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Family Hemiramphidae Gill 1859

halfbeaks

By

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The Hemiramphidae, the halfbeaks, is one of five families of the order Beloniformes (Rosen and Parenti 1981 [ref. 5538]). The family name is based on *Hemiramphus* Cuvier 1816 [ref. 993], but many authors have misspelled the genus as *Hemirhamphus* and the family name as Hemirhamphidae (although the other genera in the family do have the extra *h*; e.g., *Arrhamphus*, *Euleptorhamphus*, *Hyporhamphus*, *Oxyporhamphus*, and *Rhynchorhamphus*). The family contains two subfamilies, 14 genera and subgenera, and 117 species and subspecies. It is the sister-group of the Exocoetidae, the flyingfishes, forming the superfamily Exocoetoidea (Collette et al. 1984 [ref. 11422]). Most halfbeaks have an elongate lower jaw that distinguishes them from the flyingfishes (Exocoetidae), which have lost the elongate lower jaw, and from the needlefishes (Belonidae) and sauries (Scomberesocidae), which have both jaws elongate. The Hemiramphidae is defined by one derived character: the third pair of upper pharyngeal bones are ankylosed into a plate. Other diagnostic characters include: pectoral fins short or moderately long; premaxillae pointed anteriorly, forming a triangular upper jaw (except in *Oxyporhamphus*); lower jaw elongate in juveniles of all genera, adults of most genera; parapophyses forked; and swim bladder not extending into the haemal canal. Nostrils in a pit anterior to the eyes. No spines in fins; dorsal and anal fins posterior in position; pelvic fins abdominal in position, with 6 soft rays; pectoral fins usually short. Lateral line extending ventrally from pectoral fin origin and then posteriorly along ventral margin of body. Scales moderately large, cycloid, easily detached. Halfbeaks range in size from small species such as *Hemirhamphodon tengah*, reaching a maximum of 35.5 mm (1.4 in) SL, and the popular aquarium species *Dermogenys pusilla* at 46.2 mm (1.8 in) SL, up to *Euleptorhamphus viridis*, reaching 405 mm (16 in) SL.

Halfbeaks live near the surface and are protectively colored for this mode of life by being green or blue on the back and silvery white on the sides and ventrally. The tip of the lower jaw is bright red or orange in most species, due to carotenoid pigments, especially zeaxanthin, astaxanthin, and beta-doradexanthin.

Development in beloniform fishes has long been of interest (Collette et al. 1984 [ref. 11422]). Most beloniforms produce large spherical eggs with attaching filaments, characters they share with other atheriniform fishes (Rosen and Parenti 1981 [ref. 5538]). Three Asian freshwater genera are viviparous (Meisner and Collette 1999 [ref. 23950]). Halfbeak eggs are typically 1.5–2.5 mm in diameter and have attaching filaments although these are greatly reduced in length in the pelagic eggs of *Oxyporhamphus*. Halfbeaks hatch at 4.8–11 mm, smaller than needlefishes but larger than flyingfishes and sauries (Collette et al. 1984 [ref. 11422]). During post-embryonic development, halfbeaks, like other beloniform fishes, undergo a number of complex changes in beak length, melanistic dorsal fin lobe, body bars, and pelvic fin pigmentation.

Although halfbeaks are not currently of great commercial importance, many species are regularly found in local markets. The flesh is excellent and halfbeaks are utilized as food in many parts of the world.

Halfbeaks are also important bait fishes when fishing for billfishes. They are mainly caught with seines and pelagic trawls, and dipnetted under lights at night. They are utilized fresh, dried, salted, and smoked. Species of three freshwater genera (*Dermogenys*, *Hemirhamphodon*, and *Nomorhamphus*) are in the aquarium trade. No revision of the entire family or either subfamily is available but there are regional studies for the eastern Atlantic (Collette 1965 [ref. 13343]), Australia (Collette 1974 [ref. 12930]), the tropical Indo-West Pacific (Parin et al. 1980 [ref. 6895]), and the Far East (Collette and Su 1986 [ref. 5998]), and there are regional FAO guides to the halfbeaks of additional areas. Type catalogs are available for the halfbeaks in three important collections: USNM (Collette et al. 1992 [ref. 19410]), ZMH (Wilkins and Dohse 1993 [ref. 21161]), and MNHN (Collette et al. 1997 [ref. 22813]).

Subfamily Hemiramphinae Gill 1859

halfbeaks

The subfamily Hemiramphinae contains about half the species in the family, with 63 species and subspecies in nine genera and subgenera. *Hemiramphus* (with 10 species) is a worldwide marine genus. *Rhynchorhamphus* (with four species) has fimbriate nasal papillae and is confined to Indo-West Pacific marine waters. *Hyporhamphus*, the most speciose genus, includes two subgenera: *Hyporhamphus* with 25 species (plus two subspecies), and *Reporhamphus* with 10 species (plus one subspecies). Some of these are marine, some estuarine, and some freshwater. Four genera, the first three monotypic (*Arrhamphus*, *Chriodorus*, *Melapedalion*, and *Oxyporhamphus*), have very short or no beaks. *Euleptorhamphus* and *Oxyporhamphus* contain two offshore species each. All genera are characterized by particular lateral line characters (Parin and Astakhov 1982 [ref. 26258]). The only recent generic revision is of *Rhynchorhamphus* by Collette (1976 [ref. 7107]). A generic revision of *Hyporhamphus*, particularly of the subgenus *Hyporhamphus*, is needed.

Genus *Arrhamphus* Günther 1866

Arrhamphus Günther 1866:276 [ref. 1983]. Type species *Arrhamphus sclerolepis* Günther 1866. Type by monotypy.

Arrhamphus sclerolepis Günther 1866

Arrhamphus sclerolepis Günther 1866:277 [ref. 1983] (Australia [originally as “? New Zealand”]). Lectotype: BMNH 1862.11.15.127.

Hemiramphus krefftii Steindachner 1867:332 [26 of separate], Pl. 1 (figs. 1–2) [ref. 14188] (Port Jackson, N.S.W., Australia). Holotype (unique): NMW 5559.

Hemirhamphus breviceps Castelnau 1878:240 [ref. 761] (Brisbane R. mouth, Queensland, Australia). No types known.

DISTRIBUTION: Marine, Australia and Papua New Guinea. See Remarks.

REMARKS: Two subspecies were recognized by Collette (1974 [ref. 12930]): *A. s. sclerolepis* from northern Australia and southern Papua New Guinea and *A. s. krefftii* on the east coast of Australia from Rockhampton, Queensland south to Laurieton, N.S.W. The lectotype of *Arrhamphus sclerolepis* was designated by Collette (1974:33 [ref. 12930]). The species name of *Hemiramphus krefftii* should have been spelled *krefftii* (after the naturalist J. L. G. Krefft).

Genus *Chriodorus* Goode & Bean 1882

Chriodorus Goode & Bean 1882:431 [ref. 1840]. Type species *Chriodorus atherinoides* Goode & Bean 1882. Type by monotypy.

Chriodorus atherinoides Goode & Bean 1882

Chriodorus atherinoides Goode & Bean 1882:432 [ref. 1840] (Key West, Florida, U.S.A.). Holotype (unique): USNM 26593.

DISTRIBUTION: Marine, western Atlantic: southern Florida south through the Florida Keys, to the Bahamas, Cuba, Campeche and Yucatan, Mexico, and Belize.

Genus *Euleptorhamphus* Gill 1859

Euleptorhamphus Gill 1859:156 [ref. 1757]. Type species *Euleptorhamphus brevoortii* Gill 1859. Type by original designation.

***Euleptorhamphus velox* Poey 1868**

Euleptorhamphus velox Poey 1868:383 [ref. 3505] (Cuba). Holotype (unique): MCZ 8779.

DISTRIBUTION: Marine, Atlantic: western Atlantic from New England south through the Gulf of Mexico and Caribbean Sea to Recife, Brazil and eastern Atlantic from the Cape Verde Islands, Sierra Leone, and Nigeria.

***Euleptorhamphus viridis* (van Hasselt 1823)**

Hemiramphus viridis van Hasselt 1823:131 [ref. 5963] (Vishakhapatnam [Vizagapatam], India; Java, Indonesia). No types known.

Hemiramphus longirostris Cuvier 1829:286 [ref. 995] (Vishakhapatnam [Vizagapatam], India). No types known.

Hemiramphus macrorhynchus Valenciennes in Cuvier & Valenciennes 1847:55, Pl. 556 [not 522] [ref. 4883] (Ellice Is. (Peyster Is.), about 100 mi. east of Nukufetau Is., Polynesia, 7°S, 177°E). Holotype (unique): MNHN (not found).

Euleptorhamphus brevoortii Gill 1859:156 [ref. 1757] (locality unknown). No types known.

Hemiramphus elongatus Tanaka 1911:22, Pl. 6 (fig. 21) [ref. 14881] (Misaki, Sagami Prov., Japan). Holotype (unique): ZUMT 2946 (lost).

Hemiramphus tweediei Herre 1936:6, Pl. 2 [ref. 10994] (Selat Paoe, near Singapore, Malaysia). Holotype (unique): SU 30979.

DISTRIBUTION: Marine, widely distributed in tropical and subtropical waters of the Indo-Pacific.

REMARKS: Descriptions of both *Hemiramphus viridis* van Hasselt 1823 and *H. longirostris* Cuvier 1829 are based on Russell (1803: Pl. 178 [ref. 13862]), so the type would be the specimen upon which the figure was based.

Genus *Hemiramphus* Cuvier 1816

Hemiramphus Cuvier 1816:186 [ref. 993]. Type species *Esox brasiliensis* Linnaeus 1758. Type by subsequent designation.

Farhians Whitley 1930:250 [ref. 4670]. Type species *Hemiramphus commersonii* Cuvier 1829. Type by original designation.

Ardeapiscis Whitley 1931:314 [ref. 4672]. Type species *Hemiramphus welsbyi* Ogilby 1908. Type by original designation (also monotypic).

REMARKS: The type species of *Hemiramphus* was designated by Gill (1864 [ref. 1693]).

***Hemiramphus archipelagicus* Collette & Parin 1978**

Hemiramphus archipelagicus Collette & Parin 1978:732, Fig. 1a [ref. 8943] (w. Indian Ocean, Vietnam, 8°21'N, 104°38'E). Holotype: USNM 218371 [ex SIO 65-43].

DISTRIBUTION: Marine, Indo-West Pacific: western Indian Ocean to western islands of Polynesia.

***Hemiramphus balao* Lesueur 1821**

Hemiramphus balao Lesueur 1821:136 [ref. 13274] (near Guadeloupe I. and Martinique I. and Santo Domingo, Lesser Antilles, West Indies). No types known.

Hemiramphus vittatus Valenciennes 1843:70 [ref. 4502] (Lancerote, Canary Is.). Holotype: MNHN B-2183 (dry).

Hemiramphus pleii Valenciennes in Cuvier & Valenciennes 1847:21 [ref. 4883] (Martinique I., West Indies). Lectotype: MNHN B-1050.

Hemiramphus macrochirus Poey 1860:299 [ref. 3499] (Cuba). Lectotype: MCZ 693.

Hemiramphus guineensis Bleeker 1863:119, Pl. 25 (fig. 2) [ref. 395] (Annonkor, Boutry, Guinea). Syntypes: RMNH 2823 (2).

DISTRIBUTION: Marine, Atlantic: western Atlantic from New York south through the Gulf of Mexico and Caribbean Sea to Santos, Brazil, and eastern Atlantic from the Canary Islands south to Luanda, Angola.

REMARKS: The lectotypes of *Hemiramphus macrochirus* and *Hemiramphus pleii* were designated by Collette (1965:223 [ref. 13343]).

***Hemiramphus bermudensis* Collette 1962**

Hemiramphus bermudensis Collette 1962:432, Fig. 1 [ref. 4554] (Whalebone Bay, St. George's I., Bermuda). Holotype: FMNH 48115.

DISTRIBUTION: Marine, Bermuda: endemic.

***Hemiramphus brasiliensis* (Linnaeus 1758)**

Esox brasiliensis Linnaeus 1758:314 [ref. 2787] (several original localities). No types known.

Hemiramphus marginatus Lesueur 1821:135 [ref. 13274] (Guadeloupe I.; Martinique I., West Indies). No types known.

Hemiramphus brownii Valenciennes in Cuvier & Valenciennes 1847:13 [ref. 4883] (Martinique I., West Indies). Lectotype: MNHN 4585.

Macrogathus brevirostris Gronow in Gray 1854:148 [ref. 1911] (Indian and American oceans). Syntypes: BMNH 1853.11.12.115 [Gronovius coll.] (1, skin).

Hemiramphus filamentosus Poey 1860:297 [ref. 3499] (Cuba). Lectotype: MCZ 8775.

DISTRIBUTION: Marine, Atlantic: western Atlantic from Massachusetts south through the Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil and eastern Atlantic from the Canary Islands and Dakar south to Luanda, Angola.

REMARKS: The lectotypes of *Hemiramphus brownii* and *Hemiramphus filamentosus* were designated by Collette (1965:226 [ref. 13343]).

***Hemiramphus depauperatus* Lay & Bennett 1839**

Hemiramphus depauperatus Lay & Bennett 1839:66 [ref. 2730] (Oahu I., Hawaiian Is., U.S.A.). Holotype (unique): Royal College of Surgeons.

DISTRIBUTION: Marine, central Pacific: Hawaiian, Society, and Marquesas islands.

***Hemiramphus far* (Forsskål 1775)**

Esox var. *far* Forsskål 1775:67 [ref. 1351] (Luhaiya, Yemen, Red Sea). No types known.

Esox gladius Lacepède 1803:295, 313, Pl. 7 (fig. 3) [ref. 4930] (East Indies and America). No types known.

Hemiramphus commersonii Cuvier 1829:286 [ref. 995] (Red Sea or Indian Ocean). No types known.

Hemiramphus obesus Castelnau 1861:64 [ref. 767] (Durban [Port Natal], South Africa). No types known.

Hemiramphus mocquardianus Thominot 1886:165 [ref. 17904] (source of Pursat R., near Lake Tonlé Sap, Cambodia). Holotype (unique): MNHN 1886-0002.

DISTRIBUTION: Marine, tropical waters of the Indo-West Pacific and has invaded the eastern Mediterranean Sea by way of the Suez Canal.

REMARKS: Although the original description of *Esox gladius* mentions the East Indies and America, the figure is of *Hemiramphus far* which is confined to the Indo-West Pacific.

***Hemiramphus lutkei* Valenciennes 1847**

Hemiramphus lutkei Valenciennes in Cuvier & Valenciennes 1847:49 [ref. 4883] (Borou [Indonesia]). Lectotype: MNHN 4339.

Hemiramphus fasciatus Bleeker 1853:89 [ref. 16911] (Lawajong, Solor I., Indonesia). Holotype (unique): BMNH 1866.5.2.19.

Hemiramphus japonicus Brevoort 1856:280 [28 of separate] [ref. 17284] (Ryukyu Is., Japan). Holotype (unique): whereabouts unknown.

DISTRIBUTION: Marine, Indo-West Pacific: East Africa to Japan, the Gilbert Islands, and Samoa.

REMARKS: The lectotype of *H. lutkei* was selected by Parin et al. (1980:115 [ref. 6895]).

***Hemiramphus marginatus* (Forsskål 1775)**

Esox marginatus Forsskål 1775:67, xiii [ref. 1351] (Djedda, Red Sea). Holotype (unique): ZMUC P342523 (dry skin).

DISTRIBUTION: Marine, western Indian Ocean: restricted to the Red Sea and Persian Gulf.

***Hemiramphus robustus* Günther 1866**

Hemiramphus robustus Günther 1866:270 [ref. 1983] (Long I., Hogan Group, Tasmania, Australia). Holotype (unique): BMNH uncat.

Hemiramphus welsbyi Ogilby 1908:91 [ref. 3287] (Moreton Bay, Queensland, Australia). Holotype: QM I.1542 [ex AFAQ 648].

DISTRIBUTION: Marine, tropical and subtropical waters of Australia and southern Papua New Guinea.

***Hemiramphus saltator* Gilbert & Starks 1904**

Hemiramphus saltator Gilbert & Starks 1904:53, Pl. 9 (fig. 16) [ref. 1639] (Panama Bay, Pacific Panama). Holotype: SU 6806.

DISTRIBUTION: Marine, eastern tropical Pacific: Baja California to northern Peru and the Galápagos Islands.

Genus *Hyporhamphus* Gill 1859

Hyporhamphus Gill 1859:131 [ref. 1759]. Type species *Hyporhamphus tricuspidatus* Gill 1859. Type by monotypy.

Eulepidorhamphus Fowler 1919:7 [ref. 1397]. Subgenus of *Hyporhamphus*. Type species *Hemiramphus sajori* Temminck & Schlegel 1846. Type by original designation (also monotypic).

Reporhamphus Whitley 1931:314 [ref. 4672]. Type species *Hemiramphus australis* Steindachner 1866. Type by original designation.

Odontorhamphus Weed 1933:47, 51 [ref. 6557]. Type species *Odontorhamphus cancellori* Weed 1933. Type by original designation (also monotypic).

Ichthyacus Fernández-Yépez 1948:[1] [ref. 1318]. Type species *Ichthyacus brederi* Fernández-Yépez 1948. Type by original designation (also monotypic).

REMARKS: Two subgenera were recognized by Parin et al. (1980 [ref. 6895]): *Hyporhamphus* Gill 1859, with 25 species found in all oceans, some species occurring in freshwater (synonyms *Eulepidorhamphus* Fowler 1919 and *Ichthyacus* Fernández-Yépez 1948); and *Reporhamphus* Whitley 1931, with 11 Indo-West Pacific marine species (synonym *Odontorhamphus* Weed 1933). See Remarks under *Hyporhamphus brederi* for comments about the spelling of the type species of the genus *Ichthyacus*.

***Hyporhamphus acutus* (Günther 1872)**

Hemiramphus acutus Günther 1872:671 [ref. 1997] (Rarotonga I., Cook Is.). Holotype (unique): BMNH 1871.9.13.156.

Hemiramphus furcatus Philippi 1876:263 [ref. 12724] (Easter I., se. Pacific). Holotype (unique): whereabouts unknown.

Hemirhamphus pacificus Steindachner 1900:177 [ref. 20498] (Laysan I., Hawaiian Is., U.S.A.). Holotype (unique): UMB (not found).

Odontorhamphus cancellori Weed 1933:52, Fig. 1 [ref. 6557] (Aitutaki I., Cook Is.). Holotype (unique): FMNH 16208.

Hemirhamphus arnoldorum Curtiss 1938:42 [ref. 18057] (lagoon near Tautira, Tahiti, Society Is.). No types known.

DISTRIBUTION: Marine, central Pacific. See Remarks.

REMARKS: In the subgenus *Reporhamphus*. Two subspecies were recognized by Collette (1974 [ref. 12723]): *Hyporhamphus a. acutus* (Günther 1872) from Wake Island across the Pacific Plate to Easter Island and *Hy. a. pacificus* (Steindachner 1900) from Johnston Island and the Hawaiian Islands.

***Hyporhamphus affinis* (Günther 1866)**

Hemirhamphus affinis Günther 1866:267 [ref. 1983] (South Seas). Lectotype: BMNH uncat.

Hemiramphus australensis Seale 1906:12, Fig. 2 [ref. 3999] (Tubuai, Austral Is. [Tubuai Is.], French Polynesia). Holotype (unique): BPBM 746.

Hemirhamphus (Hyporhamphus) delagoae Barnard 1925:498 [ref. 12730] (Delagoa Bay, se. Mozambique). Lectotype: SAM 12303.

DISTRIBUTION: Marine, widespread in tropical waters of the Indo-West Pacific.

REMARKS: In the subgenus *Reporhamphus*. The lectotypes of *Hemirhamphus affinis* and *H. delagoae* were selected by Collette (1974:86 [ref. 12930] and 1982:720 [ref. 12729], respectively).

***Hyporhamphus australis* (Steindachner 1866)**

Hemiramphus australis Steindachner 1866:471 [48 of separate] [ref. 4210] (Port Jackson, N.S.W., Australia). Holotype (unique): NMW 5560.

Hemiramphus trilineatus Steindachner 1866:53 [ref. 20460] (Port Jackson, N.S.W., Australia). Holotype (unique): NMW 5560.

DISTRIBUTION: Marine; an eastern Australian endemic found from Moreton Bay, Queensland south to Eden, N.S.W., and also found at Lord Howe and Norfolk islands.

REMARKS: In the subgenus *Reporhamphus*. The name *Hemiramphus trilineatus* Steindachner 1866 was used for this species in an abstract [ref. 20460] that apparently predates the name *Hemiramphus australis* Steindachner 1866 which appeared in the main paper [ref. 4210]. Because *H. trilineatus* has not been used, whereas *H. australis* is currently used for this commercially important species, continued usage of *H. australis* is maintained. The name *Hemiramphus australis* might qualify as a nomen protectum under Article 23.9 of the Code.

***Hyporhamphus balinensis* (Bleeker 1859)**

Hemiramphus balinensis Bleeker 1859:170 [ref. 16982] (Boleling, n. Bali, Indonesia). Lectotype: BMNH 1866.5.2.14.

DISTRIBUTION: Marine, tropical waters of the Indo-West Pacific.

REMARKS: In the subgenus *Reporhamphus*. The lectotype of *Hemiramphus balinensis* was selected by Parin et al. (1980:58 [ref. 6895]).

***Hyporhamphus brederi* (Fernández-Yépez 1948)**

Ichthyacus brederi Fernández-Yépez 1948:[2], Fig. [ref. 1318] (Río Orinoco, Boca del Caño Orupe, between mouths of Río Meta and Río Apure, Venezuela). Holotype (unique): AFY 48051.

DISTRIBUTION: Freshwater; Orinoco River, Venezuela and Amazon River, Brazil.

REMARKS: In the subgenus *Hyporhamphus*. Originally described as *brederi* but named after Charles M. Breder (misspelled as Breeder); therefore, the spelling has been emended to *brederi* by authors.

***Hyporhamphus capensis* (Thomiot 1886)**

Hemiramphus capensis Thomiot 1886:166 [ref. 17904] (Cape of Good Hope, South Africa). Holotype (unique): MNHN A-7601.

Hemiramphus knysnaensis Smith 1933:144, Pls. 10 (fig. b), 11 (fig. 2), Fig. 1a [ref. 12731] (Knysna, Cape Prov., South Africa). Syntypes: RUSI 127 [ex AMG] (2), 137 [ex AMG] (1); ZMA 114582 (6) [? ZMA 114584 according to Parin et al. (1980:46 [ref. 6895]).

DISTRIBUTION: Marine, western Indian Ocean: a southern African endemic found from False Bay, South Africa north to Lake Piti, southern Mozambique.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus dussumieri* (Valenciennes 1847)**

Hemiramphus dussumieri Valenciennes in Cuvier & Valenciennes 1847:33, Pl. 554 [not 520] [ref. 4883] (Seychelles). Holotype (unique): MNHN B-1063.

Hemiramphus reynaldi Valenciennes in Cuvier & Valenciennes 1847:39 [ref. 4883] (Trincomalee, Sri Lanka; Calcutta, India). Syntypes: MNHN B-1064 (2) Sri Lanka, A-7631 (1) Calcutta.

Hemiramphus laticeps Günther 1866:267 [ref. 1983] (Fiji Is.). Lectotype: BMNH 1856.9.4.105.

Hyporhamphus samoensis Steindachner 1906:1418 [50 of separate] [ref. 4242] (Upolu, Samoa Is.). Syntypes: (2) NMW 84639 (3).

DISTRIBUTION: Marine, widespread in tropical waters of the Indo-West Pacific.

REMARKS: In the subgenus *Reporhamphus*. The lectotype of *Hemiramphus laticeps* was selected by Parin et al. (1980:83 [ref. 6895]).

***Hyporhamphus erythrorinchus* (Lesueur 1821)**

Hemiramphus erythrorinchus Lesueur 1821:137 [ref. 13274] (Mauritius). Neotype: MNHN B-1038.

DISTRIBUTION: Marine, western Indian Ocean: Mauritius and the Cargados-Carahos Islands.

REMARKS: In the subgenus *Reporhamphus*. A neotype for *Hemiramphus erythrorinchus* was selected by Parin et al. (1980:79 [ref. 6895]).

***Hyporhamphus gamberur* (Rüppell 1837)**

Hemiramphus gamberur Rüppell 1837:74 [ref. 3844] (Massaua, Red Sea). Syntypes: RMNH 4342 (1), SMF 699 (1), both from Red Sea.

DISTRIBUTION: Marine, Red Sea and Gulf of Aden.

REMARKS: In the subgenus *Reporhamphus*. RMNH 4342 was designated as neotype by Parin et al. (1980 [ref. 6895]), but that designation is now set aside because of the existence of an additional syntype at SMF.

***Hyporhamphus gernaerti* (Valenciennes 1847)**

Hemiramphus gernaerti Valenciennes in Cuvier & Valenciennes 1847:43 [ref. 4883] (China; Macao). Syntypes: MNHN 4342 (1, primary specimen) Macao, B-1046 (1) Ogasawara Is.

Hemiramphus peitaihoensis van Dam 1926:342 [ref. 17874] (Peitaiho, China). Lectotype: ZMA 109165.

DISTRIBUTION: Marine, western North Pacific: coastal waters of continental China, Taiwan, and Korea.

REMARKS: In the subgenus *Hyporhamphus*. Parin et al. (1980 [ref. 6895]) referred to MNHN 4342 as holotype, but this does not constitute lectotype designation, nor does use of the terms

“holotype” and “paratype” by Collette et al. (1997 [ref. 22813] because the original description mentions two specimens (see Art. 74.5 of the Code). The lectotype of *Hemirhamphus peitaihoensis* was selected by Parin et al. (1980:45 [ref. 6895]).

***Hyporhamphus gilli* Meek & Hildebrand 1923**

Hyporhamphus gilli Meek & Hildebrand 1923:240, Pl. 17 (fig. 1) [ref. 2963] (Balboa, Canal Zone, Pacific coast of Panama). Holotype: USNM 81736.

DISTRIBUTION: Marine, eastern tropical Pacific: Baja California to Gulf of Guayaquil, Ecuador.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus ihi* Phillipps 1932**

Hyporhamphus ihi Phillipps 1932:230 [ref. 16393] (Wellington, New Zealand). No types known.

DISTRIBUTION: Marine, restricted to New Zealand and Chatham Islands.

REMARKS: In the subgenus *Reporhamphus*.

***Hyporhamphus improvisus* (Smith 1933)**

Hemirhamphus improvisus Smith 1933:142, Pl. 11 (fig. 1); Fig. 1b [ref. 12731] (Delagoa Bay, Mozambique). Holotype (unique): SAM 16368.

DISTRIBUTION: Marine, western Indian Ocean: a southern African endemic occurring from Delagoa Bay to Quelimane, Mozambique.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus intermedius* (Cantor 1842)**

Hemirhamphus intermedius Cantor 1842:485 [ref. 17344] (Chusan I., China). Lectotype: BMNH 1860.3.19.124.

Hemirhamphus occipitalis Gill 1859:148 [ref. 1762] (Japan). Holotype (unique): whereabouts unknown.

Hyporhamphus kurumeus Jordan & Starks 1903:534, Fig. 1 [ref. 10663] (Chikugo R., Kurume, Kiusiu I., Japan). Holotype: SU 7126.

DISTRIBUTION: Marine, western North Pacific: southern China to Korea and Japan; also in freshwater lakes and rivers in China and Japan.

REMARKS: In the subgenus *Hyporhamphus*. The lectotype of *Hemirhamphus intermedius* was selected by Parin et al. (1980:50 [ref. 6895]).

***Hyporhamphus limbatus* (Valenciennes 1847)**

Hemiramphus limbatus Valenciennes in Cuvier & Valenciennes 1847:44 [ref. 4883] (Malabar coast, India). Lectotype: MNHN B-1060.

Hemiramphus tridentifer Cantor 1849:1231 [249 of separate] [ref. 715] (Sea of Pinang [Penang], Malaysia). Syntypes: BMNH 1860.3.19.487–488 (2, skins).

Hemirhamphus sinensis Günther 1866:265 [ref. 1983] (China). Lectotype: BMNH 1851.12.27.224.

Hemiramphus gorakhpurensis Srivastava 1967:93, Figured [ref. 19818] (Maheshera Tal, Gorakhpur, Uttar Pradesh, India). Holotype: ZSI F4203/2.

DISTRIBUTION: Marine and freshwater, Persian Gulf to China along the mainland of Asia.

REMARKS: In the subgenus *Hyporhamphus*. Lectotypes of *Hemiramphus limbatus* and *Hemirhamphus sinensis* were designated by Parin et al. (1980:17–18 [ref. 6895]).

***Hyporhamphus meeki* Banford & Collette 1993**

Hyporhamphus meeki Banford & Collette 1993:371, Fig. 2A [ref. 20875] (Morehead City, North Carolina, U.S.A.). Holotype: USNM 294369.

DISTRIBUTION: Marine, western Atlantic: New Brunswick, Canada south along the Atlantic coast of the United States to Miami; Gulf of Mexico from Everglades Park to Galveston, Texas; also at Yucatan.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus melanochir* (Valenciennes 1847)**

Hemiramphus melanochir Valenciennes in Cuvier & Valenciennes 1847:41 [ref. 4883] (Port Western [Adelaide], South Australia). Lectotype: MNHN B-1066.

DISTRIBUTION: Marine, Australia: Victoria and Tasmania west and north to Perth, Western Australia.

REMARKS: In the subgenus *Reporhamphus*. The lectotype was designated by Collette (1974:71 [ref. 12930]). The species name was spelled as *malanochir* on page 41 but as *melanochir* in the table on page xi. The latter spelling has been adopted by subsequent authors (e.g., Collette 1974 [ref. 12930]).

***Hyporhamphus melanopterus* Collette & Parin 1978**

Hyporhamphus (*Hyporhamphus*) *melanopterus* Collette & Parin 1978:738, Fig. 2a [ref. 8943] (Sandakan Harbor, n. Borneo). Holotype: USNM 218363.

DISTRIBUTION: Marine, western Pacific: Malaysia, Gulf of Thailand, East Indies, and North Borneo.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus mexicanus* Alvarez 1959**

Hyporhamphus mexicanus Alvarez 1959:71 [ref. 11974] (Rancho San Carlos, Río Coatzacoalcos, Palomares, Oaxaca, Mexico). Holotype (unique): PNCB 403.

DISTRIBUTION: Freshwater streams of Guatemala and Mexico draining into Campeche Bay, Gulf of Mexico.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus naos* Banford & Collette 2001**

Hyporhamphus naos Banford & Collette 2001:41, Fig. 1 [ref. 25778] (Punta Chame, Gulf of Panama). Holotype: USNM 361382.

DISTRIBUTION: Marine, tropical eastern Pacific: San Diego, California south to Paita, Peru; also in the Galápagos Islands.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus neglectissimus* Parin, Collette & Shcherbachev 1980**

Hyporhamphus (*Hyporhamphus*) *neglectissimus* Parin, Collette & Shcherbachev 1980:34, Fig. 5 [ref. 6895] (Port Lae, New Guinea). Holotype: ZIN 44886.

DISTRIBUTION: Marine, western Pacific: northern Australia and southern Papua New Guinea.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus neglectus* (Bleeker 1866)**

Hemiramphus neglectus Bleeker 1866:157 [ref. 419] (East Indies [no specific locality]). Lectotype: BMNH 1866.5.2.18.

DISTRIBUTION: Marine, western Pacific: Philippine Islands, Borneo, and East Indies.

REMARKS: In the subgenus *Hyporhamphus*. The lectotype was designated by Collette (1974:59 [ref. 12930]).

***Hyporhamphus paucirastris* Collette & Parin 1978**

Hyporhamphus (*Hyporhamphus*) *paucirastris* Collette & Parin 1978:742, Fig. 2b [ref. 8943] (San-Tu, Fukien Prov., China). Holotype: ANSP 84959.

DISTRIBUTION: Marine, western North Pacific: South China Sea.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus picarti* (Valenciennes 1847)**

Hemiramphus picarti Valenciennes in Cuvier & Valenciennes 1847:25 [ref. 4883] (Bône, Algiers). Lectotype: MNHN B-1069.

Hemiramphus schlegeli Bleeker 1863:120, Pl. 25 (fig. 1) [ref. 395] (Ghana). Syntypes: RMNH 2828 (9).

Hemiramphus calabaricus Günther 1866:266 [ref. 1983] (Old Calabar, Nigeria). Lectotype: BMNH 1861.12.29.6.

DISTRIBUTION: Marine, eastern Atlantic: southern Mediterranean Sea and coast of West Africa from Morocco to Luanda, Angola.

REMARKS: In the subgenus *Hyporhamphus*. The lectotypes of *Hemiramphus picarti* and *Hemiramphus calabaricus* were designated by Collette (1965:230 [ref. 13343]).

***Hyporhamphus quoyi* (Valenciennes 1847)**

Hemiramphus quoyi Valenciennes in Cuvier & Valenciennes 1847:35 [ref. 4883] (Port Dorey, New Guinea). Holotype (unique): MNHN B-1068.

Hemiramphus gaimardi Valenciennes in Cuvier & Valenciennes 1847:36 [ref. 4883] (New Guinea). Lectotype: MNHN B-1058.

Hemiramphus melanurus Valenciennes in Cuvier & Valenciennes 1847:42 [ref. 4883] (Sulawesi [Celebes], Indonesia). Holotype (unique): MNHN B-1057.

Hemiramphus mioprurus Jordan & Dickerson 1908:111, Fig. [ref. 10568] (Nagasaki, Japan). Holotype (unique): USNM 61053.

Reporhamphus caudalis Whitley 1951:393 [ref. 4715] (Cape York, Queensland, Australia). Holotype: AMS I.444.

DISTRIBUTION: Marine, tropical Indo-West Pacific, chiefly along the coasts of the continents and large islands.

REMARKS: In the subgenus *Reporhamphus*. The lectotype of *Hemiramphus gaimardi* was selected by Collette (1974:81 [ref. 12930]).

***Hyporhamphus regularis* (Günther 1866)**

Hemiramphus regularis Günther 1866:261 [ref. 1983] (Western Australia). Lectotype: BMNH 1843.5.19.91.

Reporhamphus ardelio Whitley 1931:314 [ref. 4672] (Iluka, near mouth of Clarence R., N.S.W., Australia). Lectotype: AMS I.12744.

DISTRIBUTION: Marine, Australia. See Remarks.

REMARKS: In the subgenus *Hyporhamphus*. Two subspecies were recognized by Collette (1974 [ref. 12930]): *Hy. r. regularis* from Western Australia; and *Hy. r. ardelio* off eastern Australia from Gladstone, Queensland south to Lakes Entrance, Victoria. The lectotypes of *Hemiramphus regularis* and *Reporhamphus ardelio* were selected by Whitley (1931:314 [ref. 4672] and 1959:310 [ref. 4729], respectively). *Reporhamphus ardelio* was based on *H. regularis* described and figured by Stead (1908:37, Pl. 11 [ref. 18743]).

***Hyporhamphus roberti* (Valenciennes 1847)**

Hemiramphus roberti Valenciennes in Cuvier & Valenciennes 1847:24 [ref. 4883] (Cayenne, French Guiana). Lectotype: MNHN 5634.

Hyporhamphus kronei Miranda-Ribeiro 1915:Hemirhamphidae [sic] p. 3 [ref. 3711] (Iguape, Estado de São Paulo, Brazil). Holotype (unique): MNRJ 1970.

Hyporhamphus salvatoris Fowler & Bean 1923:9 [ref. 1474] (Rio de Janeiro, Brazil). Holotype (unique): USNM 83286.

Hyporhamphus hildebrandi Jordan & Evermann 1927:503 [ref. 2453] (Fox Bay at Toro Point, Colón, Atlantic coast of Panama). Lectotype: FMNH 8260.

DISTRIBUTION: Marine and estuarine, western Atlantic. See Remarks.

REMARKS: In the subgenus *Hyporhamphus*. Two subspecies were recognized by Collette (2003 [ref. 26981]): *Hyporhamphus r. roberti* from Lake Maracaibo, Venezuela east and south to Iguape, Brazil; and *H. r. hildebrandi* from the Gulf of Uraba, Colombia north and west to Belize. The lectotypes of *Hemiramphus roberti* and *Hyporhamphus hildebrandi* were designated by Collette (in Collette et al. 1997:19 [ref. 22813]) and Weed (1933:61 [ref. 6557]), respectively.

***Hyporhamphus rosae* (Jordan & Gilbert 1880)**

Hemiramphus rosae Jordan & Gilbert 1880:335 [ref. 10590] (San Diego, California, U.S.A.). Lectotype: USNM 24917.

Hyporhamphus patris Miller 1945:187, Pl. 11 [ref. 13149] (Río del Fuerte, 1/2 mile upriver from El Fuerte, Sinaloa, Mexico). Holotype: USNM 129956.

DISTRIBUTION: Marine, eastern tropical Pacific: southern California through the Gulf of California to Mazatlan and Teacapan, Mexico.

REMARKS: In the subgenus *Hyporhamphus*. The lectotype of *Hemiramphus rosae* was selected by Collette et al. (1992:9 [ref. 19410]).

***Hyporhamphus sajori* (Temminck & Schlegel 1846)**

Hemiramphus sajori Temminck & Schlegel 1846:246, Pl. 110 (fig. 2) [ref. 4374] (Nagasaki Bay, Japan). Lectotype: RMNH 2822a.

DISTRIBUTION: Marine, western North Pacific: Yellow Sea north to Sakhalin and Vladivostok.

REMARKS: In the subgenus *Hyporhamphus*. The lectotype of *Hemiramphus sajori* was selected by Boeseman (1947:180 [ref. 12876]).

***Hyporhamphus sindensis* (Regan 1905)**

Hemiramphus sindensis Regan 1905:318 [ref. 15386] (Karachi, Pakistan). Holotype (unique): BMNH 1898.11.18.48.

DISTRIBUTION: Marine, western Indian Ocean: Persian Gulf and Arabian Sea (Pakistan).

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus snyderi* Meek & Hildebrand 1923**

Hyporhamphus snyderi Meek & Hildebrand 1923:240, Pl. 17 (fig. 2) [ref. 2963] (Balboa, Panama Bay, Pacific coast of Panama). Holotype: USNM 81760.

DISTRIBUTION: Marine, eastern tropical Pacific: Chiapas, Mexico south to Talora, Peru.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus taiwanensis* Collette & Su 1986**

Hyporhamphus (*Hyporhamphus*) *taiwanensis* Collette & Su 1986:276, Fig. 2D [ref. 5998] (Keelung R., Shih-lin, Taipei Hsien, Taiwan). Holotype: USNM 191155.

DISTRIBUTION: Marine, endemic to Taiwan.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus unicuspis* Collette & Parin 1978**

Hyporhamphus (Hyporhamphus) unicuspis Collette & Parin 1978:743, Fig. 2c [ref. 8943] (south tip of Ko Talibong, Thailand, 7°11'60"N, 99°22'05"E). Holotype: USNM 218364.

DISTRIBUTION: Marine, northern Indian Ocean: Persian Gulf, eastern and southwestern coasts of India, and the coasts of Thailand in the Andaman Sea.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus unifasciatus* (Ranzani 1841)**

Hemiramphus unifasciatus Ranzani 1841:63 [ref. 24074] (Brazilian seas). Holotype (unique): MZUB 932.

Hemiramphus richardi Valenciennes in Cuvier & Valenciennes 1847:26 [ref. 4883] (St. Croix, Antilles). Lectotype: MNHN B-1072.

Hyporhamphus tricuspidatus Gill 1859:131 [ref. 1759] (Barbados, West Indies). Syntypes: (2) USNM 3407 (1).

Hemiramphus poeyi Günther (ex Poey) 1866:262 [ref. 1983] (Havana, Cuba). No types known.

DISTRIBUTION: Marine, western Atlantic: Bermuda and southern Florida south through the West Indies to Uruguay.

REMARKS: In the subgenus *Hyporhamphus*. The genus in the original description was misspelled *Hemiranphus* by Ranzani; appeared in more detail in Ranzani (1842:326, Pl. 25 [ref. 18607]). *Hemiramphus poeyi* is based on *Hemiramphus fasciatus* of Poey (not Bleeker). The lectotype of *Hemiramphus richardi* was selected by Collette (in Collette et al. 1997:19 [ref. 22813]).

***Hyporhamphus xanthopterus* (Valenciennes 1847)**

Hemiramphus xanthopterus Valenciennes in Cuvier & Valenciennes 1847:47 [ref. 4883] (freshwaters of Alipey, Malabar coast, India). Holotype (unique): MNHN (not found).

DISTRIBUTION: Freshwater; lakes in Kerala, southwestern India.

REMARKS: In the subgenus *Hyporhamphus*.

***Hyporhamphus yuri* Collette & Parin 1978**

Hyporhamphus (Reporhamphus) yuri Collette & Parin 1978:737, Fig. 1b [ref. 8943] (Naha market, Okinawa, Japan). Holotype: USNM 218481.

DISTRIBUTION: Marine, western North Pacific: known only from Okinawa and the adjacent island of Ie.

REMARKS: In the subgenus *Reporhamphus*.

Genus *Melapedalion* Fowler 1934

Melapedalion Fowler 1934:326 [ref. 1416]. Type species *Oxyporhamphus brevis* Seale 1910. Type by original designation (also monotypic).

***Melapedalion brevis* (Seale 1910)**

Oxyporhamphus brevis Seale 1910:495, Pl. 2 [ref. 4000] (Paawacan, Palawan I., Philippines). Holotype: BSMP 5301 (apparently destroyed).

DISTRIBUTION: Marine, western Pacific: Sulu and South China seas.

Genus *Oxyporhamphus* Gill 1864

Oxyporhamphus Gill 1864:273 [ref. 1693]. Type species *Hemiramphus cuspidatus* Valenciennes 1847. Type by original designation (also monotypic).

Evolantia Heller & Snodgrass 1903:189 [ref. 2089]. Type species *Exocoetus micropterus* Valenciennes 1847. Type by monotypy.

REMARKS: Included in Hemiramphidae by Collette (2003 [ref. 26981]) but placed in Exocoetidae by Dasilao et al. (1997 [ref. 22938]).

***Oxyporhamphus convexus* (Weber & de Beaufort 1922)**

Hemirhamphus convexus Weber & de Beaufort 1922:159 [ref. 4598] (Timor I., s. Malay Archipelago). Lectotype: ZMA 109672.

Oxyporhamphus meristocystis Parin 1961:391, Fig. B [ref. 2993] (Solomon Sea, Moluccas Is., Vityaz sta. 3663, 6°15'S, 153°44'E, surface). Holotype: ZIN 36805 (159 mm SL).

Oxyporhamphus convexus bruuni Parin, Collette & Shcherbachev 1980:159, Figs. 42, 43 [ref. 6895] (Arabian Sea, 16°49'N, 62°03'E, surface). Holotype: ZIN 42670.

DISTRIBUTION: Marine, Indo-West Pacific. See Remarks.

REMARKS: Two subspecies were recognized by Parin et al. (1980 [ref. 6895]): *O. c. convexus* (Weber & de Beaufort 1922), widespread in the Indo-West Pacific; and *O. c. bruuni* Parin, Collette & Shcherbachev 1980, restricted to the Red Sea, Gulf of Aden, and northern Arabian Sea. The lectotype of *Hemirhamphus convexus* was designated by Parin et al. (1980:157 [ref. 6895]).

***Oxyporhamphus micropterus* (Valenciennes 1847)**

Exocoetus micropterus Valenciennes in Cuvier & Valenciennes 1847:127, Pl. 563 [not 529] [ref. 4883] (King George Sound, Western Australia). Lectotype: MNHN A-9925.

Hemiramphus cuspidatus Valenciennes in Cuvier & Valenciennes 1847:56, Pl. 557 [not 523] [ref. 4883] (Indian Ocean [stomach content]). Lectotype: MNHN 4593.

Oxyporhamphus micropterus similis Bruun 1935:17, Pl. 1 (fig. 1) [ref. 5130] (Atlantic). Holotype: ZMUC 345 (apparently lost).

DISTRIBUTION: Marine, worldwide offshore in tropical and subtropical seas. See Remarks.

REMARKS: Two subspecies were recognized by Parin et al. (1980 [ref. 6895]): *O. m. micropterus* (Valenciennes 1847), widespread in Indo-Pacific tropical and subtropical waters; and *O. m. similis* Bruun 1935 in Atlantic tropical and subtropical waters. The lectotypes of *Exocoetus micropterus* and *Hemiramphus cuspidatus* were designated by Bruun (1937 [ref. 12982]).

Genus *Rhynchorhamphus* Fowler 1928

Rhynchorhamphus Fowler 1928:75 [ref. 5596]. Subgenus of *Hemiramphus*. Type species *Hemiramphus georgii* Valenciennes 1847. Type by original designation (also monotypic).

Loligorhamphus Whitley 1931:105 [ref. 4673]. Type species *Loligorhamphus normani* Whitley 1931. Type by original designation (also monotypic).

***Rhynchorhamphus arabicus* Parin & Shcherbachev 1972**

Rhynchorhamphus arabicus Parin & Shcherbachev 1972:569, Fig. [ref. 7634] (Aden Roads, Yemen). Holotype: ZIN 40642.

DISTRIBUTION: Marine, western Indian Ocean: Gulf of Aden.

***Rhynchorhamphus georgii* (Valenciennes 1847)**

Hemiramphus georgii Valenciennes in Cuvier & Valenciennes 1847:37, Pl. 555 [not 521] [ref. 4883] (Bombay and Coromandel, India). Syntypes: MNHN B-1061 (1), B-1062 (1, primary specimen but not holotype).

Hemiramphus russeli Valenciennes in Cuvier & Valenciennes 1847:32 [ref. 4883] (Pondicherry, India). Holotype (unique): MNHN B-1067 (poor condition).

Hemiramphus leucopterus Valenciennes in Cuvier & Valenciennes 1847:48 [ref. 4883] (Bombay, India). Holotype (unique): MNHN B-1065.

Hemiramphus eclancheri Valenciennes in Cuvier & Valenciennes 1847:51 [ref. 4883] (“Marquesas Is.”). Holotype: MNHN 4592.

Hemirhamphus plumatus Blyth 1858:288 [ref. 476] (Sri Lanka). Lectotype: ZSI 625.

Hemirhamphus cantori Bleeker 1866:145 [ref. 419] (East Indies). Lectotype: BMNH 1866.5.2.16.

Loligorhamphus normani Whitley 1931:105, Pl. 12 (figs. 2–3) [ref. 4673] (Townsville, Queensland, Australia). Holotype (unique): AMS IA.2319.

DISTRIBUTION: Marine, widespread in tropical waters of the Indo-West Pacific.

REMARKS: *Hemirhamphus cantori* Bleeker 1866 was unjustifiably emended to *cantoris* by Günther (1866:264 [ref. 1983]). The lectotypes of *Hemirhamphus cantori* and of *Hemirhamphus plumatus* Blyth 1858 were designated by Collette (1976:92 [ref. 7107]).

***Rhynchorhamphus malabaricus* Collette 1976**

Rhynchorhamphus malabaricus Collette 1976:84, Fig. 8b [ref. 7107] (Myliddy near Kankasanturai, Sri Lanka). Holotype: USNM 214081.

DISTRIBUTION: Marine, central Indian Ocean: southern third of the Indian peninsula.

***Rhynchorhamphus naga* Collette 1976**

Rhynchorhamphus naga Collette 1976:87, Fig. 9a [ref. 7107] (Gulf of Thailand, 7°46'N, 103°40'E). Holotype: USNM 214085.

DISTRIBUTION: Marine, western Pacific: Gulf of Thailand into Java and South China seas east to Borneo.

Subfamily Zenarchopterinae Fowler 1934

The subfamily Zenarchopterinae contains almost half of the species in the family, with five genera and about 54 species of small, sexually dimorphic Indo-West Pacific estuarine or freshwater species (Meisner and Collette 1999 [ref. 23950], Meisner 2001 [ref. 25599]): *Zenarchopterus* (about 20 species), *Tondanichthys* (1), *Dermogenys* (13), *Hemirhamphodon* (6), and *Nomorhamphus* (16). Three genera (*Dermogenys*, *Hemirhamphodon*, and *Nomorhamphus*) are viviparous and have the anal fin of the male modified into an andropodium. Recent papers revising genera of Zenarchopterinae include *Tondanichthys* (Collette 1995 [ref. 21880]), *Dermogenys* and *Nomorhamphus* (Meisner 2001 [ref. 25599]), and *Hemirhamphodon* (Anderson and Collette 1991 [ref. 19112]). The only revision of *Zenarchopterus* was by Mohr (1926 [ref. 15597], 1934 [ref. 16438]) plus regional studies of Australian and New Guinea species by Collette (1974 [ref. 12930], 1982 [ref. 5497], 1985 [ref. 8171]), so an up-to-date revision of the genus is needed. Recent molecular research (Lovejoy 2000 [ref. 26767]) indicates that the Zenarchopterinae (as Indo-West Pacific freshwater halfbeaks) should be grouped as the sister clade to the needlefishes (Belontiidae) rather than with other halfbeaks but any such action requires morphological confirmation.

Genus *Dermogenys* Kuhl & van Hasselt 1823

Dermogenys Kuhl & van Hasselt in van Hasselt 1823:131 [ref. 5963]. Type species *Dermogenys pusillus* van Hasselt 1823. Type by monotypy.

***Dermogenys bispina* Meisner & Collette 1998**

Dermogenys bispina Meisner & Collette 1998:375, Figs. 1–4 [ref. 23906] (Kuamut drainage of the Kinabatangan basin, Danum Valley, Sabah, Borneo). Holotype: ZRC 40391a (male).

DISTRIBUTION: Freshwater; Sabah, Borneo and Busuanga, Philippine Islands.

***Dermogenys brachynotopterus* (Bleeker 1854)**

Hemiramphus brachijnotopterus Bleeker 1854:146 [ref. 341] (Hooghly R., Calcutta, India). Holotype (unique): RMNH 6964 (female).

DISTRIBUTION: Freshwater; Hooghly River, India.

REMARKS: Originally described as *brachijnotopterus* on page 146, with Dutch *ij* equivalent to *y* in Latin, but appeared as *brachynotopterus* on page 163 (index).

***Dermogenys bruneiensis* Meisner 2001**

Dermogenys bruneiensis Meisner 2001:235, Figs. 32–33 [ref. 25599] (Dolhakim R., tributary of Brunei R. near Bandar Seri Begawan, nw. Borneo). Holotype: USNM 320493 (male).

DISTRIBUTION: Freshwater; Brunei, northwestern Borneo.

***Dermogenys burmanica* Mukerji 1935**

Dermogenys burmanicus Mukerji 1935:213, Fig. [ref. 13905] (Myagaing village, Kyaukatan township, Hanthawaddy district, lower Burma [Myanmar]). Syntypes: ZSI F 11778/1 (male), F 11780/1 (female).

DISTRIBUTION: Freshwater; Burma (Myanmar) and Bangladesh.

***Dermogenys collettei* Meisner 2001**

Dermogenys collettei Meisner 2001:238, Figs. 37–38 [ref. 25599] (Kuching, Sarawak). Holotype: ZRC 37790 (male).

DISTRIBUTION: Freshwater; southern Malay Peninsula, Sumatra, and Borneo.

***Dermogenys orientalis* (Weber 1894)**

Hemiramphus orientalis Weber 1894:427, 456 [ref. 14569] (river near Maros, Sulawesi [Celebes], Indonesia). Lectotype: ZMA 104.374 (male).

Dermogenys montanus Brembach 1982:54, Fig. [ref. 8506] (above the Ban Timurung waterfalls, Sulawesi, Indonesia). Syntypes: (25) ZMH 7145 (1), 7146 (1), 7147 (?23 of 28).

DISTRIBUTION: Freshwater; Sulawesi, Indonesia.

REMARKS: The lectotype of *Dermogenys orientalis* was selected by Meisner (2001:223 [ref. 25599]). Use of the term “Holotypus” by Brembach (1991:198 [ref. 20227]) with regard to a specimen of *Dermogenys montanus* (ZMH 7145) does not constitute a valid lectotype designation (see Art. 74.5 of the Code).

***Dermogenys palawanensis* Meisner 2001**

Dermogenys palawanensis Meisner 2001:237, Figs. 35–36 [ref. 25599] (Estrella falls near Narra, tributary of Malatgao R., ca. 80–100 km south of Puerto Princesa, Palawan, Philippines). Holotype: ZRC 46170 (male).

DISTRIBUTION: Freshwater; Palawan Island, Philippine Islands.

***Dermogenys pusilla* Kuhl & van Hasselt 1823**

Dermogenys pusillus Kuhl & van Hasselt in van Hasselt 1823:131 [ref. 5963] (Buitenzorg [Bogor], Java, Indonesia). Neotype: UMMZ 237500 (male).

Hemiramphus fluviatilis Bleeker 1850:95 [ref. 13402] (Batavia, Tandjong Oost, Buitenzorg, Tjampea, Java, Indonesia). Syntypes: BMNH 1866.5.2.29 (1) plus 25 (whereabouts unknown).

DISTRIBUTION: Freshwater; Java, Indonesia.

REMARKS: The neotype of *Dermogenys pusillus* was designated by Meisner (2001:226 [ref. 25599]). The single specimen in BMNH 1866.5.2.29 is the only known extant syntype of *Hemiramphus fluviatilis* but it is not the holotype, as stated by Meisner (2001:226 [ref. 25599]), because 26 specimens were included in the original description.

***Dermogenys robertsi* Meisner 2001**

Dermogenys robertsi Meisner 2001:236, Figs. 34–35 [ref. 25599] (Wayan R. at Bario San Nicolas, Busuanga I., Palawan Prov., Philippines). Holotype: CAS 137633 (male).

DISTRIBUTION: Freshwater; Culion and Busuanga, Philippine Islands.

***Dermogenys siamensis* Fowler 1934**

Dermogenys siamensis Fowler 1934:144, Figs. 83–84 [ref. 1417] (Chieng Mai, n. Thailand).
Holotype: ANSP 59860 (female).

Dermogenys pusillus borealis Brembach 1991:166, Fig. [ref. 20227] (Bangkok, Thailand).
Holotype: ZMH 7612 (male).

DISTRIBUTION: Freshwater, southeastern Asia: Thailand, Vietnam, and Cambodia.

REMARKS: Although the holotype of *Dermogenys siamensis* was mixed in with the paratypes, Meisner (2001:228 [ref. 25599]) located the largest specimen which had been designated as the holotype by Fowler. The generic name was misspelled in the original description of *D. siamensis*.

***Dermogenys sumatrana* (Bleeker 1853)**

Hemiramphus sumatranus Bleeker 1853:526 [ref. 5965] (Lake Meninju, w. Sumatra, Indonesia).
Syntypes: (2) BMNH 1866.5.2.30 (1), RMNH 6965 (1).

Dermogenys pusillus borneensis Brembach 1991:167, Fig. [ref. 20227] (Pontianak, nw. Borneo).
Syntypes: ZMA 112571 (13).

DISTRIBUTION: Freshwater; western Sumatra and Kalimantan Barat, Indonesia.

***Dermogenys vogti* Brembach 1982**

Dermogenys vogti Brembach 1982:54 [ref. 8506] (swift running river on the highest plain of a limestone mountain at Topobulu, sw. Sulawesi [Celebes], Indonesia). Lectotype: ZMH H7148 (female).

DISTRIBUTION: Freshwater; Topobulu, Sulawesi, Indonesia.

REMARKS: Use of the term “Holotypus” by Brembach (1991:169, 198 [ref. 20227]) with regard to a specimen of *Dermogenys vogti* (ZMH H7148) does not constitute a valid lectotype designation (see Art. 74.5 of the Code); Wilkens and Dohse (1993:414 [ref. 21161]) were first to validly designate the lectotype.

Genus *Hemirhamphodon* Bleeker 1866

Hemirhamphodon Bleeker 1866:140 [ref. 419]. Type species *Hemirhamphus phaiosoma* Bleeker 1852. Type by original designation.

***Hemirhamphodon chrysopunctatus* Brembach 1978**

Hemirhamphodon chrysopunctatus Brembach 1978:342, Figured [ref. 8953] (vicinity of Seabi, Kalimantan Tengah, Kalimantan, Indonesia). Holotype: ZMH H5952 (male).

DISTRIBUTION: Freshwater; Barito and Mentaya river systems, Kalimantan Tengah, Borneo, Indonesia.

***Hemirhamphodon kapuasensis* Collette 1991**

Hemirhamphodon kapuasensis Collette in Anderson & Collette 1991:169, Fig. 7 [ref. 19112] (Insiluk, 16 km west northwest of Sanggau on road to Pontianak, Kalimantan Barat, Borneo).
Holotype: ZRC 38461 (male) [ex ZSM 27958].

DISTRIBUTION: Freshwater; Kapuas River basin, Kalimantan Barat, Borneo, Indonesia.

***Hemirhamphodon kuekenthali* Steindachner 1901**

Hemirhamphodon kuekenthali Steindachner 1901:450, Pl. 17 (fig. 2) [ref. 14769] (Baram R., Borneo). Lectotype: SMF 785 (male).

DISTRIBUTION: Freshwater; rivers of Sarawak, Borneo.

REMARKS: The lectotype of *Hemirhamphodon kuekenthali* was selected by Anderson and Collette (1991:164 [ref. 19112]).

***Hemirhamphodon phaiosoma* (Bleeker 1852)**

Hemirhamphus phaiosoma Bleeker 1852:99 [ref. 16831] (Tjirutjup R., Blitong [Billiton] I., Indonesia). Holotype (unique): BMNH 1866.5.2.21 (female).

DISTRIBUTION: Freshwater; Biliton and Banka islands off west coast of Sumatra.

***Hemirhamphodon pogonognathus* (Bleeker 1853)**

Hemirhamphus pogonognathus Bleeker 1853:193 [ref. 16902] (Marawang [Banka], Indonesia). Syntypes: (2) BMNH 1866.5.2.20 (1, male).

DISTRIBUTION: Freshwater, southeastern Asia: Malay Peninsula, Sumatra, Java, and Borneo.

REMARKS: Use of the term “holotype” in Anderson and Collette (1991 [ref. 19112]) does not validly designate the lectotype because the original description mentioned two specimens (see Art. 74.5 of the Code).

***Hemirhamphodon tengah* Collette 1991**

Hemirhamphodon tengah Collette in Anderson & Collette 1991:171, Fig. 9 [ref. 19112] (creek in Palungan, near Sungei Sampit, 75 km northwest of Sampit, Kalimantan Tengah, Kalimantan, Indonesian Borneo). Holotype: ZSM 27902 (male).

DISTRIBUTION: Freshwater; Kalimantan Tengah, Borneo.

Genus *Nomorhamphus* Weber & de Beaufort 1922

Nomorhamphus Weber & de Beaufort 1922:141 [ref. 4598]. Type species *Nomorhamphus celebensis* Weber & de Beaufort 1922. Type by subsequent designation.

Rhamphodermogenys Fowler & Bean 1922:15 [ref. 1473]. Subgenus of *Dermogenys*. Type species *Dermogenys bakeri* Fowler & Bean 1922. Type by original designation (also monotypic).

REMARKS: Jordan (1923:776 [ref. 2421]) selected the type species for *Nomorhamphus*.

***Nomorhamphus bakeri* (Fowler & Bean 1922)**

Dermogenys (*Rhamphodermogenys*) *bakeri* Fowler & Bean 1922:15, Fig. 3 [ref. 1473] (Zamboanga, Philippines). Holotype (unique): USNM 84275 (male).

DISTRIBUTION: Freshwater; Zamboanga, Mindanao Island, Philippine Islands.

***Nomorhamphus brembachi* Vogt 1978**

Nomorhamphus brembachi Vogt 1978:227, Fig. [ref. 8773] (Longron, Sulawesi [Celebes], Indonesia). Holotype: ZMH H7165 (female).

Nomorhamphus ravnaki Brembach 1991:183, Fig. [ref. 20227] (mountain stream by Ban Timurung, Maros highlands, s. Sulawesi [Celebes], Indonesia). Holotype: ZMH H7158 (female).

Nomorhamphus ravnaki australe Brembach 1991:185, Fig. [ref. 20227] (mountain stream near Bossolo, Maros highlands, s. Sulawesi, Indonesia). Holotype: ZMH H7161 (female).

Nomorhamphus sanussii Brembach 1991:187, Fig. [ref. 20227] (mountain brook at Segoja, s. South Sulawesi [Celebes], Indonesia). Holotype: ZMH H7614 (female).

DISTRIBUTION: Freshwater; Sulawesi Selatan, Indonesia.

REMARKS: *Nomorhamphus ravnaki australe* Brembach 1991 should be emended to *Nomorhamphus ravnaki australis*.

***Nomorhamphus celebensis* Weber & de Beaufort 1922**

Nomorhamphus celebensis Weber & de Beaufort 1922:141, Fig. 53 [ref. 4598] (rivulet at Lappa Kanru, Sulawesi [Celebes], Indonesia). Lectotype: ZAM 104377 (female).

DISTRIBUTION: Freshwater; Lake Poso, Sulawesi Tengah.

REMARKS: The lectotype was designated by Meisner (2001:249 [ref. 25599]).

***Nomorhamphus ebrardtii* (Popta 1912)**

Hemiramphus (*Dermatogenus*) *ebrardtii* Popta 1912:187 [ref. 14861] (Kabaena, se. Sulawesi [Celebes], Indonesia). Lectotype: SMF 6495 (female).

DISTRIBUTION: Freshwater, Sulawesi Tenggara.

REMARKS: Subgeneric named misspelled as *Dermatogenus* in original description. The lectotype was designated by Meisner (2001:251 [ref. 25599]), not Brembach (1991:199 [ref. 20227]).

***Nomorhamphus hageni* (Popta 1912)**

Hemiramphus hageni Popta 1912:190 [ref. 14861] (Penango and Rumbia-Ebene in se. Sulawesi [Celebes], Indonesia). Holotype: SMF 6521.

DISTRIBUTION: Freshwater; Penango, Sulawesi Tenggara.

***Nomorhamphus kolonodalensis* Meisner & Louie 2000**

Nomorhamphus kolonodalensis Meisner & Louie 2000:363, Fig. 2 [ref. 25079] (stream along road to Tiu, near bridge at home No. 53 in village of Mondowe, dist. of Kolonodale, city of Poso, Sulawesi Tengah). Holotype: MZB 8638 (male).

DISTRIBUTION: Freshwater, Sulawesi Tengah.

***Nomorhamphus liemi* Vogt 1978**

Nomorhamphus liemi Vogt 1978:8, Fig. [ref. 8865] (Maros, Sulawesi [Celebes], Indonesia). Holotype: ZMH H7617 (female).

Nomorhamphus liemi snijdersi Vogt 1978:224, Figured [ref. 8773] (Maros, Sulawesi [Celebes], Indonesia). Holotype: ZMH H7155 (female).

DISTRIBUTION: Freshwater, Sulawesi Selatan.

***Nomorhamphus manifesta* Meisner 2001**

Nomorhamphus manifesta Meisner 2001:270, Figs. 64–65 [ref. 25599] (Ilokos Norte Prov., Solsona, Luzon, Philippines). Holotype: CAS 129706 (male).

DISTRIBUTION: Freshwater; Ilokos Norte, Luzon Island, Philippine Islands.

***Nomorhamphus megarrhamphus* (Brembach 1982)**

Dermogenys megarrhamphus Brembach 1982:55, Fig. [ref. 8506] (Lake Towoeti, central Sulawesi [Celebes], Indonesia). Lectotype: ZMH 7151 (female).

DISTRIBUTION: Freshwater; Lakes Towuti and Mahalona, Sulawesi Selatan.

REMARKS: The lectotype was designated by Meisner (2001:256 [ref. 25599]), not Brembach (1991:199 [ref. 20227]).

***Nomorhamphus pectoralis* (Fowler 1934)**

Dermogenys pectoralis Fowler 1934:326, Fig. 80 [ref. 1416] (Bubbucan, Luzon I., Philippines). Holotype: USNM 93068 (female) [not 93058].

DISTRIBUTION: Freshwater; Luzon Island, Philippine Islands.

***Nomorhamphus philippina* (Ladiges 1972)**

Dermogenys philippinus Ladiges 1972:210, Pl. 10 (not 11) [ref. 737] (Cebu I., Kulaman Plateau, Philippines). Holotype: ZMH H4534 (male).

DISTRIBUTION: Freshwater; Cebu and Mindanao, Philippine Islands.

REMARKS: Species name was spelled as *philippinius* in the text and *philippinus* on the plate in the original description, as noted by Brembach (1991 [ref. 20227]) who decided to use the usual spelling of *philippinus*.

***Nomorhamphus pinnimaculata* Meisner 2001**

Nomorhamphus pinnimaculata Meisner 2001:271, Figs. 66–67 [ref. 25599] (creek at eastern end of Tunga, Leyte, Philippines). Holotype: ZRC 46173 (male).

DISTRIBUTION: Freshwater; Leyte, Philippine Islands.

***Nomorhamphus rossi* Meisner 2001**

Nomorhamphus rossi Meisner 2001:272, Figs. 68–69 [ref. 25599] (Intel R., pool in river bordered by waterfall (upriver) and rapids (downriver), Barrovia Barangay hot springs, Baggao Municipality, Luzon, Philippines). Holotype: USNM 333262 (male).

DISTRIBUTION: Freshwater; Cagayan Province, Luzon Island, Philippine Islands.

***Nomorhamphus towoetii* Ladiges 1972**

Normorhamphus towoetii Ladiges 1972:207, Pl. 11 (not 10) [ref. 737] (Towoeti [Towuti] Lake, Sulawesi [Celebes], Indonesia). Holotype: ZMH H4532 (female).

DISTRIBUTION: Freshwater; Lakes Towuti and Poso, Sulawesi Selatan and Tengah.

REMARKS: Generic name misspelled as *Normorhamphus* in text of original description.

***Nomorhamphus vivipara* (Peters 1865)**

Hemirhamphus viviparus Peters 1865:132 [ref. 13952] (Basey [Bassey] R., Samar I., Philippines). Syntypes: ZMB 6267 (1). Additional material at ZMB.

Dermogenys viviparus var. *mindanensis* Herre 1944:86 [48 of separate] [ref. 11023] (outlet of Lake Mainit, Jabonga, Agusan Prov., Mindanao, Philippines). Syntypes: (61 + 16 juveniles) CAS-SU 37631 (74, 4 cleared and stained).

DISTRIBUTION: Freshwater; Luzon, Samar, Mindanao, and Jolo, Philippine Islands.

***Nomorhamphus weberi* (Boulenger 1897)**

Hemirhamphus weberi Boulenger 1897:429, Pl. 28 (fig. 4) [ref. 539] (Lake Matanna [Matano], se. Sulawesi [Celebes], Indonesia). Holotype (unique): NMBA 1065 (female).

DISTRIBUTION: Freshwater; Lakes Matano and Mahalona, Sulawesi Selatan.

Genus *Tondanichthys* Collette 1995

Tondanichthys Collette 1995:172 [ref. 21880]. Type species *Tondanichthys kottelati* Collette 1995. Type by original designation (also monotypic)

***Tondanichthys kottelati* Collette 1995**

Tondanichthys kottelati Collette 1995:172, Figs. 1–2 [ref. 21880] (Lake Tondano, ca. 1°10'N, 124°53'E, Sulawesi [Celebes], Indonesia). Holotype: ZRC 38699 (male).

DISTRIBUTION: Freshwater; Lake Tondano, Sulawesi.

Genus *Zenarchopterus* Gill 1864

Zenarchopterus Gill 1864:273 [ref. 1693]. Type species *Hemiramphus dispar* Valenciennes 1847. Type by original designation (also monotypic).

Labidorhamphus Fowler 1905:493 [ref. 1370]. Type species *Hemirhamphus amblyurus* Bleeker 1849. Type by original designation (also monotypic).

Grearcchopterus Mohsen 1962:119 [ref. 3035]. Type species *Hemiramphus (Zenarchopterus) novaeguineae* Weber 1913. Type by original designation (also monotypic).

***Zenarchopterus alleni* Collette 1982**

Zenarchopterus alleni Collette 1982:268 [ref. 5497] (Mamberamo R., Batavia bivak, Irian Jaya, Indonesia). Holotype (unique): ZMA 116479 (male).

DISTRIBUTION: Freshwater; Mamberamo River, Irian Jaya, New Guinea.

***Zenarchopterus buffonis* (Valenciennes 1847)**

Hemiramphus buffonis Valenciennes in Cuvier & Valenciennes 1847:48 [ref. 4883] (Pulo-Pinan).
Syntypes: MNHN B-1076 (6), MNHN B-2186 [not B-2184] (3).

Hemirhamphus cirrhatus Day 1874:709 [ref. 18825] (Bombay, India). Holotype (unique): ZSI 1287.
DISTRIBUTION: Marine, Indo-West Pacific: Andaman Islands and Malay Peninsula through the East Indies to the Philippines and Australia.

***Zenarchopterus caudovittatus* (Weber 1907)**

Hemiramphus (*Zenarchopterus*) *caudovittatus* Weber 1907:229, Pl. 13 (figs. 1a–b). [ref. 4599]
(Merauke R. mouth, Irian Jaya, Indonesia). Syntypes: (2) ZMA 111488 (1).

DISTRIBUTION: Freshwater; Merauke River, Irian Jaya and Arnhem Land, Australia.

***Zenarchopterus clarus* Mohr 1926**

Zenarchopterus clarus Mohr 1926:241 [ref. 15597] (Malay Peninsula and Archipelago). Syntypes:
Mus. Lübeck 1005 (1), ?ZMH 16166 [ex 1005] (1).

DISTRIBUTION: Marine, Thailand and Borneo.

***Zenarchopterus dispar* (Valenciennes 1847)**

Hemiramphus dispar Valenciennes in Cuvier & Valenciennes 1847:58, Pl. 558 [not 524] [ref. 4883] (Labouane R., Java, Indonesia; Madagascar; ?Moluccas). Syntypes: MNHN 4594 (3 females) Madagascar, 4595 (2 males) Madagascar.

Zenarchopterus maculosus Garman 1903:239, Pl. 5 (fig. 4) [ref. 15030] (Suva, Fiji Is.). Holotype (unique): MCZ 28299 (partly dry).

Zenarchopterus vaisiganus Jordan & Seale 1906:208, Fig. 11 [ref. 2497] (Vaisigano R. at Apia, Upolu I., Western Samoa). Lectotype: USNM 51718 (male).

DISTRIBUTION: Marine, Indo-West Pacific: Madagascar to Fiji, Samoa, and Tonga.

REMARKS: The lectotype of *Zenarchopterus vaisiganus* was selected by Collette (in Collette et al. 1992:11 [ref. 19410]).

***Zenarchopterus dunckeri* Mohr 1926**

Zenarchopterus dunckeri Mohr 1926:255 [ref. 15597] (Ambon I., Moluccas Is., Indonesia). No types known.

DISTRIBUTION: Marine, Indo-West Pacific: Andaman Islands to New Guinea, the Philippines, and the Ryuku Islands.

REMARKS: *Zenarchopterus dunckeri* Mohr 1926 is based on *Hemiramphus dispar* of Bleeker 1854:498 [ref. 344]; *H. dispar* of Bleeker 1854 was not an original description but rather a redescription of what he thought was *H. dispar* Valenciennes 1847.

***Zenarchopterus dux* Seale 1910**

Zenarchopterus dux Seale 1910:267, Pl. 2 (fig. 2) [ref. 14808] (Sandakan, Sabah state, Borneo I., East Malaysia). Holotype (unique): BSMP 2679.

DISTRIBUTION: Probably marine, Borneo.

REMARKS: Status considered uncertain by Mohr (1926 [ref. 15597]) and Collette (1982:266 [ref. 5497]) but treated as a valid species by Kottelat et al. (1993:88 [ref. 23448]).

***Zenarchopterus ectuntio* (Hamilton 1822)**

Esox ectuntio Hamilton 1822:212, 380 [ref. 2031] (smaller rivers and ponds of Gangetic provinces). No types known.

Hemirhamphus amblyurus Bleeker 1849:11 [ref. 320] (Madura Straits near Surabaya and Kammal, Java, Indonesia). Syntypes and/or Bleeker specimens: AMS B.7614 [from Day] (1, male), BMNH 1866.5.2.11 (1, female) [Bleeker coll.], RMNH 6981 (some of 12).

Hemiramphus borneensis Bleeker 1851:273 [ref. 325] (Bandjarmasin, Borneo, Indonesia). Holotype (unique): RMNH 6981 (possibly 1 of 12) or SMNS 10598 (1).

Hemiramphus bleekeri Kner 1860:537, 539–541 [9, 11–13 of separate], Pl. (figs. 4, 4a–b) [ref. 2633] (locality unknown). Syntypes: whereabouts unknown.

Zenarchopterus hendersoni Fowler 1919:8, Fig. 2 [ref. 1397] (Japan). Holotype (unique): ANSP 7584 (female).

DISTRIBUTION: Freshwater; India to Thailand, Java, and Borneo.

REMARKS: The original description of *Esox ectuntio* contains discrepancies, and the figure published later by Hora (1929 [ref. 23132]) further confuses the issue. Several authors (e.g., Mohr 1926 [ref. 15597], Mohr 1934 [ref. 16438], Herre 1944 [ref. 11023]) do not believe that Hamilton's description is of the Indian *Zenarchopterus* with the long upper jaw, and that the name *Z. amblyurus* (Bleeker 1849) should be used for this species. The type locality of *Zenarchopterus hendersoni* is doubtful (Collette and Su 1986:291 [ref. 5998]). The description of *Hemiramphus bleekeri* Kner 1860 was based on both sexes, but a male was illustrated.

***Zenarchopterus gilli* Smith 1945**

Zenarchopterus gilli Smith 1945:432 [ref. 4056] (East Indies). Syntypes: whereabouts unknown.

Hemiramphus brevirostris Günther (ex Kner) 1866:274 [ref. 1983] (East Indies). Syntypes: whereabouts unknown.

Zenarchopterus kneri Fowler 1934:325, Fig. 78 [ref. 1416] (East Indies). Syntypes: whereabouts unknown.

DISTRIBUTION: Marine, Indo-West Pacific: Andaman Islands, Thailand, and the Moluccas to New Guinea, Australia, and the New Hebrides.

REMARKS: *Hemiramphus brevirostris* Günther 1866 is based on *Hemiramphus dispar* of Kner (1860:537, fig. 3 [ref. 2633]), but Günther's name is preoccupied by *H. brevirostris* Cuvier 1829. Fowler (1934 [ref. 1416]) replaced *Hemiramphus brevirostris* Günther 1866 before Smith (1945 [ref. 4056]) did so, but no one seems to have followed him, and the name *Z. gilli* has been widely accepted and should continue to be used for this species. Kner (1860:537, fig. 3 [ref. 2633]) apparently had at least two specimens; therefore, the subsequent proposals of names citing his description would be based on the same syntypes.

***Zenarchopterus kampeni* (Weber 1913)**

Hemiramphus (*Zenarchopterus*) *kampeni* Weber 1913:554 [ref. 4603] (Kaiserin Augusta R. [= Sepik R.], n. New Guinea). Lectotype: ZMA 116220 (male).

Zenarchopterus basudensis Fowler 1934:326, Fig. 79 [ref. 1416] (Basud R., Luzon I., Philippines). Holotype: USNM 93061 (male).

Zenarchopterus sepikensis Herre 1935:391 [ref. 2109] (Sepik R. at Koragu, New Guinea). Holotype: FMNH 17213 (male).

DISTRIBUTION: Freshwater; Papua New Guinea, Luzon (Philippine Islands), and Caroline Islands.

REMARKS: The lectotype of *Hemiramphus kampeni* was selected by Collette (1982:275 [ref. 5497]).

***Zenarchopterus novaeguineae* (Weber 1913)**

Hemiramphus (*Zenarchopterus*) *novaeguineae* Weber 1913:553 [ref. 4603] (Lorentz R., New Guinea). Lectotype: ZMA 116221 (male).

DISTRIBUTION: Freshwater; restricted to rivers draining the southern half of Papua New Guinea, such as the Laloki, Fly, and Lorenz.

REMARKS: The lectotype of *Hemiramphus novaeguinae* was selected by Collette (1982:275 [ref. 5497]).

***Zenarchopterus ornithocephala* Collette 1985**

Zenarchopterus ornithocephala Collette 1985:107, Fig. 2 [ref. 8171] (stream at Fruata, Vogelkop Peninsula, Irian Jaya, 2°59'S, 133°32'E). Holotype: NCIP 5419 (male).

DISTRIBUTION: Freshwater; streams of the Vogelkop Peninsula, Irian Jaya.

***Zenarchopterus pappenheimi* Mohr 1926**

Zenarchopterus pappenheimi Mohr 1926:258, Fig. 20 [ref. 15597] (Bangkok, Malay Peninsula and Archipelago). Syntypes: ZMB 7524 (2), ZMH 16167 [ex ZMB 7524] (1).

Zenarchopterus atrodorsalis Fowler 1934:323, Fig. 77 [ref. 1416] (Sandakan, Borneo). Holotype (unique): USNM 93060 (male).

DISTRIBUTION: Marine, Indo-West Pacific: Thailand and Borneo.

***Zenarchopterus philippinus* (Peters 1868)**

Hemirhamphus (*Zenarchopterus*) *philippinus* Peters 1868:273 [ref. 3442] (Boco R. and Quingoa R., Luzon I.; Calbigan, Samar, Philippines). Syntypes: ZMB 5110 (4) Luzon, 5111 (2) Calbigan, 6719 (3) Luzon.

Zenarchopterus cagayensis Herre 1926:537 [ref. 2122] (Pinacanauan R., Tuguegarao, Cagayan, Luzon I., Philippines). Syntypes: (9) whereabouts unknown.

Zenarchopterus magatensis Herre 1934:26 [ref. 2108] (branches of Magat R. and its tributary creeks at Bagabag, Nueva Vizcaya Prov., Luzon I., Philippines). Holotype: SU 25509 (included with paratypes).

DISTRIBUTION: Freshwater rivers, Philippine Islands.

REMARKS: *Zenarchopterus cagayensis* is included tentatively in the synonymy of *Z. philippinus*, but its status is still in doubt (Collette 1982 [ref. 5497]).

***Zenarchopterus quadrimaculatus* Mohr 1926**

Zenarchopterus quadrimaculatus Mohr 1926:257, Figs. 18–19 [ref. 15597] (Malay Peninsula and Archipelago). Syntypes: ZMH 8529 (1) Muar R., 16154 (1) Kwala Selangor; Mus. Lübeck 698 (6) Selangor.

DISTRIBUTION: Freshwater, Malay Peninsula.

***Zenarchopterus rasori* (Popta 1912)**

Hemiramphus rasori Popta 1912:192 [ref. 14861] (Raha, Muna I., Sunda Is., Indonesia). Holotype (unique): SMF 6520 (female).

DISTRIBUTION: Marine; Muna Island, Sulawesi and Arnhem Land, Australia.

***Zenarchopterus robertsi* Collette 1982**

Zenarchopterus robertsi Collette 1982:266, Fig. 2 [ref. 5497] (Ovi Creek, tributary to Kumusi R., Papua New Guinea, elevation 280–320 m). Holotype: AMS I.22029-001 (male) [ex USNM 219299].

DISTRIBUTION: Freshwater; Kumusi River draining into Solomon Sea, Papua New Guinea.

***Zenarchopterus striga* (Blyth 1858)**

Hemirhamphus striga Blyth 1858:288 [ref. 476] (Calcutta fish market, India). No types known.

Zenarchopterus beauforti Mohr 1926:259, Fig. 21 [ref. 15597] (Muar R., Selangor, Malaysia). Syntypes: ZMA 101820 (2) [ex ZMH 8530]; ZMB 31452 [ex ZMH 8528] (2); ZMH H8528 (8, lost), ZMH H8530 (4, lost).

DISTRIBUTION: Freshwater; Goa and Calcutta, India and Malay Peninsula.

REMARKS: *Zenarchopterus beauforti* was placed in synonymy with *Z. striga* by Tilak (1972 [ref. 7655]).

***Zenarchopterus xiphophorus* Mohr 1934**

Zenarchopterus xiphophorus Mohr 1934:11, Figs. 1–2 [ref. 16438] (Belawan-Deli at mouth of Deli River, Sumatra, Indonesia). Syntypes: (6) RMNH 15837 (5, both sexes).

DISTRIBUTION: Marine; mouth of Deli River, Sumatra.

Summary Lists

Genus-Group Names of Family Hemiramphidae

Ardeapiscis Whitley 1931 = *Hemiramphus* Cuvier 1816
Arrhamphus Günther 1866 = *Arrhamphus* Günther 1866
Chriodorus Goode & Bean 1882 = *Chriodorus* Goode & Bean 1882
Demogenys Kuhl & van Hasselt 1823 = *Dermogenys* Kuhl & van Hasselt 1823
Eulepidorhamphus Fowler 1919 = *Hyporhamphus* Gill 1859
Euleptorhamphus Gill 1859 = *Euleptorhamphus* Gill 1859
Farhians Whitley 1930 = *Hemiramphus* Cuvier 1816
Grecarchopterus Mohsen 1962 = *Zenarchopterus* Gill 1864
Hemiramphus Cuvier 1816 = *Hemiramphus* Cuvier 1816
Hemirhamphodon Bleeker 1866 = *Hemirhamphodon* Bleeker 1866
Hyporhamphus Gill 1859 = *Hyporhamphus* Gill 1859
Ichthyacus Fernández-Yépez 1948 = *Hyporhamphus* Gill 1859
Labidorhamphus Fowler 1905 = *Zenarchopterus* Gill 1864
Loligorhamphus Whitley 1931 = *Rhynchorhamphus* Fowler 1928
Melapedalion Fowler 1934 = *Melapedalion* Fowler 1934
Normorhamphus Weber & de Beaufort 1922 = *Nomorhamphus* Weber & de Beaufort 1922
Odontorhamphus Weed 1933 = *Hyporhamphus* Gill 1859
Oxyporhamphus Gill 1864 = *Oxyporhamphus* Gill 1864
Reporhamphus Whitley 1931 = *Hyporhamphus* Gill 1859
Rhamphodermogenys Fowler & Bean 1922 = *Nomorhamphus* Weber & de Beaufort 1922
Rhynchorhamphus Fowler 1928 = *Rhynchorhamphus* Fowler 1928
Tondanichthys Collette 1995 = *Tondanichthys* Collette 1995
Zenarchopterus Gill 1864 = *Zenarchopterus* Gill 1864

Incertae Sedis Genus-Group Names

None

Unavailable Genus-Group Names

None

Species-Group Names of Family Hemiramphidae

acutus, *Hemirhamphus* Günther 1872 = *Hyporhamphus acutus acutus* (Günther 1872)
affinis, *Hemirhamphus* Günther 1866 = *Hyporhamphus affinis* (Günther 1866)
alleni, *Zenarchopterus* Collette 1982 = *Zenarchopterus alleni* Collette 1982
amblyurus, *Hemirhamphus* Bleeker 1849 = *Zenarchopterus ectuntio* (Hamilton 1822)
arabicus, *Rhynchorhamphus* Parin & Shcherbachev 1972 = *Rhynchorhamphus arabicus* Parin & Shcherbachev 1972
archipelagicus, *Hemiramphus* Collette & Parin 1978 = *Hemiramphus archipelagicus* Collette & Parin 1978
ardelio, *Reporhamphus* Whitley 1931 = *Hyporhamphus regularis ardelio* (Whitley 1931)
arnoldorum, *Hemirhamphus* Curtiss 1938 = *Hyporhamphus acutus acutus* (Günther 1872)

atherinoides, *Chriodorus* Goode & Bean 1882 = *Chriodorus atherinoides* Goode & Bean 1882
atrodorsalis, *Zenarchopterus* Fowler 1934 = *Zenarchopterus pappenheimi* Mohr 1926
australe, *Nomorhamphus ravnaki* Brembach 1991 = *Nomorhamphus brembachi* Vogt 1978
australensis, *Hemiramphus* Seale 1906 = *Hyporhamphus affinis* (Günther 1866)
australis, *Hemiramphus* Steindachner 1866 = *Hyporhamphus australis* (Steindachner 1866)
bakeri, *Dermogenys (Rhamphodermogenys)* Fowler & Bean 1922 = *Nomorhamphus bakeri* (Fowler & Bean 1922)
balao, *Hemiramphus* Lesueur 1821 = *Hemiramphus balao* Lesueur 1821
balinensis, *Hemiramphus* Bleeker 1859 = *Hyporhamphus balinensis* (Bleeker 1859)
basudensis, *Zenarchopterus* Fowler 1934 = *Zenarchopterus kampeni* (Weber 1913)
beauforti, *Zenarchopterus* Mohr 1926 = *Zenarchopterus striga* (Blyth 1858)
bermudensis, *Hemiramphus* Collette 1962 = *Hemiramphus bermudensis* Collette 1962
bispina, *Dermogenys* Meisner & Collette 1998 = *Dermogenys bispina* Meisner & Collette 1998
bleekeri, *Hemiramphus* Kner 1860 = *Zenarchopterus ectuntio* (Hamilton 1822)
borealis, *Dermogenys pusillus* Brembach 1991 = *Dermogenys siamensis* Fowler 1934
borneensis, *Dermogenys pusillus* Brembach 1991 = *Dermogenys sumatrana* (Bleeker 1853)
borneensis, *Hemiramphus* Bleeker 1851 = *Zenarchopterus ectuntio* (Hamilton 1822)
brachynotopterus, *Hemiramphus* Bleeker 1854 = *Dermogenys brachynotopterus* (Bleeker 1854)
brasiliensis, *Esox* Linnaeus 1758 = *Hemiramphus brasiliensis* (Linnaeus 1758)
brederi, *Ichthyacus* Fernández-Yépez 1948 = *Hyporhamphus brederi* (Fernández-Yépez 1948)
brembachi, *Nomorhamphus* Vogt 1978 = *Nomorhamphus brembachi* Vogt 1978
breviceps, *Hemiramphus* Castelnau 1878 = *Arrhamphus sclerolepis krefftii* (Steindachner 1867)
brevirostris, *Hemiramphus* Günther 1866 = *Zenarchopterus gilli* Smith 1945
brevirostris, *Macrogathus* Gronow 1854 = *Hemiramphus brasiliensis* (Linnaeus 1758)
brevis, *Oxyporhamphus* Seale 1910 = *Melapedalion breve* (Seale 1910)
brevoortii, *Euleptorhamphus* Gill 1859 = *Euleptorhamphus viridis* (van Hasselt 1823)
brownii, *Hemiramphus* Valenciennes 1847 = *Hemiramphus brasiliensis* (Linnaeus 1758)
bruneiensis, *Dermogenys* Meisner 2001 = *Dermogenys bruneiensis* Meisner 2001
bruuni, *Oxyporhamphus convexus* Parin, Collette & Shcherbachev 1980 = *Oxyporhamphus convexus bruuni* Parin, Collette & Shcherbachev 1980
buffonis, *Hemiramphus* Valenciennes 1847 = *Zenarchopterus buffonis* (Valenciennes 1847)
burmanicus, *Dermogenys* Mukerji 1935 = *Dermogenys burmanica* Mukerji 1935
cagayensis, *Zenarchopterus* Herre 1926 = *Zenarchopterus philippinus* (Peters 1868)
calabaricus, *Hemiramphus* Günther 1866 = *Hyporhamphus picarti* (Valenciennes 1847)
cantori, *Hemiramphus* Bleeker 1866 = *Rhynchorhamphus georgii* (Valenciennes 1847)
capensis, *Hemiramphus* Thominot 1886 = *Hyporhamphus capensis* (Thominot 1886)
caudalis, *Reporhamphus* Whitley 1951 = *Hyporhamphus quoyi* (Valenciennes 1847)
caudovittatus, *Hemiramphus (Zenarchopterus)* Weber 1907 = *Zenarchopterus caudovittatus* (Weber 1907)
celebensis, *Nomorhamphus* Weber & de Beaufort 1922 = *Nomorhamphus celebensis* Weber & de Beaufort 1922
chancellori, *Odontorhamphus* Weed 1933 = *Hyporhamphus acutus acutus* (Günther 1872)
chrysopunctatus, *Hemiramphodon* Brembach 1978 = *Hemiramphodon chrysopunctatus* Brembach 1978
cirrhatus, *Hemiramphus* Day 1874 = *Zenarchopterus buffonis* (Valenciennes 1847)
clarus, *Zenarchopterus* Mohr 1926 = *Zenarchopterus clarus* Mohr 1926
collettei, *Dermogenys* Meisner 2001 = *Dermogenys collettei* Meisner 2001
commersonii, *Hemiramphus* Cuvier 1829 = *Hemiramphus far* (Forsskål 1775)

- convexus*, *Hemiramphus* Weber & de Beaufort 1922 = *Oxyporhamphus convexus convexus* (Weber & de Beaufort 1922)
- cuspidatus*, *Hemiramphus* Valenciennes 1847 = *Oxyporhamphus micropterus micropterus* (Valenciennes 1847)
- delagoae*, *Hemiramphus* (*Hyporhamphus*) Barnard 1925 = *Hyporhamphus affinis* (Günther 1866)
- depauperatus*, *Hemiramphus* Lay & Bennett 1839 = *Hemiramphus depauperatus* Lay & Bennett 1839
- dispar*, *Hemiramphus* Valenciennes 1847 = *Zenarchopterus dispar* (Valenciennes 1847)
- dunckeri*, *Zenarchopterus* Mohr 1926 = *Zenarchopterus dunckeri* Mohr 1926
- dussumieri*, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus dussumieri* (Valenciennes 1847)
- dux*, *Zenarchopterus* Seale 1910 = *Zenarchopterus dux* Seale 1910
- ebrardtii*, *Hemiramphus* (*Dermatogenus*) Popta 1912 = *Nomorhamphus ebrardtii* (Popta 1912)
- eclancheri*, *Hemiramphus* Valenciennes 1847 = *Rhynchorhamphus georgii* (Valenciennes 1847)
- ectuntio*, *Esox* Hamilton 1822 = *Zenarchopterus ectuntio* (Hamilton 1822)
- elongatus*, *Hemiramphus* Tanaka 1911 = *Euleptorhamphus viridis* (van Hasselt 1823)
- erythrorinchus*, *Hemiramphus* Lesueur 1821 = *Hyporhamphus erythrorinchus* (Lesueur 1821)
- far*, *Esox* Forsskål 1775 = *Hemiramphus far* (Forsskål 1775)
- fasciatus*, *Hemiramphus* Bleeker 1853 = *Hemiramphus lutkei* Valenciennes 1847
- filamentosus*, *Hemiramphus* Poey 1860 = *Hemiramphus brasiliensis* (Linnaeus 1758)
- fluviatilis*, *Hemiramphus* Bleeker 1850 = *Dermogenys pusilla* Kuhl & van Hasselt 1823
- furcatus*, *Hemiramphus* Philippi 1876 = *Hyporhamphus acutus acutus* (Günther 1872)
- gaimardi*, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus quoyi* (Valenciennes 1847)
- gamberur*, *Hemiramphus* Rüppell 1837 = *Hyporhamphus gamberur* (Rüppell 1837)
- georgii*, *Hemiramphus* Valenciennes 1847 = *Rhynchorhamphus georgii* (Valenciennes 1847)
- gernaerti*, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus gernaerti* (Valenciennes 1847)
- gilli*, *Hyporhamphus* Meek & Hildebrand 1923 = *Hyporhamphus gilli* Meek & Hildebrand 1923
- gilli*, *Zenarchopterus* Smith 1945 = *Zenarchopterus gilli* Smith 1945
- gladius*, *Esox* Lacepède 1803 = *Hemiramphus far* (Forsskål 1775)
- gorakhpurensis*, *Hemiramphus* Srivastava 1967 = *Hyporhamphus limbatus* (Valenciennes 1847)
- guineensis*, *Hemiramphus* Bleeker 1863 = *Hemiramphus balao* Lesueur 1821
- hageni*, *Hemiramphus* Popta 1912 = *Nomorhamphus hageni* (Popta 1912)
- hendersoni*, *Zenarchopterus* Fowler 1919 = *Zenarchopterus ectuntio* (Hamilton 1822)
- hildebrandi*, *Hyporhamphus* Jordan & Evermann 1927 = *Hyporhamphus roberti hildebrandi* Jordan & Evermann 1927
- ihi*, *Hyporhamphus* Phillipps 1932 = *Hyporhamphus ihi* Phillipps 1932
- improvisus*, *Hemiramphus* Smith 1933 = *Hyporhamphus improvisus* (Smith 1933)
- intermedius*, *Hemiramphus* Cantor 1842 = *Hyporhamphus intermedius* (Cantor 1842)
- japonicus*, *Hemiramphus* Brevoort 1856 = *Hemiramphus lutkei* Valenciennes 1847
- kampeni*, *Hemiramphus* (*Zenarchopterus*) Weber 1913 = *Zenarchopterus kampeni* (Weber 1913)
- kapuasensis*, *Hemiramphodon* Collette 1991 = *Hemiramphodon kapuasensis* Collette 1991
- kneri*, *Zenarchopterus* Fowler 1934 = *Zenarchopterus gilli* Smith 1945
- knysnaensis*, *Hemiramphus* Smith 1933 = *Hyporhamphus capensis* (Thomiot 1886)
- kolonodalensis*, *Nomorhamphus* Meisner & Louie 2000 = *Nomorhamphus kolonodalensis* Meisner & Louie 2000
- kottelati*, *Tondanichthys* Collette 1995 = *Tondanichthys kottelati* Collette 1995
- kreftii*, *Hemiramphus* Steindachner 1867 = *Arrhamphus sclerolepis kreftii* (Steindachner 1867)
- kronei*, *Hyporhamphus* Miranda-Ribeiro 1915 = *Hyporhamphus roberti roberti* (Valenciennes 1847)
- kuekenthali*, *Hemiramphodon* Steindachner 1901 = *Hemiramphodon kuekenthali* Steindachner 1901

kurumeus, *Hyporhamphus* Jordan & Starks 1903 = *Hyporhamphus intermedius* (Cantor 1842)
laticeps, *Hemirhamphus* Günther 1866 = *Hyporhamphus dussumieri* (Valenciennes 1847)
leucopterus, *Hemiramphus* Valenciennes 1847 = *Rhynchorhamphus georgii* (Valenciennes 1847)
liemi, *Nomorhamphus* Vogt 1978 = *Nomorhamphus liemi* Vogt 1978
limbatus, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus limbatus* (Valenciennes 1847)
longirostris, *Hemiramphus* Cuvier 1829 = *Euleptorhamphus viridis* (van Hasselt 1823)
lutkei, *Hemiramphus* Valenciennes 1847 = *Hemiramphus lutkei* Valenciennes 1847
macrochirus, *Hemirhamphus* Poey 1860 = *Hemiramphus balao* Lesueur 1821
macrorhynchus, *Hemiramphus* Valenciennes 1847 = *Euleptorhamphus viridis* (van Hasselt 1823)
maculosus, *Zenarchopterus* Garman 1903 = *Zenarchopterus dispar* (Valenciennes 1847)
magatensis, *Zenarchopterus* Herre 1934 = *Zenarchopterus philippinus* (Peters 1868)
malabaricus, *Rhynchorhamphus* Collette 1976 = *Rhynchorhamphus malabaricus* Collette 1976
manifesta, *Nomorhamphus* Meisner 2001 = *Nomorhamphus manifesta* Meisner 2001
marginatus, *Esox* Forsskål 1775 = *Hemiramphus marginatus* (Forsskål 1775)
marginatus, *Hemiramphus* Lesueur 1821 = *Hemiramphus brasiliensis* (Linnaeus 1758)
meeki, *Hyporhamphus* Banford & Collette 1993 = *Hyporhamphus meeki* Banford & Collette 1993
megarrhamphus, *Dermogenys* Brembach 1982 = *Nomorhamphus megarrhamphus* (Brembach 1982)
melanochir, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus melanochir* (Valenciennes 1847)
melanopterus, *Hyporhamphus* (*Hyporhamphus*) Collette & Parin 1978 = *Hyporhamphus melanopterus*
 Collette & Parin 1978
melanurus, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus quoyi* (Valenciennes 1847)
meristocystis, *Oxyporhamphus* Parin 1961 = *Oxyporhamphus convexus convexus* (Weber & de Beaufort 1922)
mexicanus, *Hyporhamphus* Alvarez 1959 = *Hyporhamphus mexicanus* Alvarez 1959
micropterus, *Exocoetus* Valenciennes 1847 = *Oxyporhamphus micropterus micropterus* (Valenciennes 1847)
mindanensis, *Dermogenys viviparus* Herre 1944 = *Nomorhamphus vivipara* (Peters 1865)
mioprurus, *Hemiramphus* Jordan & Dickerson 1908 = *Hyporhamphus quoyi* (Valenciennes 1847)
mocquardianus, *Hemiramphus* Thominot 1886 = *Hemiramphus far* (Forsskål 1775)
montanus, *Dermogenys* Brembach 1982 = *Dermogenys orientalis* (Weber 1894)
naga, *Rhynchorhamphus* Collette 1976 = *Rhynchorhamphus naga* Collette 1976
naos, *Hyporhamphus* Banford & Collette 2001 = *Hyporhamphus naos* Banford & Collette 2001
neglectissimus, *Hyporhamphus* (*Hyporhamphus*) Parin, Collette & Shcherbachev 1980 = *Hyporhamphus*
neglectissimus Parin, Collette & Shcherbachev 1980
neglectus, *Hemirhamphus* Bleeker 1866 = *Hyporhamphus neglectus* (Bleeker 1866)
normani, *Loligorhamphus* Whitley 1931 = *Rhynchorhamphus georgii* (Valenciennes 1847)
novaeguineae, *Hemiramphus* (*Zenarchopterus*) Weber 1913 = *Zenarchopterus novaeguineae* (Weber 1913)
obesus, *Hemirhamphus* Castelnau 1861 = *Hemiramphus far* (Forsskål 1775)
occipitalis, *Hemirhamphus* Gill 1859 = *Hyporhamphus intermedius* (Cantor 1842)
orientalis, *Hemiramphus* Weber 1894 = *Dermogenys orientalis* (Weber 1894)
ornithocephala, *Zenarchopterus* Collette 1985 = *Zenarchopterus ornithocephala* Collette 1985
pacificus, *Hemirhamphus* Steindachner 1900 = *Hyporhamphus acutus pacificus* (Steindachner 1900)
palawanensis, *Dermogenys* Meisner 2001 = *Dermogenys palawanensis* Meisner 2001
pappenheimi, *Zenarchopterus* Mohr 1926 = *Zenarchopterus pappenheimi* Mohr 1926
patris, *Hyporhamphus* Miller 1945 = *Hyporhamphus rosae* (Jordan & Gilbert 1880)
paucirastris, *Hyporhamphus* (*Hyporhamphus*) Collette & Parin 1978 = *Hyporhamphus paucirastris* Collette
 & Parin 1978

pectoralis, *Dermogenys* Fowler 1934 = *Nomorhamphus pectoralis* (Fowler 1934)
peitaihoensis, *Hemirhamphus* van Dam 1926 = *Hyporhamphus gernaerti* (Valenciennes 1847)
phaiosoma, *Hemirhamphus* Bleeker 1852 = *Hemirhamphodon phaiosoma* (Bleeker 1852)
philippinus, *Dermogenys* Ladiges 1972 = *Nomorhamphus philippina* (Ladiges 1972)
philippinus, *Hemirhamphus* (*Zenarchopterus*) Peters 1868 = *Zenarchopterus philippinus* (Peters 1868)
picarti, *Hemirhamphus* Valenciennes 1847 = *Hyporhamphus picarti* (Valenciennes 1847)
pinnimaculata, *Nomorhamphus* Meisner 2001 = *Nomorhamphus pinnimaculata* Meisner 2001
pleii, *Hemirhamphus* Valenciennes 1847 = *Hemirhamphus balao* Lesueur 1821
plumatus, *Hemirhamphus* Blyth 1858 = *Rhynchorhamphus georgii* (Valenciennes 1847)
poeyi, *Hemirhamphus* Günther 1866 = *Hyporhamphus unifasciatus* (Ranzani 1841)
pogonognathus, *Hemirhamphus* Bleeker 1853 = *Hemirhamphodon pogonognathus* (Bleeker 1853)
pusillus, *Dermogenys* Kuhl & van Hasselt 1823 = *Dermogenys pusilla* Kuhl & van Hasselt 1823
quadrinaculatus, *Zenarchopterus* Mohr 1926 = *Zenarchopterus quadrinaculatus* Mohr 1926
quoyi, *Hemirhamphus* Valenciennes 1847 = *Hyporhamphus quoyi* (Valenciennes 1847)
rasori, *Hemirhamphus* Popta 1912 = *Zenarchopterus rasori* (Popta 1912)
ravnaki, *Nomorhamphus* Brembach 1991 = *Nomorhamphus brembachi* Vogt 1978
regularis, *Hemirhamphus* Günther 1866 = *Hyporhamphus regularis regularis* (Günther 1866)
reynaldi, *Hemirhamphus* Valenciennes 1847 = *Hyporhamphus dussumieri* (Valenciennes 1847)
richardi, *Hemirhamphus* Valenciennes 1847 = *Hyporhamphus unifasciatus* (Ranzani 1841)
roberti, *Hemirhamphus* Valenciennes 1847 = *Hyporhamphus roberti roberti* (Valenciennes 1847)
robertsi, *Zenarchopterus* Collette 1982 = *Zenarchopterus robertsi* Collette 1982
robertsi, *Dermogenys* Meisner 2001 = *Dermogenys robertsi* Meisner 2001
robustus, *Hemirhamphus* Günther 1866 = *Hemirhamphus robustus* Günther 1866
rosae, *Hemirhamphus* Jordan & Gilbert 1880 = *Hyporhamphus rosae* (Jordan & Gilbert 1880)
rossi, *Nomorhamphus* Meisner 2001 = *Nomorhamphus rossi* Meisner 2001
russeli, *Hemirhamphus* Valenciennes 1847 = *Rhynchorhamphus georgii* (Valenciennes 1847)
sajori, *Hemirhamphus* Temminck & Schlegel 1846 = *Hyporhamphus sajori* (Temminck & Schlegel 1846)
saltator, *Hemirhamphus* Gilbert & Starks 1904 = *Hemirhamphus saltator* Gilbert & Starks 1904
salvatoris, *Hyporhamphus* Fowler & Bean 1923 = *Hyporhamphus roberti roberti* (Valenciennes 1847)
samoensis, *Hyporhamphus* Steindachner 1906 = *Hyporhamphus dussumieri* (Valenciennes 1847)
sanussii, *Nomorhamphus* Brembach 1991 = *Nomorhamphus brembachi* Vogt 1978
schlegeli, *Hemirhamphus* Bleeker 1863 = *Hyporhamphus picarti* (Valenciennes 1847)
sclerolepis, *Arrhamphus* Günther 1866 = *Arrhamphus sclerolepis sclerolepis* Günther 1866
sepikensis, *Zenarchopterus* Herre 1935 = *Zenarchopterus kampeni* (Weber 1913)
siamensis, *Dermogenys* Fowler 1934 = *Dermogenys siamensis* Fowler 1934
similis, *Oxyporhamphus micropterus* Bruun 1935 = *Oxyporhamphus micropterus similis* Bruun 1935
sindensis, *Hemirhamphus* Regan 1905 = *Hyporhamphus sindensis* (Regan 1905)
sinensis, *Hemirhamphus* Günther 1866 = *Hyporhamphus limbatus* (Valenciennes 1847)
snijdersi, *Nomorhamphus liemi* Vogt 1978 = *Nomorhamphus liemi* Vogt 1978
snyderi, *Hyporhamphus* Meek & Hildebrand 1923 = *Hyporhamphus snyderi* Meek & Hildebrand 1923
striga, *Hemirhamphus* Blyth 1858 = *Zenarchopterus striga* (Blyth 1858)
sumatranus, *Hemirhamphus* Bleeker 1853 = *Dermogenys sumatrana* (Bleeker 1853)
taiwanensis, *Hyporhamphus* (*Hyporhamphus*) Collette & Su 1986 = *Hyporhamphus taiwanensis* Collette & Su 1986
tengah, *Hemirhamphodon* Collette 1991 = *Hemirhamphodon tengah* Collette 1991
towoetii, *Normorhamphus* Ladiges 1972 = *Nomorhamphus towoetii* Ladiges 1972

tricuspidatus, *Hyporhamphus* Gill 1859 = *Hyporhamphus unifasciatus* (Ranzani 1841)
tridentifer, *Hemiramphus* Cantor 1849 = *Hyporhamphus limbatus* (Valenciennes 1847)
trilineatus, *Hemiramphus* Steindachner 1866 = *Hyporhamphus australis* (Steindachner 1866)
tweediei, *Hemiramphus* Herre 1936 = *Euleptorhamphus viridis* (van Hasselt 1823)
unicuspis, *Hyporhamphus* (*Hyporhamphus*) Collette & Parin 1978 = *Hyporhamphus unicuspis* Collette & Parin 1978
unifasciatus, *Hemiramphus* Ranzani 1841 = *Hyporhamphus unifasciatus* (Ranzani 1841)
vaisiganus, *Zenarchopterus* Jordan & Seale 1906 = *Zenarchopterus dispar* (Valenciennes 1847)
velox, *Euleptorhamphus* Poey 1868 = *Euleptorhamphus velox* Poey 1868
viridis, *Hemiramphus* van Hasselt 1823 = *Euleptorhamphus viridis* (van Hasselt 1823)
vittatus, *Hemiramphus* Valenciennes 1843 = *Hemiramphus balao* Lesueur 1821
viviparus, *Hemiramphus* Peters 1865 = *Nomorhamphus vivipara* (Peters 1865)
vogti, *Dermogenys* Brembach 1982 = *Dermogenys vogti* Brembach 1982
weberi, *Hemiramphus* Boulenger 1897 = *Nomorhamphus weberi* (Boulenger 1897)
welsbyi, *Hemiramphus* Ogilby 1908 = *Hemiramphus robustus* Günther 1866
xanthopterus, *Hemiramphus* Valenciennes 1847 = *Hyporhamphus xanthopterus* (Valenciennes 1847)
xiphophorus, *Zenarchopterus* Mohr 1934 = *Zenarchopterus xiphophorus* Mohr 1934
yuri, *Hyporhamphus* (*Reporhamphus*) Collette & Parin 1978 = *Hyporhamphus yuri* Collette & Parin 1978

Incertae Sedis Species-Group Names

argenteus, *Hemiramphus* Bennett 1840:269, Fig. [ref. 260].
beccarii, *Zenarchopterus* Vinciguerra 1926:601 [70 of separate] [ref. 15609] (Borneo).
brevirostris, *Hemiramphus* Cuvier 1829:286 [ref. 995].
cotnog, *Hemiramphus* Smith 1902:170, Pl. 21 [ref. 10225].
fasciatus, *Hemiramphus* Poey 1860:299 [ref. 3499].
lucens, *Hemiramphus* Valenciennes 1847:62 [ref. 4883].
marginatus, *Hemiramphus* Cuvier 1829:286 [ref. 995].
microstoma, *Belone* Basilewsky 1855:260 [ref. 200]. Publication date requires additional research.
moar, *Hemiramphus* Montrouzier 1857:483 [205 of reprint] [ref. 17789].
neglectus, *Hemiramphus* Day 1870:526 [ref. 18819].
occidentalis, *Hemiramphus balinensis* Weber & de Beaufort 1922:153 [ref. 4598].
rossica, *Dermatogenys* Gratzianov 1907:243, 244 [ref. 1871].
russelii, *Hemiramphus* Cuvier in van Hasselt 1823:131 [ref. 5963].

Unavailable Species-Group Names

angulatus, *Esox* Hamilton in Day 1877:516 [ref. 4886]. Nomen nudum.
gambarur, *Esox* Lacepède 1803:295, 313, Pl. 7 (fig. 2) [ref. 4930]. *Hyporhamphus gambarur* is of uncertain validity. See *Hyporhamphus gamberur*, attributed to Rüppell 1837.

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