooka, 2000, 2002.
- Bothrocara hollandi*** (Jordan and Hubbs, 1925) [Japanese name: Norogenge]
Bothrocara sp.: Shiogaki, 1982.
Bothrocara hollandi: Shiogaki *et al.*, 2004; Anderson *et al.*, 2009.
Bothrocara hollandi [sic]: Kitagawa *et al.*, 2008.
- Bothrocara tanakae*** (Jordan and Hubbs, 1925) [Japanese name: Kantengenge]
Zestichthys tanakai: Maruyama, 1971; Toyoshima, 1983; Shinohara *et al.*, 1996; Imamura, 1997, 1998; Funabashi, 1998; Koyanagi, 2001.
Zestichthys tanakae: Shiogaki, 1982.
Bothrocara tanakae: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008; Anderson *et al.*, 2009.
WA-05-G900 (9), WA-06-G480 (1).
- Bothrocara zestum*** Jordan and Fowler, 1902 [Japanese name: Shirogenge]
Lycogramma zesta: Shiogaki, 1982.
Bothrocara molle: Toyoshima, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Imamura, 1997, 1998; Funabashi, 1998; Shiogaki *et al.*, 2004; Koyanagi, 2001; Kitagawa *et al.*, 2008.
Bothrocara zestum: Anderson *et al.*, 2009.
WA-06-G510 (2), WA-05-G900 (2).
- Bothrocarina microcephala*** (Schmidt, 1938) [Japanese name: Kamuchakkagenge]
Bothrocarina microcephala: Shiogaki, 1982; Shinohara *et al.*, 1996; Imamura, 1997, 1998; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
- Bothrocarina nigrocaudata*** Suvorov, 1935 [Japanese name: Ogurogenge]
Bothrocarina nigrocaudata: Kitagawa *et al.*, 2008.
- Davidijordania poecilimon*** (Jordan and Fowler, 1902) [Japanese name: Sarasagaji]
Davidijordania poecilimon: Okada and Matsubara, 1938; Shinohara *et al.*, 1996; Imamura, 1997, 1998; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
- Hadropogonichthys leptopus*** Machida, Shinohara and Ohta, 2004 [Japanese name: Watatsumigenge]
Hadropogonichthys leptopus: Machida *et al.*, 2004.
WA-07-G1500 (1).
- Lycenchelys albomaculata*** Toyoshima in Amaoka *et al.*, 1983 [Japanese name: Shirobuchihebigenge]
Lycenchelys albomaculatus: Toyoshima, 1983, 1985; Amaoka *et al.*, 1995; Imamura, 1998; Koyanagi, 2001.
Lycenchelys albomaculata: Shinohara *et al.*, 1996; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.
WA-06-F900 (3), WA-07-G1200 (1).
- Lycenchelys aurantiaca*** Shinohara and Matsuura, 1998 [Japanese name: Daidaihebigenge]
Lycenchelys aurantiaca: Imamura, 1998; Shinohara and Matsuura, 1998; Hatooka, 2000, 2002; Kitagawa *et al.*, 2008.
WA-07-E550 (1), WA-07-E650 (1), WA-07-E750 (1).
- Lycenchelys maculatus*** Toyoshima, 1983 [Japanese name: Kurobuchihebigenge]
Lycenchelys maculatus: Toyoshima, 1983; Imamura, 1998.
Lycenchelys mauculata: Hatooka, 2000, 2002.
- Lycenchelys makushok*** Fedorov and Andriashev, 1993 [Japanese name: Wakatakahebigenge]

Lycenchelys makushok: Shinohara *et al.*, 1996; Imamura, 1997, 1998; Hatooka, 2000, 2002; Kitagawa *et al.*, 2008.

Lycenchelys melanostomias Toyoshima in Amaoka *et al.*, 1983 [Japanese name: Ohôtsukuhebigenge]

Lycenchelys brevimaxillaris: Toyoshima, 1985; Imamura, 1998; Hatooka, 2000, 2002.

Lycenchelys melasnostomias [sic]: Shiogaki *et al.*, 2004.

Lycenchelys melanostomias: Imamura *et al.*, 2005; Kitagawa *et al.*, 2008.

WA-05-G900 (12).

Lycenchelys remissaria Fedorov, 1995 [Japanese name: Kawarihebigenge]

Lycenchelys remissaria: Shinohara *et al.*, 1996; Imamura, 1997, 1998; Hatooka, 2000, 2002; Kitagawa *et al.*, 2008.

WA-07-G1500 (1).

Lycenchelys squamosa Toyoshima in Amasoka *et al.*, 1983 [Japanese name: Urokohebigenge]

Lycenchelys squamosus: Toyoshima, 1983, 1985; Amaoka *et al.*, 1995; Imamura, 1997, 1998; Hatooka, 2000, 2002; Koyanagi, 2001.

Lycenchelys squamosa: Shinohara *et al.*, 1996; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-05-G750 (1).

Lycenchelys tohokuensis Anderson and Imamura, 2002 [Japanese name: Kitagawahebigenge]

Lycenchelys tohokuensis: Anderson and Imamura, 2002; Kitagawa *et al.*, 2008.

Lycodes caudimaculatus Matsubara, 1936 [Japanese name: Irezumigaji]

Lycodes caudimaculatus: Toyoshima, 1983, 1985; Shinohara *et al.*, 1996; Funabashi, 1998; Imamura, 1998; Hatooka, 2000, 2002; Koyanagi, 2001; Kitagawa *et al.*, 2008.

Lycodes caudimaculata: Imamura, 1997.

WA-06-G510 (6), WA-07-G380 (1).

Lycodes hubbsi Matsubara, 1955 [Japanese name: Yokosujikurogenge]

Lycodes esmarki: Maruyama, 1971.

Lycodes sp.1: Shiogaki, 1982.

Lycodes hubbsi: Toyoshima, 1983, 1985; Amaoka *et al.*, 1995; Imamura, 1997, 1998; Hatooka, 2000, 2002; Koyanagi, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-F510 (7).

Lycodes ocellatus Toyoshima, 1985 [Japanese name: Kurohoshimayugaji]

Lycodes ocellatus: Ikeda *et al.*, 2008; Kitagawa *et al.*, 2008.

Melanostigma orientale Tominaga, 1971 [Japanese name: Konnyakuhadakagenge]

Melanostigma orientale: Koyanagi, 2001.

Family Stichaeidae

Acantholumpenus mackayi Gilbert, 1896 [Japanese name: Nuimegaji]

Acantholumpenus mackayi: Shiogaki, 1982; Shiogaki *et al.*, 2004.

Lumpenella longirostris (Evermann and Goldsborough, 1907) [Japanese name: Nezumiginpo]

Lumpenella longirostris: Shiogaki, 1982; Yabe, 1983; Amaoka and Miki, 1988; Amaoka *et al.*, 1995; Imamura, 1997; Miki, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Lumpenella longirostri [sic]: Funabashi, 1998.

WA-05-E480 (5), WA-05-E650 (2), WA-05-E450 (1), WA-05-G280 (1).

Lumpenus sagitta Wilimovsky, 1956 [Japanese name: Unagigaji]

Lumpenus anguillaris: Okada and Matsubara, 1938.

Lumpenus gracilis: Maruyama, 1971.

Lumpenus sagitta: Amaoka and Miki, 1988; Amaoka *et al.*, 1995; Imamura, 1997; Hatooka, 2000, 2002; Shiogaki *et al.*, 2004.

Stichaeus grigorjewi Herzenstein, 1890 [Japanese name: Nagazuka]

Dinogunellus grigorjewi: Okada and Matsubara, 1938.

Stichaeus grigorjewi: Maruyama, 1971; Shiogaki, 1982; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Miki, 2001; Kitagawa *et al.*, 2008.

Dinogunellus grigorjewi [sic]: Shiogaki *et al.*, 2004.

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Stichaeus nozawai Jordan and Snyder, [Japanese name: Tauegaji]

Stichaeus nozawai: Shiogaki, 1982.

Stichaeus nozawai: Amaoka and Miki, 1988; Amaoka *et al.*, 1995; Imamura, 1997; Hatooka, 2000, 2002.

Suborder Trachinoidei
Family Chiasmodontidae

Kali indica Lloyd, 1909 [Japanese name: Waniguchibouzugisu]

Kali indica: Shinohara *et al.*, 1996; Imamura, 1997.

Pseudoscopelus lavenbergi Prokofiev, 2008 [Japanese name: Zarabouzugisu]

Pseudoscopelus lavenbergi: Prokofiev, 2008; Balanov *et al.*, 2009.

Pseudoscopelus sagamianus Tanaka, 1908 [Japanese name: Kurobouzugisu]

Pseudoscopelus sagamianus: Balanov *et al.*, 2009.

Family Trichodontidae

Arctoscopus japonicus (Steindachner, 1881) [Japanese name: Hatahata]

Arctoscopus japonicus: Okada and Matsubara, 1938; Maruyama, 1971; Shiogaki, 1982; Amaoka, 1988, 2001; Amaoka *et al.*, 1995; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Uranoscopidae

Uranoscopus japonicus Houttuyn, 1782 [Japanese name: Mishimaokoze]

Uranoscopus japonicus: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Xenocephalus elongatus (Temminck and Schlegel, 1843) [Japanese name: Aomishima]

Xenocephalus elongatus: Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Suborder Icosteoidae
Family Icosteidae

Icosteus aenigmaticus Lockington, 1880 [Japanese name: Irezumikonnyakuaji]

Acrotus willoughbyi [sic]: Maruyama, 1971.

Icosteus aenigmaticus: Maruyama, 1971; Shiogaki, 1982; Nakaya, 1983; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Suborder Callionymoidei
Family Callionymidae

Foetorepus altivelis (Temminck and Schlegel, 1845) [Japanese name: Beniteguri]
Foetorepus altivelis: Funabashi, 1998.

Suborder Gobioidae
 Family Gobiidae

Suruga fundicola Jordan and Snyder, 1901 [Japanese name: Yamihaze]
Suruga fundicola: Akihito, 1988; Shinohara *et al.*, 1996; Imamura, 1997; Akihito *et al.*, 2000, 2002; Kitagawa *et al.*, 2008.

Suborder Acanthuroidei
 Family Luvaridae

Luvarus imperialis Rafinesque, 1810 [Japanese name: Amashiira]
Luvarus imperialis: Maruyama, 1971; Imamura, 1997; Shiogaki *et al.*, 2004.

Suborder Scombroidei
 Family Scombridae

Scombroideus heterolepis Roule, 1921 [Japanese name: Mukashikurotachi]
Scombroideus heterolepis: Shinohara *et al.*, 1996.

Suborder Scombroidei
 Family Gempylidae

Gempylus serpens Cuvier, 1829 [Japanese name: Kurotachikamasu]
Gempylus serpens: Maruyama, 1971; Shiogaki, 1982; Imamura, 1997; Funabashi, 1998; Shiogaki *et al.*, 2004.

Lepidocybium flavobrunneum (Smith, 1843) [Japanese name: Aburasokomutsu]
Lepidocybium flavobrunneum: Funabashi, 1998.

Nealotus tripes Johnson, 1865 [Japanese name: Fuuraikamasu]
Nealotus tripes: Kido, 1983; Shinohara *et al.*, 1996; Imamura, 1997; Kitagawa *et al.*, 2008.

Nesiarchus nasutus Johnson, 1862 [Japanese name: Hashinagakurotachi]
Nesiarchus nasutus: Kido, 1983; Imamura, 1997; Funabashi, 1998; Nakamura, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E350 (1).

Promethichthys prometheus (Cuvier in Cuvier and Valenciennes, 1832) [Japanese name: Kuroshibikamasu]

Promethichthys prometheus: Shinohara *et al.*, 1996; Imamura, 1997; Kitagawa *et al.*, 2008.

Rexea prometheoides (Bleeker, 1856) [Japanese name: Kagokamasu]
Rexea prometheoides: Funabashi, 1998.

Ruvettus pretiosus Cocco, 1883 [Japanese name: Baramutsu]
Ruvettus pretiosus: Kido, 1983; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Kitagawa *et al.*, 2008.

WA-06-F650 (1).

Thyrsitoides marleyi Fowler, 1929 [Japanese name: Nagatachikamasu]
Thyrsitoides marleyi: Kitagawa *et al.*, 2008.

Family Trichiuridae

Aphanopus carbo Lowe, 1839 [Japanese name: Kurotachimodoki]

Aphanopus carbo: Kido, 1983; Imamura, 1997.

Benthodesmus tenuis (Günther, 1877) [Japanese name: Tachimodoki]

Benthodesmus tenuis: Mead and Taylor, 1953; Maruyama, 1971; Shiohaki, 1982; Shinohara *et al.*, 1996; Imamura, 1997; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Trichiurus japonicus Temminck and Schlegel, 1844 [Japanese name: Tachiuo]

Trichiurus lepturus: Maruyama, 1971; Shiohaki, 1982; Imamura, 1997.

Trichiurus japonicus: Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Suborder Stromateoidei

Family Centrolophidae

Hyperoglyphe japonica (Döderlein in Steindachner and Döderlein, 1884) [Japanese name: Medai]

Ocyrius japonicus: Maruyama, 1971.

Hyperoglyphe japonica: Shiohaki, 1982; Shinohara *et al.*, 1996; Imamura, 1997; Funabashi, 1998; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E210 (1).

Icichthys lockingtoni Jordan and Gilbert, 1880 [Japanese name: Kuromedai]

Icichthys lockingtoni [sic]: Maruyama, 1971.

Icichthys lockingtoni: Shiohaki, 1982; Imamura, 1997; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Psenopsis anomala (Temminck and Schlegel, 1844) [Japanese name: Ibodai]

Psenopsis anomala: Okada and Matsubara, 1938; Maruyama, 1971; Shiohaki, 1982; Imamura, 1997; Funabashi, 1998; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Family Nomeidae

Cubiceps squamiceps (Lloyd, 1909) [Japanese name: Bouzokonnyaku]

Cubiceps squamiceps: Imamura, 1997.

Nomeus gronovii (Gmelin, 1789) [Japanese name: Eboshidai]

Nomeus gronovii: Okamura, 2001.

Family Tetragonuridae

Tetragonurus atlanticus Lowe, 1839 [Japanese name: Tsumaridokuurokoibodai]

Tetragonurus atlanticus: Kido, 1983, Amaoka *et al.*, 1995; Imamura, 1997; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Tetragonurus cuvieri Risso, 1810 [Japanese name: Dokuurokoibodai]

Tetragonurus cuvieri: Maruyama, 1971; Amaoka *et al.*, 1995; Imamura, 1997; Funabashi, 1998; Shiohaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Order Pleuronectiformes

Family Bothidae

Chascanopsetta lugubris lugubris Alcock, 1894 [Japanese name: Zaragarei]

Chascanopsetta lugubris: Funabashi, 1998; Kitagawa *et al.*, 2008.

Laeps kitaharae (Smith and Pope, 1906) [Japanese name: Yarigarei]

Laeps kitaharae: Funabashi, 1998; Shiogaki *et al.*, 2004.

Family Pleuronectidae

Acanthopsetta nadeshnyi Schmidt, 1904 [Japanese name: Urokomegarei]

Acanthopsetta nadeshnyi: Kitagawa, 1981; Shiogaki, 1982; Amaoka *et al.*, 1995; Sakamoto, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Atheresthes evermanni Jordan and Starks, 1904 [Japanese name: Aburagarei]

Reinhardtius oleosus: Okada and Matsubara, 1938.

Atheresthus evermanni [sic]: Maruyama, 1971.

Atheresthes evermanni: Kitagawa, 1981; Shiogaki, 1982; Funabashi, 1998; Sakamoto, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

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Clidoderma asperrimum (Temminck and Schlegel, 1846) [Japanese name: Samegarei]

Clidoderma asperrimum: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Sakamoto, 1983; Ida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Dexistes rikuzenius Jordan and Starks, 1904 [Japanese name: Migigarei]

Dexistes rikuzenius: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Glyptocephalus stelleri (Schmidt, 1904) [Japanese name: Hireguro]

Glyptocephalus stelleri: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Ida, 1992; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Hippoglossoides dubius Schmidt, 1904 [Japanese name: Akagarei]

Hippoglossoides dubius: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Sakamoto, 1983; Ida, 1992; Amaoka *et al.*, 1995; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Hippoglossoides pinetorum (Jordan and Starks, 1904) [Japanese name: Souhachi]

Cleisthenes herzensteini: Okada and Matsubara, 1938.

Cleisthenes pinetorum: Okada and Matsubara, 1938; Shiogaki, 1982; Amaoka *et al.*, 1995.

Cleisthenes pinetorum herzenstoini [sic]: Maruyama, 1971.

Hippoglossoides pinetorum: Ida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Sakamoto, 2001; Kitagawa *et al.*, 2008.

Hippoglossus stenolepis Schmidt, 1904 [Japanese name: Ohyou]

Hippoglossus stenolepis: Maruyama, 1971; Shiogaki, 1982; Amaoka *et al.*, 1995; Sakamoto, 2001; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Microstomus achne (Jordan and Starks, 1904) [Japanese name: Babagarei]

Microstomus achne: Okada and Matsubara, 1938; Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Ida, 1992; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

WA-06-E280 (1).

Pleuronichthys sp. [Japanese name: Nagaremeitagarei]

Pleuronichthys sp.: Sakamoto, 2001.

Reinhardtius hippoglossoides (Walbaum, 1792) [Japanese name: Karasugarei]

Reinhardtius hippoglossoides: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Tanakius kitaharai (Jordan and Starks, 1904) [Japanese name: Yanagimushigarei]

Tanakius kitaharae: Okada and Matsubara, 1938.

Tanakius kitaharai: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Ida, 1992; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Verasper moseri Jordan and Gilbert, 1898 [Japanese name: Matsukawa]

Verasper moseri: Okada and Matsubara, 1938; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Ida, 1992; Amaoka *et al.*, 1995; Funabashi, 1998; Sakamoto, 2001; Kitagawa *et al.*, 2008.

Verasper variegatus (Temminck and Schlegel, 1846) [Japanese name: Hoshigarei]

Verasper variegatus: Maruyama, 1971; Kitagawa, 1981; Shiogaki, 1982; Sato *et al.*, 1987; Ida, 1992; Amaoka *et al.*, 1995; Shinohara *et al.*, 1996; Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

Order Tetraodontiformes

Family Triacanthoididae

Triacanthodes anomalus (Temminck and Schlegel, 1850) [Japanese name: Benikawamuki]

Triacanthodes anomalus: Funabashi, 1998.

Family Triodontidae

Triodon macropterus Lesson, 1831 [Japanese name: Uchiwafugu]

Triodon macropterus: Kitagawa *et al.*, 2008.

Family Tetraodontidae

Spheroides pachygaster (Müller and Troschel, 1848) [Japanese name: Yoritofugu]

Liossccus cutaneus: Maruyama, 1971.

Spheroides pachygaster: Shinohara *et al.*, 1996.

Sphoeroides pachygaster: Funabashi, 1998; Shiogaki *et al.*, 2004; Kitagawa *et al.*, 2008.

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