

The status of the art of Acropomatiformes fishes

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Abstract

A checklist of Acropomatiformes fishes is presented. The order includes 20 named families and one possibly new unnamed family, with a total of 307 species.

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Introduction

The Acropomatiformes include the following 20 families (in parenthesis the number of valid species) (Smith et al., 2022): Acropomatidae (13), Banjosidae (3), Bathyclupeidae (10), Champsodontidae (13), Creediidae (18), Dinolestidae (1), Epigonidae (48), Glaucosomatidae (4), Hemerocoetidae (29), Howellidae (10), Lateolabracidae (3), Malakichthyidae (17), Ostracoberycidae (3), Pempheridae (85), Pentacerotidae (13), Polyprionidae (2), Scombridae (3), Stereolepididae (2), Symphysanodontidae (13), Synagropidae (17) and perhaps an unnamed family to accommodate the genus *Schuettea* (2) with a total of 307 species. I follow Smith et al., 2022 and Fricke et al., 2026 in excluding Leptoscopidae from Acropomatiformes. For additional taxonomic notes see also Betancur-R et al., 2017 and Ghedotti et al., 2018. Families, Genera and species are arranged in alphabetical order and for the families a brief account of the morphological and ecological traits is presented.

While not usually a primary global target like tuna or mackerel, certain species within this order are of commercial interest with some species such as *Glaucosoma scapulare* and *G. hebraicum* regarded as premium seafood products due to their exceptional culinary quality, others such as Polyprionidae are a highly prized sashimi product. Moreover, *Polyprion* is one of the most interesting new species for aquaculture, due to its fast growth (Suquet & La Pomélie, 2002; Peleteiro et al., 2010), late reproductive maturation, high market price and limited fisheries landings and easy handling in captivity with no mortality (Papandroulakis et al., 2008). Acropomatiformes are of increasing interest in marine biology due to their unique bioluminescent organs (Ghedotti et al., 2018).

Family **ACROPOMATIDAE** Gill, 1893
(Lanternbellies; Glowbellies)

Worldwide; oceanic. They are benthopelagic or bathypelagic, inhabiting tropical and temperate oceans worldwide at depths ranging from 20 to 1,200 meters. They are frequently found over sandy or muddy bottoms on continental slopes. Previously included in Percichthyidae, which contains only freshwaters species, these fishes have body oblong and moderately compressed, covered by ctenoid or cycloid scales. Lateral-line scales 41-47. Eye large; maxilla expanded posteriorly with a supplemental bone; large canine teeth present or absent. Operculum with two flat, thin spines. Dorsal fin deeply notched or separated into spinous and soft rayed portions, with 8-9 spines and 10 soft rays; anal fin with 3 spines and 6-9 soft rays; seven branchiostegal rays; 25 vertebrae. Caudal fin forked or deeply emarginated. The species of the genus *Acropoma* have a luminous organ between ventral fins. This organ is often U-shaped, Y-shaped, or O-shaped. It typically extends from the throat/isthmus to near the anus or anal-fin origin. In species with these light organs, the anus is situated well forward, often closer to the pelvic-fin base than to the anal-fin origin. Most species are small, typically under 15 cm. Maximum size to about 35 cm. Etymology: *acro-*, at the end or tip; *poma*, lid or covering, perhaps referring to operculum produced into a long denticulated point.

Traditional Acropomatidae included seven genera and 32 species (Okamoto and Ida, 2002; Yamanoue and Matsuura, 2003; Nelson et al., 2016). Recent studies (Ghedotti et al., 2018, Smith et al, 2022) demonstrate that the group is polyphyletic, recognizing three separate families: Acropomatidae with two genera and 13 species, Malakichthyidae with three genera, and Synagropidae with four genera.

GENUS *Acropoma* Temminck and Schlegel

Acropoma Temminck and Schlegel, 1843:31, Fauna Japonica. Parts 2-4. Neuter. (Type species *Acropoma japonicum* Günther, by subsequent monotypy).

In the continental shelf and continental slope at depths of 50–1203 m in the Indo-West Pacific; 12 species.

Acropoma arafurens Okamoto et al., 2019

Acropoma arafurens Okamoto, Williams, Carpenter, Santos and Kimura, 2019:40, Figs. 1-3, Ichthyol. Res., v. 67, no. 1. (type locality, off Northern Territory, Arafura Sea, 09°21'S, 133°12'E–09°22'S, 133°10'E). Holotype: AMS I. 21835-027. Paratype: AMS

I. 21835-028 (1).

DISTRIBUTION: known only from the Arafura Sea.

***Acropoma argentistigma* Okamoto and Ida, 2002**

Acropoma argentistigma Okamoto and Ida, 2002: 281, Figs. 1-5, Ichthyol. Res., v. 49, no. 3 (type locality, Phuket town fish market, Thailand). Holotype: NSMT-P 58731. Paratypes: FSKU-P 4104 (1), 4105 (1, c&s), 4106 (1); NSMT-P58732 (1); YCM-P 38680 (1). DISTRIBUTION: Northeastern Indian Ocean: Bay of Bengal (India), Myanmar and Andaman Sea (Thailand).

***Acropoma boholensis* Yamanoue and Matsuura, 2002**

Acropoma boholensis Yamanoue and Matsuura, 2002: 21, figs. 1, 2A, 3A, 4, Ichthyol. Res., v. 49, no.1 (type locality, Dumaguete city market, Negros Id., Philippines). Holotype: USNM 232332. Paratypes: USNM 362367 (1, partially dissected). DISTRIBUTION: Negros Island, the Bohol Sea and off northwestern Luzon, South China Sea, Philippines.

***Acropoma hanedai* Matsubara, 1953**

Acropoma hanedai Matsubara, 1953: 25, fig. 1, Mem. Coll. Agric. Kyoto Univ., No. 66 (type locality, Kumano-Nada, Japan). Holotype: FAKU 1712 (apparently lost). Paratypes: (apparently lost) FAKU 1683 (1), 1713-35 (23), 4206 (1), 4210 (1). DISTRIBUTION: southern Japan to Taiwan.

***Acropoma heemstrai* Okamoto and Golani, 2017**

Acropoma heemstrai Okamoto and Golani 2017: 102, Figs. 1, 2a, 3a Ichthyol. Res., v. 65, no. 1. (type locality, off Dokodweni, South Africa). Holotype: SAIAB 203936. Paratypes: AMS I.28131-001 (4), SAIAB 31325 (4); SAIAB 35515; SAIAB 81987; SAIAB 186426; SAIAB 188773; SAIAB 203778 (formerly SAIAB 81987) (2); USNM 325742, Distribution: off Mozambique and South Africa in the western Indian Ocean.

***Acropoma japonicum* Günther, 1859**

Acropoma japonicum Günther, 1859: 250, Cat. Fishes, v. 1 (type locality, Japanese Sea; 23°47'N, 58°30'30"E, Investigator sta 341, 230 fathoms). No types known.

DISTRIBUTION: West Pacific: South China Sea and Japan.

***Acropoma lecorneti* Fourmanoir, 1988**

Acropoma lecorneti Fourmanoir, 1988: 259, fig. 1, Cybium, v. 12 (no. 3) (type locality, North of St. Vincent Pass, w. coast of New Caledonia, 360 m). Holotype (unique): MNHN 1986-0552 (lost).

DISTRIBUTION: New Caledonia, Vanuatu, Taiwan and southern Japan.

***Acropoma leobergi* Prokofiev, 2018**

Acropoma leobergi Prokofiev, 2019 [15 Jan.]: 940, Figs. 1a-1c; 1d, J. Ichthyol. Original Russian Text: A.M. Prokofiev, Voprosy Ikhtiologii, 2018 [Dec.], v. 58 (no. 6) (type locality, Academician Berg large fishing freezer trawler). Holotype: IORAS 3556. Paratypes: IO RAS no. 3557.

DISTRIBUTION: Taiwan and Philippines to Northern and Western Australia.

***Acropoma musorstom* Okamoto, Randall & Motomura, 2021**

Acropoma musorstom Okamoto, Randall & Motomura, 2021: 518, Figs. 1-4a, Ichthyol. Res., v. 68 (no. 4). (type locality, Vanuatu, 15°07'S, 166°55'E, depth 262 - 352 meters. Holotype: MNHN 1998-1003. Paratypes: BPBM 32265 (2), KAUM-I 146843 (1).

DISTRIBUTION: Western Pacific: Vanuatu and the Molucca Islands, Indonesia.

***Acropoma neglectum* Okamoto and Golani 2017**

Acropoma neglectum Okamoto and Golani 2017: 110, Figs. 2c, 3c, 9, 10a, Ichthyol. Res., v. 65 (no. 1) (type locality, Eilat, Gulf of Aqaba, Red Sea, Israel). Holotype: HUI 14131. Paratypes: HUI 10613 (1); HUI 11395 (1); HUI 13775 (1); HUI 18436.

DISTRIBUTION: Red Sea.

***Acropoma profundum* Okamoto 2014**

Acropoma profundum Okamoto 2014: 10, Figs 1, 2A, 3A [Species Diversity v. 19 (type locality, Solomon Islands, western South Pacific). Holotype (unique): MNHN 2002-3878.

Distribution: known only from the type locality.

***Acropoma splendens* (Lloyd, 1909)**

Synagrops splendens Lloyd, 1909a: 159, Mem. Indian Mus., v. 2 (no. 3) (type locality, Gulf of Oman). Holotype (unique): ZSI F1164/1.

Acropoma lacrima Okamoto and Golani, 2017: 107, Figs. 2, 2b, 3b, 6, 7, 8a, Ichthyol. Res., v. 65 (no. 1) (type locality, Maharashtra, Arabian Sea, India). Holotype: CAS 29594. Paratypes: ANSP 53179 (1); USNM 427770 (4).

DISTRIBUTION: northwestern Indian Ocean: India, Oman and Persian Gulf; Arabian Sea east to Bay of Bengal, India and Myanmar and Andaman Sea, Thailand.

Comments: synonymy from Prokofiev, 2018.

Genus *Doederleinia* Steindachner

Doederleinia Steindachner, 1883:237. Denkschr. Kaiserl. Akad. Wiss. Wien, Math.-Naturwiss. Kl., v. 47 (pt 1). Feminine. (Type species *Doederleinia orientalis* Steindachner and Döderlein, by monotypy; apparently not preoccupied by *Doderleinia* Mayer 1872 in Mollusca).

Eteliscus Jordan and Snyder, 1900: 355, Proc. U. S. Natl. Mus., v. 23 (no. 1213). Masculine. (Type species, *Anthias berycoides* Hilgendorf, by monotypy).

Coruscus Jordan and Snyder, 1901:75, Annot. Zool. Jpn. v. 3 (pts 2 & 3). Masculine. (Unneeded name "by accident" for *Eteliscus* Jordan and Snyder).

Rhomboserranus Fowler, 1943:59, Bull. U. S. Natl. Mus. No. 100, v. 14 (pt 2). Masculine. (Type species, *Rhomboserranus gracilispinis* Fowler, by original designation, also monotypic)

Indo-West Pacific; found at depths 100-200 m feeds on large crustaceans and molluscs. Utilized for human consumption; monotypic.

Doederleinia berycoides (Hilgendorf, 1879)

Anthias berycoides Hilgendorf, 1879: 79, Sitzungsber. Ges. Naturf. Freunde Berlin, 1879 (type locality, Japan). Lectotype: ZMB 10602. Paralectotype: ZMB 10602 (smaller specimen). Lectotype selected by Yamanoue & Matsuura (2007:409).

Doederleinia orientalis Steindachner and Döderlein, 1883, Denkschr. Akad. Wiss. Wien, v. 47 (1. abth.): 237 (type locality, Tokyo Bay, Japan). Holotype (unique): NMW 76073.

Rhomboserranus gracilispinis Fowler, 1943, Bull. U. S. Natl. Mus., No. 100, v. 14 (pt 2): 59, Fig. 8 (type locality, Off Corregidor Light, China Sea, s. Luzon I., Philippines, 13°58'45"N, 120°21'35"E, Albatross sta. D.5273, 114 fathoms). Holotype: USNM 99519. Paratypes: USNM 99520-21 (6, 9).

DISTRIBUTION: Indo-West Pacific: from Tokyo Bay and Niigata Prefecture south to southern Korea. Also found in Indonesia, northwestern Australia and New Caledonia; a new record for northeastern Indian Ocean.

Family *BANJOSIDAE* Jordan and Thompson, 1912 (Banjofishes)

Marine coastal waters from Japan to tropical Australia, usually over sand bottoms. Distinguished by body strongly compressed; head with steep, nearly straight profile; ten stout, flattened dorsal spines and three anal spines, the second much longer than other anal rays. Soft dorsal fin with 11-13 rays. The first dorsal fin is separated from the second by a deep notch. The lateral line is uninterrupted and complete with 46-52 scales. Total vertebrae 25. Colour brownish or olive with black margin on soft dorsal and caudal fins. They typically inhabit depths ranging from 50 to 400 meters. Dimensions: to 30 cm. Etymology: unknown, but presumably from a Japanese vernacular name.

Monotypic. Genus reviewed by Matsunuma and Motomura (2017).

Genus *Banjos* Bleeker

Anoplus Temminck and Schlegel, 1843:17, Fauna Japonica. Part 1. Masculine. (Type species, *Anoplus banjos* Richardson, by subsequent designation; preoccupied by *Anoplus* Schönherr 1826 in Insects, Coleoptera; appeared originally without species, type designated by Bleeker 1876:277 in providing a replacement name).

Banjos Bleeker, 1876:277 Arch. néerl. sci. exact. nat., v. 11. Masculine. (type species *Banjos banjos* Richardson, by being a replacement name).

Indo-West Pacific; three species.

Banjos aculeatus Matsunuma and Motomura, 2017

Banjos aculeatus Matsunuma and Motomura, 2017: 274, Figs. 1a-b, 2a, 3a-c, 9-10, 11a-c, 12a-d [Ichthyol. Res., v. 64 (no. 3) (Townsville Trough, northeast of Townsville, Queensland, Australia). Holotype: CSIRO H2346-10. Paratypes: AMS I.38099-009 (1); AMS I.23956-004 (1); AMS I.32119-001 (2); AMS I.32195-001 (2); MS I.32205-001 (1); AMS I.37508-002 (1); AMS I.37679-002 (1); KAUM-I. 87585 (formerly one of three specimens in AMS I.32195-001) (1); NSMT-P 117236 (1); NSMT-P 117238 (1); NSMT-P 117237 (1).

DISTRIBUTION: Eastern Australia: in the Coral Sea, ranging from Townsville, Qld o Newcastle, NSW (32°S) (based on examined specimens) and the Capel Bank.

***Banjos banjos* (Richardson, 1846)**

Anoplus banjos Richardson, 1846:236, Rep. Brit. Assoc. Adv. Sci., 15th meeting (type locality, Sea of Japan). Holotype (unique): BMNH 2004.11.5.11.

Banjos typus Bleeker, 1876:277, Arch. Néerl. Sci. Nat., Haarlem, v. 11 (type locality, Sea of Japan, Unneeded replacement for *Anoplus banjos* Richardson). No types known.

Banjos banjos brevispinis Matsunuma and Motomura, 2017: 287, Figs. 1f-i, 2b, 3d-f, 12h. Ichthyol. Res., v. 64 (no. 3) (type locality, northwest of North Island, Houtman Abrolhos, WA, Australia). Holotype: NMV A1743. Paratypes: NMNZ 15089 (1); CSIRO CA994 (1); CSIRO CA 4214 (1); CSIRO H2037-02 (1); CSIRO H6422-07-08-09 (1, 1, 1); NMV A1749-50 (2, 1); KAUM-I. 89443 (formerly NSMT-P 114011) (1); NSMT-P 113708-9 (1, 1); NSMT-P 114010 (1); WAM P.13969.001 (1); WAM P.23899.001 (1); WAM P.25927.004 (1); WAM P.27219.004 (1); WAM P.27236-001 (1).

DISTRIBUTION: antitropical disjunct distribution corresponding to the presence of two subspecies: *Banjos banjos banjos* from Japan, Taiwan, and South China Sea and *Banjos banjos brevispinis* from Lombok, Indonesia and Western Australia.

***Banjos peregrinus* Matsunuma and Motomura, 2017**

Banjos peregrinus Matsunuma and Motomura, 2017: 289, Fig. 2c, Ichthyol. Res., v. 64 (no. 3) (type locality, Timor Sea, Northern Territory, Australia). Holotype (unique): NTM S.13342-004.

DISTRIBUTION: Timor Sea.

nomina nuda

Anoplus maculatus Döderlein in Steindachner and Döderlein, 1883:7, Denkschr. Akad. Wiss. Wien, v. 48 (1. abth.). Not available, name mentioned in passing in synonymy of *Anoplus banjos* Richardson 1846 for specimen from Tokyo, Japan (ZMB 12061).

Family **BATHYCLUPEIDAE** Gill, 1896
(Deep-sea Herrings or Deep-sea Sweepers)

Marine, oceanic and deep waters; Indo-West Pacific and Gulf of Mexico. Diagnosis: body elongate and compressed; one short dorsal fin in posterior half of body, without spines, typically with 8–10 soft rays; anal fin long, with one spine and 24 to 39 soft rays; dorsal and anal fin covered with scales; pectoral fin with 23 to 29 rays; pelvic fins minute; dorsal profile from upper jaw to caudal fin almost straight giving high resemblance to herring (Clupeidae). Mouth bordered by maxillae and premaxillae. Vertebrae usually 31 (typically with 10 precaudal + 21 caudal). Most species are small, typically growing up to 20–25 cm in length. *Neobathyclupea* typically features black pigment in the mouth cavity, whereas *Bathyclupea* has a lightly coloured cavity. Also, *Neobathyclupea* has a smooth ventral branch of the preoperculum, while *Bathyclupea* species often have dentate or weaker denticles. They are demersal or benthopelagic, living in the upper bathyal zone at depths ranging from 200 to 2,000 meters, feeding on small crustaceans. Etymology: *bathys*, deep; *clupea*, herring.

Two genera with 10 species.

GENUS *Bathyclupea* Alcock

Bathyclupea Alcock, 1891:130, Ann. Mag. Nat. Hist. (Ser. 6), v. 8 (no. 43/44). Feminine. (Type species, *Bathyclupea hoskynii* Alcock, by monotypy).

Three species (Nelson, 1994).

***Bathyclupea hoskynii* Alcock, 1891**

Bathyclupea hoskynii Alcock, 1891, Ann. Mag. Nat. Hist. (Ser. 6), v. 8 (no. 43/44): 131, Fig. 4 (type locality, Andaman Sea, 11°31'40"N, 92°46'40"E, Investigator sta. 115, 188–220 fathoms). Syntypes: (4) BMNH 1891.9.2.6 [ex ZSI F13113] (1); ZSI F13112 (1), F13114 (1).

DISTRIBUTION: Indian Ocean.

***Bathyclupea nikparini* Prokofiev, 2014**

Bathyclupea nikparini Prokofiev, 2014:137, Fig. 4, Voprosy Ikhtiologii v. 54 (no. 2) (type locality, Western Pacific, 31°08.2'N, 128°28.1'E, depth 505–515 meters). Holotype (unique): BSKU 23106.

DISTRIBUTION: West Pacific.

***Bathyclupea schroederi* Dick, 1962**

Bathyclupea schroederi Dick, 1962: 1, Fig. 1, Breviora, No. 167 (type locality, Gulf of Mexico, 23°23'N, 79°39'W, Atlantis sta. 2987, 280 fathoms). Holotype: MCZ 41498. Paratypes: FMNH 65145-47 (2, 1, 1); MCZ 39380 (1), 39416 (orig. 4, now 3), 40600 (1).

DISTRIBUTION: western tropical Atlantic.

Genus *Neobathyclupea* Prokofiev

Neobathyclupea Prokofiev, 2014:502, Voprosy Ikhtiol., v. 54 (no. 5). Feminine. (Type species, *Bathyclupea malayana* Weber, by original designation).

Worldwide: seven species.

Neobathyclupea argentea (Goode and Bean, 1896)

Bathyclupea argentea Goode and Bean, 1896: 190, Pl. 123 (fig. 415), Spec. Bull. U. S. Nat. Mus., No. 2 (type locality, off Nevis I., West Indies, 365 fathoms). Holotype (unique): MCZ 27923.

DISTRIBUTION: western tropical Atlantic: from New Brunswick (Canada) south to Guyana, including Gulf of Mexico and Caribbean Sea.

Neobathyclupea elongata (Trunov, 1975)

Bathyclupea elongata Trunov, 1975: 1116 [998], Fig., Voprosy Ikhtiol., v. 15 (no. 6) (type locality, Se. Atlantic, 30°01'S, 14°56'E, 462-475 m). Holotype (unique): ZIN 42051.

DISTRIBUTION: western Cape Province (South Africa).

Neobathyclupea gracilis (Fowler, 1938)

Bathyclupea gracilis Fowler, 1938: 34, Fig. 8, Proc. U. S. Natl. Mus., v. 85 (no. 3032) (type locality, Off Makyan I., Indonesia, 0°19'20"N, 127°28'30"E, Albatross sta. D.5622, 275 fathoms). Holotype: USNM 93320. Paratypes: (20) USNM 93313-19 (1, 2, 2, 1, 1, 4), 93321 (6).

DISTRIBUTION: Indo-West Pacific: Eastern Indonesia east to Philippines, north to Taiwan and south to northern Australia.

Neobathyclupea japanotaiwana (Prokofiev 2014)

Bathyclupea japanotaiwana Prokofiev 2014: 132, Figs. 1-2 Voprosy Ikhtiologii v. 54 (no. 2) (type locality, Northwest Pacific, 33°55.4'N, 133°29.1'E, depth 483 meters). Holotype: BSKU 29860. Paratypes: ASIZ 63765 (1), NMMBP 12638 (2), NMMSTP 877 (1).

DISTRIBUTION: Japan and Taiwan.

Neobathyclupea malayana (Weber, 1913)

Bathyclupea malayana Weber, 1913: 193, Pl. 3 (fig. 1), Fische Siboga Expedition (type locality, Flores Sea, 7°36'S, 117°30.8'E, Siboga sta. 314, 694 m; Flores Sea, 7°19.4'S, 116°49.5'E, sta. 316, 538 m). Syntypes: ZMA 112443-44 (1, 1).

DISTRIBUTION: Indo-West Pacific south of the equator: Mozambique and Madagascar east to New Ireland (Papua New Guinea) and New Caledonia.

Neobathyclupea megaceps (Fowler, 1938)

Bathyclupea megaceps Fowler, 1938: 33, Fig. 7, Proc. U. S. Natl. Mus., v. 85 (no. 3032) (type locality, Iligan Bay, n. Mindanao, Philippines, 8°21'12"N, 124°12'06"E, Albatross sta. D.5507, 425 fathoms). Holotype: USNM 93323. Paratypes: USNM 93323-24 (1, 1).

DISTRIBUTION: West Pacific: Philippines south to Papua New Guinea.

Neobathyclupea melanoptera Prokofiev, Gon and Psomadakis, 2016

Neobathyclupea melanoptera Prokofiev, Gon and Psomadakis 2016: 2, Figs. 1, 2A, 3A, 4A, 6A, Zootaxa 4208 (no. 5) (Myanmar, 17.1493°N, 94.1045°E, depth 767-772 meters). Holotype: SAIAB 203556. Paratypes: ZUMMGU.

DISTRIBUTION: recorded from Myanmar and off Socotra in the Indian Ocean.

Family CHAMPSODONTIDAE Jordan and Snyder, 1902

(Gapers or crocodile toothfishes)

Marine; Indo-Pacific. They possess an unusually large, oblique mouth with a projecting lower jaw. The maxilla typically extends well beyond the posterior margin of the eye. Jaws are lined with outer bands of cardiform teeth and an inner band of larger, depressible, needle-like teeth. The body is elongated and slightly compressed. It is covered with small, rough, non-overlapping denticulate scales that resemble shark denticles. The head is massive, often featuring serrated bony ridges and a long opercular appendage in larvae. A characteristic long, dagger-like spine is located at the angle of the preopercle. Unusually large, elongate pelvic fins before pectorals. Small pectoral fins with an oblique base. Short spinous dorsal fin, with 5 weak spines and a long second fin with 18-23 soft rays. Long anal fin, without spine and 16-21 soft rays. Caudal fin forked. Total vertebrae 29 to 33. Two horizontal lateral lines on the body,

interconnected by vertical rows of sensory papillae. Most species reach lengths between 5 cm and 13 cm, though some can grow up to 20–40 cm. Known from the surface to 1000 m, they occur in large shoals, evidently rising to the surface at night. Etymology: *champsos*, from *chámpsai* (Gr. *χάμψαι*), Egyptian name for crocodile; *odon*, tooth, referring to long, depressible, needle-like teeth. A single genus with 13 species, revised by Nemeth (1994).

Genus *Champsodon* Günther

Champsodon Günther, 1867:102, Proc. Zool. Soc. London, 1867 (pt 1) (art. 2). Masculine. (Type species, *Champsodon vorax* Günther, by monotypy).

Centropercis Ogilby, 1895:320, Proc. Linn. Soc. N. S. W. (Ser. 2), v. 10 (pt 2). Feminine. (Type species, *Centropercis nudivittis* Ogilby, by monotypy).

Thirteen species.

***Champsodon atridorsalis* Ochiai and Nakamura, 1964**

Champsodon atridorsalis Ochiai and Nakamura, 1964: 13, Fig. 6, Pls. 1D, 3B, Bull. Misaki Mar. Biol. Inst. Kyoto Univ., No. 6 (type locality, Tonkin Bay, Vietnam). Holotype: FAKU S.360. Paratypes: FAKU 113078 [ex S.6-1] (1), 113079 [ex S.6-2] (1), 103152 [ex S.359] (1), 113077 [ex S.361] (1).

DISTRIBUTION: Western Pacific: Vietnam, Philippines, Indonesia, and Australia.

***Champsodon capensis* Regan, 1908**

Champsodon capensis Regan, 1908:244, Pl. 27 (fig. 2), Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3) (type locality, South coast of Cape Colony, South Africa). Lectotype: BMNH 1903.1.29.6. Paralectotypes: BMNH 1902.1.29.7-9 (3). Lectotype selected by Nemeth 1994:354.

DISTRIBUTION: Indian Ocean: Red Sea, Kenya to eastern Cape, South Africa; also between Seychelles and Mauritius. Occurs in great shoals. Moves to the surface at night.

***Champsodon fimbriatus* Gilbert, 1905**

Champsodon fimbriatus Gilbert, 1905: 648, Pl. 88, Bull. U. S. Fish Comm., v. 23 (pt 2) [for 1903] (type locality, Pailolo Channel, between Maui I. and Molokai I., Hawaiian Is., U.S.A.). Holotype: USNM 51629. Paratypes: CAS-SU 8571 (8); USNM 51682 (16), 231818 (3).

DISTRIBUTION: Hawaiian Ids.

***Champsodon guentheri* Regan, 1908**

Champsodon guentheri Regan, 1908: 244, Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3) (type locality, Philippines). Syntypes: BMNH 1879.5.14.365-366 (2).

DISTRIBUTION: Indo-West Pacific: Australia, Japan and the Philippines.

***Champsodon longipinnis* Matsubara and Amaoka, 1964**

Champsodon longipinnis Matsubara and Amaoka, 1964: 10, Fig. 5; Pls. 1C, 3A, Bull. Misaki Mar. Biol. Inst. Kyoto Univ., No. 6 (type locality, off Todorō, Miyazaki Pref., Japan). Holotype: FAKU 34981. Paratypes: FAKU 2373 (1), 4209 (1), 4669 (1), 35036-38 (3), 35333 (1).

DISTRIBUTION: Indo-West Pacific: Japan, Philippines, Indonesia, Australia, and New Caledonia.

***Champsodon machaeratus* Nemeth, 1994**

Champsodon machaeratus Nemeth, 1994, Copeia, 1994 (no. 2): 358, Fig. 9 (type locality, North of Townsville, 17°54' to 17°57'S, 147°01' to 147°04'E, Queensland, Australia). Holotype: AMS I.25814-008. Paratypes: AMS I.21776-004 (1), I.25814-013 (5), I.25802-013 (2), I.25814-016 [ex AMS I.25814-013] (1, c&s), I.25932-002 (1), IA.5809 (1); MCZ 6095657 (1, 1); QM I.20907 (2).

DISTRIBUTION: eastern Australia.

***Champsodon nudivittis* (Ogilby, 1895)**

Centropercis nudivittis Ogilby, 1895: 320, Proc. Linn. Soc. N. S. W. (Ser. 2), v. 10 (pt 2) (type locality, Maroubra Bay, N. S. W., Australia). Holotype (unique): AMS I.3396.

Champsodon arafurensis Regan, 1908: 245, Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3) (type locality, Kai Is., Moluccas Is., Indonesia and Arafura Sea). Syntypes: BMNH 1879.5.14.369 (2), 1879.5.14.370 (1).

Champsodon curtipes Fowler, 1943: 83, Fig. 21, Bull. U. S. Natl. Mus., No. 100, v. 14 (pt 2) (type locality, Panalangan Pt., Talájit I., between Samar and Masbate, Philippines, 11°57'N, 124°12'24"E). Holotype: USNM 99506. Paratypes: USNM 99507 (15), 323057 [ex 99507] (1).

DISTRIBUTION: Indo-West Pacific: Madagascar and Mascarenes (Mauritius) to Andaman Sea off Thailand; Indonesia east to New Ireland (Papua New Guinea), north to Philippines, south to northern Australia. Mediterranean Sea as lessepsian species (Red Sea immigrant).

***Champsodon omanensis* Regan, 1908**

Champsodon omanensis Regan, 1908: 245, Pl. 27 (fig. 1), Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3) (type locality, Sea of Oman). Lectotype: BMNH 1903.7.8.2. Paralectotypes: (2) BMNH 1910.1.31.13 (1). Lectotype selected by Nemeth 1994:361.

DISTRIBUTION: Western Indian Ocean: reported from the Dahlak Archipelago, Gulf of Suez, Gulf of Aqaba, and has been collected in the central Red Sea. It is not clear whether there are two separate populations, one of the deep water (360-380 m) and one of the deep sea (1085-1120 m) or whether vertical migrations of 700 m or more take place. Gene flow occurs between the Gulf of Aden, the Red Sea, and the Gulf of Aqaba.

***Champsodon pantolepis* Nemeth, 1994**

Champsodon pantolepis Nemeth, 1994: 361, Fig. 11, Copeia, 1994 (no. 2) (type locality, About 240 km north of Dampier, 18°44'S, 116°59'E, Western Australia). Holotype: WAM P28098-003. Paratypes: FAKU 7023-24 (1, 1), 34958-59 (1, 1), 34961 (1), 34963-66 (1, 1, 1, 1), 34980 (1).

DISTRIBUTION: Indo-West Pacific: Western Australia, Japan, Indonesia, and the Philippines.

***Champsodon sagittus* Nemeth, 1994**

Champsodon sagittus Nemeth, 1994: 363, Fig. 12, Copeia, 1994 (no. 2) (type locality, Vicinity of Browse I., 13°28'S, 128°09'E, Western Australia, 0-370 m). Holotype: WAM P.25400-019. Paratypes: AMS I.22808-044 (3), I.22821-012 (2), I.22825-007 (3); BMNH 1879.5.14.366 (1), 1986.6.25.1 (1); WAM P.25400-020 (5), P.28075-003 (1), P.28076-007 (1), P.25395-017 (1), P.29304-005 (11); USNM 122405 (1); ZMA 115772 (3).

DISTRIBUTION: Western Pacific: Australia, Indonesia, New Guinea, and the Philippines.

***Champsodon sechellensis* Regan, 1908**

Champsodon sechellensis Regan, 1908: 242, Pl. 31 (fig. 2), Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3) (type locality, Seychelles). Lectotype: BMNH 1908.3.23.253. Paralectotypes: BMNH 1908.3.23.254 (1). Lectotype selected by Nemeth 1994:364.

DISTRIBUTION: Seychelles and Mascarene Ids.

***Champsodon snyderi* Franz, 1910**

Champsodon snyderi Franz, 1910: 82, Pl. 9 (fig. 74, Abh. Akad. Wiss. Munchen Math.-Phys. Kl., v. 4 (Suppl.) (no. 1)) (type locality, Wakasa Bay, Kyoto Pref., Japan). Neotype: MCZ 100468. Original syntypes: (about 40) ZSM [old collection] destroyed in WW II. Neotype designated by Nemeth 1994:364.

DISTRIBUTION: Western Pacific: southern Japan, the Yellow Sea and the China Seas. Reported from the Chesterfield Is and New Caledonia.

***Champsodon vorax* Günther, 1867**

Champsodon vorax Günther, 1867: 102, Proc. Zool. Soc. Lond., 1867 (pt 1) (type locality, China Sea). Holotype: BMNH 1848.3.16.154.

Champsodon microphthalmus Regan, 1908, Trans. Linn. Soc. London (Ser. 2, Zool.), v. 12 (pt 3): 243, Pl. 31 (fig. 3) (type locality, Suvadiva and Mulaku, Maldives). Syntypes: (3) BMNH 1901.12.31.32-35 (?3).

DISTRIBUTION: Indo-Pacific: Maldives, Australia, Viet Nam, Philippines, and Indonesia.

Family **CREEDIIDAE** Waite, 1899 (= Limnichthyidae Regan, 1913)
(Sandburrowers; Sand divers; Tommyfishes)

Marine, Indo-West Pacific. Cryptic, sand burrowing, cryptic fishes found in shallow to moderately deep water, often in large aggregations. They possess a slender, fusiform, or "eel-like" body shape with a fleshy snout projecting beyond the lower jaw, which is typically fringed with a row of skin tufts (cirri). Large, bulging eyes are positioned dorsally on the head, often capable of rotating independently to detect prey while the fish is buried. The lateral line often descends to the ventral surface, and scales (34 to 60) frequently have three-lobed posterior extensions. Some species are mostly scaleless except for the lateral line. They have a continuous, long-based dorsal fin and an anal fin, both consisting of unbranched soft rays (no spines). Typically, 12-43 soft dorsal rays and 18-41 anal soft rays. Pectorals with 8-17 soft rays. Pelvic fins are positioned very close together and resemble an inverted bowl. Vertebrae 37 to 60 in total. Dimensions: few centimetres (3-8 cm). They are planktivorous, feeding occasionally on small crustaceans. They dart out and back into the sediment in a "boomerang" fashion to capture small prey. Many species exhibit camouflage with a pale or sandy

coloration with dark saddle-like bars on their backs to blend in with their surroundings. Etymology: Ogilby's friend John Mildred Creed (1842-1930), English-born Australian physician and politician, "to whose unfailing kindness and support my present position in science is mostly due".

Eight genera and about 18 species according to Nelson et al. (2016); 19 species are presently known.

Genus *Apodocreedia* de Beaufort

Apodocreedia de Beaufort, 1948:476, Trans. R. Soc. South Africa, v. 31 (pt 5). Feminine. (Type species, *Apodocreedia vanderhosti* de Beaufort, by original designation).

One species.

Apodocreedia vanderhosti de Beaufort, 1948

Apodocreedia vanderhosti de Beaufort, 1948: 476, Fig. 1, Trans. R. Soc. S. Africa, v. 31 (pt 5) (type locality, Inhaca I., Delagoa Bay, Mozambique). Syntypes: (3) RMNH 17401 (1), ?USNM 144489 (3), ZMA 112581 (2).

DISTRIBUTION: Western Indian Ocean: occurs between Delagoa Bay, Mozambique and Durban, South Africa. Occurs from the intertidal to at least 16 m.

Genus *Chalixodytes* Schultz

Chalixodytes Schultz, 1943:261, Bull. U. S. Natl. Mus., No. 180 (Type species, *Chalixodytes tauensis* Schultz, by original designation).

One species.

Chalixodytes tauensis Schultz, 1943

Chalixodytes tauensis Schultz, 1943: 263, Fig. 24, Bull. U. S. Natl. Mus., No. 180 (type locality, Reef of Tau I. at Siulagi Point, American Samoa). Holotype: USNM 116083. Paratypes: BMNH 1952.5.8.10-11 [ex USNM 116084] (2); MCZ 37273 [ex USNM 116084] (1); USNM 116084 (orig. 32, now 26 + 1 c&s), 116085 (1); ZMA 112978 [ex USNM 116084] (2).

Chalixodytes chameleontoculis Smith, 1957: 890, Fig. 1, Ann. Mag. Nat. Hist. (Ser. 12), v. 9 (no. 108) [1956] (type locality, Denis I., 3°40'S, 55°40'E, Seychelles). Holotype (unique): SAIAB [formerly RUSI] 172.

DISTRIBUTION: Indo-Pacific: Christmas I. in the eastern Indian Ocean to the Mariana, Marshall, Samoan, Tuamotu, and Pitcairn islands. Recently reported from Ouvéa Atoll, Loyalty Ids. *C. chameleontoculis* from the western Indian Ocean is a junior synonym (Rosa, 1993; Fricke and Kulbicki 2006:345). Occurs in loose coral sand of shallow exposed seaward reefs and sandy shorelines to a depth of at least 10 m.

Genus *Creedia* Ogilby

Creedia Ogilby, 1898: 298, Proc. Linn. Soc. N. S. W., v. 23 (pt 3). Feminine. (Type species, *Creedia clathrisquamis* Ogilby, by monotypy).

Four species.

Creedia alleni Nelson, 1983

Creedia alleni Nelson, 1983: 29, Fig. 1, Proc. Biol. Soc. Wash., v. 96 (no. 1) (type locality, off Garden I., near Fremantle, Western Australia, 32°15.7'S, 115°39'E). Holotype: WAM P.25808-005. Paratypes: WAM P.25346-028 (1), P.25347-001 (1).

DISTRIBUTION: western Australia.

Creedia bilineata Shimada and Yoshino, 1987

Creedia bilineatus Shimada and Yoshino, 1987: 123, Figs. 1-5, Jpn. J. Ichthyol., v. 34 (no. 2) (type locality, Kabira Bay, Ishigaki I., Yaeyama Is., s. Ryukyu Is., Okinawa Pref., Japan, 24°09.0'N, 124°27.5'E). Holotype: URM-P6462. Paratypes: URM-P6460 (1), 6463 (1, c&s)

DISTRIBUTION: Japan.

Creedia haswelli (Ramsay, 1881)

Hemerocoetes haswelli Ramsay, 1881: 575, Proc. Linn. Soc. N. S. W., v. 6 (pt 3) (type locality, North Head, Port Jackson, N. S. W., Australia). Syntypes: AMS B.9210-13 (1, 1, 1, 1).

Creedia clathrisquamis Ogilby, 1898: 299, Proc. Linn. Soc. N. S. W., v. 23 (pt 3) (type locality, Maroubra Beach, N. S. W., Australia). Holotype (unique): AMS I.4259.

DISTRIBUTION: southern and eastern Australia.

***Creedia partimsquamigera* Nelson, 1983**

Creedia partimsquamigera Nelson, 1983: 33, Fig. 4, Proc. Biol. Soc. Wash., v. 96 (no. 1) (type locality, off Coogee Beach, Sydney, N. S. W., Australia, 33°56'S, 151°16'E). Holotype: AMS I.21420-001. Paratypes: AMS I.21420-005 (2), I.21420-006 (2), I.22868-001 (2); NMV A2229 (2).

DISTRIBUTION: southeastern Australia.

Genus *Crystallodytes* Fowler

Crystallodytes Fowler, 1923: 390, Occ. Pap. Bernice Pauahi Bishop Mus. Polyn. Ethnol. Nat. Hist., v. 8 (no. 7). Masculine. (Type species, *Crystallodytes cookei* Fowler, by original designation).

Three species.

***Crystallodytes cookei* Fowler, 1923**

Crystallodytes cookei Fowler, 1923: 391, Occas. Pap. Bernice P. Bishop Mus., v. 8 (no. 7) (type locality, Laie Beach, Oahu I., Hawaiian Is., U.S.A.). Holotype: BPBM 3400. Paratypes: BPBM 3422 (1); MCZ 37276 [ex USNM 116087] (1); USNM 116.

DISTRIBUTION: New Guinea to Hawaiian Ids and Pitcairn Group.

***Crystallodytes enderburyensis* Schultz 1943**

Crystallodytes cookei enderburyensis Schultz, 1943:264, Fig. 25, Bull. U. S. Natl. Mus. No. 180 (type locality, Reef of Enderbury Island, Phoenix Islands). Holotype: USNM 116086. Paratypes: BMNH 1952.5.8.9 [ex USNM 116087] (1); MCZ [ex USNM 116087] (1); USNM 116087 (orig. 44, now 40), 116088 (9); ZMA 110014 [ex USNM 116087] (2).

DISTRIBUTION: Western Pacific.

***Crystallodytes pauciradiatus* Nelson and Randall, 1985**

Crystallodytes pauciradiatus Nelson and Randall, 1985: 403, Fig. 1-2, Proc. Biol. Soc. Wash., v. 98 (no. 2) (type locality, off Ahu Akapu, Easter Island). Holotype: BPBM 6734. Paratypes: AMNH 49554 (2); AMS I.24606-001 [ex BPBM 6733] (2); BPBM 6733 (3), 29656 (1); CAS 54946 (2); USNM 266462 (5).

DISTRIBUTION: Easter I., Chile.

Genus *Limnichthys* Waite

Limnichthys Waite, 1904:178, Rec. Austr. Mus., v. 5 (no. 3). Masculine. (Type species, *Limnichthys fasciatus* Waite, by original designation).

Indo-Pacific; on sandy and gravel bottoms. Seven species (Yoshino et al., 1999; Fricke and Golani, 2012; Lee & Kim, 2024).

***Limnichthys fasciatus* Waite, 1904**

Limnichthys fasciatus Waite, 1904: 178, pl. 23, fig. 4, Rec. Aust. Mus., v. 5 (no. 3) (type locality, Lord Howe Is, Australia). Syntypes: (several) AMS I.5854-56 (1, 1, 1), I.5858 (1).

Limnichthys fasciatus major Whitley, 1945: 41, Aust. Zool., v. 11 (pt 1) (type locality, Garden Island, Western Australia). Holotype (unique): WAM P.121-001.

DISTRIBUTION: antitropical; Rottnest Island (Western Australia), New South Wales (Australia), Lord Howe Island, Norfolk Island and Kermadec Islands; southern Japan, Ryukyu Ids and Ogasawara Ids, Taiwan, southern Korea, Philippines and New Guinea east to Gilbert Islands and Fiji,

***Limnichthys koreanus*, Lee and Kim, 2024**

Limnichthys koreanus Lee & Kim 2024:63, Figs. 2, 3A, 4A-B, 5A, 5E, 6A, 7, 8. ZooKeys No. 1214. (type locality, Tidal pool on Jeju Island, South Korea, 33°13'21.1"N, 126°14'30.9"E, depth 1 meter). Holotype: MABIK PI00060703 [+ PKU 63120]. Paratypes: MABIK PI 00060704 (PKU 63121); MABIK PI 00060705 (PKU 63122); PKU 21427; PKU 21528; PKU 21529; PKU 21530; PKU 22426; PKU 22427; PKU 22428; PKU 22626; PKU 22627.

DISTRIBUTION: Western Pacific: Jeju Island, South Korea.

***Limnichthys marisrubri* Fricke and Golani, 2012**

Limnichthys marisrubri Fricke and Golani 2012: 288, Figs. 1-3, Stuttgarter Beiträge zur Naturkunde A, Neue Serie. v. 5 (type locality, Eilat, north beach, Israel, Gulf of Aqaba, Red Sea). Holotype: HUJ F 19903. Paratypes: BMNH 2011.6.26.1 (1); HUJ F18609 (1), 20060 (5), 20066 (5); MNHN 2011-0210 (1); USNM 400922 (1).

DISTRIBUTION: Gulf of Aqaba, northern Red Sea.

***Limnichthys nitidus* Smith, 1958**

Limnichthys nitidus Smith, 1958: 247, Fig. 1, Ann. Mag. Nat. Hist. (Ser. 13), v. 1 (no. 4) (type locality, Pinda, Mozambique). Holotype: SAIAB [formerly RUSI] 171. Paratypes: SAIAB [formerly RUSI] 3733 (1), 3736 (1).

Limnichthys donaldsoni Schultz, 1960, Bull. U. S. Natl. Mus., No. 202, v. 2: 278, Fig. 107 (type locality, Between Bikini and Amen Is., Bikini Atoll, Marshall Ids.). Holotype: USNM 140906. Paratypes: USNM 140907-09 (2, 1, 1), 164422-23 (1, 1).

DISTRIBUTION: widely distributed from western Indian Ocean and Red Sea to the central Pacific northward to the southern Japan.

COMMENTS: synonymies from Yoshino et al. (1999: 79).

***Limnichthys orientalis* Yoshino, Kon and Okabe, 1999**

Limnichthys orientalis Yoshino, Kon and Okabe, 1999: 82, Figs. 2C, 4C, 5C, 6C, 7C, Ichthyol. Res. 46, no. 1 (type locality, Tsukigahama, Iriomote Island, Yaeyama Islands, Okinawa, Japan). Holotype: URM-P 11590. Paratypes: AMS I.38816-001 (1); NSMT-P 55182 (1); URM-P 20346 (1 c&s), 2162 (1), 2306 (1), 6467 (1).

DISTRIBUTION: Ryūkyū Ids., Japan.

***Limnichthys polyactis* Nelson, 1978**

Limnichthys polyactis Nelson, 1978: 353, Fig. 1a, N. Z. J. Zool., v. 5 (no. 2) (type locality, West end Island Bay, Wellington, New Zealand, 41°21'S, 174°47'E). Holotype: NMNZ P.6243. Paratypes: AMS I.19646-001 (1), I.19647-001 (2); ANSP 122755 (2), 122797 (4), 122805 (3); NMNZ P.3140 (6), P.3411 (1), P.3422 (10, 2 c&s), P.4095 (2), P.6244 (1), UAMZ 3758 (1).

DISTRIBUTION: New Zealand. Buries itself in areas of broken shell and gravel with only the head exposed. Darts away and dives into the sand when disturbed.

***Limnichthys rendahli* Parrott, 1958**

Limnichthys rendahli Parrott, 1958: 116, Rec. Dom. Mus. (Wellington), v. 3 (pt 2) (type locality, Auckland Is., New Zealand; washed up on beach). Holotype (unique): CMC F601.

DISTRIBUTION: New Zealand.

Genus *Myopsaron* Shibukawa

Myopsaron Shibukawa 2010:49, Bull. Natl. Mus. Nat. Sci. (Ser. A) Suppl. No. 4. Masculine. (Type species, *Myopsaron nelsoni* Shibukawa by original designation). Monotypic.

***Myopsaron nelsoni* Shibukawa 2010**

Myopsaron nelsoni Shibukawa 2010: 51, Figs. 1-4, 5C, 6-9, 10A, 11-20, Bull. Natl. Mus. Nat. Sci. (Ser. A) Suppl. No. 4 (type locality, off southern Chichi-jima Island, Ogasawara Islands, Japan). Holotype: NSMT-P 94886. Paratypes: Total 19 specimens: AMS I.44840-001 (3); NSMT-P 94887 (8); NSMT-P 94888 (2); NSMT-P 94895 (1); OMNH-P 35374-35376 (3); YCM-P 44207 (2).

DISTRIBUTION: Ogasawara Islands, Japan.

Genus *Schizochirus* Waite

Schizochirus Waite, 1904:241, Rec. Austr. Mus. v. 5 (no. 4). Masculine. (Type species, *Schizochirus insolens* Waite, by monotypy) One species.

***Schizochirus insolens* Waite, 1904**

Schizochirus insolens Waite, 1904: 242, Pl. 26 (fig. 3); Figs. 33-34, Rec. Aust. Mus., v. 5 (pt 4) (type locality, Maroubra Bay, N. S. W., Australia). Syntypes: AMS I.6758-59 (1, 1).

DISTRIBUTION: eastern Australia.

Genus *Tewara* Griffin

Tewara Griffin, 1933:174, Trans. N. Zeal. Inst., v. 63 (pt 2). Feminine. (Type species, *Tewara cranwelli* Griffin, by monotypy). One species.

***Tewara cranwellae* Griffin, 1933**

Tewara cranwelli Griffin, 1933: 174, Pl. 25 (top), Trans. N. Z. Inst., v. 63 (pt 2) (type locality, Smugglers' Bay, Whangarei Heads, New Zealand). Holotype: AIM MA 457. Named for a woman, so name is most desirably *cranwellae*. If *cranwellae* is regarded as established on prevailing usage, then that spelling should be maintained.

DISTRIBUTION: New Zealand. Occurs in rockpools and pools with sandy bottoms down to 5 m.

Family **DINOLESTIDAE** Whitley, 1948
(Long-finned pike)

Marine; endemic of temperate Australia. Schooling fishes found in harbors and around coral reefs. Previously included in Apogonidae, they differ in having only one anal spine and 25-27 soft rays. Two widely separated dorsal fins; the first is small with 10 spines, while the second is longer and higher with 17-19 dorsal rays. Tail yellowish in colour, weakly forked, with the lateral line extending far onto the tail. They have a pointed snout with a large mouth and a protruding lower jaw. Mouth equipped with small teeth in a single row, including some canine-like teeth and teeth on the vomer and palatine. Eyes notably large. Cycloid scales cover the body and parts of the head (including the maxilla and snout). Lateral line scales 63-70. Total vertebrae 27. They resemble members of the family Sphyracidae for their robust, cylindrical body, but distinguished by their significantly longer second dorsal and anal fins. Carnivore that feeds primarily on smaller fishes and squids. Etymology: *dino-*, fearfully great *lestes*, plunderer or pirate. Maximum length: 90 cm. Monotypic.

Genus ***Dinolestes*** Klunzinger

Dinolestes Klunzinger, 1872:29, Arch. Natur., v. 38 (pt. 1). Masculine. (Type species *Dinolestes muelleri* Klunzinger, by monotypy). *Lanioperca* Günther, 1872:183, Ann. Mag. Nat. Hist. (Ser. 4), v. 10 (no. 57). Feminine. (Type species *Lanioperca mordax* Günther, by monotypy).

Neosphyraena Castelnau, 1872:96, Proc. Zool. Acclim. Soc. Victoria, Melbourne. v. 1. Feminine. (Type species *Neosphyraena multiradiata* Castelnau, by monotypy).

A single species.

Comments: According to Fowler (MS), *Neosphyraena* was published 15 July 1872, *Dinolestes* in early 1872.

***Dinolestes lewini* (Griffith and Smith, 1834)**

Esox lewini Griffith and Smith, 1834: 465, Pl. 60, Class Pisces, Cuvier (type locality, Australia). No types known.

Dinolestes muelleri Klunzinger, 1872: 30, Pl. 3, Arch. Naturgeschichte, v. 38 (no. 1) (type locality, Hobson's Bay, Victoria, Australia). Holotype (unique): SMNS 1557.

Lanioperca mordax Günther, 1872: 183, Ann. Mag. Nat. Hist. (Ser. 4), v. 10 (no. 57) (type locality, Hobart, Tasmania). Holotype (unique): BMNH 1872.7.1.60.

Neosphyraena multiradiata Castelnau, 1872:9, Proc. Zool. Acclim. Soc. Victoria, v. 1 (type locality, Melbourne market, Victoria, Australia). Syntypes: MNHN A-4280 (1, dry), B-2614 (1, dry), B-2615 (1, dry).

DISTRIBUTION: southern Western Australia, South Australia, Victoria, New South Wales and Tasmania.

Family **EPIGONIDAE** Poey, 1861
(Deepwater cardinalfishes)

Marine, Atlantic, Indian and Pacific. Usually found on continental slope at depth range of 200-1200 m, benthic or pelagic. Most species have a circumglobal distribution. Previously included in the Apogonidae, they have been elevated to family rank by Johnson (1984). They differ from Apogonidae in having 25 (vs 24) vertebrae, seven to eight (vs 6) infraorbitals, two (vs one) uroneural, dorsal and anal fins covered with scales; two supernumerary anal spines (except *Brephostoma* and *Brinkmannella* which have one spine) not homologous with the two anal spines of the Apogonidae. Other features include a dorsal fin with 7-9 spines and 7-11 soft rays; anal fin with 1-3 spines and 7-10 soft rays; 15-23 pectoral fin rays and 46-52 lateral-line scales. Recent studies (Betancur-R et al., 2017) have showed the Epigonidae have no affinities with Apogonidae: they are placed in the order Pempheriformes (series Eupercaria) whereas Apogonidae are in the order Kurtiiformes (series Gobiaria) being closely related to Gobiiformes. Carnivorous, they have a maximum length of 58 cm, mostly about 20 cm.

Etymology: *epi-*, above; *gonus*, angle, referring to slightly curved back of *E. macrophthalmus* (=telescopus), angled anteriorly (from first dorsal fin to head).

Seven genera and 33 species are present here at the end of the year 2003. New species have been discovered since then and 43 species are counted by Nelson et al. (2016) and 48 species are recorded in the Eschmeyer's Catalog of Fishes (Fricke et al., 2026) and in the present checklist.

Genus ***Brephostoma*** Alcock

Brephostoma Alcock, 1889:383, Ann. Mag. Nat. Hist. (Ser. 6), v. 4 (no. 23). Neuter. (Type species *Brephostoma carpenteri* Alcock, by monotypy).

Family position uncertain according to Fraser (1972); also placed in Acropomatidae (Eschmeyer, 1990).

***Brephostoma carpenteri* Alcock, 1889**

Brephostoma carpenteri Alcock, 1889: 383, Ann. Mag. Nat. Hist. (Ser. 6), v. 4, no. 23 (type locality, Bay of Bengal, summit of

Carpenter Ridge, 6°18'N to 6°16'N, 90°40'E to 90°44'E, 1370-1520 fathoms). No types known.

DISTRIBUTION: Indian Ocean; New Guinea; probably more widespread in tropical and subtropical seas, including Hawaiian Islands.

Genus ***Brinkmannella* Parr**

Brinkmannella Parr, 1933: 26, Bull. Bingham Ocean. Coll. Yale Univ., v. 3 (art. 6). Feminine. (type species *Brinkmannella elongata* Parr, by original designation).

***Brinkmannella elongata* Parr, 1933**

Brinkmannella elongata Parr, 1933: 26, fig. 12, Bull. Bingham Oceanogr. Collect. Yale Univ., v. 3, art. 6 (type locality, Tongue of the Ocean, Bahamas, 23°37'25"N, 77°15'10"W, 7000 ft. wire out). Holotype: YPM 2837.

DISTRIBUTION: western Atlantic.

COMMENTS: *B. elongata* is based on juvenile specimens of *Brephostoma* according to Fedoryako (1976); valid according to Fraser (1972: 42), Johnson (1984: 469) and Nelson (1994). The Catalog of Fishes follows the opinion of Fedoryako without further comments.

Genus ***Epigonus* Rafinesque**

Epigonus Rafinesque, 1810:64, Indice Ittiol. Sicil. Masculine. (Type species *Epigonus macrophthalmus* Rafinesque, by monotypy).

Pomatomus Risso, 1810:301, Ichthyol. Nice. Masculine. (Type species *Pomatomus telescopus* Risso, by monotypy; permanently invalid, preoccupied by *Pomatomus* Lacepède, 1802, Pomatomidae, Pisces).

Telescopus Bleeker, 1876:261, Arch. néerland. sci. exact. nat., v. 11. Masculine. [Type species *Pomatomus telescopus* Risso, by monotypy; based on *Pomatomus* of Cuvier (not of Lacepède)].

Pomatomichthys Giglioli, 1880:20, Elenco ... pesci italiani, book. Masculine. (Type species *Pomatomichthys constanciae* Giglioli, by monotypy).

Hynnodus Gilbert, 1905:617, Bull. U. S. Fish Comm., v. 23 (pt 2) [for 1903]. Masculine. (Type species *Hynnodus atherinoides* Gilbert, by original designation).

Oxyodon Brauer, 1906:287, Die Tiefsee-Fische, Syst. Teil, v. 15. Masculine. (Type species *Oxyodon macrops* Brauer, by monotypy).

Xystramia Jordan, 1917:46, Copeia No. 44. Neuter. (Type species *Apogon pandionis* Goode and Bean, by original designation).

Scepterias Jordan and Jordan, 1922: 44, Mem. Carnegie Mus., v. 10 (no. 1). Masculine. (Type species *Scepterias fragilis* Jordan and Jordan, by original designation).

Parahynnodus Barnard, 1927:69, Ann. Mag. Nat. Hist. (Ser. 9), v. 20 (no. 115) (art. 8). Masculine. (Type species *Parahynnodus robustus*, by monotypy).

Benthic or benthopelagic on continental slopes usually between 200 and 800 m of depth; juvenils pelagic; 44 species (Abramov, 1992; McCosker and Long, 1997; Okamoto, 2015; Okamoto and Gon, 2018; Okamoto, Baldwin & Long, 2024).

***Epigonus affinis* Parin and Abramov, 1986**

Epigonus affinis Parin and Abramov, 1986: 180, fig. 3, Trans. P. P. Shirshov Inst. Oceanol., v. 121 (type locality, E. Atlantic, 3°02'S, 0°44'E, 300 m over 2000 m). Holotype: ZIN 47333. Paratypes: USNM 276948 (2), ZIN 47334 (10), ZMMU P-16678 (2). [In Russian with English summary.]

DISTRIBUTION: Gulf of Guinea.

***Epigonus angustifrons* Abramov and Manilo, 1987**

Epigonus angustifrons Abramov and Manilo, 1987: 45, fig. 1, Byull. Mosk. Obsh. Ispyt. Prir. Otd. Biol., v. 92, no. 2 (type locality, Sw. Indian Ocean, 36°33'N, 52°05'E, 560-610 m). Holotype: ZIN 47266 (not received). Paratypes: ZIN 47267-68 (1, not received), 47268 (? , not received); ZMMU P-16298 (2), P-16299 (2). [In Russian with English summary.]

Epigonus trunovi Parin and Prokofiev in Parin, Prokofiev and Bussarawit 2012 [27 April]:239, Fig. 1 J. Ichthyol., v. 52 (no. 3). Original Russian Text © N.V. Parin, A.M. Prokofiev, S. Bussarawit, 2012, published in Voprosy Ikhtiologii, 2012, Vol. 52, No. 2, pp. 248–252. (type locality Southeastern Atlantic, Valdivia Bank). Holotype: ZMMU 21892. Paratypes: ZMMU 21893 (1).

DISTRIBUTION: subtropical Indian Ocean: southern Indian Ocean: Saint-Paul Seamount.

***Epigonus atherinoides* (Gilbert, 1905)**

Hynnodus atherinoides Gilbert, 1905: 618, pl. 79, Bull. U. S. Fish Comm., v. 23, pt 2 (type locality, Pailolo Channel, Hawaii Is., Albatross sta. 3867, 284-290 fathoms). Holotype: USNM 51601. Paratypes: CAS-SU 8660 (1).

DISTRIBUTION: Japan, Philippines, Sala-y-Gomez Ridge (southeastern Pacific), New Britain (Papua New Guinea), southeast Australia and Society Islands and Hawaiian Islands.

***Epigonus bispinosus* Okamoto and Gon, 2018**

Epigonus bispinosus Okamoto and Gon, 2018: 267, Figs. 5, 6A, 7A, Zootaxa 4382 (no. 2) (type locality, off northern Madagascar,

western South Indian Ocean, 11°58.41'S, 49°22.26'E, depth 453-455 meters). Holotype: SAIAB 189476. Paratypes: BMNH 2017.6.9.1 (1), KAUM-I 102566 (1); SAIAB 35606 (5); USNM 438974 (1).

DISTRIBUTION: Western south Indian Ocean: off Eastern Cape coast (South Africa) and off northern Madagascar.

***Epigonus carbonarius* Okamoto and Motomura, 2011**

Epigonus carbonarius Okamoto and Motomura 2011: 156, Figs. 1, 2a, 2e, 3 Ichthyol. Res. v. 58 (no. 2) (type locality, off Nuku Hiva Island, 8°58'S, 140°04'W, Marquesas Islands). Holotype: MNHN 2010-0983. Paratypes: MNHN 2010-0984 to 0986 (3).

DISTRIBUTION: Marquesas Islands.

***Epigonus cavaticus* Ida, Okamoto and Sakaue, 2007**

Epigonus cavaticus Ida, Okamoto and Sakaue, 2007: 132, Figs. 2, 3 4A, 5A Ichthyol. Res. v. 54 (no. 2) (type locality, Virgin Hole, southern fringing reef of Ngemelis Island, Palau). Holotype: NSMT-P 72637. Paratypes: FSKU-P 19991 (1), 19992 (1, c&s), 19993 (1); KAUM-I.33 (1); NSMT-P 72638-40 (1, 1, 1).

DISTRIBUTION: Palau.

***Epigonus chilensis* Okamoto, 2012**

Epigonus chilensis Okamoto, 2012: 243, Figs. 1, 2a, 3a, 4a, 5a [Ichthyological Research v. 59 (type locality, Off southern Chile, 42°57'S, 75°07'W, depth 315-340 meters). Holotype: FAKU-CP504. Paratypes: FAKU-CP505 (1), CP508 (1), CP309 (1), CP311(1)

DISTRIBUTION: off southern Chile.

***Epigonus constanciae* (Giglioli, 1880)**

Pomatomichthys constanciae Giglioli, 1880: 20, Fauna Italica (type locality, Messina Strait, Italy). Holotype (unique): MZUF 3089.

Epigonus trewavasae Poll, 1954: 91, fig. 27, Res. Sci. Exped. Oceanogr. Belge Cot. Afr. Atlant. Sud., v. 4, no. 3A (type locality, Atlantic, 8 [or 48] mi. southwest of Moite Seca, 6°08'S, 11°30'E, 280-290 m). Holotype (unique): IRSNB 206.

DISTRIBUTION: Mediterranean and eastern Atlantic from Portugal to Namibia, including Azores (Portugal), Madeira (Portugal), Cape Verde Islands, and São Tomé and Príncipe.

***Epigonus crassicaudus* De Buen, 1959**

Epigonus (Xystramia) crassicaudus De Buen, 1959: 196, Bull. Mus. Natl. Hist. Nat. Santiago, v. 27, no. 3 (type locality, off Valparaiso, Chile). Holotype (unique): EBMC 10183.

DISTRIBUTION: Chile.

COMMENTS: misspelled *crassicaudus* (Parin and Abramov 1986: 189) and *crassicaudatus* (Nakamura in Nakamura et al. 1986: 202).

***Epigonus ctenolepis* Mochizuki and Shirakihara, 1983**

Epigonus ctenolepis Mochizuki and Shirakihara, 1983: 199, fig. 1, Jpn. J. Ichthyol., v. 30, no. 3 (type locality, off Owase, Pacific coast of central Japan). Holotype: FUMT-P 1567. Paratypes: FUMT-P 1568 (1).

DISTRIBUTION: Kumanonada Sea, on the southern part of the Kii Peninsula, Honshu, Japan.

***Epigonus denticulatus* Dieuzeide, 1950**

Epigonus denticulatus Dieuzeide, 1950: 89, figs. 1-11, Bull. Trav. Publ. Sta. Aquic. Peche Castiglione (n. s.), v. 2 (type locality, Mediterranean Sea, Algeria, 100-500 m). No types known.

DISTRIBUTION: temperate and tropical waters, circumglobal, Atlantic and Indo-Pacific (including Gulf of Mexico, Caribbean Sea, Mediterranean Sea; Tasman Sea).

***Epigonus devaneyi* Gon, 1985**

Epigonus devaneyi Gon, 1985: 225, fig. 3, Pac. Sci., v. 39, no. 2 (type locality, off south end of Necker Island, Hawaiian Islands, U.S.A., 311-347 m). Holotype: BPBM 22429. Paratypes: BPBM 30277 (2).

DISTRIBUTION: Hawaiian Islands.

***Epigonus draco* Okamoto, 2015**

Epigonus draco Okamoto, 2015: 121, Figs. 1-2, 4A, 5A, Species Diversity v. 20 (type locality, Solomon Islands, 7°43'34"S, 158°29'24"E, depth 391-623 meters). Holotype: MNHN 2006-0589. Paratypes: CAS 235796 (1); MNHN 2006-0063 (2); MNHN 2012-0836; MNHN 2006-0684,

Epigonus okamotoi Fricke R. 2017:117, Figs. 1-4 FishTaxa v. 2 (no. 3) (type locality, Ainto Bay, West New Britain Province Papua New Guinea, Solomon Sea).

DISTRIBUTION: Western Pacific: Philippines, Papua New Guinea, Solomon Islands and Vanuatu.

Comments: synonymy from Okamoto et al., 2018.

***Epigonus elegans* Parin and Abramov, 1986**

Epigonus elegans Parin and Abramov, 1986: 177, fig. 2, Trans. P. P. Shirshov Inst. Oceanol., v. 121 (type locality, Nazca Ridge, 21°25'S, 81°37'W, e. Pacific, 25 m). Holotype: ZIN 47332. Paratypes: IOM (3), USNM 276946 (2), ZIN 47651 (17), ZMMU P-16677 (29).

DISTRIBUTION: southeastern Pacific: Nazca Ridge.

***Epigonus elongatus* Parin and Abramov, 1986**

Epigonus elongatus Parin and Abramov, 1986: 55, fig. d, Byull. Mosk. Obsh. Ispyt. Prir. Otd. Biol., v. 91, no. 3 (type locality, N. Indian Ocean, 11°00'S, 50°42'E, 320 m). Holotype: ZIN 47138. Paratypes: (6) IOM uncat. (4), ZIN 47139 (2).

DISTRIBUTION: Western Indian Ocean: Saya de Malha Bank endemic.

***Epigonus exodon* Okamoto and Motomura, 2012**

Epigonus exodon Okamoto and Motomura, 2012: 85, Figs. 1-4A, Zootaxa No. 3453 (type locality, Réunion Island, western Indian Ocean, depth 450-480 meters). Holotype: MNHN 1991-0155. Paratypes: MNHN 2012-0134 (1).

DISTRIBUTION: south-western Indian Ocean: Mayotte (Comoros, France) and Réunion (Mascarenes).

***Epigonus fragilis* (Jordan and Jordan, 1922)**

Scepterias fragilis Jordan and Jordan, 1922: 45, pl.2, fig. 2, Mem. Carnegie Mus., v. 10, no. 1 (type locality, Honolulu market, Oahu Island, Hawaiian Islands). Holotype: FMNH 55204 [ex CM 3900]. Other material or paratypes: (3).

DISTRIBUTION: Western and central Pacific: Japan, New Caledonia, Papua New Guinea, Taiwan, Marcus Island, Johnston Atoll, Hawaiian Ridge and Hawaiian Islands.

***Epigonus gemma* Okamoto, Baldwin & Long, 2024**

Epigonus gemma Okamoto, Baldwin & Long 2024: 434, Figs. 1, 2, Ichthyol. Res., v. 71, no. 1. (type locality: Deep reef off Curaçao, southern Caribbean Sea). Holotype: USNM 431654. Paratypes: USNM 413854 (1); USNM 413858-9 (1, 1); USNM 413861-2 (1, 1); USNM 431690 (1).

DISTRIBUTION: Western Atlantic: southern Caribbean Sea.

***Epigonus glossodontus* Gon, 1985**

Epigonus glossodontus Gon, 1985: 222, Figs. 1-2, Pac. Sci., v. 39, no. 2 (type locality, small caves in vertical face, Mamala Bay, off Pearl Harbor, Oahu Island, Hawaiian Islands, U.S.A., 366 m). Holotype: BPBM 28611. Paratypes: BPBM 30278 (4)

DISTRIBUTION: Hawaiian Islands and Daito Islands, Japan, observed using remotely operated vehicles (ROVs) and collected during the ROV observations around the Daito Islands. Subsequent record of this species from the Kyushu-Palau Ridge indicated that the species is widely distributed.

Comments: Reference for distribution: Sato M, Ito S, Fujiwara Y, Koeda K (2025) First northwestern Pacific records of the deep-sea cardinalfish *Epigonus glossodontus* (Teleostei, Epigonidae) from the Daito Islands, Japan. ZooKeys 1231: 1-10.

***Epigonus heracleus* Parin and Abramov, 1986**

Epigonus heracleus Parin and Abramov, 1986: 183, fig. 5, Trans. P. P. Shirshov Inst. Oceanol., v. 121 (type locality, S. Pacific, 43°35'S, 161°25'W, 650-670 m). Holotype: ZIN 47626. Paratypes: ZIN 47627-28 (1, 9), 47652 (5); USNM 276947 (3); ZMMU P-16679 (13).

DISTRIBUTION: Seamounts and ridges in the southwestern Pacific (off Eastern New Zealand).

***Epigonus hexacanthus* Okamoto, Baldwin & Long, 2024**

Epigonus hexacanthus Okamoto, Baldwin & Long, 2024: 436, Figs. 3, 4, Ichthyol. Res., v. 71, no. 1. First online. (type locality, Deep reef off Curaçao, southern Caribbean Sea. Holotype: USNM 422678. Paratypes: USNM 413950-1 (1, 1); USNM 426792 (1); USNM 431707 (1); USNM 431760 (7).

DISTRIBUTION: Western Atlantic: southern Caribbean Sea. Habitat: marine.

***Epigonus idai* Okamoto and Gon, 2018**

Epigonus idai Okamoto and Gon, 2018: 274, Figs. 6B, 7B, 11, Zootaxa 4382 (no. 2) (type locality, Off Mozambique, southwestern Indian Ocean). Holotype: SAIAB 82171. Paratype: SAIAB 204434 (formerly SAIAB 82171).

DISTRIBUTION: off Mozambique, western South Indian Ocean.

***Epigonus indicus*, Idrees Babu and Akhilesh 2020**

Epigonus indicus, Idrees Babu and Akhilesh 2020:21, Figs. 1-6, J. Ocean Sci. Foundation, v. 36 (type locality, offshore of desalination plant, Kavaratti Island, Lakshadweep, India, 10.576°, 72.649°, depth 350 - 400 meters). Holotype: BNHS MF94. Paratype: BNHS MF95 (1).

DISTRIBUTION: Kavaratti Island, Lakshadweep, India, Indian Ocean.

***Epigonus lenimen* (Whitley, 1935)**

Scepterias lenimen Whitley, 1935: 230, Rec. Aust. Mus. v. 19, no. 4 (type locality, Great Australian Bight, s. from Eucla, Western Australia, 350-450 fathoms). Holotype: AMS E.3368. Paratypes: AMS E.3554 (3), E.3581-82 (1, 1), E.5490 (1), IA.6303 [ex AMS E.3354] (1).

DISTRIBUTION: southwest Pacific, including New Zealand, eastern Australia and Tasmania.

***Epigonus lifouensis* Okamoto and Motomura, 2013**

Epigonus lifouensis Okamoto and Motomura, 2013: 2, Figs. 1, 2a, Ichthyol. Res., v. 60 (no 4) (type locality, south of Lifou Island, Loyalty Islands, New Caledonia). Holotype: MNHN 2000-0018. Paratypes: MNHN 2003-1826 (1).

DISTRIBUTION: Macclesfield Bank (South China Sea), Loyalty Islands (New Caledonia) and Indonesia.

***Epigonus lustrans* Okamoto, Fricke and Yagishita, 2025**

Epigonus lustrans Okamoto, Fricke and Yagishita, 2025: 2, Figs. 1, 2a, Ichthyol. Res., publ. online 24 dec. 2025. (type locality, São Tomé and Príncipe, 0°15.81'N, 6°47.09'E, 185 m wire out, 60–71 m depth). Holotype: CAS-ICH 234747. Paratypes: CAS-ICH 231648 (3); CAS-ICH 234724 (3); CAS-ICH 243677 (1); SMNS 25277 (1).

DISTRIBUTION. Known only from the island of São Tomé, Gulf of Guinea, eastern central Atlantic, at 6–71 m depth.

***Epigonus machaera* Okamoto, 2012**

Epigonus machaera Okamoto 2012:248, Figs. 2b, 4b, 5b,7, 8a, 9a Ichthyol. Res. v. 59. (type locality, Chatham Rise, east of New Zealand, 43°18'S, 175°02'W, depth 727-746 meters). Holotype: NSMT-P 42741. Paratypes: AMS I.45910-001 (1); NSMT-P 10599 (1), 106600 (1), 106601 (1), 106602 (1), 106603 (1), 106604 (1).

DISTRIBUTION: New Zealand.

***Epigonus macrops* (Brauer, 1906)**

Oxyodon macrops Brauer, 1906: 288, fig. 172, Tiefsee-Fische, v. 15. (type locality, West coast of Sumatra, 3°22'01"S, 101°11'05"E, Indonesia). Syntypes: (2) ZMB 17678 (1).

Epigonus merleni McCosker and Long, 1997: 126, figs. 1-3, Ichthyol. Res., v. 44, no. 2 (type locality, off Cabo Hammond, Isla Fernandina (00°28'S, 91°37'W), Galapagos Islands, floating on surface). Holotype (unique): CAS 86581.

DISTRIBUTION: worldwide, in tropical and warm temperate oceans (continental and insular slopes and seamounts in tropical western Atlantic (including Caribbean Sea, Gulf of Mexico) and Indo-Pacific (including Tanzania to Vietnam, Indonesia and northwestern Australia); in eastern Pacific recorded off Galapagos Islands (Ecuador).

Comments: synonymy from Okamoto et al., 2012.

***Epigonus marimonticolus* Parin and Abramov, 1986**

Epigonus marimonticolus Parin and Abramov, 1986: 53, fig'd, Byull. Mosk. Obsh. Ispyt. Prir. Otd. Biol., v. 91, no. 3 (type locality, N. Indian Ocean, 10°18'S, 56°03'E, 400-420 m). Holotype: ZIN 43133. Paratypes: (12) IOM uncat. (4), ZIN 47134-35 (2, 1), ZMMU P-12288 (5).

DISTRIBUTION: western Indian Ocean: seamounts between Socotra (Yemen) and Madagascar.

***Epigonus marisrubri* Krupp, Zajonz and Khalaf, 2009**

Epigonus marisrubri Krupp, Zajonz and Khalaf, 2009:224, Figs. 1-3, aqua, International Journal of Ichthyology v. 15 (no. 4) (type locality, Northern of Gulf of Aqaba, Red Sea, Jordan). Holotype: SMF 24661. Paratypes: SMF 31636 (1).

DISTRIBUTION: Red Sea, Gulf of Aqaba.

***Epigonus mayeri* Okamoto, 2011**

Epigonus mayeri Okamoto 2011:102, Figs. 2-3, 4a-5a, Ichthyol. Res., v. 58 (no. 2) (type locality, Off Angola, eastern central Atlantic, 9°55'S, 5°25'E, depth 396 meters). Holotype: HUMZ 100044. Paratypes: HUMZ 100045 (1).

DISTRIBUTION: off Angola

***Epigonus megalops* (Smith and Radcliffe, 1912)**

Hynnodus megalops Smith and Radcliffe, 1912: 445. Pl. 38, fig. 3, Bull. U.S. Natl. Mus. No. 41, 1868 (type locality, between Burias and Luzon Island, 12°51'30"N, 123°26'15"E, Philippines, Albatross sta. 5388, 226 fathoms). Holotype: USNM 70255. Paratypes: USNM 147373 (2), 147375 (1).

DISTRIBUTION: Philippines.

REMARKS: resurrected from synonymy with *E. atherinoides* by Okamoto (2016).

***Epigonus notacanthus* Parin and Abramov, 1986**

Epigonus notacanthus Parin and Abramov, 1986: 174, fig. 1, Trans. P. P. Shirshov Inst. Oceanol., v. 121 (type locality, Sala y Gomez ridge, 22°06'S, 81°17'W, e. Pacific, 230 m). Holotype: ZIN 47328. Paratypes: IOM (1), ZIN 47329-30 (8, 1), USNM 276945 (3), ZMMU P-16674-76 (4, 6, 1).

DISTRIBUTION: southeastern Pacific.

***Epigonus occidentalis* Goode and Bean, 1896**

Epigonus occidentalis Goode and Bean, 1896: 233, pl. 66, fig. 236, Spec. Bull. U. S. Nat. Mus., No. 2 (type locality, off Barbados, West Indies, 237 fathoms). Holotype (unique): MCZ 28032.

DISTRIBUTION: Western Atlantic: eastern-central Florida south to Guyana, including Gulf of Mexico and Caribbean Sea.

***Epigonus oligolepis* Mayer, 1974**

Epigonus oligolepis Mayer, 1974: 179, fig. 15, Bull. Mus. Comp. Zool., v. 146, no. 3 (type locality, Florida Straits southeast of Key West, Combat sta. 436, 24°13'N, 81°42'W, 300 fathoms). Holotype: USNM 207718. Paratypes: MCZ 48848 (1); USNM 109430 (3), 207719 (18, 15 c&s), 207720 (1 c&s), 207721-22 (1, 2).

DISTRIBUTION: Western Atlantic: Florida south to Rio Grande do Norte (Brazil), including Gulf of Mexico and Caribbean Sea.

***Epigonus pandionis* (Goode and Bean, 1881)**

Glossamia pandionis Goode and Bean, 1881:160, Proc. U.S. Natl. Mus v. 4 (no. 211) (type locality, Off Chesapeake Bay, 37°25'N, 74°18'W, U.S.A., depth 157.5 fathoms). Holotype (unique): USNM 26228.

DISTRIBUTION: Western Atlantic; southern central Atlantic: Saint Helena Island; eastern Atlantic: Senegal south to Namibia.

***Epigonus parini* Abramov, 1988**

Epigonus parini Abramov, 1988: 1010, fig. 1, Voprosy Ikhtiol., v. 27, no. 6 [Journal of Ichthyology, v. 28 (no. 3), 1989:102-106.] (type locality, S. Pacific, 53°35'S, 140°40'W, 200-240 m). Holotype: ZIN 47851. Paratypes: USNM 285049 (2); ZIN 46181 (10), 47852-54 (17, 5, 1); ZMMU P-17003 (14).

DISTRIBUTION: South Pacific.

***Epigonus pectinifer* Mayer, 1974**

Epigonus pectinifer Mayer, 1974: 186, fig. 19, Bull. Mus. Comp. Zool., v. 146, no. 3 (type locality, off Grenada, 12°01'N, 61°53'30"W, Oregon sta. 5043, 210-250 fathoms). Holotype: USNM 207725. Paratypes: ABE 64-2085 (1), 64-2245 (1), 64-2248 (1); MCZ 48850 (2), 48851 (1 c&s), 49813 (1); UF 230378 [ex UMML 30378] (1); USNM 207726-28 (1, 10, 9), 207729 (2 c&s).

DISTRIBUTION: Cosmopolitan: southwestern Indian Ocean, western North Atlantic, Caribbean Sea, Tasman Sea, Australia, New Zealand, Emperor Seamounts and Japan.

***Epigonus robustus* (Barnard, 1927)**

Epigonus macrops Gilchrist and von Bonde, 1924: 14, pl. 1, fig. 3, Rep. Fish. Mar. Biol. Surv. Union So. Afr., Rep. 3, no. 7 (type locality, Sw. Cape, South Africa, Pickle stations 344 and 347, 510 and 670 fathoms). Syntypes: (2) SAIAB [formerly RUSI] 669 (1). Secondly preoccupied in *Epigonus* by *Oxyodon macrops* Brauer, 1906 [= *Epigonus macrops* (Brauer, 1906)].

Parahynnodus robustus Barnard, 1927: 70, Ann. Mag. Nat. Hist. (Ser. 9), v. 20, no. 115 (type locality, off Cape Point, South Africa, Pieter Faure sta. 17361, 460 fathoms). Holotype (unique): SAM 13080.

DISTRIBUTION: Southern circumglobal: South Africa, Chile, southern Australia, New Zealand, and Tasmania.

***Epigonus telescopus* (Risso, 1810)**

Pomatomus telescopus Risso, 1810: 301, pl. 9, fig. 31, Ichthyol. Nice (type locality, Nice, France). Lectotype: MNHN B-0862 (dry, poor condition). Paralectotypes: MNHN A-0750 (1, dry, poor condition). Lectotype apparently established by Tortonese (1973:366) as "type" MNHN B-0862.

Epigonus macrophthalmus Rafinesque, 1810: 64, Indice Ittiol. Sicil. (type locality, Sicily, Italy). No types known.

Pomatomus cuvieri Cocco, 1829: 143, Giorn. Sci. Lett. Art. Sicilia, v. 26, no. 77 (type locality, Messina, Sicily, Italy). No types known.

DISTRIBUTION: Atlantic, Indian Ocean and west Pacific. Circumglobal, antitropical (including Mediterranean Sea).

***Epigonus thai* Prokofiev and Bussarawit, 2012**

Epigonus thai Prokofiev and Bussarawit in Parin, Prokofiev and Bussarawit 2012:241, Fig. 2 J. Ichthyol., v. 52 (no. 3) (type locality, Indian Ocean: Andaman Sea, 6°44'710"N, 98°06'095"E, depth 303-313 meters). Holotype (unique): PMBC 26430.

DISTRIBUTION: Andaman Sea, Indian Ocean.

***Epigonus tuberculatus* Okamoto and Motomura, 2013**

Epigonus tuberculatus Okamoto and Motomura, 2013:5, Figs. 2b, c, 4, 5 Ichthyol. Res., v. 60 (no. 4) (type locality 14°45'S, 95°24"E to 14°45'S, 95°22'E, south of Cocos-Keeling Islands, Indian Ocean, depth 473-570 meters). Holotype: CSIRO H 5677-08. Paratypes: CSIRO H 5677-09 (1).

DISTRIBUTION: South of Cocos-Keeling Islands.

***Epigonus waltersensis* Parin and Abramov, 1986**

Epigonus waltersensis Parin and Abramov, 1986: 182, fig. 4, Trans. P. P. Shirshov Inst. Oceanol., v. 121 (type locality, Madagascar submarine ridge, 33°06'S, 44°04'E, sw. Indian Ocean, 740-760 m). Holotype (unique): ZIN 47335.

DISTRIBUTION: Eltanin Fracture Zone.

***Epigonus zonatus* Okamoto et al., 2025**

Epigonus zonatus Okamoto, Long, Claro and McCosker, 2025:2, Figs. 1-2, Ichthyol. Res. (type locality, Jordines de la Reina National Marine Park, off the island of Cayo Anclitas, Cuba, Caribbean Sea, 20°48.37'N, 78°58.17'W, depth 385 - 567 meters). Holotype: CAS 227559. Paratype: CAS 248427 (1).

DISTRIBUTION: Western Atlantic: off northwestern Cuba, endemic.

Genus *Florenciella* Mead and De Falla

Florenciella Mead and De Falla, 1965:268, Bull. Mus. Comp. Zool., v. 134 (no. 7). Feminine. (Type species *Florenciella lugubris* Mead and De Falla, by monotypy).

One species.

***Florenciella lugubris* Mead and De Falla, 1965**

Florenciella lugubris Mead and De Falla, 1965: 268, Figs. 2, 3 (right), Bull. Mus. Comp. Zool., v. 134 (7). (type locality, Equatorial Indian Ocean, 1°58'S, 60°06'E to 2°06'S, 60°02'E, to 510 m). Holotype: MCZ 43089. Paratypes: ANSP 128493 [ex MCZ 45894] (8); MCZ 45894 (orig. 57, now 27), 49815-17 (1, 1, 6) 50984 (1, c&s), 50985 (1, c&s), 50986 (2); SIO 75-603 [ex MCZ 45894] (8); UF [ex UMML] (1); USNM 202590 (1), 214031-32 (8, 1); ZMUC [ex MCZ 45894] (3).

DISTRIBUTION: Indian Ocean in tropical and subtropical waters and southwestern Indian Ridge; northwestern Pacific.

Genus *Microichthys* Rüppell

Microichthys Rüppell, 1852:1, Fische und deren Skelette. Masculine. (Type species *Microichthys coccoi* Rüppell, by monotypy).

Four species. Genus revised by Fricke et al. (2020). Pelagic.

***Microichthys atlanticus* Fricke, Ordines & Williston, 2020**

Microichthys atlanticus Fricke, Ordines & Williston, 2020:5, Figs. 2, 3, 4. Ichthyol. Res., 67 (3). (type locality, Off Azores Islands, 113 km east of São Miguel Island, northeastern Atlantic Ocean, 37°47'42"N, 23°52'00"W, depth 0 - 350 meters). Holotype: MCZ 149633. Paratypes: MCZ 149631 (1); MCZ 149632 (2); MCZ 149634 (1).

DISTRIBUTION: Northeastern Atlantic: Azores Islands, Mid-Atlantic Ridge zone north of Azores.

***Microichthys coccoi* Rüppell, 1852**

Microichthys coccoi Rüppell, 1852: 1, Fische und deren Skelette (type locality, Messina, Sicily, Italy). Holotype (unique): SMF 1069.

DISTRIBUTION: previously known only from the Strait of Messina (Sicily) in the Mediterranean. Now from several localities of the Mediterranean Sea: Balearic Islands, Italy, Greece and Turkey.

***Microichthys grandis* Fricke & Couperus, 2023**

Microichthys grandis Fricke & Couperus, 2023: 41, Figs. 1-4. Ichthyol. Res., 71 (1). (type locality, continental slope of southwest coast of Ireland, 324 km west of Dingle, northeastern Atlantic Ocean, 52°02.74'N, 14°57.70'W, depth 0 - 537 meters). Holotype (unique): SMNS 27380.

DISTRIBUTION: Northeastern Atlantic Ocean: off southwest coast of Ireland.

***Microichthys sanzoi* Spartà, 1950**

Microichthys sanzoi Spartà, 1950: 202, figs. 1-8, Boll. Pesca Piscic. Idrobiol., No. 26, v. 5, fasc. 2. (type locality, Strait of Messina, Sicily, Italy). Holotype (unique): Istituto Talassografico di Messina (lost).

DISTRIBUTION: Mediterranean: known only from the Strait of Messina (Hureau and Monod, 1979).

Comments: additional material was provided by Fricke et al. 2020: ISPRA MIC-SAN-01, 1 specimen, 40.3 mm SL, Mediterranean Sea, Italy, Sicily, Strait of Messina, stranded on shore, Pietro Battaglia, 20 Mar. 2013.

Genus *Rosenblattia* Mead and De Falla

Rosenblattia Mead and De Falla, 1965:263, Bull. Mus. Comp. Zool., 134 (no. 7). Feminine. (type species *Rosenblattia robusta* Mead and De Falla, by original designation).

One species.

***Rosenblattia robusta* Mead and De Falla, 1965**

Rosenblattia robusta Mead and De Falla, 1965: 263, Figs. 1, 3 (left), Bull. Mus. Comp. Zool., 134(7) (type locality, 46°53'S, 179°48'W to 46°42'S, 179°32'W, 1878 m). Holotype: SIO 61-45. Paratypes: LACM 10073-78 (1 ea.); MCZ 50020 (2), 50759 (1); SIO 61-41 (1), 61-45 (1), 734193-604 (2); USNM 202589 (1).

DISTRIBUTION: Southern Ocean in temperate waters; mesopelagic and bathypelagic

Genus *Sphyraenops* Gill

Sphyraenops Gill in Poey, 1861:349, Mem. Hist. Nat. Cuba, v. 2. Masculine. (Type species *Sphyraenops bairdianus* Poey, by monotypy).

Scombrosphyraena Fourmanoir, 1970:28, Cah. O.R.S.T.O.M. Sér. Océanogr., 8 (2). Feminine. (Type species *Scombrosphyraena oceanica* Fourmanoir, by monotypy).

Monotypic.

***Sphyraenops bairdianus* Gill, 1860**

Sphyraenops bairdianus Gill, 1860: 350, Pl. 18, fig. 12, Mem. Hist. Nat. Cuba, v. 2 (type locality, Cuba). No types known.

Scombrosphyraena oceanica Fourmanoir, 1970: 27, fig. 5, Cah. O.R.S.T.O.M. Sér. Océanogr., 8 (2) (type locality, Santo, sw. Pacific, 16°30'S, 166°58'E [stomach content]). Holotype: LACM (specimen of 4.8 cm). Paratypes: (5) MNHN 1970-0037 (2).

DISTRIBUTION: Tropical seas: Atlantic and West Pacific; pelagic and oceanic. Western Australia, northwestern Atlantic, possibly circumglobal.

COMMENTS: synonymy from Suda and Tominaga (1983: 292).

**Family GLAUCOSOMATIDAE Jordan and Thompson, 1911
(Pearl perches)**

Marine; eastern Indian to western Pacific. Pearl perches are characterized by robust to deeply ovate, compressed body; head large; mouth large, oblique, terminal and protractile; broad, scaled; lower jaw protruding; teeth pointed or conical maxilla. They have dorsal fin with 8 graduated spines and 12-14 soft rays; anal III, 9-12; caudal fin lunate to truncate. Their complex swim bladder/vertebral association suggests a close relationship with Pempheridae (Tominaga, 1986; McKay, 1997). Johnson (1993) recommended that this family should be included in Pempheridae. The family Glaucosomatidae is recognized as distinct from Pempheridae based on possession of fewer anal fin elements (9-12 vs 17-45), more dorsal spines (8-9 vs 4-6), a supramaxillary bone, the procurent spur, the axillary process of the pelvic fin, and lacking the two ventral processes attaching the cleithrum. They occur in small schools in offshore reefs and are usually bottom feeders that may move up into the water column to take a bait on occasion. Adults grow over one meter in length. All are superior tablefishes and they might be taken throughout day and night in deep water. Their biology is poorly known. Etymology: *glaukos*, hoary blue; *soma*, body, referring to nearly uniform bluish-grey body colour.

One genus with 4 species (Nelson, 1994), based on Paxton et al. (1989), based on the work of Arai and Fuji presented at the Conference on the Systematics and Evolution of Indo-Pacific Fishes held in Sydney in 1981. They recognised 4 species. The family has been revised by McKay (1997).

Genus *Glaucosoma* Temminck and Schlegel

Glaucosoma Temminck and Schlegel, 1843:62, Fauna Japonica, Parts 2-4. Neuter. (Type species *Glaucosoma buergeri* Richardson, by subsequent designation).

Breviperca Castelnau, 1875:6, Official Record... colony of Victoria. Feminine. (Type species *Breviperca lineata* Castelnau, by monotypy).

Reganichthys Ogilby, 1915: 123, Mem. Queensl. Mus., v. 3. Masculine. (Type species *Reganichthys magnificus* Ogilby by monotypy).

Brachyglaukosoma Fowler, 1934:357, Proc. Acad. Nat. Sci. Phila., v. 85 [for 1933]. Neuter. (Type species, *Glaucosoma taeniatus* Fowler, by original designation).

Four species.

***Glaucosoma buergeri* Richardson, 1845**

Glaucosoma buergeri Richardson, 1845: 27, Ichthyology of the voyage of H. M. S. Erebus and Terror v. 2 (2) (type locality, Southwestern coast of Japan). No types known.

Glaucosoma fauvelii; Sauvage, 1881: 104, Bull. Soc. philom. Paris (7th Série) v.5 (type locality, Swatow, China). Holotype (unique): MNHN A-2981.

Glaucosoma taeniatus Fowler, 1934: 357, Fig. 108, Proc. Acad. Nat. Sci. Phila. v. 85 (type locality, East of Masbate Island, Philippines). Holotype: USNM 93173.

DISTRIBUTION: western Australia from Shark Bay northward to Cape Talbot and China Sea to southern Japan.

***Glaucosoma hebraicum* Richardson, 1845**

Glaucosoma hebraicum Richardson, 1845: 27, pl. 17, Ichthyology of the voyage of H. M. S. Erebus and Terror v. 2 (2) (type locality, Houtman Abrolhos Islands, Western Australia; southwestern coast of Australia). Holotype: BMNH 1844.2.15.65.

Breviperca lineata Castelnau, 1875: 6, Official Records (type locality, Swan River, Australia). Holotype (unique): not at MNHN [Type catalog: Bauchot and Desoutter (1987:101).]

DISTRIBUTION: western Australia from Shark Bay southward to Cape Leeuwin.

***Glaucosoma magnificum* (Ogilby, 1915)**

Reganichthys magnificus Ogilby, 1915: 123, Pl. 30, Mem. Queensl. Mus., v. 3 (type locality, Thursday Island, Torres Strait, Australia). Holotype (unique): QM I.1803.

DISTRIBUTION: Exmouth Gulf, Western Australia to Shelburne Bay, Queensland.

***Glaucosoma scapulare* Ramsay, 1881**

Glaucosoma scapulare Ramsay in MacLeay, 1881: 334, Pl. 13, Porc. Linn. Soc. N.S.W., v. 5 (pt 3) (type locality, Thursday Island, Torres Strait, Australia). Holotype (unique): AMS A.8510.

DISTRIBUTION: Queensland to Port Jackson, New South Wales.

Family **HEMEROCOETIDAE** Kaup, 1873
(Signalfishes)

Indo-Pacific. Previously regarded as a subfamily of Percophidae, Hemerocoetidae includes nine genera and 29 species (Nelson et al., 2016; Fricke, 2024). Hemerocoetidae are small, slender, and often fragile fishes. They have a cylindrical and elongate body, covered with large cycloid or ctenoid scales, typically less than 50 mm in standard length, though some species like *Pteropsaron indicum* can reach over 80 mm; often a flattened heads with pointed or "duckbill-like" snouts; usually have two separate dorsal fins. The first (spines lacking in some species with a maximum of seven) dorsal fin often features a specialized pterygiophore complex. The second dorsal fin with 13-43 fin rays. Anal fin with no spines and 16-42 soft rays; pectorals with 15-21 fin rays and 32-36 lateral-line scales. Total vertebrae variable between 25 and 50. In males of some species, the first dorsal fin spines are greatly elongated and used for signaling. Eyes large often positioned dorsally on the head, reflecting their bottom-dwelling nature. Osteology reveals the absence of the supramaxilla and the basisphenoid, fused first and second hypural, and a unique connection between the lower jaw and hyoid arch. Hemerocoetidae occupies specific niches within marine and estuarine ecosystems: They are bottom-dwelling fishes found primarily on soft substrates like sand or mud. They occur across a wide depth range, from continental shelves to deeper submarine ridges and seamounts, generally between 50 m and 500 m deep. The name "signalfishes" comes from their behaviour of flicking or waving their often-elongated dorsal fins, likely for communication or territorial displays during the breeding season. They are typically small predators of benthic invertebrates. Etymology: based on *hemerokoites* or "day-sleeper" from Oppian, referring to fishes with upward-facing eyes that buries itself (i.e., "sleeps") in the sand.

Genus *Acanthaphritis* Günther

Acanthaphritis Günther, 1880: 43. Feminine. (Type species, *Acanthaphritis grandisquamis* Günther, by monotypy).

Spinapsaron Okamura and Kishida, 1963: 43. Neuter. (Type species, *Spinapsaron barbatum* Okamura and Kishida, by monotypy).

Branchiopsaron McKay, 1971: 41. Neuter. (Type species *Branchiopsaron ozawai* McKay, by original designation).

Four species. Genus revised by Suzuki and Nakabo (1996).

***Acanthaphritis barbata* (Okamura and Kishida, 1963)**

Spinapsaron barbatum Okamura and Kishida, 1963: 43, Figs. 1-2, Bull. Misaki Mar. Biol. Inst. Kyoto Univ., No. 4 (type locality, Bungo Channel, off Yamatahama, Ehime Pref., Japan). Holotype (unique): FAKU 35855.

DISTRIBUTION: Eastern Indian Ocean, western Pacific: Myanmar; Philippines to Milne Bay and New Ireland (Papua New Guinea), north to southern Korea and southern Japan, south to northern Western Australia.

***Acanthaphritis grandisquamis* Günther, 1880**

Acanthaphritis grandisquamis Günther, 1880: 43, Figs. 1-2, Bull. Misaki Mar. Biol. Inst. Kyoto Univ., No. 4. (type locality, Bungo Channel, off Yamatahama, Ehime Pref., Japan). Lectotype: BMNH 1879.5.14.198. Paralectotypes: BMNH 1996.4.31.1 (1). Lectotype selected by Suzuki & Nakabo 1996:447.

DISTRIBUTION: Western Pacific: eastern Indonesia east to Bougainville and New Ireland (Papua New Guinea), north to South China Sea, south to Woodlark Island (Papua New Guinea).

***Acanthaphritis ozawai* (McKay, 1971)**

Branchiopsaron ozawai McKay, 1971: 41, Fig. 1, J. R. Soc. West. Aust., v. 54 (pt 2) (type locality, Indian Ocean off nw. Australia, 17°17'00"S, 119°57'00"E). Holotype: WAM P.19153-001. Paratypes: WAM P.19152-001 (1), P.19154-001 through P.19158-001 (5).

DISTRIBUTION: western Australia and Tarawa Atoll, Gilbert Islands.

***Acanthaphritis unoorum* Suzuki and Nakabo, 1995**

Acanthaphritis unoorum Suzuki and Nakabo, 1995:452, Fig. 5, Ichthyol. Res., 43 (4) (type locality, off Hamasaka, Hyogo Prefecture, Japan). Holotype: FAKU 61500. Paratypes: BSKU 22919-20 (1, 1), 22922 (1), 22924-27 (1 ea.), 22929-39 (1 ea.), 30271-73 (1 ea.), 42959 (1), 42990-93 (1 ea.), 45049 (1), 81513 (1); FAKU 61501-02 (1, 1), 62976-78 (1, 1, 1), 63082 (1); OMNH-P 4520-27 (1 ea.), 4528-30 (1 ea., c&s); YCM-P 25099 (1), 25100 (1).

DISTRIBUTION: Western Pacific: Philippines south to Morobe, New Britain, New Ireland and Bougainville (Papua New Guinea), north to southern Korea and southern Japan.

Genus *Acanthopsaron* Fricke

Acanthopsaron Fricke, 2024: 3. Neuter. (Type species, *Acanthopsaron striatum* Fricke, by original designation)

***Acanthopsaron striatum*, Fricke, 2024**

Acanthopsaron striatum Fricke 2024:5, Figs. 1-2, Taxa (Journal of Taxonomy and Systematics) v. 5: ad24501. (type locality, Grand Passage, southern side, 186 km north-northwest of Koumac, New Caledonia, 19°01'S, 163°26'E - 19°00'S, 163°26'E, depth 277 - 292 meters). Holotype (unique): MNHN 2024-0429.

DISTRIBUTION: Southwestern Pacific: Belep Islands, New Caledonia.

Genus *Dactylopsaron* Parin

Dactylopsaron Parin, 1990: 9. Neuter. (Type species, *Dactylopsaron dimorphicum* Parin and Belyanina, by original designation). One species.

***Dactylopsaron dimorphicum* Parin and Belyanina, 1990**

Dactylopsaron dimorphicum Parin and Belyanina in Parin, 1990: 9 [p. 77 of the English version], Fig. 3, Voprosy Ikhtiol., v. 30 (no. 1). Se. Pacific, 25°04'S, 97°27'W. Holotype: ZIN 49195 (not yet received at ZIN). Paratypes: AMS I.28180-001 (4); IOM uncat. (35, 4, 8); USNM 301298 (15); ZIN 49196 (19); ZMMU P-17949 (25).

DISTRIBUTION: Nazca Ridge, Southeastern Pacific at 240-260 m.

Genus *Enigmapercis* Whitley

Enigmapercis Whitley, 1936: 19. Masculine. (Type species, *Enigmapercis reducta* Whitley, by monotypy). Two species.

***Enigmapercis acutirostris* Parin, 1990**

Enigmapercis acutirostris Parin, 1990: 7, Fig. 2., Voprosy Ikhtiol., v. 30 (no. 1) (type locality, E. Pacific, 25°01'S, 97°35'W). Holotype (unique): ZIN 49194.

DISTRIBUTION: Nazca Ridge, Southeastern Pacific at 470-485 m.

***Enigmapercis reducta* Whitley, 1936**

Enigmapercis reducta Whitley, 1936: 19, Proc. R. Zool. Soc. N. S. W., v. for 1935-36 (type locality, Off Long Reef, Collaroy, N. S. W., Australia.) Holotype (unique): AMS IA.7024.

DISTRIBUTION: South Australia to central New South Wales, Australia, including Bass Strait. Usually buried in the upper parts of wave-formed sand in clear sand estuaries and coastal bays to at least 130 m.

Genus *Hemerocoetes* Valenciennes

Hemerocoetes Valenciennes, 1837: 311. Masculine. (Type species, *Callionymus monopterygius* Schneider in Bloch and Schneider, by monotypy).

COMMENTS: *Callionymus acanthorhynchus* Forster, 1801 is *nomen nudum*.
Five species.

***Hemerocoetes artus* Nelson, 1979**

Hemerocoetes artus Nelson, 1979: 594, Fig. 1 d, N. Z. J. Zool., v. 6 (type locality, New Zealand). Holotype: NMNZ P.1748. Paratypes: NMNZ P.1740 (26), P.1749 (4), P.2167 (10), P.5047-48 (1, 1), P.6202-03 (1, 3), P.6205 (3, c&s), P.6206-07 (6, 1).
DISTRIBUTION: New Zealand.

***Hemerocoetes macrophthalmus* Regan, 1914**

Hemerocoetes macrophthalmus Regan, 1914:15, Ann. Mag. Nat. Hist. (Ser. 8), v. 13 (no. 73) (type locality, Cape North, New Zealand). Syntypes: BMNH 1913.12.4.35-36 (2).

Hemerocoetes waitei Regan, 1914: 18, Fish. Terra Nova Exped., v. 1 (no. 1) (type locality, Stations between Foveaux Strait and Pegasus Bay, New Zealand (stomach contents). Syntypes: (several) ?AMS I.10866 (1), CMC (?).

DISTRIBUTION: New Zealand.

***Hemerocoetes monopterygius* (Schneider, 1801)**

Callionymus monopterygius Schneider in Bloch and Schneider, 1801: 41, Systema Ichthyol. (type locality, Near New Zealand). No types known.

Hemerocoetes microps Waite, 1911: 247, Pl. 54 (fig. 2), Rec. Canterbury Mus., 1 (3) (type locality, Sw. coast New Zealand). Syntypes: (several) CMC F1626 (1).

DISTRIBUTION: New Zealand.

***Hemerocoetes morelandi* Nelson, 1979**

Hemerocoetes morelandi Nelson, 1979: 591, Fig. 1 b, N. Z. J. Zool., v. 6 (type locality, New Zealand). Holotype: NMNZ P.5043. Paratypes: NMNZ P.1406 (1), P.2168 (7), P.2868 (1), P.6173 (1), P.6174 (3, c&s), P.6175-77 (2, 1, 1).

DISTRIBUTION: New Zealand.

***Hemerocoetes pauciradiatus* Regan, 1914**

Hemerocoetes pauciradiatus Regan, 1914: 15, Ann. Mag. Nat. Hist. (Ser. 8), v. 13 (no. 73) (type locality, Cape North, New Zealand, 70 fathoms). Syntypes: BMNH 1913.12.4.33-34 (2).

DISTRIBUTION: New Zealand.

Genus *Matsubaraea* Taki

Roxasella Fowler, 1943: 87. Feminine. (Type species, *Roxasella fusiforme* Fowler, by original designation; Preoccupied by *Roxasella* Merino 1936 in Insects Hemiptera, Cicadellidae).

Matsubaraea Taki, 1953: 201. Feminine. (Type species *Matsubaraea setouchiensis* Taki, by monotypy).

Cirrinus Schultz, 1960: 277. Masculine. (Replacement name for *Roxasella* Fowler, 1943).

One species.

***Matsubaraea fusiformis* (Fowler, 1943)**

Roxasella fusiforme Fowler, 1943, Bull. U. S. Natl. Mus., No. 100, v. 14 (pt 2): 87, Fig. 23 (type locality, Aparri, Cagayan Prov., Luzon I., Philippines). Holotype: TMF [Taiwan Mus.] 00165. Paratypes: TMF 00166 (19).

Matsubaraea setouchiensis Taki, 1953, J. Sci. Hiroshima Univ. Ser. B Div. 1 (Zool.), v. 14: 202, Figs. 1-6, Pl. 1 (figs. 2-3). (type locality, Takamatsu fish market, Kagawa Pref., Inland Sea of Japan). Holotype (unique): ZIHU?

DISTRIBUTION: Western Pacific: Thailand east to Philippines, north to Miyazaki Prefecture (Japan).

Genus *Osopsaron* Jordan and Starks

Osopsaron Jordan and Starks, 1904: 600. Netral. (Type species *Pteropsaron verecundum* Jordan and Snyder, by original designation).
Three species.

***Osopsaron formosensis* Kao and Shen, 1985**

Osopsaron formosensis Kao and Shen, 1985, J. Taiwan Mus., v. 38 (no. 1): 175, Figs. 1-2 (type locality, Tachi harbor, ne. Taiwan). Holotype: TMF [Taiwan Mus.] 00165. Paratypes: TMF 00166 (19).

DISTRIBUTION: Taiwan to southern Japan; New Ireland (Papua New Guinea).

***Osopsaron karlik* Parin, 1985**

Osopsaron karlik Parin, 1985, Jpn. J. Ichthyol., 31 (4): 358, Fig. 1 (type locality, Nazca Ridge, eastern South Pacific, 25°48'S, 86°13'W). Holotype: ZIN 46748. Paratypes: BPBM 29194 (2); USNM 265048 (2); ZIN 46749-50 (2, 3).

DISTRIBUTION: Nazca Ridge, South Pacific.

***Osopsaron verecundum* (Jordan and Snyder, 1902)**

Pteropsaron verecundum Jordan and Snyder, 1902, Proc. U. S. Natl. Mus., 24 (no. 1263): 472, Fig. 3 (type locality, Suruga Bay, Japan). Holotype (unique): USNM 50009.

DISTRIBUTION: Japan.

Genus *Pteropsaron* Jordan and Snyder

Pteropsaron Jordan and Snyder, 1902: 470. Neuter. (Type species, *Pteropsaron evolans* Jordan and Snyder, by original designation). There are 11 species.

***Pteropsaron dabfar* Iwamoto 2014**

Pteropsaron dabfar Iwamoto, 2014:252, Figs. 1-3 (Between Luzon and Mindoro islands, 13.905833°N, 120.35433°E, Philippines, depth 82-86 meters). Holotype: CAS 236400. Paratypes: CAS 236560 (1), 236667 (1).

DISTRIBUTION: Philippines.

***Pteropsaron evolans* Jordan and Snyder, 1902**

Pteropsaron evolans Jordan and Snyder, 1902: 471, Fig. 2, Proc. U. S. Natl. Mus., v. 24 (no. 1263) (Sagami Sea, Japan). Holotype: USNM 50008. Paratypes: (3) CAS-SU 7158 (2).

DISTRIBUTION: southern Japan and Korea.

***Pteropsaron flavissimum*, Fricke, 2024**

Pteropsaron flavissimum, Fricke, 2024:7, Figs. 4-5. Taxa (Journal of Taxonomy and Systematics) v. 5: ad24501:1-15 (type locality, Grand Passage, southern side, 186 km north-northwest of Koumac, New Caledonia, 19°05'S, 163°22'E - 19°04'S, 163°21'E, depth 228 - 239 meters). Holotype (unique): MNHN 2024-0430. Holotype (unique): MNHN 2024-0430.

DISTRIBUTION: Southwestern Pacific: Belep Islands, northern Grande Terre Group (New Caledonia).

***Pteropsaron heemstrai* Nelson, 1982**

Pteropsaron heemstrai Nelson, 1982: 2, Figs. 1-2, J. L. B. Smith Inst. Ichthyol. Spec. Publ., No. 25 (type locality, off Park Rynie, s. Natal, South Africa, 30°20'S, 30°44'E). Holotype: SAIAB [formerly RUSI] 15926. Paratypes: SAIAB [formerly RUSI] 15927 (1).

DISTRIBUTION: off southern Natal, South Africa and East Africa (Somalia), east to Glorieuse Islands.

***Pteropsaron incisum* Gilbert, 1905**

Pteropsaron incisum Gilbert, 1905: 647, Pl. 87, Bull. U. S. Fish Comm., v. 23 (pt 2) [for 1903] (type locality, Off Laysan I., Leeward Is., Hawaiian Is., U.S.A.). Holotype: USNM 51621. Paratypes: CAS-SU 20166 (1); USNM 51659 (1), 126132 [ex USBF 1198] (1).

DISTRIBUTION: Hawaiian Ids.

***Pteropsaron indicum* Victor and Kumar, 2019**

Pteropsaron indicum Victor & Kumar, 2019:72, Figs. 1-7, J. Ocean Sci. Foundation, v. 33 (type locality, off Kerala coast, Lakshadweep Sea, India, 8.16°N, 73.4°E, depth about 70 meters). Holotype: ZSI/WGRC IR/VER.3080. Paratypes: UOK FI/305 (1).

DISTRIBUTION: Northern Indian Ocean: Lakshadweep Sea (Laccadive Sea, southern India); Myanmar.

***Pteropsaron levitoni* Iwamoto, 2014**

Pteropsaron levitoni Iwamoto, 2014:255, Figs. 4-6 (type locality, Between Luzon and Mindoro islands, 13.905833°N, 120.35433°E, Philippines, depth 82-86 meters). Holotype: CAS 236401. Paratypes: CAS 236399 (6).

Distribution: Philippines and Papua New Guinea.

***Pteropsaron longipinnis* Allen and Erdmann 2012**

Pteropsaron levitoni Iwamoto, 2014:1158, Figs. 1-5, Reef fishes of the East Indies (type locality, Oceanic patch reef east of Point Mangguar, 2°54.652'S, 134°58.744'E, Cenderawasih Bay, West Papua, Indonesia). Holotype: MZB 20604. Paratypes: USNM 404236 (5); WAM P.33365-001 (3), P.33404 (1).

Distribution: Cenderawasih Bay, West Papua, Indonesia.

***Pteropsaron natalensis* (Nelson, 1982)**

Osopsaron natalensis Nelson, 1982: 4, Figs. 3-4, J. L. B. Smith Inst. Ichthyol. Spec. Publ., No. 25 (type locality, ff Kosy Bay, Natal, South Africa). Holotype: SAIAB [formerly RUSI] 11779. Paratypes: SAIAB [formerly RUSI] 15062 (2).

DISTRIBUTION: Natal, South Africa and Mozambique, Tanzania, Kenya, Somalia.

***Pteropsaron neocaledonicus* Fourmanoir and Rivaton, 1979**

Pteropsaron neocaledonicus Fourmanoir and Rivaton, 1979: 419, Fig. 11, Cah. Indo-Pacif., v. 1 (no. 4) (type locality, South of Isle of Pines, sw. Pacific). Holotype (unique): MNHN 1978-0688.

DISTRIBUTION: New Caledonia.

***Pteropsaron springeri* Smith and Johnson 2007**

Pteropsaron springeri Smith and Johnson 2007: 365, Figs. 1B, 2-5, Copeia 2007 (no. 2) (type locality, East of Bais, 9°36'58"N, 123°10'05"E, Negros Island, Philippines). Holotype: USNM 367912. Paratypes: AMS I.21918-036 (1); BPBM 34996 (2); USNM 288848 (1), 288849 (1), 288850 (10), 368827 (1, c&s); WAM P.29714-003 (1).

DISTRIBUTION: Western Pacific: Indo-West Pacific: Indonesia, Philippines and Palau.

Genus *Squamicreedia* Rendahl

Squamicreedia Rendahl, 1921: 20. Feminine. (Type species *Squamicreedia obtusa* Rendahl, by monotypy).
One species.

***Squamicreedia obtusa* Rendahl, 1921**

Squamicreedia obtusa Rendahl, 1921, K. Sven. Vetenskapsakad. Handl., v. 61 (no. 9): 20, Fig. 5-6 (type locality, 45 naut. mi. west-southwest of Cape Jaubert, nw. Australia, 72 ft). Holotype (unique): NRM 10283.

DISTRIBUTION: Northwestern Australia.

Family *HOWELLIDAE* Ogilby, 1899

(Oceanic basslets)

Marine, Indo-West Pacific and Atlantic, typically found in deep-sea environments across all major oceans at depths between 100 and 1,800 meters. They have a small, fusiform and laterally compressed body. Rear edge of opercle with 3 to 7 sharp, slender spines; subopercle and interopercle with large spines; no supramaxilla; first dorsal fin of 8 or 9 spines, second dorsal fin with one spine, 8 or 9 soft rays; gap between dorsal fins subequal to spinous dorsal-fin base; anal fin with 3 spines, 6 to 8 soft rays; scales spinoid, adherent; lateral-line scales 27-53. Maximum size to about 10 cm. Distinctive spines on the opercle, often consisting of clusters or simple sharp spines used for genus-level identification. Some species migrate to shallower waters at night and return to the deep during the day, primarily feeding on smaller mesopelagic organisms.

Etymology: named after Lord Howe Island, Australia. Three genera with ten species.

Genus *Bathysphyraenops* Parr

Bathysphyraenops Parr, 1933: 28. Masculine. (type species, *Bathysphyraenops simplex* Parr, by original designation).

According to Patricia Kailola (1987:267) this genus might represent a junior synonym of *Howella* Ogilby.

Three species.

***Bathysphyraenops declivifrons* Fedoryako, 1976**

Bathysphyraenops declivifrons Fedoryako, 1976: 164, Fig. 5, Trudy Inst. Okeanol. Akad. Nauk. SSSR, v. 104 (type locality, Pacific, 5°38'S, 130°52'E, Vitiaz sta. 7265). Holotype: ZIN 42634. Paratypes: (4 or 5).

DISTRIBUTION: West Pacific.

***Bathysphyraenops radhae* Rajakrishnan et al., 2022**

Bathysphyraenops radhae Rajakrishnan, Rajeeshkumar, Cubelio & Prokofiev, 2022: 1523, Figs. 2-4a, b, Journal of Fish Biology v. 101 (no. 6) (type locality, Western Indian Ocean, 00°49.524'S, 67°56.385'E, depth 380 - 600 meters). Holotype: CMLRE IO/SS/FIS/00695. Paratype: CMLRE IO/SS/FIS/00693 (1).

DISTRIBUTION: Western Indian Ocean. Habitat: marine.

***Bathysphyraenops simplex* Parr, 1933**

Bathysphyraenops simplex Parr, 1933: 29, Fig. 13, Bull. Bingham Oceanogr. Collect. Yale Univ., v. 3 (art. 6) (type locality, Caicos Passage, 21°44'N, 72°43'W, Bahamas, 7000 ft. wire out). Holotype (unique): BMNH 1930.1.12.1052.

Schistoperca macrobrachium Fowler, 1943, Bull. U. S. Natl. Mus. No. 100, v. 14 (pt 2) :62, Fig. 9 (type locality, Tataán Pass, Simulac Island, southern end of Basún Channel, Sulu Archipelago, Tawi Tawi Islands, Philippines). Holotype: USNM 99489. Paratypes: USNM 99529-33 (1, 2, 1, 2, 1).

DISTRIBUTION: Circumglobal in tropical and subtropical seas.

Comments: synonymy from Rajakrishnan et al., 2022.

Genus *Howella* Ogilby

Howella Ogilby, 1899: 734. Feminine. (Type species, *Howella brodiei* Ogilby, by monotypy).

Galeagra Heller and Snodgrass, 1903: 193. Feminine. (Type species, *Galeagra pammelas* Heller and Snodgrass, by monotypy).

Rhctogramma Norman, 1930: 348. Feminine. (Type species, *Rhctogramma sherborni* Norman, by original designation).

Schistoperca Fowler, 1943: 61. Feminine. (Type species, *Schistoperca macrobrachium* Fowler, by original designation):

Taxonomic decision of A. Post and J.-C. Quero (1991) and Prokofiev (2007). Six species.

Howella atlantica Post and Quero, 1991

Howella brodiei atlantica Post and Quero, 1991: 118, Cybium v. 15 (no. 2) (type locality, Atlantic, 44°12'N, 20°04'W, depth 1100 meters). Holotype: ISH 290-1982. Paratypes: ISH 144-1984 (1), 263-1974 (1), 308-1979 (1), 330-1966 (4), 479-1986 (2), 614-1966 (2), 781-1979 (4), 852-1973 (2), 1048-1979 (1), 2629-1979 (1); MNHN 1990-0056 (1).

DISTRIBUTION: Western Atlantic: south to off northeastern Brazil; eastern Atlantic: Azores and Madeira south to Cape Verde Islands. Previously two subspecies were considered: *H. brodiei brodiei* from eastern Australia, Lord Howe Island, and New Zealand and *H. brodiei atlantica* from Iceland to Brazil. Inhabits the open ocean. Spends the day in midwater from 305-1,829 m depth and migrates near surface at night.

Howella brodiei Ogilby, 1899

Howella brodiei Ogilby, 1899: 735, Fig., Proc. Linn. Soc. N. S. W., v. 23 (pt 4) (type locality, Lord Howe Island). Holotype (unique): QM I.777.

DISTRIBUTION: Indo-Pacific: South Africa east to Hawaiian Islands (U.S.A.), north to southern Japan, south to northern Australia; eastern Pacific: northern California (U.S.A.) south to Chile.

Howella pammelas (Heller and Snodgrass, 1903)

Galeagra pammelas Heller and Snodgrass, 1903: 193, Pl. 4, Proc. Wash. Acad. Sci., v. 5 (type locality, Wenman I., Galápagos Islands). Holotype (unique): CAS-SU 6355.

DISTRIBUTION: Galápagos Islands.

Howella parini Fedoryako, 1976

Howella parini Fedoryako, 1976: 177, Fig. 12, Trudy Inst. Okeanol. Akad. Nauk. SSSR, v. 104 (type locality, North central Pacific, 31°N, 176°E). Holotype: ZIN 42632. Paratypes: (1).

DISTRIBUTION: Japan to Kuril Islands and Hawaiian Ridge.

Howella sherborni (Norman, 1930)

Rhctogramma sherborni Norman, 1930: 348, Fig. 39, Discovery Repts., v. 2 (type locality, 33°50'S to 34°13'S, 16°04'E to 15°49'E, off South Africa, 850-950 m). Holotype (unique): BMNH 1930.1.12.1052.

DISTRIBUTION: Widely distributed in the Atlantic, Indian and Pacific. Atlantic: reported from Iceland; about 33°-35°N southward to about 40°S. Juveniles pelagic from 26 to 300 m, adults bathypelagic, probably benthic when mature.

Howella zina Fedoryako, 1976

Howella zina Fedoryako, 1976: 176, Fig. 11, Trudy Inst. Okeanol. Akad. Nauk. SSSR, v. 104 (type locality, Nw. Pacific, 29°20'N, 142°41'E, Vitiáz sta. 7402). Holotype: ZIN 42633 [not 42693]. Paratypes: (1).

DISTRIBUTION: Kyushu-Palau Ridge, Ogasawara Islands, Japan, Hawaiian Islands.

Genus *Pseudohowella* Fedoryako

Pseudohowella Fedoryako, 1976: 179. Feminine. (Type species, *Pseudohowella intermedia* Fedoryako, by original designation).

One species.

Pseudohowella intermedia Fedoryako, 1976

Pseudohowella intermedia Fedoryako, 1976: 180, Fig. 13, Trudy Inst. Okeanol. Akad. Nauk. SSSR, v. 104 (type locality, W. Pacific, 4°28'N, 142°16'E, Vitiáz sta. 6429). Holotype: ZIN 42635. Paratypes: (2).

DISTRIBUTION: Western and central Pacific: north of Papua New Guinea; Hawaiian Islands.

Family **LATEOLABRACIDAE** Ghedotti, Davis and Smith, 2018
(Asian Seaperches)

Paralabracinae Fowler 1907: 249 (subfamily) *Percolabrax* [no stem of the type genus, not available, Article 11.7.1.1]

Lateolabracidae Springer and Raasch 1995: 94, 104 (family) *Lateolabrax* [name only, published after 1960, not available, Article 13.1.1].

Lateolabracidae Orrell, Carpenter, Musick and Graves 2002: 619 (family) *Lateolabrax* [not published according to the rules, not available].

Lateolabracidae Springer and Johnson 2004: 147 (family) *Lateolabrax* [not published according to the rules, not available].

Lateolabracidae Smith and Craig 2007: 42 (family) *Lateolabrax* [not published according to the rules, not available].

Lateolabracidae Ghedotti, Davis and Smith in Ghedotti, Gruber, Barton, Davis and Smith, 2018: 9, type genus *Lateolabrax* Bleeker, 1855.

They have elongated, laterally compressed bodies with a silvery to blackish coloration, a large mouth with a protruding lower jaw that extends beyond the upper jaw, two dorsal fins; the first contains 12–14 sharp spines, and the second contains 12–16 soft rays. The anal fin typically has 3 spines and 6–8 soft rays. Lateral-line scales 71–86. Vertebrae 34–36. The largest size is documented for *Lateolabrax japonicus* which can reach a maximum length of 102 cm and weigh up to 8.7 kg. Found in moving water of inshore rocky reefs. Juveniles may ascend rivers and return to sea to spawn. Protandrous, sex change happens after maturation of males at age 2, becoming females when older. Spawning occurs during winter, in deeper rocky reefs or inshore areas. Predaceous, feeding on zooplankton at an early age and on small fish and shrimps as adults. Highly prized in East Asian cuisine, particularly in Japan where it is an essential ingredient for sushi and sashimi (often called Suzuki). Monotypic.

Genus ***Lateolabrax* Bleeker**

Percalabrax Temminck and Schlegel, 1843: 2. Masculine. [Pisces. Siebold, P. F. de (ed.): Fauna Japonica, sive descriptio animalium, quae in itinere per Japoniam ... suscepto annis 1823–1830 collegit, notis, observationibus et adumbrationibus illustravit Ph. Fr. de Siebold. Lugduni Batavorum (A. Arnz et soc.). Part 1: 1–20] (type genus *Labrax japonicus* Cuvier 1828. Type by monotypy). *Nomen oblitum* as declared by Kottelat, 2013:342. Endruweit's (2024) treatment of *Percalabrax* on page 61 rejects the *nomen oblitum* status for *Percalabrax*, arguing that the name remained technically available and should take precedence over junior synonyms in a strictly regulated nomenclatural framework.

Lateolabrax Bleeker, 1855: 53. Masculine. [Nieuwe nalezingen op de ichthyologie van Japan. Verhandelingen van het Bataviaasch Genootschap van Kunsten en Wetenschappen. v. 26 (art. 4): 1–132, Pls. 1–8.] (type genus *Labrax japonicus* Cuvier 1828. Type by monotypy).

West Pacific. Three valid species. Placed in Serranidae by Katayama (1960:24) or in Moronidae by Authors.

***Lateolabrax japonicus* (Cuvier, 1828)**

Labrax japonicus Cuvier in Cuvier and Valenciennes, 1828: 85, Hist. Nat. Poiss., v. 2 (type locality, Sea of Japan). Holotype: ZMB 3705.

Labrax lyiuy Basilevsky 1855: 219, Nouv. Mem. Soc. Imp. Natur. Moscou v. 10 (type locality, Oriental Seas, China). Neotype: ZMB 3705. Originally as *Perca Ly-iuy*, correction mandatory. Neotype designated by Endruweit (2024:62).

Percalabrax tokionensis Döderlein in Steindachner and Döderlein, 1883:228. Not available, name mentioned in synonymy of *Percalabrax japonicus*; from Tokyo, Japan.

DISTRIBUTION: Japan, Korea, and New South Wales (introduced).

REMARKS: taxonomic decisions of Katayama (1960), Bauchot and Desoutter (1986:78) and Endruweit (2024:62)

***Lateolabrax latus* Katayama, 1957**

Labrax japonicus Bleeker, 1853:23 (misidentification).

Lateolabrax latus Katayama, 1957: 154, Fig. 2, Jpn. J. Ichthyol., v. 6 (nos. 4–6) (type locality, Senzaki, Yamaguchi Pref., Japan). Holotype: NSMT-P 18257 [ex Katayama Fish Coll. 1927]. Paratypes: Katayama's Fish Coll. 1589 (1), 1926 (1), 2146 (1), 2206–07 (1, 1), 2430–31 (1, 1).

DISTRIBUTION: Ryukyu Islands (Japan) north to southern Korea and central Japan, in shallow rocky areas.

***Lateolabrax spilonotus* (Guichenot, 1872)**

Holocentrum maculatum McClelland, 1844: 395. pl. 21, fig. 1, Calcutta J. Nat. Hist. v. 4 (no. 4) (type locality, Chusan Id and Ningpo,

China). Syntypes: whereabouts unknown. Permanently invalid, preoccupied by *Holocentrus maculatus* Bloch 1790.

Percalabrax labrax poecilnotus Guichenot in Dabry de Thiersant, 1872: 178, pl. 36, fig. 2, La pisciculture et la pêche en Chine, G. Masson, Paris, 195 pp (type locality, Yangtze River, China). Holotype: MNHN 0000-5013.

Percalabrax labrax spilonotus Guichenot in Dabry de Thiersant, 1872: 178, pl. 36, fig. 3, *ibidem* (type locality, Yangtze River, China). Holotype: MNHN 0000-5012.

Lateolabrax sp. Yokogawa and Seki, 1995.

DISTRIBUTION: South Korea, Taiwan and China inshore waters.

Comments: the combination *Holocentrum maculatum* McClelland is permanently invalid as primary homonym of *Holocentrus maculatus* Bloch (= *Epinephelus maculatus*).

Family **MALAKICHTHYIDAE** Jordan and Richardson, 1910
(Temperate Ocean-Basses)

Marine these fishes are 10 to 40 centimeters long. They have two dorsal fins, which are supported by ten spines rays and nine to eleven soft rays. The anal fin has three hard and seven to nine soft rays. Two thin, flat, short spines on the opercle; preopercle serrated. Villiform teeth in bands, in jaws and on vomer and palatines; no canines. Large eyes (reflecting their deep-water or nocturnal habits) and a large mouth with a protruding lower jaw. All species of Malakichthyidae have 25 vertebrae and 7 branchiostegals; dorsal fin with 10 spines and 9-11 soft rays; anal fin with 3 spines and 7-9 soft rays; procurent spur present. Demersal, they inhabit the continental shelf and upper continental slope. They are often found at depths ranging from 50 to 500 meters, though they may migrate to shallower estuarine waters as juveniles. Malakichthyidae are carnivorous fishes, feeding on small crustaceans, cephalopods, and smaller fishes. Etymology: from *malakos*, soft, allusion not explained, perhaps referring to “Very delicate head bones” of *M. griseus*; *ichthys*, fish.

Three genera with 17 species.

GENUS **Hemilutjanus** Bleeker

Hemilutjanus Bleeker, 1876: 277. Masculine. (Type species, *Plectropoma macrophthalmos* Tschudi, 1846, by original designation). *Pomodon* Boulenger, 1895: 144 (Unneeded replacement for *Hemilutjanus* Bleeker 1876).

***Hemilutjanus macrophthalmos* (Tschudi, 1846)**

Plectropoma macrophthalmos Tschudi, 1846: 6, Ichthyologie. Pp. ii-xxx + 1-35, Pls. 1-6. In: Untersuchungen über die Fauna Peruana (type locality, Lurin, Peru). Holotype: ZMB 291

DISTRIBUTION: coasts of Peru and Chile over rocky bottoms.

Remarks: a valid species placed in the suborder Percoidei incertae sedis by Johnson (1984); in Serranidae incertae sedis according to Hildebrand (1946) and Pequeño (1989). Not a serranid according to Johnson (1983: 781) and McCosker and Rosenblatt (2010: 191). In Malakichthyidae follows Smith et al. (2022).

Genus **Malakichthys** Döderlein

Malakichthys Döderlein, 1883: 240 (type species *Malakichthys griseus* Döderlein, by monotypy).

Satsuma Smith and Pope, 1906: 472 (type species *Satsuma macrops* Smith and Pope, by original designation; preoccupied by *Satsuma* Adams 1868 in Mollusca and by Murray 1874 in Lepidoptera, not replaced).

West Pacific in the continental slope; genus revised by Yamanoue and Matsuura (2004) recognizing seven species; an additional eightieth species has been recently described (Ng et al, 2023)

***Malakichthys barbatus* Yamanoue and Yoseda, 2001**

Malakichthys barbatus Yamanoue and Yoseda, 2001: 257, Ichthyol. Res. v. 48, no. 3 (type locality, Suruga Bay, Honshu, Japan). Holotype: NSMT-P 46015. Paratypes: BSKU 39929-34 (6); FAKU 34335 (1); FUMT-P 3990 (1), 20302 (1, dissected), 20303 (1), 20344 (1); NSMT-P 7156-57 (2), 46013 (1), 46857 (2), 59092-95 (5); OMNH-P 9312 (1), 10829 (1), 11079 (1), 11083 (1).

DISTRIBUTION: Pacific coast of Japan, Taiwan to New Ireland (Papua New Guinea).

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

Malakichthys elegans Matsubara and Yamaguti, 1943: 84, fig. 1, J. Sigenkagaku Kenkyusyo, v. 1 (no. 1) (type locality, Suruga Bay, Japan). Holotype: FAKU 6545.

DISTRIBUTION: Indo-West Pacific: from Sagami Bay to Okinawajima in Japan. A new record for the northeastern Indian Ocean. Also occurs in the Arafura Sea. (Gloerfelt-Tarp and Kailola, 2022:135).

***Malakichthys formosus* Ng, Liu & Joung, 2023**

Malakichthys formosus Ng, Liu & Joung, 2023:381, Figs. 2-5 [Zootaxa 5380 (no. 4) (type locality, off Donggang, southwestern Taiwan, northwestern Pacific, circa 22°36'N, 120°16'E, depth 300 - 400 meters). Holotype: NMMB P37683. Paratypes: NMMB P37684 (1, dissected), P37685 (1), P37686 (1), P37687 (1), P37688 (1).

DISTRIBUTION: Northwestern Pacific: northern South China Sea, southwestern Taiwan.

***Malakichthys griseus* Döderlein, 1883**

Malakichthys griseus Döderlein in Steindachner and Döderlein, 1883: 240, Denkschr. Akad. Wiss. Wien, v. 47 (1. abth.) (type locality, Tokyo, Japan). Syntypes: (several) NMW 10611 (1), 42204 (1), 54982 (2), 86227 (1); ?ZMB 12065 (1).

Satsuma macrops Smith and Pope, 1906: 472, fig. 5, Proc. U.S. Natl. Mus., v. 31, no. 1479 (type locality, Kagoshima, Japan). Holotype: USNM 55616. Paratypes: USNM 126626 (2).

DISTRIBUTION: Western Pacific: southern Japan, Taiwan, China and the Philippines.

***Malakichthys levis* Yamanoue and Matsuura, 2002**

Malakichthys levis Yamanoue and Matsuura, 2002: 1140, Figs. 1, 2A, 3(A, D, G), 4A, Bull. Mar. Sci. v. 69 (no. 3) (type locality, North of Dampier Archipelago, Western Australia). Holotype: CSIRO H 5188-27. Paratypes: AMS I.22807-054 (6); CSIRO CA 426 (1), CA 1782 (1), CA 1784 (1), H 4085-02 (1), H 5188-18 (4); NSMT-P 59934 (9); NTM S.12902-002 (6), S.13579-009 (5), S.13580-018 (2); WAM P.26795-001(2).

DISTRIBUTION: Northwestern to northern Australia.

***Malakichthys mochizuki* Yamanoue and Matsuura, 2002**

Malakichthys mochizuki Yamanoue and Matsuura, 2002: 1145, Figs. 3 (B, E, H), 4B, 6., Bull. Mar. Sci. v. 69 (no. 3) (type locality, East of Hinchinbrook Island, Queensland, Australia). Holotype: QM I.32150. Paratypes: NTM S.11754-006 (5), 11755-015 (5); QM I.15799 (1), I.25299 (11).

DISTRIBUTION: off Queensland.

***Malakichthys similis* Yamanoue and Matsuura, 2004**

Malakichthys similis Yamanoue and Matsuura, 2004: 524, Figs. 1F, 9, J. Fish Biol. v. 65 (no. 2) (type locality, north of Macabalan Pt., Mindanao Island, Bohol Sea, Philippines). Holotype: USNM 184144. Paratypes: USNM 367114 (10).

Distribution: Bohol Sea, Philippines.

***Malakichthys wakiyae* Jordan and Hubbs, 1925**

Malakichthys wakiyae Jordan and Hubbs, 1925: 233, pl. 10, fig. 2, Mem. Carnegie Mus., v. 10 (no. 2) (type locality, Kagoshima Bay, Japan). Holotype: FMNH 58754 [ex CM 7863]. Paratypes: AMNH 26804 (1), CAS-SU 23815 (4), UMMZ 142701 (1).

DISTRIBUTION: Taiwan to southern Sea of Japan (Korea, Japan); New Ireland (Papua New Guinea).

COMMENTS: spelled *wakiyai* by Katayama (1960:20).

Genus *Verilus* Poey

Verilus Poey, 1860: 124 (type species *Verilus sordidus* Poey, by monotypy).

Apogonops Ogilby, 1896: 23 (type species *Apogonops anomalus* Ogilby, by monotypy).

Neoscombrops Gilchrist, 1922: 67 (type species *Neoscombrops annectens* Gilchrist, by monotypy).

Genus revised by Yamanoue (2016) recognizing eight species (Schwarzhan et al, 2020).

***Verilus anomalus* (Ogilby, 1896)**

Apogonops anomalus Ogilby, 1896: 24, Proc. Linn. Soc. N. S. W., v. 21 (pt 1) (type locality, Maroubra Bay, N. S. W., Australia). Holotype (unique): AMS I.11378.

DISTRIBUTION: southern Australia from southern Queensland to Great Australian Bait, Tasman Sea, and eastern Australia. A temperate species occurring in a broad range of habitat from estuaries to continental shelf and upper slope at depths to 600 m.

COMMENTS: Valid in Percichthyidae according to Paxton et al. (1989: 510), Gomon et al. (1994: 548) on the basis of the presence of three anal spines and two opercular spines.

***Verilus atlanticus* (Mochizuki and Sano, 1984)**

Neoscombrops atlanticus Mochizuki and Sano, 1984: 335, fig. 1, Jpn. J. Ichthyol., v. 30 (no. 4) (type locality, Caribbean Sea, 12°07'N, 82°44'W, Oregon sta. 6444, 192 m). Holotype: USNM 232322. Paratypes: CAS 44052 (2); USNM 229531-35 (2, 2, 1, 3, 1), 232323 (3).

DISTRIBUTION: Caribbean Sea.

***Verilus costai* Schwarzhans, Mincarone & Villarins 2020**

Verilus costai Schwarzhans, Mincarone & Villarins 2020:590, Figs. 1, 2A, 3H-J [Zootaxa 4751 (no. 3)] Off Belmonte, Bahia State, Brazil, 15°42'41"S, 38°37'18"W - 15°44'14"S, 38°39'12"W, depth 233 - 294 meters. Holotype: NPM 6028. Paratypes: MNRJ 51645 (10); NPM 6027 (20); ZMUC P2396755-69 (15).

DISTRIBUTION: off Belmonte, Bahia State, Brazil, southwestern Atlantic.

***Verilus cynodon* (Regan, 1921)**

Acropoma cynodon Regan, 1921: 415, Ann. Mag. Nat. Hist. (Ser. 9), v. 7 (no. 41) (type locality, 15-20 mi. off R. Umvoti, Natal, South Africa, 120-130 fathoms). Holotype (unique): BMNH 1921.3.1.13.

Neoscombrops annectens Gilchrist, 1922: 68, pl. 11, fig. 2, Rep. Fish. Mar. Biol. Surv. Union So. Afr., Rep. 2 (art. 3) (type locality, off Natal, South Africa, 62-260 m). A neotype was designated as SAM 16749 by Mochizuki 1979.

DISTRIBUTION: Southwestern Indian Ocean at depths from 100 to 550 m.

***Verilus pacificus* (Mochizuki, 1979)**

Neoscombrops pacificus Mochizuki, 1979:247, fig. 1A, Jpn. J. Ichthyol., v. 26 (no. 3) (type locality, Aogashima I., Japan, 32°25'N, 139°47'E, 300-500 m). Holotype: ZUMT 52879. Paratypes: SMBL 73201-03 (1, 1, 1); ZUMT 52880-81 (1, 1).

DISTRIBUTION: Pacific Ocean: Japan, New Caledonia and Samoa. Reported from Fiji and Tuvalu; Chesterfield Islands.

***Verilus pseudomicrolepis* (Schultz, 1940)**

Synagrops pseudomicrolepis Schultz, 1940: 420, Proc. U. S. Natl. Mus., v. 88 (no. 3085) (type locality, off Virgin Is., West Indies, 18°38'45"N, 64°52'45"W to 18°40'15"N, 64°50'15"W). Holotype (unique): USNM 107203.

DISTRIBUTION: western Atlantic: Cuba south to Rio Grande do Norte (Brazil), including Caribbean Sea.

***Verilus sordidus* Poey, 1860**

Verilus sordidus Poey, 1860: 125, p. 12, fig. 6, Mem. Hist. Nat. Cuba, v. 2 (type locality, Cuba). Neotype: MCZ 21764. Neotype selected by Yamanoue et al. 2009:402.

DISTRIBUTION: western Atlantic: Cuba to the northern coast of Colombia and to Venezuela. Inhabits rocky bottoms to depths less than 100 m.

***Verilus starnesi* Yamanoue, 2016**

Verilus starnesi Yamanoue, 2016: 2392, Figs. 2F, 4F, 5F, 12, J. Fish Biol., v. 89 (type locality, Coral Sea off Bellona Reefs, Chesterfield Islands, New Caledonia). Holotype (unique): MNHN 1994-0016.

DISTRIBUTION: known only from a single specimen collected at the type locality.

Family **OSTRACOBERYCIDAE** Fowler, 1934
(Shellskin alfonosinos)

Marine; eastern and northern Indian Ocean and Western Pacific. They have relatively small, robust, and laterally compressed bodies covered with small, rough, embedded ctenoid scales. These fishes are characterized by the presence of a stout spine extending back on the lower limb of the preopercle; head bones highly developed, in particular the suborbital and the lachrymal. No supramaxilla. Juveniles possess a unique recurved spine on the rear top of the head that is bent forward. Two dorsal fins. The typical formula is 9 spines in the first dorsal fin and 9–10 soft rays in the second; the anal fin usually has 3 spines and 7-9 soft rays. Pectoral fins with 14-15 rays and lateral line scales 47-55. They possess 25-26 vertebrae. Ostracoberycids are bathydemersal and benthic fishes, meaning they live on or near the seafloor. They are primarily found on the continental slope at depths ranging from 250 to over 700 meters. Etymology: *ostrakon*, shell, referring to largely bony head; *Beryx*, a perch-like fish classified in Berycoidei (now suborder of Beryciformes) at the time. Monotypic.

Genus *Ostracoberyx* Fowler

Ostracoberyx Fowler, 1934: 353. Masculine. (Type species *Ostracoberyx dorygenys* Fowler, by original designation). Three species.

***Ostracoberyx dorygenys* Fowler, 1934**

Ostracoberyx dorygenys Fowler, 1934: 353, Fig. 105, Proc. Acad. Nat. Sci. Phila., v. 85 (for 1933) (type locality, off n. Mindanao I., Philippines, Albatross sta. D.5503, 226 fathoms). Holotype: USNM 93143. Paratypes: CAS-SU 40193 [ex USNM 93143] (3), USNM 93380-81 (10, 8).

Ostracoberyx tricornis Matsubara, 1939: 125, Fig. 2, Bull. Jpn. Soc. Sci. Fish., v. 8 (no. 3) (type locality, Northeast of Suruga Bay, Japan, 125-167 fathoms). Holotype (unique): FAKU 6463.

DISTRIBUTION: Madagascar, Zanzibar, Maldives Islands, Philippines, and southern Japan, at depth of 400-650 m.

COMMENTS: synonymy from Quero and Ozouf-Costaz (1991).

***Ostracoberyx fowleri* Matsubara, 1939**

Ostracoberyx fowleri Matsubara, 1939: 122, Fig. 1, Bull. Jpn. Soc. Sci. Fish., v. 8 (no. 3) (type locality, Northeast of Suruga Bay, Japan, 125-167 fathoms). Holotype (unique): FAKU 6464.

DISTRIBUTION: southern Japan.

***Ostracoberyx paxtoni* Quéro and Ozouf-Costaz, 1991**

Ostracoberyx sp. Paxton et al., 1989: 487, Zool. Catalogue Australia, 7 (type locality, southern Queensland, Australia).

Ostracoberyx paxtoni Quéro and Ozouf-Costaz, 1991: 44, figs. 1-2, Cybium, v. 15 (n. 1) (type locality, 28°06'S, 153°58'E, off eastern Australia). Holotype: AMS I.21777-001. Paratypes: AMS I.17864-002 (1), I.19378-002 (2), I.20118-005 (5), I.21777-012 [ex I.21777-001] (2), I.24561-001 (1), I.27683-002 (5), I.29296-001 (3).

DISTRIBUTION: off southern Queensland and New South Wales.

Family **PEMPHERIDAE** Bleeker, 1859

(Bullseyes, Sweepers)

Marine and brackish waters; Indian, Pacific and western Atlantic in shallow (less than 100 m) waters. Diagnosis: body compressed and deep anteriorly but tapering rapidly to a slender peduncle; eyes large; supramaxilla absent; a single dorsal fin, originating before the middle of the body and with 4-7 graduated spines and 7-13 soft rays; anal fin with 3 spines (rarely 2) and 17-45 soft rays; pectorals pointed with 14-18 rays; scales along lateral line usually 45-82; the tubes usually short and wide. Long gill rakers, usually 25-31; caudal fin truncate to slightly forked. Species of *Parapriacanthus* and some *Pempheris* have a bioluminescent organ on the peritoneum behind the pectoral fin. Pyloric caeca 9 or 10. Swim bladder present in all but one species. Vertebrae 25 (10 + 15). Nocturnal, living in crevices or caves during the day. They may form large aggregations which disperse after dusk and feed on zooplankton or benthic invertebrates. Dimensions: 10-30 cm. Etymology: a name given by Greek philosopher Numenius of Apamea (late 2nd century AD) to an unknown small fish, which Cuvier applied to the genus *Pempheris*.

Two genera with 32 species according to Nelson et al. (2016). Many new species have been recently described (Randall and Victor 2014; 2015; Randall and Bogorodsky, 2016) bringing the total number of species to 85.

Genus ***Parapriacanthus* Steindachner**

Parapriacanthus Steindachner, 1870: 623 (type species *Parapriacanthus ransonneti* Steindachner, by monotypy).

Pempherichthys Klunzinger, 1871: 470 (type species *Pempherichthys guentheri* Klunzinger, by monotypy).

Parapempheris von Bonde, 1923: 11 (type species *Parapempheris argenteus* von Bonde, by monotypy).

Indo-West Pacific. Number of species uncertain: 4 according to Gomon et al. (1994) and Mooi (2000), 5 species (Nelson, 1994). The genus has been preliminary revised by Randall and Bogorodsky (2016). Eleven species are listed here.

***Parapriacanthus argentea* (von Bonde, 1923)**

Parapempheris argenteus von Bonde, 1923: 11, Pl. 2 (fig. 2), Rep. Fish. Mar. Biol. Surv. Union So. Afr., Rep. 3 (art. 1) (type locality, Natal, South Africa, Pickle sta. 188, 32 fathoms). Neotype: SAIAB 50530. Neotype designated by Randall & Bogorodsky (2016:6).

DISTRIBUTION: Mozambique and South Africa.

***Parapriacanthus darros* Randall and Bogorodsky, 2016**

Parapriacanthus darros Randall and Bogorodsky, 2016:8, Figs. 6-7, J. Ocean Sci. Foundation, v. 20 (type locality, Amirante Islands, D'Arros Island, Seychelles). Holotype (unique): BPBM 35551.

DISTRIBUTION: Seychelles.

***Parapriacanthus dispar* (Herre, 1935)**

Pempheris dispar Herre, 1935:40, Field Museum of Natural History, Publications, Zool. Ser., v. 18 (no. 12) (type locality, Tenibuli, Ysabel Island, Solomon Islands). Holotype: FMNH 17326. Paratypes: FMNH 17328-32 (5), 17334 (1); CAS-SU 24440 (9); USNM 117317-18 (1, 1).

DISTRIBUTION: Western Pacific: Indonesia, Philippines, Papua New Guinea, Solomon Islands, Australia to New Caledonia and Loyalty Islands.

***Parapriacanthus elongatus* (McCulloch, 1911)**

Pempheris elongata McCulloch, 1911: 47, Pl. 4 (fig. 1), Biol. Results "Endeavour", v. 1 (pt 1) (type locality, Off Flinder's I., Bass Strait, and off Wilson's Promontory, Victoria, Australia). Holotype: AMS I.10186. Paratypes: (15) AMS E.469 (1), 471-472 (1, 1, 1),

I.10184-85 (1, 1), I. 10187-89 (1, 1, 1), I. 10842-45 (1, 1, 1, 1), E.1258 (3, now 1), E.3242 (2); QM I.1125-26 [ex AMS E.3242] (1, 1); TMH D137/13018 [ex AMS E.470] (1); WAM P.28591-001 [ex WAM 11519] (1).

DISTRIBUTION: southern Australia from Disaster Bay (N.S.W.) to Perth (W.A.) including Tasmania.

***Parapriacanthus guentheri* (Klunzinger, 1871)**

Pempherichthys guentheri Klunzinger, 1871:470, Verh. K.-K. Zool.-Bot. Ges. Wien, v. 21 (type locality, Red Sea). Lectotype: BMNH 1871.7.15.35. Paralectotypes: SMNS 1752 (1), ZMB 8007 (1). Lectotype selected by Randall & Bogorodsky (2016:10).

DISTRIBUTION Red Sea and Socotra (Yemen).

Comments: *Pempherichthys guentheri* Klunzinger is treated as valid by Dor (1984:165) and Randall and Bogorodsky (2016:10).

***Parapriacanthus kwazulu* Randall and Bogorodsky, 2016**

Parapriacanthus kwazulu Randall and Bogorodsky, 2016: 13, Fig. 12, J. Ocean Sci. Foundation, v. 20 (type locality, KwaZulu-Natal, Park Rynie, South Africa). Holotype: BPBM 41244. Paratypes: BPBM 41245 (2); SAIAB. 190113 (1); USNM 437530 (2).

DISTRIBUTION: KwaZulu-Natal, South Africa.

***Parapriacanthus marei* Fourmanoir, 1971**

Parapriacanthus marei Fourmanoir, 1971: 498, Fig. 7 [not 6]. Cah. O.R.S.T.O.M. Sér. Océanogr., v. 9 (no. 4) (type locality, Maré I., Loyauté Is., 1.5 m). Holotype (unique): MNHN.

DISTRIBUTION: New Caledonia, Loyalty Islands, Vanuatu and Philippines.

***Parapriacanthus punctulatus* Randall and Bogorodsky, 2016**

Parapriacanthus punctulatus Randall and Bogorodsky, 2016: 14, Figs. 2B, 13-16, J. Ocean Sci. Foundation, v. 20 (type locality, Ponta Malongane, Mozambique). Holotype: SAIAB 201845. Paratypes: SAIAB 201846 (1); BPBM 41238 (5); USNM 437219 (5); SAIAB 64653 (10); SAIAB 79271 (53); SAIAB 192761 ((1); SAIAB 83990 (19).

Distribution: KwaZulu-Natal (South Africa) and Mozambique to Seychelles, Comoros, Madagascar and Saint Brandon's Shoals.

***Parapriacanthus rahah* Randall and Bogorodsky, 2016**

Parapriacanthus rahah Randall and Bogorodsky, 2016:17, Fig. 17, J. Ocean Sci. Foundation, v. 20 (type locality, South coast of Oman, Rahah Bay, cave in dropoff known as Hole-in-the-Wall, Arabian Sea). Holotype: BPBM 36324. Paratypes: BPBM 41240 (3); USNM 437250 (1).

Distribution: coast of Oman but probably more widespread.

***Parapriacanthus ransonneti* Steindachner, 1870**

Parapriacanthus ransonneti Steindachner, 1870: 623, Pl. 1 (figs. 1-2), Sitzungsber. Akad. Wiss. Wien, v. 61 (1. Abth.) (type locality, Nagasaki, Japan). Syntypes: NMW 37101 (1), 38606 (1).

Pempheris unwini Ogilby, 1889: 60, Pl. 3 (fig. 1), Mem. Aust. Mus., No. 2 (art. no. 3) (type locality, Lord Howe Island). Holotype (unique): AMS I.1478.

Parapriacanthus beryciformis Franz, 1910: 33, Pl. 6 (fig. 46), Abh. Akad. Wiss. Munchen Math.-Phys. Kl., v. 4 (Suppl.) (no. 1) (type locality, Yokohama, Japan). Holotype (unique): ZSM [old collection] destroyed in WW II.

DISTRIBUTION: southern Japan to the Marshalls, Rowley Shoals, and Carolines; East Africa south to Transkei, South Africa. Replaced in the Red Sea by *P. guentheri*.

REMARKS: synonymy from Heemstra (1986:669); *P. beryciformis* is a synonym of *P. ransonneti* according to Tominaga (1963) and Randall (1995:244); valid in Randall and Randall (1987).

***Parapriacanthus sharm* Randall and Bogorodsky, 2016**

Parapriacanthus sharm Randall and Bogorodsky, 2016: 18, Figs. 18-19, J. Ocean Sci. Foundation, v. 20 (type locality, Gulf of Aqaba, southern end of Sinai Peninsula, Sharm el Sheikh, boat pier, Red Sea). Holotype: BPBM 21526. Paratypes: BPBM 41241 (1); SAIAB 201582 (1); USNM 437249 (1).

DISTRIBUTION: Red Sea.

Genus *Pempheris* Cuvier

Pempheris Cuvier, 1829: 195 (type species *Pempheris touea* Cuvier, by subsequent designation).

Priacanthopsis Fowler, 1906: 122 (type species *Pempheris muelleri* Poey, by original designation).

Catalufa Snyder, 1911: 528 (type species *Catalufa umbra* Snyder, by original designation).

Liopempheris Ogilby, 1913: 61, 62, 66 (type species *Pempheris multiradiata* Klunzinger, by original designation).

Worldwide. Four species in the western Atlantic and seventy in the Indo-West Pacific; 28 species counted by Nelson et al. (2016) but Randall and Victor (2015) described 34 new species and additional new species has been discovered in recent times (e.g. Randall and

Victor, 2014; Pinheiro et al, 2016; Koead and Motomura, 2017) thus bringing the total number of species to 74. However, the status of several new species requires further study as Randall and Victor (2015) wrote: "Many of the species of *Pempheris* described below are without enough specimens for adequate description (nine from single specimens!), and most without knowledge of the life colour. We hope that this publication, admittedly preliminary, will aid in acquiring more material of this troublesome genus".

***Pempheris adpersa* Griffin, 1927**

Pempheris adpersus Griffin, 1927: 139, Pl. 11 (Fig. 3), Trans. N. Z. Inst., v. 58 (type locality, Bay of Islands, Auckland Provincial Dist., New Zealand). Holotype: AIM MA 74995. Paratypes: AIM MA 74994 (1).
DISTRIBUTION: endemic to northeastern New Zealand.

***Pempheris adusta* Bleeker, 1877**

Pempheris adustus Bleeker, 1877: 50, Arch. Neerl. Sci. Nat. (Haarlem), v. 12 (type locality, Ambon Island, Moluccas Islands, Indonesia). Holotype (unique): RMNH 6161.
DISTRIBUTION: Indo-West Pacific [eastern Malaya (Malaysia) and eastern Indonesia east to New Guinea, north to Pacific coast of central Japan, Izu Islands and Ogasawara Islands (Japan)]. south to Transkei, South Africa.

***Pempheris affinis* McCulloch, 1911**

Pempheris affinis McCulloch, 1911: 45, Pl. 7 (fig. 1), Biol. Results "Endeavour", [v. 1] (pt 1) (type locality, Port Jackson, New South Wales, Australia). Holotype: AMS B.7332. Paratypes: (3) AMS E.2086 (2).
DISTRIBUTION: Hervey Bay (Queensland) to Montague Island (New South Wales).

***Pempheris analis* Waite, 1910**

Pempheris analis Waite, 1910: 375, Pl. 36, Trans. N. Z. Inst., v. 42 (type locality, Washed up on beach at Denham Bay, Kermadec Island). Lectotype: CMC F701. Paralectotypes: (9) F1615 (1). Lectotype selected by Mooi (2000:97).
DISTRIBUTION: western Australia, Great Barrier Reef, Lord Howe, Norfolk, and Kermadec Is.; records from New Zealand are misidentification of *P. adpersa*.

***Pempheris andilana* Randall and Victor, 1915**

Pempheris andilana Randall and Victor, 2015: 17, Fig. 2, J. Ocean Sci. Foundation, v. 18 (type locality, off Andilana Beach, Nosy Be, Madagascar). Holotype: USNM 307628. Paratypes: BPBM 41193 (1); SAIAB 31327 (1); SAIAB 52862 (1); USNM 435863 (5).
Distribution: Endemic to northwestern Madagascar.

***Pempheris argyrea* Randall and Victor, 2015**

Pempheris argyrea Randall and Victor, 2015: 18, Figs. 3-4, J. Ocean Sci. Foundation, v. 18 (type locality, La Digue, North Point, rocky shore, Seychelles). Holotype: BPBM 2159. Paratypes : BPBM 22937 (1); BPBM 22980 (5); CAS 237995 (2); SAIAB 51264; SAIAB 51265; USNM 434841 (6).
Distribution: Seychelles.

***Pempheris bexillon* Mooi and Randall, 2014**

Pempheris bexillon Mooi and Randall, 2014: 391, Figs. 1-2, Zootaxa 3780 (no. 2) (type locality, Grand Comore, 0.5 km north of the Coelacanth hotel, 11.8167°S, 43.0167, Comoro Islands). Holotype: SAIAB 30861. Paratypes: BPBM 41165 (1); CAS 33012 (1), 33403 (8); USNM 402278 (1).
Distribution: Mozambique Channel, Mascarene Plateau, Comoro Islands.

***Pempheris bineeshi* Randall and Victor, 2015**

Pempheris bineeshi Randall and Victor, 2015: 20, Figs. 5-6, J. Ocean Sci. Foundation, v. 18 (type locality, Tamil Nadu, Tuticorin, India). Holotype: NBFGR-CH-1143. Paratypes: BPBM 41096 (1); ZSI/CLT 2492 (5).
Distribution: India.

***Pempheris bruggemanni* Randall and Victor, 2015**

Pempheris bruggemanni Randall and Victor, 2015: 22, Figs. 7-9, J. Ocean Sci. Foundation, v. 18 (type locality, West side, S of Saint-Leu, Réunion). Holotype: MNHN 2015-0002. Paratypes: BPBM 41198 (1); SMF 1537; URUN 2007-1208 (1); URUN 2007-1209 (1); URUN 2007-1419 (1).
Distribution: Réunion and Mauritius.

***Pempheris compressa* (Shaw, 1790)**

Sparus compressus Shaw in White, 1790:267, Pl. 53 (fig. 2), Voyage N.S.W. (type locality, New South Wales, Australia). No types known.

Kurtus argenteus Bloch and Schneider, 1801:164, Pl. 41 [M. E. Blochii, Systema Ichthyologiae (type locality, Australia). No types known.

Pempheris touea Cuvier, 1829, Règne Animal (ed. 2), v. 2: 195. (type locality, Indian Seas). No types known.

DISTRIBUTION: probably endemic to eastern Australia, off New South Wales from Byron Bay to Eden; records from New Zealand represent *P. adspersa*. Records from Taiwan need further confirmation.

***Pempheris connelli* Randall and Victor, 2015**

Pempheris connelli Randall and Victor, 2015:24, Figs. 10-11, J. Ocean Sci. Foundation, v. 18 (type locality, KwaZulu-Natal, Aliwal Shoal, South Africa). Holotype: SAIAB 58560. Paratypes: SAIAB 40347 (9); SAIAB 43263 (2); SAIAB 46185 (2); BPBM 41202 (1); USNM 435889 (2); SAIAB 61199 (3); SAIAB 62965 (2); SAIAB 64662 (3); SAIAB 75776 (1); SAIAB 75850 (2); SAIAB 194781 (2); SAIAB 194782 (6); SAIAB 194783 (2) BPBM 41204 (1).

Distribution: South Africa.

***Pempheris convexa* Randall and Victor, 2014**

Pempheris convexa Randall and Victor 2014:64, Figs. 1-2, J. Ocean Sci. Foundation, v. 12 (type locality, Oman, south coast, Sawda Island, 17°28'28"N, 56°36'5"E, Arabian Sea). Holotype: BPBM 36009. Paratypes: BPBM 41078 (1); USNM 410915 (1).

Distribution: Maldives and Arabian Sea.

***Pempheris cuprea* Randall and Victor, 2014**

Pempheris cuprea Randall and Victor, 2014:68, Fig. 3, J. Ocean Sci. Foundation, v. 12 (type locality, Mozambique. Holotype: SAIAB 51335. Paratype: SAIAB 199988 (1).

Distribution: Mozambique.

***Pempheris darvelli* Randall and Victor, 2014**

Pempheris darvelli Randall and Victor, 2014:71, Figs. 4-6, J. Ocean Sci. Foundation, v. 12 (type locality, Jissah Island, 23°33'30.80"N, 58°39'8.64"E, Gulf of Oman). Holotype: BPBM 41178. Paratype: USNM 427522 (1).

Distribution: Coasts of Oman.

***Pempheris eatoni* Randall and Victor, 2014**

Pempheris eatoni Randall and Victor, 2014: 76, Figs. 10-14, J. Ocean Sci. Foundation, v. 12 (KwaZulu-Natal, Scottburgh). Holotype: SAIAB 189160. Paratypes: SAIAB 16554 (1); SAIAB 51229 (6); SAIAB 3874 (19); USNM 410914 (3); CAS 237379 (1); BPBM 41164 (1); SAIAB 51230 (17); SAIAB 8606 (1); BPBM 41177; BPBM 41191.

Distribution: Mozambique to South Africa.

***Pempheris ellipse* Randall and Victor, 2015**

Pempheris ellipse Randall and Victor, 2015, J. Ocean Sci. Foundation, v. 18: 26, Figs. 12-13 (type locality, South coast, Rahah Bay, Oman). Holotype: BPBM 35867. Paratype: BPBM 41082.

DISTRIBUTION: Gulf of Oman.

***Pempheris erythraea* Kossmann and Räuber, 1877**

Pempheris erythraea Kossmann and Räuber, 1877: 398, Verh. Naturh.-Med. Ver. Heidelb., v. 1 (type locality, Red Sea). No types known.

Pempheris flavicycla marisrubri Randall, Satapoomin and Alpermann in Randall, Bogorodsky, Alpermann, Satapoomin, Mooi and Mal, 2014:9, Figs. 7-9, J. Ocean Sci. Foundation, v. 9 (type locality, Saudi Arabia, Raghigh, Red Sea). Holotype: ZMF 33630. Paratypes: BPBM 41159; CAS 235013; CAS 236380; KAUMM 9 – 12 (1, 1, 1, 1); SMF 33624 (1); SMF 33625 (1); SMF 33631; USNM 402218 (4); USNM 402211 (1).

DISTRIBUTION: Red Sea and Gulf of Aden.

***Pempheris familia* Koeda and Motomura, 2017**

Pempheris familia Koeda and Motomura, 2017:22, Figs. 1-3 [Ichthyological Research v. 65 (no. 1) (type locality, off Ototojima Island, Ogasawara Islands, Japan). Holotype: KAUM-I 74713. Paratype: NSMT 124563 (1).

DISTRIBUTION: Ogasawara Islands, Japan.

***Pempheris flavicycla* Randall, Satapoomin and Alpermann, 2014**

Pempheris flavicycla flavicycla Randall, Satapoomin and Alpermann in Randall, Bogorodsky, Alpermann, Satapoomin, Mooi and Mal, 2014: 4, Figs. 3-6, J. Ocean Sci. Foundation, 2013 (v. 9) (type locality, Mafia Island, Chole Islands, Chole Bay, Tanzania). Holotype: BPBM 17633. Paratypes: BPBM 27210 (2); BPBM 36372 (7); SAIAB 189345 (1); SAIAB 77856 (1); SAIAB 77805 (5); SAIAB 187538 (2) USNM 410717 (2); ZSI/CLT 2465 (1).

DISTRIBUTION: Indian Ocean: Gulf of Aden, Kenya, Tanzania, Seychelles, Chagos Archipelago to Thailand.

Comments: a synonym of *P. adusta* according to Koeda et al. (2014:303); valid according to Randall and Victor (2022:102).

***Pempheris gasparinii* Pinheiro, Bernardi and Rocha, 2016**

Pempheris gasparinii Pinheiro, Bernardi and Rocha 2016: 108, Figs. 1-2, Zookey No.561 (type locality, Trinidad Island, Espirito Santo, Brazil). Holotype: CIUFES 2432. Paratypes: CAS 238409 (1); CAS 238410 (1); CIUFES 2432 (1) ; ZUEC PIS 11233 (1).

Distribution: known only from the type locality.

***Pempheris hadra* Randall and Victor, 2015**

Pempheris hadra Randall and Victor, 2015: 27, Fig. 14, J. Ocean Sci. Foundation, v. 18 (type locality, Kaafu Atoll, rocky wall of swimming pool opposite power station, Republic of Maldives). Holotype (unique): SAIAB 187537.

DISTRIBUTION: known only from the holotype.

***Pempheris heemstraorum* Randall and Victor, 2015**

Pempheris heemstraorum Randall and Victor, 2015: 29, Fig. 15, J. Ocean Sci. Foundation, v. 18 (type locality, Rodrigues, Mascarene Islands). Holotype (unique): SAIAB 69487.

DISTRIBUTION: known only from the holotype from eastern Mascarenes (Rodrigues).

***Pempheris hollemani* Randall and Victor, 2015**

Pempheris hollemani Randall and Victor, 2015: 30, Fig. 16, J. Ocean Sci. Foundation, v. 18 (type locality, Anosy Region, Fort Dauphin, Libanona Beach, Madagascar). Holotype: SAIAB 200564. Paratype: SAIAB 97406.

Distribution: known only from southern Madagascar (two specimens).

***Pempheris ibo* Randall and Victor, 2015**

Pempheris ibo Randall and Victor, 2015: 31, Figs. 17-18, J. Ocean Sci. Foundation, v. 18 (type locality, Ibo Island, Mozambique). Holotype: SAIAB 191483. Paratypes: BPBM 41201 (1); SAIAB 3759 (8); SAIAB 189307 (2); SAIAB 189165 (2).

Distribution: Mozambique and South Africa.

***Pempheris itoi* Fowler, 1931**

Pempheris itoi Fowler, 1931: 61, Fig. 7, Bull. U. S. Natl. Mus., No. 100, v. 11 (type locality, Tanakeke I., Flores Sea, Indonesia). Holotype: USNM 89994. Paratypes: USNM 122597 (2).

DISTRIBUTION: Indonesia.

***Pempheris japonica* Döderlein, 1883**

Pempheris japonicus Döderlein in Steindachner and Döderlein, 1883: 125, Anz. Akad. Wiss. Wien, v. 20 (no. 15) (type locality, Tokyo, Japan). Syntypes: (several) BMNH 1891.5.26.7-8 (2); NMW 76727-28 (2, 3); ZMH 4250 (2).

Catalufa umbra Snyder, 1911: 528, Proc. U. S. Natl. Mus., v. 40 (no. 1836) (type locality, Misaki, Japan). Holotype (unique): USNM 68229.

DISTRIBUTION: Western Pacific: southern China and Taiwan to Philippines, north to Korea and southern Sea of Japan (Korea, Japan).

REMARKS: Species described in more details in Steindachner and Döderlein 1883:29.

***Pempheris klunzingeri* McCulloch, 1911**

Pempheris muelleri Klunzinger, 1880: 380, Pl. 6, Sitzungsber. Akad. Wiss. Wien, v. 80 (1. Abth.) (3-4) (type locality, King George Sound, Western Australia; permanently invalid, preoccupied by *Pempheris muelleri* Poey 1860). Holotype (unique): SMNS 2559.

Pempheris klunzingeri McCulloch, 1911, Biol. Results "Endeavour", [v. 1] (pt 1): 47. (type locality, King George Sound, Western Australia; replacement name for *Pempheris muelleri* Klunzinger 1880)

DISTRIBUTION: southern Australia from Geraldton to Saint Vincent Gulf.

***Pempheris kruppi* Randall, Victor and Aideed, 2015**

Pempheris kruppi Randall, Victor and Aided in Randall and Victor, 2015: 33, Figs. 19-20, J. Ocean Sci. Foundation, v. 18 (type locality, Ras Belhaf, Gulf of Aden, Yemen). Holotype: SMF 35711. Paratypes: BPBM 41214, NHCY-P-12 (6); NHCY-P-13 (1); SMF 35528 (6); USNM 435864 (1).

DISTRIBUTION: Yemen and Socotra Archipelago.

***Pempheris kuriamuria* Randall and Victor, 2015**

Pempheris kuriamuria Randall and Victor, 2015: 35, Figs. 21-22, J. Ocean Sci. Foundation, v. 18 (type locality, South coast, Ras Hamar, Oman). Holotype: CAS 236521. Paratype: BPBM 41239.

DISTRIBUTION: Gulf of Oman.

***Pempheris leiolepis* Randall and Victor, 2015**

Pempheris leiolepis Randall and Victor, 2015: 37, Fig. 23, J. Ocean Sci. Foundation, v. 18 (type locality, Chumbe Island, Zanzibar). Holotype (unique): SAIAB 200715.

DISTRIBUTION: known only from the holotype, a male specimen collected by J.L.B. and M.M. Smith the Aug. 5, 1952.

***Pempheris malabarica* Cuvier, 1831**

Pempheris malabarica Cuvier in Cuvier and Valenciennes, 1831: 308, Hist. Nat. Poiss., v. 7 (type localities, Mahé and Malabar, India). Syntypes: MNHN A-0219 (1), A-0417 (1), B-2511 (1).

DISTRIBUTION: Oman, Pakistan, India and Sri Lanka east to Thailand, Cambodia and Singapore.

***Pempheris mangula* Cuvier, 1829**

Pempheris mangula Cuvier, 1829:195, Règne Animal (ed. 2), v. 2 (type locality, Vishakhapatnam [Vizagapatam], India). Neotype: ZSI/CLT 2489. "Paraneotypes": BPBM 41079 (1), ZSI/CLT 2490 (3). Neotype selected on 24 April by Randall & Bineesh (2014:30) but a neotype was also selected little later (30 April) by Koeda et al. (2014:309) as BPBM 41095.

DISTRIBUTION: east and southwestern coasts of India, and eastward.

***Pempheris megalops* Randall and Victor, 2015**

Pempheris megalops Randall and Victor, 2015: 38, Fig. 24, J. Ocean Sci. Foundation, v. 18 (type locality, La Digue, North Point, Seychelles). Holotype (unique): BPBM 41063.

DISTRIBUTION: Seychelles; known only from a single specimen collected the June 1, 1977.

***Pempheris micromma* Randall and Victor, 2015**

Pempheris micromma Randall and Victor, 2015: 39, Figs. 25-26, J. Ocean Sci. Foundation, v. 18 (type locality, South coast, Rahah Bay, Oman). Holotype: BPBM 41157.

DISTRIBUTION: Oman.

***Pempheris molucca* Cuvier, 1829**

Pempheris molucca Cuvier, 1829: 195, Règne Animal (ed. 2), v. 2 (type localities, Moluccas; Batavia, Java, Indonesia). Syntypes: MNHN A-0217 (1) Jakarta (coll. Renard), ?MNHN A-0220 (1) Molucca Islands [Bauchot's holotype]; ?RMNH 1483 (1).

DISTRIBUTION: Red Sea and Indo-West Pacific: southwest Sumatra to Bali Strait, and Malaysia

Comments: might be a synonym of *P. mangula* (Heemstra, 1986). Valid species according to Koeda et al. (2014:311).

***Pempheris multiradiata* Klunzinger, 1879**

Pempheris multiradiatus Klunzinger, 1879: 257, Sitzungsber. Akad. Wiss. Wien, v. 16, no. 22 (type locality, King George Sound, Western Australia). Syntypes: NMW 78547 (1); SMNS 2557 (3), 2676 (4), 24577 [ex SMNS 2676] (1).

Pempheris lineatus Ogilby, 1885: 447, Proc. Linn. Soc. N. S. W., v. 10 (pt 2) (type locality, Shark Reef, Port Jackson, New South Wales, Australia). Holotype (unique): AMS B.7334.

Pempheris macrolepis Macleay, 1881: 516, Proc. Linn. Soc. N. S. W., v. 5 (pt 4) (type localities, King George Sound, Western Australia; Port Jackson, N. S. W., Australia). Syntypes: AMS I.16327-001 [ex MAMU F503] (2).

DISTRIBUTION: southern Australia from central New South Wales to Perth.

***Pempheris muscat* Randall and Victor, 2015**

Pempheris muscat Randall and Victor, 2015: 40, Fig. 27, J. Ocean Sci. Foundation, v. 18 (type locality, Gulf of Oman, Cat Island, Oman). Holotype: BPBM 35845. Paratypes: BMNH 1889.4.15.35-38 (3); BPBM 21359 (1).

DISTRIBUTION: Oman.

Comments: known only from preserved specimen collected the April 28, 1990 (holotype) and March 5, 1977 (paratypes) by J.E. Randall.

***Pempheris nesogallica* Cuvier, 1831**

Pempheris nesogallica Cuvier in Cuvier and Valenciennes, 1831: 306, Hist. Nat. Poiss., v. 7 (type locality, Mauritius). Lectotype: MNHN B-2514. Paralectotype: MNHN A-0222 (1). Lectotype designated by Koeda et al. (2014:315).

DISTRIBUTION: South Africa to Madagascar and Mascarenes.

***Pempheris nyctereutes* Jordan and Evermann, 1902**

Pempheris nyctereutes Jordan and Evermann, 1902: 339, Fig. 14, Proc. U. S. Natl. Mus., v. 25 (no. 1289) (type locality, Hokoto, Taiwan). Holotype (unique): ZUMT 42902 [orig. no. 286] (apparently lost).

DISTRIBUTION: Vietnam to Taiwan and southern Japan.

***Pempheris orbis* Randall and Victor, 2015**

Pempheris orbis Randall and Victor, 2015: 42, Fig. 28, J. Ocean Sci. Foundation, v. 18 (type locality, Gulf of Aqaba, Dahab, Red Sea). Holotype: SMNHNTAU P.5284. Paratype: HUJ 4727 (2).

DISTRIBUTION: northern Red Sea.

Comments: described on the basis of three specimens collected in 1968.

***Pempheris ornata* Mooi and Jubb, 1996**

Pempheris sp. Gomon et al. 1994: 608, fig. 536, The fishes of Australia's south coast.

Pempheris ornata Mooi and Jubb, 1996: 120, Figs. 1-3, 4a, 5, Rec. Aust. Mus., v. 48 (no. 2) (type locality, Rapid Bay, 35°31'09"S, 138°11'05"E, South Australia, 9.1 m). Holotype: AMS I.33831-001. Paratypes: (19) AMS I.33831-002 (1); BMNH 1995.7.17.1 (1); MPM 31496 (2); NMV A15835 (4); NTM S.14104-001 (1); ROM 69303 (1); USNM 337545 (2); WAM P.30996-001 (2).

DISTRIBUTION: southern Australia from Rottnest Island to Kangaroo Island.

***Pempheris otaitensis* Cuvier, 1831**

Pempheris otaitensis Cuvier in Cuvier and Valenciennes, 1831: 304, Pl. 191, Hist. Nat. Poiss., v. 7 (type locality, Tahiti, Society Islands). Holotype (unique): MNHN A-0927.

DISTRIBUTION: Tahiti.

***Pempheris oualensis* Cuvier, 1831**

Pempheris oualensis Cuvier in Cuvier and Valenciennes, 1831: 299, Hist. Nat. Poiss., v. 7 (type locality, Strong I. [Oualan I.], Caroline Islands). Holotype (unique): MNHN A-0221.

DISTRIBUTION: Indo-Pacific: Red Sea to the Line, Marquesas, and Ducie Islands; north to Ryukyu Islands, south to Lord Howe and Rapa Islands. Throughout Micronesia.

***Pempheris pathirana* Randall and Victor, 2015**

Pempheris pathirana Randall and Victor, 2015: 43, Fig. 29, J. Ocean Sci. Foundation, v. 18 (type locality, Trincomalee District, Koddhiyar Pattu, Foul Point, Sri Lanka). Holotype: USNM 432500. Paratypes: BPBM 41225 (1); SAIAB 200844 (2); USNM 402255 (1); USNM 402235 (9).

DISTRIBUTION: Sri Lanka, expected from southern coast of India; known only from preserved specimens; divers search for *P. pathirana* at Trincomalee, where it was collected in 1969 and 1970, failed to find it.

***Pempheris peza* Randall and Victor, 2015**

Pempheris peza Randall and Victor, 2015: 44, Fig. 30, J. Ocean Sci. Foundation, v. 18 (type locality, Ponta do Ouro, Mozambique). Holotype: SAIAB 50637. Paratypes: BPBM 41192 (6); SAIAB 200761 (9).

DISTRIBUTION: known only from the type locality; color in life unknown.

***Pempheris poeyi* Bean, 1885**

Pempheris poeyi Bean, 1885: 229, Proc. U. S. Natl. Mus., v. 8 (no. 516) (type locality, Cuba). Holotype (unique): USNM 37184 [ex USNM 4721].

DISTRIBUTION: Bermuda and Bahamas south to Colombia, Venezuela and Trinidad and Tobago, including Caribbean Sea.

***Pempheris rapa* Mooi, 1998**

Pempheris rapa Mooi, 1998: 155, figs. 1, 2, Pac. Sci. 52(2) (type locality, Haurei Bay, Rapa Iti, French Polynesia). Holotype: BPBM 12889. Paratypes: AMS I.37829-001 (1), BPBM 37408 (4), MNHN 1997-0057 (1), MPM 31325 (1), ROM 70538 (1), USNM 344109 (1).

DISTRIBUTION: known only from the type locality.

***Pempheris rhomboidea* Kossmann and Räuber, 1877**

Pempheris rhomboidea Kossmann and Räuber, 1877: 398, Pl. 3 (fig. 4), Verh. Naturh.-Med. Ver. Heidelb., v. 1 (type locality, Red Sea). Lectotype: ZMB 9850. Paralectotypes: (2) ZMB 9850. Lectotype selected by Koeda et al. (2014:312)

DISTRIBUTION: Red Sea and Mediterranean Sea as Red Sea immigrant.

***Pempheris rochai* Randall and Victor, 2015**

Pempheris rochai Randall and Victor, 2015: 45, Fig. 31, J. Ocean Sci. Foundation, v. 18 (type locality, South coast, Ras Hamar, Oman). Holotype (unique): CAS 236522.

DISTRIBUTION: Oman; known only from the type locality and a single specimen.

***Pempheris rubricauda* Randall and Victor, 2015**

Pempheris rubricauda Randall and Victor, 2015: 46, Fig. 32, J. Ocean Sci. Foundation, v. 18 (type locality, Nosy Be, Nosy Vorona, Madagascar). Holotype: MNHN 2015-003. Paratypes: BPBM 41199; URUN 2008-4281 (3).

DISTRIBUTION: known only from the type locality.

***Pempheris russellii* Day, 1888**

Pempheris russellii Day, 1888: 788, Fishes India, Suppl. (type locality, India). Syntypes: ZSI F910 (2).

DISTRIBUTION: southern Iran and Pakistan.

***Pempheris sarayu* Randall and Bineesh, 2014**

Pempheris sarayu Randall and Bineesh, 2014: 33, Fig. 12, J. Ocean Sci. Foundation, v. 10 (type locality, Kerala, Kovalam, 300 meters north of lighthouse, off Raja Hotel, India). Holotype (unique): BPBM 27666.

DISTRIBUTION: known only from the type locality.

***Pempheris sasaki* (Jordan and Hubbs, 1925)**

Liopempheris sasaki Jordan and Hubbs, 1925: 228, Pl. 10 (fig. 1), Mem. Carnegie Mus., v. 10 (no. 2) (type locality, Toba market, Japan). Holotype: FMNH 58751 [ex CM 7860]

DISTRIBUTION: Japan.

***Pempheris mexicana* Cuvier, 1831**

Pempheris mexicana Cuvier in Cuvier and Valenciennes, 1831: 308, Hist. Nat. Poiss. V. 7 (type locality, Acapulco, Mexico). Holotype: MNHN A-0241 [ex ZMB].

Pempheris schomburgkii Müller and Troschel in Schomburgk, 1848: 15, Hist. Barbados (type locality, Barbados, West Indies). No types known.

Pempheris muelleri Poey, 1860: 203, Mem. Hist. Nat. Cuba, v. 2 (type locality, Cuba). Syntypes and/or Poey specimens: MCZ 17318 (2), NMW 78663 (1), USNM 4721 (1).

Pempheris polio Breder, 1927: 32, Figs. 15-16, Bull. Bingham Oceanogr. Collect. Yale Univ., v. 1 (art. 1) (type locality, Isle of Pines, Cuba [or Saddle Rock, Bahamas]). Holotype: YPM 182. Paratypes: YPM 183 (1).

DISTRIBUTION: Bermuda, Bahamas, Florida, Antilles to Brazil. Absent from northern Gulf of Mexico.

COMMENTS: synonymy from Smith-Vanitz et al., 1999: 273 and Farooqi et al. (2005: 1745). Major taxonomic databases like the World Register of Marine Species (WoRMS) and FishBase formally list *Pempheris mexicana* Cuvier, 1831, as an accepted synonym of *Pempheris schomburgkii* Müller & Troschel, 1848. Recently, Fricke et al (2024) treated *mexicana* as a synonym of *schomburgkii* without further explanations. Jordan et al, 1930 listed both *Pempheris schomburgkii* and ***Pempheris mexicana*** (as *mexicanus*) as valid species. Therefore *Pempheris mexicana* cannot be declared *nomen oblitum* as established by the Code, art. 23.9.1. According to Recommendation 23A (If suppression desired), as in the present case, if suppression of the older name, rather than a change in the relative precedence of the two names involved, is desirable, in addition to taking action under Article 23.9.2 to maintain prevailing usage, the author should refer the case to the Commission with an appropriate recommendation for a ruling. Therefore, according to the Art. 23.9.3, as the conditions of 23.9.1 are not met but nevertheless I considers that the use of the older synonym, *Pempheris mexicana* Cuvier 1831, would threaten stability or cause confusion, and so I wish to maintain use of the younger synonym, I must refer the matter to the Commission for a ruling under the plenary power [Art. 81]. While the case is under consideration the use of the junior name is to be maintained [Art. 82].

***Pempheris schreineri* Miranda-Ribeiro, 1915**

Pempheris schreineri Miranda-Ribeiro, 1915:2, Arq. Mus. Nac. Rio de J., v. 17: Pempheridae (type locality, Fernando de Noronha Terr., Brazil). Syntypes: (2) ? MNRJ 2427 (1).

DISTRIBUTION: Brazil.

***Pempheris schwenkii* Bleeker, 1855**

Pempheris schwenkii Bleeker, 1855: 314, Natuurkd. Tijdschr. Neder. Indië, v. 8 (type locality, Butu Islands, Indonesia). Syntypes: (2) RMNH 6160 (2).

DISTRIBUTION: Red Sea south to Natal and Western Australia north to southern Japan; Indonesia, Fiji, Tonga and Vanuatu.

***Pempheris sergey* Randall and Victor, 2015**

Pempheris sergey Randall and Victor, 2015: 47, Fig. 33, J. Ocean Sci. Foundation, v. 18 (type locality, Saudi Arabia, Sharm Obhur, in front of Marine Station, Red Sea). Holotype: SMF 35717. Paratypes: BPBM 41229 (ex KAU 13-674) (1); KAUMM 370 (KAU 13-673) (1); KAUMM 371 (KAU 13-675) (1); SMF 35718 (ex KAU 13-672) (1).

DISTRIBUTION: Red Sea.

***Pempheris shimoni* Randall and Victor, 2015**

Pempheris shimoni Randall and Victor, 2015: 49, Fig. 34, J. Ocean Sci. Foundation, v. 18 (type locality, Shimoni, Kenya). Holotype: SAIAB 51257. Paratypes: SAIAB 51256 (7); SAIAB 200843 (3); USNM 402231.

DISTRIBUTION: known only from the type locality. Description is based on only one adult specimen.

***Pempheris shirleen* Randall and Victor, 2015**

Pempheris shirleen Randall and Victor, 2015: 50, Fig. 35, J. Ocean Sci. Foundation, v. 18 (type locality, Egypt, Hurghada, 300 yards north of pier of Institute of Oceanography and Fisheries, Red Sea). Holotype: USNM 402228. Paratype: USNM 436759 (1).

DISTRIBUTION: Red Sea.

***Pempheris smithorum* Randall and Victor, 2015**

Pempheris smithorum Randall and Victor, 2015: 51, Fig. 36, J. Ocean Sci. Foundation, v. 18 (type locality, Zanzibar, Chumbe Island, Tanzania). Holotype: SAIAB 51259. Paratype: BPBM 37176 (1).

DISTRIBUTION: known from Zanzibar and Mafia Island, possibly expected all along the coast of Tanzania.

Comments: the holotype was collected by J.L.B. and M.M. Smith, Sept. 5, 1952 and a second specimen (the paratype) was collected in 1972 at Mafia Island, Tanzania.

***Pempheris tau* Randall and Victor, 2015**

Pempheris tau Randall and Victor, 2015: 52, Fig. 37, J. Ocean Sci. Foundation, v. 18 (type locality, Gulf of Aqaba, east coast of Sinai Peninsula, Nuweiba, Egypt, Red Sea). Holotype: HUJ 10979. Paratypes: BPBM 41232(1); SMNHTAU P 3650 (1).

DISTRIBUTION: Red Sea.

***Pempheris ternay* Randall and Victor, 2015**

Pempheris ternay Randall and Victor, 2015: 53, Fig. 38, J. Ocean Sci. Foundation, v. 18 (type locality, Mahé, Ternay Marine National Park, Cape Matoopa, Seychelles). Holotype (unique): SAIAB 77935.

Distribution: Seychelles. Known only from the holotype.

***Pempheris tilman* Randall and Victor, 2015**

Pempheris tilman Randall and Victor, 2015: 54, Fig. 39, J. Ocean Sci. Foundation, v. 18 (type locality, Aqaba, Jordan, Gulf of Aqaba, Red Sea). Holotype: SMF 35779 [ex. SMF 23763]. Paratypes: BPBM 41233 (1); SMF 23763 (1).

DISTRIBUTION: Gulf of Aqaba.

***Pempheris tiran* Randall and Victor, 2015**

Pempheris tiran Randall and Victor, 2015: 55, Fig. 40, J. Ocean Sci. Foundation, v. 18 (type locality, Saudi Arabia, Strait of Tiran, Red Sea). Holotype: CAS 236818. Paratype: BPBM 41230 (1).

DISTRIBUTION: Northern Red Sea endemic.

***Pempheris tominagai* Koeda, Yoshino and Tachihara, 2014**

Pempheris tominagai Koeda, Yoshino and Tachihara, 2014: 317, Fig. 7, Zootaxa 3793 (no. 3) (type locality, Sharm el-Sheikh, 34°17'41"N, 27°51'29"E, Egypt). Holotype: NSMT-P 106826. Paratypes: BMNH 1982.9.9.1 (1); NSMT-P 106827 (1), 106828 (2); SAIAB 77935 (1), 97406 (2), 62146 (1), 75871 (5); SMNS 21172 (1); URM-P 46567 (1), 46568 (2)

DISTRIBUTION: Red Sea.

***Pempheris trinco* Randall and Victor, 2015**

Pempheris trinco Randall and Victor, 2015: 57, fig. 42, J. Ocean Sci. Foundation, v. 18 (type locality, Trincomalee, Dutch Point, Sri Lanka). Holotype: BPBM 18771. Paratypes: BPBM, USNM 343709 (7);

DISTRIBUTION: Sri Lanka but the range is expected more widely.

REMARKS: the holotype was collected by J.E. Randall, April 2, 1975; several additional specimens has been collected from many localities of Sri Lanka.

***Pempheris ufuagari* Koeda, Yoshino and Tachihara, 2013**

Pempheris ufuagari Koeda, Yoshino and Tachihara, 2013: 232, Fig. 1a, Zootaxa 3609 (no. 2) (type locality, Kameike port, Minami Daito Island, Daito Islands, Japan). Holotype: NSMT-P 108633. Paratypes: BPBM 35182 (1), 35286 (1); NSMT-P 35498 (1), 108634 (1); URM-P 46315-46318 (4), 46322 (1).

DISTRIBUTION: Daito Islands and Ogasawara Archipelago, southern Japan.

***Pempheris vanicolensis* Cuvier, 1831**

Pempheris vanicolensis Cuvier in Cuvier and Valenciennes, 1831: 305, Hist. Nat. Poiss., v. 7 (type locality, Vanikoro I., Santa Cruz Is., sw. Pacific, 11°37'S, 166°58'E). Syntypes: MNHN A-223 (now 1), A-0418 (now 1), B-2512 (1), B-2513 (1).

DISTRIBUTION: Red Sea and east Africa south to Kwazulu-Natal eastward to New Caledonia and Samoa north to Philippines and Ryukyu Islands; in the Mediterranean Sea as Red Sea immigrant.

***Pempheris viridis* Randall and Victor, 2015**

Pempheris viridis Randall and Victor, 2015: 58, Fig. 43, J. Ocean Sci. Foundation, v. 18 (type locality, Saudi Arabia, off Al Lith, Red Sea). Holotype (unique): SMF 33629.

DISTRIBUTION: Red Sea; known only from a single specimen.

***Pempheris wilsoni* Randall and Victor, 2015**

Pempheris wilsoni Randall and Victor, 2015: 60, Figs. 45-48, J. Ocean Sci. Foundation, v. 18 (type locality, Gulf of Oman, Fahal Island, Oman). Holotype (unique): CAS 236523.

DISTRIBUTION: Oman.

Remarks: described only from the holotype, but recorded from several underwater photograph along the Oman coast.

***Pempheris xanthomma* Randall and Victor, 2015**

Pempheris xanthomma Randall and Victor, 2015: 62, Figs. 49-50, J. Ocean Sci. Foundation, v. 18 (type locality, Gulf of Aden, Ras Majdaha, Yemen). Holotype: SMF 35712. Paratypes: BPBM 41227 (1); NHCY-P-10 (9); SMF 35489 (10); USNM 436600 (1).

DISTRIBUTION: Gulf of Aden, Yemen; known only from the type locality (several specimens collected by F. Krupp, M. Schneider, and E. Lavergne the May 20, 2005).

***Pempheris xanthoptera* Tominaga, 1968**

Pempheris xanthoptera Tominaga, 1968: 286, Figs. 12-13, J. Fac. Sci. Univ. Tokyo Sect. IV Zool., v. 10 (pt 1) (type locality, Manazuri, Kanagawa Pref., Japan). Holotype: ZUMT 51967. Paratypes: (over 300) ZUMT.

DISTRIBUTION: East China sea (China) north to off southern Korea and Pacific coast of southern and central Japan, including Izu Islands (Japan) and Ogasawara Islands (Japan).

***Pempheris ypsilychnus* Mooi and Jubb, 1996**

Pempheris ypsilychnus Mooi and Jubb, 1996: 123, Figs. 4b, 7-8, Rec. Aust. Mus., v. 48 (no. 2) (type locality, Broome, 17°59'S, 122°11'E, Western Australia, 1 m). Holotype: WAM P.28059-019. Paratypes: AMS I.15557-187 (7); CSIRO C 3443 (1); MPM 31024 (4); NTM 13227-001 (1); SMNS 14293 (2); USNM 337546 (1); WAM P.28059-023 (1), P.28416-019 (1).

DISTRIBUTION: central west coast of Western Australia to southern Great Barrier Reef and Moreton Bay.

***Pempheris zajonzi* Randall and Victor, 2015**

Pempheris zajonzi Randall and Victor, 2015: 64, Fig. 51, J. Ocean Sci. Foundation, v. 18 (type locality, Socotra Archipelago, Socotra Island, Ras Qatanin, 150 meters off coast on shipwreck, Yemen). Holotype: SMF 35713. Paratypes: SMF 35714 (4).

DISTRIBUTION: Socotra Archipelago.

Undescribed species:

However, there are a few photographs that are sufficiently distinct to suggest undescribed species.

Doubtful species:

Pempheris woodlarkensis Thiollière in Montrouzier, 1857, Ann. Soc. Imp. Agric. Hist. Nat. Lyon, v. 8 (1856): 448 [170]. (type locality, Woodlark Island, southwestern Pacific).

Family **PENTACEROTIDAE** Bleeker, 1859

(Armorheads)

Marine. Indo-Pacific and Southwestern Atlantic. Body moderately deep (*Pentaceroopsis*) to very deep (*Pentaceros*); strongly

compressed covered by small scales. Head almost entirely encased in exposed, rough and striated dermal bones. Supramaxilla lacking. Dorsal fin having 4-15 strong spines; 9-29 soft rays. With 2-5 strong spines in anal fin; soft rays 7-45. Large pelvic fins. One long and strong spine in pelvic fin; soft rays 5. Many species develop elongated, almost tubular snouts as adults, which they use to forage for benthic invertebrates in sand or mud. Some species are restricted in deep water, few are occasionally observed in shallow waters. In pair or small aggregations close to reefs with large caves where they rest. The diet consists of small fishes, zooplankton, and benthic invertebrates like polychaetes and brittle stars. They do not provide parental care to their eggs. Dimensions: from 30 cm to 1 m. Etymology: *penta*-, five; *keras*, horn, referring to five horn-like projections on head of *P. capensis* Cuvier. Eight genera and 13 species (Kuitert, 1993).

Subfamily HISTIOPTERINAE Bleeker 1876

Genus ***Evistias* Jordan**

Evistias Jordan, 1907: 236. Masculine. (Type species, *Histiopaterus acutirostris* Temminck and Schlegel, by original designation). *Evistiopterus* Whitley, 1932: 334. Masculine. (Unneeded replacement name for *Evistias* Jordan). Thought to be preoccupied by *Evistius* Gill 1893 in Latridae (Pisces). Monotypic.

***Evistias acutirostris* (Temminck and Schlegel, 1844)**

Histiopaterus acutirostris Temminck and Schlegel, 1844: 88, Pisces, Fauna Japonica, Parts 5-6 (type locality, Nagasaki, Japan). Lectotype: RMNH D822 (stuffed). Paralectotypes: RMNH 2398 (1, stuffed). Lectotype selected by Boeseman (1947:86). DISTRIBUTION: Pacific Ocean: Japan and Hawaiian Is.; Australia, New Zealand and Lord Howe, Norfolk and Kermadec Is. Found in pairs or small groups in deep rocky dropoffs.

Genus ***Histiopaterus* Temminck and Schlegel**

Histiopaterus Temminck and Schlegel, 1844: 86. Masculine. (Type species, *Histiopaterus typus* Temminck and Schlegel, by monotypy). One species.

***Histiopaterus typus* Temminck and Schlegel, 1844**

Histiopaterus typus Temminck and Schlegel, 1844: 86, Pl. 45, Pisces, Fauna Japonica, Parts 5-6 (type locality, Nagasaki, Japan). Lectotype: RMNH 422. Paralectotypes: ?RMNH D543 (1, stuffed). Lectotype selected by Boeseman (1947:86). *Histiopaterus spinifer* Gilchrist, 1904: 3, Pl. 21, Mar. Invest. S. Africa, v. 3 (type locality, Mossel Bay, South Africa, 30-36 fathoms). Holotype (unique): SAM 11692.

DISTRIBUTION: Indo-West Pacific (Eastern Cape and KwaZulu-Natal, East Africa, Gulf of Aden, Socotra, Comoro Islands, Réunion and Persian Gulf east to Philippines and New Ireland, north to Korea and central Japan, south to northern Australia), including the Red Sea. Inhabits deep rocky reefs between 40 and 400 m.

Genus ***Parazanclistius* Hardy**

Parazanclistius Hardy, 1983: 373. Masculine. (Type species, *Parazanclistius hutchinsi* Hardy, by original designation). One species.

***Parazanclistius hutchinsi* Hardy, 1983**

Parazanclistius hutchinsi Hardy, 1983: 375, Fig. 1, Rec. West. Aust. Mus., v. 10 (pt 4) (type locality, Transit Reefs, Rottnest I., Western Australia, 32°00'S, 115°30'E). Holotype: WAM P.25718-001. Paratypes: NMNZ P.12195 (2); WAM P.725-001 (1), P.16411-001 (1). DISTRIBUTION: southern Western Australia.

Genus ***Paristiopterus* Bleeker**

Richardsonia Castelnau, 1872: 112. Feminine. (Type species, *Richardsonia insignis* Castelnau, preoccupied by *Richardsonia* Steindachner 1866 in Retropinnidae, Pisces). *Paristiopterus* Bleeker, 1876: 268. Masculine. (Replacement name for *Richardsonia* Castelnau). *Macullochia* Waite, 1910: 25. Feminine. (Replacement name for *Richardsonia* Castelnau). *Glauertichthys* Whitley, 1945: 28. Masculine. (Type species, *Paristiopterus gallipavo* Whitley, by original designation; proposed as a subgenus of *Paristiopterus*). Two species.

***Paristiopterus gallipavo* Whitley, 1944**

Paristiopterus gallipavo Whitley, 1944: 28, Fig. 4, Proc. R. Zool. Soc. N. S. W., v. for 1943-44 (type locality, Off Rockingham, Western Australia. Holotype: WAM P.2589-001.

DISTRIBUTION: southern Australia. Found on the continental shelf.

***Paristiopterus labiosus* (Günther, 1872)**

Histioporus labiosus Günther 1872: 658, Pl. 59, Proc. Zool. Soc. Lond., 1871 (pt 3) (type locality, South Australia). Holotype (unique): BMNH 1870.12.27.35.

Richardsonia insignis Castelnau, 1872: 112, Proc. Zool. Acclim. Soc. Victoria, v. 1 (type locality, Western Port (via Melbourne market), Australia). Holotype (unique): whereabouts unknown.

Histiophorus farnelli Waite 1898: 33, Pl. 4, N. S. W. Sea Fisheries (type locality, Shoalhaven Bight, N. S. W., Australia, Thetis sta. 50, 15-18 fathoms). Holotype (unique): AMS I.3859.

DISTRIBUTION: Tasmania and eastern Australia.

Genus *Pentaceropsis* Steindachner

Pentaceropsis Steindachner in Steindachner and Döderlein, 1883:13. Masculine. (Type species, *Histioporus recurvirostris* Richardson, by original designation).

Prosoplismus Waite, 1903: 59. Masculine. (Type species, *Histioporus recurvirostris* Richardson, by original designation). One species.

***Pentaceropsis recurvirostris* (Richardson, 1845)**

Histioporus recurvirostris Richardson, 1845: 34, Pl. 22 (figs. 5-6), Ichthyol. Erebus and Terror, v. 2 (2) (type locality, Storm Bay, Tasmania, Australia). Holotype (unique): mutilated head only.

DISTRIBUTION: southern Australia.

Genus *Zanclistius* Jordan

Zanclistius Jordan, 1907: 236. Masculine. (type species, *Histioporus elevatus* Ramsay and Ogilby, by original designation).

***Zanclistius elevatus* (Ramsay and Ogilby, 1888)**

Histioporus elevatus Ramsay and Ogilby, 1888: 1311, Proc. Linn. Soc. N. S. W. (Ser. 2), v. 3 (pt 3) (type locality, off Port Jackson, New South Wales, Australia). Holotype: AMS I.1894.

DISTRIBUTION: southern Australia.

Subfamily PENTACEROTINAE Bleeker, 1859**Genus *Pentaceros* Cuvier**

Pentaceros Cuvier in Cuvier and Valenciennes, 1829: 30. Masculine. (Type species, *Pentaceros capensis* Cuvier, by monotypy).

Pseudopentaceros Bleeker, 1876: 270. Masculine. (Type species, *Pentaceros richardsoni* Smith, by original designation).

Gilchristia Jordan, 1907: 236. Feminine. (Type species, *Pentaceros richardsoni* Smith, by original designation).

Quadrarius Jordan, 1907: 236. Masculine. (Type species, *Pentaceros decacanthus* Günther, by original designation).

Quinquarius Jordan, 1907: 236. Masculine. (Type species, *Pentaceros japonicus* Steindachner, by original designation).

Undecimus Whitley, 1934: no p. Masculine. (Type species, *Quinquarius hendecacanthus* McCulloch, by original designation).

Griffinetta Whitley and Phillipps, 1939: 233. Feminine. (Type species, *Griffinetta nelsonensis* Whitley and Phillipps, by original designation).

Six species.

***Pentaceros capensis* Cuvier, 1829**

Pentaceros capensis Cuvier in Cuvier and Valenciennes, 1829: 30, Pl. 43, Hist. Nat. Poiss., v. 3 (type locality, Cape of Good Hope, South Africa). Holotype: RMNH.

DISTRIBUTION: South Africa to Madagascar and Réunion; off southern Chile (Pequeño, 1997).

***Pentaceros decacanthus* Günther, 1859**

Pentaceros decacanthus Günther, 1859: 213, Cat. Fishes, v. 1 (type locality, Pacific Ocean).

Quinquarius hendecacanthus McCulloch, 1915: 144, Pl. 26 (figs. 1-3), Biol. Results "Endeavour", v. 3 (pt 3) (type locality, Victoria and Great Australian Bight, Australia, 160-300 fathoms). Holotype: AMS E.4606. Paratypes: AMS E.4607 (1), QM I.2342.

DISTRIBUTION: southern Australia and New Zealand; Chile.

***Pentaceros japonicus* Steindachner, 1883**

Pentaceros japonicus Steindachner, 1883: 124, Anz. Akad. Wiss. Wien, v. 20 (no. 15) (type locality, Tokyo, Japan). Syntypes: NMW 82877 (1), 86123 (1).

DISTRIBUTION: Japan, Australia, New Zealand, New Caledonia and Chile.

***Pentaceros quinquespinis* Parin and Kotlyar, 1988**

Pentaceros quinquespinis Parin and Kotlyar, 1988: 356, Fig., Voprosy Ikhtiolog., v. 28 (no. 3) (type locality, Bol'shaya Seamount e. Pacific, 25°42'S, 85°28'W, 175-210 m). Holotype: ZIN 48053. Paratypes: NMNZ P20369 (2); USNM 285046-47 (3, 1); ZIN 48054-56 (2, 3, 1), 48059 (3); ZMMU P-17072-76 (1, 1, 3, 3, 1), P-17115-17 (1, 4, 1).

DISTRIBUTION: Sala y Gomez Ridge, southeastern Pacific Ocean.

***Pentaceros richardsoni* Smith, 1844**

Pentaceros richardsoni Smith, 1844: no pagination [51], Pl. 21, Illust. Zool. S. Africa, v. 4 (type locality, Very deep water near Cape Point, Cape of Good Hope, South Africa). Holotype (unique): BMNH 1845.7.3.56 (stuffed).

Pentaceros knerii Steindachner, 1866: 19, Anzeiger K. Akad. Wiss. Math.-Naturwiss. Cl., v. 3 (type locality, Cape Horn, South America). Holotype (unique): NMW 38617.

Griffinetta nelsonensis Whitley and Phillipps 1939: 233, Trans. Proc. R. Soc. N. Z., v. 69 (no. 2) (type locality, Nelson, New Zealand). Holotype: NMNZ P.214.

DISTRIBUTION: Southeast Atlantic: Tristan de Cunha and South Africa. Western Indian Ocean: South Africa. South Pacific: southern Australia and New Zealand and Cape Horn, Chile. North Pacific records refers to *Pentaceros wheeleri*. Have been trawled on the continental shelf and slope to a depth of 600 m; juveniles recorded from surface waters.

***Pentaceros wheeleri* (Hardy, 1983)**

Pseudopentaceros wheeleri Hardy, 1983: 209, Fig. 11, N. Z. J. Zool., v. 10 (type locality, Kinmei Seamount, Emperor Seamount Chain, North Pacific). Holotype: HUMZ 90823. Paratypes: BPBM 20684 (2), 26410 (3); HUMZ 90824-25 and 90827 (3); MTUF 21775-77 (3); NMNZ P.13040 (1).

Pseudopentaceros pectoralis Hardy, 1983: 212, Figs. 12, 13B, N. Z. J. Zool., v. 10 (type locality, Ladd Bank, Leeward Is., Hawaiian Is., U.S.A.). Holotype: BPBM 27853. Paratypes: BPBM 25156 (2), 25757 (2); HUMZ 45160-61 (2); OSUO 483 (1); SAIAB [formerly RUSI] 13849 (1).

DISTRIBUTION: Japan to the Hawaiian Islands.

Family POLYPRIONIDAE Bleeker

(Wreckfishes)

Worldwide. They possess a prominent horizontal bony ridge on the upper part of the gill cover (opercle) that ends in a short, strong spine. A manuscript has been published listing all nominal species (Parenti, 2019), including Stereolepididae, which are treated as separate family following the study of Smith et al., 2022. Etymology: *poly*, many; *prion*, saw, referring to serrations on preopercle.

Genus *Polyprion* Oken

Polyprion Oken (ex Cuvier), 1817: 1182. Masculine. (Type species *Amphiprion americanus* Bloch & Schneider, by monotypy);

Hectoria Castelnau, 1873: 151. Feminine. (Type species *Oligorus gigas* Günther, by monotypy);

Notognidion Rafinesque 1810:46 (*Notognidion scirenga* Rafinesque 1810, by monotypy).

***Polyprion americanus* (Bloch & Schneider, 1801)**

Amphiprion americanus Bloch & Schneider, 1801: 205, Systema Ichthyol. (type locality, America).

Notognidion scirenga Rafinesque, 1810:46, Caratteri (type locality, Sicily, Italy).

Sparus adottus Rafinesque, 1810: 50, Caratteri (type locality, Sicily, Italy).

Scorpaena massiliensis Risso 1810: 184, Ichtyol. Nice (type locality, Marseilles, France).

Polyprion cernium Valenciennes, 1824: 265, pl. 17, Mém. Mus. Natl. Hist. Nat., v. 11 (type localities, Cape of Good Hope, South Africa; Mediterranean).

Scorpena nigra Nardo, 1824: 230, Giornale fis. chim. Stor. nat., med., arti (series 2), v. 7 (type locality, Adriatic Sea, Mediterranean Sea).

Holocentrus gulo Risso, 1827: 367, Hist. nat. Princip. prod. Europe mérid., v. 3 (type locality, Nice, France).

Polyprion massiliense Costa, 1829: 1, pl. 1, Fauna regno Napoli, Part 1 (type locality, southern Italy).

Serranus couchii Yarrel, 1836: 12, Fig., History British fishes (type locality, Coast of Cornwall, Great Britain).

Polyprion cernuum Gray and Richardson in Richardson 1843: 206, Travels in New Zealand, v. 2 (unneeded new spelling for *Polyprion cernium* Valenciennes 1824)

Polyprion moeone Phillips, 1927: 126, Trans. Proc. N. Zeal. Inst., v. 58 (no. 1-2) (type locality, Kaikoura, New Zealand).

DISTRIBUTION: worldwide; Mediterranean, Adriatic and eastern Atlantic from Norway to the Canary Islands; Tristan da Cunha and South Africa; from Uruguay and Argentina and Newfoundland to North Carolina in the western Atlantic (rare); St. Paul and Amsterdam islands in the Western Indian Ocean; New Zealand, Tasmania, Victoria, and New South Wales.

***Polyprion oxygeneios* (Schneider & Forster, 1801)**

Epinephelus oxygeneios Schneider & Forster in Bloch & Schneider, 1801: 301, Systema Ichthyol. (type locality, Queen Charlotte Island, New Zealand).

Perca fernandeziana Guichenot 1848: 369, Fauna Chilena, Historia fisica politica Chile, v. 2 (type locality, Juan Fernández Islands).

Centropristis gigas Owen 1853: 51, Descr. catalog. osteol. Series, v. 1 (type locality, New Zealand).

Polyprion knerii Steindachner 1875: 443, Sitzungsber. Akad. Wiss. Wien, v. 71 (no. 1) (type locality, St. Paul's Island, Juan Fernandez Islands).

Polyprion yanezi de Buen, 1959: 85, Rev. Biol. Mar. Valparaiso, v. 9 (no. 1-3) (type locality, 1.5 mi. west of Montemar, Chile).

DISTRIBUTION: southern Australia, New Zealand, and Chile mostly on deep water to about 400 m.

Family **SCOMBROPIDAE** Gill, 1862
(Gnomefishes)

Marine, moderate sized predators of the outer continental shelf, preying on smaller fish, squid, and crustaceans. Common at depth between 200-600 m. They possess powerful, canine-like teeth. Supramaxilla present. Two dorsal fins: the first with 8-11 spines and the second with 12-14 soft rays. Anal fin with 2-3 spines and 11-13 soft rays. Soft-rayed parts of dorsal and anal fins scaly. Preopercle bearing a membrane flap over the subopercle. Pectorals with a black blotch at base. Large eyes, their most striking feature, adapted for low-light environments. Lateral-line scales 50-70. Dimensions: to 60 cm. In Japan, where they are known as Mutsu, they are highly prized for their rich, oily flesh. They are considered a seasonal delicacy, often served as sushi, sashimi, or simmered. Nelson (1994) places these fishes within Pomatomidae. Monotypic.

Genus ***Scombrops* Temminck and Schlegel**

Scombrops Temminck and Schlegel, 1845: 118. Masculine. (Type species *Scombrops cheilodipteroides* Bleeker, by subsequent monotypy).

Latebrus Poey, 1860: 168. Masculine. (Type species *Latebrus oculatus* Poey, by monotypy).

Telescopias Jordan and Snyder, 1901: 909. Masculine. (Type species *Telescopias gilberti* Jordan and Snyder, by original designation). Three species (Nelson et al., 2016).

***Scombrops boops* (Houttuyn, 1782)**

Labrus boops Houttuyn, 1782: 326, Verh. Holl. Maatsch. Wet. Haarlem, v. 20, pt 2 (type locality, Japan). No types known.

Scombrops cheilodipteroides Bleeker, 1853: 9, Verh. Batav. Genootsch. Kunst. Wet., v. 25 (type locality, Nagasaki, Japan). No types known.

Scombrops dubius Gilchrist, 1922: 66, pl. 11, fig. 1, Rep. Fish. Mar. Biol. Surv. Union So. Afr., Rep. 2, art. 3 (type locality, Off South Africa, Pickle stations 152 and 118, 160-207 fathoms). Syntypes: SAIAB (3).

DISTRIBUTION: Indo-West Pacific: Mozambique and South Africa, Japan and the East China Sea. Southeast Atlantic: Cape, South Africa. Live at 20-400m: adults found in deep rocky areas; young found in shallow water. The diet consists of fishes, crustaceans and squids. Spawns from October to March.

***Scombrops gilberti* (Jordan and Snyder, 1901)**

Telescopias gilberti Jordan and Snyder, 1901: 909, pl. 44, Proc. U.S. Natl. Mus., v. 23, no. 1240 (type locality, Between Misaki and Oshima, Japan). Holotype: CAS-SU 12657. Paratypes: USNM 57540 (1).

DISTRIBUTION: Japan: southern Hokkaido to Suruga Bay.

***Scombrops oculatus* (Poey, 1860)**

Latebrus oculatus Poey, 1860: 168, pl. 14, fig. 2, Mem. Hist. Nat. Cuba, v. 2 (type locality, Cuba). No types known.

DISTRIBUTION: Western Atlantic: Straits of Florida in USA, especially along western Bahamas, but ranges widely in tropical western Atlantic. Possibly nearly worldwide in tropical region. Commonly caught by anglers at depths between 200-610 m.

Family **STEREOLEPIDIDAE** Smith, Ghedotti and Davis, 2022
(Giant Sea Basses)

Marine, exclusively in the Pacific Ocean. These are exceptionally large fishes. The giant sea bass (*Stereolepis gigas*) can reach lengths of up to 2.5 meters and weights exceeding 250 kg. The striped jewfish (*Stereolepis doederleini*) is slightly smaller, reaching up to 2.1 meters and 84 kg. Stereolepididae can be distinguished from all other acropomatiforms by a unique combination of 26 vertebrae (12 precaudal and 14 caudal), 9–12 dorsal-fin spines, and the presence of a supramaxilla. Polyprionidae, in which *Stereolepis* has been usually placed, differ in having 13 precaudal vertebrae and higher number of lateral-line scales (84–98 vs 57–80). They inhabit rocky substrates and kelp beds. Adults are often deep-water (bathydemersal) residents, found at depths of 400–600 meters, while juveniles occupy shallower sandy areas or kelp forests at 12–21 meters.

Genus ***Stereolepis* Ayres**

Stereolepis Ayres, 1859: 28. Masculine. (Type-species *Stereolepis gigas* Ayres, by monotypy).

Megaperca Hilgendorf, 1878: 155. Feminine. (Type-species *Megaperca ischinagi* Hilgendorf, by monotypy).

***Stereolepis doederleinii* Lindberg & Krasnyukova, 1969**

Stereolepis doederleinii Lindberg & Krasnyukova, 1969: 69, fig. 130, Fishes of the Sea of Japan and of adjacent areas of the Sea of Okhotsk and the Yellow Seas. Part 3. Teleostomi XXIX Perciformes. (type locality, Japanese Sea).

DISTRIBUTION: Japan from Hokkaido to Kochi Prefecture and to Ishikawa Prefecture at depths between 400 and 600 m.

***Stereolepis gigas* Ayres, 1859**

Stereolepis gigas Ayres, 1859: 28, fig. 6, Proc. Cal. Acad. Sci. (Ser. 1) 2 (1858–1862) (type locality, San Francisco Bay, California, U.S.A.).

Stereolepis californicus Gill, 1863: 330, Proc. Acad. Nat. Sci. Phila., v. 15 (replacement name for *Stereolepis gigas* supposed preoccupied in this genus).

Megaperca ischinagi Hilgendorf, 1878: 156, Sitzung. Gesell. Nat. Freunde Berlin 1878 (type locality, Fish market in Tokyo and Yokohama, Japan).

DISTRIBUTION: northern Japan, Sea of Japan, and California.

Family **SYMPHYSANODONTIDAE** Katayama, 1984
(Slopefishes)

Marine; Indo-Pacific and Atlantic, found over continental shelf, upper continental slope and submarine ridges. Anterior ends of premaxillaries forming a conspicuous notch which receives the anterior ends of dentaries. Premaxillary with small teeth, notch toothless; dentary with small teeth, symphysis toothless. Supramaxilla absent. Dorsal fin continuous and not incised usually with 9 spines and 10 soft rays; anal fin with 3 spines and 7 soft rays; caudal fin deeply forked; opercle with two flattened spines, the ventral one more prominent. Lateral-line scales 42–50.

Etymology: *symphysis*, grown together; *an-*, without; *odon*, tooth, referring to the absence of teeth over the area where the two jaw halves meet (the symphysis).

Two genera with 13 species.

Genus ***Cymatognathus* Kimura et al.**

Cymatognathus Kimura, Johnson, Peristiwady and Matsuura, 2017: 53. Masculine. (Type species, *Cymatognathus aureolateralis* Kimura, Johnson, Peristiwady and Matsuura, by original designation)

***Cymatognathus aureolateralis* Kimura, Johnson, Peristiwady and Matsuura, 2017**

Cymatognathus aureolateralis Kimura, Johnson, Peristiwady and Matsuura, 2017 :55, Figs. 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9 [Zootaxa 4277 (no. 1) (type locality, Fish market at Tanjung Kodok, Bitung, North Sulawesi, Indonesia). Holotype: MZB 19251 (formerly LBRC-F 2837). Paratypes: FRLM54552 (formerly LBRC-F 2918) (1) partly dissected to observe the cranium and suspensorium); LBRC-F 337 (1).

Distribution: Currently known only from Bitung, North Sulawesi, Indonesia, found at depths between 15 and 400 m.

Genus ***Symphysanodon* Bleeker**

Symphysanodon Bleeker, 1877: 3. Masculine. (Type species, *Symphysanodon typus* Bleeker 1877, by monotypy).

Propoma Günther, 1880: 39. Neuter. (Type species, *Propoma roseum* Günther 1880, by monotypy).

Rhyacanthias Jordan, 1921: 646. Masculine. (Type species, *Rhyacanthias carlsmithi* Jordan 1921, by original designation).

Twelve species: Indo-Pacific (9) and Atlantic (3).

***Symphysanodon andersoni* Kotthaus, 1974**

Symphysanodon andersoni Kotthaus, 1974, Meteor Forschungsergeb. Reihe D Biol., No. 17: 52, Fig. 326 (type locality, Gulf of Aden, Sokotra, 11°33.9'N, 52°54'E to 11°38'N, 52°52'E, Meteor sta. 102, 290-190 m). Holotype (unique): ZMH 5170 [ex IOES 188].

DISTRIBUTION: western Indian Ocean.

***Symphysanodon berryi* Anderson, 1970**

Symphysanodon berryi Anderson, 1970, U. S. Natl. Mar. Fish. Serv. Fish. Bull., v. 68 (no. 2): 338, Fig. 4 (type locality, Off s. coast of Great Inagua I., Bahamas, 20°45'N, 73°33'W, 200-217 fathoms). Holotype: USNM 204086 [not 204068]. Paratypes: AMNH 28501 (2); AMS I.15402-001 (1); ANSP (2, 1 lot); BMNH 1969.5.16.2-3 (2); BPBM 7305 (1), 14197 (1); CUMV (2); FMNH 66918-23 (8, 1, 5, 1, 1, 4); IRSNB 474 (1), LACM 30769-1 (2); MCZ 46518 (2); MNHN 1969-0165 (2); RMNH 26071 (1); CAS-SU 67142 (2); TU 57443 (2); UF (now 54 in 10 lots, incl. ex TABL and UMML); UMMZ 18888 (2); USNM (9, 3 lots; now 25 in 5 lots); UW (1); YPM 5988 (1); ZMH 4201 (1).

Planctanthias longifilis Trunov, 1976:266 [232], Fig. 4 [Voprosy Ikhtiologii v. 16 (no. 2) (art. 97) (Near St. Helena Island, southeastern Atlantic). Holotype (unique): ZIN 42033.

DISTRIBUTION: Western Atlantic: from the Bahamas and Central America to the northern coast of Venezuela.

***Symphysanodon disii* Khalaf and Krupp 2008**

Symphysanodon disii Khalaf and Krupp 2008: 86, Figs. 1-2 [aqua, International Journal of Ichthyology v. 14 (no. 2) (type locality, Aqaba, Jordan, Gulf of Aqaba, Red Sea). Holotype (unique): MSSA 64-20/1.

Distribution: Gulf of Aqaba.

***Symphysanodon katayamai* Anderson, 1970**

Symphysanodon katayamai Anderson, 1970, U. S. Natl. Mar. Fish. Serv. Fish. Bull., v. 68 (no. 2): 333, Fig. 2. (type locality, Off Kashiwajima, Kochi Pref., Japan). Holotype (unique): ZIKU 8206.

DISTRIBUTION: southern Japan and Taiwan.

***Symphysanodon maunaloae* Anderson, 1970**

Symphysanodon maunaloae Anderson, 1970, U. S. Natl. Mar. Fish. Serv. Fish. Bull., v. 68 (no. 2): 335, Fig. 3 (type locality, Off ne. coast of Hawaii I., 20°07'N, 155°25'W to 20°08'N, 155°28'W, 130 fathoms). Holotype: USNM 204389. Paratypes: BPBM 9778-79 (1, 3), 14196 [ex UH] (1), 18071 [ex UH] (8); USNM 204388 (12).

DISTRIBUTION: Pacific: off Japan and Lombok (Indonesia) to the Hawaiian Islands and eastern South Pacific (Sala y Gómez Ridge).

***Symphysanodon mona* Anderson and Springer 2005**

Symphysanodon mona Anderson and Springer 2005: 7, Figs. 1-3, Zootaxa No. 996 (type locality, Mona Passage, off west coast of Puerto Rico). Holotype (unique): USNM 371386.

Distribution: Western Atlantic: Off Puerto Rico.

***Symphysanodon octoactinus* Anderson, 1970**

Symphysanodon octoactinus Anderson, 1970, U. S. Natl. Mar. Fish. Serv. Fish. Bull., v. 68 (no. 2): 342, Fig. 5 (type locality, Off s. coast of Grand Bahama I., 26°34'N, 78°25-26'W, 150-160 fathoms). Holotype: USNM 204084 [ex UMML 20775]. Paratypes: ANSP 112723 (1); BMNH 1969.5.16.4 (1); FMNH 66924 (1); UF 19291 [ex TABL 101314] (2), 211050 [ex UMML 11050] (8), 212273 [ex UMML 12273] (2); USNM 204085 (3), 208501 [ex TABL 101314] (1).

DISTRIBUTION: Western Central Atlantic: off coast of Grand Bahama I., 26°34'N, 78°25-26'W.

***Symphysanodon parini* Anderson and Springer, 2005**

Symphysanodon parini Anderson and Springer 2005: 11, Fig. 5 [Zootaxa No. 996 (type locality, Sala y Gómez Ridge, 25°04'S, 97°28'W, southeastern Pacific. Holotype: USNM 372776. Paratypes: IOAN uncat. (5), USNM 375198 (4).

Distribution: Southeastern Pacific: Sala-y-Gómez Ridge.

***Symphysanodon pitondelaournaisei* Quéro, Spitz and Vayne 2009**

Symphysanodon pitondelaournaisei Quéro, Spitz and Vayne, 2009: 74 [Cybium v. 33 (no. 1) (type locality, site of volcanic eruption of Piton de la Fournaise, Réunion, western Mascarenes, southwestern Indian Ocean). Holotype: MNHN 2008-0151. Paratype: MHN RUN P613 (1).

Distribution: Southwestern Indian Ocean: off Réunion.

***Symphysanodon rhax* Anderson and Springer, 2005**

Symphysanodon rhax Anderson and Springer, 2005: 16, Fig. 9, Zootaxa No. 996 (type locality, Maldives Islands). Holotype: BMNH

2003.1.5.1. Paratypes: BMNH 2003.1.5.2 (1).

DISTRIBUTION: Maldives Islands.

***Symphysanodon typus* Bleeker, 1877**

Symphysanodon typus Bleeker, 1877, Processen-verbaal van de gewone vergaderingen der Koninklijke Akademie van Wetenschappen; Afdeeling Natuurkunde 1877-1878 (no. 4): 3. (type locality, New Guinea). [described also in Arch. Néerl. Sci. Nat., Haarlem, v. 13 (1878): 61, Pl. 3 (fig. 1)]. Holotype (unique): ZMH H398.

Propoma roseum Günther, 1880, Rept. Challenger Shore Fishes, v. 1 (pt 6): 39, Pl. 20 (fig. B). (type locality, Kai Is., Challenger sta. 192, Indonesia, Arafura Sea, 129 fathoms). Lectotype: BMNH 1879.5.14.164-5 (107 mm). Paralectotypes: BMNH 1868.8.1.2 (1). Lectotype selected by Anderson (1970:329, 333).

Rhyacanthias carlsmithi Jordan, 1921, Proc. U. S. Natl. Mus., v. 59 (no. 2392): 647, Figs. 3-4 (type locality, Off lava flow from Mauna Loa, Alika, Kau Dist., Hawaii I., Hawaiian Is., U.S.A.). Holotype (unique): USNM 84099 [not 84009].

DISTRIBUTION: Pacific: Indonesia (off Lombok and the Kai Islands) and the Philippines (off Luzon) to the Hawaiian Islands. Inhabits deep offshore trawling grounds. Probably feeds on zooplankton. Max. length 17 cm.

***Symphysanodon xanthopterygion* Anderson and Bineesh, 2011**

Symphysanodon xanthopterygion Anderson and Bineesh, 2011: 32, Figs. 1-2, Zootaxa No. 2966 (type locality, Off Quilon, Kerala coast, 9°05'N, 75°51'E, India). Holotype: USNM 400886. Paratypes: CMFRI/PFD/SYM/8.1-8.8 (8), DNR 31.136.1.2.2-3 (2), GMBL 10-016 (1), USNM 400887 (1).

DISTRIBUTION: Southeastern Arabian Sea off southern India.

Family **SYNAGROPIDAE** Smith, 1961
(Splitfin Ocean-basses)

Marine, mainly Indo-Pacific with two species in the Atlantic Ocean; benthopelagic, primarily inhabiting continental slopes and deep-shelf environments at depths between 50 and 1,000 meters. They have an elongated, compressed, oblong body covered in large cycloid scales that are often easily shed. The head is massive lacking scales on top) with a prominent cranial crest. They possess notably large eyes. The mouth is large and terminal. A key diagnostic feature is the presence of 3 to 6 large canine-like teeth on the lateral side of the lower jaw. Two widely separated dorsal fins: first with 9 spines, second dorsal with 1 spine and 9 soft rays; with 2 spines and 9 soft rays; jaws, vomer and palatines with bands of small teeth. Pectoral fins are generally longer than the pelvic fins but do not reach the anus. Caudal fin forked. The swim bladder is anteriorly bifurcated and comes into direct contact with the skull, a feature likely linked to enhanced sound reception. Juveniles are typically uniformly blackish-brown. Adults are black or dark grey dorsally and paler or silver/metallic ventrally. Some species, like *Synagrops atrumoris*, are distinguished by a black mouth cavity. Most members reach maximum standard lengths of 15 cm to 35 cm. Etymology: from *synagris*, ancient Greek name of *Dentex dentex* dating back to Aristotle; *ops*, having the appearance of.

Four genera with 17 species.

Genus ***Caraibops* Prokofiev and Schwarzhans**

Caraibops Prokofiev and Schwarzhans in Schwarzhans and Prokofiev, 2017: 13. Masculine. (Type species, *Synagrops trispinosus* Mochizuki and Sano, by original designation).

***Caraibops trispinosus* (Mochizuki and Sano, 1984)**

Synagrops trispinosus Mochizuki and Sano, 1984: 1, fig. 1, Jpn. J. Ichthyol., v. 31 (no. 1) (type locality, off Venezuela, 10°45'N, 66°37'W, 230 m).

DISTRIBUTION: Western central Atlantic: from the southern portion of the Caribbean Sea and northeastern South America to Suriname.

Genus ***Kaperangus* Prokofiev and Schwarzhans**

Kaperangus Prokofiev and Schwarzhans in Schwarzhans and Prokofiev, 2017: 15 (type species, *Synagrops microlepis* Norman, by original designation).

***Kaperangus microlepis* (Norman, 1935)**

Synagrops microlepis Norman, 1935: 12, fig. 3, Discovery Reps., v. 12 (type locality, off St. Paul de Loanda, Angola, w. Africa).

DISTRIBUTION: Eastern Atlantic: off the coasts of Gambia and Guinea to southern Angola. Reported to extend to Walvis Bay, Namibia.

Genus *Parascombrops* Alcock

Parascombrops Alcock, 1889: 296. Masculine. (Type species *Parascombrops pellucidus* Alcock, by monotypy).

Genus revised by Schwarzhans and Prokofiev (2017) with 13 species.

***Parascombrops analis* (Katayama, 1957)**

Neoscombrops analis Katayama, 1957: 153, Fig. 1, Jpn. J. Ichthyol., v. 6 (nos. 4-6) (type locality, Owase, Mie Pref., Japan). Holotype: NSMT [ex Katayama Fish Coll. 2447]

DISTRIBUTION: Western Pacific: Owase, Japan and the Philippines and Coral Sea to Vanuatu

***Parascombrops argyreus* (Gilbert and Cramer 1897)**

Melanostoma argyreum Gilbert and Cramer 1897: 416, Pl. 39 (fig.3), Proc. U. S. Natl. Mus. v. 19 (no. 1114) (type locality, off Hawaiian Is, Albatross sta. 3472, 295-298 fathoms). Holotype: USNM 47732. Paratypes: CAS-SU 4925 (1).

DISTRIBUTION: Madagascar; Coral Sea to Tasman Sea, Vanuatu and Tonga; Hawaiian Islands.

***Parascombrops glossodon* Schwarzhans and Prokofiev 2017**

Parascombrops glossodon Schwarzhans and Prokofiev, 2017: 33, Figs. 7C, 8F, 9C, 12A, 12D, 13C, 14J-N, 18, Zootaxa 4260 (no. 1) (type locality, Philippines, Mindanao, Zamboango del Norte). Holotype: USNM 436687. Paratypes: AMS I.21835-026 (5); BMNH 1986.10.9.79-85 (7); CAS 214605 (2); NMMB-P22001 (3); NMMB-P23098 (1); NMMB-P23095 (5); NMMB-P11355 (1); NMMB-P23101 (2); USNM 99335 (1); USNM 382250 (1); USNM 436684 (1); USNM 436685 (7); USNM 436686 (3); USNM 438230 (2); ZMMGU 23812 (4).

DISTRIBUTION: Western Pacific: Philippines, Indonesia to Taiwan and northern Australia; eastern Indian Ocean: Myanmar.

***Parascombrops madagascariensis* Schwarzhans and Prokofiev 2017**

Parascombrops madagascariensis Schwarzhans and Prokofiev 2017: 36, Figs. 6E, 7D, 9D, 13D, 19, Zootaxa 4260 (no. 1) (type locality, Off Reunion, 21°20'S, 55°26'E). Holotype: MNHN 2008-1769. Paratypes: MNHN 1988-1438 (1); MNHN 1988-1443 (1); MNHN 1989-0194.

DISTRIBUTION: Madagascar and Réunion.

***Parascombrops mochizukii* Schwarzhans, Prokofiev and Ho 2017**

Parascombrops mochizukii Schwarzhans, Prokofiev and Ho 2017 in Schwarzhans and Prokofiev 2017: 37, Figs. 7E, 9E, 13E, 14H-I, 20, Zootaxa 4260 (no. 1) (type locality, Off Dong-gang, Pingtung, southwestern Taiwan). Holotype: NMMB-P782. Paratypes: NMMB-P3887 (1); NMMB-P22743 (1).

DISTRIBUTION: Taiwan.

***Parascombrops nakayamai* Schwarzhans and Prokofiev 2017**

Parascombrops nakayamai Schwarzhans and Prokofiev 2017: 39, Figs. 7F, 8C, 9F, 12B, 13F, 14O-R, 21, 27, Zootaxa 4260 (no. 1) (type locality, Japan, Tosa Bay, Mimase fish market near Kochi). Holotype: BSKU 102255. Paratypes: AMS, I.24449-014 (10); BSKU 16825 (1); CAS 34870 (1); CAS 236019; CAS 238017 (4); MNHN 1995-o570 (4); MNHN 1995-0574 (2); MNHN 1995-0575 (3); MNHN 1998-0993 (3); MNHN 2005-0934 (2); MNHN 2009-0780 (1); NMMB-P2851 (1); NMMB-P114i346 (2); NMMB-P14362 (1); NMMB-P22083 (2); NMMB-P23092 (8); NMMB-P23094 (2); USNM 99303 (1); USNM 99315 (2); ZMUC P44338 - 47 (10).

DISTRIBUTION: Western Pacific: Japan, Taiwan, Philippines to Timor Sea, off Vanuatu and Wallis and Futuna.

***Parascombrops ohei* Schwarzhans and Prokofiev 2017**

Parascombrops ohei Schwarzhans and Prokofiev 2017: 41, Figs. 2C, 6G, 7G, 9H, 13G, 14S-U, 22, Zootaxa 4260 (no. 1) (type locality, Japan, Tosa Bay, 33°14'N, 133°38'E). Holotype: BSKU 72614. Paratypes: BSKU 9951 (1), 63370-1 (2), 87909 (1), 116497-8 (2); NSMT P59841 (1).

DISTRIBUTION: Japan.

***Parascombrops parvidens* Schwarzhans and Prokofiev 2017**

Parascombrops parvidens Schwarzhans and Prokofiev 2017: 43, Figs. 7H, 8B, 9G, 11C, 13H, 14V-Y, 23, Zootaxa 4260 (no. 1) (type locality, Indonesia, south of Sulawesi). Holotype: BSKU 98886. Paratypes: BSKU 98883-84 (7); BSKU 15219-21 (3); USNM 436686 (3).

DISTRIBUTION: Western Pacific: Philippines and eastern Indonesia.

***Parascombrops pellucidus* Alcock, 1889**

Parascombrops pellucidus Alcock, 1889: 296, pl. 22, fig. 1 J. Asiatic Soc. Bengal, v. 58 (pt 2, no. 3) (type locality, 16 mi. east of

Mahanaddi Delta, 68 fathoms.; Bay of Bengal, 20°18'N, 90°50'E, 65 fathoms). Syntypes: ZSI 11829 (1), F12437 (1). Alcock specimens: BMNH 1890.7.31.13-15 (3).

Synagrops adeni Kotthaus, 1970: 74, Figs. 258-259, Meteor Forschungsergeb. Reihe D Biol., No. 6 (type locality, Sw. coast of Arabia, 12°25'N, 43°54.5'E to 12°26'N, 43°52'E, Meteor sta. 54, 60 m). Holotype: ZMH 5055. Paratypes: ZMH 5056 (2), 5057 (2).

DISTRIBUTION: southwestern coast of Arabia south to Mombasa in Kenya and New Caledonia.

***Parascombrops philippinensis* (Günther, 1880)**

Acropoma philippinense Günther, 1880: 51, Rept. Challenger Shore Fishes, v. 1 (pt 6) (type locality, Philippines, Challenger sta. 201, 82-102 fathoms). Lectotype: BMNH 1879.5.14.167 (70 mm SL). Paralectotypes: BMNH 2016.9.14.1-4 (4) (ex 1879.5.14.167 (5)). Lectotype designated by Schwarzhans & Prokofiev (2017:48).

Synagrops malayanus Weber, 1913: 196, fig. 52, Fische Siboga Exped. (type locality, Bali Sea; Timor Sea; Lebetobi Straits, Indonesia, Siboga sta. 15, 302 and 303, 100-247 m). Lectotype: ZMA 112.453. Lectotype designated by Schwarzhans & Prokofiev (2017:48).

DISTRIBUTION: Indo-West Pacific including the Red Sea.

***Parascombrops serratospinosus* (Smith, 1912)**

Synagrops serratospinosa Smith and Radcliffe in Radcliffe, 1912: 444, pl. 38, fig. 2, Proc. U. S. Natl. Mus., v. 41 (no. 1868) (type locality, Batangus Bay, Luzon Island, 13°44'24"N, 120°45'30"E, Philippines, Albatross sta. 5365, 214 fathoms). Holotype: USNM 70254. Paratypes: USNM 99336-61 (4, 2, 2, 9, 3, 61, 3, 2, 11, 16, 2, 1, 3, 1, 2, 2, 1, 3, 1, 1, 2, 4, 3, 2, 2, 1); USNM 367313 (1).

DISTRIBUTION: Japan and Philippines.

***Parascombrops spinosus* (Schultz, 1940)**

Synagrops spinosa Schultz 1940: 417, Proc. U. S. Natl. Mus., v. 88 (no. 3085) (type locality, Gulf of Mexico, 28°38'30"N, 85°52'30"W, Albatross sta. 2401, 142 fathoms). Holotype (unique): USNM 74324.

DISTRIBUTION: Western Atlantic: from the Gulf of Mexico, Caribbean Sea and adjacent areas from 36°38'N to 7°27'N and from 54°27'W to 74°44'W. Western Pacific: from Japan and near Hainan, China.

***Parascombrops yamanouei* Schwarzhans, Prokofiev and Ho 2017**

Parascombrops yamanouei Schwarzhans, Prokofiev and Ho in Schwarzhans and Prokofiev, 2017: 54, Figs. 7M, 10F, 13M, 15S-U, 30, Zootaxa 4260 (no. 1) (type locality, Dong-gang, Pingtung, southwestern Taiwan). Holotype: NMMB-P13850. Paratypes: AMS I.21625-010 (1); NMMB-P11343 (9); NMMB-P13672 (1); NMMB-P14237 (8); NMMB-P15571 (1); NMMB-P230597 (7).

DISTRIBUTION: Taiwan and Timor Sea off northwestern Australia.

Genus *Synagrops* Günther

Melanostoma Döderlein in Steindachner and Döderlein, 1883:123. Neuter. (Type species *Melanostoma japonicum* Döderlein, by monotypy; preoccupied by *Melanostoma* Schiner 1860 in Diptera and *Malanostoma* Stål in Hemiptera 1872).

Synagrops Günther, 1887: 16. Masculine. (Type species *Melanostoma japonicum* Döderlein, by being a replacement name; replacement name for *Melanostoma* Döderlein)

Hypoclydonia Goode and Bean, 1896: 236. Feminine. (Type species *Hypoclydonia bella* Goode and Bean, by monotypy).

Maccullochina Jordan in Jordan and Jordan, 1922: 44. Feminine. (Type species *Synagrops serratospinosa* Smith and Radcliffe, by original designation).

Indo-West Pacific and Atlantic in the continental shelf and slope; two species (Schwarzhans and Prokofiev, 2017). Taxonomic decisions of Katayama (1960: 11) and Mediodia et al. 2024.

***Synagrops atrumoris* Mediodia et al., 2024**

Synagrops atrumoris Mediodia, Chang, Ho, Prikryl and Lin CH, 2024:4, Figs. 2-9, Zool Stud **63**, 20 (type locality, Dongsha Island, Taiwan, South China Sea). Holotype: ASIZP 0081729. Paratypes: ASIZP 0081726 (5); ASIZP 0081726 (6); ASIZP0081728 (10); ASIZP0081730 (8); ASIZP0081731 (1).

DISTRIBUTION: Currently known from the Dongsha Islands, Taiwan, and the South China Sea. Possibly from the south of Scott Reefs, Western Australia.

***Synagrops japonicus* (Döderlein, 1883)**

Melanostoma japonicum Döderlein, 1883: 124, Anz. Akad. Wiss. Wien, v. 20 (no. 15) (type locality, Tokyo, Japan). Holotype (unique): NMW 76006.

Hypoclydonia bella Goode and Bean, 1896: 236, pl. 66, fig. 237, Spec. Bull. U. S. Nat. Mus., No. 2 (type locality, Ne. Gulf of Mexico, 28°42'00"N, 86°36'00"W, Albatross sta. 2397, 280 fathoms). Lectotype: USNM 44621. Paralectotypes: BMNH 1939.3.22.3 (1) [ex USNM]; USNM 74324 (1), 39338 (1), 39346 (3), 74325-28 (2, 39, 1, 4). Lectotype established in Jordan & Evermann (1896:1116).

Synagrops natalensis Gilchrist, 1922: 69, Rep. Fish. Mar. Biol. Surv. Union So. Afr., Rep. 2 (art. 3) (type locality, Natal, South Africa,

Pickle sta. 101, 233 fathoms).

DISTRIBUTION: South Africa to Hawaiian Islands. Eastern Atlantic: from the coast of Guinea to Nigeria. Western Atlantic: North Carolina, USA and northern Gulf of Mexico to northern South America; inhabits deep shelf and slope waters from 60 to 910 m depth.

COMMENTS: Species illustrated and described in more detail in Steindachner and Döderlein 1883: 5, Pl. 1 (fig. 2). Synonymy according to Mediodia et al. (2024).

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