

Checklist of fishes collected by bottom otter-trawling from upper Gulf of Thailand by MV-SEAFDEC 2 cruise in December 2019

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ABSTRACT

The survey named “Collaborative survey on marine debris in the Gulf of Thailand” was conducted in the upper Gulf of Thailand by the Southeast Asian Fisheries Development Center, Training Department (SEAFDEC/TD) and the National Science Museum (NSM) during 14–20 December 2019. The operation of bottom otter-trawling conducted by using the research vessel MV-SEAFDEC 2 in daytime with depth ranging 30.0–57.8 m in almost muddy substrates. Subsequently, the 936 fish specimens were collected and taxonomically identified to 131 species in 50 families. The species list is reported with sampling stations, registration numbers, sizes and identification reference. Photographs of fresh or preserved specimens for species were also provided. In addition, two species of lizardfish, *Saurida fortis*, and lefteye flounder, *Engyprosopon keliaoense*, are first recorded from the Gulf of Thailand.

Keywords: Taxonomy, species list, SEAFDEC/TD, NSM, *Saurida fortis*, *Engyprosopon keliaoense*.

INTRODUCTION

The Gulf of Thailand, a shallow bay, is located on the middle of the west Pacific Ocean, and surrounded by shores along the Malay and Indochinese peninsulas on the west and north and east sides respectively, with the southeastern side opening to the South China Sea. This area is strongly affected by flowing of water mass from the South China Sea, currents and upwellings inside the gulf associated with the counterclockwise eddies and the seasonal southwest and northeast monsoons as well as the large amount of fresh water discharge from large rivers, *i.e.* the Maeklong, Chao Phraya and Bang Pakong rivers. This special environment has developed different coastal and marine ecosystems and supported an enormous diversity of marine and estuarine organisms, significantly serving people, food resources and ecological balances (Robinson, 1974; Satapoomin, 2000; Sojisuporn *et al.*, 2010; Yoshida *et al.*, 2013).

Knowledge of its ichthyofauna is limited, there are few comprehensive works covering the entire region. Wongratana (1968) reported fishes caught during the trawl surveys in the Gulf of Thailand and the east coast of the Malay Peninsula, which included 195 species in 58 families. Satapoomin (2000) compiled the list of reef-associated fishes of the Gulf of Thailand based on data during field surveys in 1991–1998, comprising 241 species in 49 families. Species compositions of different small-scale localities of the Gulf of Thailand also have been documented, *e.g.* Bang Pakong (Sawangarreruks *et al.*, 2005; Chamason *et al.*, 2015), Khlong Wan (Monkolprasit, 1966), Sichang Island (Menasveta *et al.*, 1986), Khang Khao Island (Wongratana *et al.*, 1990; Thapanand *et al.*, 1996), Samet Island (Monkolprasit and Songsirikul, 1988), Samui Island (Vilasri *et al.*, 2018), the northern Gulf of Thailand (Yoshida *et al.*, 2013), the upper Gulf of Thailand (Poreeyanond *et al.*, 1984) and the middle Gulf of Thailand (Pokapunt *et al.*, 1983).

The Southeast Asian Fisheries Development Center, Training Department (SEAFDEC/TD) and research colleagues plus the National Science Museum (NSM) conducted a survey named “Collaborative survey on marine debris in the Gulf of Thailand” using the research vessel M.V. SEAFDEC 2 from November–December 2019. As part of bottom otter-trawling, fish specimens were collected and subsequently deposited in the Natural History Museum of NSM fish reference collection. The purpose of this paper is to document the fish specimens obtained and provide a list of species and photographs for identification and future reference.

MATERIALS AND METHODS

A total ten survey stations (ST) by M.V. SEAFDEC 2 were undertaken using bottom otter-trawls during 14–20 December 2019 (Table 1; Figs. 1, 2). Some 936 fish specimens, excluding larvae, were selectively collected from the fish catches. After the cruise survey was completed, these specimens were curated and photographed. All specimens preserved in 70% ethyl alcohol after fixation in 10% formalin have been deposited in the Natural History Museum, Thailand (THNHM).

Table 1. Sampling data of bottom otter-trawls made by the M.V. SEAFDEC 2 in December 2019.

Station No.	Date	Position	Local time	Depth of capture (m)	Water surface temperature (C°)	Bottom type
15	December 14	11°14.7' N 100°13.4' E– 11°12.5' N 100°11.6' E	17.00–18.00	44.4–50.0	28.4	-
6	15	12°14.3' N 100°43.5' E– 12°12.3' N 100°43.4' E	08.35–09.35	41.0	28.0	muddy
7	15	12°15.8' N 101°09.5' E– 12°16.1' N 101°06.7' E	14.40–15.40	30.0–30.7	28.3	muddy
8	16	12°14.1' N 101°41.8' E– 12°13.3' N 101°38.9' E	07.50–08.50	33.3–34.1	27.9	muddy, sandy
A	16	12°01.6' N 102°03.8' E– 11°59.1' N 102°02.6' E	14.00–15.00	32.5–37.5	29.0	muddy
13	17	11°45.5' N 102°14.6' E– 11°42.7' N 102°13.9' E	12.00–13.00	42.9–48.2	29.4	muddy
12	17	11°46.7' N 101°46.3' E– 11°48.6' N 101°47.1' E	17.20–18.20	53.3–55.6	29.3	muddy
11	18	11°45.7' N 101°13.1' E– 11°48.2' N 101°10.1' E	08.20–09.20	52.6–55.0	28.3	muddy
17	18	11°26.2' N 101°04.7' E– 11°29.3' N 101°04.4' E	14.05–15.05	55.3–55.8	29.6	muddy
16	19	11°15.5' N 100°45.9' E– 11°17.6' N 100°46.3' E	08.30–09.12	54.3–57.8	28.6	muddy
10	19	11°43.4' N 100°43.6' E– 11°41.6' N 100°41.9' E	14.10–14.55	44.0–45.3	29.6	muddy
9	20	11°46.5' N 100°14.5' E– 11°49.2' N 100°13.5' E	08.05–09.05	36.3–38.2	28.7	muddy

The identification of the voucher specimens resulted in 131 species from 52 families. Various recent taxonomic papers and pictorial guide books were used for identification reference (IR) and these are cited following each species. The species list is presented by taxonomic arrangement, scientific name, sampling stations (ST), registration numbers and specimen size. Sizes of specimens are shown as standard length (SL) or total length (TL), and mostly follow Hubbs and Lagler (1958), except for disc width (DW) in a specimen of *Telatrygon zugei* (THNHM-F20033) with tail cut off as used by Masuda *et al.* (1984). Systematic arrangements of orders and families follow Nelson (2006). Species names generally follow Fricke *et al.* (2023), except for some recently published papers. Within families, species names are

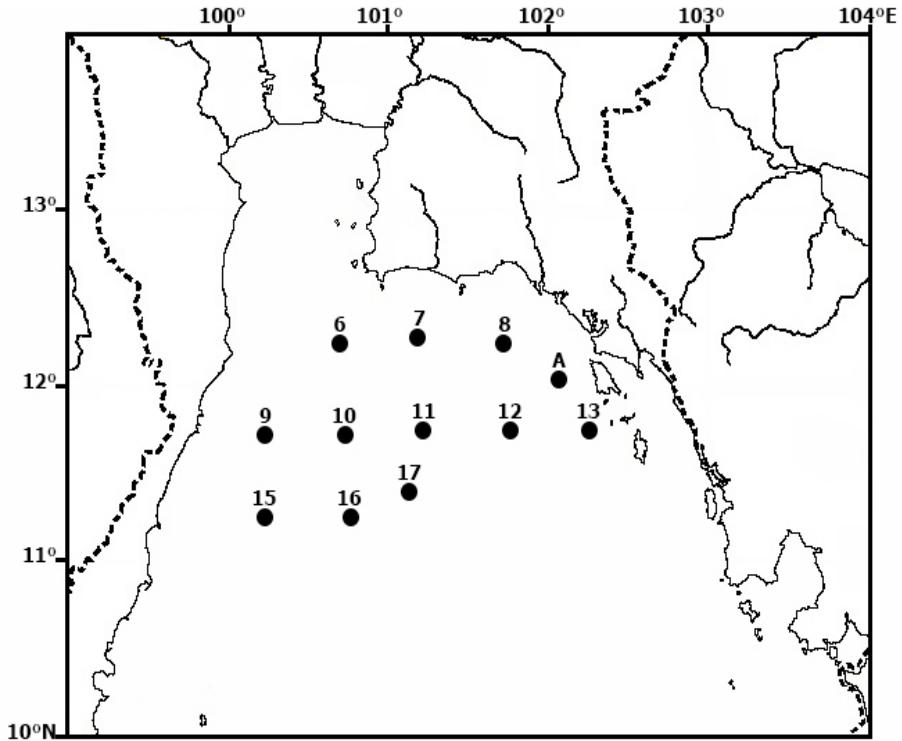


Figure 1. Survey stations of bottom otter-trawls. Number corresponds with that of Table 1.



Figure 2. M.V. SEADEC 2 conducted the bottom otter-trawl at station no.15 on 14 December 2019.

arranged in alphabetical order. Figure caption of photographs of representative specimens for each species indicates with the registered number, specimen size and condition of specimens when photographed, as either fresh (FS) or preserved in 70% ethanol (PS).

SPECIES LIST

Order Orectolobiformes

Family Hemicyllidae

Chiloscyllium punctatum Müller and Henle, 1838—Pl. 1A; IR: Krajangdara (2017). Specimen examined: ST-6, THNHM-F20522, 1 specimen, 757 mm TL.

Order Myliobatiformes

Family Dasyatidae

Brevitrygon imbricata (Bloch and Schneider, 1801)—Pl. 1B; IR: Last *et al.* (2016). Specimen examined: ST-A, THNHM-F20214, 1 specimen, 306 mm TL.

Taeniura lymma (Forsskål, 1775)—Pl. 1C; IR: Krajangdara (2017). Specimen examined: ST-7, THNHM-F20394, 1 specimen, 697 mm TL.

Telatrygon zugei (Müller and Henle, 1841)—Pl. 1D; IR: Last *et al.* (2016). Specimens examined: ST-13, THNHM-F20033, 1 specimen, 266 mm DW (tail cut off); ST-11, THNHM-F20235, 1 specimen, 535 mm TL; ST-17, THNHM-F20444, 1 specimen, 598 mm TL.

Order Anguilliformes

Family Muraenidae

Gymnothorax sp.—Pl. 1E; IR: Hibino in Motomura *et al.* (2017). Specimen examined: ST-7, THNHM-F20386, 1 specimen, 684 mm TL.

Gymnothorax thysoides (Richardson, 1845)—Pl. 1F; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20723–24, 2 specimens, 79–160 mm TL.

Strophidon sathete (Hamilton, 1822)—Pl. 1G; IR: Hibino in Motomura *et al.* (2017). Specimen examined: ST-10, THNHM-F20348, 1 specimen, 945 mm TL.

Family Muraenesocidae

Muraenesox cinereus (Forsskål, 1775)—Pl. 1H; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-13, THNHM-F20032, 1 specimen, 523 mm TL; ST-12, THNHM-F20304, F20320, 2 specimens, 486–488 mm TL.

Order Clupeiformes**Family Engraulidae**

Stolephorus indicus (van Hasselt, 1823)—Pl. 1I; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-A, THNHM-F20714, 1 specimen, 103 mm SL; ST-12, THNHM-F20926–28, 3 specimens, 108–111 mm SL; ST-11, THNHM-F20245, 1 specimen, 109 mm SL; ST-17, THNHM-F20502, 1 specimen, 115 mm SL; ST-16, THNHM-F20883–84, 2 specimens, 107–108 mm SL.

Family Clupeidae

Sardinella gibbosa (Bleeker, 1849)—Pl. 1J; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20848, 1 specimen, 104 mm SL; ST-A, THNHM-F20704–07, 4 specimens, 96–111 mm SL.

Order Aulopiformes**Family Synodontidae**

Saurida fortis Furuhashi, Russell and Motomura, 2022—Pl. 1K; IR: Furuhashi *et al.* (2022). Specimens examined: ST-15, THNHM-F20055, 1 specimen, 248 mm SL; ST-6, THNHM-F20560, 1 specimen, 254 mm SL; ST-7, THNHM-F20402, 1 specimen, 186 mm SL; ST-8, THNHM-F20099, F20102, F20120–22, 5 specimens, 102–232 mm SL; ST-A, THNHM-F20206, F20218–20, 4 specimens, 143–160 mm SL; ST-13, THNHM-F20003, 1 specimen, 323 mm SL; ST-12, THNHM-F20301, 1 specimen, 274 mm SL; ST-11, THNHM-F20250, 1 specimen, 227 mm SL; ST-17, THNHM-F20508–09, 2 specimens, 201–292 mm SL; ST-16, THNHM-F20151, F20171, 2 specimens, 221–225 mm SL; ST-10, THNHM-F20350, 1 specimen, 340 mm SL; ST-9, THNHM-F20575, 1 specimen, 230 mm SL. Remarks. This species, found in the Gulf of Thailand, was formerly identified by Kimura in Yoshida *et al.* (2013) and Chamason and Phenpraphai (2020) as *Saurida tumbil* (Bloch, 1795) or *S. elongata* (Temminck and Schlegel, 1846), respectively. Recently, *S. fortis* was described from southern Japan and Taiwan by Furuhashi *et al.* (2022) who also include a specimen recorded as ‘locality unknown’ but purchased at Sapanpa Samut Sakorn fish market in Thailand. *S. fortis* morphologically conforms with specimens collected, in having 11 or 12 dorsal-fin rays; 53–56 lateral-line scales; pectoral fins moderately long, with length

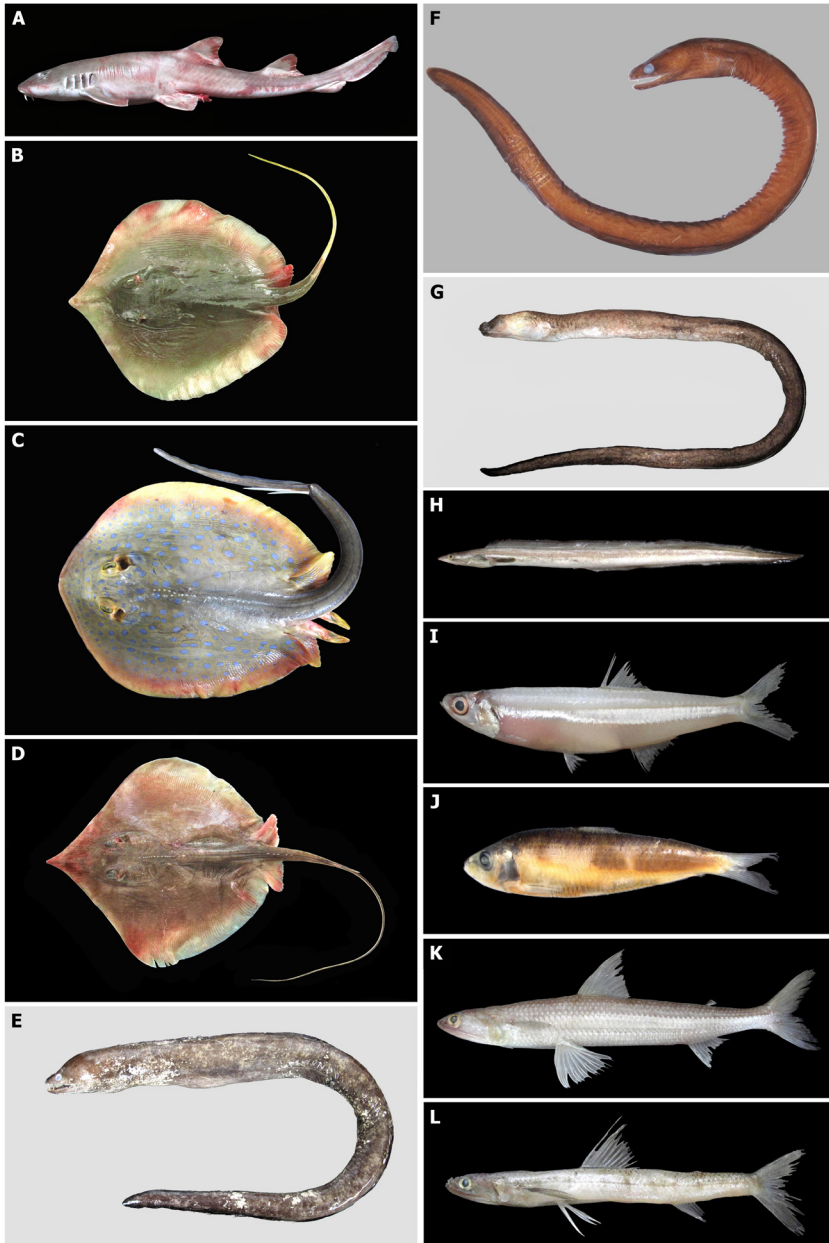


Plate 1. A. *Chiloscyllium punctatum* (THNHM-F20522, 757 mm TL, FS); B. *Brevitrygon imbricata* (THNHM-F20214, 306 mm TL, FS); C. *Taeniura lymma* (THNHM-F20394, 697 mm TL, FS); D. *Telatrygon zugei* (THNHM-F20444, 598 mm TL, FS); E. *Gymnothorax* sp. (THNHM-F20386, 684 mm TL, FS); F. *Gymnothorax thysoides* (THNHM-F20724, 79 mm TL, PS); G. *Strophidon sathete* (THNHM-F20348, 945 mm TL, FS); H. *Muraenesox cinereus* (THNHM-F20304, 488 mm TL, FS); I. *Stolephorus indicus* (THNHM-F20245, 109 mm SL, FS); J. *Sardinella gibbosa* (THNHM-F20704, 96 mm SL, PS); K. *Saurida fortis* (THNHM-F20151, 221 mm SL, FS); L. *Saurida isarankurai* (THNHM-F20296, 88 mm SL, FS).

12.5–16.9 % SL and tip of fin just short of or extending slightly beyond imaginary line from dorsal-fin origin to pelvic-fin insertion; body dark brown dorsally and silvery-white ventrally, with a row of poorly defined brownish-black blotches along lateral line and a pair of similar blotches posterior to dorsal-fin and adipose-fin bases. Thus, *S. fortis* is first recorded here from the Gulf of Thailand.

***Saurida isarankurai* Shindo and Yamada, 1972**—Pl. 1L; IR: Russell in Koeda and Ho (2019). Specimens examined: ST-8, THNHM-F20835–46, 12, 64–109 mm SL; ST-13, THNHM-F20680–81, 2, 60–75 mm SL; ST12, THNHM-F20296, 1 specimen, 88 mm SL; ST-11, THNHM-F20755–67, 13, 62–91 mm SL; ST-16, THNHM-F20867–73, 7, 54–109 mm SL.

***Saurida macrolepis* Tanaka, 1917**—Pl. 2A, 2B: Russell in Koeda and Ho (2019). Specimens examined: ST-15, THNHM-F20048, F20065, F20067–68, F20076, 5 specimens: 85–137 mm SL; ST-6, THNHM-F20524, 1 specimen, 108 mm SL; ST-7, THNHM-F20391, F20420–23, 5 specimens, 118–195 mm SL; ST-8, THNHM-F20864–66, 3 specimens, 103–145 mm SL; ST-A, T55HNHM-F20203, F20215, 2 specimens, 192–208 mm SL; ST-13, THNHM-F20018, 1 specimen, 161 mm SL; ST-12, THNHM-F20299, F20318–19, F20322, 4 specimens 182–213 mm SL; ST-11, THNHM-F20251, F20271–72, 3 specimens, 129–175 mm SL; ST-17, THNHM-F20442–43, F20448, F20450–51, F20475, F20490, 7 specimens, 89–185 mm SL; ST-16, THNHM-F20135, F20172, 2 specimens, 175–190 mm SL; ST-10, THNHM-F20354, F20795, 2 specimens, 91–117 mm SL; ST-9, THNHM-F20562, F20574, 2 specimens, 154–236 mm SL.

Remarks. This species, found in the Gulf of Thailand and adjacent areas, has previously been identified as *Saurida undosquamis* (Chamason and Phenpraphai, 2020; Seah in Seah *et al.*, 2021). It is part of a complex of related species of *Saurida* (Inoue and Nakabo, 2006) and genetic work is needed to verify the identity of specimens collected from the Gulf of Thailand.

Order Lophiformes

Family Antennariidae

***Abantennarius nummifer* (Cuvier, 1817)**—Pl. 2C; IR: Pietsch & Arnold (2020). Specimen examined: ST-11, THNHM-F20737, 1 specimen, 18 mm SL.

Order Beryciformes

Family Holocentridae

***Sargocentron rubrum* (Forsskål, 1775)**—Pl. 2D; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20554, 1 specimen, 164 mm SL; ST-12,

THNHM-F20295, 1 specimen, 157 mm SL; ST-11, THNHM-F20223, 1 specimen, 147 mm SL; ST-17, THNHM-F20440, 1 specimen, 161 mm SL; ST-10, THNHM-F20337, 1 specimen, 139 mm SL.

Order Gasterosteiformes

Family Syngnathidae

Hippocampus kuda Bleeker, 1852—Pl. 2E; IR: Paulus (1999). Specimen examined: ST-13, THNHM-F20029, 1 specimen, 127 mm SL.

Trachyrhamphus bicoarctatus (Bleeker, 1857)—Pl. 2F; IR: Paulus (1999). Specimens examined: ST-6, THNHM-F20540, 1 specimen, 355 mm SL; ST-7, THNHM-F20392, 1 specimen, 295 mm SL.

Family Fistulariidae

Fistularia petimba Lacepède, 1803—Pl. 2G; IR: Satapoomin and Kimura in Kimura *et al.* (2018). Specimens examined: ST-15, THNHM-F20063, F20073, F20080, 3 specimens, 265–346 mm SL; ST-8, THNHM-F20106, F20125, F20847, 3 specimens, 170–284 mm SL; ST-12, THNHM-F20306, F20329, 2 specimens, 307–400 mm SL; ST-11, THNHM-F20254, F20265, 2 specimens, 227–359 mm SL; ST-17, THNHM-F20449, F20477, 2 specimens, 280–309 mm SL; ST-16, THNHM-F20141, F20182, 2 specimens, 121–394 mm SL; ST-10, THNHM-F20366–68, 3 specimens, 289–395 mm SL.

Family Centriscidae

Centriscus scutatus Linnaeus, 1758—Pl. 2H; IR: Paulus (1999). Specimens examined: ST-7, THNHM-F20719, 1 specimen, 86 mm SL; ST-8, THNHM-F20849–50, 2 specimens, 56–89 mm SL.

Order Scorpaeniformes

Family Dactylopteridae

Dactyloptena orientalis (Cuvier, 1829)—Pl. 2I; IR: Motomura in Yoshida *et al.* (2013). Specimen examined: ST-12, THNHM-F20305, 1 specimen, 127 mm SL.

Family Scorpaenidae

Apistus carinatus (Bloch and Schneider, 1801)—Pl. 2J; IR: Motomura in Yoshida *et al.* (2013). Specimen examined: ST-A, THNHM-F20205, 1 specimen, 97 mm SL.

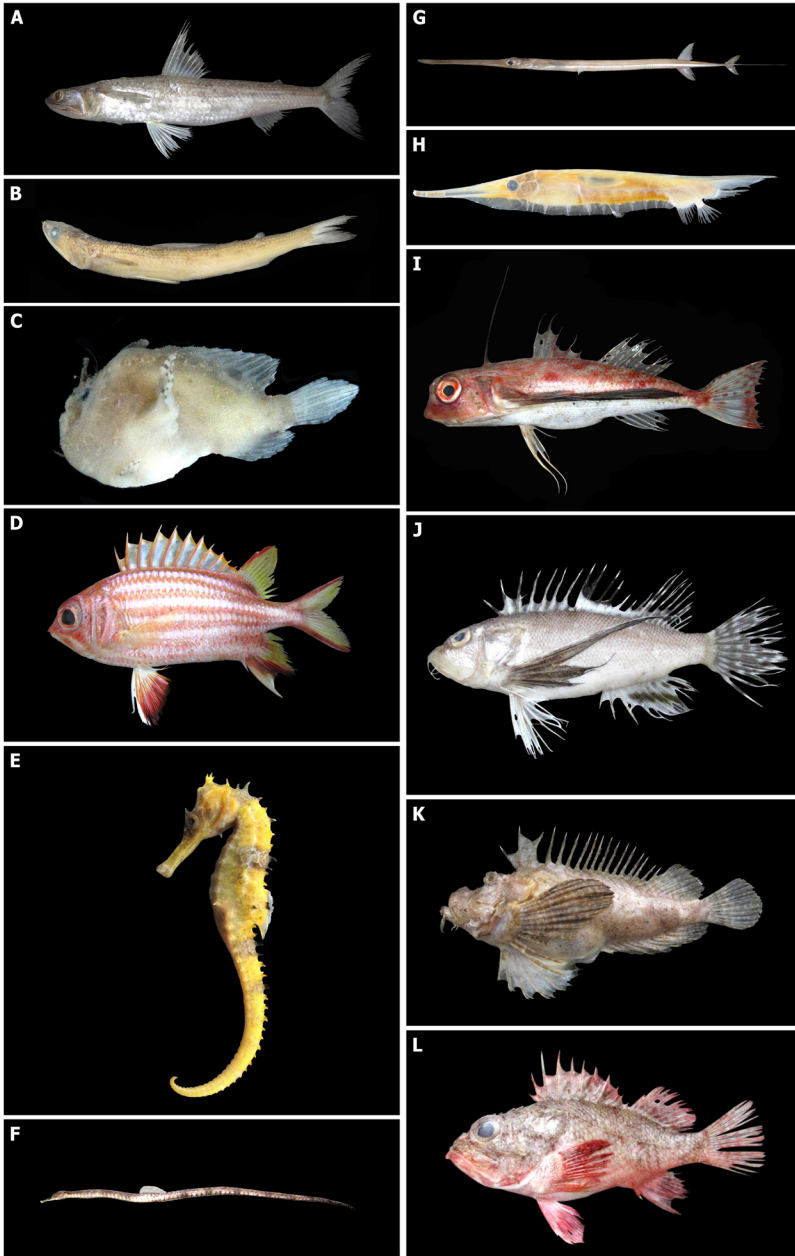


Plate 2. *Saurida macrolepis* (THNHM-F20299, 182 mm SL, FS); B. *Saurida macrolepis* (THNHM-F20271, 175 mm SL, PS); C. *Abantennarius nummifer* (THNHM-F20737, 18 mm SL, PS); D. *Sargocentron rubrum* (THNHM-F20295, 157 mm SL, FS); E. *Hippocampus kuda* (THNHM-F20029, 127 mm SL, FS); F. *Trachyrhamphus bicoarctatus* (THNHM-F20392, 295 mm SL, FS); G. *Fistularia petimba* (THNHM-F20254, 359 mm SL, FS); H. *Centriscus scutatus* (THNHM-F20719, 86 mm SL, PS); I. *Dactyloptena orientalis* (THNHM-F20305, 127 mm SL, FS); J. *Apistus carinatus* (THNHM-F20205, 97 mm SL, FS); K. *Inimicus cuvieri* (THNHM-F20104, 178 mm SL, FS); L. *Neomerinthe procurva* (THNHM-F20247, 77 mm SL, FS).

***Inimicus cuvieri* (Gray, 1835)**—Pl. 2K; IR: Motomura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20521, 1 specimen, 163 mm SL; ST-7, THNHM-F20379, 1 specimen, 106 mm SL; ST-8, THNHM-F20104, 1 specimen, 178 mm SL.

***Neomerinthe procurva* Chen, 1981**—Pl. 2L; IR: Motomura in Yoshida *et al.* (2013). Specimen examined: ST-11, THNHM-F20247, 1 specimen, 77 mm SL.

***Pterois russelli* Bennett, 1831**—Pl. 3A; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20062, 1 specimen, 141 mm SL; ST-6, THNHM-F20527, 1 specimen, 158 mm SL; ST-7, THNHM-F20425, 1 specimen, 118 mm SL; ST-A, THNHM-F20211, 1 specimen, 137 mm SL; ST-13, THNHM-F20031, F20035, 2 specimens, 110–124 mm SL; ST-12, THNHM-F20313, 1 specimen, 114 mm SL; ST-11, THNHM-F20222, 1 specimen, 122 mm SL; ST-17, THNHM-F20470, 1 specimen, 80 mm SL.

***Scorpaenopsis neglecta* Heckel, 1837**—Pl. 3B; IR: Motomura in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20414–16, 3 specimens, 103–115 mm SL; ST-12, THNHM-F20312, 1 specimen, 102 mm SL.

Family **Platycephalidae**

***Elates ransonnetii* (Steindachner, 1876)**—Pl. 3C; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: THNHM-F20859, 1 specimen, 129 mm SL; ST-13, THNHM-F20025–27, F20038, F20682, 5 specimens, 127–136 mm SL; ST-12, THNHM-F20310, F20323–25, 4 specimens, 135–147 mm SL; ST-11, THNHM-F20240, F20277–82, 7 specimens, 99–138 mm SL; ST-17, THNHM-F20465–69, F20478–89, 17 specimens, 121–141 mm SL; ST-16, THNHM-F20143, F20166–69, 5 specimens, 118–137 mm SL.

***Inegocia japonica* (Cuvier, 1829)**—Pl. 3D; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20383, F20412, 2 specimens, 119–155 mm SL; ST-8, THNHM-F20860, 1 specimen, 67 mm SL.

***Insidiator macracanthus* (Bleeker, 1869)**—Pl. 3E; IR: Imamura and Hoese (2020). Specimens examined: ST-7, THNHM-F20384, 1 specimen, 132 mm SL; ST-13, THNHM-F20021, 1 specimen, 129 mm SL; ST-10, THNHM-F20349, 1 specimen, 160 mm SL.

***Kumococius rodericensis* (Cuvier, 1829)**—Pl. 3F; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-13, THNHM-F20022, F20024, 2 specimens, 110–131 mm SL; ST-12, THNHM-F20307, F20326, F20331–32, F20940, 5 specimens, 63–145 mm SL; ST-11, THNHM-F20248, F20256–64, 10 specimens, 74–139 mm SL; ST-17, THNHM-F20452–60,

F20471, F20510, 11 specimens, 113–141 mm SL.

***Rogadius pristiger* (Cuvier, 1829)**—Pl. 3G; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-13, THNHM-F20020, F20023, 2 specimens, 97–124 mm SL.

Order Perciformes

Family Serranidae

***Cephalopholis boenak* (Bloch, 1790)**—Pl. 3H; IR: Motomura and Yusuf in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20518, 1 specimen, 73 mm SL; ST-7, THNHM-F20376, 1 specimen, 116 mm SL.

***Epinephelus areolatus* (Forsskål, 1775)**—Pl. 3I; IR: Yusuf in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20561, 1 specimen, 167 mm SL; ST-7, THNHM-F20382, 1 specimen, 223 mm SL; ST-8, THNHM-F20107, 1 specimen, 76 mm SL; ST-13, THNHM-F20005, F20007, 2 specimens, 97–111 mm SL; ST-12, THNHM-F20303, 1 specimen, 87 mm SL; ST-11, THNHM-F20243, 1 specimen, 159 mm SL; ST-17, THNHM-F20445, 1 specimen, 122 mm SL; ST-16, THNHM-F20145, F20185, 2 specimens, 91–181 mm SL; ST-10, THNHM-F20355, F20359, 2 specimens, 108–216 mm SL.

***Epinephelus sexfasciatus* (Valenciennes, 1828)**—Pl. 3J; IR: Yusuf in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20049, 1 specimen, 111 mm SL; ST-8, THNHM-F20096, F20117, 2 specimens, 99–102 mm SL; ST-A, THNHM-F20204, 1 specimen, 151 mm SL; ST-13, THNHM-F20014, 1 specimen, 113 mm SL; ST-12, THNHM-F20302, 1 specimen, 120 mm SL; ST-11, THNHM-F20241, 1 specimen, 199 mm SL; ST-17, THNHM-F20505, 1 specimen, 99 mm SL; ST-16, THNHM-F20149, 1 specimen, 139 mm SL.

***Plectropomus maculatus* (Bloch, 1790)**—Pl. 3K; IR: Motomura in Yoshida *et al.* (2013). Specimen examined: ST-7, THNHM-F20381, 1 specimen, 329 mm SL.

Family Priacanthidae

***Priacanthus tayenus* Richardson, 1846**—Pl. 3L; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20051, 1 specimen, 99 mm SL; ST-8, THNHM-F20094, 1 specimen, 111 mm SL; ST-A, THNHM-F20199, 1 specimen, 132 mm SL; ST-11, THNHM-F20237, 1 specimen, 135 mm SL; ST-17, THNHM-F20476, 1 specimen, 128 mm SL; ST-16, THNHM-F20142, 1 specimen, 121 mm SL; ST-9, THNHM-F20566, 1 specimen, 127 mm SL.

Family Apogonidae

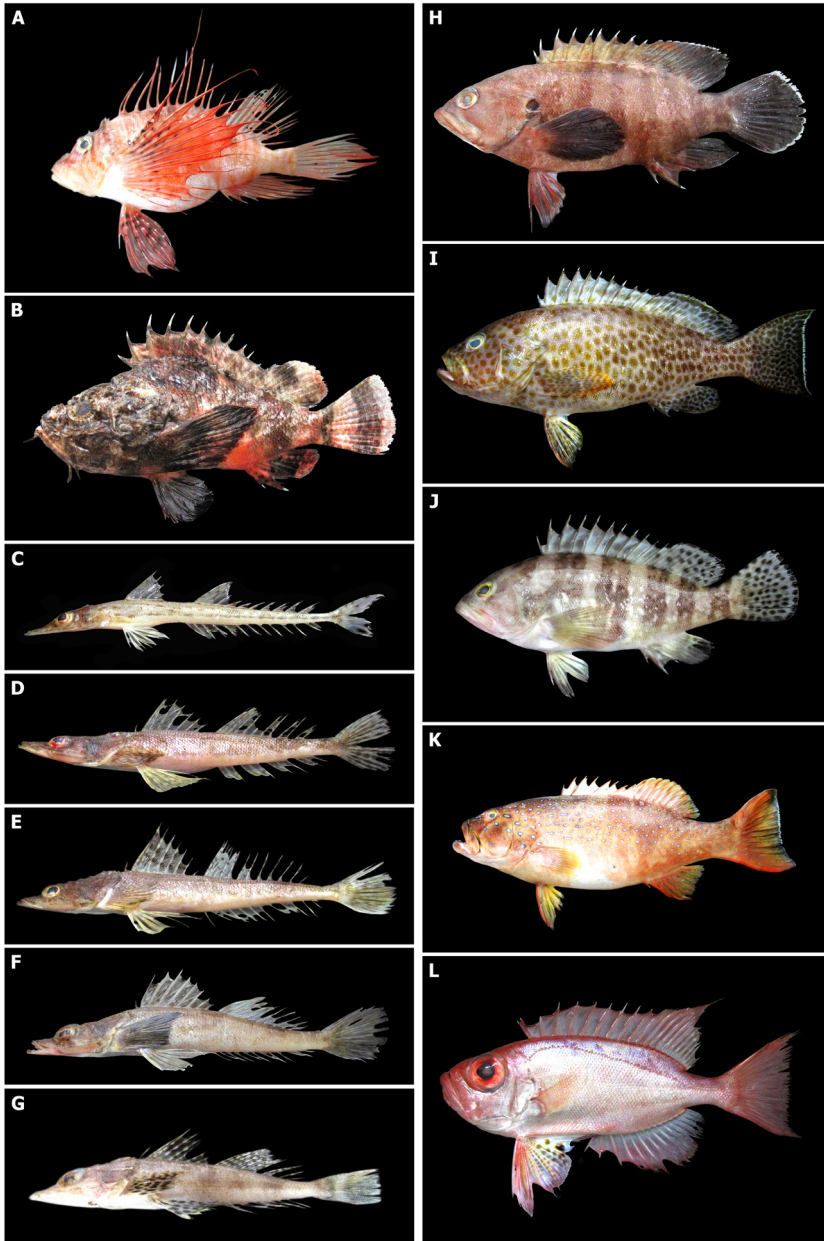


Plate 3. A. *Pterois russelli* (THNHM-F20062, 141 mm SL, FS); B. *Scorpaenopsis neglecta* (THNHM-F20312, 102 mm SL, FS); C. *Elates ransonnettii* (THNHM-F20240, 130 mm SL, FS); D. *Inegocia japonica* (THNHM-F20383, 155 mm SL, FS); E. *Insidiator macracanthus* (THNHM-F20384, 132 mm SL, FS); F. *Kumococius rodericensis* (THNHM-F20248, 139 mm SL, FS); G. *Rogadius pristiger* (THNHM-F20020, 124 mm SL, FS); H. *Cephalopholis boenak* (THNHM-F20376, 116 mm SL, FS); I. *Epinephelus areolatus* (THNHM-F20382, 223 mm SL, FS); J. *Epinephelus sexfasciatus* (THNHM-F20149, 139 mm SL, FS); K. *Plectropomus maculatus* (THNHM-F20381, 329 mm SL, FS); L. *Priacanthus tayenus* (THNHM-F20199, 132 mm SL, FS).

***Jaydia striatodes* (Gon, 1997)**—Pl. 4A; IR: Yoshida in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20863, 1 specimen, 59 mm SL; ST-A, THNHM-F20709–11, 3 specimens, 61–82 mm SL; ST-17, THNHM-F20911–12, 2 specimens, 51–76 mm SL.

***Jaydia truncata* (Bleeker, 1855)**—Pl. 4B; IR: Yoshida in Motomura *et al.* (2017). Specimen examined: ST-17, THNHM-F20913, 1 specimen, 55 mm SL.

***Ostorhinchus fasciatus* (Shaw, 1790)**—Pl. 4C; IR: Yoshida in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20827–34, 8 specimens, 47–81 mm SL; ST-11, THNHM-F20728–29, 2 specimens, 48–72 mm SL.

***Ostorhinchus pleuron* (Fraser, 2005)**—Pl. 4D; IR: Yoshida in Motomura *et al.* (2017). Specimens examined: ST-15, THNHM-F20589–99, F20602, 12 specimens, 41–56 mm SL; ST-12, THNHM-F20915, 1 specimen, 58 mm SL; ST-11, THNHM-F20768–73, 6 specimens, 32–58 mm SL; ST-9, THNHM-F20727, 1 specimen, 59 mm SL.

Family Echeineidae

***Echeineis naucrates* Linnaeus, 1758**—Pl. 4E; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20057–58, 2 specimens, 228–233 mm SL; ST-13, THNHM-F20028, 1 specimen, 326 mm SL; ST-12, THNHM-F20311, 1 specimen, 464 mm SL; ST-16, THNHM-F20126, 1 specimen, 387 mm SL; ST-10, THNHM-F20351–52, 2 specimens, 455–554 mm SL.

Family Rachycentridae

***Rachycentron canadum* (Linnaeus, 1766)**—Pl. 4F; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20526, 1 specimen, 235 mm SL; ST-A, THNHM-F20208, 1 specimen, 326 mm SL.

Family Carangidae

***Alectis ciliaris* (Bloch, 1787)**—Pl. 4G; IR: Kimura in Yoshida *et al.* (2013). Specimen examined: ST-6, THNHM-F20514, 1 specimen, 84 mm SL.

***Alepes melanoptera* (Swainson, 1839)**—Pl. 4H; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-A, THNHM-F20190, 1 specimen, 162 mm SL; ST-12, THNHM-F20287, 1 specimen, 220 mm SL; ST-11, THNHM-F20228, 1 specimen, 178 mm SL; ST-10, THNHM-F20347, 1 specimen, 226 mm SL.

***Atropus atropus* (Bloch and Schneider, 1801)**—Pl. 4I; IR: Kimura in Yoshida *et al.* (2013).

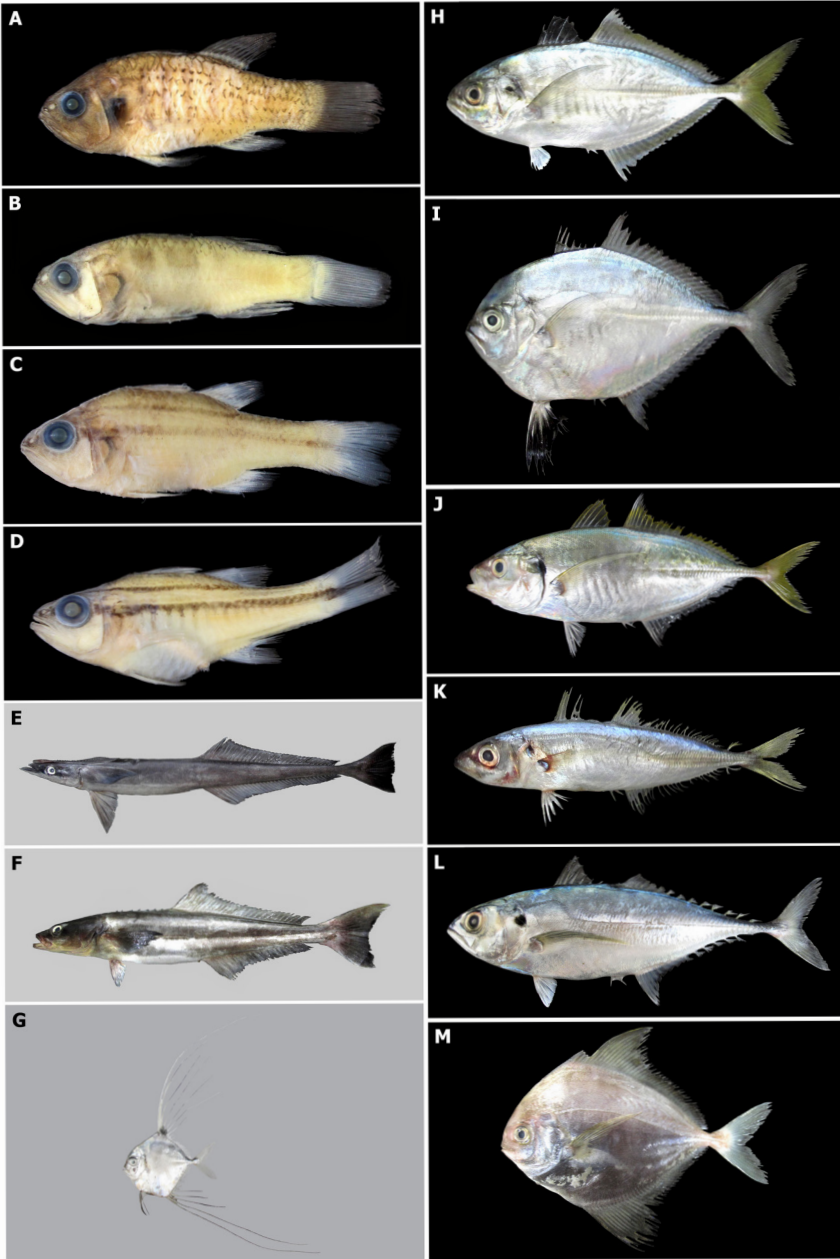


Plate 4. A. *Jaydia striatodes* (THNHM-F20709, 82 mm SL, PS); B. *Jaydia truncata* (THNHM-F20913, 55 mm SL, PS); C. *Ostorhinchus fasciatus* (THNHM-F20728, 72 mm SL, PS); D. *Ostorhinchus pleuron* (THNHM-F20589, 55 mm SL, PS); E. *Echeneis naucrates* (THNHM-F20311, 464 mm SL, FS); F. *Rachycentron canadum* (THNHM-F20208, 326 mm SL, FS); G. *Alectis ciliaris* (THNHM-F20514, 84 mm SL, FS); H. *Alepes melanoptera* (THNHM-F20190, 162 mm SL, FS); I. *Atropus atropus* (THNHM-F20202, 121 mm SL, FS); J. *Atule mate* (THNHM-F20041, 149 mm SL, FS); K. *Decapterus russelli* (THNHM-F20377, 111 mm SL, FS); L. *Megalaspis cordyla* (THNHM-F20093, 156 mm SL, FS); M. *Parastromateus niger* (THNHM-F20046, 104 mm SL, FS).

Specimen examined: ST-A, THNHM-F20202, 1 specimen, 121 mm SL.

***Atule mate* (Cuvier, 1833)**—Pl. 4J; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20041, 1 specimen, 149 mm SL; ST-6, THNHM-F20516, 1 specimen, 141 mm SL; ST-A, THNHM-F20189, 1 specimen, 104 mm SL; ST-13, THNHM-F20006, 1 specimen, 146 mm SL; ST-9, THNHM-F20564, 1 specimen, 113 mm SL.

***Decapterus russelli* (Rüppell, 1830)**—Pl. 4K; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20377, 1 specimen 111 mm SL; ST-17, THNHM-F20438, 1 specimen, 153 mm SL.

***Megalaspis cordyla* (Linnaeus, 1758)**—Pl. 4L; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20093, F20109–16, 9 specimens, 100–171 mm SL.

***Parastromateus niger* (Bloch, 1795)**—Pl. 4M; IR: Kimura in Yoshida *et al.* (2013). Specimen examined: ST-15, THNHM-F20046, 1 specimen, 104 mm SL.

***Platyaranx malabaricus* (Bloch and Schneider, 1801)**—Pl. 5A; IR: Kimura *et al.* (2022). Specimens examined: ST-15, THNHM-F20056, F20072, 2 specimens, 105–113mm SL; ST-8, THNHM-F20086, 1 specimen, 114 mm SL; ST-16, THNHM-F20132, F20183, 2 specimens, 88–120 mm SL; ST-11, THNHM-F20230, 1 specimen, 164 mm SL; ST-6, THNHM-F20512, 1 specimen, 81 mm SL; ST-12, THNHM-F20914, 1 specimen, 98 mm SL.

***Scomberoides tol* (Cuvier, 1832)**—Pl. 5B; IR: Kimura in Yoshida *et al.* (2013). Specimen examined: ST-8, THNHM-F20084, 1 specimen, 152 mm SL.

***Scyris indica* (Rüppell, 1830)**—Pl. 5C; IR: Kimura *et al.* (2022). Specimens examined: ST-8, THNHM-F20856–57, 2 specimens, 65–95 mm SL.

***Selar crumenophthalmus* (Bloch, 1793)**—Pl. 5D; IR: Kimura in Kimura *et al.* (2018). Specimens examined: ST-7, THNHM-F20401, 1 specimen, 185 mm SL; ST-17, THNHM-F20504, 1 specimen, 110 mm SL; ST-10, THNHM-F20336, F20343, 2 specimens, 140–197 mm SL.

***Selaroides leptolepis* (Cuvier, 1833)**—Pl. 5E; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20047, F20081, 2 specimens, 97–110 mm SL; ST-7, THNHM-F20373, F20424, 2 specimens, 90–94 mm SL.

***Seriolina nigrofasciata* (Rüppell, 1829)**—Pl. 5F; IR: Kimura in Yoshida *et al.* (2013). Spec-

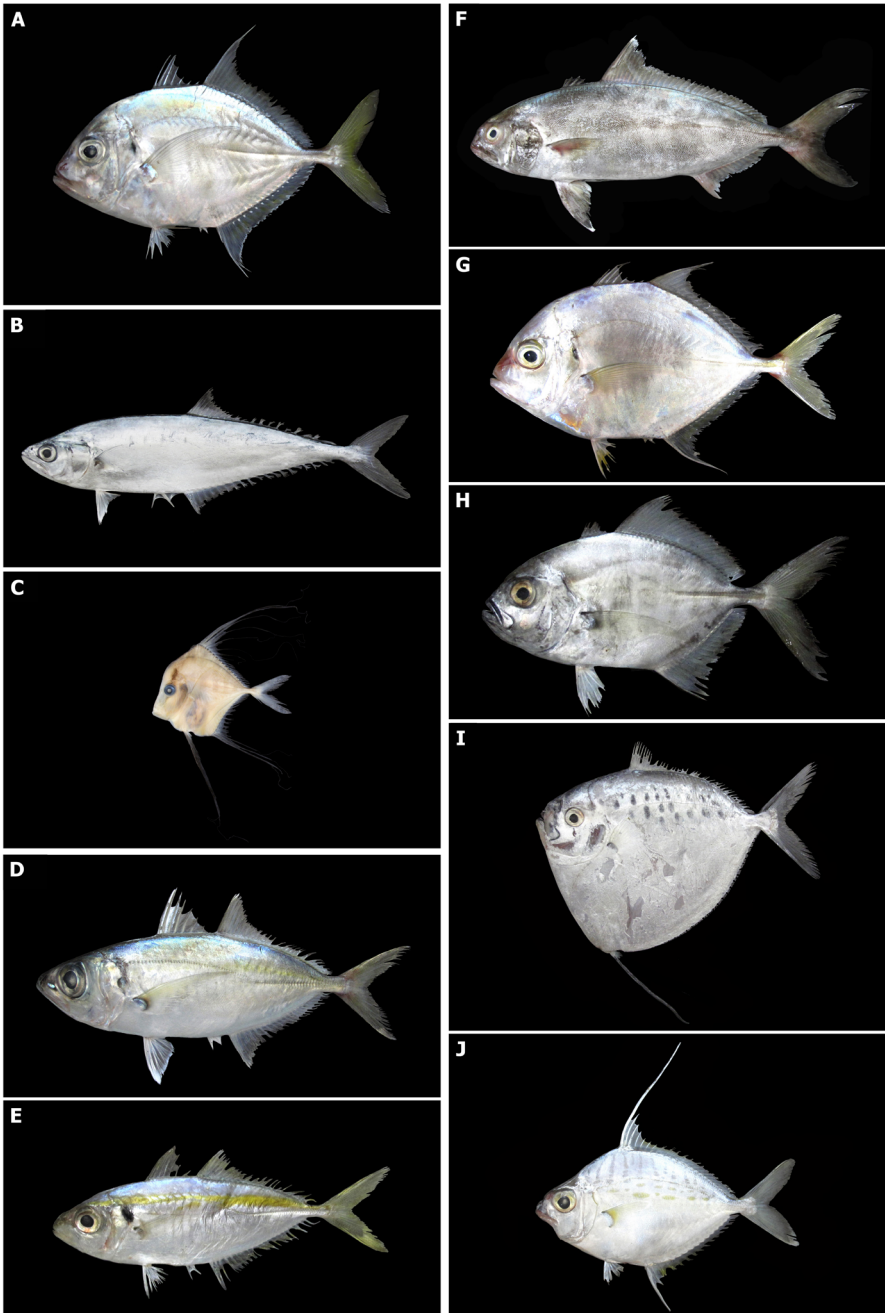


Plate 5. A. *Platycaranx malabaricus* (THNHM-F20132, 120 mm SL, FS); B. *Scomberoides tol* (THNHM-F20084, 152 mm SL, FS); C. *Scyris indica* (THNHM-F20856, 65 mm SL, PS); D. *Selar crumenophthalmus* (THNHM-F20343, 197 mm SL, FS); E. *Selaroides leptolepis* (THNHM-F20373, 94 mm SL, FS); F. *Seriolina nigrofasciata* (THNHM-F20298, 271 mm SL, FS); G. *Turrum coeruleopinnatus* (THNHM-F20010, 106 mm SL, FS); H. *Uraspis uraspis* (THNHM-F20234, 126 mm SL, FS); I. *Mene maculata* (THNHM-F20233, 129 mm SL, FS); J. *Aurigequula longispinis* (THNHM-F20138, 131 mm SL, FS).

imen examined: ST-12, THNHM-F20298, 1 specimen, 271 mm SL.

***Turrum coeruleopinnatus* (Rüppell, 1830)**—Pl. 5G; IR: Kimura *et al.* (2022). Specimens examined: ST-13, THNHM-F20679, 1 specimen, 61 mm SL, ST-13, THNHM-F20010, 1 specimen, 106 mm SL; ST-17, THNHM-F20446, 1 specimen, 151 mm SL.

***Uraspis uraspis* (Günther, 1860)**—Pl. 5H; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-11, THNHM-F20234, F20273–74, 3 specimens, 126–163 mm SL.

Family Menidae

***Mene maculata* (Bloch and Schneider, 1801)**—Pl. 5I; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-11, THNHM-F20233, F20268–69, 3 specimens, 99–165 mm SL.

Family Leiognathidae

***Aurigequula longispinis* (Valenciennes, 1835)**—Pl. 5J; IR: Psomadakis *et al.* (2019). Specimens examined: ST-11, THNHM-F20229, 1 specimen, 128 mm SL; ST-16, THNHM-F20138, F20156–58, 4 specimens, 120–131 mm SL.

***Deveximentum megalolepis* (Mochizuki and Hayashi, 1989)**—Pl. 6A; IR: Kimura in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20854–55, 2 specimens, 44–49 mm SL.

***Equulites oblongus* (Valenciennes, 1835)**—Pl. 6B; IR: Suzuki in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20817–26, 10 specimens, 55–69 mm SL; ST-A, THNHM-F20685–92, 8 specimens, 58–70 mm SL; ST-13, THNHM-F20633–44, 12 specimens, 33–64 mm SL; ST-11, THNHM-F20778–82, 5 specimens, 52–65 mm SL; ST-17, THNHM-F20908–10, 3 specimens, 49–57 mm SL; ST-16, THNHM-F20886–88, 3 specimens, 58–67 mm SL.

***Eubleekeria jonesi* (James, 1971)**—Pl. 6C; IR: Kimura in Yoshida *et al.* (2013). Specimen examined: ST-8, THNHM-F20858, 1 specimen, 84 mm SL.

***Gazza minuta* (Bloch, 1795)**—Pl. 6D; IR: Kimura in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20085, F20123, 2 specimens, 89–91 mm SL; ST-A, THNHM-F20702–03, 2 specimens, 81–82 mm SL; ST-12, THNHM-F20941–43, 3 specimens, 95–97 mm SL; ST-9, THNHM-F20565, 1 specimen, 111 mm SL.

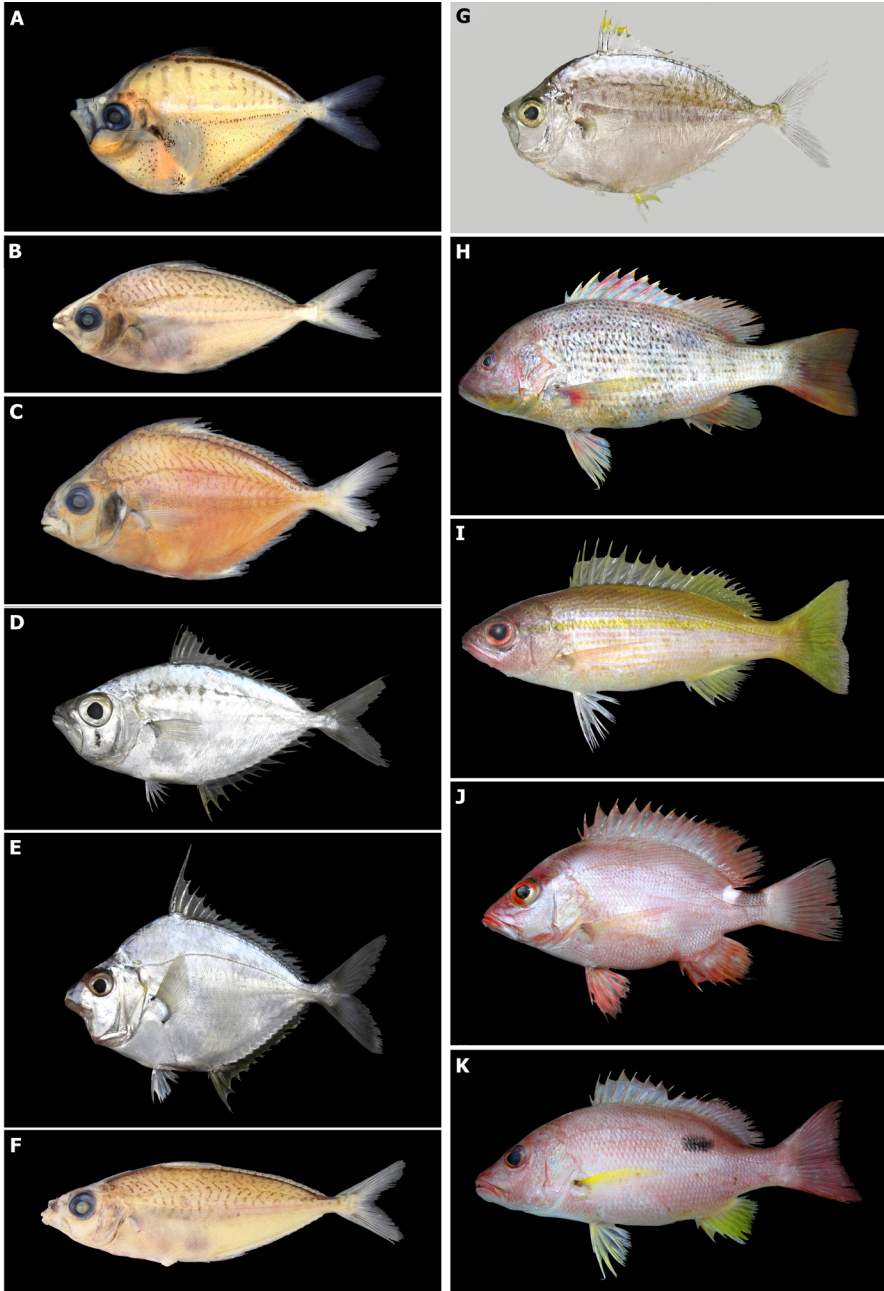


Plate 6. A. *Deveximentum megalolepis* (THNHM-F20854, 44 mm SL, PS); B. *Equulites oblongus* (THNHM-F20633, 64 mm SL, PS); C. *Eubleekeria jonesi* (THNHM-F20858, 84 mm SL, PS); D. *Gazza minuta* (THNHM-F20085, 89 mm SL, FS); E. *Leiognathus equula* (THNHM-F20095, 124 mm SL, FS); F. *Photolateralis stercorarius* (THNHM-F20720, 76 mm SL, PS); G. *Photopectoralis bindus* (THNHM-F20515, 68 mm SL, FS); H. *Lutjanus johnii* (THNHM-F20297, 299 mm SL, FS); I. *Lutjanus lutjanus* (THNHM-F20200, 113 mm SL, FS); J. *Lutjanus malabaricus* (THNHM-F20136, 96 mm SL, FS); K. *Lutjanus russellii* (THNHM-F20283, 184 mm SL, FS).

***Leiognathus equula* (Forsskål, 1775)**—Pl. 6E; IR: Seah in Motomura *et al.* (2021). Specimens examined: ST-8, THNHM-F20095, F20119, 2 specimens, 124–143 mm SL; ST-A, THNHM-F20196, 1 specimen, 97 mm SL.

***Photolateralis stercorarius* (Evermann & Seale, 1907)**—Pl. 6F; IR: Suzuki in Motomura *et al.* (2017). Specimens examined: ST-7, THNHM-F20720–21, 2 specimens, 76–81 mm SL.

***Photopectoralis bindus* (Valenciennes, 1835)**—Pl. 6G; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20617–31, 15 specimens, 35–46 mm SL; ST-6, THNHM-F20515, F20525, 2 specimens, 68–73 mm SL; ST-8, THNHM-F20796–804, F20811–16, 15 specimens, 46–71 mm SL; ST-A, THNHM-F20693–96, 4 specimens, 45–76 mm SL; ST-13, THNHM-F20645–61, 17 specimens, 34–48 mm SL; ST-12, THNHM-F20919–25, 7 specimens, 37–46 mm SL; ST-11, THNHM-F20738–54, 17 specimens, 38–57 mm SL; ST-17, THNHM-F20889–98, 10 specimens, 38–57 mm SL; ST-16, THNHM-F20876–82, 7 specimens, 36–62 mm SL; ST-10, THNHM-F20792–94, 3 specimens, 40–62 mm SL.

Family Lutjanidae

***Lutjanus johnii* (Bloch, 1792)**—Pl. 6H; IR: Muto in Motomura *et al.* (2017). Specimen examined: ST-12, THNHM-F20297, 1 specimen, 299 mm SL.

***Lutjanus lutjanus* Bloch, 1790**—Pl. 6I; IR: Muto in Motomura *et al.* (2017). Specimens examined: ST-8, THNHM-F20092, 1 specimen, 104 mm SL; ST-A, THNHM-F20200, F20216, 2 specimens, 93–113 mm SL; ST-9, THNHM-F20568, 1 specimen, 128 mm SL.

***Lutjanus malabaricus* (Bloch and Schneider 1801)**—Pl. 6J; IR: Muto in Motomura *et al.* (2017). Specimen examined: ST-16, THNHM-F20136, 1 specimen, 96 mm SL.

***Lutjanus russellii* (Bleeker, 1849)**—Pl. 6K; IR: Muto in Motomura *et al.* (2017). Specimens examined: ST-12, THNHM-F20283, 1 specimen, 184 mm SL; ST-10, THNHM-F20345, 1 specimen, 183 mm SL.

***Lutjanus vitta* (Quoy and Gaimard, 1842)**—Pl. 7A; IR: Muto in Motomura *et al.* (2017). Specimens examined: ST-7, THNHM-F20408, 1 specimen, 158 mm SL; ST-A, THNHM-F20195, 1 specimen, 120 mm SL; ST-13, THNHM-F20009, 1 specimen, 167 mm SL.

***Lutjanus xanthopinnis* Iwatsuki, Tanaka and Allen, 2015**—Pl. 7B; IR: Iwatsuki *et al.* (2015). Specimen examined: ST-17, THNHM-F20439, 1 specimen, 138 mm SL.

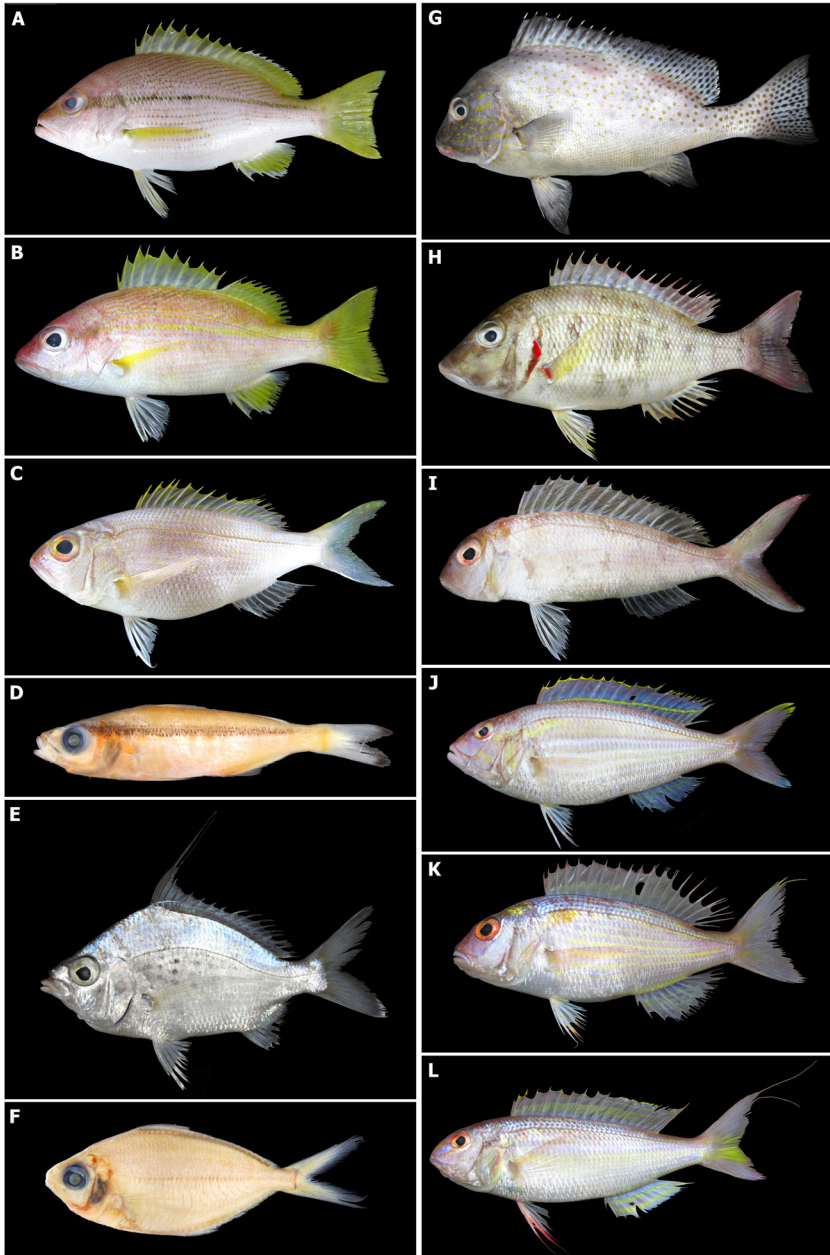


Plate 7. A. *Lutjanus vitta* (THNHM-F20009, 167 mm SL, FS); B. *Lutjanus xanthopinnis* (THNHM-F20439, 138 mm SL, FS); C. *Pristipomoides multidens* (THNHM-F20053, 101 mm SL, FS); D. *Pterocaesio chrysozona* (THNHM-F20582, 67 mm SL, PS); E. *Gerres filamentosus* (THNHM-F20140, 155 mm SL, FS); F. *Pentaprion longimanus* (THNHM-F20730, 78 mm SL, PS); G. *Diagramma picta picta* (THNHM-F20344, 260 mm SL, FS); H. *Lethrinus lentjan* (THNHM-F20232, 181 mm SL, FS); I. *Nemipterus furcosus* (THNHM-F20370, 142 mm SL, FS); J. *Nemipterus hexodon* (THNHM-F20127, 172 mm SL, FS); K. *Nemipterus japonicus* (THNHM-F20197, 95 mm SL, FS); L. *Nemipterus marginatus* (THNHM-F20130, 120 mm SL, FS).

Pristipomoides multidentis (Day, 1871)—Pl. 7C; IR: Campos in Motomura *et al.* (2017). Specimens examined: ST-15, THNHM-F20053, 1 specimen, 101 mm SL; ST-13, THNHM-F20684, 1 specimen, 63 mm SL.

Pterocaesio chrysozona (Cuvier, 1830)—Pl. 7D; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20582–88, 7 specimens, 35–67 mm SL.

Family Gerreidae

Gerres filamentosus Cuvier, 1829—Pl. 7E; IR: Kimura and Tafzilmeriam in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20520, 1 specimen, 163 mm SL; ST-A, THNHM-F20713, 1 specimen, 85 mm SL; ST-16, THNHM-F20140, F20186, 2 specimens, 122–155 mm SL.

Pentaprion longimanus (Cantor, 1849)—Pl. 7F; IR: Kimura and Tafzilmeriam in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20603–09, 7 specimens, 33–88 mm SL; ST-8, THNHM-F20805–10, 6 specimens, 44–73 mm SL; ST-A, THNHM-F20697–700, 4 specimens, 53–77 mm SL; ST-13, THNHM-F20671–77, 7 specimens, 54–83 mm SL; ST-12, THNHM-F20929–31, 3 specimens, 57–65 mm SL; ST-11, THNHM-F20730–35, 6 specimens, 69–81 mm SL; ST-17, THNHM-F20902–05, 4 specimens, 66–83 mm SL; ST-16, THNHM-F20874–75, 2 specimens, 78–86 mm SL; ST-10, THNHM-F20785–89, 5 specimens, 37–64 mm SL.

Family Haemulidae

Diagramma picta picta (Thunberg, 1792)—Pl. 7G; IR: Shibukawa in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20388, 1 specimen, 131 mm SL; ST-10, THNHM-F20344, 1 specimen, 260 mm SL.

Family Lethrinidae

Lethrinus lentjan (Lacepède, 1802)—Pl. 7H; IR: Shibukawa in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20413, F20419, 2 specimens, 182–187 mm SL; ST-13, THNHM-F20008, 1 specimen, 163 mm SL; ST-11, THNHM-F20232, 1 specimen, 181 mm SL; ST-10, THNHM-F20334, F20360–61, 3 specimens, 127–197 mm SL.

Family Nemipteridae

Nemipterus furcosus (Valenciennes, 1830)—Pl. 7I; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20537–38, 2 specimens, 162–167 mm SL; ST-7, THNHM-F20370, F20431, 2 specimens, 142–164 mm SL.

Nemipterus hexodon (Quoy and Gaimard, 1824)—Pl. 7J; IR: Motomura in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20083, 1 specimen, 152 mm SL; ST-A, THNHM-F20193, 1 specimen, 147 mm SL; ST-12, THNHM-F20291, 1 specimen, 160 mm SL; ST-11, THNHM-F20244, F20276, 2 specimens, 90–95 mm SL; ST-17, THNHM-F20492, 1 specimen, 128 mm SL; ST-16, THNHM-F20127, F20165, F20178, 3 specimens, 118–172 mm SL.

Nemipterus japonicus (Bloch, 1791)—Pl. 7K; IR: Matsunuma in Kimura *et al.* (2018). Specimens examined: ST-A, THNHM-F20197, 1 specimen, 95 mm SL; ST-12, THNHM-F20292, 1 specimen, 164 mm SL.

Nemipterus marginatus (Valenciennes, 1830)—Pl. 7L; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20045, F20074–75, 3 specimens, 77–133 mm SL; ST-A, THNHM-F20198, 1 specimen, 91 mm SL; ST-13, THNHM-F20011, F20017, 2 specimens, 93–115 mm SL; ST-12, THNHM-F20284, F20288, F20327, F20330, 4 specimens, 75–124 mm SL; ST-11, THNHM-F20238, 1 specimen, 115 mm SL; ST-17, THNHM-F20493–95, F20498, 4 specimens, 85–115 mm SL; ST-16, THNHM-F20130, F20164, F20179–81, 5 specimens, 94–128 mm SL; ST-10, THNHM-F20340, F20362, 2 specimens, 129–130 mm SL.

Nemipterus nematophorus (Bleeker, 1854)—Pl. 8A; IR: Motomura in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20054, F20079, 2 specimens, 120–127 mm SL; ST-12, THNHM-F20289, F20321, 2 specimens, 109–121 mm SL; ST-11, THNHM-F20236, F20275, 2 specimens, 130–132 mm SL; ST-17, THNHM-F20496–97, 2 specimens, 139–143 mm SL; ST-16, THNHM-F20128, F20159–61, F20173, 5 specimens, 95–143 mm SL.

Nemipterus nemurus (Bleeker, 1857)—Pl. 8B; IR: Matsunuma in Kimura *et al.* (2018). Specimens examined: ST-6, THNHM-F20535, F20539, 2 specimens, 156–165 mm SL; ST-13, THNHM-F20019, 1 specimen, 144 mm SL; ST-17, THNHM-F20501, 1 specimen, 109 mm SL; ST-10, THNHM-F20342, F20363, 2 specimens, 132–169 mm SL; ST-9, THNHM-F20567, F20569, 2 specimens, 142–160 mm SL.

Nemipterus tambuloides (Bleeker, 1853)—Pl. 8C; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20044, 1 specimen, 98 mm SL; ST-17, THNHM-F20503, 1 specimen, 186 mm SL; ST-16, THNHM-F20129, F20162–63, 3 specimens, 160–171 mm SL.

Pentapodus setosus (Valenciennes, 1830)—Pl. 8D; IR: Matsunuma in Yoshida *et al.* (2013).

Specimens examined: ST-7, THNHM-F20371, F20380, 2 specimens, 67–134 mm SL.

***Scolopsis monogramma* (Cuvier, 1830)**—Pl. 8E; IR: Shibukawa in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20530, 1 specimen, 177 mm SL; ST-7, THNHM-F20372, 1 specimen, 150 mm SL.

***Scolopsis taenioptera* (Cuvier, 1830)**—Pl. 8F; IR: Shibukawa in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20042, 1 specimen, 125 mm SL; ST-6, THNHM-F20559, 1 specimen, 181 mm SL; ST-7, THNHM-F20398–99, F20405, F20417–18, F20430, 6 specimens, 97–180 mm SL; ST-8, THNHM-F20088, 1 specimen, 128 mm SL; ST-A, THNHM-F20191, 1 specimen, 120 mm SL; ST-13, THNHM-F20012, F20030, 2 specimens, 79–106 mm SL; ST-12, THNHM-F20293, 1 specimen, 192 mm SL; ST-11, THNHM-F20231, 1 specimen, 116 mm SL; ST-17, THNHM-F20491, 1 specimen, 110 mm SL; ST-16, THNHM-F20134, 1 specimen, 128 mm SL; ST-10, THNHM-F20335, 1 specimen, 145 mm SL.

Family Mullidae

***Parupeneus heptacanthus* (Lacepède, 1802)**—Pl. 8G; IR: Tafzilmeriam in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20369, F20400, F20406, 3 specimens, 137–184 mm SL.

***Upeneus guttatus* (Day, 1868)**—Pl. 8H; IR: Kimura in Matsunuma *et al.* (2011). Specimens examined: ST-15, THNHM-F20043, F20069–71, 4 specimens, 78–96 mm SL; ST-6, THNHM-F20543–51, 9 specimens, 73–125 mm SL; ST-7, THNHM-F20407, F20432–34, 4 specimens, 92–107 mm SL; ST-8, THNHM-F20100, 1 specimen, 79 mm SL; ST-13, THNHM-F20016, 1 specimen, 107 mm SL; ST-12, THNHM-F20290, F20328, 2 specimens, 93–110 mm SL; ST-11, THNHM-F20224, F20266, 2 specimens, 86–97 mm SL; ST-17, THNHM-F20506–07, 2 specimens, 73–80 mm SL; ST-16, THNHM-F20139, F20187–88, 3 specimens, 105–118 mm SL; ST-10, THNHM-F20339, F20364, 2 specimens, 103–130 mm SL; ST-9, THNHM-F20570–71, 2 specimens, 88–113 mm SL.

***Upeneus sulphureus* Cuvier, 1829**—Pl. 8I; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20091, 1 specimen, 99 mm SL; ST-11, THNHM-F20246, 1 specimen, 108 mm SL.

***Upeneus tragula* Richardson, 1846**—Pl. 8J; IR: Tafzilmeriam in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20552–53, 2 specimens, 176–189 mm SL; ST-7, THNHM-F20411, 1 specimen, 172 mm SL; ST-13, THNHM-F20015, 1 specimen, 165 mm SL; ST-11, THNHM-F20221, 1 specimen, 152 mm SL.

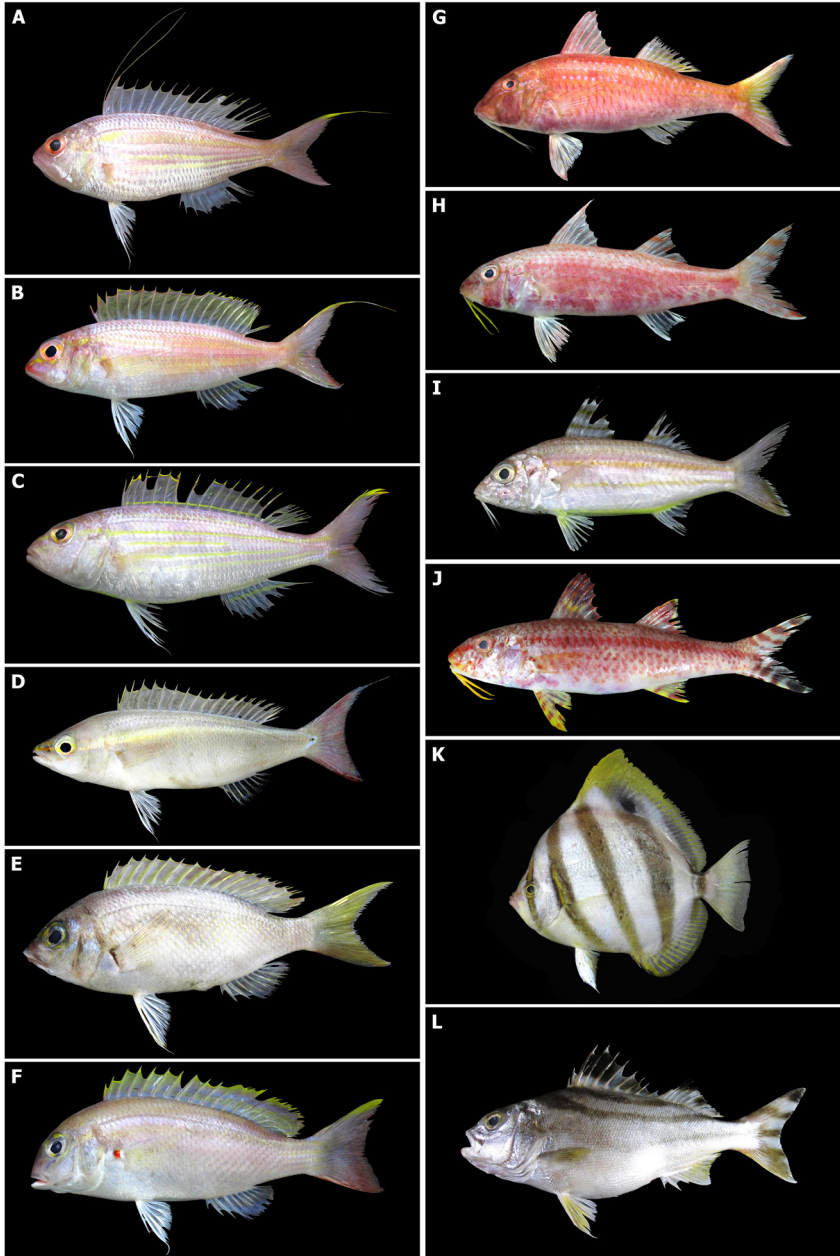


Plate 8. A. *Nemipterus nematophorus* (THNHM-F20236, 132 mm SL, FS); B. *Nemipterus nemurus* (THNHM-F20342, 132 mm SL, FS); C. *Nemipterus tambuloides* (THNHM-F20129, 160 mm SL, FS); D. *Pentapodus setosus* (THNHM-F20380, 134 mm SL, FS); E. *Scolopsis monogramma* (THNHM-F20372, 150 mm SL, FS); F. *Scolopsis taenioptera* (THNHM-F20134, 128 mm SL, FS); G. *Parupeneus heptacanthus* (THNHM-F20369, 173 mm SL, FS); H. *Upeneus guttatus* (THNHM-F20139, 105 mm SL, FS); I. *Upeneus sulphureus* (THNHM-F20091, 99 mm SL, FS); J. *Upeneus tragula* (THNHM-F20015, 165 mm SL, FS); K. *Parachaetodon ocellatus* (THNHM-F20150, 111 mm SL, FS); L. *Terapon jarbua* (THNHM-F20004, 199 mm SL, FS).

Family Chaetodontidae

Parachaetodon ocellatus (Cuvier, 1831)—Pl. 8K; IR: Yusuf in Yoshida *et al.* (2013). Specimens examined: ST-17, THNHM-F20447, F20461–64, 5 specimens, 94–107 mm SL; ST-16, THNHM-F20150, F20174, 2 specimens, 97–111 mm SL.

Family Terapontidae

Terapon jarbua (Forsskål, 1775)—Pl. 8L; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-A, THNHM-F20192, 1 specimen, 187 mm SL; ST-13, THNHM-F20004, 1 specimen, 199 mm SL.

Terapon theraps Cuvier, 1829—Pl. 9A; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20426, 1 specimen, 77 mm SL; ST-8, THNHM-F20098, F20118, 2 specimens, 77–84 mm SL; ST-A, THNHM-F20194, F20708, 2 specimens, 68–78 mm SL; ST-11, THNHM-F20225, 1 specimen, 119 mm SL; ST-16, THNHM-F20133, 1 specimen, 79 mm SL; ST-10, THNHM-F20338, 1 specimen, 79 mm SL.

Family Labridae

Choerodon typus (Bleeker, 1856)—Pl. 9B; IR: Gomon (2017). Specimens examined: ST-15, THNHM-F20052, F20078, 2 specimens, 89–112 mm SL; ST-17, THNHM-F20500, 1 specimen, 117 mm SL; ST-16, THNHM-F20148, F20177, F20184, 3 specimens, 92–102 mm SL.

Leptojulius lambdastigma Randall and Ferraris, 1981—Pl. 9C; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20513, F20536, 2 specimens, 105–117 mm SL; ST-11, THNHM-F20249, 1 specimen, 107 mm SL.

Family Champsodontidae

Champsodon vorax Günther, 1867—Pl. 9D; IR: Matsunuma in Kimura *et al.* (2018). Specimens examined: ST-12, THNHM-F20917–18, 2 specimens, 50–53 mm SL; ST-11, THNHM-F20736, 1 specimen, 42 mm SL.

Family Uranoscopidae

Uranoscopus cognatus Cantor, 1849—Pl. 9E; IR: Vilasri in Koeda and Ho (2019). Specimens examined: ST-13, THNHM-F20040, 1 specimen, 108 mm SL; ST-12, THNHM-F20314–17, F20916, 5 specimens, 57–119 mm SL; ST-11, THNHM-F20255, 1 specimen, 97 mm SL; ST-17, THNHM-F20511, F20906–7, 3 specimens, 52–131 mm SL; ST-16, THNHM-F20144, F20153–54, F20175–76, 5 specimens, 73–109 mm SL.

Family Blenniidae

Xiphasia setifer Swainson, 1839—Pl. 9F; IR: Imamura in Yoshida *et al.* (2013). Specimen examined: ST-10, THNHM-F20390, 1 specimen, 437 mm SL.

Family Callionymidae

Dactylopus dactylopus (Valenciennes, 1837)—Pl. 9G; IR: Shibukawa in Yoshida *et al.* (2013). Specimen examined: ST-7, THNHM-F20374, 1 specimen, 123 mm SL.

Repomucenus meridionalis (Suwardji, 1965)—Pl. 9H; IR: Shibukawa in Yoshida *et al.* (2013). Specimen examined: ST-7, THNHM-F20375, 1 specimen, 89 mm SL.

Family Gobiidae

Oxyurichthys auchenolepis Bleeker, 1876—Pl. 9I; IR: Shibukawa in Motomura *et al.* (2017). Specimen examined: ST-A, THNHM-F20701, 1 specimen, 102 mm SL.

Trypauchen pelaeos Murdy, 2006—Pl. 9J; IR: Shibukawa in Kimura *et al.* (2018). Specimens examined: ST-8, THNHM-F20851–53, 3 specimens, 96–118 mm SL.

Family Siganidae

Siganus canaliculatus (Park, 1797)—Pl. 9K; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20541–42, 2 specimens, 115–128 mm SL; ST-7, THNHM-F20427–29, 3 specimens, 102–126 mm SL; ST-8, THNHM-F20097, 1 specimen, 126 mm SL; ST-A, THNHM-F20201, F20217, 2 specimens, 112–126 mm SL; ST-13, THNHM-F20001, 1 specimen, 130 mm SL.

Siganus javus (Linnaeus, 1766)—Pl. 9L; IR: Matsuura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20533, 1 specimen, 153 mm SL; ST-7, THNHM-F20404, 1 specimen, 179 mm SL; ST-13, THNHM-F20002, 1 specimen, 168 mm SL; ST-12, THNHM-F20286, 1 specimen, 189 mm SL; ST-10, THNHM-F20346, 1 specimen, 167 mm SL.

Family Sphyraenidae

Sphyraena forsteri Cuvier, 1829—Pl. 9M; IR: Kimura in Kimura *et al.* (2018). Specimens examined: ST-15, THNHM-F20050, F20632, 2 specimens, 74–86 mm SL; ST-8, THNHM-F20087, F20103, 2 specimens, 108–177 mm SL; ST-13, THNHM-F20013, F20036, 2 specimens, 72–202 mm SL; ST-11, THNHM-F20242, 1 specimen, 234 mm SL; ST-17, THNHM-F20474, 1 specimen, 197 mm SL; ST-16, THNHM-F20131, 1 specimen, 194 mm SL; ST-10, THNHM-F20341, F20790–91, 3 specimens, 71–218 mm SL.

Sphyraena obtusata Cuvier, 1829—Pl. 9N; IR: Kimura in Yoshida *et al.* (2013). Specimen

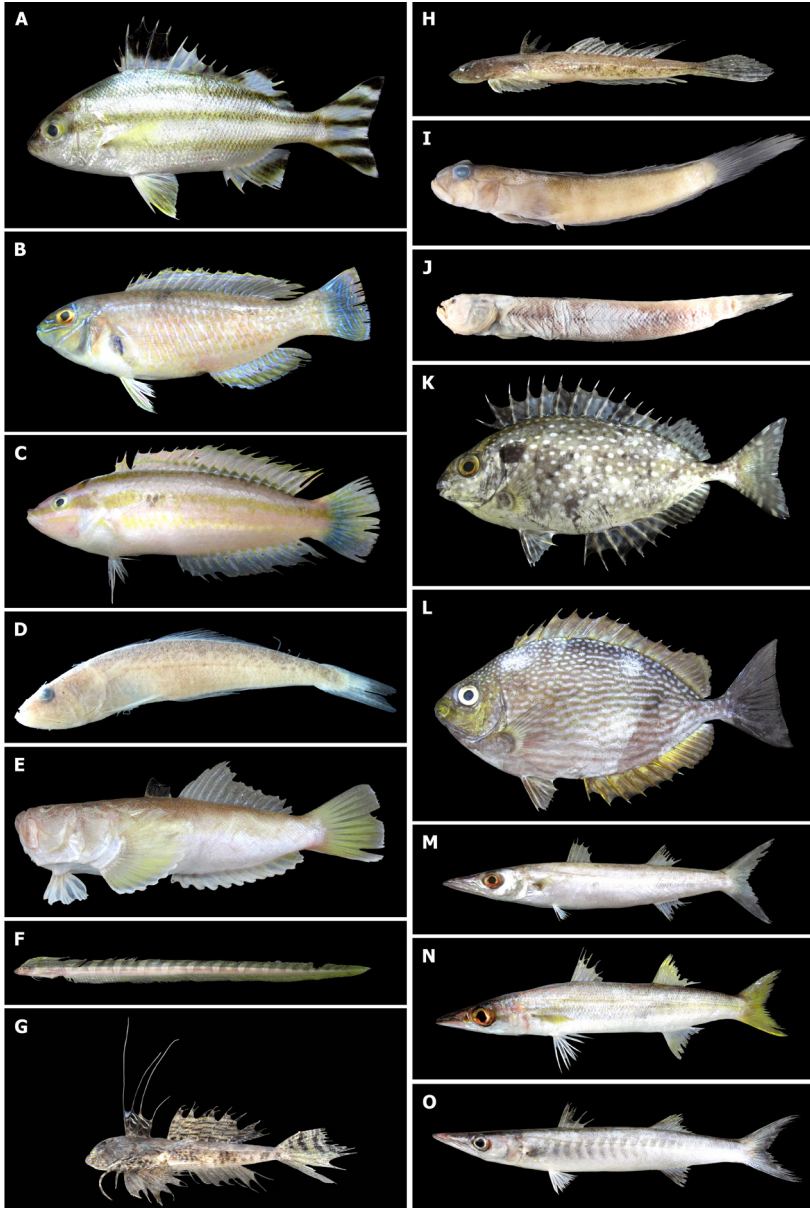


Plate 9. A. *Terapon theraps* (THNHM-F20225, 119 mm SL, FS); B. *Choerodon typus* (THNHM-F20148, 102 mm SL, FS); C. *Leptojulius lambdastigma* (THNHN-F20249, 107 mm SL, FS); D. *Champsodon vorax* (THNHM-F20736, 42 mm SL, PS); E. *Uranoscopus cognatus* (THNHM-F20144, 109 mm SL, FS); F. *Xiphasia setifer* (THNHM-F20390, mm SL, FS); G. *Dactylopus dactylopus* (THNHN-F20374, 123 mm SL, FS); H. *Repomucenus meridionalis* (THNHM-F20375, 89 mm SL, FS); I. *Oxyurichthys auchenolepis* (THNHM-F20701, 102 mm SL, PS); J. *Trypauchen pelaeos* (THNHM-F20851, 96 mm SL, PS); K. *Siganus canaliculatus* (THNHM-F20097: 126 mm SL, FS); L. *Siganus javus* (THNHM-F20346, 167 mm SL, FS); M. *Sphyraena forsteri* (THNHM-F20087, 177 mm SL, FS); N. *Sphyraena obtusata* (THNHM-F20300, 217 mm SL, FS); O. *Sphyraena putnamae* (THNHM-F20082, 292 mm SL, FS).

examined: ST-12, THNHM-F20300, 1 specimen, 217 mm SL.

***Sphyraena putnamae* Jordan and Seale, 1905**—Pl. 9O; IR: Kimura in Kimura *et al.* (2018). Specimens examined: ST-15, THNHM-F20077, 1 specimen, 81 mm SL; ST-8, THNHM-F20082, 1 specimen, 292 mm SL; ST-12, THNHM-F20294, 1 specimen, 267 mm SL.

Family Trichiuridae

***Trichiurus lepturus* Linnaeus, 1758**—Pl. 10A; IR: Matsunuma in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20861, 1 specimen, 325 mm SL; ST-A, THNHM-F20712, 1 specimen, 421 mm SL.

Family Scombridae

***Rastrelliger brachysoma* (Bleeker, 1851)**—Pl. 10B; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-8, THNHM-F20090, 1 specimen, 140 mm SL, ST-11, THNHM-F20239, 1 specimen, 168 mm SL.

***Rastrelliger kanagurta* (Cuvier, 1816)**—Pl. 10C; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20529, 1 specimen, 181 mm SL; ST-7, THNHM-F20395–97, 3 specimens, 147–178 mm SL; ST-8, THNHM-F20089, 1 specimen, 175 mm SL; ST-17, THNHM-F20499, 1 specimen, 162 mm SL; ST-16, THNHM-F20137, 1 specimen, 169 mm SL.

***Scomberomorus commerson* (Lacepède, 1800)**—Pl. 10D; IR: Kimura in Yoshida *et al.* (2013). Specimens examined: ST-12, THNHM-F20285, 1 specimen, 253 mm SL; ST-11, THNHM-F20227, 1 specimen, 226 mm SL; ST-17, THNHM-F20441, 1 specimen, 245 mm SL.

Order Pleuronectiformes

Family Citharidae

***Laiopteryx novaezeelandiae* (Günther, 1862)**—Pl. 10E; IR: Imamura in Yoshida *et al.* (2013); Fricke *et al.* (2023). Specimens examined: ST-15, THNHM-F20610–16, 7 specimens, 72–85 mm SL; ST-13, THNHM-F20662–70, 9 specimens, 40–85 mm SL; ST-12, THNHM-F20932–39, 8 specimens, 70–80 mm SL; ST-11, THNHM-F20774–77, 4 specimens, 57–77 mm SL; ST-17, THNHM-F20899–901, 3 specimens, 65–74 mm SL; ST-16, THNHM-F20155, F20170, F20885, 3 specimens, 64–75 mm SL; ST-10, THNHM-F20783–84, 2 specimens, 78–81 mm SL.

Family Bothidae

***Arnoglossus aspilos* (Bleeker, 1851)**—Pl. 10F; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-9, THNHM-F20725–26, 2 specimens, 56–63 mm SL.

***Engyprosopon grandisquama* (Temminck and Schlegel, 1846)**—Pl. 10G; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20946–47, 2 specimens, 78–79 mm SL; ST-7, THNHM-F20716–18, 3 specimens, 76–79 mm SL.

***Engyprosopon keliaoense* Amaoka and Ho, 2022**—Pl. 10H; IR: Amaoka and Ho (2022). Specimens examined: ST-6, THNHM-F20944–45, F20948, 3 specimens, 75–84 mm SL; ST-7, THNHM-F20715, 1 specimen, 69 mm SL.

Remarks. The present specimens are congruent with *Engyprosopon keliaoense* in having the following characters: 81–83 dorsal-fin rays, 62–63 anal-fin rays, 47–49 lateral-line scales, five gill rakers on lower limb on the first gill arch, narrow interorbital width in females (2.5–2.8% SL), short ocular-side pectoral fin (18.6–19.6% and 18.5% SL in males and females, respectively), and presence of a pair of black spots on the caudal fin. However, some diagnostic characters of the present specimens are slightly different from those of the type specimens of *E. keliaoense*: *i.e.*, upper eye diameter (7.0–7.7% SL in the present specimens vs. 6.6–6.9% SL in the types), lower eye diameter (7.2–7.8% SL vs. 6.6–7.1% SL), and interorbital width in males (4.3–4.6% SL vs. 3.8–4.1% SL) (Amaoka and Ho, 2022). We recognized these differences as the intraspecific variation of *E. keliaoense* with growth, because the sizes of the present specimens are larger than those of the type specimens (74.5–83.7 mm SL vs. 66.7–72.4 mm SL). Interorbital width (% SL) in males of *Engyprosopon* has been known to tend to be increased with growth (*e.g.*, Amaoka *et al.*, 1993). *Engyprosopon keliaoense* was recently described by Amaoka and Ho (2022) based on four specimens from Taiwan and has not ever been recorded since the original description. Therefore, this report is the second record of the species, and is also first record of the species from the Gulf of Thailand.

***Engyprosopon grandisquama* (Temminck and Schlegel, 1846)**—Pl. 10G; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20946–47, 2 specimens, 78–79 mm SL; ST-7, THNHM-F20716–18, 3 specimens, 76–79 mm SL.

***Grammatobothus polyophthalmus* (Bleeker, 1865)**—Pl. 10I; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20517, F20555–58, 5 specimens, 111–119 mm SL; ST-7, THNHM-F20389, F20437, 2 specimens, 81–125 mm SL; ST-13, THNHM-F20678, 1 specimen, 102 mm SL.

Family Paralichthyidae

***Pseudorhombus javanicus* (Bleeker, 1853)**—Pl. 10J; IR: Imamura in Matsunuma *et al.* (2011).

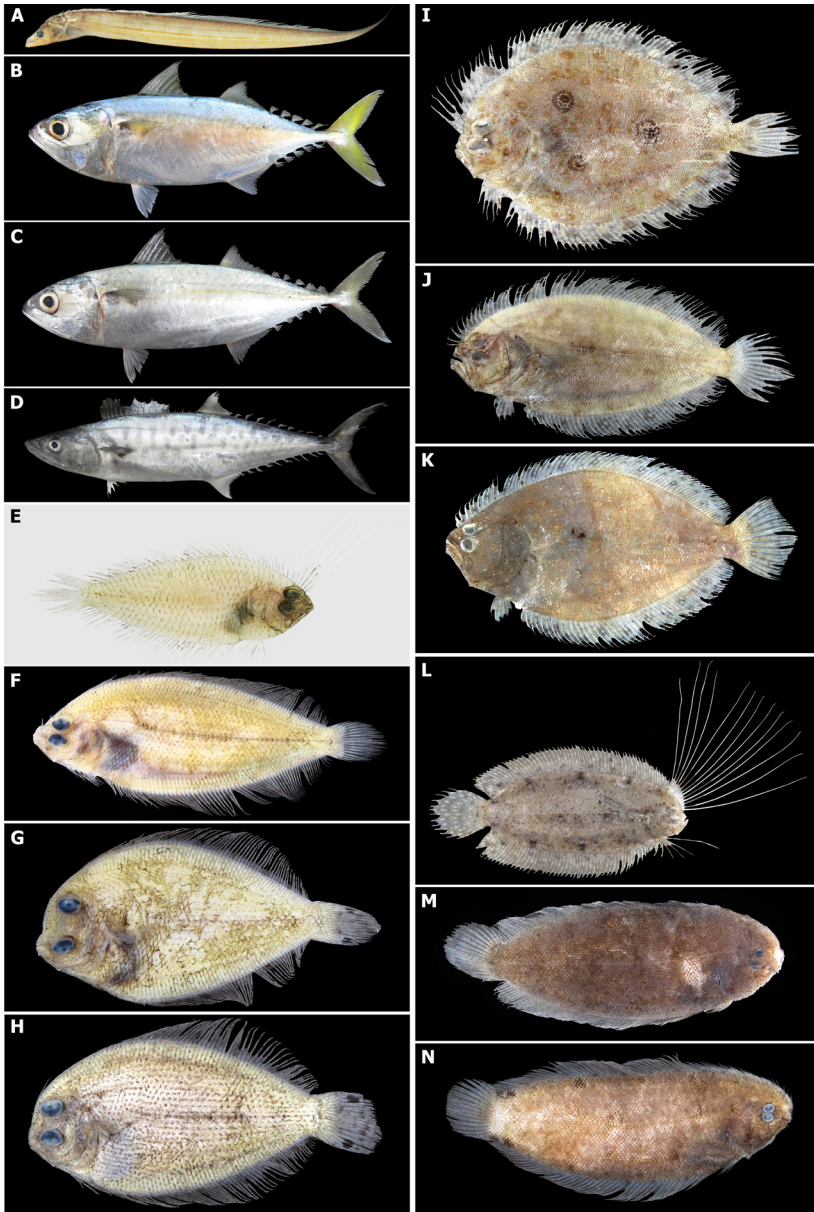


Plate 10. A. *Trichiurus lepturus* (THNHM-F20712, 421 mm SL, PS); B. *Rastrelliger brachysoma* (THNHM-F20090, 140 mm SL, FS); C. *Rastrelliger kanagurta* (THNHM-F20089, 175 mm SL, FS); D. *Scomberomorus commerson* (THNHM-F20227, 226 mm SL, FS); E. *Laiopteryx novaezeelandiae* (THNHM-F20155, 75 mm SL, FS); F. *Arnoglossus aspidos* (THNHM-F20725, 63 mm SL, PS); G. *Engyprosopon grandisquama* (THNHM-F20716, 76 mm SL, PS); H. *Engyprosopon keliaoense* (THNHM-F20715, 69 mm SL, PS); I. *Grammatobothus polyophthalmus* (THNHM-F20389, 125 mm SL, FS); J. *Pseudorhombus javanicus* (THNHM-F20378, 146 mm SL, FS); K. *Pseudorhombus malayanus* (THNHM-F20213, 140 mm SL, FS); L. *Samaris cristatus* (THNHM-F20226, 112 mm SL, FS); M. *Aseraggodes dubius* (THNHM-F20683, 65 mm SL, PS); N. *Aseraggodes filiger* (THNHM-F20722, 88 mm SL, PS).

Specimen examined: ST-7, THNHM-F20378, 1 specimen, 146 mm SL.

***Pseudorhombus malayanus* Bleeker, 1865**—Pl. 10K; IR: Imamura in Matsunuma *et al.* (2011). Specimen examined: ST-A, THNHM-F20213, 1 specimen, 140 mm SL.

Family Samaridae

***Samaris cristatus* Gray, 1831**—Pl. 10L; IR: Imamura in Yoshida *et al.* (2013). Specimen examined: ST-11, THNHM-F20226, 1 specimen, 112 mm SL.

Family Soleidae

***Aseraggodes dubius* Weber, 1913**—Pl. 10M; IR: Randall and Desoutter-Meniger (2007). Specimen examined: ST-13, THNHM-F20683, 1 specimen, 65 mm SL.

***Aseraggodes filiger* Weber, 1913**—Pl. 10N; IR: Imamura in Yoshida *et al.* (2013). Specimen examined: ST-7, THNHM-F20722, 1 specimen, 88 mm SL.

***Pardachirus pavoninus* (Lacepède, 1802)**—Pl. 11A; IR: Imamura in Yoshida *et al.* (2013). Specimens examined: ST-7, THNHM-F20385, F20403, 2 specimens, 153–162 mm SL.

Order Tetraodontiformes

Family Monacanthidae

***Aluterus monoceros* (Linnaeus, 1758)**—Pl. 11B; IR: Matsuura in Yoshida *et al.* (2013). Specimens examined: ST-15, THNHM-F20061, 1 specimen, 101 mm SL; ST-A, THNHM-F20212, 1 specimen, 168 mm SL; ST-11, THNHM-F20270, 1 specimen, 193 mm SL; ST-16, THNHM-F20146, 1 specimen, 132 mm SL; ST-10, THNHM-F20353, 1 specimen, 199 mm SL.

***Anacanthus barbanus* Gray, 1830**—Pl. 11C; IR: Matsuura in Yoshida *et al.* (2013). Specimen examined: ST-9, THNHM-F20563, 1 specimen, 161 mm SL.

***Paramonacanthus choirocephalus* (Bleeker, 1851)**—Pl. 11D; IR: Matsuura in Yoshida *et al.* (2013). Specimens examined: ST-A, THNHM-F20207, 1 specimen, 100 mm SL; ST-8, THNHM-F20105, F20124, 2 specimens, 59–75 mm SL.

***Pseudomonacanthus macrurus* (Bleeker, 1856)**—Pl. 11E; IR: Matsuura in Yoshida *et al.* (2013). Specimens examined: ST-6, THNHM-F20528, 1 specimen, 158 mm SL; ST-7, THNHM-F20387, F20409, 2 specimens, 137–146 mm SL.

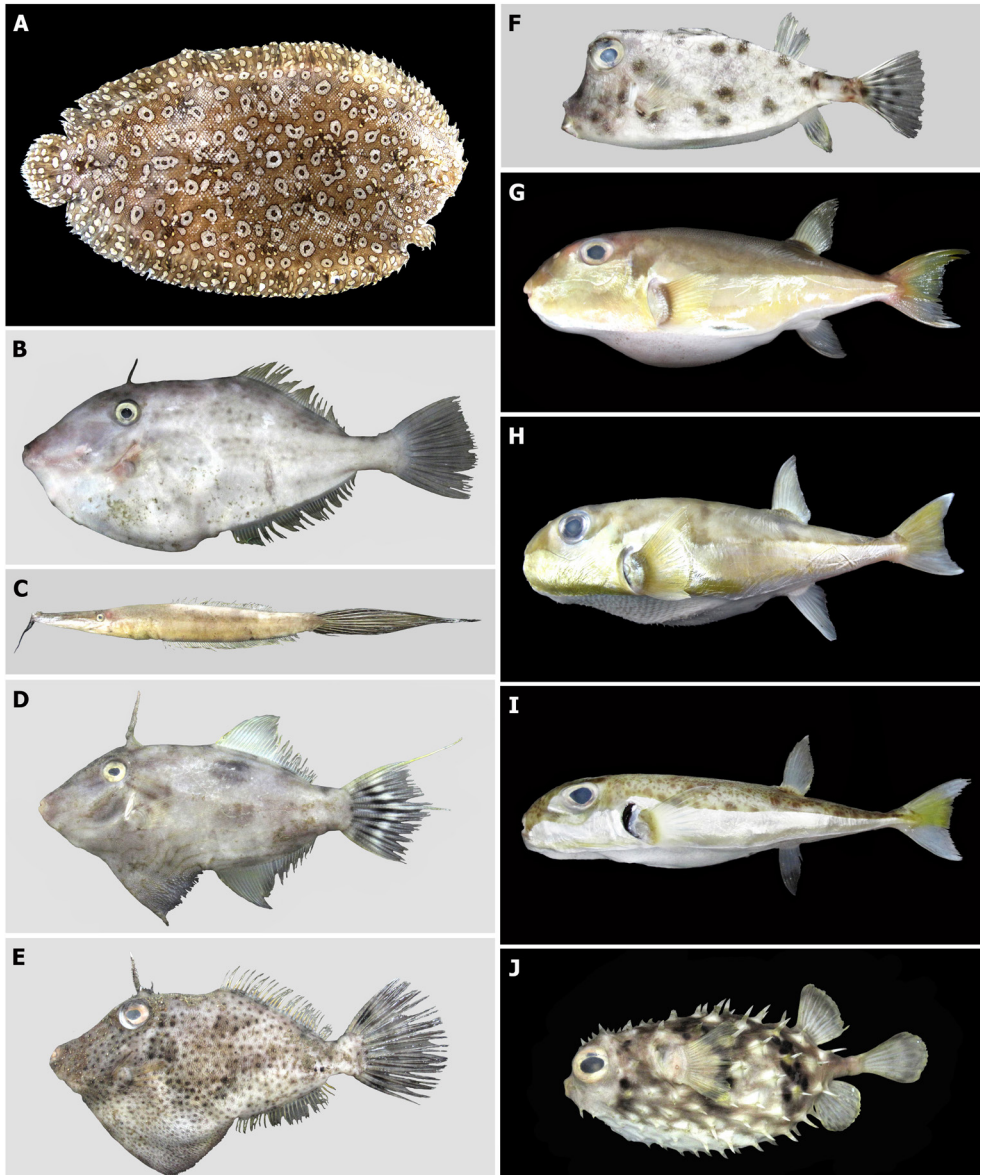


Plate 11. A. *Pardachirus pavonicus* (THNHM-F20385, 162 mm SL, FS); B. *Aluterus monoceros* (THNHM-F20146, 132 mm SL, FS); C. *Anacanthus barbanus* (THNHM-F20563, 161 mm SL, FS); D. *Paramonacanthus choirocephalus* (THNHM-F20105, 75 mm SL, FS); E. *Pseudomonacanthus macrurus* (THNHM-F20387, 137 mm SL, FS); F. *Ostracion nasus* (THNHM-F20393, 71 mm SL, FS); G. *Lagocephalus lunaris* (THNHM-F20034, 169 mm SL, FS); H. *Lagocephalus spadiceus* (THNHM-F20059, 129 mm SL, FS); I. *Lagocephalus suezensis* (THNHM-F20252, 128 mm SL, FS); J. *Cyclichthys orbicularis* (THNHM-F20152, 82 mm SL, FS).

Family Ostraciidae

Ostracion nasus **Bloch, 1785**—Pl. 11F; IR: Matsuura in Kimura *et al.* (2015). Specimens examined: ST-6, THNHM-F20531–32, 2 specimens, 64–71 mm SL; ST-7, THNHM-F20393, F20436, 2 specimens, 71–78 mm SL.

Family Tetraodontidae

Lagocephalus lunaris (**Bloch and Schneider, 1801**)—Pl. 11G; IR: Matsuura in Yoshida *et al.* (2013). Specimen examined: ST-13, THNHM-F20034, 1 specimen, 169 mm SL.

Lagocephalus spadiceus (**Richardson, 1845**)—Pl. 11H; IR: Matsuura in Motomura *et al.* (2017). Specimens examined: ST-15, THNHM-F20059, F20066, 2 specimens, 129–139 mm SL; ST-A, THNHM-F20210, 1 specimen, 143 mm SL; ST-11, THNHM-F20267, 1 specimen, 148 mm SL.

Lagocephalus suezensis **Clark and Gohar, 1953**—Pl. 11I; IR: Matsuura in Yoshida *et al.* (2013). Specimen examined: ST-15, THNHM-F20064, 1 specimen, 123 mm SL; ST-6, THNHM-F20534, 1 specimen, 114 mm SL; ST-8, THNHM-F20101, F20108, F20862, 3 specimens, 71–76 mm SL; ST-A, THNHM-F20209, 1 specimen, 91 mm SL; ST-13, THNHM-F20037, 1 specimen, 101 mm SL; ST-12, THNHM-F20308, F20333, 2 specimens, 97–124 mm SL; ST-11, THNHM-F20252, 1 specimen, 128 mm SL; ST-17, THNHM-F20472–73, 2 specimens, 89–123 mm SL; ST-16, THNHM-F20147, 1 specimen, 120 mm SL; ST-10, THNHM-F20356–58, 3 specimens, 106–115 mm SL; ST-9, THNHM-F20572–73, 2 specimens, 109–112 mm SL.

Family Diodontidae

Cyclichthys orbicularis (**Bloch, 1785**)—Pl. 11J; IR: Matsuura in Motomura *et al.* (2017). Specimens examined: ST-15, THNHM-F20060, 1 specimen, 101 mm SL; ST-6, THNHM-F20523, 1 specimen, 93 mm SL; ST-7, THNHM-F20410, F20435, 2 specimens, 57–98 mm SL; ST-13, THNHM-F20039, 1 specimen, 94 mm SL; ST-12, THNHM-F20309, 1 specimen, 81 mm SL; ST-11, THNHM-F20253, 1 specimen, 91 mm SL; ST-16, THNHM-F20152, 1 specimen, 82 mm SL; ST-10, THNHM-F20365, 1 specimen, 104 mm SL.

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