

An annotated checklist of the fishes of the family Serranidae of the world with description of two new related families of fishes

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Abstract

An annotated checklist of the groupers and sea basses known to date is given. Species are arranged in the subfamilies Anthiinae, Epinephelinae, and Serraninae and listed alphabetically according to the genus they belong to. The list includes 1183 nominal species representing 579 valid species in 72 genera. Thirty-one new junior synonyms (*Cerna acutirostris* var. *lata* Döderlein, *Holocentrus bicolor* Shaw, *Centropristis brasiliensis* Brisout de Barneville, *Labrus caprulensis* Nardo, *Holocentrus chana* Nardo, *Serranus confertus* Anonymous, *Holocentrus decussatus* Shaw, *Labrus fasciatus* Walbaum, *Perca fusca* Thunberg, *Serranus goliath* Peters, *Paraserranus hasseltii* Bleeker, *Holocentrus hians* Nardo, *Grammistes lineatus* Arnault, *Holocentrus marinus variegatus* Suchow, *Serranus cruentatus* Peters, *Holocentrus epinephelus* Lacepède, *Plectropoma melanorhina* Guichenot, *Serranus melas* Peters, *Prionodes nigropunctatus* Hildebrand, *Perca pentacantha* Lacepède, *Holocentrus pirapixanga* Lacepède, *Labrus salviani* Suckow, *Serranus sarnicus* Griffith and Smith, *Lutjanus scriptura* Lacepède, *Bodianus sexlineatus* Lacepède, *Labrus spatensis* Walbaum, *Centropristis springeri* Weed, *Epinephelus striatus* Bloch, *Perca triacantha* Lacepède, *Lutjanus trilobatus* Lacepède, *Mustelichthys ui* Tanaka) are recognized. Five *nomina oblita* (*Cerna sicana* Döderlein, *Epinephelus argus* Bloch and Schneider, *Grammistes compressus* Liénard, *Perca miniata caeruleoocellata* Forsskål, and *Holocentrus zebra* Marion de Procé) are here declared. *Perca daba* Forsskål is regarded as vernacular. An unneeded replacement name (*Epinephelus dermatolepis* Boulenger) is discovered. *Epinephelus gigas* (Brünnich) should be regarded as the valid name presently known as *Epinephelus marginatus* and an application to ICZN is needed to retain the latter and to preserve stability. The enigmatic species *Caesioscorpis theagenes* and *Hemilutjanus macrophthalmos* are placed in the families Caesioscorpidae, new family, and Hemilutjanidae new family, respectively.

Keywords: Serranidae, Checklist, *Nomina oblita*, Caesioscorpidae, Hemilutjanidae.

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Introduction

Checklists of species are invaluable tools in the fields of natural sciences. In the period 2008-2018, a mean of about 406 new species of fishes have been named and described per year (Fricke et al. 2019b) and a large number of new records have been documented. Much of this information is scattered across many scientific journals (Allen 2014) and assembling all taxonomic and biogeographical data available for species in a family serve to consolidate our level of knowledge and at the same time reveal areas in need of further investigation.

The family Serranidae, generally known as groupers and sea basses, with the inclusion of anthias and soapfishes, comprises primitive perciform fishes traditionally placed in the taxonomic wastebasket of the suborder Percoidei. Serranidae is accepted as a monophyletic assemblage since Gosline (1966). Johnson (1983) corroborated and refined Gosline's hypothesis by individuating four derived features. However, contrasting results were obtained by recent molecular studies, showing that monophyly of the family is obtained if the genera *Niphon* and *Acanthistius* are removed from Serranidae (Craig and Hastings 2007). Whilst *Niphon* is placed in its own family, the Niphonidae in the suborder Percoidei by Betancur-R et al. (2017), the affinities of *Acanthistius* remain unclear and lie outside the Serranidae according to Craig and Hastings (2007). Enigmatic are also the position of two monotypic genera *Hemilutjanus* and *Caesioscorpis*. Nelson et al. (2016) still included *Niphon* and *Acanthistius* in Serranidae and we prefer adopting this solution. Thus, the subfamily Epinephelinae is divided into five tribes: Epinephelini, Diploprionini, Grammistini, Liopropomini, and

Nipponini. In the Catalog of Fishes *Nippon* is maintained in Epinephelinae as well as *Acanthistius* in Anthiadae, *Hemilutjanus* and *Caesiocorpiis* in Serraninae, whereas Liopropomini and Grammistini are not included in Epinephelinae and they are elevated at subfamily rank (Fricke et al. 2019a). Anderson (2018) prepared an annotated checklist of Anthiadae recognizing *Acanthistius* as a member of the subfamily. Smith and Craig (2007) have recommended to include Trachininae as a subfamily of Serranidae and have proposed to elevate the subfamily Epinephelinae to family levels. In the present account, we decided do not follow Smith and Craig recommendations and we agree with Johnson (1983: 780) to exclude Trachinidae and with Betancur-R et al. (2017) to maintain Epinephelinae at the subfamily rank. Despite we do not deny the value of biomolecular studies in resolving affinities between taxonomic groups, we decided to follow the arrangement adopted by the Eschmeyer's Catalog of Fishes on line (ECoF) (Fricke et al. 2019b).

As in other checklists prepared by the senior author (Parenti and Randall 2000, 2011, 2018; Parenti 2019a, b), genera and species are listed alphabetically after a brief introduction of general morphology, habitat and distribution of each subfamily and tribe in which they belong to. A list of synonyms of the family-group names is included following Van der Laan et al. (2014, 2017). Spelling, date, authorship, and type locality of each nominal species have been checked against the latest version of the ECoF. Genera and species are listed together with their synonyms, type locality, type material, distribution, and comments. Misidentifications are included only when a later author, upon noting that a misidentification is a new species, named it for the author who made the misidentification. New combination is not included except in that instances required for additional explanations about the status of a nominal species (e.g. *Epinephelus marginatus*). The expression "new synonym" refers as a new status compared with that present on the ECoF.

Widespread in tropical, subtropical and temperate waters, Serranidae are often at the top of the alimentary chain and represent important fish food in many areas. Distribution is relevant to the species account and terms are those currently accepted with minor modifications. Briefly, Indo-Pacific includes East coast of Africa to central Pacific; if not specifically indicated it does not include Red Sea, Persian Gulf, and Hawaiian Islands; analogously western Indian Ocean does not necessarily include the Red Sea. West Pacific ranges from Japan to coasts of Australia.

Family Serranidae Swainson 1839

(En.: groupers, anthias, sea basses, hamlets, soapfishes; Fr.: mérous, barbiers, serrans; It.: cernie, perchie, castagnole; Germ.: sägerbarsche, zackerbarsche, fahnenbarsche, Sp.: meros, forcadellas)

The fishes of the family Serranidae are characterized by the following morphological traits. Opercle with three spines (rarely two, e.g. *Luzonichthys* and some species of *Pseudanthias*); margin of preopercle nearly always serrate or with 1 to 4 spines. Mouth large, terminal; maxilla exposed when mouth is closed; lower jaw usually projecting anteriorly; bands of small, slender teeth in jaws; canines usually present at front in jaws. Scales small to moderate, adherent, usually ctenoid (or secondary cycloid); lateral line complete (except Pseudogrammini and one species of *Plectranthias*) not extending to or almost to the rear margin of the caudal fin (as in other lower percoids Moronidae and Centropomidae). Dorsal fin continuous, sometimes notched or separated in two dorsal fins (as in some species of the genus *Liopropoma*), with 7-13, usually 9-11 spines and 9-25 soft rays; anal fin with three (rarely two) spines and 6-24 soft rays; pelvic fin with one spine and five soft rays; usually 24-26 vertebrae. Presence of three derived characters states: absence of a posterior uroneural, absence of the procurrent spur, and absence of radial cartilages anterior to the distal ends of neural and haemal spines of the third preural centrum.

Table 1. Genera and species of the family Serranidae.

Subfamily	Genus	n. species	revisions
Anthiadinae (29 genera; 231 species)			
	<i>Acanthistius</i>	11	
	<i>Anatolanthias</i>	1	
	<i>Anthias</i>	9	
	<i>Baldwinella</i>	3	Anderson and Heemstra 2012
	<i>Caesioperca</i>	2	
	<i>Caprodon</i>	4	
	<i>Choranthias</i>	2	Anderson and Heemstra 2012
	<i>Dactylanthias</i>	2	
	<i>Epinephelides</i>	1	
	<i>Giganthias</i>	2	
	<i>Hemanthias</i>	3	
	<i>Holanthias</i>	2	
	<i>Hypoplectrodes</i>	8	
	<i>Lepidoperca</i>	10	Roberts 1989
	<i>Luzonichthys</i>	8	Randall and McCosker 1992
	<i>Meganthias</i>	4	Randall and Heemstra 2006
	<i>Nemanthias</i>	1	
	<i>Odontanthias</i>	16	Randall and Heemstra 2006
	<i>Othos</i>	1	
	<i>Plectranthias</i>	55	Randall 1980
	<i>Pronotogrammus</i>	2	Anderson and Heemstra 2012
	<i>Pseudanthias</i>	63	Heemstra and Akhilesh 2012, in part
	<i>Rabaulichthys</i>	4	
	<i>Sacura</i>	5	Heemstra and Randall 1979
	<i>Selenanthias</i>	3	
	<i>Serranocirrhitis</i>	1	
	<i>Tosana</i>	1	
	<i>Tosanoides</i>	6	
	<i>Trachypoma</i>	1	
Subfamily Epinephelinae			
Tribe Epinephelini (16 genera; 171 species)			
	<i>Aethaloperca</i>	1	
	<i>Alphestes</i>	3	
	<i>Anyperodon</i>	1	
	<i>Cephalopholis</i>	24	Randall and Heemstra 1991
	<i>Cromileptes</i>	1	
	<i>Dermatolepis</i>	3	
	<i>Epinephelus</i>	89	
	<i>Gonioplectrus</i>	1	
	<i>Gracila</i>	1	
	<i>Hyporthodus</i>	18	
	<i>Mycteroperca</i>	15	
	<i>Paranthias</i>	2	
	<i>Plectropomus</i>	8	Randall and Hoese 1986
	<i>Saloptia</i>	1	
	<i>Triso</i>	1	
	<i>Variola</i>	2	

Tribe Diploprionini (3 genera; 5 species)		
<i>Aulacocephalus</i>	1	
<i>Belonoperca</i>	2	
<i>Diploprion</i>	2	
Tribe Grammistini (8 genera; 34 species)		
<i>Aporops</i>	1	Randall and Baldwin 1997
<i>Grammistes</i>	1	
<i>Grammistops</i>	1	
<i>Jeboehlkia</i>	1	
<i>Pogonoperca</i>	2	
<i>Pseudogramma</i>	15	Randall and Baldwin 1997
<i>Rypticus</i>	10	Guimaraes 1999
<i>Suttonia</i>	3	Randall and Baldwin 1997
Tribe Liopropomini (3 genera; 36 species)		
<i>Bathyanthias</i>	4	
<i>Liopropoma</i>	31	Randall and Taylor 1988
<i>Rainfordia</i>	1	
Tribe Nipponini (1 genus; 1 species)		
<i>Nippon</i>	1	
Subfamily Serraninae (12; genera; 101 species)		
<i>Bullisichthys</i>	1	
<i>Centropristis</i>	5	
<i>Chelidoperca</i>	16	
<i>Cratinus</i>	1	
<i>Diplectrum</i>	12	Bortone 1977b
<i>Dules</i>	1	
<i>Hypoplectrus</i>	18	Lobel 2011
<i>Paralabrax</i>	9	
<i>Parasphyraenops</i>	2	
<i>Schultzea</i>	1	Robins and Starck 1961
<i>Serraniculus</i>	1	
<i>Serranus</i>	34	

Serranids are mostly benthic or bottom-oriented fishes, occurring on continental or insular shelves usually in depths less than 200 m over coral reefs or rocky substrates. Several anthiadines have been collected at depths > 300 m. All species are carnivorous, feeding on fishes, a variety of invertebrates or zooplankton. Many species are protogynous hermaphrodites exhibiting in some instances sexual dichromatism (widespread among anthiadines, rare in groupers), whereas a number of species are gonochore. This different reproductive behaviour may be found among species of the same genus. For example, *Paralabrax nebulifer* is gonochore, whereas the other species of the genus are protogynous hermaphrodites and *P. maculatofasciatus* appears to be flexible, with some populations made up of gonochore and some made up of hermaphroditic individuals (Hovey and Allen 2000). Eight species of the subfamily Serraninae (e.g. *Hypoplectrus chlorurus*, *H. unicolor*, *Serranus tabacarius*, *S. phoebe*) are synchronous hermaphrodites with both sexes combined and functional at the same time in a single individual.

Nelson et al. (2016: 446) recognized three subfamilies with about 75 genera and 538 species (Table 1). Since then the number of species increased further bringing the total number of species to 579. It is expected that several new species, in particular Anthiadae, will be discovered as they occur at depth greater than that penetrated by divers with atmospheric air in their tanks.

Subfamily Anthiaginae Poey 1861

(Streamer basses)

Caprodontini Bonaparte 1850 (proposed as subfamily; type genus *Caprodon* Temminck & Schlegel 1843: 64 [genus inferred from the stem, article 11.7.1.1]).

Anthiadides Poey 1861: 363 (proposed as a family; type genus *Anthias* Bloch 1792: 97; inferred from the stem, as a subgenus of *Serranus* Cuvier).

Anthianini Bleeker 1874a: 1.

Anthianini Bleeker 1875-76: 1 15 (proposed as *phalanx* [regarded as equivalent to tribe]).

Hypoplectrodidae Whitley 1929: 110 (proposed as a family; type genus *Hypoplectrodes*, inferred from the stem).

Hypoplectrodidae McCulloch 1929: 153.

Anthiinae Fowler & Bean 1930: 176.

Anthiidae Whitley and Colefax 1938: 290.

Nauruinae Whitley and Colefax 1938: 290 (proposed as a subfamily of Anthiidae; type genus *Naurua* Whitley and Colefax 1938: 290).

Anthiidae Whitley 1951a: 63, 64 (proposed as a replacement name for Hypoplectrodidae of McCulloch 1929).

Stigmatonotidae Whitley 1954: 25 (proposed as a family for *Stigmatonotus australis* Peters 1877).

Gigantiinae Katayama 1959: 105 [proposed as a subfamily; type genus *Gigantias*; name only, but used as valid by Katayama (1960: 111) and by Gosline (1966: 95)].

Temperate to tropical seas; small to moderate-sized (4-40 cm), colourful fishes belonging to three ecologically distinct kinds: i) small, schooling and plankton-feeding, characterized by sexual dichromatism and protogynous hermaphroditism (e.g. *Pseudanthias*); ii) larger, deep water (50-200 m) and plankton-feeding, rarely showing sexual dichromatism (e.g. *Holanthias*, *Selenanthias*); and iii) large or small solitary, benthic (e.g. *Plectranthias*). Dimensions: 4-40 cm. Some 30 genera with 217 species are included by Nelson et al. (2016); 231 species in 29 genera are listed here (Rojas and Pequeño 1998b; Anderson and Baldwin 2000; Ida and Sakaue 2001; Heemstra 2012; Anderson and Heemstra 2012). A number of undescribed species are known from museum collections and more species remain to be discovered mainly due to advances in technical mixed-gas rebreather diving, which now allow scientists to safely document small, active, cryptic, and demersal fishes in ways that have been previously impossible. Anderson (2018) provided a helpful annotated checklist of Anthiaginae including *Acanthistius*. Anderson's checklist does not include synonyms.

Anthiinae was used as valid by Nelson (1976, 1984, 1994, 2006), Nelson et al. (2016), Heemstra and Randall (1986a); Heemstra (1995), Eschmeyer (1998), Hoese et al. (2006), Allen and Erdmann (2008), Anderson and Heemstra (2012); Anderson and García-Moliner (2012), Williams et al. (2013). According to Van der Laan et al. (2017), the stem Anthi- is preoccupied by *Anthias* Bonelli 1813: 18 based on *Anthia* Weber 1801 in Carabidae (Coleoptera), so this stem is invalid in fishes and the name Anthiaginae is adopted.

Genus *Acanthistius* Gill 1862

Acanthistius Gill 1862b: 236 (type species *Plectropoma serratum* Cuvier 1828. Type by monotypy). Gender masculine.

Pseudalphestes Boulenger 1895: 139 as subgenus (type species *Plectropoma pictum* Tschudi 1845. Type by monotypy). Gender masculine.

Temperate waters of the Southern Hemisphere. The South African species have been revised by Heemstra (2010). Eleven valid species and one undescribed are listed here.

Comments: Traditionally placed in Anthiadinae (Anderson 2018) it has been recommended to left this genus in the Percoidei *incertae sedis* (Smith & Craig 2007).

Acanthistius brasilianus (Cuvier 1828)

Plectropoma brasilianum Cuvier in Cuvier & Valenciennes 1828: 397 (15°S, 35°E [incorrect], east of Ilheus, Bahia State, Brazil). Syntypes: MNHN 0000-4540 (1), 0000-6407 (2).

Plectropoma aculeatum Valenciennes in Cuvier & Valenciennes 1828: 523 (Banc des Aiguilles, Brazil). Holotype: MNHN 0000-7675.

Distribution: Off Brazil, Uruguay, and Argentina.

Acanthistius cinctus (Günther 1859)

Plectropoma cinctum Günther 1859: 162 (Norfolk Id). Holotype (unique): BMNH 1855.9.19.1381.

Distribution: Southern Australia, New Zealand, Kermadec Ids, and Lord Howe Ids.

Acanthistius fuscus Regan 1913

Acanthistius fuscus Regan 1913: 368, Pl. 55 (Easter Id, southeastern Pacific). Holotype (unique): BMNH 1913.12.7.1.

Distribution: Eastern South Pacific off Easter Id and Sala y Gómez Id.

Acanthistius joanae Heemstra 2010

Acanthistius joanae Heemstra 2010: 61, figs. 1-5 (Off Umdloti, KwaZulu-Natal, South Africa, southwestern Indian Ocean, depth 80 meters). Holotype: SAIAB 26401. Paratypes: (many) BPBM, SAIAB, SAM, USNM.

Distribution: East coast of South Africa.

Acanthistius ocellatus (Günther 1859)

Plectropoma cyanostigma Günther (*nec* Bleeker) 1859: 161 (Australian seas). Syntypes: (6) BMNH 1846.10.22.1 (right half skin) 1847.6.17.3 (right half skin) 1847.6.17.22 (right half skin) 1848.10.25.7 (1, stuffed) 1848.10.25.8 (right half skin).

Plectropoma ocellatum Günther 1859: 504 (*nomen novum*; replacement name for *P. cyanostigma* Günther 1859).

Plectropoma myriaster Steindachner 1866: 50 (Port Jackson, New South Wales, Australia). Syntypes: NMW 38909 (2).

Distribution: Southeastern Australia and Lord Howe Ids.

Comments: Günther replaced *cyanostigma* with *ocellatum* believing it is preoccupied by *Plectropoma cyanostigma* Bleeker 1845:525. This name, however, is not available, as no distinguishing features are reported (Randall and Hoese 1986: 3). Therefore, *Plectropoma ocellatum* Günther is an unneeded replacement name and the correct name for this species should be *Acanthistius cyanostigma* (Günther 1859) but this combination has never been used and *Plectropoma cyanostigma* Günther 1859 should be declared *nomen oblitum* in order to continue the usage of *Acanthistius ocellatus* (Günther 1859).

Acanthistius pardalotus Hutchins 1981

Acanthistius pardalotus Hutchins 1981: 493, figs. 1b 2 (Rock pool at mouth of Murchison River, Kalbarri 27°42'S 114°12'E, Western Australia). Holotype: WAM P.5113-001. Paratypes: AMS I.21432-001 (1); BMNH 1980.3.24.1 (1); WAM P.3784-001 (1), P.4465-001 (1), P.4502-001 (1), P.4791-001 (1), P.4792-001 (1),

P.5577-001 (1), P.5777-001 (1), P.14532-001 (1), P.14533-001 (1), P.16775-001 (1), P.26664-004 (1), P.26825-001 (2).

Distribution: Western temperate Australia.

Acanthistius patachonicus (Jenyns 1840)

Plectropoma patachonica Jenyns 1840: 11 (Rio de la Plata mouth (depth 40 fathoms) and Patagonia coast, 38°20'S). Syntypes: BMNH 1917.7.14.34-35 (2) 1917.7.25.4 (1, dry, on wood).

Distribution: Off southern Brazil and Argentina.

Acanthistius paxtoni Hutchins & Kuitert 1982

Acanthistius paxtoni Hutchins & Kuitert 1982: 128, fig. 1 (Seal Rocks, New South Wales, Australia). Holotype: AMS I.21555-001. Paratype: AMS I.16997-001 (1).

Distribution: Temperate eastern Australia.

Acanthistius pictus (Tschudi 1846)

Plectropoma pictum Tschudi 1846: 5 (Coast of middle Peru; market at Valparaíso, Chile). Syntypes: (several) ZMB 290 (1).

Distribution: Off Chile, Peru and Ecuador.

Acanthistius sebastoides (Castelnau 1861)

Serranus sebastoides Castelnau 1861: 3 (Algoa Bay, South Africa). Neotype: SAIAB 85233, selected by Heemstra (2010: 64).

Distribution: Namibia to Maputo.

Acanthistius serratus (Cuvier 1828)

Plectropoma serratum Cuvier in Cuvier & Valenciennes 1828: 399 (King George Sound, Western Australia). Holotype: MNHN 0000-7789.

Distribution: Southern and western Australia.

Acanthistius sp.

Acanthistius sp. Heemstra & Randall 1986: 511.

Distribution: Port Alfred, South Africa.

Comments: Based on a single specimen; colour in life unknown.

Genus *Anatolanthias* Anderson, Parin & Randall 1990

Anatolanthias Anderson, Parin & Randall 1990: 923 (type species *Anatolanthias apiomycter* Anderson, Parin & Randall 1990. Type by original designation). Gender masculine.

South Pacific, in deep waters. Monotypic.

Anatolanthias apiomycter Anderson, Parin & Randall 1990

Anatolanthias apiomycter Anderson, Parin & Randall 1990: 924, figs 1-2 (Southeastern Pacific, Nazca Ridge). Holotype: USNM 309202. Paratypes: ZIN 49471 (1).

Distribution: Nazca Ridge, southeastern Pacific.

Genus *Anthias* Bloch 1792

Anthias Bloch 1792: 97 (type species *Labrus anthias* Linnaeus 1758. Type by absolute tautonymy). Gender masculine.

Aylopon Rafinesque 1810: 52 (type species *Labrus anthias* Linnaeus 1758; unneeded replacement name, supposed to be preoccupied by *Anthia* Weber 1801 in Coleoptera). Gender neuter.

Mediterranean, tropical, and subtropical Atlantic, from shallow waters, on rocks and coral reefs to about 200 m depth, usually below 100 m. The genus has been used in a broad sense to include the species presently placed in *Pseudanthias* (Heemstra & Randall 1986). Nine species.

Anthias anthias (Linnaeus 1758)

Labrus anthias Linnaeus 1758: 282 (southern Europe). No types known.

Anthias sacer Bloch 1792: 99, Pl. 315 (unneeded replacement for *Labrus anthias* Linnaeus 1758) (Mediterranean Sea). Holotype (unique): ZMB 8720 (stuffed).

Holocentrus pennanti Suckow 1799: 535 (Gibraltar). No types known.

Perca pennanti Bloch in Cuvier 1828 (Gibraltar). No type known.

Aylopon hispanus Guichenot 1868: 81 (Algésiras Bay, Spain, Eastern Atlantic). Holotype (unique): MNHN 0000-4315.

Aylopon ivicae Guichenot 1868: 81 (Ibiza Id, Spain; Mediterranean Sea). Syntypes: MNHN 0000-4313 (1) Iviça, 0000-4314 (1) Malta.

Aylopon rissoi Guichenot 1868: 82 (Nice, France). Holotype (unique): MNHN 0000-4216.

Aylopon nicaeensis Guichenot 1868: 83 (Nice, France). Syntypes: MNHN 0226 (3).

Aylopon algeriensis Guichenot 1868: 84 (Algeria, western Mediterranean Sea). Syntypes: MNHN 0000-4318 (4).

Aylopon canariensis Guichenot 1868: 84 (Canary Ids and Madeira). Syntypes: MNHN 0000-4316 (2) Madeira, 0000-4317 (1) Canary I.

Anthias sacer brevipes Bellotti 1879: 36 (Nice, France). Holotype: MSNM (destroyed in 1943).

Anthias mundulus Johnson 1890: 452 (Madeira). Syntypes: BMNH 1890.5.31.2-3 (2).

Distribution: Mediterranean, Adriatic, Atlantic from Portugal to Angola, including Azores and Madeira.

Comments: Taxonomic decision of Tortonese (Hureau and Monod 1974: 356) and Maugé (Quero et al. 1990: 707); *Perca pennanti* Bloch is a synonym according to Günther (1859: 88). Bloch (1792: 422, Pl. 9, fig.1) described and illustrated this fish as *Pennantsche barsch* without generic and specific Latin names. The Catalog of Fishes lists *Perca pennanti* Günther 1859: 88 as *nomen nudum* (Eschmeyer 2015); however, several previous authors have included *Perca pennanti* Bloch in their accounts of fishes. The first author was probably Suckow (1799: 535) who described this species under the genus *Holocentrus* as *H. pennanti*, listing the name *Perca pennanti* Bloch into synonymy. Cuvier (1828: 255, footnote) reported *Perca pennanti* and used this name to the specimen illustrated by Bloch; he added that the fish is figured after a specimen collected at Gibraltar sent by Pennant and that Bloch forgot the description and the figure given by Pennant which is according to Cuvier much better than that given by Bloch in his *Histoire naturelle des poissons* (1792: Pl. 315). Bonaparte (1833) listed *Perca pennanti* Bloch in his account of *Anthias sacer* Bloch (= *Labrus anthias* Linnaeus).

Anthias asperilinguis Günther 1859

Anthias asperilinguis Günther 1859: 89 (South America). Holotype (unique): BMNH 1974.10.4.1.

Distribution: Northern South America.

Anthias cyprinoides (Katayama & Amaoka 1986)

Holanthias cyprinoides Katayama & Amaoka 1986: 213, fig.1 (West of Pagalu Id. Annobon Id., Gulf of Guinea). Holotype: HUMZ 100019. Paratypes: HUMZ 100018 (1, not found in 1997) 100020 (1, not found in 1997) 100136 (1) 100137 (1).

Distribution: Southeastern Atlantic.

Comments: Taxonomic decision of Anderson and Baldwin (2000: 370).

Anthias helenensis Katayama & Amaoka 1986

Anthias helenensis Katayama & Amaoka 1986: 215, fig. 2 (North of St. Helena Id, eastern Atlantic). Holotype: HUMZ 100156. Paratypes: HUMZ 100157-63 (1 1 1 1 1 1) with 100158 and 100163 headless.

Distribution: St. Helena, Atlantic Ocean.

Anthias hensleyi (Anderson & García-Moliner 2012)

Odontanthias hensleyi Anderson & García-Moliner 2012: 26, fig. 1 (Mona Passage, off west coast of Puerto Rico 18°07'N, 67°40'W). Holotype: USNM 400888. Paratypes: UPRM 3793 (1), 3794 (1), 3809 (1).

Distribution: Known only from the type locality between Puerto Rico and Dominican Republic; probably more widespread as the specimens have been collected at 338 m of depth.

Anthias menezesi Anderson & Heemstra 1980

Anthias menezesi Anderson & Heemstra 1980: 80, figs. 4-5 (off southern Brazil, 33°38'S, 51°04'W). Holotype: MZUSP 11765. Paratypes: ISH 1732-1968 (2) 1044-1966 (4) 1600-1966 (1); MZUSP 11766-67 (1 1) 12609-10 (1 1); USNM 216270-71 (1 1).

Distribution: Northern South America.

Anthias nicholsi Firth 1933

Anthias nicholsi Firth 1933: 158, fig. (Chesapeake Light Vessel, off Virginia, U.S.A.). Holotype: USNM 92936. Paratypes: AMNH 12337 (1) 20933 [ex USNM] (1); USNM (1 or 2).

Distribution: Virginia to southern Florida, Caribbean Sea and northern South America.

Anthias noeli Anderson & Baldwin 2000

Anthias noeli Anderson & Baldwin 2000: 372, figs. 1-5 (seamount SE of Isla San Cristobal, Galápagos Ids). Holotype: USNM 353113. Paratypes: ANSP 177770 (3); CAS 86573 (1), 86807 (1) 201896 (1); GMBL 95-34 (1); HBOM 107:08471 (1); UF 110990 (2); USNM 351333-35 (2 2 2).

Distribution: Galápagos Ids and Cocos Id in depth from 180 to 350 m.

Anthias woodsi Anderson & Heemstra 1980

Anthias woodsi Anderson & Heemstra 1980: 74, figs. 1-2 (off Dry Tortugas, Florida, U.S.A.). Holotype: FMNH 70709. Paratypes: FMNH 70710 (1), 83708 (1); GMBL 76-245 (1); UF 201781 [ex UMML 1781] (1) 230332-37 [ex UMML 30332-37] (1 1 1 1 1 1); USNM 218882 (1).

Distribution: Tropical western Atlantic.

Genus *Baldwinella* Anderson & Heemstra 2012

Baldwinella Anderson & Heemstra 2012: 109 (type species *Pronotogrammus aureorubens* Longley 1935. Type by original designation). Gender feminine.

Amphiamerican; three species.

Baldwinella aureorubens (Longley 1935)

Pronotogrammus aureorubens Longley 1935: 88 (South of Tortugas, Florida, U.S.A.). Holotype: USNM 101320.

Distribution: Massachusetts and Florida to Antilles and to northern South America.

Baldwinella eos (Gilbert 1890)

Pronotogrammus eos Gilbert 1890: 62 (Gulf of California, Mexico 24°30'15"N 110°29'W, Albatross station 2996). Lectotype: CAS-SU 229 [now at CAS]. Paralectotypes: CAS-SU 69848 [now at CAS] [ex SU 229] (1); USNM 44387 (1), 46550 (3) 125366 [ex USBF] (2). Lectotype selected by Anderson & Heemstra (2012:113).

Distribution: Baja California to Panama and Cocos Id.

Baldwinella vivanus (Jordan & Swain 1885)

Anthias vivanus Jordan & Swain 1885a: 544 (Snapper banks off Pensacola, Florida, U.S.A., stomach content of *Lutjanus vivanus*). Holotype (unique): USNM 36942.

Distribution: North Carolina and northern Gulf of Mexico to northern Brazil.

Genus *Caesioperca* Castelnau 1872

Caesioperca Castelnau 1872: 49 (type species *Serranus rasor* Richardson 1839. Type by monotypy). Gender feminine.

Lacepedia Castelnau 1873: 42 (type species *Lacepedia cataphracta* Castelnau 1873. Type by monotypy). Gender feminine.

Australia and New Zealand. Two species (Paxton et al. 1989).

Caesioperca lepidoptera (Forster 1801)

Epinephelus lepidopterus Forster in Bloch & Schneider 1801: 302 (New Zealand seas). No types known.

Anthias richardsonii Günther 1869a: 429 (Tasmania, Australia). Syntypes: BMNH 1869.2.24.28-29.

Scorpius hectori Hutton 1872, Fishes New Zealand: 4, Pl. 1, fig. 4 (Milford Sound, New Zealand). Holotype (unique): presumed lost.

Distribution: Eastern Australia, New Zealand.

Comments: Taxonomic decisions of McCulloch (1829-30) as reported by Paxton et al., (1989), and Russell (1996).

Caesioperca rasor (Richardson 1839)

Serranus rasor Richardson 1839: 95 (Port Arthur, Tasmania). Holotype (unique): whereabouts unknown.

Anthias rasor extensa Klunzinger 1872: 17 (Hobson's Bay, Victoria, Australia). Syntypes: SMNS 1559.

Lacepedia cataphracta Castelnau 1873: 43 (Melbourne fish market, Victoria, Australia). Holotype (unique): MNHN A-5591 (skin).

Distribution: western, southern and eastern Australia, including Tasmania.

Genus *Caprodon* Temminck & Schlegel 1843

Caprodon Temminck & Schlegel 1843: 64 (*Anthias schlegelii* Günther 1859. Type by subsequent monotypy. Proposed originally without species; one species added and type fixed by subsequent monotypy by Günther 1859: 93, but Günther did not treat *Caprodon* as valid, including it in *Anthias*). Gender masculine.

Neoanthias Castelnau 1879: 366 (*Neoanthias guntheri* Castelnau 1879. Type by monotypy). Gender masculine.

Western Pacific. Four species.

Caprodon krasnyukovae Kharin 1983

Caprodon krasnyukovae Kharin in Kharin & Dudarev 1983: 23, fig. 1 (Western Pacific 25°15.0'N 159°43.3'E, depth 55 meters). Holotype: ZIN 45346.

Distribution: Queensland and New South Wales, Australia, Lord Howe Ids, and Norfolk Id.

Caprodon longimanus (Günther 1859)

Anthias longimanus Günther 1859: 94 (no locality). Holotype (unique): BMNH 1857.6.13.116 (stuffed).

Neoanthias guntheri Castelnau 1879: 367 (Port Jackson, New South Wales, Australia). Holotype (unique): whereabouts unknown.

Scorpis fairchildi Hector 1875: 241 (Bay of Plenty, New Zealand). No types known.

Distribution: Southern Queensland to southern New South Wales and New Zealand.

Comments: Katayama (1960: 136) synonymised this species with *C. schlegelii* (Günther); Paxton et al. (1989) followed McCulloch (1929-30) in regarding this species as distinct from *schlegelii*. *Scorpis fairchildi* is a synonym according to Phillips (1927: 33).

Caprodon schlegelii (Günther 1859)

Anthias schlegelii Günther 1859: 93 (Nagasaki, Japan). Holotype (unique): RMNH D 279.

Caprodon affinis Tanaka 1924: 611, Pl. 148 (fig. 408) (Tokyo market). Holotype (unique): ZUMT 11755.

Distribution: Japan, Taiwan, and tropical Australia.

Comments: Anderson (2018: 11) listed *Caprodon affinis* as valid but with uncertain distribution.

Caprodon unicolor Katayama 1975

Caprodon unicolor Katayama 1975: 13, fig. 1 (Midway Ids., northern Pacific). Holotype: NSMT-P 18221.

Distribution: Known only from the type locality, northern Pacific.

Comments: *Caprodon unicolor* is a junior synonym of *longimanus* according to Kharin and Dudarev (1983). Valid species according to Randall (2007: 190) and Anderson (2018:11).

Genus *Choranthias* Anderson & Heemstra 2012

Choranthias Anderson & Heemstra 2012: 59 (type species *Anthias tenuis* Nichols 1920. Type by original designation). Gender masculine.

Western Atlantic. Two species.

Choranthias salmopunctatus (Lubbock & Edwards 1981)

Anthias salmopunctatus Lubbock & Edwards 1981: 139, fig. 2 (Steep rock face with crevices, south-western side of Belmonte Islet, St Paul's Rocks, mid-Atlantic Ridge, 0°55'N 29°21'W). Holotype: MZUSP 14596. Paratypes: BMNH 1980.1.22.2 (1), SAIAB [formerly RUSI] 985 (1), SMF 15678 (1).

Distribution: Saint Peter and Saint Paul's Rocks, southwestern Atlantic.

Choranthias tenuis (Nichols 1920)

Anthias tenuis Nichols 1920: 60 (Bermuda). Holotype: AMNH 7310. Paratype: AMNH 7311 (1).

Distribution: Bermuda, North Carolina, southeastern Gulf of Mexico, Yucatan, Puerto Rico and southern Caribbean Sea.

Genus *Dactylanthias* Bleeker 1871

Dactylanthias Bleeker 1871: Pl. 282 (type species *Anthias apiodactylus* Bleeker 1858. Type by monotypy). Gender masculine.

Indonesia. Two species.

Dactylanthias apiodactylus (Bleeker 1858)

Anthias apiodactylus Bleeker 1858a: 3 (Ambon Id, Molucca Id, Indonesia). Holotype (unique): RMNH 5457.

Dactylanthias hapiodactylus Boulenger 1895: 333 (unjustified emendation of *Anthias apiodactylus* Bleeker 1858).

Distribution: Papua New Guinea and Sulawesi.

Dactylanthias baccheti Randall 2007

Dactylanthias baccheti Randall 2007: 84, figs. 2-3 (Takaroa Atoll, Tuamotu Archipelago). Holotype (unique): BPBM 40412.

Distribution: Tuamotu Archipelago.

Genus *Epinephelides* Ogilby 1899

Epinephelides Ogilby 1899: 169 (type species *Epinephelides leai* Ogilby 1899. Type by original designation). Gender masculine.

Gilbertella Waite 1902: 182 (type species *Serranus armatus* Castelnau 1875. Type by monotypy). Gender feminine.

Southwestern Australia on offshore reefs to depth of about 100 m; one species.

Epinephelides armatus (Castelnau 1875)

Serranus armatus Castelnau 1875: 7 (Swan River, Western Australia). Holotype (unique): whereabouts unknown.

Epinephelides leai Ogilby 1899: 170 (Pelsart Id, Houtman Abrolhos, Western Australia). Holotype (unique): AMS I.4917.

Distribution: From the Great Australian Bight to Shark Bay.

Comments: Taxonomic decision of McCulloch (1929-30) as reported by Paxton et al. (1989).

Genus *Giganthias* Katayama 1954

Giganthias Katayama 1954: 56 (type species *Giganthias immaculatus* Katayama 1954. Type by original designation). Gender masculine.

West Pacific. Two species. Placed in the subfamily Giganthiinae by Sin-Che Lee (1990).

Gigantias immaculatus Katayama 1954

Gigantias immaculatus Katayama 1954: 57, fig. 1 (Izu-Oshima, Japan). Holotype: NSMT-P 18654. Paratype: Katayama Fish Coll. 1535 (1).

Distribution: Izu Ids, Japan, and Taiwan.

Gigantias serratospinosus White & Dharmadi 2012

Gigantias serratospinosus White & Dharmadi 2012: 63, figs. 1-3 (Tanjung Luar fish landing site, Lombok, East Nusa Tenggara, Indonesia). Holotype (unique): MZB 20015.

Distribution: Known only from Lombok, Indonesia.

Genus *Hemanthias* Steindachner 1875

Hemanthias Steindachner 1875: 378 (type species *Anthias (Hemanthias) peruanus* Steindachner 1875. Type by monotypy). Gender masculine.

Centristhmus Garman 1899: 47 (type species *Centristhmus signifer* Garman 1899. Type by monotypy). Gender masculine.

Anthiasicus Ginsburg 1952: 91 (type species *Anthiasicus leptus* Ginsburg 1952. Type by original designation). Gender masculine.

Amphiamerican, over hard bottom at depths of 30-600 m. Three species.

Hemanthias leptus (Ginsburg 1952)

Anthiasicus leptus Ginsburg 1952: 91, Fig. 4 (off Dauphin Id, Alabama, U.S.A.). Holotype (unique): USNM 134189.

Distribution: South Carolina and northern Gulf of Mexico to Caribbean Sea.

Hemanthias peruanus (Steindachner 1875)

Anthias (Hemanthias) peruanus Steindachner 1875: 378 (Paita, Peru). Lectotype: MCZ 10232 (248 mm SL). Paralectotypes: MCZ 166564 [ex 10232] (1), NMW 42406 (1). Lectotype selected by Anderson & Heemstra 2012:53

Distribution: Baja California to Peru and Galapagos Ids.

Hemanthias signifer (Garman 1899)

Centristhmus signifer Garman 1899: 48, Pl. 69 (fig. 5) (Off Panama Bay, vicinity of 7°40'00"N, 79°17'54"W). Lectotype: MCZ 28771. Paralectotypes: MCZ 166565 [ex MCZ 28771] (1) 28772(1): USNM 120402 [ex MCZ 28771] (1) 153596 [ex. MCZ 28772] (1). Lectotype selected by Anderson & Heemstra (2012:56).

Hemanthias delsolari Chirichigno 1974: 289, fig. 558 (Máncora and Talara, Peru). No type known.

Distribution: Central California to Peru.

Genus *Holanthias* Günther 1868

Holanthias Günther 1868: 226 (type species *Anthias fronticinctus* Günther 1868. Type by original designation). Gender masculine.

Ocyanthias Jordan & Evermann 1896: 1131, 1227 (type species *Aylopon martinicensis* Guichenot 1868. Type by original designation). Gender masculine.

Indo-West Pacific and Atlantic. Two species.

Holanthias caudalis Trunov 1976

Holanthias caudalis Trunov 1976: 263, fig. 1 (near Ascension Id, southeastern Atlantic). Holotype: AtlantNIRO 33. Paratypes: AtlantNIRO 33 (1).

Distribution: Ascension Id, eastern tropical Atlantic.

Holanthias fronticinctus (Günther 1868)

Anthias fronticinctus Günther 1868: 226, Pl. 18 (St. Helena, Atlantic Ocean). Lectotype: BMNH 1867.10.8.40. Paralectotypes: BMNH 1867.12.26.16 (1). Lectotype selected by Anderson and Heemstra (2012:90).

Distribution: Apparently endemic to St. Helena, Ascension Id, and Grattan seamount (260 kilometres southeast of Ascension Id), Atlantic Ocean.

Comments: The name is listed as *Holanthias fronticinctus* Günther 1868 on p. 225. On p. 226 Günther stated that this species may be regarded as the type of a distinct generic division (*Holanthias*), distinguished from *Anthias* by its convex caudal fin. Sometimes misspelled as *Anthias frontocinctus* Günther (Maugé in Quero et al. 1990).

Genus *Hypoplectrodes* Gill 1862

Hypoplectrodes Gill 1862b: 236 (type species *Plectropoma nigrorubrum* Cuvier 1828. Type by monotypy). Gender masculine.

Gilbertia Jordan in Jordan & Eigenmann 1890: 333, 346 (type species *Plectropoma semicinctum* Valenciennes 1833. Type by original designation. Objectively invalid, *nomen praeoccupatum*; preoccupied by *Gilbertia* Cossman 1889 in Mollusca). Gender feminine.

Ellerkeldia Whitley 1927: 298 (type species *Plectropoma annulatum* Günther 1859. Type by original designation; *nomen novum*; replacement name for *Gilbertia* Jordan 1890). Gender feminine.

Scopularia De Buen 1959: 95 (*Scopularia rubra* de Buen 1959. Type by original designation). Gender feminine.

Southern temperate hemisphere, including Australia, New Zealand, Easter Id and Juan Fernandez Id, usually on shallow coastal and estuarine rocky reefs, particularly common in sponge areas. Ten species, two of which are undescribed (Allen and Randall 1990; Gomon et al. 1994).

Hypoplectrodes annulatus (Günther 1859)

Plectropoma annulatum Günther 1859: 158 (Port Jackson, New South Wales, Australia). Holotype (unique): BMNH 1855.9.19.174.

Distribution: Southern Queensland to Wilson Promontory, Victoria.

Hypoplectrodes cardinalis Allen & Randall 1990

Ellerkeldia rubra Allen 1976: 24, fig. 1 (off Beacon Id, Wallabi Group, Houtman Abrolhos Ids, Western Australia). Holotype: WAM P.25314-003. Paratypes: AMS I.18476-001 (1); USNM 214701 (1); WAM P.25226-001 (1), P.25311-007 (2).

Hypoplectrodes cardinalis Allen & Randall 1990: 45 (*nomen novum* for *Ellerkeldia rubra* Allen 1976). Holotype: WAM P.25314-003. Paratypes: AMS I.18476-001 (1), USNM 214701 (1), WAM P.25226-001 (1), WAM P.25311-007 (2).

Distribution: Southwestern Australia.

Comments: According to Allen and Randall (1990: 45) *Ellerkeldia rubra* Allen 1976 is a secondary homonym of *Scopularia rubra* De Buen when both in *Hypoplectrodes*. However, *S. rubra* is a junior synonym of

H. semicinctus (Valenciennes), hence *H. cardinalis* appears as an unneeded replacement name and *H. ruber* should be used for this species. *Hypoplectrodes cardinalis* is in prevailing recent usage: Gomon et al. (1994: 537), Kuitert (1997: 112), Hutchins (2001b: 262), Hutchins (2001b: 30), Allen et al. (2006: 986), Gomon et al (2008: 544) and Anderson (2018: 15) recognized *H. cardinalis* as the valid name for this species.

Hypoplectrodes huntii (Hector 1875)

Plectropoma huntii Hector 1875: 240, Pl. 10 (fig. 1) (Chatham Ids, off New Zealand). Holotype (unique): whereabouts unknown.

Distribution: New Zealand.

Hypoplectrodes jamesoni Ogilby 1908

Hypoplectrodes jamesoni Ogilby 1908a: 16 (Woody Point, Moreton Bay, Queensland, Australia). Holotype: QM I.1537. Paratype: AMS I.9494 (1).

Distribution: Southern Queensland to Sydney.

Hypoplectrodes maccullochi (Whitley 1929)

Ellerkeldia maccullochi Whitley 1929: 110, Pl. 30 (fig. 3) (Maroubra, New South Wales). Holotype (unique): AMS I.12472.

Distribution: Northern New South Wales to eastern Victoria and Tasmania.

Hypoplectrodes nigroruber (Cuvier 1828)

Plectropoma nigrorubrum Cuvier in Cuvier & Valenciennes 1828: 402 (King George Sound, Western Australia). Lectotype: MNHN 0000-7776 (poor condition). Paralectotypes: MNHN 1988-0799 (1). Lectotype selected by Anderson and Heemstra (1989:1005).

Distribution: Northern New South Wales to Houtman Abrolhos (Western Australia), including northern Tasmania.

Hypoplectrodes semicinctus (Valenciennes 1833)

Plectropoma semicinctum Valenciennes in Cuvier & Valenciennes 1833: 442 (Juan Fernández Ids). Holotype (unique): MNHN 0000-7777.

Scopularia rubra De Buen 1959: 95, fig. 14 (Cumberland Bay, Más a Tierra Id, Juan Fernández Ids). Holotype: EMBC 123 (apparently lost). Paratypes: EMBC 124 (1).

Distribution: Juan Fernandez Ids (Chile); record from Easter Id (Yanez 1975: 35) appears as a stray to the island or an error (Allen and Randall 1990: 46).

Hypoplectrodes wilsoni (Allen & Moyer 1980)

Ellerkeldia wilsoni Allen & Moyer 1980: 329, figs. 1-2 (off Dunsborough, Geographe Bay, Western Australia). Holotype: WAM P.26531-010. Paratypes: AMS I.20233-010 (4); WAM P.26531-011 (2), P.26532-001 (5), P.26533-001 (1).

Distribution: Western Australia from Recherche Archipelago to Port Denison.

***Hypoplectrodes* sp. 1**

Distribution: Lord Howe and Kermadec Ids, New Zealand.

Comments: Reported by Francis (1993: 160).

***Hypoplectrodes* sp. 2**

Distribution: Deep offshore waters of New South Wales.

Comments: Reported by Hutchins and Swainston 1993.

Genus *Lepidoperca* Regan 1914

Lepidoperca Regan 1914: 15 (type species *Lepidoperca inornata* Regan 1914. Type by subsequent designation by Roberts 1989). Gender feminine.

Southern Australia, New Zealand, and southern Atlantic in deep shelf waters; the genus has been revised by Roberts (1989) who recognized ten species.

***Lepidoperca aurantia* Roberts 1989**

Lepidoperca aurantia Roberts 1989: 580, fig. 8 (Off northwest coast of South Id, 40°48.8'S 171°24.6'E, New Zealand). Holotype: NMNZ P.14799. Paratypes: AMS I.23991-001 (2); BMNH 1984.24.4.? (1); NMNZ P.14800 (8), P.14801 (1, skeleton), P.10459 (1); WAM P.28301-001 (2).

Distribution: New Zealand.

***Lepidoperca brochata* Katayama & Fujii 1982**

Lepidoperca brochata Katayama & Fujii 1982: 247, fig. 6 (Southeastern Australia, 34°51.7'S 151°07.5'E). Holotype: NSMT-P 21438. Paratypes: AMS I.23359-001 (1); NSMT-P 21439-42 (1 1 1 1); ZUMT 54320 (1).

Distribution: Southeastern Australia.

***Lepidoperca caesiopercula* (Whitley 1951)**

Anthias pulchellus caesiopercula Whitley 1951b: 398 (5 1/4 miles northeast of Cape Moreton, Queensland, Australia). Lectotype: AMS E.2878. Paralectotypes: AMS E.2879 (12). Lectotype selected by Roberts (1989:567).

Distribution: Queensland, Australia.

Comments: A synonym of *L. pulchella* according to Kuitert in Gomon et al. (1994: 544). Roberts (1989: 567) and Anderson (2018: 17) recognized *L. caesiopercula* as valid.

***Lepidoperca coatsii* (Regan 1913)**

Caesioperca coatsii Regan 1913: 237, Pl. 6 (fig. 1) (40°20'S, 9°56'30'W, off Gough Id, southern Atlantic). Syntypes: (several) BMNH 1912.7.1.72-76 (5, now 4), NMSZ 1921.143.374 (3 lots 13).

Distribution: Southern Atlantic from Tristan da Cunha Group, Gough Id, St. Paul and Amsterdam Id and the Austral Seamount.

***Lepidoperca filamenta* Roberts 1987**

Lepidoperca filamenta Roberts 1987: 83 (West of Eucla, Great Australian Bight, 32°20'S 128°00'E, Western Australia). Holotype: AMS I.12339. Paratypes: AMS E.2356-61 (1 1 1 1 1 1), E.2489 (1), I.12335-38 (1 1 1 1) 12340 (1); WAM P.26804-001 (2).

Distribution: Port Lincoln, South Australia, to Cape Naturaliste, Western Australia.

***Lepidoperca inornata* Regan 1914**

Lepidoperca inornata Regan 1914: 15 (Cape North, New Zealand, 34°20'S 173°00'E). Holotype (unique): BMNH 1913.12.4.20.

Distribution: New Zealand and Kermadec Ids.

Comments: *Lepidoperca inornata* represents the female of *L. pulchella* according to Katayama and Fujii (1982); a synonym of *L. pulchella* according to Kuitert in Gomon et al. (1994: 544); it is considered as valid by Paulin et al. (1989: 176), Roberts (1989: 578) and Anderson (2018: 18).

Lepidoperca magna Katayama & Fujii 1982

Lepidoperca magna Katayama & Fujii 1982: 250, fig. 7 (Norfolk Ridge, southern Pacific 29°35'S 168°05.8'E). Holotype: NSMT-P 21443. Paratypes: AMS I.23358-001 (1), NSMT-P 21444-50 (7 1 ea.), ZUMT 54319 (1).

Distribution: Southeastern Australia and New Zealand.

Lepidoperca occidentalis Whitley 1951

Lepidoperca occidentalis Whitley 1951b: 398 (Between Cape Naturaliste and Geraldton, Western Australia). Holotype: AMS E.2493. Paratypes: AMS I.12400 (1), I.12494 (1), I.28926-001 [ex AMS E.2493] (1).

Distribution: Port Lincoln, South Australia, to Houtman Abrolhos Ids, Western Australia.

Lepidoperca pulchella (Waite 1899)

Anthias pulchellus Waite 1899: 77, Pl. 22 (Off Wollongong (34°26'S 151°04'E), New South Wales, Australia). Lectotype: AMS I.3848. Paralectotypes: AMS I.3846-47 (1 1), I.4040 (1). Lectotype selected by Roberts (1989:563).

Distribution: Southeastern Australia (from New South Wales to Victoria and eastern Tasmania) and New Zealand.

Lepidoperca tasmanica Norman 1937

Lepidoperca tasmanica Norman 1937: 54, fig. 2 (off eastern Tasmania). Holotype: BMNH 1937.9.21.13. Paratypes: BMNH 1937.9.21.15-24 (10).

Distribution: Tasmania and New Zealand.

Genus *Luzonichthys* Herre 1936

Luzonichthys Herre 1936: 366 (type species *Mirolabrichthys waitei* Fowler 1931. Type by original designation). Gender masculine.

Naurua Whitley & Colefax 1938: 290 (type species *Naurua waitei* Whitley & Colefax 1938. Type by original designation). Gender feminine.

Indo-Pacific with predilection for deep reefs (except *L. waitei*); eight species. Randall and McCosker (1992) revised the genus. Due to their small size (less than 7 cm total length) and habitat they are difficult to collect, hence the distribution maps are incomplete.

Luzonichthys earlei Randall 1981

Luzonichthys earlei Randall 1981: 14, fig. 4 (off Maile Point, Waianae coast, Oahu Id, Hawaiian Ids). Holotype: BPBM 22754. Paratypes: AMS I.22166-001 (1); BMNH 1981.3.18.3 (1); BPBM 19926 (10) 22607 (1) 22706 (1) 22755 (4); CAS 48093 [not 58093] (1); MNHN 1981-0859 (1); SAIAB [formerly RUSI] 512 (1); USNM 226552 (1).

Distribution: Apparently two disjunct populations, one in the Pacific from Hawaiian Ids, Marshall Ids, the other in the Indian Ocean from Maldives Ids and Christmas Id.

Luzonichthys kiomeamea Shepherd et al. 2019

Luzonichthys kiomeamea Shepherd, Pinheiro, Phelps, Pérez-Matus & Rocha 2019:19, figs. 1-4 (Hanga Piko, Rapa Nui, Chile, -27.15333°, -109.44778°, depth 83 meters). Holotype (unique): CAS 244640.

Distribution: Easter Id, Chile.

Luzonichthys microlepis (Smith 1955)

Naurua microlepis Smith 1955b: 345, fig. 3 (Aldabra Id, 9°30'S, 46°15'E, western Indian Ocean). Holotype (unique): SAIAB [formerly RUSI] 168.

Distribution: Aldabra and Agalega Ids, western Indian Ocean.

Luzonichthys seaver Copus, Ka'apu-Lyons & Pyle 2015

Luzonichthys seaver Copus, Ka'apu-Lyons & Pyle 2015: 3, fig. 1 (southwest end of Ahnd (Ant) Atoll, Senyavin (Pohnpei) Ids, Caroline Ids, Micronesia). Holotype: BPBM 41205. Paratypes: BPBM.

Distribution: Collected from Pohnpei, Micronesia and Moorea, French Polynesia; more localities are expected.

Luzonichthys taeniatus Randall & McCosker 1992

Luzonichthys taeniatus Randall & McCosker 1992: 10, Pl. 1B (fig. 3) (Kadola Id, 5°22'S 127°46'E, Panyu Group, Lucipara Ids, Banda Sea, Indonesia). Holotype: BPBM 32336. Paratypes: BPBM 35037 (1), CAS 62527 (1), USNM 323627 (1).

Distribution: Lucipara Ids, Banda Sea, Indonesia.

Luzonichthys waitei (Fowler 1931)

Mirolabrichthys waitei Fowler 1931: 228, fig. 16 (Port Maricaban, Luzon Id, Philippines). Holotype: USNM 89997. Paratypes: (32) USNM 323542 (8 or 7), 329439 (1).

Naurua addisi Smith 1955b: 348, fig. 4 (Aldabra Id, western Indian Ocean, 9°30'S, 46°15'E). Holotype: SAIAB [formerly RUSI] 161. Paratypes: SAIAB [formerly RUSI] (3).

Luzonichthys robustus Fourmanoir 1977: 267, fig. 1 (northwestern tip of Maré, Loyalty Ids). Holotype: MNHN 1976-0376. Paratypes: BPBM 19963 (1), MNHN 1977-0205 (3) 1992-0001 and 0002 [ex MNHN 1977-0205] (1 1).

Distribution: The species most commonly encountered ranging from Seychelles to the Loyalty Ids and Japan.

Comments: The type series of *Luzonichthys robustus* Fourmanoir is a mixture of different species: the holotype represents *L. waitei*; the paratype BPBM 19963 from Kwajalein, Marshall Ids has been demonstrated to represent a specimen of *L. earlei* Randall and McCosker (1981: 6 14); four specimens of the type series represent *Luzonichthys williamsi* Randall & McCosker.

Luzonichthys whitleyi (Smith 1955)

Naurua waitei Whitley & Colefax 1938: 290, fig. 1 (Nauru, Gilbert Ids) (*nomen praeoccupatum*; preoccupied by *Mirolabrichthys waitei* Fowler 1931 when both in *Luzonichthys*). Holotype: AMS I.6680. Paratypes: AMS I.21031-001 [ex AMS I.6680, not 21032-001] (7).

Naurua whitleyi Smith 1955b: 345. Holotype: AMS I.6680. Paratype: AMS I.21031-001 (Nauru, Gilbert Ids) (*nomen novum*; replacement name for *Naurua waitei*).

Distribution: Christmas Id (eastern Indian Ocean) and central Pacific from Nauru, Phoenix Ids, and Line Ids.

Luzonichthys williamsi Randall & McCosker 1992

Luzonichthys williamsi Randall & McCosker 1992: 17, Pl. 2D (fig. 4) (Bagaat Islet 20°37'18"S 166°16'08"E, Ouvéa Atoll, Loyalty Ids). Holotype: USNM 322225. Paratypes: BPBM 35038 (1), MNHN 1992-0942 (1).

Distribution: Loyalty Ids.

Genus *Meganthias* Randall & Heemstra 2006

Meganthias Randall & Heemstra 2006: 27 (type species *Sacura natalensis* Fowler 1925. Type by original designation). Gender masculine.

Eastern Atlantic and Indo-West Pacific. Four species.

Meganthias carpenteri Anderson 2006

Meganthias carpenteri Anderson 2006: 405, figs. 1- 2, 3A-B, 5B (off Nigeria, eastern Atlantic). Holotype: USNM 386079. Paratypes: USNM 386080 (1).

Distribution: Off Nigeria, eastern Atlantic.

Meganthias filiferus Randall & Heemstra 2008

Meganthias filiferus Randall & Heemstra 2008: 6, figs. 1-2 (off southwest coast of Thailand, Andaman Sea, depth 150 meters). Holotype (unique): PMBC 10034.

Distribution: Andaman Sea, coast of Thailand to southwestern India.

Meganthias kingyo (Kon, Yoshino & Sakurai 2000)

Holanthias sp. Kon, Yoshino & Sakurai 1998, Proc. 31st Annual Meeting, Kochi, Japan.

Holanthias kingyo Kon, Yoshino & Sakurai 2000: 75, fig. 1 (Houzan-sonne, off Miyako Id, Okinawa, Ryukyu Ids, Japan). Holotype: URM-P 18748. Paratype: URM-P 28315 (1).

Distribution: Ryukyu Ids, Japan.

Meganthias natalensis (Fowler 1925)

Sacura natalensis Fowler 1925: 226, fig. 2 (KwaZulu-Natal, South Africa, southwestern Indian Ocean). Holotype (unique): ANSP 93154.

Holanthias furcatus Pellegrin 1935: 51 (Réunion, western Mascarenes, southwestern Indian Ocean). Syntypes: MNHN 1934-0272 (1, dry), Mus. Levallois-Perret (1, not found).

Glaucosoma pealopesi Smith 1939: 216, fig. 1 (Between Delagoa Bay and Inhambane, Mozambique, western Indian Ocean). Holotype (unique): MHNMM [Museu Alvarez da Castro] (dry).

Distribution: East London, South Africa, to Madagascar and Réunion.

Genus *Nemanthias* Smith 1954

Nemanthias Smith 1954a: 4 (type species *Nemanthias carberryi* Smith 1954. Type by original designation). Gender masculine.

Emmelanthias Smith 1955b: 342 (type species *Emmelanthias stigmatipteron* Smith 1955b. Type by original designation). Gender masculine.

Western Indian Ocean on coral reefs in depths of 10-30 m. Monotypic.

Nemanthias carberryi Smith 1954

Nemanthias carberryi Smith 1954a: 4, fig. 2 (Malindi, Kenya, western Indian Ocean). Holotype: SAIAB [formerly RUSI] 153. Paratypes: (9) Some of SAIAB [formerly RUSI] 963 (19), 964 (48).

Emmelanthias stigmatyeron Smith 1955b: 342, fig. 2 (Pekweni, 33°25'S 27°15'E, east of Port Alfred, South Africa, western Indian Ocean). Holotype (unique): SAIAB [formerly RUSI] 141.

Distribution: Widespread in the western Indian Ocean to Maldives Ids.

Genus *Odontanthias* Bleeker 1873

Odontanthias Bleeker 1873a: 236 (type species *Serranus borbonius* Valenciennes 1828. Type by original designation). Gender masculine.

Scalantarus Smith 1965: 535 (type species *Anthias chrysostictus* Günther 1872. Type by original designation). Gender masculine.

Indo-West Pacific.

Comments: *Scalantarus* Smith was regarded as synonym of *Holanthias* Günther by Heemstra & Randall (1986); genus then revised by Randall and Heemstra (2006); 16 species.

Odontanthias borbonius (Valenciennes 1828)

Serranus borbonius Valenciennes in Cuvier & Valenciennes 1828: 263 (Réunion, western Mascarenes, southwestern Indian Ocean). Holotype (?): MNHN 0000-0983.

Serranus delissii Bennett 1831: 126 (Mauritius). Holotype (unique): BMNH 1852.9.13.106.

Aylopon mauritianus Guichenot 1868: 86 (Réunion, western Mascarenes). Syntypes: MNHN 0000-4320 (1, dry) Réunion, MNHN 0000-4322 (1, dry) Mauritius.

Anthias ornatus Fourmanoir 1955: 213, fig. 8 (Grande Comoro and Anjouan Ids, Comoro Ids). Holotype: SAIAB [formerly RUSI] 48.

Distribution: Western Indian Ocean to Japan and Mariana Ids.

Odontanthias caudicinctus (Heemstra & Randall 1986)

Holanthias caudicinctus Heemstra & Randall 1986: 513, Pl 34 (fig. 116.11 a, b) (off Kenya). Holotype: Shown in Pl. 34. Paratypes: BPBM 30637 (3); CAS 57164 (2); SAIAB [formerly RUSI] 24183-85 (1, 3 1); USNM 272104 (3) 273881 (1).

Distribution: Kenya to South Africa.

Odontanthias cauoh Carvalho-Filho, Macena & Nunes 2016

Odontanthias cauoh Carvalho-Filho, Macena & Nunes 2016: 586, figs. 2-3 (São Pedro and São Paulo Archipelago, Brazil). Holotype (unique): MZUSP 111260.

Distribution: Known only from the holotype.

Odontanthias chrysostictus (Günther 1872)

Anthias chrysostictus Günther 1872: 655, Pl. 56 (Manado, Sulawesi, Indonesia). Syntypes: BMNH 1871.7.20.142-143 (2).

Distribution: Japan to Indo-Australian Archipelago and Marianas Ids.

Odontanthias dorsomaculatus Katayama & Yamamoto 1986

Odontanthias dorsomaculatus Katayama & Yamamoto 1986: 387, fig. 1 (Saya de Malha Bank, western Indian Ocean 10°43'S, 61°19'E). Holotype: HUMZ 74194. Paratypes: HUMZ 73951 (1).

Distribution: North Indian Ocean.

Odontanthias elizabethae Fowler 1923

Odontanthias elizabethae Fowler 1923: 380 (Honolulu, Oahu Id, Hawaiian Ids). Holotype: BPBM 3404. Paratypes: BPBM 3405 (1).

Distribution: Hawaiian Ids and Johnston Atoll.

Odontanthias flagris Yoshino & Araga 1975

Odontanthias flagris Yoshino & Araga in Masuda et al. 1975: 219, Pl. 51 (fig. b) (off Okinawa Id, Ryukyu Ids). Holotype: SMBL F73147. Paratypes: SMBL 73148-55 (8).

Distribution: Okinawa and Ogasawara Archipelago.

Odontanthias fuscipinnis (Jenkins 1901)

Anthias fuscipinnis Jenkins 1901: 389, fig. 3 (Honolulu, Oahu, Hawaiian Ids). Holotype: USNM 49695. Paratypes: CAS-SU 6113 (2).

Distribution: Hawaiian Ids (in deep waters).

Odontanthias grahami Randall & Hoese 2006

Odontanthias grahami Randall & Hoese 2006: 17, figs. 1H, 7, Pl. IVB (Off northern New South Wales 28°27'S 153°50'E to 28°24'S 153°49'E). Holotype (unique): AMS I.32142-010.

Distribution: Off New South Wales.

Odontanthias katayamai (Randall, Maugé & Plessis 1979)

Holanthias katayamai Randall, Maugé & Plessis 1979: 16, fig. 1 (Northwest of Haputu Point, Guam, Mariana Ids, western Pacific). Holotype: BPBM 8527. Paratypes: BPBM 5848 (1), MNHN 1978-0136 (1), URB 78-0148 (1).

Distribution: Indo-West Pacific.

Odontanthias randalli White 2011

Odontanthias randalli White 2011: 22, figs. 1-2 (Tanjung fish landing site, 8°45'S 116°35'E, Lombok, East Nusa Tenggara, Indonesia). Holotype: MZB 20010. Paratypes: CSIRO H 7217-01 (1), 7218-01 (1), 7219-01 (1), 7219-02 (1), 7220-01 (1), 7221-01 (1); MZB 20011-14 (1 ea.).

Distribution: Lombok, southern Indonesia.

Odontanthias rhodopeplus (Günther 1872)

Anthias rhodopeplus Günther 1872: 654, Pl. 55 (Manado, Sulawesi, Indonesia). Holotype (unique): BMNH 1871.7.20.49.

Anthias pannuceus Tanaka 1922: 584, Pl. 145 (fig. 402) (Tokyo fish market, Japan). Holotype: ZUMT 9960.

Holanthias perumali Talwar 1976: 362, fig. (Arabian Sea off Quilon, 9°N, 76°E, India). Holotype: ZSI F6566/2. Paratypes: ZSI F6567/2 (1), 6568/2 (4).

Comments: Taxonomic decisions of Katayama (1960) and Randall and Heemstra (2006).

Odontanthias tapui (Randall, Maugé & Plessis 1979)

Holanthias tapui Randall, Maugé & Plessis 1979: 20, fig. 3 (About 1/3 mile offshore from Vairao fringing reef, southern coast of Tahiti, Society Ids). Holotype: MNHN 1978-0459. Paratypes: BPBM 17345 (1), SAIAB [formerly RUSI] 4680 (1).

Distribution: Cook Ids and Tahiti.

Odontanthias unimaculatus (Tanaka 1917)

Anthias unimaculatus Tanaka 1917a: 199 (Tanabe, Wakayama Prefecture, Japan). Holotype (unique): apparently lost.

Distribution: Japan, Taiwan.

Odontanthias wassi Randall & Hoese 2006

Odontanthias wassi Randall & Hoese 2006: 17, figs. 1M, 6 10, Pl. VIC (Ofu Id, off village, American Samoa). Holotype (unique): BPBM 39373.

Distribution: Samoa.

Odontanthias xanthomaculatus (Fourmanoir & Rivaton 1979)

Anthias xanthomaculatus Fourmanoir & Rivaton 1979: 414, fig. 8 (Bulari Pass, New Caledonia). Holotype (unique): MNHN 1978-0477.

Distribution: New Caledonia.

Comments: Allocation in genus *Odontanthias* follows Gill and Russell (2019).

Genus *Othos* Castelnau 1875

Othos Castelnau 1875: 43 (type species *Othos cephalotes* Castelnau 1875. Type by monotypy). Gender masculine.

Colpognathus Klunzinger 1879: 339 (type species *Plectropoma dentex* Cuvier 1828. Type by monotypy; *nomen praeoccupatum*, preoccupied by Wesmael 1844 in Hymenoptera).

Chenia Fowler 1958: 16 (type species *Plectropoma dentex* Cuvier 1828; *nomen novum*, replacement name for *Colpognathus* Klunzinger 1879 and *nomen praeoccupatum*; preoccupied by Hsu 1954 in Platyhelminthes, not replaced). Gender feminine.

Southern Australia on shallow rocky reefs with drop-offs and caves at depth of at least 30 m. One species.

Othos dentex (Cuvier 1828)

Plectropoma dentex Cuvier in Cuvier & Valenciennes 1828: 394 (King George Sound, Western Australia). Holotype (unique): MNHN 0000-7678.

Plectropoma richardsonii Günther 1862: 391, Pl. 38 (Freemantle, Western Australia). Holotype (unique): BMNH 1861.5.18.14.

Othos cephalotes Castelnau 1875: 44 (Swan River, Western Australia). Holotype (unique): whereabouts unknown.

Distribution: Port Phillip Bay, Victoria, to Green Head, Western Australia.

Genus *Plectranthias* Bleeker 1873

Plectranthias Bleeker 1873a: 238 (type species *Plectropoma anthioides* Günther 1872. Type by monotypy). Gender masculine.

Paracirrhites Steindachner in Steindachner & Döderlein 1883c: 25 (type species *Paracirrhites japonicus* Steindachner 1883. Type by monotypy; *nomen praeoccupatum*; preoccupied by *Paracirrhites* Bleeker 1875 in fishes). Gender masculine.

Sayonara Jordan & Seale 1906b: 145 (type species *Sayonara satsumae* Jordan & Seale 1906. Type by original designation). Gender feminine.

Isobuna Jordan in Jordan & Herre 1907: 158 (type species *Paracirrhites japonicus* Steindachner 1883; *nomen novum*, replacement name for *Paracirrhites* Steindachner 1883). Gender feminine.

Xenanthias Regan 1908: 223 (type species *Xenanthias gardineri* Regan 1908. Type by monotypy). Gender masculine.

Pteranthias Weber 1913: 208 (type species *Pteranthias longimanus* Weber 1913. Type by monotypy). Gender masculine.

Zalanthias Jordan & Richardson 1910: 470 (type species *Anthias kelloggi* Jordan & Evermann 1903. Type by original designation). Gender masculine.

Serranops Regan 1914: 15 (type species *Serranops maculicauda* Regan 1914. Type by monotypy). Gender masculine.

Pelontrus Smith 1961a: 364 (type species *Pelontrus morgansi* Smith 1961. Type by original designation). Gender masculine.

Zacallanthias Katayama 1964: 27 (type species *Zacallanthias sagamiensis* Katayama 1964. Type by original designation). Gender masculine.

Indo-Pacific except one species (*garrupellus*) from the western Atlantic. The genus was revised by Yoshino (1972) who recognized only two species, and Randall (1980) who recognized 17, of which 13 were described as new; 55 species are presently listed here (Randall and Shimizu 1994; Randall and Hoese 1995; Randall 1996b; Anderson and Baldwin 2000; Shepherd et al. 2018). Undescribed species are also known (Williams et al. 2013: fig. 1).

Plectranthias ahiahiata Shepherd et al. 2018

Plectranthias ahiahiata Shepherd, Phelps, Pinheiro, Pérez-Matus & Rocha 2018: 107, figs. 1-3 (Hanga Piko, Rapa Nui, Chile). Holotype (unique): CAS 244172.

Distribution: Easter Id, Southeastern Pacific.

Plectranthias alcocki Bineesh, Gopalakrishnan & Jena 2014

Plectranthias alcocki Bineesh, Gopalakrishnan & Jena In Bineesh, Akhilesh, Gopalakrishnan & Jena 2014: 492, figs. 2-4 (Off Kollam, Kerala coast, India, southeastern Arabian Sea). Holotype: CMFRIGB 31.139.30.10. Paratypes: CMFRIGB 31.139.20.10.1 (1).

Distribution: Off Kerala coast, India.

Plectranthias alleni Randall 1980

Plectranthias alleni Randall 1980: 113, fig. 2 (Off southwestern Western Australia 29°09'S 113°55'E). Holotype: WAM P.25625-001. Paratypes: AMS I.20125-001 (1); ANSP 136750 (1); BMNH 1978.2.27 (3); BPBM 21093-96 (2 2, 7 1); CAS 40799 (1); MNHN 1978-0082 (1); SAIAB [formerly RUSI] 933 (1); USNM 218368 (3); WAM P.23309-001 (1), P.23322-001 (1), P.23323-001 (1), P.23325-001 to P.23330-001 (10) 23334-001 (1).

Distribution: Western Australia from Cape Freycinet to Dongara (between latitude 29° and 33°S) at depths of 90-192 m.

Plectranthias altipinnatus Katayama & Masuda 1980

Plectranthias altipinnatus Katayama & Masuda 1980b: 185, fig. 1 (Izu Peninsula, Japan). Holotype (unique): ZUMT 54242.

Distribution: Izu Peninsula, Japan.

Plectranthias anthioides (Günther 1872)

Plectropoma anthioides Günther 1872: 655 (Manado, Sulawesi, Indonesia). Holotype (unique): BMNH 1871.7.20.49.

Distribution: West Pacific: Indonesia and Taiwan.

Plectranthias bauchotae Randall 1980

Plectranthias bauchotae Randall 1980: 118, fig. 4 (Banc de l'Etoile 25°54'S, 44°36'E, south of Madagascar). Holotype (unique): MNHN 1978-0084.

Distribution: Off southern Madagascar.

Comments: Described on the basis of a single specimen trawled from a bank in 140-180 m.

Plectranthias bennetti Allen & Walsh 2015

Plectranthias bennetti Allen & Walsh 2015: 85, figs. 1-4 (Holmes Reefs, Coral Sea, Australia). Holotype (unique): QM I.39334.

Distribution: Known only from a single specimen.

Plectranthias bilaticlavata Paulin & Roberts 1987

Plectranthias bilaticlavata Paulin & Roberts 1987: 13, fig. 1 (off Bells Flat, Raoul Id, Kermadec Ids, northwest of New Zealand). Holotype: NMNZ P.14024. Paratypes: NMNZ P.20264 (1), NZOI P697 (1).

Distribution: New Zealand.

Plectranthias cirrhitoides Randall 1980

Plectranthias cirrhitoides Randall 1980: 121, fig. 5 (Cave in reef, southwestern side of Karapoo Iti Islet at southern end of Rapa Id, French Polynesia). Holotype: BPBM 15066. Paratypes: BPBM 15067 (1), USNM 212177 (1).

Distribution: Rapa, French Polynesia.

Plectranthias elaine Heemstra & Randall 2009

Plectranthias elaine Heemstra & Randall 2009: 7, fig. 2 (off Qolora River, Eastern Cape Province, 32°38.2'S 28°27.6'E, South Africa). Holotype: SAIAB 28200.

Distribution: Eastern Cape Province to KwaZulu-Natal, South Africa.

Plectranthias elongatus Wu, Randall & Chen 2011

Plectranthias elongatus Wu, Randall & Chen 2011: 248, fig.1 (Hsing-Ta Harbour, Kaohsiung, southwestern Taiwan 22°41.566'N 119°54.085'E). Holotype (unique): NMMST P01301.

Distribution: Known only from the holotype taken by trawling at 200-243 m off Hsing-Ta Harbour, Kaohsiung, southwestern Taiwan in 2004.

Plectranthias exsul Heemstra & Anderson 1983

Plectranthias exsul Heemstra & Anderson 1983: 632, figs. 1-2 (Off Juan Fernández Id, 33°37'S, 78°49'W). Holotype: ANSP 127843. Paratypes: BPBM 27978 (1), MCZ 52520 (2), USNM 176577 (1), ZMMU P-16022.

Plectranthias lamillai Rojas & Pequeño 1998: 203 (Rey de Bastos Sector, Isla Alejandro Selkirk, 33°46'S, 80°46'W, Juan Fernández Archipelago). Holotype (unique): MNHNC P.7055.

Distribution: Southeastern Pacific (Rojas and Pequeño 1998c:49).

Comments: Synonymy from Anderson and Baldwin (2000: 381).

Plectranthias fijiensis Raj & Seeto 1983

Plectranthias fijiensis Raj & Seeto 1983: 15, fig. 1 (Suva Barrier Reef, Fiji 18°12'S 178°25'E). Holotype (unique): USP 4392.

Distribution: Fiji Ids.

Plectranthias flammeus Williams, Delrieu-Trottin & Planes 2013

Plectranthias flammeus Williams, Delrieu-Trottin & Planes 2013: 170, figs. 2, 4 (Nuku Hiva, Uea, west coast, Marquesas Ids, French Polynesia). Holotype: USNM 409013. Paratypes: MNHN 2013-0001 [ex. USNM 409014] (1); USNM 409019 (1), 409425 (1).

Distribution: Marquesas Ids.

Plectranthias foresti Fourmanoir 1977

Plectranthias foresti Fourmanoir 1977: 269, fig. 2 (Philippines 14°01'N 120°16'E). Holotype: MNHN 1976-0377. Paratypes: BPBM 20873 (2).

Distribution: Philippines.

Plectranthias fourmanoiri Randall 1980

Plectranthias fourmanoiri Randall 1980: 125, fig. 7 (Enewetak Id, Marshall Ids). Holotype: BPBM 17242. Paratypes: ANSP 128436 (1); BMNH 1974.8.8.1 (1); BPBM 9263 (1), 9608 (1) 13925 (2) 15068 (1) 17466 (1); CAS 30867 (1); MNHN 1971-0133 (1); USNM 212176 (1); WAM P.26085-029 (1), P.26113-004 (2), P.26126-005 (1).

Distribution: Christmas Id (eastern Indian Ocean), Marshall Ids, Samoa, Tuamotu Archipelago, Society Ids, Pitcairn Group and Cook Ids.

Plectranthias gardineri (Regan 1908)

Xenanthias gardineri Regan 1908: 223, Pl. 28, fig. 1 (Amirante Ids, Seychelles, Indian Ocean). Lectotype: BMNH 1908.3.23.62. Paralectotypes: BMNH 1908.3.23.63-66 (4). Lectotype selected by Randall (1980:130).

Distribution: Seychelles.

Plectranthias garrupellus Robins & Stark 1961

Plectranthias garrupellus Robins & Stark 1961: 295, fig. 7a (Caribbean Sea 28°52'N, 80°05'W). Holotype: ANSP 95129. Paratypes: ANSP 94416 (1), FMNH 65811 (1), UF 204523 [ex UMML 4523] (1), USNM 197392 (1).

Distribution: Western Atlantic from Bahamas, east coast of Florida, and Antilles.

Plectranthias helenae Randall 1980

Plectranthias helenae Randall 1980: 131, fig. 10 (off northern shore of Oahu Id 21°43'36" - 21°40'N 158°04'06" - 158°07'18"W, Hawaiian Ids). Holotype: BPBM 13957. Paratypes: BPBM 21091 (1), CAS 40803 (1), USNM 218367 (1).

Distribution: Hawaiian Ids, Johnston Atoll, and Taiwan.

Comments: Described on the basis of a single specimen trawled in 119-168 m off the north Shore of Oahu.

Plectranthias inermis Randall 1980

Plectranthias inermis Randall 1980: 135, fig. 11 (Southwestern side of Caban Id, Batangas, Luzon Id, Philippines). Holotype: BPBM 22468. Paratypes: BMNH 1978.2.27 (2); BPBM 20324 (1) 21087 (2) 22460 (3); CAS 40800 (1); NCIP 3768-3769 (2); USNM 210121 (1); WAM P.26121-001 (2), P.26125-008 (1).

Distribution: eastern Indian Ocean from Christmas Id and West Pacific from Philippines, New Britain, and Moluccas.

Plectranthias intermedius (Kotthaus 1973)

Xenanthias intermedius Kotthaus 1973: 26, fig. 293 (off Socotra, Arabian Sea 11°33.9'N, 52°54'E to 11°38'N, 52°52'E, Meteor station 102). Holotype: ZMH 5132 [ex IOES 167a]. Paratypes: ZMH 5133 [ex IOES 167b] (1).

Distribution: Gulf of Aden.

Plectranthias japonicus (Steindachner 1883)

Paracirrhites japonicus Steindachner in Steindachner & Döderlein 1883c: 25. Holotype (unique): NMW.

Sayonara satsumae Jordan & Seale 1906: 145, fig. 3 (Yamagawa, near Kagoshima, Satsuma Province, Japan). Holotype (unique): CAS-SU 9259.

Sayonara mitsukurii Smith & Pope 1906: 469, fig. 3 (Kagoshima, Japan). Holotype (unique): USNM 55617.

Distribution: Japan, Korea, Taiwan, Philippines and Northern Territory (Australia).

Comments: *S. satsumae* is listed as valid by Paxton et al. (1989: 507), apparently overlooking the Randall's taxonomic decisions (Randall 1980:139).

Plectranthias jothyi Randall 1996

Plectranthias jothyi Randall 1996b: 122, fig. 1 (Strait of Malacca, northern part of west coast of Peninsular Malaysia). Holotype (unique): BPBM 30230.

Distribution: Philippines.

Plectranthias kamii Randall 1980

Plectranthias kamii Randall 1980: 141, fig. 14 (Naha fish market, Okinawa Id, Ryukyu ids, Japan). Holotype: BPBM 19636. Paratypes: BPBM 5845 (1), USNM 219329 (1).

Distribution: Japan, Ryukyu Ids, Taiwan, Indonesia, Mariana Ids, Palau.

Comments: Randall (1980) regarded as misidentifications the specimens identified as *anthioides* by Katayama (1960) and Yoshino (1972) from Japan and described the new specie *P. kamii*. Lee (1990) described new specimens intermediate between *P. anthioides* and *P. kamii* and synonymized the latter with the former.

Plectranthias kelloggi (Jordan & Evermann 1903)

Anthias japonicus Döderlein in Steindachner and Döderlein 1883a: 49 (Tokyo, Japan) (*nomen praeoccupatum*; preoccupied by *Anthias japonicus* Bloch [= *Scolopsis vosmeri* (Bloch)]). Syntypes: ?BMNH 1891.5.26.1 (1), MZS 1180 (1); NMW 42378-79 (1, 3), ?ZMB 12058 (1). Species described as new also in Steindachner and Döderlein 1883b: 227, Pl. 3, fig. 2.

Anthias kelloggi Jordan & Evermann 1903: 179 (Off Kailua, Hawaii Id, Hawaiian Ids). Holotype: USNM 50642. Paratypes: CAS-SU 7460 (1), USNM 125630 [ex USFC 2711] (1).

Pseudanthias azumanus Jordan & Richardson 1910: 470 (Tokyo Bay, Japan) (*nomen novum*, replacement name for *Anthias japonicus* Döderlein 1883). Syntypes: NMW 42378-79 (1, 3).

Plectranthias kelloggi melanesius Randall 1980: 148 (Isle of Pines, New Caledonia). Holotype: BPBM 22484. Paratypes: BPBM 21067 (1) 22485 (4).

Anthias rubromaculatus Borets 1982: 68, unnumb. fig. (Milwaukee Seamount, 32°01'N 173°08'W, Hawaiian Ridge). Holotype: ZIN 45853. Paratypes: [ex Mus. Fisheries Inst. Vladivostok 72d] (5, whereabouts unknown).

Distribution: West to central Pacific; Randall (1980) regarded as valid subspecies the three population described from Japan (*japonicus*), Hawaiian Ids (*azumanus*), and New Caledonia (*melanesicus*). *Anthias rubromaculatus* Borets is a synonym according to Mundy (2005: 342).

Plectranthias klausewitzii Zajonz 2006

Plectranthias klausewitzii Zajonz 2006: 21, figs. 2-3 (Northwest of Perim Id, Strait of Perim, Yemen, southern Red Sea 12°43.7'N, 43°15.0'E). Holotype: SMF 29279. Paratypes: (6) SMF 29294 (5); SAIAB 65098 (1).

Distribution: Red Sea.

Plectranthias knappi Randall 1996

Plectranthias knappi Randall 1996b: 126, fig. 2 (Southwest of Caruruan Pt. 11°38'00"N 123°52'38"E, Visayan Sea between northern Negros and Masbate Id, Philippines). Holotype (unique): USNM 219865.

Distribution: Malaysia to Philippines.

Plectranthias lasti Randall & Hoese 1995

Plectranthias lasti Randall & Hoese 1995: 332, fig. 3 (175 kilometres north of Port Hedland 18°32'S 118°17'E, Northwest Shelf, Western Australia). Holotype: AMS I.22807-056. Paratypes: CSIRO H 651-02 (1).

Distribution: Queensland and northern shelf of Western Australia (200-370 m depth).

Plectranthias longimanus (Weber 1913)

Pteranthias longimanus Weber 1913: 209, fig. 54 (Paternoster Id, East Indies, Siboga station 315). Lectotype: ZMA 113364. Paralectotypes: (7) SAIAB [formerly RUSI] 818 [ex ZMA 100477] (1); ZMA 100475-78 (1 1 2 1). Lectotype selected by Randall (1980:149).

Distribution: Western Indian Ocean and West Pacific from Okinawa to New Caledonia, Loyalty Ids, Fiji, eastward to Caroline Ids.

Plectranthias maculicauda (Regan 1914)

Serranops maculicauda Regan 1914: 15 (Cape North, New Zealand). Lectotype: BMNH 1913.12.4.12-19 (83 mm SL). Paralectotypes: BMNH 1913.12.4.12-19 (8). Lectotype selected by Randall (1980:152).

Distribution: North Id, New Zealand and New South Wales.

Plectranthias maekawa Wada, Senou & Motomura 2018

Plectranthias maekawa Wada, Senou & Motomura 2018:270, figs. 1, 2a (Off Gaja-jima island, Tokara Islands, Ryukyu Islands, Kagoshima Prefecture, Japan 29°53'04"N 129°37'11"E, depth 170 meters). Holotype: KAUM-I 110114. Paratypes: KAUM-I.

Distribution: Tokara Islands, Ryukyu Islands, Japan.

Plectranthias maugei Randall 1980

Plectranthias maugei Randall 1980: 152, fig. 18 (off Tuléar 23°36'03"S, 43°32'05"E, Madagascar). Holotype: MNHN 1978-0083. Paratypes: BPBM 21157 (1), MNHN 1978-0184 (1).

Distribution: Off Madagascar.

Comments: Described on the basis of a single specimen collected at a depth of 250 m.

Plectranthias megalepis (Günther 1880)

Anthias megalepis Günther 1880: 37, Pl. 16 (fig. E) (Kai Ids, Challenger station 192, Indonesia, Arafura Sea). Lectotype: BMNH 1879.5.14.180. Paralectotypes: BMNH 1890.2.26.28 (1). Lectotype selected by Randall (1980:157).

Distribution: Kai Id, Arafura Sea.

Comments: The syntype series of *A. megalepis* represents three different species, two of which have been described as new by Randall (1980), *P. wheeleri* and *P. whiteheadi*.

Plectranthias megalophthalmus Fourmanoir & Randall 1979

Plectranthias megalophthalmus Fourmanoir & Randall 1979: 316, fig. 1 (South of Isle of Pines, New Caledonia). Holotype (unique): BPBM 22486.

Distribution: New Caledonia.

Comments: Described on the basis of a single specimen collected at a depth of 360 m.

Plectranthias morgansi (Smith 1961)

Pelontrus morgansi Smith 1961a: 365, fig. 3 (off Lamu, Kenya, western Indian Ocean). Holotype: SAIAB 134. Paratypes: SAIAB [formerly RUSI] 806 (1).

Distribution: Off Kenya, western Indian Ocean.

Plectranthias nanus Randall 1980

Plectranthias nanus Randall 1980: 159, fig. 22 (Reef off northwestern side of Cocos Id, Guam, Mariana Ids, western Pacific). Holotype: BPBM 7279. Paratypes: AMS I.17902-001 (2); ANSP 128434-35 (2 1) 128437 (2) 128454 (5); BMNH 1974.8.8.2 (1); BPBM 6345 (2), 6928 (1), 8068 (1), 8132 (2), 8444 (1), 9768 (1), 9905 (1) 12283 (3) 13909 (1) 13926 (3) 14042 (1) 16542 (4) 16744 (2) 16847 (1) 16891 (2) 17027 (1) 17181 (1) 17701 (3); CAS 24405 (1); MNHN 1974-83 (1); SAIAB [formerly RUSI] 3646 (2); USNM 212228 (2); WAM P.26090-002 (1), P. 26122-003 (2).

Distribution: West to central Pacific, including Taiwan, Mariana Ids, Palau, Caroline Ids, Marshall Ids, Samoa, Cook Ids, Loyalty Ids, Society Ids, Tuamotu Archipelago, Pitcairn Group, Marquesas Ids, Line Ids and Hawaiian Ids; eastern Indian Ocean from Christmas Id and Cocos-Keeling Ids.

Comments: Misidentified as *Pteranthias longimanus* by Gosline and Brock (1960: 155).

Plectranthias nazcae Anderson 2008

Plectranthias nazcae Anderson 2008: 430, figs. 1-2 (Nazca Ridge 25°43'S, 85°22'W, southeastern Pacific). Holotype: USNM 312926. Paratypes: BPBM 27978 (1) 29400 (1); USNM 312927 (1); ZMMU P-16022 (1).

Distribution: southeastern Pacific.

Plectranthias pallidus Randall & Hoese 1995

Plectranthias pallidus Randall & Hoese 1995: 330, fig. 2 (Off Townsville 17°58'30"S 147°00'30"E, Queensland, Australia). Holotype (unique): AMS I.25800-005.

Distribution: Off Townsville, Queensland, at 220 m.

Comments: Original description based on a single specimen.

Plectranthias parini Anderson & Randall 1991

Plectranthias parini Anderson & Randall 1991: 336, figs. 1, 2A (Sala y Gómez Ridge, southeastern Pacific 25°02.6'S, 97°29.2'W). Holotype (unique): USNM 312925.

Distribution: South Pacific.

Plectranthias pelicierii Randall & Shimizu 1994

Plectranthias pelicierii Randall & Shimizu 1994: 109, figs. 1-2 (Mauritius, Mascarenes, southwestern Indian Ocean). Holotype: BPBM 34646. Paratypes: BPBM 35420 (1); NSMT-P 45179-80 (1 1); SAIAB [formerly RUSI] 37015 (1); USNM 325539 (1).

Distribution: Izu Ids and Ryukyu Ids to New Caledonia.

Plectranthias randalli Fourmanoir & Rivaton 1980

Plectranthias randalli Fourmanoir & Rivaton 1980: 27, fig. (Chesterfield Id, western South Pacific 19°40'S 158°31'E). Holotype (unique): MNHN 1979-0430.

Distribution: Taiwan to western South Pacific.

Plectranthias retrofasciatus Fourmanoir & Randall 1979

Plectranthias retrofasciatus Fourmanoir & Randall 1979: 318, fig. 2 (Gazelle Pass, near northwestern tip of Id, New Caledonia). Holotype (unique): BPBM 22487.

Distribution: New Caledonia and off North Sulawesi, Indonesia.

Comments: Described on the basis of a single specimen collected at depth of 200 m; recently recorded from Indonesia (Peristiwady et al. 2014).

Plectranthias robertsi Randall & Hoese 1995

Plectranthias robertsi Randall & Hoese 1995: 328, fig. 1 (Off Hinchinbrook Id, Queensland, Australia). Holotype: AMS I.20968-003. Paratypes: AMS I.25800-007 (6), I.25801-013 (2); BPBM 35053 (1); CSIRO H 682-01 (1), H 690-01 (3), H 691-01 (1), H 719-12 to -17 (6); NTM S.11746-028 (5) 11747-023 (5); QM I.20024 (1); USNM 319773 (2).

Distribution: Off Queensland at 200-400 m depth.

Plectranthias rubrifasciatus Fourmanoir & Randall 1979

Plectranthias rubrifasciatus Fourmanoir & Randall 1979: 321, fig. 3 (off Bulari Pass, south of Noumèa, New Caledonia). Holotype (unique): BPBM 22513.

Distribution: New Caledonia and Tuamotu Archipelago.

Comments: Described on the basis of a single specimen collected at a depth of 100 m.

Plectranthias ryukyuensis Wada, Suzuki, Senou & Motomura 2020

Plectranthias ryukyuensis Wada, Suzuki, Senou & Motomura 2020:2, Figs. 1-5 (Off Hamahiga-jima island, Okinawa Id, Ryukyu Id, Okinawa Prefecture, Japan, depth 190 meters). Holotype: KPM-NI 50196. Paratypes: KAUM-I 132499 (1) [ex KPM-NI 50195], URB 15117 (2).

Distribution: Ryukyu Id, Japan.

Plectranthias sagamiensis (Katayama 1963)

Zacallanthias sagamiensis Katayama 1963: 28, figs. 1-4 (off Nagai, Kanagawa Prefecture, Japan). Holotype: LICPP 1325. Paratypes: LICPP 677 (1), 799 (1), 899 (1), 940 (1), 966 (1) 1205 (1) 1397 (1) 1472 (1) 1532 (1) 1644-1 (1) 1644-2 (1).

Distribution: Japan and Philippines.

Plectranthias sheni Chen & Shao 2002

Plectranthias sheni Chen & Shao 2002: 64, figs. 1-2 (Chungchou fish market, Kaohsiung, southwestern Taiwan). Holotype: NTUM 03723. Paratypes: ASIZT 056173 (1); NTUM 06425 (1), 07006 (1), 08690 (1).

Distribution: Taiwan.

Plectranthias takasei Gill, Tea & Senui 2016

Plectranthias takasei Gill, Tea & Senui 2016: 350, figs. 1-5 (Izu Ocean Park, Sagami Bay, Japan, Honshu). Holotype: KPM-NI 21068. Paratypes: KPMI-NI 21286.

Distribution: Known only from the type locality.

Plectranthias taylori Randall 1980

Plectranthias taylori Randall 1980: 170, fig. 26 (Western side off distillation plant, Canton Id, Phoenix Ids). Holotype: BPBM 22489. Paratypes: USNM 219328 (1).

Distribution: Canton Id, Phoenix Ids.

Plectranthias vexillarius Randall 1980

Plectranthias vexillarius Randall 1980: 173, fig. 27 (Gulf of Oman 23°43'-46'N, 58°23'E). Holotype (unique): USNM 213545.

Distribution: Gulf of Oman.

Plectranthias wheeleri Randall 1980

Plectranthias wheeleri Randall 1980: 175, figs. 28-29 (Manado Bay, Sulawesi, Indonesia). Holotype: BPBM 22401. Paratype: BMNH 1890.2.26.28.

Distribution: Taiwan to Sulawesi and Western Australia.

Plectranthias whiteheadi Randall 1980

Plectranthias whiteheadi Randall 1980: 179, fig. 30 (Northern Arafura Sea, 5-6°S 132-133°E, Kai Ids, Indonesia). Holotype (unique): BMNH 1975.1.14.1.

Plectranthias chungchowensis Shen & Lin 1984, fig. 1 (Chungchou, Taiwan). Holotype: NTUM 03721. Paratypes: NTUM 03724 (1), 04463 (1).

Distribution: Kai Id, Arafura Sea, and Taiwan.

Comments: Taxonomic decision of Lee (1990).

Plectranthias winniensis (Tyler 1966)

Pteranthias winniensis Tyler 1966: 2, fig. 1 (Saint Joseph Id, Amirante Group, Seychelles, western Indian Ocean). Holotype (unique): ANSP 103583.

Distribution: Gulf of Aqaba to South Africa, Seychelles, Mauritius, New Caledonia, Tonga, New Hebrides, Loyalty Ids, Hawaiian Ids, Tuamotu Archipelago, Austral Ids, Pitcairn Group.

Plectranthias xanthomaculatus Wu, Randall & Chen 2011

Plectranthias xanthomaculatus Wu, Randall & Chen 2011: 250, fig. 2 (Hsing-Ta Harbour, Kaohsiung, southwestern Taiwan 22°42.64'N 119°51.70'E). Holotype (unique): NMMST P01302.

Distribution: previously known only from the holotype taken by trawling at 200-243 m off Hsing-Ta Harbour, Kaohsiung, southwestern Taiwan in 2002, the species has been recently recorded from Amami Ids, East China Sea, Japan (Okamoto and Motomura 2017).

Plectranthias yamakawai Yoshino 1972

Plectranthias yamakawai Yoshino 1972: 53, figs. 1B, 3 (Okinawa Id, Ryukyu Ids, Japan). Holotype: FAKU 44565. Paratypes: FAKU 44566-68 (3).

Distribution: Ryukyu Ids and Taiwan.

Plectranthias sp.

Plectranthias sp. Williams, Delrieu-Trottin & Planes 2013: 167, fig. 1 (Rangiroa, French Polynesia).

Distribution: Caves off Rangiroa, at a depth of 65 m (underwater photo by Patrick Plantard in Williams et al. 2013).

Genus *Pronotogrammus* Gill 1863

Pronotogrammus Gill 1863a: 81 (type species *Pronotogrammus multifasciatus* Gill 1863. Type by monotypy). Gender masculine.

Pacificogramma Kharin 1983: 116 (type species *Pacificogramma stepanenkoi* Kharin 1983. Type by original designation). Gender neuter.

Amphiamerican. Genus first revised by Fitch (1982); recently, some species have been transferred to the new genus *Baldwinella* (Anderson and Heemstra 2012) leaving only two species into genus *Pronotogrammus*.

Pronotogrammus martinicensis (Guichenot 1868)

Aylopon martinicensis Guichenot 1868: 85 (off Martinique Id, West Indies). Lectotype: MNHN 0000-4319. Paralectotypes: MNHN B-2767 [or 2667] [ex MNHN 0000-4319] (3). Lectotype selected by Anderson & Heemstra (1980:82).

Anthias duplicidentatus Miranda-Ribeiro 1903: 169 (East-southeast of Ilha Rasa, off coast of Brazil). Holotype (unique): MNRJ (apparently lost).

Anthias lousi Bean 1912: 124 (Argus Bank, Bermuda, stomach content). Holotype (unique): AMNH 7308. **Distribution:** From North Carolina, Bermuda and Caribbean Sea to Brazil.

Pronotogrammus multifasciatus Gill 1863

Pronotogrammus multifasciatus Gill 1863: 81 (Cape San Lucas, Baja California, Mexico). Holotype (unique): USNM 2762.

Anthias gordensis Wade 1946: 225, Pl. 32 (Inner Gorda Bank, Cape San Lucas, Baja California, Mexico). Holotype: LACM 21714 [ex AHF 924]. Paratypes: LACM 21713 [ex AHF 925] (1).

Holanthias sechurae Barton 1947: 2, fig. 2 (off Talara, Peru). Holotype: AMNH 17082. Paratype: AMNH 17083.

Pacificogramma stepanenkoi Kharin 1983: 116, fig. (Uncle Sam Bank 24°54'N 112°34'W, Baja California Sur, Mexico). Holotype: ZIN 45987. Paratypes: ZIN 45987a (2).

Distribution: From southern California and the Gulf of California to Peru, Cocos Id, and the Galápagos Ids.

Genus *Pseudanthias* Bleeker 1871

Pseudanthias Bleeker 1871: Pls. 287-288 (type species *Anthias pleurotaenia* Bleeker 1857. Type by subsequent designation by Bleeker 1872b: 156). Gender masculine.

Franzia Jordan & Thompson 1914: 251 (type species *Anthias nobilis* Franz 1910. Type by original designation). Gender feminine.

Rosanthias Tanaka 1917: 198 (type species *Rosanthias amoenus* Tanaka 1917. Type by monotypy). *Gender masculine.*

Leptanthias Tanaka 1918: 525 (type species *Leptanthias kashiwae* Tanaka 1918. Type by original designation). Gender masculine.

Entonanthias Jordan & Tanaka 1927: 385 (type species *Entonanthias pascalus* Jordan & Tanaka 1927. Type by original designation). Gender masculine.

Mirolabrichthys Herre 1927: 413 (type species *Mirolabrichthys tuka* Herre & Montalban 1927. Type by monotypy). Gender masculine.

Planctanthias Fowler 1935: 385 (type species *Planctanthias preopercularis* Fowler 1935. Type by original designation). Gender masculine.

Comments: The number of valid species has been growing substantially in the last decades, from 35 species (Kuitert 1993) to 52 valid species listed by Randall and Pyle (2001) and 66 species mentioned by Williams et al. (2013: 168). Sixty-three species are listed here. Recent studies have shown that all Indo-Pacific species previously included in *Anthias* belong to this genus (Meyer 1989: 99, footnote). The genus *Anthias* is confined mostly to the Atlantic with one species in the Mediterranean Sea and one species off Galapagos Ids. Heemstra and Akhilesh (2012) reviewed the species of the western Indian Ocean.

Pseudanthias aurulentus (Randall & McCosker 1982)

Anthias (Mirolabrichthys) aurulentus Randall & McCosker 1982: 67, fig.9 (off wreck of 'V. Lindenbank', outer ocean reef 1.5 miles northwest of English Harbour, Tabuaeran [= Fanning Id], Line Ids, Central Pacific). Holotype: BPBM 26546. Paratypes: AMS I.22467-001 (1), BMNH 1980.5.20.1 (1), BPBM 26547 (1), CAS 48098 (1), USNM 227296 (1).

Distribution: Line Ids, Central Pacific.

Pseudanthias bartlettorum (Randall & Lubbock 1981)

Anthias (Mirolabrichthys) bartlettorum Randall & Lubbock 1981: 20, figs. 15-16 (Outer reef off E nubuj Islet at southern end of atoll, Kwajalein Atoll, Marshall Ids, western Pacific). Holotype: BPBM 17981. Paratypes:

AMS I.19218-001 (1); BMNH 1976.9.30.1 (1); BPBM 19969 (2) 20449 (1); CAS 37889 (1); LACM 35906-1 (1); MNHN 1976-0125 (1); USNM 216495 (1).

Distribution: Papua New Guinea, Palau, Caroline Ids, Marshall Ids, Gilbert Ids eastward to Line Ids.

Pseudanthias bicolor (Randall 1979)

Anthias (Mirolabrichthys) bicolor Randall 1979: 4, figs. 1-3 (Waianae coast off Pokai Bay, Oahu Id, Hawaiian Ids). Holotype: BPBM 10146. Paratypes: AMS I.18721-001 (1), I.19218-001 (1); ANSP 134235 (1); BMNH 1976.3.15.1 (1); BPBM 10141-42 (1, 4) 10145 (1) 10173 (4) 13344 (3) 15498 (1) 15877 (4) 17959 (1) 18833 (1) 19916 (1) 19924 (2) 19930 (1); CAS 35678 (1); LACM 35579-1 (1); MNHN 1974-48 (1) 1975-1139 (1); USNM 215284 (1).

Distribution: Mauritius, Chagos Ids, Maldives, Sri Lanka to the Philippines and southern Japan eastward Hawaiian Ids and Line Ids, southward to Loyalty Ids.

Pseudanthias bimaculatus (Smith 1955)

Anthias bimaculatus Smith 1955b: 339, fig. 1 (Bay of Bocage 14°10'S, 40°50'E, Mozambique, western Indian Ocean). Holotype: SAIAB 47. Paratypes: (3) SAIAB [formerly RUSI] 958-959 (2 2).

Distribution: Western Indian Ocean (from Mozambique to Aldabra), Reunion, Maldives eastward to Indonesia and New Caledonia.

Pseudanthias bimarginatus Randall 2011

Pseudanthias bimarginatus Randall 2011: 80, Pl. 1A-C (North Malé Atoll, Maldives). . Holotype: BPBM 34697. Paratypes: BPBM 41006 (1), SAIAB 86490 (2), USNM 398058 (1).

Distribution: Maldives.

Comments: Misidentified in the past as *P. parvirostris* by Randall and Anderson (1993: 14), Debelius (1993: 106) and Kuitert and Debelius (2007, underwater photos). The two species are very similar, mainly distinguished by the colour pattern of the caudal fin in male (centrally red in *P. bimarginatus* vs centrally yellow in *P. parvirostris*) and some meristics (see Heemstra and Akhilesh 2012).

Pseudanthias calloura Ida & Sakaue 2001

Pseudanthias calloura Ida & Sakaue 2001: 263, figs. 1-5 (Korol Id, Palau). Holotype: NSMT-P 57228. Paratypes: NSMT-P 57229-30 (1 1).

Distribution: Known only from the type locality.

Pseudanthias caudalis Kamohara & Katayama 1959

Pseudanthias caudalis Kamohara & Katayama 1959: 1, fig. 1 (Kashiwajima, Kochi Prefecture, Japan). Holotype: BSKU 7492. Paratypes: BSKU 8205 (1).

Distribution: Japan.

Pseudanthias charleneae Allen & Erdmann 2008

Pseudanthias charleneae Allen & Erdmann 2008: 140, figs. 1-3 (Gayebi Reef, Cenderawasih Bay, Papua Province, Indonesia). Holotype (unique): NCIP 6322.

Distribution: Bali and West Papua, Indonesia.

Pseudanthias cichlops (Bleeker 1853)

Serranus cichlops Bleeker 1853b: 245 (Priaman, Sumatra, Indonesia). Holotype (unique): RMNH 5460.

Distribution: Southern Japan, Philippines, East Indies and New Caledonia.

Pseudanthias connelli (Heemstra & Randall 1986)

Anthias connelli Heemstra & Randall 1986: 511, pl 33, figs 166.4 a, b (Off Brighton Beach, south of Durban, KwaZulu-Natal, South Africa, southwestern Indian Ocean). Lectotype: SAIAB 10571. Paralectotypes: BPBM 24764 (3); CAS 57165 (2); SAIAB [formerly RUSI] 458 (1) 10527 (1) 10572 (1); SAM 30453 (2); USNM 285752 (6). Lectotype designated by Heemstra and Akhilesh (2012:134).

Distribution: South of Durban harbour, from Margate to Sodwana Bay, South Africa.

Pseudanthias conspicuus (Heemstra 1973)

Anthias conspicuus Heemstra 1973: 200, fig.1 (Off Diu, India, Arabian Sea). Holotype: USNM 205864. Paratypes: FMNH 70651 (12); USNM 205862-63 (1 1).

Anthias bitaeniatus Kotthaus 1973: 19, fig. 289 (East of Mumbai, Arabian Sea). Holotype (unique): ZMH 5126 [ex IOES 164].

Distribution: Northern Somalia, Oman, and western India, but probably more widespread.

Comments: Life colour unknown; taxonomic decision of Heemstra and Akhilesh (2012), misspelled *conspicuuus*. Synonym of *Pseudanthias townsendi* (Boulenger 1897) according to Randall and Pyle (2001: 34), misspelled *conspicuous*.

Pseudanthias cooperi (Regan 1902)

Anthias cooperi Regan 1902: 273 (Haddummati Atoll, Maldives, Indian Ocean). Holotype (unique): BMNH 1901.12.31.15.

Leptanthias kashiwae Tanaka 1918: 525, Pl. 138, fig. 387 (Kashiwajima, Kochi prefecture, Japan). Holotype (unique): ZUMT 8459 (lost).

Planctanthias preopercularis Fowler 1935: 385, figs. 18-19 (Washed ashore, KwaZulu-Natal coast, South Africa). Holotype: ANSP 63916 (with paratypes). Paratypes: ANSP 63917-31 (15).

Anthias altus Smith 1961a: 363, fig. 2 (off Lamu, Kenya). Holotype: SAIAB [formerly RUSI] 170. Paratypes: SAIAB [formerly RUSI] 957 (1).

Distribution: Western Indian Ocean to Japan and Mariana Ids eastward to Line Ids and southward to New South Wales (Australia) and New Caledonia.

Comments: Taxonomic decisions of Heemstra and Randall (1986:511), Randall and Pyle (2001:34), and Heemstra and Akhilesh (2012:138).

Pseudanthias dispar (Herre 1955)

Mirolabrichthys dispar Herre 1955: 224 (Gizo Id, Solomon Ids). Holotype: UW 10628 (49 mm). Paratypes: UW 10628 (5, with holotype).

Distribution: Christmas Id (eastern Indian Ocean) and Scott/Seringapatam Reefs, off northwestern Australia (eastern Indian Ocean) to Line Ids north to Yaeyama Id and Marshall Ids south to Great Barrier Reef, Fiji and Samoa.

Pseudanthias elongatus (Franz 1910)

Anthias elongatus Franz 1910: 39, Pl. 6, fig. 51 (Yokohama, Japan). Syntypes: ZSM [old collection] (31) destroyed in WW II.

Rosanthias amoenus Tanaka 1917a: 198 (Tanabe, Wakayama Prefecture, Japan). Holotype (unique): ZUMT 8468 (lost).

Distribution: Japan and Korea.

Pseudanthias emma Gill & Psomadakis 2018

Pseudanthias emma Gill & Psomadakis 2018: 526, fig. 1 (Off Tanintharyi coast, Myanmar, Andaman Sea, Indian Ocean). Holotype (unique): SAIAB 203722.

Distribution: Known only from the holotype, trawled in proximity of a deep coral reef (105 m) off the south east coast of Myanmar in the Andaman Sea.

Pseudanthias engelhardi (Allen & Stark II 1982)

Anthias engelhardi Allen & Stark II 1982: 48, figs. 2-3 (Escape Reef, Great Barrier Reef). Holotype: AMS I.22632-005. Paratypes: AMS I.22629-003 (1), I.22632-011 (1); WAM P.27483-001 (1).

Pseudanthias carlsoni Randall & Pyle 2001: 20, figs. 1-4 (Yanutha Reef, southern end of No Name Pass, ocean side 18°24'30"S 177°56'E, Fiji). Holotype: BPBM 38665. Paratypes: AMS I.39906-001 (1), BMNH 2000.1.6.1 (1), BPBM 30630 (1), CAS 210368 (1), NSMT-P 58835 (1), ZRC 45768 (2), USNM 359477(2).

Distribution: Great Barrier Reef, Papua New Guinea, Loyalty Ids, Fiji, and Tonga.

Pseudanthias evansi (Smith 1954)

Anthias evansi Smith 1954: 1, fig. 1 (Shimoni, Kenya). Holotype: SAIAB [formerly RUSI] 125. Paratypes: SAIAB [formerly RUSI] 38094 (6 not 5).

Distribution: East Africa, Seychelles, Mauritius, Chagos Archipelago, Maldives, and Cocos-Keeling Ids to Sumatra and Christmas Id (eastern Indian Ocean).

Pseudanthias flavicauda Randall & Pyle 2001

Pseudanthias flavicauda Randall & Pyle 2001: 23, figs. 5-8 (Beqa Id, ocean side, Fiji). Holotype: BPBM 33921. Paratypes: AMS I.39907-001 (1); BMNH 2000.1.6.2 (1); BPBM 37209 (1), 38667-68 (1, 3); CAS 210369 (1); USNM 359478 (1).

Distribution: Fiji Ids.

Pseudanthias flavoguttatus (Katayama & Masuda 1980)

Anthias (Miolabrichthys) flavoguttatus Katayama & Masuda 1980b: 187, figs. 2-3 (Coast of Izu-Oshima, Japan). Holotype: ZUMT 54243. Paratypes: NSMT-P 19137-38 (1 1); ZUMT 54244 (1).

Distribution: Indo-West Pacific: Christmas Id (Indian Ocean), Indonesia, Palau, Marshall Ids and to Japan.

Pseudanthias fucinus (Randall & Ralston 1985)

Anthias fucinus Randall & Ralston 1985: 222, figs. 1-4 (Southwestern end of Penguin Bank 20°52.4'N 157°39.3'W, Hawaiian Ids). Holotype: BPBM 28622. Paratypes: AMS I.24334-001 (1); BMNH 1983.12.22.3 (1); BPBM 28123 (1) 28350 (1) 29265 (3) 29267 (2); CAS 54302 (1); NSMT-P 22995 (1); ROM 43016 (1); SAIAB [formerly RUSI] 19798 (1); USNM 264611 (1).

Distribution: Hawaiian Ids and Johnston Atoll.

Pseudanthias georgei (Allen 1976)

Anthias georgei Allen 1976: 28, fig. 2 (About 40 nautical miles west of Bernier Id, Western Australia 24°59'S 112°27'E). Holotype: WAM P.25205-001. Paratypes: WAM P.25205-002 (2).

Distribution: Western Australia.

Pseudanthias gibbosus (Klunzinger 1884)

Anthias (Pseudanthias) gibbosus Klunzinger 1884: 9 (Al-Qusair, Red Sea). Syntypes: SMNS 3482 (2, not found).

Franzia fasciata Kamohara 1954: 3, fig. 1 (Okinoshima, Kochi Prefecture, Japan). Holotype (unique): BSKU 3032.

Distribution: Red Sea to Kwa-Zulu Natal, South Africa, Indonesia, Australia to southern Japan and Great Barrier Reef.

Comments: Previously known as *Pseudanthias fasciatus* with *Anthias gibbosus* regarded as a synonym of *squamipinnis* (Dor 1984). Type material of *A. gibbosus* apparently lost; Heemstra and Akhilesh published a translation of the original description of Klunzinger concluding that description fits with *F. fasciata* better than with *P. squamipinnis*. Gill and Psomadakis (2018:530) agreed in regarding *P. gibbosus* as the senior synonym of *fasciatus*. Anderson regarded (2018:36) both *gibbosus* and *fasciatus* as valid with *gibbosus* confined to the Red Sea and western Indian Ocean and *fasciatus* inhabiting the eastern Indian Ocean and the West Pacific.

Pseudanthias hawaiiensis (Randall 1979)

Anthias (Pseudanthias) ventralis hawaiiensis Randall 1979: 9, figs. 5-6 (Off northern side at base of drop-off, Moku Manu, Oahu Id, Hawaiian Ids). Holotype: BPBM 10560. Paratypes: AMS I.18720-001 (1); ANSP 134236 (1); BMNH 1976.3.15.2 (1); BPBM 15058-59 (1, 3) 10172 (1) 10561 (7); CAS 35679 (1); LACM 35578-1 (1), MNHN 1974-0017 (1); USNM 215285 (1).

Distribution: Hawaiian Ids and Johnston Atoll.

Pseudanthias heemstrai Schuhmacker, Krupp & Randall 1989

Pseudanthias heemstrai Schuhmacker, Krupp & Randall 1989: 339, figs. 1-3, Pls. 1-9 (In front of Marine Science Station 12 kilometres south of Aqaba, Jordan, Red Sea). Holotype: SMF 23176. Paratypes: BMNH 1989.10.11.1 (1); BPBM 28867 (8); SMF 23177 (5).

Distribution: Red Sea.

Pseudanthias hiva Randall & Pyle 2001

Anthias sp. Randall 1985: 469 (Marquesas Ids).

Pseudanthias hiva Randall & Pyle 2001: 25, figs. 9-11 (Hiva Oa, Marquesas Ids). Holotype: BPBM 12223. Paratypes: AMS I.39908-00 1(1), I.33909-001 (1); BPBM 11792 (1) 11861 (5) 11929 (4), 38530 (3), 38671 (1); CAS 210370-71(1. 1); MNHN 2000-3 (1) 2000-4 (1); NSMT-P 58836 (1); USNM 359479-80 (1 1).

Distribution: Marquesas Ids.

Pseudanthias huchtii (Bleeker 1857)

Anthias huchtii Bleeker 1857: 38 (Ambon Id, Molucca Ids, Indonesia). Syntypes: (6) ?BMNH 1880.4.21.50 (1), ?NMV 46523 (1), RMNH 5453 (some or all of 6).

Anthias mortoni Macleay 1883: 253 (Pitt Bay, Moresby Id, New Guinea). Syntypes: AMS I.9223-25 (1 1 1).

Distribution: East Indies, Great Barrier Reef, Scott/Seringapatam Reefs, off northwestern Australia, Palau Ids, north to Philippines.

Pseudanthias hutomoi (Allen & Burhanuddin 1976)

Anthias hutomoi Allen & Burhanuddin 1976: 46, fig. 1 (Seram, Seleman Bay, Maluku Ids, Indonesia). Holotype: LON NCIP 3493. Paratypes: LON NCIP 3494-3499 (6), WAM P.25199-001 (4).

Distribution: Western Central Pacific: Brunei, Indonesia, Papua New Guinea, and Philippines.

Pseudanthias hypselosoma Bleeker 1877

Pseudanthias hypselosoma Bleeker 1877: 58, Pl. 2, fig. 2 (New Guinea). Holotype (unique): whereabouts unknown.

Anthias (Pseudanthias) truncatus Katayama & Masuda 1983b: 142, figs. 1-3 (Zamami Id, Kerama Ids, Okinawa, Japan). Holotype: NSMT-P 21793. Paratypes: NSMT-P 21794-95 (1 1) 21796-803 (8 1 ea.).

Distribution: Maldives to Indonesia, Philippines and southern Japan, Papua, New Guinea, New Caledonia, Great Barrier Reef, and New South Wales.

Pseudanthias ignitus (Randall & Lubbock 1981)

Anthias (Mirolabrichthys) ignitus Randall & Lubbock 1981: 18, fig. 12 (Lagoon reef, Villingili Id, North Male Atoll, Maldives). Holotype: BPBM 18858. Paratypes: AMS I.19219-001 (1); BMNH 1976.9.30.8 (1) 1977.5.11.5-6 (2); CAS 37888 (1); LACM 35905-1 (1); USNM 216494 (1).

Distribution: Maldivian Ids and Andaman Sea to Sumatra, Indonesia.

Pseudanthias leucozonus (Katayama & Masuda 1982)

Anthias (Pseudanthias) leucozonus Katayama & Masuda 1982: 393, fig. 1 (Izu Peninsula, Japan). Holotype: ZUMT 54295. Paratype: NSMT-P 54296 (1).

Distribution: Japan.

Pseudanthias lori (Lubbock & Randall 1976)

Anthias lori Lubbock & Randall in Fourmanoir & Laboute 1976: 287, figs (Point Mackau, Maré Id, Loyalty Ids). Holotype: MNHN 1976-0001. Paratypes: AMS 18563-001 [ex BPBM 13998] (1); ANSP; BMNH; BPBM 8437 (1), 8597 (1), 9629 (2) 13998 (3) 14026 (1) 14997 (1); LACM 35552-1 (1); WAM P.25493-001 (1); USNM 215263 (1).

Mirolabrichthys imeldae Burgess 1977: 39, figs (Philippines). Holotype: USNM 216923. Paratypes: USNM 216922 (2).

Distribution: Christmas Id (eastern Indian Ocean), Philippines, Indonesia, northern Great Barrier Reef, Palau Ids, Loyalty Ids, Samoa, Fiji, Society Ids and Tuamotu Archipelago.

Pseudanthias lunulatus (Kotthaus 1973)

Anthias lunulatus Kotthaus 1973: 20, fig. 290 (Somal Basin, Somalia). Holotype: ZMH 5127 [ex IOES 161a]. Paratypes: ZMH 5128 [ex IOES 161b] (1).

Distribution: Southern Red Sea and western Indian Ocean; Bali.

Pseudanthias luzonensis (Katayama & Masuda 1983)

Anthias (Pseudanthias) luzonensis Katayama & Masuda 1983a: 340, figs. 1-2 (Off Batangas, Luzon Id, Philippines). Holotype: NSMT-P21435. Paratypes: NSMT-P 21436 (1).

Distribution: Philippines, Taiwan, and Ryukyu Ids southward to Great Barrier Reef, Solomon Ids, Vanuatu and Fiji.

Pseudanthias manadensis (Bleeker 1856)

Anthias manadensis Bleeker 1856b: 39 (Manado, Sulawesi, Indonesia). Holotype (unique): RMNH 5456.

Distribution: Sulawesi and Papua New Guinea.

Pseudanthias marcia Randall & Hoover 1993

Pseudanthias marcia Randall & Hoover 1993: 47, figs. 1-5 (Off Rahah Bay, southwestern coast of Oman). Holotype: BPBM 35457. Paratypes: BMNH 1993.7.22.1 (1), BPBM 35455-56 (1 2), SAIAB [formerly RUSI] 525 (1), USNM 320765 (1).

Distribution: Gulf of Oman.

Pseudanthias mica Allen & Erdmann 2012

Pseudanthias mica Allen & Erdmann 2012: 1106, figs. 1-3 (Suangi, southwestern Lembata Id, 834.111'S 123°13.452'E, Indonesia). Holotype: MZB 20600. Paratypes: MZB 20601 (1), WAM P.33406-002 (3).

Distribution: Known only from the type locality.

Pseudanthias mooreanus (Herre 1935)

Anthias mooreanus Herre 1935: 405 (Moorea Id, Society Ids). Holotype (unique): FMNH 17325.

Distribution: Society Ids, Tuamotu Archipelago, and Pitcairn Ids.

Comments: Regarded as doubtful synonym of *P. taeniatus* by Katayama (1960); listed as valid by Anderson and Heemstra (1980: 203), Randall and Pyle (2001: 34) and Anderson (2018: 43).

Pseudanthias nobilis (Franz 1910)

Anthias nobilis Franz 1910: 38, Pl. 6 (fig. 44) (Misaki, Japan). Syntypes: ZSM [old collection] (3) destroyed in WWII.

Distribution: Japan.

Pseudanthias olivaceus Randall & McCosker 1982

Anthias (Pseudanthias) olivaceus Randall & McCosker 1982: 59, figs. 6-8 (Rarotonga, Cook Ids). Holotype: BPBM 13907. Paratypes: AMS I.22165-001 [ex BPBM 7520](2); BMNH 1981.3.18.1-2 (2); BPBM 7570 (8) 13094 (1) 14030 (2) 19572 (2) 26533 (1); CAS 42080 (5), 48006-07 (5 1); MNHN 1981-0858 (2); SAIAB [formerly RUSI] 511 (2); USNM 226551 (2).

Distribution: Central Pacific.

Pseudanthias oumati Williams, Delrieu-Trottin & Planes 2013

Pseudanthias oumati Williams, Delrieu-Trottin & Planes 2013: 175, fig. 9 (Fatu Hiva, Marquesas Ids). Holotype (unique): USNM 409433.

Distribution: Marquesas Ids.

Pseudanthias parvirostris (Randall & Lubbock 1981)

Anthias (Mirolabrichthys) parvirostris Randall & Lubbock 1981: 6, fig. 2 (Alite Reef, off Malaita, Solomon Ids, western Pacific). Holotype: BPBM 15605. Paratypes: BMNH 1976.9.30.10 (1) 1979.1.3.1 (1); BPBM 20448 (6); CAS 37886 (1); LACM 35904-1 (1); USNM 216490 (1).

Distribution: Mauritius; Indonesia and Philippines north to Japan; New Guinea, Solomon Ids, Palau, and Western Australia.

Pseudanthias pascalus (Jordan & Tanaka 1927)

Entonanthias pascalus Jordan & Tanaka 1927: 385 (Naha market, Okinawa, Japan). Holotype: FMNH 59184 [ex CM 8327]. Paratype: CAS-SU 23680 (1).

Distribution: Ryukyu Ids, Ogasawara Archipelago, Taiwan, Great Barrier Reef, Mariana Ids, Marshall, Ids, Gilbert Ids, Tuamotu Archipelago, Society Ids, Samoa, New Caledonia, Palau Ids, eastern Caroline Ids and northern Great Barrier Reef.

Pseudanthias pictilis (Randall & Allen 1978)

Anthias pictilis Randall & Allen 1978: 34, figs. 1-2 (Southeastern side of North Rock, Lord Howe Id). Holotype: BPBM 14811. Paratypes: AMS I.17365-010 [sic] (1), I.17366-021 (12 or 66), I.17466-013 (1); ANSP 138769 (1); BMNH 1977.11.21.1 (1); BPBM 20856 (13); CAS 40396 (1), MNHN 1977-0761 (1); QM I.14498 (3); RMNH 27663 (1); USNM 217906 (2); WAM P.25939-001 (3).

Distribution: Great Barrier Reef, Lord Howe Ids, New Caledonia.

Pseudanthias pillai Heemstra & Akhilesh 2012

Pseudanthias pillai Heemstra & Akhilesh 2012: 152, figs. 39-40 (off Chavakkadu 10°30'N, 75°24'E, Kerala, India). Holotype: SAIAB 86517. Paratype: SAIAB 97562 (1).

Pseudanthias vizagensis Krishna, Rao & Venu 2017: 213, figs. 1A-E 2. Holotype: not defined. Syntypes (44). (Off Visakhapatnam, Andhra Pradesh, India).

Distribution: Southwestern coast of India.

Comments: *Pseudanthias vizagensis* is a synonym according to K.V. Akhilesh (pers. comm. In Fricke et al., Oct. 2018).

Pseudanthias pleurotaenia (Bleeker 1857)

Anthias pleurotaenia Bleeker 1857: 34 (Ambon Id, Moluccas Ids, Indonesia). Holotype (unique): RMNH 5452.

Distribution: Widespread in the western Pacific and southeastern Indian Ocean from Australia to southern Japan to northern Great Barrier Reef and New Caledonia eastward to Marshall Ids and Samoa.

Comments: A synonym of *Pseudanthias taeniatus* (Klunzinger) according to Dor (1984: 104); valid according to Katayama in Masuda et al. (1984: 136), Allen (1997: 92) and Anderson (2018: 45).

Pseudanthias privitera Randall & Pyle 2001

Pseudanthias privitera Randall & Pyle 2001: 28, fig. 12 (Rarotonga, off Matavera, Cook Ids). Holotype: BPBM 38669. Paratypes: AMS I.39928-001 (1), BPBM 38670 (1), CAS 210375 (1), USNM 359481 (1).

Distribution: Cook Ids.

Pseudanthias pulcherrimus (Heemstra & Randall 1986)

Anthias pulcherrimus Heemstra & Randall 1986: 512, Pl. 33, figs. 166.8 a, b (Maldives, Chagos Archipelago, and Mauritius). Lectotype: SAIAB 86492. Paralectotypes: BPBM 16375 (1) 16378 (2) 22541 (1), 34647 (4); ROM 87931 (2); SAIAB 7773 (1) 17260 (2). Lectotype selected by Heemstra and Akhilesh (2012:154).

Distribution: Western Indian Ocean from South Africa, Seychelles and Mascarenes eastward to Maldives, Chagos Archipelago and Andaman Ids.

Pseudanthias randalli (Lubbock & Allen 1978)

Anthias randalli Lubbock & Allen 1978: 260, figs. 1-2 (Large cave on vertical drop-off, Baring, Olango Id, Cebu Strait, Philippines). Holotype: BMNH 1977.1.21.1. Paratypes: AMS I.19756-001 (1); BMNH 1976.1.21.2-3 (1 1); BPBM 9532 (1) 19983 (2); MHNG 1551.39 (1); RMNH 28182 [ex WAM P25239-002] (2); USNM 217534 (1); WAM P25233-007 (6), P.25239-002 (8), P.25628-001 (3).

Distribution: Eastern Indian Ocean to western and central Pacific.

Pseudanthias regalis (Randall & Lubbock 1981)

Anthias (Mirolabrichthys) regalis Randall & Lubbock 1981: 23, figs. 17-18 (Fatu Hiva, Marquesas Ids). Holotype: BPBM 11686. Paratypes: AMS I.19220-001 (1); BMNH 1976.9.30.11 (1); BPBM 11026 (5) 11811 (8) 12442 (9) 12751 (1); CAS 37887 (1); LACM 35903-1 (1); MNHN 1976-0124 (1); USNM 216496 (1).

Distribution: Marquesas Ids.

Pseudanthias rubrizonatus (Randall 1983)

Anthias rubrizonatus Randall 1983: 35, figs. 5-8 (southwestern side of Savo Id, Solomon Ids). Holotype: BPBM 15590. Paratypes: AMS I.22915-001 (2); BMNH 1982.7.27.31-36 (6); BPBM 15572 (3) 15881 (1) 16987 (2); CAS 50933 (1); NSMT-P 21412 (1); ROM 40323 (2); SAIAB [formerly RUSI] 17147 (1); USNM 235346 (1); WAM P.27647-001 (1).

Distribution: Andaman Sea and Western Australia east to Philippines and Fiji, south to Queensland, Western Australia and Loyalty Ids.

Pseudanthias rubrolineatus (Fourmanoir & Rivaton 1979)

Anthias rubrolineatus Fourmanoir & Rivaton 1979: 413, fig. 7 (Leleizour Id, northwest of New Caledonia). Holotype (unique): MNHN 1978-0686.

Distribution: New Caledonia.

Pseudanthias sheni Randall & Allen 1989

Pseudanthias sheni Randall & Allen 1989: 74, figs. 1-5 (Mermaid Reef 17°02'S 119°38'E, Rowley Shoals, Western Australia). Holotype: WAM P.29660-001. Paratypes: BMNH 1988.2.1.1 (1); BPBM 31983-86 (2 1 2); CAS 62327 (1); USNM 292906 (1); WAM P.27668-001 (1).

Distribution: Rowley Shoals and Scott Reef and possibly continental shelf of Western Australia and Indonesia.

Pseudanthias smithvanizi Randall & Lubbock 1981

Anthias (Mirolabrichthys) smithvanizi Randall & Lubbock 1981: 9, figs. 7-8 (Outer reef slope on western side, Alite Reef, off Malaita, Solomon Ids). Holotype: BPBM 15606. Paratypes: AMS I.18093-001 (2); ANSP 134016 (4) 134046-49 (4) 134050 (49); BPBM 9632 (3) 15592 (1) 15726 (2) 18389 (8) 18434 (1) 19269 (5 of

9) 19694 (5); BMNH 1976.9.30.12-15 (4); CAS 34718 [ex BPBM 19269] (4 of 9); LACM 35553-1 (8); USNM 215264 (4) 215964 (14); WAM P.25492-001 (4).

Distribution: Christmas and Cocos-Keeling Ids in the eastern Indian Ocean and from several localities of the West Pacific, including Indo-Australian Archipelago, Palau Ids, northern Great Barrier Reef, and Marshall Ids.

Pseudanthias squamipinnis (Peters 1855)

Serranus (Anthias) squamipinnis Peters 1855a: 429 (Mozambique). Holotype: ZMB 258.

Anthias cheirospilos Bleeker 1857: 36 (Ambon Id, Molucca Ids, Indonesia). Syntypes: RMNH 5454 (2).

Anthias lepidolepis Bleeker 1857: 37 (Ambon Id, Molucca Ids, Indonesia). Syntypes: RMNH 4555 (3).

Franzia ardens Jordan & Thompson 1914: 251, Pl. 30 (fig. 1) (Misaki, Japan). Holotype: FMNH 57509 [ex CM 6451].

Franzia affinis Tanaka 1915: 566 (Nagasaki fish market). Holotype (unique): ZUMT 6579.

Franzia pectoralis Tanaka 1917b: 268 (Tanabe, Wakayama Prefecture, Japan). Holotype (unique): ZUMT 9896.

Franzia ruber Tanaka 1917b: 268 (Tanabe, Wakayama Prefecture, Japan). Syntypes: ZUMT 9906 (1), described syntype lost.

Distribution: Red Sea and East coast of Africa to the Philippines and southern Japan southward to Great Barrier Reef and Western Australia east to Tonga and Society Ids.

Comments: Taxonomic decision of Katayama (1960); *A. lepidolepis* is reported as synonym of *squamipinnis* by Smith (1961).

Pseudanthias taeniatus (Klunzinger 1884)

Anthias (Pseudanthias) taeniatus Klunzinger 1884: 9, Pl. 3 (fig. 2) (Al-Qusair, Red Sea Governorate, Egypt, Red Sea). Lectotype: SMNS 3447, established by Dor (1984:104).

Distribution: Red Sea. Not reported from Oman or the Persian Gulf.

Pseudanthias taira Schmidt 1931

Pseudanthias taira Schmidt 1931: 37, Pl. 3, fig. 2 (Kominato, Amami-Oshima Id, Ryukyu Ids, Japan). Syntypes: ZIN 23235 (4).

Distribution: Japan.

Pseudanthias tequila Gill, Tea & Senou 2017

Pseudanthias tequila Gill, Tea & Senou 2017: 68, figs. 1-3, 4A-B, 5-6 (Ototo-jima Id, Chichi-jima Ids, Ogasawara Ids, Japan). Holotype: KPM-NI 3759. Paratypes: KPM-NI.

Distribution: Mariana Ids and Ogasawara Archipelago.

Pseudanthias thompsoni (Fowler 1923)

Caesioperca thompsoni Fowler 1923: 379 (Honolulu, Oahu id, Hawaiian Ids). Holotype (unique): BPBM 3376.

Distribution: Hawaiian Ids and Ogasawara Archipelago.

Pseudanthias townsendi (Boulenger 1897)

Anthias townsendi Boulenger 1897: 420 (Mekran coast, Iran). Holotype (unique): BMNH 1897.9.22.1.

Distribution: Persian Gulf to southern Oman and southern Iran.

Pseudanthias tuka (Herre & Montalban 1927)

Mirolabrichthys tuka Herre & Montalban in Herre 1927: 413, Pl. 1 (Maricaban Id, Philippines). Holotype: BSMP (apparently destroyed). Paratypes: BSMP (3) apparently destroyed.

Distribution: Indo-Australian Archipelago, Palau Ids, and Great Barrier Reef.

Pseudanthias unimarginatus Randall 2011

Pseudanthias unimarginatus Randall 2011: 82, Pl. 2A, B (West coast, reef about 2 miles north of Flic en Flac, Mauritius). Holotype (unique): BPBM 22924.

Distribution: Known only from a single specimen collected on a small reef in 53 m off the west coast of Mauritius. Expected to be found elsewhere, but not likely to be observed by divers.

Pseudanthias venator Snyder 1911

Pseudanthias venator Snyder 1911: 529 (Kagoshima, Japan). Holotype: USNM 68230.

Distribution: Japan.

Comments: Regarded as a synonym of *P. cichlops* by Katayama (1960), valid according to Randall and Hutomo (1988) and Anderson (2018: 49).

Pseudanthias ventralis (Randall 1979)

Anthias (Pseudanthias) ventralis ventralis Randall 1979: 12, fig. 7 (Patch reef on northern side off Gannet Ridge, Pitcairn Id). Holotype: BPBM 16883. Paratypes: BMNH 1976.3.25.1 (1); BPBM 13530 (8) 19895 (1); LACM 35586-1 (1); USNM 215289 (1).

Distribution: Previously regarded as composed of two subspecies (now recognized as valid species): *A. ventralis hawaiiensis* from the Hawaiian Ids and *A. ventralis ventralis* from Mariana Ids, Marshall Ids, Ogasawara Archipelago, Great Barrier Reef, New Caledonia, Tuamotu Archipelago, Pitcairn Group.

Genus *Rabaulichthys* Allen 1984

Rabaulichthys Allen 1984: 48 (*Rabaulichthys altipinnis* Allen 1984. Type by original designation). Gender masculine.

Indo-West Pacific over steep coral-reef. Four species.

Rabaulichthys altipinnis Allen 1984

Rabaulichthys altipinnis Allen 1984: 48, fig. 1 (Off Nordup Village, about 4 kilometres east of Rabaul, New Britain Id, Bismarck Archipelago). Holotype: WAM P.28179-001. Paratypes: KFRS F.5365.01 (2), WAM P.28180-001 (3).

Distribution: West Papua (Indonesia), Papua New Guinea and Coral Sea.

Rabaulichthys squirei Randall & Walsh 2010

Rabaulichthys squirei Randall & Walsh 2010: 207, figs. 1A-D (Flinders Reef, north end 17°24'01"S 148°25'03"E, Coral Sea). Holotype: QM I.38237. Paratypes: BPBM 40978 (2); QM I.38420 (4), I.38441 (1); USNM 395918 (2); WAM P.33113-001 (2).

Distribution: Coral Sea.

Rabaulichthys stigmaticus Randall & Pyle 1989

Rabaulichthys stigmaticus Randall & Pyle 1989: 2, figs. 1-2 (East side of reef north of Bathala Id, Ari Atoll, Maldives). Holotype: BPBM 32751. Paratypes: BPBM 32752 (1), SAIAB [formerly RUSI] 28149 (1), USNM 298470 (1).

Distribution: Mauritius, Maldive Ids and Sri Lanka.

Rabaulichthys suzukii Masuda & Randall 2001

Rabaulichthys suzukii Masuda & Randall 2001: 78, figs. 1-4 (West coast of Izu Peninsula off Osezaki, Shizuoka Prefecture, Honshu, Japan). Holotype: NSMT-P 59400. Paratypes: BPBM 38715 (1), IOP 3585 (1).

Distribution: Izu Peninsula, Japan.

Genus Sacura Jordan & Richardson 1910

Sacura Jordan & Richardson 1910: 468 (subgenus of *Anthias* Block 1792; type species: *Anthias margaritaceus* Hilgendorf 1879. Type by original designation). Gender feminine.

Indo-West Pacific; five species. Genus revised by Heemstra and Randall (1979).

Sacura boulengeri (Heemstra 1973)

Anthias formosus Boulenger 1889: 238 (Muscat, Oman, Gulf of Oman) (*nomen praeoccupatum*; preoccupied by *Anthias formosus* Bloch 1792 [= *Haemulon sciurus* (Shaw 1803), Haemulidae]). Lectotype: BMNH 1889.4.15.15. Paralectotypes: BMNH 1889.4.15.16 (1).

Anthias boulengeri Heemstra 1973: 206, fig. 2 (Muscat, Oman, Gulf of Oman, Arabian Sea) (*nomen novum* for *Anthias formosus* Boulenger 1889). Lectotype: BMNH 1889.4.15.15. Paralectotypes: BMNH 1889.4.15.16 (1).

Distribution: Gulf of Oman.

Sacura margaritaceus (Hilgendorf 1879)

Anthias margaritaceus Hilgendorf 1879: 78 (Tokyo Bay, Japan). Holotype: ZMB 10603 (1).

Anthias pulcher Döderlein in Steindachner & Döderlein 1883b: 227 (Japan). Syntypes: (4) NMW.

Distribution: Taiwan, Japan, Korea, and New Caledonia.

Sacura parva Heemstra & Randall 1979

Sacura parva Heemstra & Randall 1979: 9, fig. 2, Pl. 4 (Dillon shoals, Timor Sea). Holotype: WAM P.24785-001. Paratype: WAM P.26459-001 (1).

Distribution: Timor Sea.

Sacura sanguinea Motomura, Yoshida & Vilasri 2017

Sacura sanguinea Motomura, Yoshida & Vilasri 2017: 291, figs. 1-2 (Andaman Sea, Thailand, 09°56'N, 98°35'EC).

Distribution: Off Thailand, Andaman Sea.

Sacura speciosa Heemstra & Randall 1979

Sacura speciosa Heemstra & Randall 1979: 8, Pl. 3 (Manado Bay, Sulawesi, Indonesia). Holotype (unique): BPBM 22494.

Distribution: Indonesia.

Genus *Selenanthias* Tanaka 1918

Selenanthias Tanaka 1918: 516 (type species *Selenanthias analis* Tanaka 1918. Type by original designation). Gender masculine.

West Pacific at depths between 100-220 m; three species and one undescribed.

Selenanthias analis Tanaka 1918

Selenanthias analis Tanaka 1918: 516, Pl. 138 (fig. 385) (Tokyo fish market, Japan). Holotype (unique): ZUMT 8458.

Plectranthias maculatus Fourmanoir 1982: 58, fig. 1 (Philippines 14°01'N 120°17.1'E). Holotype: MNHN 1981-1438. Paratypes: MNHN 1981-1439 (1).

Distribution: Taiwan, Japan, and Western Australia.

Comments: Taxonomic decision of Heemstra and Randall (1999: 2471).

Selenanthias barroi (Fourmanoir 1982)

Plectranthias barroi Fourmanoir 1982: 60, fig. 2 (Chesterfield Ids, Coral Sea 19°40'S 158°31'E, depth 300 meters). Holotype: MNHN 1979-0431. Paratypes: MNHN 1979-0432 (3) 1981-1441 (1).

Distribution: Chesterfield Ids, Coral Sea.

Selenanthias myersi Randall 1995

Selenanthias myersi Randall 1995: 48, fig. 1 (South China Sea, off Vietnam 15°40'N 109°25'30"E, depth 110-200 meters. Holotype: CAS 53554. Paratypes: BPBM 30360 (1), USNM 276253 (2).

Distribution: South China Sea.

***Selenanthias* sp.** Fourmanoir 1973

Distribution: Vicinity of Banaba (Ocean Id).

Comments: Recorded from three postlarval specimens. Lateral line count suggests this represents a new species (Randall 1995: 52).

Genus *Serranocirrhitis* Watanabe 1949

Serranocirrhitis Watanabe 1949: 17 (type species *Serranocirrhitis latus* Watanabe 1949. Type by original designation). Gender masculine.

West Pacific in small aggregation in the vicinity of caves and ledges on steep outer reef slopes at depth ranging between 15 and 70 m; monotypic.

Serranocirrhitis latus Watanabe 1949

Serranocirrhitis latus Watanabe 1949: 18, figs. 1-2 (Itoman, Okinawa Id, Ryukyu Ids, Japan). Holotype (unique): TUFIL W.1301 (whereabouts unknown).

Dactylanthias mcmichaeli Whitley 1962: 3, fig.1 (Lihou Atoll, Coral Sea). Holotype (unique): AMS IB.4907.

Distribution: Ryukyu Ids, Taiwan, Sulawesi, New Hebrides, Palau Ids, Great Barrier Reef, New Caledonia, Loyalty Ids and Fiji.

Comments: Taxonomic decision of Randall and Heemstra (1978).

Genus *Tosana* Smith & Pope 1906

Tosana Smith & Pope 1906: 470 (type species *Tosana niwae* Smith & Pope 1906. Type by original designation). Gender feminine.

Mustelichthys Tanaka 1917a: 201 (type species *Mustelichthys ui* Tanaka 1917. Type by monotypy). Gender masculine.

West Pacific in fairly deep water; one species.

Tosana niwae Smith & Pope 1906

Tosana niwae Smith & Pope 1906: 470, fig. 4 (Urado Bay in Tosa, southern Japan). Holotype (unique): USNM 55618.

Anthias gracilis Franz 1910: 38, Pl. 6, fig. 47 (Dzushi, Japan, depth 80 meters). Syntypes: ZSM [old collection] (3) destroyed in WWII.

Mustelichthys ui Tanaka 1917a: 198 (Tanabe, Wakayama Prefecture, Japan). Holotype (unique): ZUMT 9957.

Anthias albofasciatus Fowler & Bean 1930: 309 (China Sea southeast of Hong Kong, Albatross station D.5308 21°54'N 115°42'E). Holotype (unique): USNM 89988.

Distribution: Taiwan, Japan.

Comments: Taxonomic decision of Kamohara (1960) and Gill et al. (2019). No status given for *Mustelichthys ui* Tanaka 1917 in ECoF (Fricke et al. 2019b) and therefore it is treated as new synonym.

Genus *Tosanoides* Kamohara 1953

Tosanoides Kamohara 1953: 3 (type species *Tosanoides filamentosus* Kamohara 1953. Type by original designation). Gender masculine.

West and central Pacific and southwestern tropical Atlantic at depths of 40-60 m over rocky bottoms; six species.

Tosanoides annepatrice Pyle, Greene, Copus & Randall 2018

Tosanoides annepatrice Pyle, Greene, Copus & Randall 2018: 141, figs. 1-5 (Ngaruanga Atoll, Republic of Palau). Holotype: BPBM 40848. Paratypes: BPBM 41354, BPBM 41354, USNM 444916.

Distribution: Palau and Pohnpei, but expected throughout much Micronesia.

Tosanoides aphrodite Pinheiro, Rocha & Rocha 2018

Tosanoides aphrodite Pinheiro, Rocha & Rocha 2018: 108, figs. 1-4 (Saint Paul Rocks, Brazil, 00°56'N, 029°22'W). Holotype: CIUFES 3444. Paratypes: BPBM 41351, CAS 244382, CAS 244383, MZUSP 123538, USNM 440405, ZUEC 16842.

Distribution: Only known from Saint Paul's Rocks, off Brazil; found on mesophotic coral ecosystems of the island, observed between 100 and 130 m depth while rebreather diving, and a single observation at 260 m depth, taken from a submersible dive.

Tosanoides bennetti Allen & Walsh 2019

Tosanoides bennetti Allen & Walsh 2019: 27, figs. 1 2A-B, 3, 4A (Northwestern section of western part of Holmes Reefs, Coral Sea, Australia 16°31.3'S 147°49.0'E, depth 150 meters). Holotype: QM I.40881. Paratypes: AMS I.48015-001, AMS I.48016-001, QM I.40882, WAM P.34932-001, WAM P.34933-001.

Distribution: Coral Sea, Australia.

Tosanoides filamentosus Kamohara 1953

Tosanoides filamentosus Kamohara 1953: 3, fig. 3 (Okinoshima, Kochi Prefecture, Japan). Holotype (unique): BSKU 1908.

Distribution: Japan.

Tosanoides flavofasciatus Katayama & Masuda 1980

Tosanoides flavofasciatus Katayama & Masuda 1980a: 51, figs. 1-3 (off Izu-Oshima, Japan, 34°47'N 139°24'E). Holotype: ZUMT 54241. Paratypes: FSFL EE814 (1), NSMT-P 22994 [ex Katayama coll. 5744] (1).

Distribution: Japan and Tonga Ridge, Melanesia.

Tosanoides obama Pyle, Greene & Kosaki 2016

Tosanoides obama Pyle, Greene & Kosaki 2016: 168 figs. 1-6 (Northwestern Hawaiian Ids, Kure Atoll). Holotype: BPBM 41315. Paratype: BPBM.

Distribution: Hawaiian Ids.

Genus *Trachypoma* Günther 1859

Trachypoma Günther 1859: 167 (*Trachypoma macracanthus* Günther 1859. Type by monotypy). Gender neuter.

Southwestern Pacific in rocky estuaries to clear coastal waters in shallow protected waters to about 20 m. One species.

Trachypoma macracanthus Günther 1859

Trachypoma macracanthus Günther 1859: 167 (Norfolk Id). Syntypes: BMNH 1855.9.19.40-41 (2) 1855.9.19.208-209 (2).

Distribution: Eastern Australia, Lord Howe Ids, Kermadec Ids, New Zealand to Easter Id and Desventuradas Ids off Chile.

Subfamily Epinephelinae Bleeker 1874

(Groupers; rockcods; sea basses)

Epinephelini Bleeker 1874a: 1 (type genus *Epinephelus* Bloch 1793).

Epinephelini Bleeker 1875–76: 1 22 (proposed as *phalanx* [tribe]).

Epinephelini Bleeker 1876: 253.

Cephalopholinae Whitley 1937a: 124 (subfamily) *nomen nudum*.

Cephalopholidae Whitley 1951a: 63 (proposed as a family; type genus *Cephalopholis*).

Chromileptidae Whitley 1951a: 63 (proposed as a family; type genus *Chromileptes*).

Plectropomidae Smith 1956: 689 (proposed as a family) *Plectropomus* [used as valid by Smith 1961b: 189 (article 13.2.1)].

Demersal fishes of tropical, subtropical and temperate (few species) seas. They inhabit coral reefs, rocky bottom or sandy substrates. Found also on seagrass beds and mud or sandy bottoms. They are at the top of the alimentary chain feeding mainly of fishes or large crustaceans and cephalopods. Size: 20-300 cm with a maximum weight of 400 Kg. Excellent food fishes and of considerable commercial importance. Fifteen genera in five tribes (Johnson 1983; Baldwin and Johnson 1993). The Indo-Pacific species have been revised by Randall and Heemstra (1991). Based on larval and adult characters Baldwin and Johnson (1993) recognized five tribes Diploprionini, Epinephelini, Grammistini, Liopropomini, and Niphonini. The Niphonini represent

the sister group of all other epinepheline, which share the following morphological traits: first supranumerary dorsal-fin spine absent; two supranatural reduced in size; the spine serially associated with the first dorsal-fin pterygiophore extremely elongate in larvae and encased in a fleshy sheath.

Tribe Diploprionini Bleeker 1874

Diplopriontini Bleeker 1874a: 124 (phalanx or tribe) *Diploprion* Cuvier 1828).

Diploprionini Jordan 1923: 195 (emendation).

Belonopercinae Fowler & Bean 1930: 175 (proposed as a subfamily; type genus *Belonoperca* Fowler & Bean 1930).

Indo-Pacific. Diploprionini, Grammistini, and Liopropomini represents a monophyletic group based on two larval characters: one or more elongate, filamentous dorsal-fin spine and absence of elongate spine at angle of preopercle. Diploprionini and most Grammistini have their skin coated of viscid mucus containing the toxin grammistin, which imparts a bitter taste and serve as effective deterrent against predators. Carnivorous, they feed mainly on benthic crustaceans and small fishes. Neurocranium and infraorbitals rugose; base of dorsal and anal fin covered with ridges of tissue; unique scale morphology (Baldwin & Johnson 1993). Three genera with five species.

Genus *Aulacocephalus* Temminck & Schlegel 1843

Aulacocephalus Temminck & Schlegel 1843: 15 (type species *Aulacocephalus temminckii* Bleeker 1854. Type by subsequent monotypy. Original description without species; one species added by Bleeker 1854: 12). Gender masculine.

Indo-west Pacific; one species.

Aulacocephalus temminckii Bleeker 1855

Grammistes compressus Liénard 1834: 117 (Mauritius, Mascarenes, southwestern Indian Ocean). No types known.

Aulacocephalus temminckii Bleeker 1855a: 12 (Nagasaki, Japan). No types known.

Aulacocephalus schlegelii Günther 1859: 173 (Mauritius, Mascarenes, southwestern Indian Ocean). Syntypes: (2, stuffed) BMNH.

Centropristis saponaceus Valenciennes 1862: 1167 (Réunion). Syntypes: MNHN 0000-2586 (1) Réunion, 0000-7298 (1) Mauritius.

Distribution: From South Africa and Mauritius to Thailand, Australia, Kermadec Id, New Zealand northward to Japan.

Comments: Taxonomic decisions of Katayama (1960: 43), Randall et al. (1971), and Bauchot et al. (1984: 13). *Aulacocephalus temminckii* is often misspelled *temmincki* in literature. *Grammistes compressus* Liénard 1834 predates *Aulacocephalus temminckii* Bleeker 1854 but it has never been used as a valid name for this species. Both the conditions established by Art. 23.9.1 of the Code are met for prevailing usage to be maintained: *Grammistes compressus* Liénard 1834 has not been used as valid name since 1899 and it is here declared *nomen oblitum*. *Aulacocephalus temminckii* Bleeker 1854 is here declared *nomen protectum* as it has been used in at least 25 works published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. In order to satisfy Art. 23.9.1.2 we select the following 25 works: Katayama in Masuda et al. (1984), Randall (1986), Paxton et al. (1989), Paulin et al. (1989), Kuitert (1993), Francis (1993), Goren and Dor (1994), Kuitert (1997), Baldwin and Smith (1998), Francis et al. (1999), Fricke (1999), Heemstra and Randall (1999), Randall in Randall and Lim (2000), Huang (2001), Hutchins (2001), Nakabo (2002), Youn

(2002), Chen (2004); Randall et al. (2005), Heemstra et al. (2006), Hoese et al. (2006), Khalaf and Zajonz (2007), Fricke et al. (2009), Golani and Bogorodsky (2010), Bos and Gumanao (2013).

Genus *Belonoperca* Fowler & Bean 1930

Belonoperca Fowler & Bean 1930: 175 (type species *Belonoperca chabanaudi* Fowler & Bean 1930. Type by original designation). Gender feminine.

Indo-Pacific, in rocky and coral reefs; two species (Baldwin and Smith 1998).

Belonoperca chabanaudi Fowler & Bean 1930

Belonoperca chabanaudi Fowler & Bean 1930: 182, fig. 4 (Una Una Road, Binang Unang, Gulf of Tomini, Sulawesi, Indonesia). Holotype: USNM 89982. Paratypes: USNM 93363 (1).

Distribution: From East Africa to Samoa and Marshall Ids.

Belonoperca pylei Baldwin & Smith 1998

Belonoperca pylei Baldwin & Smith 1998: 326, figs. 1-3 (Rarotonga, Cook Ids). Holotype: BPBM 37615.

Paratypes: BMNH 1997.10.22.2 (1); BPBM 37426 (1); USNM 345768 (1), 345848 (1).

Distribution: Rarotonga, Cook Ids; one larval specimen from Philippines probably belong to this species.

Genus *Diploprion* Cuvier 1828

Diploprion Cuvier (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 137 (*Diploprion bifasciatum* Cuvier 1828. Type by monotypy). Gender masculine.

Indo-West Pacific in coral reefs. Two species.

Diploprion bifasciatus Cuvier 1828

Diploprion bifasciatum Cuvier (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 137, Pl. 21 (Java, Indonesia). Syntypes (Kuhl & van Hasselt specimens): MNHN 0000-7296 (1), ?ZMB 6377 [ex RMNH] (1, stuffed).

Distribution: India to west Pacific.

Comments: The genus is masculine and the correct spelling is *bifasciatus*. Sometimes treated with Kuhl and van Hasselt as authors. Kuhl and van Hasselt tragically died before they could publish the descriptions of the fishes they collected. Several years later, Cuvier and Valenciennes used the names for the new species and wrote the descriptions themselves. This makes them alone the authors.

Diploprion drachi Roux-Estève 1955

Diploprion drachi Roux-Estève in Roux-Estève & Fourmanoir 1955: 197 (Abu Latt, Saudi Arabia, Red Sea 19°58.0'N, 40°07.60' E). Holotype (unique): MNHN 1952-0253.

Distribution: Red Sea.

Tribe Epinephelini Bleeker 1874

(Groupers)

Larvae with an elongate pelvic fin spine. The tribe, treated as a subfamily, has been reviewed by Heemstra & Randall (1993). We follow Craig et al. (2011) in recognizing 16 valid genera. A molecular study performed by Ma and Craig (2018) resulted in recognizing only nine genera as valid; however, on the basis of well-defined morphological differences among the genera the arrangement proposed by Ma and Crag is not accepted here.

In addition, several regional checklists did not use the generic arrangement proposed by Ma & Craig, as this decision would create much confusion about well established fish taxa (Fricke et al 2018, 2019c; Zajonz et al. 2019).

Genus *Aethaloperca* Fowler 1904

Aethaloperca Fowler 1904: 522 (type species *Perca rogae* Forsskål 1775. Type by original designation). Gender feminine.

Monotypic; Indo-West Pacific.

Aethaloperca rogae (Forsskål 1775)

Perca rogae Forsskål 1775: 38 (Jeddah, Saudi Arabia, Red Sea). No types known. Neotype designation by Fricke (1999:174) is invalid.

Perca lunaria Forsskål 1775: 39 (Jeddah, Saudi Arabia, Red Sea). No types known.

Bodianus lunulatus Shaw 1803: 575 (Jeddah, Saudi Arabia and Al-Luhayya, Yemen, Red Sea) (*nomen novum* for *Perca lunaria* Forsskål). No types known.

Distribution: Red Sea and East Africa to Fiji and Gilbert Ids in the central Pacific.

Genus *Alphestes* Bloch & Schneider 1801

Alphestes Bloch & Schneider 1801: 236 (type species *Epinephelus afer* Bloch 1793. Type by subsequent designation by Jordan and Swain 1884: 394). Gender masculine.

Prospinus Poey 1861: 364, 388 (type species *Plectropoma chloropterum* Cuvier 1828. Type by subsequent designation by Jordan & Evermann 1896: 1164). Gender masculine.

Amphiamerican and eastern Atlantic, in shallow water among seagrass and crevices. Three species.

Alphestes afer (Bloch 1793)

Epinephelus afer Bloch 1793: 12, Pl. 327 (Guinea, West Africa). Holotype (unique): ZMB 143.

Plectropoma chloropterum Valenciennes in Cuvier & Valenciennes 1828: 398 (San Domingo; Martinique Id, West Indies). Syntypes: MNHN 0000-7782 (1) and 0000-7783 (1) San Domingo, 0000-4907 (1) Martinique; ?ZMB 282 (1) San Domingo.

Plectropoma monacanthus Müller & Troschel in Schomburgk 1848: 665 (Barbados, West Indies). Holotype (unique): ZMB 292.

Serranus armatus Osório 1894: 174 (São Tomé Id, eastern Atlantic) (*nomen preoccupatum*, junior homonym of *Serranus armatus* Castelnau 1875 [= *Epinephelides armatus* (Castelnau 1875)]; objectively invalid). Syntypes: MB (lost in fire in 1978). Syntypes: MB (lost in fire in 1978).

Epinephelus lightfooti Fowler 1907: 258, fig. 3 (Dominican Republic, West Indies). Holotype (unique): ANSP 16514.

Prospinus apiarius Poey 1962: 55, Pl. 47 (fig. P) (Cuba). No types known.

Distribution: Western Atlantic from Bermuda, southern Florida, Bahamas, Cuba, West Indies and along the mainland from Panama to Venezuela and off Brazil. Also in the Gulf of Guinea.

Alphestes immaculatus Breder 1936

Alphestes immaculatus Breder 1936: 22, fig. 9 (San Francisco Bay, Gulf of California, Mexico). Holotype (unique): YPM 596.

Alphestes galapagensis Fowler 1944: 342, fig. 186 (San Cristóbal Id [Chatham Id], Galápagos Ids). Holotype: ANSP 70138.

Alphestes fasciatus Hildebrand 1946: 163, fig. 36 (Lobos de Afuera Bay, Peru). Holotype: USNM 127950. Paratypes: USNM 127951-54 (1, now 4 1 2); Gov't Peru [ex USNM 127952] (1).

Distribution: Eastern Pacific from the northern Gulf of California to Peru, including Galápagos Ids.

Alphestes multiguttatus (Günther 1867)

Plectropoma multiguttatum Günther 1867: 600 (Panama). Holotype: BMNH 1866.1.14.3.

Distribution: eastern Pacific from the northern Gulf of California to northern Peru, including Cocos Ids and Malpelo Id.

Genus *Anyperodon* Günther 1859

Anyperodon Günther 1859: 95 (type species *Serranus leucogrammicus* Valenciennes 1828. Type by monotypy). Gender masculine.

Monotypic; Indo-West Pacific.

Anyperodon leucogrammicus (Valenciennes 1828)

Serranus leucogrammicus Valenciennes in Cuvier & Valenciennes 1828: 347 (Molucca Ids, Indonesia; Seychelles). Lectotype: MNHN 0000-7166. Paralectotypes: MNHN 0000-7165 (1), RMNH D117 (1, stuffed). Lectotype selected by Randall & Ben-Tuvia (1983:381).

Serranus micronotatus Rüppell 1838: 90 (Massawa, Eritrea, Red Sea). Holotype: SMF 2001.

Serranus urophthalmus Bleeker 1855b: 310. Holotype (unique): whereabouts unknown (Batu Ids, Indonesia).

Distribution: Widespread from Red Sea and western Indian Ocean to Samoa, Phoenix Ids and Marshall Ids.

Genus *Cephalopholis* Bloch & Schneider 1801

Cephalopholis Bloch & Schneider 1801: 311 (type species *Cephalopholis argus* Bloch & Schneider 1801. Type by monotypy). Gender feminine.

Uriphaeton Swainson 1839: 168 (type species *Serranus phaeton* Valenciennes 1828. Type by monotypy). Gender masculine.

Enneacentrus Gill 1865: 105 (type species *Serranus ouatalibi* Valenciennes 1828. Type by original designation). Gender masculine.

Petrometopon Gill 1865: 105 (type species *Serranus guttatus* of Poey. Type by monotypy). Gender neuter. Twenty-four species distributed in the Indo-Pacific (19), eastern Pacific (1) and eastern (2) and western Atlantic (2). Genus is feminine, however in the past it was treated as masculine: the original combinations are not emended here.

Cephalopholis aitha Randall & Heemstra 1991

Cephalopholis aitha Randall & Heemstra 1991: 29, Pl. 1c, fig. 5 (Tripod Reef, lagoon off Nagada Harbour, Madang Province, Papua New Guinea). Holotype: BPBM 32655. Paratypes: AMS I.28525-001 (1); BMNH 1989.2.3.1 (1); BPBM 32223 (1), 32229 (1); SAIAB [formerly RUSI] 29158 [ex USNM 236462] (1); USNM 236456 (1) 274684 (1).

Distribution: Indonesia, Papua New Guinea, and Philippines.

Cephalopholis argus Schneider 1801

Perca miniata caeruleoocellata Forsskål 1775: xi, 41 (no locality stated [Red Sea]; as *varietas b* on p. 41). No types known.

Bodianus guttatus Bloch 1790, Pl. 224 (Indian Ocean and Japan). Syntypes: ZMB 5213 (1, right skin) Japan, 33016 (1, stuffed).

Anthias argus Bloch 1792: 111, Pl. 317 (no locality stated).

Perca balah Walbaum 1792: 338 (Red Sea). No types known.

Epinephelus argus Bloch & Schneider 1801: 301 (East Indies).

Cephalopholis argus Schneider in Bloch & Schneider 1801: 311, Pl. 61. Holotype (unique): ZMB 220 (In India Orientali [Indonesia]).

Bodianus jacobevertsen Lacepède 1802: 283 296 (St. Helena Id, South Atlantic). No types known.

Serranus myriaster Valenciennes in Cuvier & Valenciennes 1828: 365 (Bora Bora, Society Ids; Hawaiian Ids). Syntypes: MNHN 0000-7218 (1) Bora Bora, 0000-7219 (1) Hawaiian Is.

? *Serranus immunerur* Montrouzier 1857: 422 (Woodlark Island, South Pacific). No types known.

Anthias amarui Curtiss 1938: 93 (Lagoon near Tautira, Tahiti). No types known.

Anthias grandinatus Curtiss 1938: 93 (near Tautira, Tahiti). No types known.

Distribution: Widespread in the Indo-Pacific from Red Sea and western Indian Ocean to Ducie Id, Marquesas Ids, and Line Ids, northward to Ryukyu Ids and Ogasawara Ids, southward to Lord Howe Id; introduced to the Hawaiian Ids.

Comments: The specific names *Bodianus guttatus* Bloch 1790 and *Anthias argus* Bloch 1792 have been suppressed (ICZN 1987, Opinion 1439) to conserve *C. argus* as the valid name for this species. Bloch & Schneider placed the same species a fourth time under the genus *Epinephelus* as *E. argus*. The description of *E. argus* is shorter than that of *C. argus*, but there are no distinguishing features between the two, including an identical fin rays count. *Epinephelus argus* precedes *Cephalopholis argus* and it is here declared a *nomen oblitum* under Code art. 23.9.2, as it has not been used as a valid name since 1899 [Code art. 23.9.1.1]. *Cephalopholis argus* here declared a *nomen protectum* under Code art. 23.9.2, used in at least 25 works in the last 50 years, listed here below [Code art. 23.9.1.2]). *Perca balah* Walbaum 1792 has been declared *nomen oblitum* (Parenti 2003: 493). *Perca balah* is a new name for *Perca miniata caeruleoocellata* Forsskål 1775, erroneously listed as a synonym of *Perca miniata* in the ECoF (see also remarks under *Cephalopholis miniata*). Therefore, *Perca miniata caeruleoocellata* Forsskål 1775 is here declared *nomen oblitum*. The list of 25 works in which *Cephalopholis argus* Schneider is used as a valid name, published by at least 10 authors, in the immediately preceding 50 years and encompassing a span of not less than 10 years (Code art. 23.9.2) is: Dor (1984), Katayama in Masuda et al. (1984), Winterbottom et al. (1989), Randall and Heemstra (1991), Heemstra and Randall (1993), Francis (1993), Goren and Dor (1994), Kuitert (1997), Randall and Lim (2000), Laboute and Grandperrin (2000), Hutchins (2001), Nakabo (2002), Allen and Adrim (2003), Manilo and Bogorodsky (2003), Myers and Donaldson (2003), Heemstra and Heemstra (2004), Randall (2005), Mundy (2005), Hoese et al. (2006), Randall (2007), Motomura and Satapoomin (2009), Craig et al. (2011), Allen and Erdmann (2012) and Fricke et al. (2013).

Cephalopholis aurantia (Valenciennes 1828)

Serranus aurantius Valenciennes in Cuvier & Valenciennes 1828: 305 (Seychelles). Holotype (unique): MNHN 0000-0765.

Serranus analis Valenciennes in Cuvier & Valenciennes 1828: 307 (New Ireland Id, Bismarck Archipelago). Holotype (unique): MNHN 0000-7269.

Serranus rufus Hombron & Jacquinot in Jacquinot & Guichenot 1853: 35, Pl. 1 (fig. 4) (no locality stated) (objectively invalid, *nomen praeoccupatum*; preoccupied by *Serranus rufus* Bowdich 1825). Holotype (unique): whereabouts unknown.

? *Epinephelus miltostigma* Bleeker 1873b: 45 (Ambon Id, Moluccas, Indonesia). Holotype (unique): RMNH 5508.

Bodianus indelebilis Fowler 1904: 521, Pl. 17 (lower fig.) (Padang, Sumatra, Indonesia). Holotype (unique): ANSP 27553.

Cephalopholis obtusauris Evermann & Seale 1907: 77, fig. 12 (Bacon, Sorsogon, Luzon Id, Philippines). Holotype (unique): USNM 55910.

Distribution: East coast of Africa to Pitcairn and Society Ids northward to Ryukyu Ids south to New Caledonia and Rapa.

Comments: *Epinephelus miltostigma* was described having body and fins rosy; the head, body, and fins with unequal, sparse, purple spots. It was regarded as a doubtful synonym of *C. aurantia*, which have spots only anterodorsally on the body. If more specimens with colour pattern as illustrated by Bleeker will be found, the possibility that *E. miltostigma* represents a valid species should be investigated (Randall and Heemstra 1991).

Cephalopholis boenak (Bloch 1790)

Bodianus boenak Bloch 1790: 43, Pl. 226 (Japan [apparently erroneous, Indonesia]). Lectotype: ZMB 5220 (right skin). Paralectotypes: ZMB (1, stuffed, lost). Lectotype selected by Paepke (1999:133).

Perca fusca Thunberg 1793b: 297, Pl. 9 (Japan). No types known.

Bodianus zebra Shaw 1803: 574 (Japan) (unneded new name for *Bodianus boenak* Bloch 1790).

Serranus pachycentron Valenciennes in Cuvier & Valenciennes 1828: 295 (no locality stated). Holotype: MNHN 0000-7432 (dry).

Serranus boelang Valenciennes in Cuvier & Valenciennes 1828: 308 (East Indies). Holotype (unique): MNHN 0000-7672 (dry).

Serranus stigmatomus Richardson 1846: 232 (Canton, China). Holotype (unique): BMNH.

Serranus nigrofasciatus Hombron & Jacquinot in Jacquinot & Guichenot 1853: 36, Pl. 2 (fig.1) (no locality stated). Holotype (unique): whereabouts unknown.

Epinephelus stigmatomus Seale 1909 (misspelling for *stigmatomus*).

Distribution: East coast of Africa and Madagascar, Laccadives, India, Sri Lanka and Andaman Sea; in the West Pacific from Ryukyu Ids and East China Sea to north-western shelf of Australia and southern Coral sea, eastward to Palau, Solomon Ids, and New Caledonia.

Comments: In literature the name appears also as *boenack* (e.g. Dor 1984: 97, Masuda et al. 1984: 128, Heemstra and Randall 1986: 517). *Perca fusca* is here regarded as a new junior synonym of *C. boenak*.

Cephalopholis cruentata (Lacepède 1802)

Sparus cruentatus Lacepède 1802: 51 156, Pl. 4 (fig. 1) (Antilles and Bahamas). No types known.

Serranus coronatus Valenciennes in Cuvier & Valenciennes 1828: 371 (Martinique Id, West Indies). Syntypes: MNHN 0000-0890 (1), A-7713 (1, dry).

Serranus apiarius Poey 1860: 143 (Havana, Cuba). Syntypes: MCZ 9998 (1) 10068 (1, missing) 10158 (1).

Bodianus stellatus Blosser 1909: 297, Pl. 10 (St. Croix Id, Virgin Ids, West Indies). Holotype (unique): FMNH 53048.

Distribution: Western Atlantic from Bermuda, Bahamas, North Carolina to Florida, Gulf of Mexico, Caribbean Sea, West Indies and northern South America.

Comments: *Sparus cruentatus* Lacepède is said to be based on *Perca guttata* Linnaeus (Gmelin edition). However, *P. guttata* was created on the base of five earlier references (Marggraf 1648: 169; Willoughby 1686: 303; Ray 1713: 127; Sloane 1725: 280; Catesby 1743: 14), reported unchanged in the 12th edition as well as in the 13th edited by Gmelin (1789). The name was based solely on literature and includes at least three similar species, which has been confused by ancient naturalists: the present species, *Epinephelus itajara* (Lichtenstein 1822) and *Epinephelus guttatus* (Linnaeus 1758). These species can be distinguished by several morphological traits, among all the number of dorsal fin spines. Neither Linnaeus nor Gmelin reported fin spine and rays count; Lacepède described his species having nine dorsal fin spines as well as Bonnaterre (1789: 130) and Suckow (1799: 501) for their *Perca guttata* L. Moreover, Bonnaterre illustrated the species on plate 56, fig. 215, which is a reproduction of the specimen illustrated by Catesby on Table 14, fig. 1 characterized by nine dorsal spines.

Cephalopholis cyanostigma (Valenciennes 1828)

**Serranus cyanostigma* Valenciennes (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 359 (Java, Indonesia). Holotype (unique): RMNH 103.

Cephalopholis kendalli Evermann & Seale 1907: 76, fig. 11 (Bacon, Sorsogon, Luzon Id, Philippines). Holotype (unique): USNM 55911.

Cephalopholis xanthopterus Allen & Stark 1975: 246, fig. 1. Holotype: BPBM 15621. Paratypes: AMS I.16866-001 (1), I.17498-001 (2), I.17499-001 (1), I.17503-001 (1); BPBM 18088 (1); WAM P.25244-008 (1) (Alite Reef, off Malaita, Solomon Ids, about 8°52'S 160°36'E).

Distribution: Indo-Australian Archipelago from Gulf of Thailand to Palau, Solomon Ids, southward in the Coral Sea.

Cephalopholis formosa (Shaw and Nodder 1812)

Sciaena formosa Shaw and Nodder 1812: no page n., Pl. 1007 (Vizagapatam, India). No type known.

Distribution: West and East coasts of India, Laccadive Ids, Sri Lanka, Indonesia, Gulf of Thailand, Philippines, Taiwan, southern Japan and South China Sea.

Comments: Many authors have used the name *C. boenak* for this species.

Cephalopholis fulva (Linnaeus 1758)

Labrus fulvus Linnaeus 1758: 287 (America). No type known.

Perca punctata Linnaeus 1758: 291 (Bahamas). No types known.

Holocentrus auratus Bloch 1790: 75, Pl. 236 (Martinique Id, West Indies). Holotype (unique): ZMB 231.

Bodianus guativere Bloch & Schneider 1801: 336 (no locality stated). No types known.

Gymnocephalus ruber Bloch & Schneider 1801: 346, Pl. 67 (Brazil). No types known.

Serranus ouatalibi Valenciennes in Cuvier & Valenciennes 1828: 381 (West Indies). Syntypes: MNHN 0000-7257 (1) and 0000-7258 (1) Martinique, A-5746 (1, dry) and A-5778 (1, dry) Martinique, A-7677 (1, dry) and A-7717 (1, dry) St. Thomas.

Serranus carauna Valenciennes in Cuvier & Valenciennes 1828: 384 (Brazil). No type known.

Distribution: Tropical and subtropical western Atlantic from Bermuda, North Carolina to Brazil, including Gulf of Mexico and Atoll das Rocas, Brazil.

Comments: *Bodianus guativere* is based on "guativere" of Parra (1787: 7, Pl 5, figs. 1-2) collected off Havana, Cuba.

Cephalopholis hemistiktos (Rüppell 1830)

Serranus hemistiktos Rüppell 1830: 109, Pl. 27, fig. 3 (Massawa, Eritrea; Red Sea). Lectotype: SMF 314. Paralectotypes: BMNH 1860.11.9.96 (1); SMF 2999 (1), 3007 (1), 4895-96 (1 1). Lectotype established by Dor (1984:96).

Distribution: Red Sea to Pakistan, including the Persian Gulf.

Cephalopholis igarashiensis Katayama 1957

Cephalopholis igarashiensis Katayama 1957: 156, fig. 3 (Izu Ids, Japan). Holotype: NSMT-P 18655. Paratypes: ZUMT 39466 (1).

Cephalopholis swanius Tsai 1960: 188, fig. (Hualien, eastern Taiwan). Holotype (unique): NTUM 2305.

Distribution: West to South Pacific from Japan to Philippines; Mariana Ids, Samoa, Fiji and Society Isl.

Comments: The species was named in honour of the collector, Mr. Igarashi, hence the specific name should be *igarashii* not *igarashiensis* because the suffix *-ensis* denote a locality. However, Article 18 of the ICZN states that the availability of the name is not affected by being inappropriate.

Cephalopholis leopardus (Lacepède 1801)

Labrus leopardus Lacepède 1801: 450, 518, Pl. 30 (fig.1) (Grand Océan équatorial, ou les mers qui en sont voisines). Syntypes: MNHN A-5725 (3, dry) Indian Ocean.

Serranus spilurus Valenciennes in Cuvier & Valenciennes 1833: 433 (Mauritius). Holotype (unique): MNHN 0000-7270.

Serranus homfrayi Day 1871: 678 (Port Blair, Andaman Ids). Holotype (unique): ZSI 1680.

Epinephelus urodelops Schultz 1943: 105, fig. 8 (Lagoon of Canton Id, Phoenix Ids). Holotype (unique): USNM 115366.

Distribution: Widespread in the Indo-west and central Pacific from East coast of Africa to Society Ids and Line Ids and from southern Japan to Australia; absent from the Asian continental shelf of the Indian Ocean.

Cephalopholis microprion (Bleeker 1852)

Serranus microprion Bleeker 1852b: 552 (Ambon Id, Moluccas Ids, Indonesia). Lectotype: RMNH 5476 or 5467. Paralectotypes: RMNH 31257 [ex RMNH 5476 or 5467] (2). Lectotype selected by Randall & Heemstra (1991:53).

Distribution: Indo-Australian Archipelago, including Gulf of Thailand to Vanuatu (New Hebrides) and New Caledonia.

Cephalopholis miniata (Forsskål 1775)

Perca miniata Forsskål 1775: xi, 41 (Jeddah, Saudi Arabia, Red Sea; Al-Luhayya, Yemen, Red Sea). Lectotype: ZMUC P43567 (1, dry skin). Lectotype designated by Fricke (2008:27).

Perca nadjil Walbaum 1792: 339 (no locality stated). No types known.

Pomacentrus burdi Lacepède 1802: 506, 511 (unnecessary replacement name for *Perca miniata* Forsskål 1775). No types known.

Serranus cyanostigmatoides Bleeker 1849: 31 (Jakarta, Indonesia). Holotype (unique): RMNH 31174 [ex RMNH 8134].

? *Serranus perguttatus* De Vis 1884a: 445 (New Hebrides). Holotype (?): QM I.497.

Cephalopholis maculatus Seale & Bean 1907: 235, fig. 5 (Zamboanga, Mindanao, Philippines). Holotype: USNM 57843. Paratypes: USNM 61153 (1).

Cephalopholis formosanus Tanaka 1911: 24, Pl. 7, fig. 22 (Keelung, Taihoku, Taiwan). Holotype (unique): ZUMT 2975 (poor condition).

Cephalopholis boninius Jordan & Thompson 1914: 248, Pl. 29 (fig. 1 [not 7]) (Bonin Ids, Japan). Holotype: FMNH 57099 [ex CM 6038].

Distribution: Widespread in the Indo-Pacific: Red Sea to Natal eastward to Line Ids throughout the Indian Ocean and from Japan to western Australia, Coral Sea, and New Caledonia; not recorded along the coast of Asia from Persian Gulf to Cambodia.

Comments: Forsskål described two varieties of *P. miniata* and named them on p. xi as: β) *caeruleo-ocellata*. Balah and γ) *caeruleo-guttata*, major. *Nadjil*. Walbaum named these two varieties *Perca balah* and *Perca nadjil*, respectively. *Perca balah* is a senior synonym of *C. argus*. The Catalog of Fishes listed these two varieties as *Perca miniata* var. *caeruleoocellata* and *Perca miniata* var. *caeruleoguttata*, respectively and regarded them as available by indication. Kottelat (2013: 326) treated *Perca miniata caeruleoocellata* as vernacular and not available, but erroneously listed this name into synonymy of *Cephalopholis miniata*.

Cephalopholis nigri (Günther 1859)

Serranus nigri Günther 1859: 112 (Niger River mouth). Holotype (unique): BMNH 1847.4.4.5.

Serranus lineoocellatus Guichenot in Duméril 1861: 244 (Gabon; Gorée, Senegal). Syntypes: MNHN 0000-7370-to 0000-7371 (1 1).

Serranus cruentatus Peters 1876a: 244, Pl. (fig.1) (Victoria, West Africa). Syntypes: ZMB 9333 (2).

Distribution: Eastern Atlantic from Canary Ids and Senegal to Lobito, Angola; occasionally in brackish waters.

Comments: *Serranus cruentatus* was overlooked by Heemstra and Randall (1993); I examined the two syntypes at the ZMB and confirmed that *S. cruentatus* is a new synonym of *Cephalopholis nigri*. Also listed as a synonym by Smith (1971: 697).

Cephalopholis nigripinnis (Valenciennes 1828)

Serranus nigripinnis Valenciennes in Cuvier & Valenciennes 1828: 339 [spelled *nigripennis* in the Index at p. xiv] (no locality stated). Syntypes: MNHN A-5733 (2, dry skins, left side).

Distribution: Indian Ocean: South and East Africa, Seychelles, Madagascar and Mascarenes east to Andaman Sea and Christmas Island (eastern Indian Ocean).

Cephalopholis oligosticta Randall & Ben-Tuvia 1983

Cephalopholis oligosticta Randall & Ben-Tuvia 1983: 386, Pl. 1 (fig. D) (South side of entrance to Port Sudan about 100 meters from end of jetty, Sudan, Red Sea). Holotype: BPBM 19709. Paratypes: BMNH 1981.4.6.1 (1); BPBM 20401 (1) 20837 (1); CAS 47921 (1); HJ 10440 (1) 10543 (1); MNHN 1981-0720 (1); NMW 39259 (1); SAIAB [formerly RUSI] 513 (1); SMF 8618 (1); USNM 226618 (1).

Distribution: Red Sea.

Cephalopholis panamensis (Steindachner 1876)

Serranus panamensis Steindachner 1876: 551, Pl. 1 (fig. 1) (Panama). Syntypes: (several) NMW 40730

Distribution: Eastern Pacific from northern Gulf of California to Ecuador including Galápagos Ids.

Cephalopholis polleni (Bleeker 1868)

Epinephelus polleni Bleeker 1868: 336 (Réunion). Holotype (unique): RMNH 5511.

Plectropoma lineatum Bliss 1883: 45 (Mauritius). Holotype (unique): MCZ 5712.

Cephalopholis virgatus Fourmanoir 1955: 214, Pl. 8 B. Syntypes: IRSMNB (lost) (Mutsamudu, Anjouan Id, Comoro Ids).

Gracila okinawae Katayama 1974: 102, fig. 3 (Okinawa Id, Ryukyu Ids, Japan). Holotype: Katayama Fish Coll. 5180 (apparently lost).

Distribution: Scattered localities of the Indo-Pacific: Comoro Ids, Mauritius, Réunion, Maldives Ids, Chagos Archipelago, Cocos-Keeling and Christmas Ids, small Ids of Indonesia, Philippines, New Britain, Palau Ids, Guam and Line Ids.

Cephalopholis polyspila Randall & Satapomin 2001

Cephalopholis polyspila Randall & Satapomin 2001: 2, figs. 1-2 (Pulau Ular 1°7.2'S 100°21.35'E, southern side, Sumatra, Indonesia). Holotype: BPBM 37636. Paratypes: AMS I.39056-001 (1); BMNH 1999.2.18.1 (1); BPBM 38552-53 (1 1); CAS 205887 (1); NSMT-P 50628 (1); PMBC 9832 (1) 14099-100 (1 1) 11566 (1); ROM 69424-37 (15 15, 3 1 2 20 14, 8 2 10, 6 11 14, 3), 69438-39 (3); SAIAB [formerly RUSI] 27659 (1), 59838 (1); USNM 353870 (1).

Distribution: Andaman Sea: southwest coast of Thailand and southwestern coast of Sumatra.

Comments: Previously misidentified with *C. cyanostigma* and *M. microprion*.

Cephalopholis sexmaculata (Rüppell 1830)

Serranus zanana Valenciennes in Cuvier & Valenciennes 1828: 339 Holotype: MNHN 0000-7271 (dry) (Mauritius).

Serranus sexmaculatus Rüppell 1830: 107 (Red Sea). Holotype (unique): SMF 2994 (dry).

Cephalopholis coatesi Whitley 1937a: 124, Pl. 12 (Slasher's Reef, off Townsville, Queensland, Australia). Holotype (unique): QM I.5504.

Anthias percaroli Curtiss 1938: 88 (Lagoon near Tautira, Tahiti). No types known.

Cephalopholis gibbus Fourmanoir 1955: 215, Pl. 8B (Mutsamudu, Anjouan Id, Comoro Ids). Holotype (unique): IRSMNB (lost).

Distribution: Red Sea and western Indian Ocean to Marquesas Ids and Line Ids, and from Japan to Coral Sea; not recorded from the Asian continental shelf.

Comments: *Serranus zanana* Valenciennes is a senior synonym; Randall et al. (1985) proposed that it be suppressed. The ICZN (1987: Opinion 1439) rejected the name *Serranus zanana* and placed *Serranus sexmaculatus* on the Official List of Specific Name in Zoology.

Cephalopholis sonnerati (Valenciennes 1828)

Serranus sonnerati Valenciennes in Cuvier & Valenciennes 1828: 299 (Puducherry, India). Lectotype: MNHN A-7671 (dry). Paralectotypes: MNHN A-5774 (2, dry), A-7686 (1, dry), MNHN 0000-7266 (2). Lectotype selected by Randall & Heemstra (1991:64).

Serranus zananelle Valenciennes in Cuvier & Valenciennes 1828: 304. No type known (Fort Dauphin, Madagascar).

Epinephelus janthinopterus Bleeker 1873b: 45 (Makassar, Sulawesi, Indonesia). Holotype: RMNH 5507.

Epinephelus unicolor Bleeker 1874b: 89 (Mauritius). No types known

Cephalopholis purpureus Fourmanoir 1966: 221, fig. 3 (Nha-Trang market, Vietnam). Syntypes: MNHN 1965-0276 (2).

Distribution: Two populations from Indian Ocean and Pacific readily distinguished by colour pattern of adults; in the Indian Ocean from Gulf of Oman South to Durban to Bay of Bengal and Christmas Id (not found in the Red Sea and Persian Gulf); in the Pacific from Japan to Queensland to central Pacific (Line Ids).

Cephalopholis spiloparaea (Valenciennes 1828)

Serranus spiloparaeus Valenciennes in Cuvier & Valenciennes 1828: 338 (no locality stated). Holotype (unique): MNHN 0000-7172 (dry skin).

Distribution: Western Indian Ocean to Pitcairn Group (absent from the Asian continental shelf) northward to Marshall Ids and Mariana Ids and from Ryukyu Ids to southern Great Barrier Reef.

Cephalopholis taeniops (Valenciennes 1828)

Perca maculosa Walbaum 1792: 350 (no locality stated). No types known.

Perca punctata maculosa Walbaum 1792: 350 (no locality stated). No types known.

Bodianus maculatus Bowdich 1825: 236, fig. 39 (Boa Vista, Cape Verde Ids) (objectively invalid, *nomen preoccupatum*, preoccupied by *Bodianus maculatus* Bloch 1790). No types known.

Serranus taeniops Cuvier in Guérin-Méneville 1828, no page n. (no locality stated). No types known.

Serranus taeniops Valenciennes in Cuvier & Valenciennes 1828: 307 (Cape Verde Ids). Syntypes: MNHN 0000-6218 (1, dry), 0000-6233 (1), A.7720 (1).

Distribution: Eastern Atlantic from Morocco to Angola, including Cape Verde Ids, Principe Id, and São Tomé.

Comments: Parenti (2003: 495) treated *Perca maculosa* Walbaum as *nomen oblitum* to permit the continued use of *taeniops*, which has been declared *nomen protectum*. *Perca punctata maculosa* Walbaum was described as a variety and based on Seba Thesauri, plate 27, figure 6 (Seba 1759), which has been recognized as *Serranus taeniops* Cuvier by Parenti and Desoutter-Meniger (2007: 397). Text of *Serranus taeniops* applies to Pl. 27 (no. 6) was published in 1827: declared *nomen oblitum* by Parenti and Desoutter-Meniger (2007:397).

Cephalopholis urodeta (Forster 1801)

Perca urodeta Forster in Bloch & Schneider 1801: 333, xlv (Santa Christina Id, Waitaho [Waitahu, Tahuata Id, Marquesas Ids). Holotype (unique): BMNH 1979.6.13.7.

Serranus urodelus Valenciennes in Cuvier & Valenciennes 1830: 306 (Santa Christina Id [= Tahuata Id], Marquesas Ids). Holotype (unique): BMNH 1979.6.13.7.

Serranus erythraeus Valenciennes in Cuvier & Valenciennes 1830: 516 (Réunion). Holotype: MNHN 0000-7346.

Perca urodeta Forster in Lichtenstein 1844:221 (St. Christinae, Waitaho, Marquesas Islands) (objectively invalid, *nomen praeoccupatum*; preoccupied by *Perca urodeta* Forster in Bloch & Schneider 1801). No types known.

Epinephelus playfairi Bleeker 1879: 2 (Mauritius). Holotype (unique): whereabouts unknown.

Serranus mars De Vis 1884b: 390 [dated 1885 in Randall and Heemstra 1991] (Cardwell, Queensland, Australia). Holotype: not at QM.

Anthias teatae Curtiss 1938: 89 (Lagoon near Tautira, Tahiti). No types known.

Distribution: Widespread in the west to central Pacific from southern Japan, including Ogasawara Ids and Marcus Id to Loyalty Ids, Pitcairn Group and Line Ids.

Genus *Chromileptes* Swainson 1839

Chromileptes Swainson 1839: 168 201 (*Serranus altivelis* Valenciennes 1828. Type by subsequent designation.). Gender masculine.

Serranichthys Bleeker 1855c: 344 (*Serranus altivelis* Valenciennes 1828. Type by monotypy). Gender masculine.

Monotypic; Indo-West Pacific.

Comments: The genus was spelled *Cromileptes* on p. 201 and *Chromileptes* on p. 168 and in the index; first technical reviser apparently McCulloch (1929), who selected *Chromileptes* over *Cromileptes*; both spellings are in current usage. Placed in *Epinephelus* by Ma and Craig (2018:455), but we prefer to maintain the genus as valid as documented in a wide number of publications (Fricke et al. 2019b) and also in a recent regional checklist (Fricke et al. 2019c:116).

Chromileptes altivelis (Valenciennes 1828)

Serranus altivelis Valenciennes in Cuvier & Valenciennes 1828: 324, Pl. 35 (Java, Indonesia). Syntypes: MNHN 0000-7174 (1, dry) no locality, RMNH (not found).

Distribution: Japan to Great Barrier Reef and New Caledonia westward to Nicobare Ids; records from Sri Lanka and India need confirmation; specimen collected off Oahu, Hawaiian Ids, was ascribed to aquarium release (Randall and Heemstra 1991).

Genus *Dermatolepis* Gill 1861

Dermatolepis Gill 1861d: 54 (type species *Dermatolepis punctatus* Gill 1861. Type by monotypy). Gender feminine.

Lioperca Gill 1862b: 236 (type species type species *Serranus inermis* Valenciennes 1833. Type by monotypy). Gender feminine.

Eastern Pacific, western Atlantic and western Indian Ocean; relatively rare and secretive coral-reef fishes from 10 to 212 m. Three species.

Dermatolepis dermatolepis (Boulenger 1895)

Dermatolepis punctatus Gill 1861d: 54 (Cape San Lucas, Baja California, Mexico). No types known.

Epinephelus dermatolepis Boulenger 1895: 256 (Cape San Lucas, Baja California, Mexico). No types known.

Distribution: Los Angeles, California and Gulf of California to Ecuador, including Revillagigedo Archipelago, Cocos Ids, Clipperton Atoll and Galápagos Ids.

Comments: *Epinephelus dermatolepis* Boulenger 1895 was proposed as *nomen novum* for *Dermatolepis punctatus* Gill preoccupied by *Holocentrus punctatus* Bloch 1790 when both are in *Epinephelus*. However as *D. punctatus* Gill and *H. punctatus* Bloch belong to different genera, *E. dermatolepis* is an unneeded replacement name and *Dermatolepis punctatus* Gill should be used for this species. *Dermatolepis punctatus* cannot be declared a *nomen oblitum* under Code art. 23.9.2, as it has been used as a valid name after 1899 [Code art. 23.9.1.1] by Jordan et al. (1930: 313). However *Dermatolepis dermatolepis* is in prevailing usage as it has been used as valid name for many years (McCosker and Rosenblatt (1975: 92), Robins et al. (1991), Heemstra and Randall (1993: 65), Allen and Robertson (1994: 107), Heemstra in Fischer et al. (1995: 1581), Béarez (1996: 736), Grove and Lavenberg (1997: 315), Chirichigno and Vélez (1998: 350), Castro-Aguirre et al. (1999: 270), Thomson et al. (2000: 80), Craig et al. (2001: 126), Nelson et al. (2004: 127), Dominici-Arosemena and Wolff (2006: 289) Erisman et al. (2009: 15), McCosker and Rosenblatt (2010: 191) Craig et al.

(2011: 65), and Page et al. (2013: 130). The matter should be sent to the Zoological Commission for a ruling under the plenary power (Art. 81).

Dermatolepis inermis (Valenciennes 1833)

Serranus inermis Valenciennes in Cuvier & Valenciennes 1833: 436 (Antilles). Holotype (unique): MNHN 0000-5633 (dry).

Dermatolepis zanclus Evermann & Kendall 1898: 129, Pl. 8, fig. 9. Holotype (unique): USNM 48843 (Near Dry Rocks Reef 1 mile east of Sand Key, Key West, Florida, U.S.A.).

Dermatolepis marmoratus Osburn & Mowbray 1915: 1, fig. (Key West, Florida, U.S.A.). Holotype (unique): AMNH 4775.

Distribution: Widespread in tropical and subtropical western Atlantic from North Carolina to Rio de Janeiro, including Gulf of Mexico and Caribbean Sea.

Dermatolepis striolata (Playfair 1867)

Serranus striolatus Playfair in Playfair & Günther 1867: 11, Pl. 3 (fig. 2) (Zanzibar, Tanzania). Holotype: BMNH 1867.3.9.39 (stuffed).

Serranus gibbosus Boulenger 1888: 654 [dated 1887 in Randall & Heemstra 1991] (Muscat, Oman). Holotype (unique): BMNH 1888.12.29.36.

Dermatolepis aldabrensis Smith 1955: 311, Pl. 3 (fig. B) (Aldabra Id, western Indian Ocean). Holotype: SAIAB [formerly RUSI] 429 (head, skin, fins).

Distribution: Western Indian Ocean from Gulf of Oman and southern coast of Arabian peninsula to Natal, including Comoro Ids.

Genus *Gracila* Randall 1964

Gracila Randall 1964: 281 (type species *Cephalopholis albomarginatus* Fowler & Bean 1930. Type by original designation). Gender feminine.

Monotypic; Indo-West Pacific.

Comments: Ma and Craig (2018:445) synonymized *Gracila* with *Cephalopholis* on the basis of molecular analysis. However, this decision is not followed by the majority of ichthyologists (Fricke et al. 2019a; Fricke et al. 2019c:120).

Gracila albomarginata (Fowler & Bean 1930)

Cephalopholis albomarginatus Fowler & Bean 1930: 235, fig.11 (Danawan Id, vicinity of Sibuko Bay, Borneo [Sabah, Malaysia, ca. 4°18'28 N 118°51'56 E]). Holotype: USNM 89985. Paratypes: USNM 99780 (2) 149319 (1) 183851-58 (1 1 2 1 1 2 1 1) 183860 (1).

Distribution: East Africa, Aldabra, Mozambique Channel, western Mascarenes east to northern Line and Tuamotu Ids, north to Ryukyu Ids, south to New Caledonia and Tonga.

Genus *Epinephelus* Bloch 1793

Epinephelus Bloch 1793; 11 [type species *Epinephelus marginalis* Bloch 1793. Type designated by ICZN under plenary powers; on Official List (Opinion 93)]. Gender masculine.

Merou Bonaparte (ex Cuvier) 1831: 167 (type species *Perca gigas* Brünnich 1768. Type by subsequent designation by Jordan 1919: 175; treated as *nomen nudum* by Kottelat 2013: 326). Gender masculine.

Cerna Bonaparte 1833: punctata 10 (type species *Perca gigas* Brünnich 1768. Type by monotypy). Gender feminine.

Cynichthys Swainson 1839: 168, 701 (type species *Perca flavopurpureus* Bennett 1830. Type by monotypy). Gender masculine.

Cernua Agassiz 1846: 74 (objectively invalid, *nomen preoccupatum*, preoccupied by *Cernua* Fleming 1828 in Fishes; unjustified emendation of *Cerna* Bonaparte).

Cernua Costa 1849: 1 (type species *Cernua gigas* of Costa 1849. Type by monotypy) (objectively invalid, *nomen preoccupatum*, preoccupied by *Cernua* Fleming 1828 and Agassiz 1846 in Fishes; unjustified emendation of *Cerna* Bonaparte). Gender feminine.

Labroperca Gill 1862b: 236 (type species *Serranus labriformis* Jenyns 1840. Type by monotypy). Gender feminine.

Promicrops Poey (ex Gill) 1868: 287 (type species *Serranus guasa* Poey 1860. Type by monotypy). Gender masculine.

Priacanthichthys Day 1868a: 193 (type species *Priacanthichthys maderaspatensis* Day 1868. Type by monotypy). Gender masculine.

Merus Poey (ex Cuvier) 1871: 39 (type species *Perca gigas* Brünnich 1768. Type by original designation) (*nomen novum*, replacement name for *Epinephelus* Bloch 1793; objectively invalid, *nomen praeoccupatum*; preoccupied by *Merus* Gistel 1857 in Coleoptera, not replaced). Gender masculine.

Homalogrystes Alleyne & Macleay 1877: 268 (type species *Homalogrystes guntheri* Alleyne & Macleay 1877. Type by monotypy). Gender masculine.

Itajara Vaillant & Bocourt 1878: 70 (type species *Serranus itajara* Lichtenstein 1822. Type by monotypy). Gender feminine.

Hyposerranus Klunzinger 1884: 3 (type species *Serranus morrhua* Valenciennes 1833. Type by subsequent designation by Jordan and Evermann 1896: 1148). Gender masculine.

Phrynotitan Gill 1885: 255 (type species *Batrachus gigas* Günther 1869. Type by monotypy). Gender masculine.

Garrupa Jordan in Jordan & Evermann 1890: 350 (type species *Serranus nigrilus* Holbrook 1855. Type by original designation). Gender feminine.

Enneistus Jordan & Evermann 1896: 1143, 1147 (subgenus of *Bodianus* Bloch 1890; type species *Bodianus acanthistius* Gilbert 1892. Type by original designation). Gender masculine.

Stereolepoides Fowler 1923: 382 (type species *Stereolepoides thompsoni* Fowler 1923. Type by original designation). Gender masculine.

Vivero Jordan & Evermann 1927: 505 (type species *Serranus morio* Valenciennes 1828. Type by original designation). Gender masculine.

Altiserranus Whitley 1947: 150 (type species *Serranus jayakari* Boulenger 1889. Type by original designation). Gender masculine.

Widespread in tropical and subtropical seas; 89 species: 75 in the Indo-Pacific, 4 in the eastern Pacific, 6 in the western Atlantic (3 of which, *E. adscensionis*, *E. marginatus* and *E. itajara*, occur also in the eastern Atlantic), *E. aeneus*, *E. caninus*, *E. costae*, and *E. gorensis* are species found in the eastern Atlantic and their distribution (except *gorensis*) includes the Mediterranean Sea. Two Indo-Pacific species (*coioides* and *malabaricus*) enter the Mediterranean Sea through the Suez Canal. Seventeen species previously placed in the genus *Epinephelus* have been moved to the resurrected genus *Hyporthodus*.

Comments: Ma and Craig (2018) proposed to move to the genus *Mycteroperca* twelve species of *Epinephelus* including *E. albomarginatus*, *E. andersoni*, *E. caninus*, *E. costae*, *E. epistictus*, *E. gorensis*, *E. heniochus*, *E.*

marginatus, *E. morrhua*, *E. poecilonotus*, *E. posteli*, and *E. radiatus*. This reallocation is supported only by molecular data and in the absence of morphological synapomorphies we prefer to let the aforementioned species within the genus *Epinephelus*.

Epinephelus adscensionis (Osbeck 1765)

Trachinus adscensionis Osbeck 1765: 388 (Ascension Id, southeastern Atlantic). No types known.

Perca stellio Walbaum 1792: 349 (no locality stated; based on *Perca tota maculis* Seba 1758). No types known

Perca maculata Bloch 1792: 92, Pl. 313 (Martinique Id, West Indies) (subjectively invalid, *nomen preoccupatum*; preoccupied in *Epinephelus* by *Holocentrus maculatus* Bloch 1790). No types known.

Trachinus osbeck Lacepède 1800: 353, 364 (Ascension Id) (*nomen novum*, replacement name for *Trachinus adscensionis* Osbeck). No types known.

Perca maculata Bloch & Schneider 1801:333, xlv (St. Christine Island or Waitako). No types known.

Sparus atlanticus Lacepède 1802: 52 156, Pl. 5 (fig. 1) (Martinique Id) (*nomen novum*, replacement name for *Perca maculata* Bloch 1792). No type known.

Serranus nigriculus Valenciennes in Cuvier & Valenciennes 1828: 375 (West Indies). Syntypes: MNHN 0000-7275 (1) Martinique, 0000-7276 (1) San Domingo [=Dominican Republic]; ZMB 241 [ex MNHN] (1) St. Domingo.

Serranus nigriceps Valenciennes in Cuvier & Valenciennes 1828: 517 (no locality stated). Holotype: MNHN 0000-7393.

Serranus impetiginosus Müller & Troschel in Schomburgk 1848: 665 (Barbados). Holotype (unique): ZMB 237.

Serranus capreolus Poey 1860: 145 (Cuba). No types known.

Serranus varius Bocourt 1868: 222. Syntypes: MNHN 0000-5186 (1), 5190 (1) Bauchot holotype, B-3115 [ex MNHN 0000-5190] (Gulf of Mexico).

Distribution: Western Atlantic from Massachusetts and Bermuda to Brazil, including Gulf of Mexico and Caribbean Sea; eastern Atlantic from Ascension and St. Helena Ids to the Id of Sao Tomé, Gulf of Guinea.

Epinephelus aeneus (Geoffroy Saint-Hilaire 1817)

Serranus aeneus Geoffroy Saint-Hilaire 1817: Pl. 21 (figs. 3, 4) (Egypt, eastern Mediterranean Sea). Holotype: MNHN 0000-7326. Paratypes: MNHN 0000-6227 (1), B.3116 [ex MNHN 0000-7326] (1).

Perca robusta Couch 1832: 21, fig. 7 (Polperro, Cornwall, England). No types known.

Distribution: Southern Mediterranean and southeastern Adriatic Sea (Tutman et al. 2000); eastern Atlantic from Lisboa to Angola along the African coast (records from Canary and Cape Verde Ids remain unsubstantiated).

Comments: *Perca robusta* was apparently based on a stray individual caught off the south coast of England.

Epinephelus akaara (Temminck & Schlegel 1843)

Serranus akaara Temminck & Schlegel 1843: 9, Pl. 3 (fig.1) (Nagasaki, Nagasaki Prefecture, Kyushu, Japan). Lectotype: RMNH D85 (dry). Paralectotypes: RMNH D82 (1), D83 (1), D84 (1); ZMB 5218 [ex RMNH] (1, stuffed). Lectotype selected by Boeseman (1947:26).

Serranus shihpan Richardson 1846: 231 (Canton, China). Syntypes: BMNH (apparently lost).

Serranus variegatus Richardson 1846: 231. No types known (Canton, China).

Epinephelus lobotoides Nichols 1913: 179, fig. 1 (Shimonoseki market, Honshu, Japan). Holotype (unique): AMNH 3957.

Epinephelus ionthas Jordan & Metz 1913: 32, Pl. 6 (fig. 2) (Pusan, South Korea). Holotype (unique): FMNH 55797 [ex CM 4559].

Distribution: Japan, Korea, Taiwan and coasts of China; records from Philippines and India are questionable.

Epinephelus albomarginatus Boulenger 1903

Epinephelus albomarginatus Boulenger 1903: 65, Pl. 4 (KwaZulu-Natal coast, South Africa). Syntypes: BMNH 1903.2.6.2 (1) 1903.2.6.3 (1).

Distribution: southwestern Indian Ocean from Mozambique to East London, South Africa.

Epinephelus amblycephalus (Bleeker 1857)

Serranus amblycephalus Bleeker 1857: 32 (Ambon Id, Molucca Ids, Indonesia). Holotype (unique): RMNH 5159.

Distribution: Southern Japan to northern Australia including Gulf of Thailand and from Andaman Sea to Fiji.

Epinephelus analogus Gill 1863

Epinephelus analogus Gill 1863b: 163 (Western coast of Central America). Holotype (unique): USNM 4944.

Serranus courtadei Bocourt 1868: 222 (La Union, El Salvador). Syntypes: MNHN 0000-5210 (2).

Distribution: Eastern Pacific from southern California and northern Gulf of California to Peru including Galápagos Ids.

Epinephelus andersoni Boulenger 1903

Epinephelus andersoni Boulenger 1903: 66, Pl. 5 (KwaZulu-Natal coast, South Africa). Holotype (unique): BMNH 1903.2.6.4.

Distribution: Southeastern coast of Africa from Mozambique to Knysna, South Africa and Madagascar.

Epinephelus areolatus (Forsskål 1775)

Perca areolata Forsskål 1775: xi, 42 (Jeddah, Saudi Arabia, Red Sea). Possible holotype: ZMUC P43570 (dry skin).

Bodianus melanurus Geoffroy Saint-Hilaire 1817: unnumbered page, Pl. 21 (figs. 1, 2) (Suez, Egypt). Syntypes: MNHN 0000-7409 (2), 0000-7410 (1).

Serranus angularis Valenciennes in Cuvier & Valenciennes 1828: 353 (Sri Lanka). Syntypes: MNHN 0000-7280 (2).

Serranus celebicus Bleeker 1851b: 217 (Bulucomba, southern Sulawesi, Indonesia). Holotype (unique): whereabouts unknown. Bleeker specimens: NMV 46427 (1), RMNH 5492 (7).

Serranus waandersii Bleeker 1858b: 152 (Boleling, Bali, Indonesia). Holotype (unique): RMNH 5509

Serranus glaucus Day 1871: 678 (Andaman Ids) [dated 1870 in Randall & Heemstra 1991]. Holotype (unique): BMNH 1870.5.18.76.

Epinephelus craspedurus Jordan & Richardson 1910: 447, fig. 7 (Kagoshima, Japan). Holotype: USNM 64154. Paratypes: (5) CAS-SU 21180 (1 or 2), USNM 74585 (1).

Distribution: Indo-West Pacific, including Red Sea and Persian Gulf; it ranges from Japan to Queensland and New Caledonia, but it is absent from Micronesia and Polynesia; the most eastern record is Fiji.

Comments: The Catalog of Fishes (Fricke et al. 2019a) includes the name *Perca daba* Forsskål 1775: 44 with holotype ZMUC P43570 as a synonym of *E. areolatus* which shares the same holotype. However *Perca daba* is not a binomial name, as Forsskål mentioned Daba as vernacular Arabic name of *Perca areolata* on p. 42 (Arab.

Daba) using the same style applied for the other species described in the book. *Bodianus melanurus* Geoffroy Saint-Hilaire appears as *Serranus melanurus* on page 357 of the 1829 edition.

Epinephelus awoara (Temminck & Schlegel 1843)

Serranus awoara Temminck & Schlegel 1843: 9, Pl. 3 (fig. 2) (Nagasaki, Japan). Lectotype: RMNH D78 (stuffed). Paralectotypes: ?BMNH (1); RMNH D77 (1, dry), D80 (1, dry), D110a-b (2); possible paralectotypes (dry): RMNH D18 (1, dry), D79 (1, dry), D81 (1, dry); ZMB 5217 [ex RMNH] (1, dry). Lectotype selected by Boeseman (1947:26).

Distribution: West Pacific from Japan to South China Sea and Nha Trang, Viet Nam.

Epinephelus bilobatus Randall & Allen 1987

Epinephelus bilobatus Randall & Allen 1987: 406, fig. 4 (Rosemary Id 20°28'S 116°36'E, Dampier Archipelago, Western Australia). Holotype: WAM P.25119-008. Paratypes: BPBM 31041 (1); WAM P.14924-001 (1), P.14948-001 (1), P.24358-001 (1).

Distribution: Endemic to Western Australia from 16°8' to 20°39'S.

Epinephelus bleekeri (Vaillant 1878)

Serranus variolosus Bleeker (*nec* Valenciennes) 1849: 35 (misidentification).

Serranus waandersii Day (*nec* Bleeker) 1875: 12 (misidentification).

Epinephelus dayi Bleeker 1875: 47 (Madras, India) (*nomen novum*, replacement name for *Serranus waandersii* Day 1875 and objectively invalid, *nomen preoccupatum*, preoccupied by *Epinephelus dayi* Bleeker 1874 [= *Epinephelus diacanthus* (Valenciennes 1828)]). Holotype (unique): ?BMNH 1889.2.1.4226 (skin, not seen).

Serranus bleekeri Vaillant in Vaillant & Bocourt 1878: 47, 69 (Jakarta, Java, Indonesia; *nomen novum* for *Serranus variolosus* Bleeker). Holotype (unique): MNHN 0000-7401.

Serranus coromandelicus Day 1878: 746 (Madras, India) (*nomen novum*, replacement name for *Epinephelus dayi* Bleeker 1875). Holotype: ?BMNH 1889.2.1.4226 (skin). Syntypes and/or Day specimens: AMS B.8272 (1, syntype); BMNH 1889.2.1.2791 (1); NMW 39248 (1); ZSI 1997 (1) 2920 (1, lost).

Epinephelus albimaculatus Seale 1910: 509, Pl. 8 (Butuan Bay, Mindanao Id, Philippines). Holotype (unique): BSMP 1908 (apparently destroyed).

Distribution: Persian Gulf, India, Sri Lanka, northern Australia to Taiwan, including the Gulf of Thailand, but absent from New Guinea.

Epinephelus bontoides (Bleeker 1855)

Serranus bontoides Bleeker 1855d: 405 (Ambon Id, Moluccas Ids, Indonesia). Holotype (unique): RMNH 5502. Bleeker specimens: RMNH 30548 [ex 5502] (6), BMNH 1880.4.21.7 (1) [Bleeker coll.].

Distribution: Scattered localities of the Indo-Australian Archipelago: Bali, Flores, Sulawesi, Ambon, New Guinea, New Britain and Philippines; recorded also from Taiwan.

Epinephelus bruneus Bloch 1793

Epinephelus bruneus Bloch 1793: 15, Pl. 328 (fig. 2) (Norway; erroneous, probably China). Lectotype: ZMB 5221 (left skin). Paralectotypes: (2, lost). Lectotype selected by Randall and Heemstra (1991:109).

Holocentrus fuscus Lacepède 1802: 342, 384 (*nomen novum*, unneeded replacement name for *Epinephelus bruneus* Bloch 1793). Lectotype: ZMB 5221 (left half skin).

Holocentrus testudineus Shaw 1803: 556 (Northern Sea) (*nomen novum*, unneeded replacement name for *Epinephelus bruneus* Bloch 1793).

Distribution: Japan, Korea to Hainan, Hong Kong and Philippines.

Comments: Misspelled *brunneus* in several instances; the type locality was recorded as Norway, which obviously could not have been the collecting site.

Epinephelus caninus (Valenciennes 1843)

Serranus caninus Valenciennes 1843: 10 (Canary Ids). Holotype (unique): whereabouts unknown.

Distribution: Mediterranean, including Adriatic Sea, and eastern Atlantic from Portugal to Angola, including Canary Ids.

Epinephelus chlorocephalus (Valenciennes 1830)

Serranus chlorocephalus Valenciennes in Cuvier & Valenciennes 1830: 522 (Tongatapu, Tonga). Holotype (unique): MNHN 0000-7543 (poor condition).

Distribution: Tonga.

Comments: Known only from the holotype; despite the use of SCUBA gear, the catches of local fishermen, and intensive collecting activity in the Tonga Island by Phillip Heemstra in the 1983 no additional specimens have been found.

Epinephelus chlorostigma (Valenciennes 1828)

Serranus chlorostigma Valenciennes in Cuvier & Valenciennes 1828: 352 (Seychelles). Lectotype: MNHN 0000-7430. Paralectotypes: MNHN 0000-7429 (1). Lectotype established by Bauchot et al. (1984:26).

Serranus areolatus japonicus Temminck & Schlegel 1843: 8 (Japan). Holotype: RMNH D76 (stuffed).

Serranus reevesii Richardson 1846: 232 (Canton, China). No types known.

Distribution: Western Indian Ocean to West Pacific but without definite records from the Asian continental shelf from Gulf of Oman and Persian Gulf to Kampuchea; in the West Pacific from southern Japan to New Caledonia eastward to Caroline Ids, Fiji, and Tuvalu (Ellice Ids).

Comments: Because of confusion with the closely related *E. areolatus* and the similarly coloured *E. gabriellae* and *E. polylepis* several literature records without diagnostic information and/or good illustration have not been accepted (Randall and Heemstra 1991).

Epinephelus clippertonensis Allen & Robertson 1999

Epinephelus clippertonensis Allen & Robertson 1999: 12, figs. 1-3 (Clipperton Id). Holotype: USNM 347506. Paratypes: LACM W56-235 (35), W56-238 (44), W56-240 (68), W58-282 (2), W58-283 (54), W58-295 (64), W58-300 (17), W58-371 (2); USNM 332389 (26).

Distribution: Southern coast of Baja California, Revillagigedo Archipelago, and Clipperton Id, eastern Pacific.

Epinephelus coeruleopunctatus (Bloch 1790)

Holocentrus coeruleopunctatus Bloch 1790: 94, Pl. 242 (fig. 2) (locality not stated). Holotype (unique): ZMB 232.

Serranus alboguttatus Valenciennes in Cuvier & Valenciennes 1828: 366 (Indian Ocean). Holotype: MNHN 0000-6406.

Serranus dermochirus Valenciennes in Cuvier & Valenciennes 1830: 513 (Coromandel Coast, India). Holotype: MNHN 0000-7650.

Serranus hoevenii Bleeker 1849: 36 (Jakarta, Java, Indonesia). Syntypes and/or Bleeker specimens: AMS B.8158 [from Day] (1), RMNH 6164 (some syntypes out of 23), SMNS 10635 (1 syntype).

Serranus kunhardtii Bleeker 1851a: 169 (Padang, western Sumatra). Holotype (unique): RMNH 32444

Serranus flavoguttatus Peters 1855: 235 (Mozambique). Holotype (unique): ZMB 257.

Distribution: Western Indian Ocean, including the Persian Gulf to Fiji and Gilbert Ids and from Japan to New South Wales.

Comments: *S. flavoguttatus* Peters 1855 was described as new also on p. 429 in: Übersicht der in Mossambique beobachteten Seefische. Monatsberichte der Königlich Preussische Akademie der Wissenschaften zu Berlin 1855: 428-466.

Epinephelus coioides (Hamilton 1822)

Bola coioides Hamilton 1822: 82, 369 (Large Gangetic estuaries, India). No types known.

Serranus nebulosus Valenciennes in Cuvier & Valenciennes 1828: 313 (no locality stated). Holotype: MNHN 0000-7421 (dry skin).

Serranus suillus Valenciennes in Cuvier & Valenciennes 1828: 335 (Coromandel Coast of India). Syntypes: MNHN A-7710 (1, dry) Puducherry, 7288 (1).

Homalogrystes guntheri Alleyne & Macleay 1877: 269, Pl. 6, fig. 3 (about 12 miles south of Papua New Guinea coast at Katow). Holotype (unique): whereabouts unknown.

Distribution: Red Sea (occasionally Mediterranean through the Suez Canal; Parenti and Bressi 2003), Persian Gulf along the Asian continental shelf to China; East coast of Africa, Mauritius and Réunion; Andaman sea, Indo-Australian Archipelago, and western Australia; in the West Pacific from Ryukyu Ids to New South Wales, including eastward records Palau and Fiji.

Epinephelus corallicola (Valenciennes 1828)

Serranus corallicola Valenciennes (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 336 (Java, Indonesia). Holotype: RMNH D154 (dry). Possible types: SMF 3054 [ex RMNH in 1829] (1, dry).

Serranus altiveloides Bleeker 1849: 38 (Jakarta, Java, Indonesia). No types known.

Distribution: Australia (except southern coast), Indo-Australian Archipelago, Solomon Ids, Gulf of Thailand, Hong Kong, Taiwan, Palau Ids and Mariana Ids.

Epinephelus costae (Steindachner 1878)

Plectropoma fasciatus Costa [*nec* Bloch, *nec* Lacepède] 1844: Plectropoma p. 1, Pl. 6 (Napoli, Italy) (*nomen praeoccupatum*; preoccupied in *Epinephelus* by *Perca fasciata* Forsskål 1775). No types known.

Serranus costae Steindachner 1878a: 389 (Messina, Italy) (*nomen novum* for *Plectropoma fasciatus* Costa 1844). Holotype (unique): NMW 39250.

Cerna chrysotaenia Döderlein 1882: 171 208, Pl. 2 (fig. 4) (Palermo, Sicily, Italy). No types known.

Cerna catalonica Gilbert 1913: 38 2 figs (Catalonia, Spain, western Mediterranean Sea). No types known.

Epinephelus zaslavskii Poll 1949: 223, fig. 12 (Baie des Eléphants, Angola). Holotype: IRSNB 90. Paratype: IRSNB 600.

Distribution: Mediterranean, except the Adriatic Sea and eastern Atlantic from Portugal to Angola including Canary Ids and Cape Verde Ids.

Epinephelus craigi Frable, Tucker & Walker Jr. 2018

Epinephelus stictus (*nec* Randall & Allen 1987; *partim*).

Epinephelus craigi Frable, Tucker & Waller Jr. 2018: 2, figs. 1a-c, 3 (Tai Kui Market, Hong Kong, South China Sea). Holotype: SIO 17-31. Paratypes: 16 specimens ANSP 77242 (1); BMNH 1939.1.17.10 (1) (paratype of *Epinephelus stictus*; Fig. 1c); BPBM 30913 (1) (paratype of *E. stictus*); CAS 62197(1); CAS 62198(2); CAS 62199(1); CAS 17797(1); CAS 27664(1); KU 41383(1); SWIMS-CHO-1958-001 (formerly CAS 62199)(1); ZMUA E002001017001(1); ZMUA E002001017002(1); ZMUA E002001017003(1); ZUMT (Abe No.) 10701 1 (paratype of *E. stictus*); ZUMT 52224 1, (paratype of *E. stictus*).

Distribution: South China Sea.

Epinephelus cyanopodus (Richardson 1846)

Serranus cyanopodus Richardson 1846: 233 (China). Neotype: BMNH 1893.12.22.1. Neotype established by Randall and Whitehead (1985: 34).

Serranus hoedtii Bleeker 1855d: 406 (Ambon Id, Moluccas Ids, Indonesia). Lectotype: RMNH 5494. Paralectotype: RMNH 30345 (1).

Serranus punctatissimus Günther 1859: 144 (China). Holotype (unique): BMNH 1983.12.22.1.

Homalogrystes luctuosus De Vis 1882b: 369 (Brisbane, Queensland, Australia). Holotype (unique): QM I.179 (dry mount).

Epinephelus suitonis Tanaka 1915: 566 (Saiki fish market, Ooita Prefecture, Kyushu, Japan). Holotype: ZUMT 13309 or 12309.

Epinephelus kohleri Schultz in Schultz et al. 1953: 329, 336, fig. 51 (Bock Passage, Rongerik Atoll, western Pacific). Holotype: USNM 141922. Paratypes: UW (1).

Distribution: Japan to Gulf of Thailand and southern Queensland eastward to Micronesia and Fiji.

Epinephelus daemeli (Günther 1876)

Serranus daemeli Günther 1876: 391 (Sydney, New South Wales, Australia). Holotype (unique): BMNH 1876.5.1.8.

Epinephelus forsythi Whitley 1937b: 222, Pl. 13, fig. 4 (Lord Howe Id). Holotype: AMS I.1793.

Distribution: Southern Queensland to Kangaroo Id, South Australia, eastward to Lord Howe Id, Elizabeth and Middleton Reefs, Norfolk Id, Kermadec Ids and North Id, New Zealand.

Epinephelus diacanthus (Valenciennes 1828)

Serranus diacanthus Valenciennes in Cuvier & Valenciennes 1828: 319 (coast of Malabar, India). Lectotype: MNHN 0000-7157. Paralectotypes: MNHN 0000-7158 (3) 1989-1018 [ex 7157] (2), A-5727 (1, dry). Lectotype selected by Randall and Heemstra (1991:137).

Epinephelus dayi Bleeker 1874: 105 (Cochin, India). No types known.

Distribution: The Asian continental shelf from Oman to Madras and Sri Lanka.

Epinephelus epistictus (Temminck & Schlegel 1843)

Serranus epistictus Temminck & Schlegel 1843: 8 (Nagasaki, Japan). Holotype (unique): RMNH D88 (stuffed).

Serranus praeopercularis Boulenger 1888: 654 (Muscat, Oman). Lectotype: BMNH 1887.11.11.40. Paralectotypes: BMNH 1887.11.11.37 (1, dry). Lectotype selected by Randall & Heemstra (1991:138 140).

Epinephelus stigmogrammacus Cheng & Yang 1983: 506, Figs. 1-3 (South China Sea). Holotype: ASIO 64-916. Paratypes: ASIO 40955 (1), 64-612 (1), 64-1023 (1), 64-1400 (1), 35503 (1), 56-8665 to 8670 (6).

Epinephelus sp. Heemstra & Randall 1986.

Distribution: Discontinuous, primarily continental shelf from the Red Sea and East coast of Africa including Madagascar to Japan, but absent from the Persian Gulf and from southern India to Viet Nam; absent also from oceanic Ids except the Ogasawara Ids and East Indies.

Epinephelus erythrurus (Valenciennes 1828)

Serranus erythrurus Valenciennes in Cuvier & Valenciennes 1828: 320 (Malabar region, India). Holotype (unique): MNHN 0000-7545.

Epinephelus townsendi Boulenger 1898: 133 (Karachi, Sind, Pakistan). Syntypes: BMNH 1898.6.29.4-7 (4).

Distribution: Pakistan, India, Laccadive Ids, Sri Lanka and Gulf of Thailand, Malay Peninsula, Andaman Sea and Indonesia.

Epinephelus fasciatomaculosus (Peters 1865)

Serranus fasciatomaculosus Peters 1865: 111 (Nagasaki, Japan). Syntypes: ZMB 5552 (2).

Distribution: southern Japan to South China Sea, including Philippines and coast of the Viet Nam.

Epinephelus fasciatus (Forsskål 1775)

Perca fasciata Forsskål 1775: xi, 40 (Ras Muhammad, southern Sinai, Egypt, Red Sea). No type known.

Epinephelus marginalis Bloch 1793: 14, Pl. 328 (fig. 1) (East India). Holotype (unique): ZMB 5224 (right skin).

Holocentrus erythraeus Bloch & Schneider 1801: 320 (*nomen novum*, replacement name for *Perca fasciata* Forsskål 1775). No types known.

Perca maculata Forster in Bloch & Schneider 1801: xlv, 333 (St. Christian Id, Waitako, Tahuata Id, Marquesas Ids) (objectively invalid, *nomen preoccupatum*, preoccupied by *Perca maculata* Bloch 1792). No types known.

Holocentrus forskael Lacepède 1802: 337, 377 (*nomen novum* for *Perca fasciata* Forsskål 1775). No type known.

Holocentrus marginatus Lacepède 1802: 384 (incorrect subsequent spelling for *H. marginalis* Bloch 1793). No type known.

Holocentrus rosmarus Lacepède 1802: 345, 389, Pl. 7 (fig. 2) (no locality stated). Commerson specimens: MNHN A-5726 (1, dry) Indian seas, A-5736 (2, dry) Indian seas, A-7689 (1, dry) Mauritius. Type catalog: Bauchot et al. (1984:16-17) with syntypes; the drawn specimen is the holotype if identifiable.

Holocentrus oceanicus Lacepède 1802: 345, 389, Pl. 7, fig. 3 (le grand Océan). Commerson specimens: MNHN A-5734 (2) Mauritius, 7295 (1) Mauritius.

Holocentrus marginatus Shaw 1803: 566 (*nomen novum*, unneeded replacement name for *Holocentrus marginalis* Bloch 1793). Holotype (unique): ZMB 5224 (right skin).

Serranus alexandrinus Valenciennes in Cuvier & Valenciennes 1828: 281 (Egypt, Red Sea). Holotype: MNHN 0000-7325.

Serranus variolosus Valenciennes in Cuvier & Valenciennes 1828: 354. Possible types: BMNH 1979.6.13.4-5 (2) (Tahiti).

Serranus tsirimenara Temminck & Schlegel 1843: 7, Pl. 4A (fig. 3) (Japan). Lectotype: RMNH D64 (stuffed). Paralectotypes: RMNH D62-D63 and D65 (3, stuffed) 114 (2) 2754 (1); ZMB 5216 [ex RMNH] (1, stuffed).

Perca maculata Forster in Lichtenstein 1844: 220 (St. Christian Id, Tahuata Id, Marquesas Ids) (objectively invalid, *nomen preoccupatum*, preoccupied by *Perca maculata* Bloch 1792). No types known.

Serranus cruentus De Vis 1884a: 446 (New Britain Id, Bismarck Archipelago). No types known.

Serranus geometricus De Vis 1884c: 144 (Moreton Bay, Queensland, Australia). Syntypes: QM I.10140-41 (1 1).

Serranus subfasciatus De Vis 1884b: 389 (Cardwell, Queensland, Australia). No types known.

Epinephelus zapyrus Seale 1906: 36, fig. 11 (Tubuai, Austral Ids, French Polynesia). Holotype (unique): BPBM 761.

Epinephelus emoryi Schultz in Schultz et al. 1953: 340, fig. 52 (Lagoon coral head at Bikini Atoll 11°33'13"N 165°28'39"E, Marshall Ids, western Pacific). Holotype: USNM 141929. Paratypes: FMNH 62613 [ex USNM 139695] (1); USNM 139695 (orig. 6, now 5).

Distribution: Widespread in the tropical and subtropical Indo-Pacific except the Persian Gulf, Hawaiian Ids, and Easter Id.

Comments: *Serranus cruentus* was misspelled as *cruentatus* by McCulloch (1929: 147). *Epinephelus marginalis* Bloch 1793 has been regarded as valid by Fricke et al. (2011:384). Gill and Kemp (2002:165) suggested splitting *E. fasciatus* into six species, recognizing as valid species the geographical forms identified by Randall and Heemstra (1991:149): *emoryi* from West Pacific, unnamed variety from Japan, unnamed variety from Marquesas Ids, unnamed variety from Western Australia, unnamed variety from the Society Ids, and *fasciatus* from the Red Sea and Western Indian Ocean.

Epinephelus faveatus (Valenciennes 1828)

Serranus faveatus Valenciennes in Cuvier & Valenciennes 1828: 329 (Mauritius and Sri Lanka). Syntypes: MNHN 0000-1714 (1) Sri Lanka.

Serranus bontoo Valenciennes in Cuvier & Valenciennes 1828: 334 (coast of Vizagapatam, India). No types known.

Distribution: Southern India, Sri Lanka, Bali and Lombok, Java, Indonesia.

Comments: FishBase reports specimens from Mauritius, Réunion and Seychelles: these records are apparently based on misidentifications of *E. macrospilos*. Valenciennes himself said based his description on specimens from the Isle-de-France (=Mauritius) sent by Commerson.

Epinephelus flavocaeruleus (Lacepède 1802)

Holocentrus flavocaeruleus Lacepède (ex Commerson) 1802: 331, 367 (Mauritius). Neotype: MNHN A-5747 (dry skin), designated by Randall and Whitehead (1985:37).

Holocentrus gymnosus Lacepède 1802: 335, 372 (no locality stated). Possible type: MNHN A-5747 (1) Commerson collection.

Bodianus macrocephalus Lacepède 1802: 281 293 (no locality stated). Possible type: MNHN A-5747 (1, dry).

Holocentrus caerulescens Shaw 1803: 559 (Indian Seas). Neotype: MNHN A-5747.

Serranus borbonicus Quoy and Gaimard 1824: 312, Pl. 57 (fig. 2) (Réunion). Holotype (unique): MNHN 0000-7407.

Serranus flavocaeruleus Valenciennes in Cuvier & Valenciennes 1828: 297 (Mauritius).

Perca flavapurpurea Bennett 1830: page 19, Pl. 19 (south coast of Sri Lanka) (*nomen novum*, replacement name for *Serranus flavocaeruleus* Valenciennes 1828). Holotype (unique): whereabouts unknown.

Cynichthys flavopurpuratus Swainson 1839: 202, fig. 42c (*nomen novum*, unneeded replacement name for *Perca flavapurpurea* Bennett 1830).

Serranus melas Peters 1855a: 429 (Querimba-IlseIn, Mozambique). No type known.

Epinephelus flavocoeruleus var. *melanometopon* Bleeker 1871: 96 (Reunion). No types known.

Epinephelus flavocoeruleus var. *xanthometopon* Bleeker 1871: 97 (Mauritius and Sri Lanka). No type known.

Distribution: Widespread in the Indian Ocean from Gulf of Aden south to Port Alfred, South Africa and eastward to East Burma Sea.

Comments: *Serranus melas* Peters 1855 is here regarded as a new synonym.

Epinephelus fuscoguttatus (Forsskål 1775)

Perca summana var. *fusco-guttata* Forsskål 1775: xi, 41 (Suez, Egypt, and Jeddah, Saudi Arabia). Neotype: USNM 147594 designated by Randall (1964: 291).

Perca summana var. *koschar* Walbaum 1792: 345 (Red Sea). No types known.

Serranus horridus Valenciennes (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 321 (Java, Indonesia). Lectotype: RMNH D19 (stuffed). Paralectotypes: RMNH D2160 (1, stuffed); ?SMF 2986 [ex RMNH in 1829] (1).

Serranus taeniocheirus Valenciennes in Cuvier & Valenciennes 1830: 518 (no locality stated). Holotype: MNHN 0000-7644.

Serranus lutra Valenciennes in Cuvier & Valenciennes 1832: 474 (Mauritius). Holotype: MNHN 0000-7278.

Distribution: Red Sea south to Mozambique eastward to Samoa and Phoenix Ids; in the West Pacific from Ryukyu Ids to tropical Australia.

Comments: *Perca summana* var. *koschar* is a synonym as determined by Parenti (2003: 499).

Epinephelus fuscomarginatus Johnson & Worthington Wilmer 2019

Epinephelus fuscomarginatus Johnson & Worthington Wilmer 2019:332, Figs. 2-4A (Capricorn Channel, south of Swain Reefs, Queensland, Australia, 22°52.8'S, 152°40.8'E, depth 230 meters). Holotype: QM I.40945. Paratypes: CSIRO, QM I.40942 (1), QM I.40943 (1), QM I.40944 (1).

Distribution: South of Swain Reefs and east of the Capricorn-Bunker group, Queensland, Australia. Habitat: marine.

Epinephelus gabriellae Randall & Heemstra 1991

Epinephelus sp. Amaoka et al. 1976.

Epinephelus gabriellae Randall & Heemstra 1991: 159, Pl. 14A, Pl. 36A, B; fig. 78 (Eagles' Retreat 16°58'00"N, 54°42'50"E, Oman, Arabian Sea). Holotype: BPBM 33947. Paratypes: ANSP 161089 (1), BPBM 33948 (1), FMNH 4005 (1), NSMT-P 29536 (1), SAIAB [formerly RUSI] 34268 [not 33620] (1).

Distribution: Off Oman and Somalia.

Epinephelus geoffroyi (Klunzinger 1870)

Serranus tauvina (nec Forsskål) Geoffroy St. Hilaire 1809-17: 317, Pl. 20 (fig. 1) (Suez, Egypt, Red Sea).

Serranus areolatus (nec Forsskål) Valenciennes in Cuvier & Valenciennes 1828: 350.

Serranus geoffroyi Klunzinger 1870: 675 (Port Safaga, Egypt, Red Sea). Holotype: SMNS 233. Syntype: NMW 39276 (1), questionable according to Randall et al. (2013:528).

Serranus assabensis Giglioli 1889: 68 (Assab, Eritrea, Red Sea). No types known.

Serranus celebicus var. *multipunctatus* Kossmann & Räuber 1877a: 382 (Red Sea; also in Kossmann & Räuber 1877b: 6, early not researched). Syntypes: (7) SMF 14349 (1).

Distribution: Red Sea.

Comments: Previously regarded as a synonym of *E. chlorostigma*. Resurrected from synonymy by Randall et al. (2013).

Epinephelus goreensis (Valenciennes 1830)

Serranus goreensis Valenciennes in Cuvier & Valenciennes 1830: 511 (Gorée, Senegal). Syntypes: MNHN 0000-7323 (2), 0000-7324 (1).

Distribution: Tropical eastern Atlantic from Senegal to Angola and possibly Cape Verde Ids.

Epinephelus guttatus (Linnaeus 1758)

Perca guttata Linnaeus 1758: 292 (America). No types known.

Holocentrus punctatus Bloch 1790: 88, Pl. 241 (Brazil). No types known.

Lutjanus lunulatus Bloch & Schneider 1801: 329 (no locality stated). No types known.

Holocentrus pirapixanga Lacepède 1802: 339, 380 (Brazil). No types known.

Serranus maculosus Valenciennes in Cuvier & Valenciennes 1828: 332 (Martinique Id). Holotype (unique): MNHN 0000-7360.

Serranus catus Valenciennes in Cuvier & Valenciennes 1828: 373 (Martinique Id). Holotype: MNHN 0000-7238.

Serranus arara Valenciennes in Cuvier & Valenciennes 1828: 377 (Havana, Cuba). Holotype: MNHN 0000-0885.

Serranus pixanga Valenciennes in Cuvier & Valenciennes 1828: 383 (Brazil) (*nomen novum*, replacement name for *Holocentrus punctatus* Bloch 1790, Pl. 241). No types known.

Epinephelus cubanus Poey 1865b: 202 (Cuba). Holotype (?): MCZ 10058. Poey specimens: ZMB 5222 (1).

Serranus stathouderi Vaillant & Bocourt 1878: 69 (no locality stated). Holotype: MNHN 0000-7360.

Distribution: Widespread in tropical western Atlantic from North Carolina to Venezuela; the most common *Epinephelus* in the West Indies.

Comments: *Serranus arara* Valenciennes is based on a specimen supplied by Desmarest that Valenciennes supposed to be the same fish described as *bonaci arara* Parra (1787: 30, Pl. 16, fig. 2). Valenciennes (1828: 378) wrote "nous rapportons à cette espèce la court description che Parra nous a laissè de son bonaci arara, dont il donne la figure à la planche 16 de son Histoire des poissons de l'Havana". Poey was probably the first to realize that *S. arara* Valenciennes was a specimen of *E. guttatus*. The holotype of *S. arara* is preserved at the Museum d'Histoire Naturelle of Paris and it has been identified as *E. guttatus* by Bauchot et al (1984). *Holocentrus pirapixanga* Lacepède 1802 is a new synonym.

Epinephelus heniochus (Fowler 1904)

Epinephelus heniochus Fowler 1904: 522, Pl. 18 (upper fig.) (Padang, Sumatra, Indonesia). Holotype: ANSP 27557. Paratypes: ANSP 27558 (1).

Epinephelus hata Katayama 1953: 52, figs. 1-2 (Nagasaki, Japan). Holotype: NSMT-P 41376 (ex Katayama coll. 1541). Paratypes: (4) Katayama coll. 1537-40 (now should be 3), ZUMT 41376.

Distribution: Korea, Japan, Philippines, Gulf of Thailand, Sumatra and Western Australia to Queensland.

Epinephelus hexagonatus (Forster 1801)

Holocentrus hexagonatus Forster in Bloch & Schneider 1801: 323 (Tahiti, Society Ids). No types known.

Serranus parkinsonii Valenciennes in Cuvier & Valenciennes 1828: 329 (Tahiti). No types known.

Serranus stellans Richardson 1842: 23 (Melville Id, Northern Territory, Australia). Holotype (unique): BMNH 1858.4.12.477.

Epinephelus stellatus Snyder 1912: 498 (misspelling for *stellans*).

Distribution: In the Indian Ocean from Zanzibar, Comoro Ids, Mozambique Channel, Mauritius, Réunion and Christmas Id; in the Pacific from Japan to southern Queensland eastward to Marcus Id, Wake Id, and French Polynesia.

Epinephelus howlandi (Günther 1873)

Serranus howlandi Günther 1873: 8, Pl. 9 (fig. B) (Howland Id, 0°48'N 176°38'W, central Pacific). Holotype: BMNH 1873.4.3.237. Paratypes: ?NMV 8239 (1).

Epinephelus spilotos Schultz in Schultz et al. 1953: 352, fig. 55 (Lagoon reef at Rujoru Id, Eniwetok Atoll, western Pacific). Holotype: USNM 141895. Paratypes: USNM 141896 (2) 150001 (4) 152974 [ex UW] (1).

Distribution: Ryukyu Ids to Great Barrier Reef eastward to Marshall Ids, Samoa, Tonga and Lord Howe Id.

Epinephelus indistinctus Randall & Heemstra 1991

Epinephelus indistinctus Randall & Heemstra 1991: 171, fig. 84 (Indian Ocean off east coast of Somalia, 9°03'N, 50°59'E). Holotype (unique): ANSP 148119.

Distribution: Off Somalia and Oman, western Indian Ocean.

Epinephelus irroratus (Forster 1801)

Perca irrorata Forster in Bloch & Schneider 1801: 333 (St. Christian Id, Marquesas Ids). Holotype (?): MNHN 0000-7438.

Perca irrorata Forster [G.] in Lichtenstein 1844: 222 (St. Christian Id) (*nomen preoccupatum*, preoccupied by *Perca irrorata* Forster in Bloch & Schneider 1801).

Serranus spiniger Günther 1859: 146 (no locality stated). Holotype (unique): BMNH 1978.2.1.2.

Epinephelus albopunctulatus Boulenger 1895: 234, Pl. 9 (Nuka Hiva, Marquesas Ids). Holotype (unique): BMNH 1978.2.1.1.

Distribution: Marquesas Ids and Marcus Id (one specimen reported by Bryan and Herre 1903 as *E. spiniger*).

Epinephelus itajara (Lichtenstein 1822)

Serranus itajara Lichtenstein 1822: 278 (Brazil). Holotype (unique): ZMB 238.

? *Serranus mentzelii* Valenciennes in Cuvier & Valenciennes 1828: 291 (coast of Brazil). Syntypes: MNHN 0137 (1), 7368 (1), A-5777 (1).

? *Serranus galeus* Müller & Troschel 1849: 621 (Guyana). Syntypes: ?ZMB 254 (1) Rio de Janeiro 255 (1) Guyana.

Serranus guasa Poey 1861: 141, Pl. 13, fig. 8 (Cuba). Syntypes: MCZ 34157 (1).

Promicrops esonue Ehrenbaum 1914: 293, fig. (Cameroon, West Africa). No types known.

Promicrops ditobo Roux & Collignon 1954: 473 (Kouilou estuary, Congo). Syntypes: (2) MNHN.

Distribution: In the western Atlantic from Florida to southern Brazil including Gulf of Mexico and Caribbean Sea; in the eastern Atlantic from Senegal to Congo and, rarely, from Canary Ids.

Comments: Recorded as *Epinephelus esonue* in the eastern Atlantic.

Epinephelus jayakari (Boulenger 1889)

Serranus jayakari Boulenger 1889: 237 (Muscat, Oman). Syntypes: (3) BMNH 1888.12.29.32 (1, skin, missing) 1888.12.29.33 (1, skin) 1888.12.29.34 (1, skin).

Distribution: Persian Gulf and Gulf of Oman.

Comments: Previously regarded as a synonym of *E. multinotatus* but already recognized as a distinct population, it is now considered a valid species (Psomadakis et al. (2015:199).

Epinephelus kupangensis Tucker, Kurniasih & Craig 2016

Epinephelus kupangensis Tucker, Kurniasih & Craig 2016: 658, fig. 1 (Timor Sea, Sahul Banks). Holotype: MZB 23005. Paratypes: BBPM, MZB, SIO, UF, USNM.

Distribution: Timor Sea, Sulawesi, Philippines, Taiwan and Fiji.

Epinephelus labriformis (Jenyns 1840)

Serranus labriformis Jenyns 1840: 8, Pl. 3 (off San Cristóbal Id, Galápagos Ids). Holotype (unique): BMNH 1917.7.25.5 (right half skin on wood).

Epinephelus sellicauda Gill 1862c: 250 (Cape San Lucas, Baja California). Holotype: USNM 7247.

Epinephelus ordinatus Cope 1871: 466 (Pacific Panama). Holotype (unique): ANSP 13457.

Distribution: Eastern Pacific from southern California to Peru, including Isla del Coco, Revillagigedo Archipelago, and Galápagos Ids.

Epinephelus lanceolatus (Bloch 1790)

Holocentrus lanceolatus Bloch 1790: 92, Pl. 242 (fig. 1) (East Indies). Syntypes: ZMB 169 (1), ZMB (1, lost).

Serranus geographicus Valenciennes (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1828: 322 (Java, Indonesia). Syntypes: RMNH D132 (dry).

Serranus abdominalis Peters 1855a: 430. Holotype (unique): ZMB 32501 (Mozambique). Also described in Peters 1855b:237.

Serranus goliath Peters 1855a: 430 (Mossimboa, Mozambique). Holotype (unique): ZMB 32500 (skeleton).

Batrachus gigas Günther 1869b: 131 (Seychelles). Holotype (unique): BMNH 2007.8.13.1 (dry head).

Oligorus terraereginae Ramsay 1880: 93, Pl. 9 (Brisbane, Queensland, Australia). Holotype: AMS A.7506.

Serranus magnificus Macleay 1882: 229 (Port Moresby, Papua New Guinea). Holotype (unique): AMS I.9460.

Oligorus goliath De Vis 1882a: 318 (Moreton Bay, Queensland, Australia). Holotype: QM (mounted, not found).

Serranus phaeostigmaeus Fowler 1907: 255, fig. 2 (Hawaiian Ids). Holotype: ANSP 13463.

Stereolepoides thompsoni Fowler 1923: 382 (Honolulu, Oahu, Hawaiian Ids). Holotype: BPBM 3406.

Distribution: Both continental shelves and oceanic Ids from Red Sea and western Indian Ocean, including the Persian Gulf (Jawad et al. 2019) to Pitcairn Group and Hawaiian Ids and from Ryukyu Ids to South Australia.

Comments: Despite its large distribution this species is seriously depleted in many areas; the spearing of *E. lanceolatus* is banned in South Africa. *Serranus magnificus* is a synonym according to Gill (2014). *Serranus goliath* Peters 1855 has been described as new also by Peters (1855b:237) and it is regarded as a new synonym.

Epinephelus latifasciatus (Temminck & Schlegel 1843)

Serranus latifasciatus Temminck & Schlegel 1843: 6 (Nagasaki, Japan). Lectotype: RMNH D21 (stuffed). Paralectotypes: RMNH D22 (1, stuffed). Lectotype selected by Boeseman (1947:22).

Serranus grammicus Day 1868b: 700 (Madras, India). Holotype (unique): ZSI 2952.

Priacanthichthys maderaspatensis Day 1868a: 193 (Madras, India). Syntypes: BMNH 1868.10.27.38 (1).

Distribution: Asian continental shelf from Red Sea to Korea and Japan; also from northwestern Australia and Bali, Indonesia.

Epinephelus lebretonianus (Hombron & Jacquinot 1853)

Serranus lebretonianus Hombron & Jacquinot 1853: 33, Pl. 1 (fig. 3) (no locality stated). Holotype (unique): MNHN 0000-7548.

Distribution: Probably Indo-Pacific (type locality unknown).

Comments: The species is known only from the holotype MNHN 7548 248 mm SL and for this reason, it is also known as "mystery grouper".

Epinephelus longispinis (Kner 1864)

Serranus longispinis Kner 1864: 483 (Madras, India). No types known.

Distribution: East coast of Africa to eastern Indonesia.

Epinephelus macrospilos Bleeker 1855

Epinephelus macrospilos Bleeker 1855f: 499 (Batjan, Moluccas Ids, Indonesia). Holotype (unique): RMNH 5503.

Serranus cylindricus Günther 1859: 151 (Madagascar). Holotype (unique): BMNH 1981.12.23.1.

Distribution: In the Indian Ocean from Kenya to Natal and the following Ids: Madagascar, Comoro Ids, Mascarenes, Seychelles, Chagos Archipelago, and Maldives; from Cocos-Keeling to Marquesas and Line Ids and from Ryukyu Ids to Coral Sea.

Epinephelus maculatus (Bloch 1790)

Holocentrus maculatus Bloch 1790: 96, Pl. 242 (East Indies). Holotype (unique): ZMB (not found).

Holocentrus albofuscus Lacepède 1802: 340, 384 (East Indies) (*nomen novum*, unneeded replacement name for *Holocentrus maculatus* Bloch 1790).

Holocentrus bicolor Shaw 1803: 568 (no locality stated) (*nomen novum*, unneeded replacement name for *Holocentrus maculatus* Bloch 1790). No type known.

Serranus sebae Bleeker 1854: 488 (Ambon Id, Moluccas Ids, Indonesia). Holotype (unique): whereabouts unknown.

Plectropoma kulas Thiollière in Montrouzier 1857: 423 (Woodlark Id, South Pacific). No types known.

Serranus medurensis Günther 1873: 8, Pl. 9 (fig. A) (Majuro [Meduro], Marshall Ids). Holotype (unique): BMNH 1873.4.3.243.

Distribution: Ryukyu Ids and Ogasawara Archipelago to Indo-Australian Archipelago, Micronesia, Great Barrier Reef, New Caledonia, Lord Howe Id, Fiji and Samoa; Cocos-Keeling Id in the eastern Indian Ocean.

Comments: *Holocentrus bicolor* Shaw 1803 is here regarded as new synonym.

Epinephelus magniscuttis Postel, Fourmanoir & Guézé 1963

Epinephelus magniscuttis Postel, Fourmanoir & Guézé 1963: 365, fig. 9 (Réunion). Holotype: MNHN 1962-1296. Paratype: MNHN 1963-0037 (1).

Epinephelus pseudomorrhua Postel, Fourmanoir & Guézé 1963: 366, fig. 10 (Réunion). Holotype: MNHN 1962-1296.

Distribution: Off Natal to northern Mozambique, Mascarene Ids, New Caledonia, Fiji, New Guinea, New Ireland and Mindanao, Philippines.

Epinephelus malabaricus (Bloch & Schneider 1801)

Holocentrus malabaricus Bloch & Schneider 1801: 319, Pl. 63 (Tranquebar, India). Holotype (unique): ZMB 190.

Holocentrus salmoides Lacepède 1802: 346, 389 (probably Mauritius). Syntypes: MNHN A-5444 (2, dry).

Serranus semipunctatus Valenciennes in Cuvier & Valenciennes 1828: 341 (Puducherry, India). Syntype: MNHN 0000-0743 (1).

Serranus salmonoides Valenciennes in Cuvier & Valenciennes 1828: 343 (*nomen novum*, replacement name for *Holocentrus salmoides* Lacepède 1802).

Serranus crapao Cuvier in Cuvier & Valenciennes 1829: 494 (Jakarta, Java, Indonesia). Holotype: MNHN 0000-7332.

Serranus polypodophilus Bleeker 1849: 37 (Jakarta, Java, Indonesia). Syntypes: BMNH 1880.4.21.1-3 (3) 1840.4.21.13 (1); ?RMNH 5486 (7), SMNS 10637 (2 syntypes).

Serranus estuarius Macleay 1883: 200 (Mary River, Queensland, Australia). Holotype (unique): MAMU (missing).

Epinephelus cylindricus Postel 1965: 124, fig. 1 (Noumèa market, New Caledonia) (*nomen praeoccupatum*, preoccupied by *Serranus cylindricus* Günther 1859 when both in *Epinephelus*). Holotype (unique): not at MNHN.

Distribution: Red Sea to South Africa, Comoro Ids, Seychelles, Gulf of Oman and southern India; in the West Pacific from Ryukyu Ids to New South Wales eastward to Yap and Palau Ids in Micronesia, and Fiji and Tonga in the southern hemisphere.

Epinephelus marginatus (Lowe 1834)

? *Labrus guaza* Linnaeus 1758: 285 ("Pelago" [= Caribbean coast of Venezuela]) *nomen dubium*. No types known.

Perca gigas Brünnich 1768: 65 (Marseille, France). No types known.

Holocentrus merou Lacepède 1802: 337, 377 (no locality). No types known.

Serranus gigas Valenciennes in Cuvier & Valenciennes 1828: 270, Pl. 33 (Mediterranean Sea) (new combination).

Serranus marginatus Lowe 1834: 142 (off Madeira). Neotype: MMF 3388. Possible syntype: BMNH 1858.4.2.81 (1) [from Lowe]. Neotype designated by Heemstra (1991:39).

Serranus fimbriatus Lowe 1836: 195, Pl. 1 (fig. 1) (*nomen novum*, unneeded replacement name for *Serranus marginatus* Lowe thought to be preoccupied by *Serranus marginalis* Valenciennes 1828). Neotype: MMF 3388. Possible syntype: BMNH 1858.4.2.81 (1).

Serranus aspersus Jenyns 1840: 6 (Porto Praya, St. Jago, Cape Verde Ids). Holotype (unique): BMNH 1917.7.14.36.

Serranus cernioides de Brito Capello 1867a: 156 (Portugal). Holotype: whereabouts unknown. Redescribed and figured on de Brito Capello 1867b: 244, Pl. 4 (fig.1).

Cernua gigas Costa 1849: 1, fasc. 64, Pl. 7 (Gulf of Naples, Italy) (new combination).

Epinephelus brachysoma Cope 1871: 466 (Rio de Janeiro, Brazil). Holotype (unique): ANSP 13372.

Distribution: Off Brazil and eastern Atlantic from England to southern tip of Africa, including Madeira, Canary Ids and Cape Verde Ids; widespread in the Mediterranean Sea; in the western Indian Ocean from South Africa northward to Mozambique and Madagascar and Oman.

Comments: Jordan and Evermann (1896) and others (e.g. Tortonese (1973: 359); Daget and Smith (1986: 302)) used the combination *Epinephelus guaza* (Linnaeus 1758) for this species, but *Labrus guaza* (originally as *gvaza*) must be regarded as *nomen dubium* according to Randall and Heemstra (1991: 198) or a doubtful synonym of *Mycteroperca cidi* Cervigon (see additional comments in the incertae sedis section). *Perca gigas* was regarded as a synonym of *Epinephelus guaza* by Jordan and Evermann (1898) and Tortonese (1973: 359). According to Heemstra and Randall (1993) while *L. guaza* fits with no *Epinephelus* known, Brünnich's description of *P. gigas* fits in part with both *E. marginatus* and *E. haifensis*. Heemstra and Randall emphasized that *Perca gigas* has been described having 16 pectoral rays, which is too low for both *marginatus* and *haifensis*, whereas its nine anal soft rays best fit with *haifensis* and colour pattern best fits with *marginatus*. Valenciennes redescribed *Perca gigas* Brünnich as *Serranus gigas* giving the following fin formula: D. XI,15; A. III,8; P. 17. This fin ray formula, combined with the description of colour pattern and the illustration given by Valenciennes, are clearly in agreement with *Serranus marginatus* Lowe. Costa (1849: 1) redescribed *Perca gigas* as *Cernua gigas*. He mentioned 18 pectoral rays and mottled colour pattern and included a colour figure of the species. Lowe redescribed *S. marginatus* as *S. fimbriatus* revising his earlier fin-ray count characterized by an higher number of dorsal and anal fin rays (D. XI,17; P. 18; V. I,5; A. III,9; C. 18) to the following fin formula: D. XI,15 v. 16; P. 18; V. I,5; A. III,8; C. 3 v. 4 + viii/ 3 v. 4 + vii. As Lowe has given no explanation about such differences in fin-ray count, whether related to erroneous determination or aberrant specimens, the same consideration might apply to Brünnich's description of *Perca gigas*. Heemstra (1991: 38) regarded *S. gigas* Valenciennes as a senior synonym of *E. marginatus*. *Epinephelus marginatus* was proposed in 1991 as the valid name for this species and it is currently used in scientific, popular and commercial publications (e.g. Elbaraasi et al. 2019). Reversal of precedence cannot be applied since the combination *Epinephelus gigas* has been used in several publications after 1899 (e.g., Gilchrist 1902: 107; de Buen 1919: 277; Dawes 1947: 351). The correct name for this species should be *Epinephelus gigas*. However, to preserve stability of the name an application to ICZN is needed to suppress both *Perca gigas* 1768 and *Holocentrus merou* Lacepède 1802 in order to maintain *Epinephelus marginatus* as the valid name for this species.

***Epinephelus melanostigma* Schultz 1953**

Epinephelus melanostigma Schultz in Schultz et al. 1953: 331, 348, fig. 54 (reef off Swains Id, American Samoa). Holotype: USNM 115375. Paratypes: BMNH 1962.12.12.52 [ex USNM 115385] (1); FMNH 62614 [ex USNM 148966] (2); SAIAB [formerly RUSI] 18870 [ex USNM 148966] (2); USNM 115374 (4) 115376 (18, ? now 17) 115385 (6, now 5) 148965 (5) 148966 (18, now 14) 148967-68 (2 1).

Distribution: In the Indian Ocean from East coast of Africa, Mauritius, Chagos Archipelago, Maldives Ids, Laccadive Ids, in the Pacific from Indo-Malayan Archipelago to Line Ids northward to Ryukyu Ids; not recorded from Australia.

***Epinephelus merra* Bloch 1793**

Epinephelus merra Bloch 1793: 17, Pl. 329 (Japan and Indian Ocean). Lectotype: ZMB 8716 (right skin). Paralectotypes: ZMB (3, lost).

Serranus confertus Anonymous [Bennett] 1830: 686 (Sumatra). No types known.

Anthias atara Curtiss 1938: 93 (Lagoon near Tautira, Tahiti). No types known.

Anthias faroa Curtiss 1944: 8 (Lagoon near Tautira, Tahiti). No types known.

Anthias tearlachi Curtiss 1944: 8 (Lagoon near Tautira, Tahiti). No types known.

Anthias alternatus Curtiss 1944: 9 (Lagoon near Papeete, Tahiti). No types known.

Anthias tarao Curtiss 1944: 9 (Lagoon near Papeete, Tahiti). No types known.

Distribution: East coast of Africa and insular localities of the Indian Ocean to Tuamotu Archipelago and Line Ids and from Japan to New South Wales and Lord Howe Id.

Comments: *Serranus confertus* is a junior synonym of *E. merra* according to McCulloch (1929: 148) and it is reported as new synonym.

Epinephelus miliaris (Valenciennes 1830)

Serranus miliaris Valenciennes in Cuvier & Valenciennes 1830: 520 (Vanikoro Id, Santa Cruz Ids, southwestern Pacific). Lectotype: MNHN 0000-7547. Paralectotypes: MNHN 0000-7641 (1), 0000-7642 (1, dry). Lectotype selected by Randall and Ben-Tuvia (1983:407).

Serranus gaimardi Valenciennes in Cuvier & Valenciennes 1830: 520 (Vanikoro Id, Santa Cruz Ids). Lectotype: MNHN 0000-7547. Paralectotypes: MNHN 0000-7420 (2), 0000-7641 (1).

Serranus diktiphorus Bleeker 1856b: 38 (Manado, Sulawesi, Indonesia). Syntypes: RMNH 5158 (1).

Epinephelus dictiphorus Bleeker 1873-76: 65 (incorrect subsequent spelling).

Epinephelus fuscus Fourmanoir 1961: 92 (West coast of Madagascar). Holotype (unique): MNHN 1963-0603.

Distribution: Scattered localities of the Indo-West Pacific from East coast of Africa to Samoa northward to Ryukyu Ids; Scott/Seringapatam Reefs, off northwestern Australia; not recorded from Red Sea and Philippines.

Epinephelus moara (Temminck & Schlegel 1843)

Serranus moara Temminck & Schlegel 1843: 10, Pl. 4 (fig. 2) (Nagasaki, Japan). Lectotype: RMNH D72 (dry). Paralectotypes: RMNH D70 and D71 (2, dry) 181 (1, dry?); ZMB 5215 [ex RMNH] (1, dry). Lectotype selected by Boeseman (1947:28).

Distribution: South and East China Sea.

Comments: Resurrected from synonymy with *Epinephelus bruneus* by Liu et al. (2013).

Epinephelus morio (Valenciennes 1828)

Serranus morio Valenciennes in Cuvier & Valenciennes 1828: 285 (New York and Santo Domingo). Syntypes: MNHN (1, not found) New York, MNHN A-7675 (1, dry) Santo Domingo.

Serranus erythrogaster DeKay 1842: 21, Pl. 19 (fig. 52) (Florida). No types known.

Serranus luridus Ranzani 1842: 20, Pl. 36 (fig. 1) (Brazil). Holotype (unique): MZUB 977.

Serranus remotus Poey 1860: 140 (Havana, Cuba). No types known.

Serranus angustifrons Steindachner 1864: 230, Pl. 7 (figs. 2-3) (Cuba). Holotype (unique): whereabouts unknown.

Distribution: Western Atlantic from North Carolina to southern Brazil, including Gulf of Mexico, Caribbean Sea, and Bermuda.

Epinephelus morrhua (Valenciennes 1833)

Serranus morrhua Valenciennes in Cuvier & Valenciennes 1833: 434 (Mauritius). Holotype (unique): MNHN 0000-7431.

Epinephelus cometae Tanaka 1927: 704, Pl. 159 (fig. 445), Pl. 160 (fig. 447) (Tanabe and Hiro, Japan). Syntypes: ZUMT 7499 (1), 7509 (1), 7991.

Distribution: Red Sea and East coast of Africa to Cook Ids and Tuamotu Archipelago and from Japan to New South Wales.

Epinephelus multinotatus (Peters 1876)

Serranus multinotatus Peters 1876b: 435 (Mauritius). Holotype (unique): ZMB 9452.

Epinephelus rankini Whitley 1945: 24 (off Onslow, Western Australia). Holotype (unique): WAM P.2847-001.

Epinephelus leprosus Smith 1955a: 310, Pl. 1 (fig. A) (Aldabra id, Seychelles). Holotype: SAIAB [formerly RUSI] 434.

Distribution: Chagos Archipelago and Mauritius to East Africa, and Western Australia.

Epinephelus ongus (Bloch 1790)

Holocentrus ongus Bloch 1790: 69, Pl. 234 (Japan [erroneous]; Java, instead). Lectotype: ZMB 5533 (right skin). Paralectotypes: ZMB 5214 (1, stuffed). Lectotype selected by Paepke 1999:137.

Serranus dichropterus Valenciennes in Cuvier & Valenciennes 1828: 293 (Japan). Syntypes: MNHN 0000-7403 (2) Brazil; ZMB 5533 [not 365] (dry, lectotype of *ongus*), ?5214 (1, dry) Japan.

Serranus reticulatus Valenciennes in Cuvier & Valenciennes 1828: 323 (Java, Indonesia). Holotype (unique): RMNH D113 (dry).

Serranus tumilabris Valenciennes in Cuvier & Valenciennes 1828: 346 (Seychelles). Holotype: MNHN 0000-7336.

Serranus bataviensis Bleeker 1849: 38 (Jakarta, Java, Indonesia). No type known.

Epinephelus summana hostiaretis Whitley 1954: 25 (Queensland, Australia). No types known.

Epinephelus slacksmithi Whitley 1959: 312 (Heron Id, Capricorn Group, Queensland, Australia). Holotype: AMS IB.3871. Paratypes: AMS I.13424.

Distribution: East coast of Africa, Madagascar, Seychelles, Maldives Ids, Andaman Ids, Japan, Ogasawara Archipelago to South China Sea and Gulf of Thailand, Great Barrier Reef eastward to Caroline Ids, Marshall Ids, Vanuatu and Fiji.

Epinephelus poecilonotus (Temminck & Schlegel 1843)

Serranus poecilonotus Temminck & Schlegel 1843: 6, Pl. 4A (fig. 1) (Nagasaki, Japan). Lectotype: RMNH D75 (dry). Paralectotypes: RMNH 176 (2). Lectotype selected by Boeseman (1947:22).

Distribution: Two disjunct populations; in the western Indian Ocean from Somalia to Port Alfred, South Africa eastward to southern India and Sri Lanka, including Mauritius, Maldives and Chagos Archipelago; in the West Pacific from Japan to South China Sea and from Fiji.

Epinephelus polylepis Randall & Heemstra 1991

Epinephelus polylepis Randall & Heemstra 1991: 226, Pl. 19C (fig. 118) (off Bahrain 26°55'30"N, 50°58'18"E, Persian Gulf). Holotype: BPBM 30580. Paratypes: BMNH 1891.2.1.2 (1) 1899.1.24.1 (1) 1945.12.31.19 (1); BPBM 27480 (1); FMNH 98283 (1); ONHM 1606 (1); RMNH 12345 (1); ZMUC P43670 (1).

Distribution: Persian Gulf to western coast of India.

Epinephelus polyphekadion (Bleeker 1849)

Serranus polyphekadion Bleeker 1849: 39 (Jakarta, Java, Indonesia). Holotype: RMNH.

Serranus goldmanni Bleeker 1855: 434 (Obi Id, Molucca Ids, Indonesia). Holotype (unique): RMNH 5483.

Serranus microdon Bleeker 1856c: 86 (Ora Malang, southeastern Java). Syntypes: RMNH 5510 (1).

Serranus dispar Playfair & Günther 1867: 6, Pl. 1 (figs. 2-3) (Zanzibar). Syntypes: (3) BMNH 1867.3.9.22 ["var. b"] (1, stuffed).

Distribution: Widespread from Red Sea and western Indian Ocean (except the Persian Gulf) to Tuamotu Archipelago, Line Ids, Wake Id and from Ryukyu Ids and Ogasawara Archipelago to western and eastern Australia and Lord Howe Id.

Comments: *Serranus dispar* was described on the base of three specimens, one from Seychelles (named as variety *a* = *Epinephelus tukula*) and two from Zanzibar (named as variety *b*): the two varieties were distinguished on the basis of differences in the ground colour and shape and positions of the blotches superimposed on the small close-set spots covering body and fins. Morgans (1959) was the first to realize that the two varieties represented different species and chose variety *b* to represent *dispar*.

Epinephelus polystigma (Bleeker 1853)

Serranus polystigma Bleeker 1853b: 244 (Benculen, Bengkulu, Sumatra, Indonesia). Syntypes: RMNH 5491 (1) 29577 [ex RMNH 5491] (1).

Serranus australis Castelnau 1875: 7 (Cape York, Queensland, Australia). Holotype (unique): whereabouts unknown.

Epinephelus rahanus Popta 1918: 1 (Raha, Muna Id, Sunda Ids., Indonesia). Lectotype: SMF 4904. Paralectotypes: RMNH 10552 (1), SMF 4905 (1). Lectotype selected by Randall & Heemstra 1991:235.

Distribution: Indo-Australian Archipelago.

Epinephelus posteli Fourmanoir & Crosnier 1964

Epinephelus posteli Fourmanoir & Crosnier 1964: 18, Pl. 16 (fig. C) (Fort Dauphin, Madagascar). Syntypes: IRSMNB (3) probably lost.

Distribution: Madagascar, Natal, and southern Mozambique.

Epinephelus quinquefasciatus (Bocourt 1868)

Serranus quinquefasciatus Bocourt 1868: 223 (mouth of Rio Nagualate, Pacific coast of Guatemala). Holotype (unique): MNHN 0000-5211.

Distribution: In the eastern Pacific from Gulf of California to Peru.

Comments: Previously regarded as a synonym of *E. itajara*, Craig et al. (2009) produced evidence that the Pacific population of the so-called grouper goliath should be regarded as distinct species from the Atlantic form.

Epinephelus quoyanus (Valenciennes 1830)

Perca manca Walbaum 1792: 349 (no locality stated) (*nomen oblitum*). No types known.

Serranus quoyanus Valenciennes in Cuvier & Valenciennes 1830: 519 (New Guinea). Holotype (unique): MNHN 0000-7422.

Serranus gilberti Richardson 1842: 19 (Port Essington, Northern Territory, Australia). Holotype: BMNH 1968.3.11.3 (skin).

Serranus megachir Richardson 1846: 230 (coast of China). Holotype: BMNH 1968.3.11.2 (skin).

Serranus pardalis Bleeker 1848: 635 (Bima, Sumbawa Id, Lesser Sunda Ids, Indonesia). Syntypes and/or Bleeker specimens: AMS B.8324 (1), SMNS 10636 (3 syntypes) Java. Described as a new species also in Bleeker 1849:37.

Perca melanocelidota Gronow in Gray 1854: 110 (Indian Ocean). Holotype (unique): BMNH 1853.11.12.57 (skin).

Serranus alatus Alleyne & Macleay 1877: 264, Pl. 4 (fig.2) (Hall Sound, Papua New Guinea). Holotype (unique): AMS I.16323-001 [ex MAMU F482].

Serranus carinatus Alleyne & Macleay 1877: 265, Pl. 4 (fig. 3) (Cape Grenville, Queensland, Australia). Syntypes: MAMU (2).

Distribution: Japan to New South Wales westward through Indonesia to the Andaman Ids.

Comments: Parenti (2003: 496) treated *Perca manca* Walbaum as *nomen oblitum* to preserve *Epinephelus quoyanus* (Valenciennes 1828). (In the abstract and on p. 493 of Parenti 2003 *Epinephelus quoyanus* was erroneously credited to Cuvier).

Epinephelus radiatus (Day 1868)

Serranus radiatus Day 1868b: 699 (near Madras, India). Holotype (unique): ZSI F1676. Possible holotype: AMS B.8342 (1).

Epinephelus doederleinii Franz 1910: 35 (Yokohama and Dzushi, Japan). Syntypes: ZSM [old collection] (8) destroyed in WWII.

Distribution: Red Sea and western Indian Ocean to northwestern Australia, Papua New Guinea, Taiwan, Japan.

Epinephelus retouti Bleeker 1868

Epinephelus retouti Bleeker 1868: 339 (Réunion). Holotype (unique): RMNH 5415.

Epinephelus truncatus Katayama 1957: 158, fig. 4 (Torishima, Izu Ids, Japan). Holotype: NSMT-P 18222.

Epinephelus mauritanus Baissac 1962: 188 (Mauritius). Holotype (unique): NHMI uncat.

Distribution: Western Indian Ocean, Chagos Archipelago, Indonesia northward to Japan, eastward to Society Ids and Line Ids.

Epinephelus rivulatus (Valenciennes 1830)

Serranus rivulatus Valenciennes in Cuvier & Valenciennes 1830: 515 (Réunion). Holotype (unique): MNHN 0000-7347.

Serranus rhyncholepis Bleeker 1853a: 749 (Bulucomba, Sulawesi, Indonesia). Holotype (unique): RMNH 5465.

Serranus viridipinnis De Vis 1884c: 144 (Moreton Bay, Queensland, Australia). Syntypes at QM according to Paxton et al. 1989:497 as *Epinephelus viridipinnis*.

Epinephelus grammatorphus Boulenger 1903: 64, Pl. 3 (Kwa-Zulu Natal coast, South Africa). Syntypes: BMNH 1903.2.6.2 (1) 1905.6.6.94 (1).

Epinephelus raymondi Ogilby 1908b: 93 (Cape Moreton, Queensland, Australia). Holotype (unique): QM I.1565.

Epinephelus matterni Fowler 1914: 31, fig. 13 (Philippines). Holotype: ANSP 47506.

Epinephelus homosinensis Whitley 1944: 267 (Broom, Western Australia). Holotype: WAM P.2413-001. Paratypes: WAM P.2412-001 (1), P.2430-001 (1).

Epinephelus spiramen Whitley 1945: 25 (30 miles north of Carnarvon, Western Australia). Holotype (unique): WAM P.2796-001 (head only).

Distribution: Western Indian Ocean and West Pacific from Japan to temperate Australia, New Caledonia, Lord Howe and Norfolk Ids, New Zealand.

Comments: We follow Heemstra and Randall (1993:225) in regarding *E. spiramen* as a synonym of *rivulatus* instead of *E. fasciatus* as reported by Paxton et al. (1989:494) and Randall and Heemstra (1991:248).

Epinephelus sexfasciatus (Valenciennes 1828)

Holocentrus zebra Marion de Procé 1822: 132 (Manila Bay, Philippines).

Serranus sexfasciatus Valenciennes in Cuvier & Valenciennes 1828: 360 (Java, Indonesia). Lectotype: RMNH D153 (dry). Non-types: MNHN 0000-6872 (1). Lectotype selected by Randall and Heemstra (1991:256).

Distribution: Indo-Malayan Archipelago, including northern half of Australia and Gulf of Thailand.

Comments: *Holocentrus zebra* has been described having the fin ray formula P.16.V.1/7.D.11/26. A.3/11.C.18, violaceous body with five blackish transverse bands and spotted fins. On the basis of the Article 23.9.1 of the Code we declare *Holocentrus zebra* Marion de Procé 1822 *nomen oblitum*, whereas *Epinephelus sexfasciatus* (Valenciennes 1828) is declared *nomen protectum*. To give evidence that the conditions of the Article 23.9.1.2 are met we produce the following list of 25 publications: Herre (1953), Kailola (1987), Allen and Swainston (1988), Paxton et al. (1989), Russell and Houston (1989), Ramm et al. (1990) Randall et al. (1990), Randall and Heemstra (1991), Salini et al. (1994), Mohsin and Ambak (1996), Monkolprasit et al. (1997), Johnson (1999), Kuitert and Tonzuka (2001), Huang (2001), Allen and Adrim (2003), Heemstra and Randall (1986, 1993, 1999), Hoese et al. (2006), Motomura and Satapoomin (2009) Craig et al. (2011), Larson et al. (2013), Yoshida et al. (2013), Tucker et al. (2016), and Ma and Craig (2018).

Epinephelus socialis (Günther 1873)

Serranus socialis Günther 1873: 7, Pl. 8 (fig. B) (Tahiti, Society Ids). Lectotype: BMNH 1873.4.3.1. Paralectotypes: BMNH 1865.5.29.9 (1) Samoa, BMNH 1873.4.3.2 (1) Tuamotus. Lectotype selected by Randall (1964:289, fig. 7).

Distribution: Pacific Plate, with the exclusion of the Hawaiian Ids.

Epinephelus spilotoceps Schultz 1953

Epinephelus spilotoceps Schultz in Schultz et al. 1953: 332, 357, figs. 56-57 (lagoon reef off Namu Id, Bikini Atoll, Marshall Ids). Holotype: USNM 141901. Paratypes: FMNH 62615-16 (1 1); USNM 141902 (3) 141904-921 (1 2 1 1 1, 9 1 1, 3 1 2 1 2 1, 7 1 1 1).

Epinephelus salonotus Smith & Smith 1963: 15, Pl. 14, fig. 1 (Delgado, Western Indian Ocean). Holotype (unique): SAIAB [formerly RUSI] 3.

Distribution: Western Indian Ocean to Line Ids.

Epinephelus stictus Randall & Allen 1987

Epinephelus sp. Gloerfelt-Tarp & Kailola 1987: 135, lowermost figure on p. 134 (northwestern Australia).

Epinephelus stictus Randall & Allen 1987: 394, fig. 1 (About 20 kilometres south of Heywood Shoals 13°33'S 124°02'E, Western Australia). Holotype: WAM P.28277-001. Paratypes: CSIRO CA 886 (1). The following type materials BMNH 1939.1.17.10 (1), BPBM 30913 (1), ZUMT 10701 (1), 52224 are regarded as paratypes of *E. craigi*.

Distribution: Northwestern Australia. Records from Japan and South China Sea represent *E. fasciatomaculosus* and *E. craigi*, respectively.

Epinephelus stoliczkae (Day 1875)

Serranus stoliczkae Day 1875: 11, Pl. 1 (fig. 3) (coast of Sind, Pakistan). Lectotype: ZSI 1679. Paralectotypes and/or Day specimens: AMS B.8157 (1); MNHN 0000-9360 (1); NMW 81226 (1); RMNH 143 [? or 73] (1); ZMB 8885 (1); ZSI 897-899 (3) 1955 (1). Lectotype selected by Randall and Ben-Tuvia (1983).

Distribution: Red Sea (including the Gulf of Suez but not the Gulf of Aqaba), Gulf of Aden, Gulf of Oman and coast of Pakistan; not recorded from the Persian Gulf.

Epinephelus striatus (Bloch 1792)

Perca reticulata Walbaum 1792: 354 (no locality stated). No types known.

Anthias striatus Bloch 1792: 125, Pl. 324 (Martinique Id, West Indies). No types known.

Anthias cherna Bloch & Schneider 1801: 310 (no locality stated). No types known.

Lutjanus trilobatus Lacepède 1802: 196, 246 (no locality stated). No types known.

Sparus chrysomelanus Lacepède 1802: 53, 160 (Amerique equinoxiale). No types known.

Lutjanus plumierii Lacepède 1802: 192, 235 (Antilles) (*nomen novum*, unneeded replacement name for *Anthias striatus* Bloch 1792).

Sparus semifasciatus Shaw 1803: 472 (American seas) (*nomen novum*, unneeded replacement name for *Anthias striatus* Bloch 1792).

Serranus gymnopareius Valenciennes in Cuvier & Valenciennes 1828: 248 (no locality stated). Holotype: MNHN 0000-7071.

Distribution: Bermuda, Florida, Bahamas, Yucatan, throughout the Caribbean Sea to southern Brazil.

Comments: *Anthias cherna* is based on the 'Cherna' of Parra (1787: 50, Pl. 24 [fig. 1]) thus type locality might be inferred to be Cuba. Parenti (2003: 500) serves as first reviser selecting *Anthias striatus* Bloch 1792 over *Perca reticulata* Walbaum 1792. *Lutjanus trilobatus* Lacepède 1802 is here regarded as new synonym.

Epinephelus suborbitalis Amaoka & Randall 1990

Epinephelus sp. Amaoka in Okamura et al. 1982: 374.

Epinephelus suborbitalis Amaoka & Randall 1990: 3, figs. 1-5 (Minami-Koho Seamount, Kyushu-Palau Ridge, western Pacific 26°11.5'N 135°46'E to 26°09.2'N 135°49.5'E). Holotype (unique): HUMZ 80533.

Distribution: West Pacific.

Epinephelus summana (Forsskål 1775)

Perca summana Forsskål 1775: xi, 42 (no locality stated). Holotype (unique): ZMUC P43569 (dry skin).

Serranus leucostigma Valenciennes in Cuvier & Valenciennes 1828: 346 (Massawa, Eritrea, Red Sea; based on a drawing). No types known.

Sebastes meleagris Peters 1864: 392 (Massawa, Eritrea, Red Sea). Syntypes: ZMB 198 (4).

Distribution: Red Sea and Gulf of Aden.

Epinephelus tauvina (Forsskål 1775)

Perca tauvina Forsskål 1775: xi, 39 (Jeddah, Saudi Arabia, Red Sea). Holotype (unique): ZMUC P43565 (dry skin).

Holocentrus pantherinus Lacepède 1802: 345, 389 (figured with vernacular name in Lacepède 1801: Pl. 27, fig. 3) (no locality stated). No types known.

? *Serranus diacopaeformis* Bennett 1830: 686 (Sumatra). No type known.

? *Serranus janseni* Bleeker 1857: 376 (Sangi Sangihe Id, Indonesia). Holotype (unique): whereabouts unknown.

Serranus goldiei Macleay 1882: 226 (Port Moresby, Papua New Guinea). Holotype (unique): AMS I.16322-001 [ex MAMU F477].

Epinephelus elongatus Schultz in Schultz et al. 1953: 345, Pl. 25, fig. c; fig. 53 (Ocean reef off Giriinien Id, Eniwetok Atoll, Marshall Ids). Holotype: USNM 141844. Paratypes: FMNH 62611-12 (2 1); USNM 115371 (1) 115384 (1) 139694 (2) 141836-42 (1 2 1 2, 5 1 2) 141845-48 (1 1 2 1) 141850-56 (6 2 1 1 1, 7 2) 141930-32 (3).

Epinephelus chewa Morgans 1966: 267, Pl. 9 (fig. D) (Mafia Id, Tanzania). Holotype: EAMFRO S73. Paratypes: EAMFRO S82/1 (1), S82/2 (1), S87 (1).

Distribution: Red Sea and western Indian Ocean to Line Ids, Tuamotu Archipelago, Pitcairn Group and Ducie, northward to Ryukyu Ids, southward to Lord Howe Id.

Epinephelus timorensis Randall & Allen 1987

Epinephelus sp. Wass 1984: 12 (Samoa).

Epinephelus timorensis Randall & Allen 1987: 399, fig. 2 (Dillon Shoals, Timor Sea, Western Australia). Holotype (unique): WAM P.24794-001.

Distribution: Timor Sea, Samoa and Phoenix Ids.

Epinephelus trimaculatus (Valenciennes 1828)

? *Perca fario* Thunberg 1793b: 296, Pl. 9 [*nomen dubium* (Randall and Heemstra 1991)].

Serranus trimaculatus Valenciennes in Cuvier & Valenciennes 1828: 331 (Japan). No types known.

Serranus ura Valenciennes in Cuvier & Valenciennes 1828: 332 (Japan). Holotype (unique): ZMB 5529 (stuffed).

Serranus ara Temminck & Schlegel 1843: 9 (*nomen novum*, unjustified emendation of *Serranus ura* Valenciennes 1828).

Distribution: southern Japan, Korea, Taiwan, and China.

Comments: Katayama in Masuda et al. (1984: 130) used the combination *Epinephelus fario* for the species presently known as *Epinephelus trimaculatus* (Valenciennes 1828); however, Heemstra regarded *Perca fario* as unidentifiable (Bauchot et al. 1984: 48) who wrote: "la description et la figure de Thurnberg ne présentent les caractères diagnostiques d'aucun *Epinephelus*". This opinion was followed in subsequent papers. Kottelat (2013: 328) listed the name as doubtful senior synonym of *E. trimaculatus*.

Epinephelus trophis Randall & Allen 1987

Epinephelus trophis Randall & Allen 1987: 402, fig. 3 (Base of drilling rig 11°S 124°E, Dillon Shoals, Timor Sea, Western Australia). Holotype: WAM P.24795-001. Paratypes: BPBM 30279.

Distribution: Timor Sea.

Epinephelus tuamotuensis Fourmanoir 1971

Epinephelus tuamotuensis Fourmanoir 1971: 127, fig. 1 (Rangiroa Atoll, from the village of Avatoru to 2 kilometres east, Tuamotu Archipelago). Holotype: MNHN 1970-0040. Paratypes: (8) possibly at the MNHN.

Distribution: Tuamotu Archipelago, Society Ids, Pitcairn Group, and Rapa.

Epinephelus tukula Morgans 1959

Epinephelus tukula Morgans 1959: 651, Pls. 17-19 (Mafia Id, Tanzania). Holotype: EAMFRO S.96. Paratypes: EAMFRO. S.88 (1), S.102 (1), S.122 (1).

Distribution: Red Sea and western Indian Ocean, Japan to South China Sea, Western Australia and Coral Sea.

Epinephelus undulostriatus (Peters 1866)

Serranus undulostriatus Peters 1866: 518 (Sydney, New South Wales, Australia). Holotype (unique): ZMB 5520.

Serranus guttulatus Macleay 1878: 33, Pl. 2 (Port Jackson, New South Wales, Australia). Holotype (unique): AMS I.16324-001 [ex MAMU F1166].

Distribution: Eastern Australia from southern Queensland to New South Wales.

Epinephelus undulosus (Quoy & Gaimard 1824)

Bodianus undulosus Quoy & Gaimard 1824: 310 (Pulau Waigeo, Papua Province, New Guinea). No types known.

Serranus lineatus Valenciennes in Cuvier & Valenciennes 1828: 312 (Puducherry, India). Syntypes: MNHN 0000-7544 (dry), A-7681 (1, dry).

Serranus amboinensis Bleeker 1852a: 258 (Ambon Id, Molucca Ids, Indonesia). Holotype (unique): RMNH 5466.

Distribution: Kenya to Gulf of Aden eastward to China and Indonesia (not recorded from the Arabian Gulf and Australia).

Genus *Gonioplectrus* Gill 1862

Gonioplectrus Gill 1862b: 236 (type species *Plectropoma hispanum* Cuvier 1828. Type by monotypy). Gender masculine.

Western Atlantic; one species.

Gonioplectrus hispanus (Cuvier 1828)

Plectropoma hispanum Cuvier in Cuvier & Valenciennes 1828: 396 (Martinique Id, West Indies). Holotype (unique): MNHN 0000-7679.

Distribution: North Carolina to southern Brazil, including the Gulf of Mexico, Greater and Lesser Antilles, and Bahamas.

Genus *Hyporthodus* Gill 1861

Hyporthodus Gill 1861c: 98 (type species *Hyporthodus flavicauda* Gill 1861. Type by monotypy). Gender masculine.

Schistorus Gill 1862b: 236-237 (type species *Serranus mystacinus* Poey 1852. Type by monotypy). Gender masculine.

Serrihastaperca Fowler 1944: 384 (type species *Serrihastaperca exsul* Fowler 1944. Type by original designation). Gender feminine.

Comments: Based on molecular analysis and supported by a series of morphological traits *Hyporthodus* is resurrected from synonymy with *Epinephelus* and regarded as a valid genus by Craig and Hastings (2007) to include the *Epinephelus niveatus* species group; Craig et al. (2011: 280), Page et al. (2013:130) and Smith-Vaniz and Collette (2013: 171) followed this decision; 18 species.

Hyporthodus acanthisti (Gilbert 1892)

Bodianus acanthisti Gilbert 1892: 552 (Near Cape Lobos on eastern shore of Gulf of California, Mexico 29°54'30"N 113°01'W, Albatross station 3017). Holotype (unique): USNM.

Cephalopholis popino Walford 1936: 3 (Mazatlán, Sinaloa, Mexico). Holotype: USNM 100979. Paratypes: USNM 80257 (1).

Distribution: Eastern Pacific from southern California including Gulf of California to Peru.

Hyporthodus chabaudi (Castelnau 1861)

Serranus chabaudi Castelnau 1861: 3 (Zwartkops River mouth, Algoa Bay, South Africa). Holotype (unique): MNHN (not found).

Epinephelus modestus Gilchrist & Thompson 1909: 218 (Durban market, Kwa-Zulu Natal, South Africa). Holotype (unique): SAM 10446.

Epinephelus clarkei Smith 1958: 123, Pl. 1, fig. C (off Xora River mouth, Transkei, South Africa). Holotype: SAIAB [formerly RUSI] 26. Additional material or paratypes: SAIAB.

Distribution: Indian Ocean off Kenya, Natal, and Kerala, southern India.

Hyporthodus cifuentes (Lavenberg & Grove 1993)

Epinephelus cifuentes Lavenberg & Grove in Heemstra & Randall 1993: 129, fig. 277 (off Punta Judas, Puntarenas Province, Costa Rica). Holotype: LACM 44418-1. Paratypes: AMNH 55725 (1); CAS 39423 (1); LACM 35469-25 (1); CAS-SU 37462 (1); UCR 720-5 (1) 1666-2 (1) 1819-1 (1) 1978-1 (1) 2017-1 (1).

Distribution: Mexico to Ecuador, including Galápagos Ids and Isla del Coco.

Hyporthodus darwinensis (Randall & Heemstra 1991)

Epinephelus darwinensis Randall & Heemstra 1991: 133, Pl. 11B (fig. 66) (North of Bathurst Id 10°11'S 129°48'E, Timor Sea). Holotype (unique): NTM S.12346-001.

Distribution: Timor Sea, North of Bathurst Id, off Northern Territory, Australia.

Comments: Described from a single specimen.

Hyporthodus drummondhay (Goode & Bean 1878)

Epinephelus drummondhay Goode & Bean 1878: 173 (Pensacola, Florida, and Bermuda). Syntypes: USNM 16795 (1) 21255 (1).

Distribution: Bermuda and along the coast of USA from North Carolina to the Florida Key and in the northern and eastern Gulf of Mexico.

Hyporthodus ergastularius (Whitley 1930)

Epinephelus (Schistorus) ergastularius Whitley 1930: 119, Pl. 14 (fig. 1) (Long Bay, near Sydney, New South Wales, Australia). Holotype: AMS IA.2482. Paratypes: AMS I.4039 (1), I.11252 (1), I.13809 (1), IA 3992 (1).

Distribution: eastern Australia from Queensland and New South Wales in a depth range of 108-370 m.

Hyporthodus exsul (Fowler 1944)

Serrihastaperca exsul Fowler 1944: 385, 396, fig. 182-183 (about 20 miles south to Mazatlán, Mexico [stomach content]). Holotype: ANSP 70060. Paratypes: ANSP 70061-62 (2).

Distribution: Eastern Pacific from northern Gulf of California to Panama.

Hyporthodus flavolimbatus (Poey 1865)

Epinephelus flavolimbatus Poey 1865a: 183 (Matanzas, Cuba). No type known.

Distribution: western Atlantic from North Carolina to Brazil, including Gulf of Mexico and Caribbean Sea but not recorded from Bermuda.

Hyporthodus haifensis (Ben-Tuvia 1953)

Cerna sicana Döderlein 1882: 250 (Palermo, Sicily, Italy). Holotype: MZUSP.

Epinephelus haifensis Ben-Tuvia 1953: 21, fig. 14 (off Caesarea, Israel, Mediterranean Sea). Holotype: HUIJ 8604 [ex SFRS M411]. Paratypes: ANSP 128518 (1), BMNH 1955.9.25.5 (1).

Distribution: Southern Mediterranean and eastern Atlantic from Portugal and along the coasts of North Africa to Angola.

Comments: *Cerna sicana* originally named as *Serranus* or *Cerna sicana* is a senior synonym of *E. haifensis*. As annotated by Heemstra and Randall (1993:162) “Except for having only X dorsal-fin spines, this specimen fits the description of *E. haifensis*”. They added: “Since we are reluctant to use *E. sicana* as the valid name for a species that normally has XI dorsal-fin spines, we here accept *Epinephelus haifensis* as the valid name for this species”. However, in order to maintain the junior synonym as valid, we formally declare *Cerna sicana* Döderlein 1882 as *nomen oblitum* and *Epinephelus haifensis* Ben-Tuvia 1953 as *nomen protectum* according the Art. 23.9.1 of the Code. The combination *Serranus* vel *Cerna sicana* has not been used as valid since 1899 (Art. 23.9.1.1), whereas *Epinephelus haifensis* (= *Hyporthodus haifensis*) has been used as valid in at least 25 works published by at least 10 authors during the past 50 yr, encompassing a span of not less than 10 yr (Art. 23.9.1.2). To give evidence that these conditions are met the following list of publications is included: Economidis (1973), Tortonese (1979, 1986), Eschmeyer (1990), Heemstra (1991), Heemstra and Randall (1993), Wu et al. (1999), Azzurro et al. (2000), Quignard and Tomasini (2000), Crespo et al. (2001), Louisy (2001), Parenti and Bressi (2001), Bilecenoglu et al. (2002), Saad (2005), Craig and Hastings (2007), Fricke et al. (2007), Craig et al. (2011), Psomadakis et al. (2012), Goren (2014), Kamikawa et al. (2015), Ulman et al. (2015), Consoli et al. (2016), Moravec et al. (2017), Ma and Craig (2018), and Mavruk et al. (2018).

Hyporthodus mystacinus (Poey 1852)

Serranus mystacinus Poey 1852: 52, 59, Pl. 10, fig. 1 (Cuba). Holotype: MCZ 9991. Paratype: MCZ 10009 (1).

Distribution: Amphiameric: Bermuda, North Carolina, Florida, Gulf of Mexico to Yucatan, Greater and Lesser Antilles in the western Atlantic, and Galápagos Ids, Cocos Ids, and coast of Ecuador in the eastern Pacific.

Hyporthodus nigrinus (Holbrook 1855)

Serranus nigrinus Holbrook 1855: 177, Pl. 25 (fig. 2) (Charleston, South Carolina, U.S.A.). Holotype (unique): ANSP 13468.

Centropristis merus Poey 1868: 288 (Matanzas, Cuba). No types known.

Distribution: Massachusetts to Gulf of Mexico, Cuba, Trinidad and Rio de Janeiro; record from the eastern Pacific appear to misidentifications of *H. exsul* (Heemstra and Randall 1993: 202).

Hyporthodus niphobles (Gilbert & Starks 1897)

Epinephelus niphobles Gilbert & Starks 1897: 442 (Magdalena Bay, Baja California, Mexico 24°35'30"N 112°05'W, Albatross station 3041). Holotype (unique): USNM 47582.

Distribution: Central California including the Gulf of California to Peru.

Hyporthodus niveatus (Valenciennes 1828)

Serranus niveatus Valenciennes in Cuvier & Valenciennes 1828: 380 (Brazil). Syntypes: MNHN 0000-7318 to 0000-7319 (2 2).

Serranus margaritifer Günther 1859: 131 (South America). Holotype (unique): BMNH 2015.12.15.1.

Serranus conspersus Poey 1860: 139 (Cuba). Syntypes: MCZ 10161 (3).

Hyporthodus flavicauda Gill 1861c: 98 (Newport, Rhode Id, U.S.A.). Syntypes: ANSP(2).

Alphestes scholanderi Walters 1957: 283, fig. 1 (West of Bimini, Bahamas). Holotype: AMNH 19925 (complete skeleton). Paratypes: AMNH 19924 (1, neurocranium) 19926 (1, skull and fin girdles) 20230 (1).

Distribution: Massachusetts to Florida, Gulf of Mexico, northern South America and Brazil; also from Bermuda and northern coast of Cuba.

Hyporthodus octofasciatus (Griffin 1926)

Epinephelus octofasciatus Griffin 1926: 540, Pl. 95 (Arid Id, off the northeastern coast of Great Barrier Id, Auckland District, New Zealand). Holotype (unique): AIM MA 259.

Epinephelus compressus Postel, Fourmanoir & Guézé 1963: 364, fig. 8 (Réunion). Holotype: CNRO uncat. Paratypes: MNHN 1963-0127 (1) 1967-0543 (1).

Distribution: From East Africa to Marquesas Ids and from Japan to Great Barrier Reef, Kermadec Ids, New Zealand, and Tonga (the distribution is spotty due to its occurrence in deep waters).

Hyporthodus perplexus (Randall, Hoese & Last 1991)

Epinephelus thompsoni Whitley 1948: 89 (36.5 miles northeast of Cape Moreton, Queensland, Australia) (subjectively invalid, *nomen praeoccupatum*, preoccupied by *Stereolepoides thompsoni* Fowler 1923 when both are in *Epinephelus*). Holotype (unique): AMS E.2116.

Epinephelus perplexus Randall, Hoese & Last in Randall & Heemstra 1991: 222, fig. 116 (*nomen novum* for *Epinephelus thompsoni* Whitley). Holotype (unique): AMS E.2116.

Distribution: Cape Moreton, Queensland.

Comments: Known only from the holotype.

Hyporthodus peruanus (Chirichigno 1963)

Epinephelus peruanus Chirichigno 1963: 44, fig. 37B (Puerto Pizarro, Peru). Holotype: MHNJP [= MUSM] P 1173. Paratypes: ?MHNJP [SP 537] (1).

Distribution: Peru.

Hyporthodus quernus (Seale 1901)

Epinephelus quernus Seale 1901: 3, fig. 1 (Honolulu, Oahu Id, Hawaiian Ids). Holotype (unique): BPBM 481.

Distribution: Endemic to the Hawaiian Ids and Johnston Id.

Hyporthodus septemfasciatus (Thunberg 1793)

Perca septemfasciata Thunberg 1793a: 56, Pl. 1 (Nagasaki, Japan). Holotype (unique): ZMUU 280.

Plectropoma susuki Cuvier in Cuvier & Valenciennes 1828: 404 (Japan). Holotype (unique): ZMB 285 (stuffed).

Serranus octocinctus Temminck & Schlegel 1843: 7, Pl. 4A, fig. 2 (Japan). Lectotype: RMNH 123. Paralectotype: RMNH 124 (1). Lectotype selected by Boeseman (1947:23).

Distribution: Japan and East China Sea.

Genus *Mycteroperca* Gill 1862

Mycteroperca Gill 1862b: 236 (type species *Serranus olfax* Jenyns 1840. Type by monotypy). Gender feminine.

Trisotropis Gill 1865: 104 (type species *Mycteroperca pardalis* Gilbert 1892. Type by original designation). Gender feminine.

Parepinephelus Bleeker 1874a: 3 (type species *Serranus acutirostris* Valenciennes 1828. Type by original designation). Gender masculine.

Archoperca Jordan & Evermann 1896: 1169, 1171 (type species *Mycteroperca boulengeri* Jordan & Starks 1895. Type by original designation). Gender feminine.

Xystroperca Jordan & Evermann 1896: 1170, 1181 (type species *Mycteroperca pardalis* Gilbert 1892. Type by original designation). Gender feminine.

Tropical and subtropical shallow coastal waters of eastern and western Atlantic and eastern Pacific on coral reefs, rocky bottom, mangrove areas, and kelp beds; 15 species; moving 12 valid species from *Epinephelus* to *Mycteroperca* Ma and Craig (2018) recognized 27.

Mycteroperca acutirostris (Valenciennes 1828)

Serranus acutirostris Valenciennes in Cuvier & Valenciennes 1828: 286 (Brazil). Syntypes: MNHN 0000-7329 (1), MNHN [Bauchot's holotype] not found.

Serranus undulosus Valenciennes in Cuvier & Valenciennes 1828: 295 (Brazil). Syntypes: MNHN 0133 (1), 5288 (1), 7406 (2).

Epinephelus chalinus Cope 1871: 465 (St. Martin Id, West Indies). Holotype (unique): ANSP 12768.

Epinephelus cuvieri Bleeker 1874b: 46 (*nomen novum*, replacement name for *Serranus undulosus* Valenciennes supposed to be preoccupied in *Epinephelus* by *Bodianus undulosus* Quoy & Gaimard 1824).

Distribution: Bermuda and northwestern Gulf of Mexico, Cuba, Jamaica, Virgin Ids, Leeward Ids, Panama, Colombia, Venezuela, Curaçao and Brazil.

Mycteroperca bonaci (Poey 1860)

Serranus arara Parra in Storer 1846: 279 (objectively invalid, *nomen praeoccupatum*, preoccupied by *Serranus arara* Valenciennes 1828).

Serranus arara Poey 1860: 132 (Havana, Cuba) (objectively invalid, *nomen praeoccupatum*, preoccupied by *Serranus arara* Valenciennes 1828). No types known.

Serranus bonaci Poey 1860: 129 (Cuba). Syntypes: MCZ 10000 (2) 10032-34 (3).

Serranus brunneus Poey 1860: 131 (Cuba). Syntypes and/or Poey specimens: MCZ 10184 (2); ?ZMB 5221 (1).

Serranus decimalis Poey 1860: 138 (Cuba). Holotype (unique): whereabouts unknown.

Serranus cyclopomatus Poey 1861: 353 (Cuba). Syntypes: MCZ 10180 (2).

Serranus latepictus Poey 1861: 353 (Cuba). No types known.

Trisotropis aguaji Poey 1867b: 229 (Havana, Cuba). No types known.

Mycteroperca bonaci var. *xanthosticta* Jordan & Swain 1885: 371 (Snapper Bank of Pensacola, Florida). Holotype: USNM 35083 (skin).

Trisotropis microps Poey 1955: 115 (Cuba). No types known.

Distribution: Bermuda and Massachusetts to Brazil, including Caribbean Sea and coast of Yucatan, but absent from northwestern Gulf of Mexico.

Mycteroperca cidi Cervigón 1966

Mycteroperca cidi Cervigón 1966: 654, fig. 117 (Isla Cubagua, Venezuela). Holotype: MOBR-EDIMAR -P--1210. Paratypes: UF 219264 [ex UMML 19264] (1), MOBR-EDIMAR-P-1211 (3).

Distribution: Caribbean coast of Venezuela and off Jamaica, suggesting its presence in other Caribbean localities.

Mycteroperca fusca (Lowe 1836)

Serranus fuscus Lowe 1836: 196 (off Madeira). Neotype: MMF 24928, designated by Heemstra (1991:48-49)

Serranus emarginatus Valenciennes 1843: 10 (Canary Ids). Holotype: MNHN 0000-7437 (dry).

Serranus simonyi Steindachner 1891: 352 (Grand Canary Id). Syntypes: NMW 39457 (2).

Distribution: Madeira, Azores, Canary and Cape Verde Ids.

Mycteroperca interstitialis (Poey 1860)

Serranus interstitialis Poey 1860: 127, Pl. 12 (fig. 6) (Cuba). No types known.

Serranus dimidiatus Poey 1860: 129 (Havana, Cuba). Holotype (unique): MCZ 26953.

Serranus falcatus Poey 1860: 138 (Marianao, near Havana, Cuba). Syntypes: ?MCZ (1, dismembered skeleton), MCZ 10014 (1) 10183 (1) 10188 (1).

Mycteroperca calliura Poey 1865a: 181 (Cuba). Syntypes: MCZ 10011 (1), ?ZMB 6361 (1).

Trisotropis chlorostomus Poey 1867b: 231 (Cuba). Holotype (unique): MCZ.

Mycteroperca roquensis Martin Salazar 1956: 88 100, fig. (Gran Roque Id, Los Roques Ids, Venezuela). Holotype (unique): MHN La Salle 12597.

Trisotropis intermedius Poey 1955: 122 (Cuba). Holotype (unique): whereabouts unknown.

Distribution: Bermuda, Gulf of Mexico, Yucatan, West Indies, Caribbean Sea, and southern Brazil.

Mycteroperca jordani (Jenkins & Evermann 1889)

Epinephelus jordani Jenkins & Evermann 1889: 140 (Guaymas, Sonora, western Mexico). Holotype: USNM 39628. Paratypes: CAS 61868 [ex IU 4031] (1), CAS-SU 416 (1).

Mycteroperca venadorum Jordan & Starks in Jordan 1895: 446. Holotype (unique): BMNH 1895.5.27.342 (near Isla Blanca, off Sinaloa, Mexico).

Distribution: La Jolla (California) to Mazatlán (Mexico), including the Gulf of California.

Mycteroperca microlepis (Good & Bean 1880)

Trisotropis microlepis Goode & Bean 1879: 141 (Western Florida, U.S.A.). Syntypes: USNM 5137 (2).

Trisotropis stomias Goode & Bean 1880: 427 (Florida, U.S.A.). Lectotype: USNM 16902. Paralectotypes: USNM 15462 (1) 21336 (1, not found in 1980) 26561 (1) 26587 (1). Lectotype selected by Smith (1971:189).

Trisotropis immaculatus Poey 1955: 119 [Also in Poey 1962: 27 and Poey 2000: 46, Pl. 14 (fig .3)].

Distribution: North Carolina to northern Gulf of Mexico to Yucatan, Bermuda, Cuba and eastern Brazil.

Mycteroperca olfax (Jenyns 1840)

Serranus olfax Jenyns 1840: 9, Pl. 4 (San Cristóbal Id, Galápagos Ids). Holotype (unique): BMNH 1917.7.25.7 (left half skin).

Mycteroperca olfax var. *ruberrima* Jordan & Bollman in Jordan & Eigenmann 1890: 367 (James Id, Galápagos Ids). Holotype: MCZ 90703. Paratype: USNM 41274 (1).

Distribution: Off Ecuador, Malpelo Id, Galapagos and Cocos Ids.

Mycteroperca phenax (Jordan & Swain 1885)

Mycteroperca falcata var. *phenax* Jordan & Swain 1885a: 363 (Key West and Pensacola, Florida). Syntypes: BMNH 1884.7.7.187 (1), USNM 34992 (1).

Distribution: North Carolina, Florida Keys, Gulf of Mexico and along the southern shore of Caribbean Sea.

Mycteroperca prionura Rosenblatt & Zahuranec 1967

Mycteroperca xenarcha Walford (*nec* Jordan) 1937.

Mycteroperca prionura Rosenblatt & Zahuranec 1967: 241, figs. 3a-4a [Inner Gorda Bank (23°02'N 109°31'W), Baja California Sur, Mexico]. Holotype: SIO 66-48. Paratypes: AMNH 26000 [ex SIO 65-351] (5); SIO (18 lots 105); USNM 101061 (1) 204315 [ex SIO 65-347] (20).

Distribution: Gulf of California to Jalisco, Mexico.

Mycteroperca rosacea (Streets 1877)

Epinephelus rosacea Streets 1877: 51 (Angel Id, Gulf of California, Mexico). Holotype (unique): USNM 17554.

Mycteroperca pardalis Gilbert 1892: 551 (La Paz Bay, Baja California, Mexico). Holotype (unique): whereabouts unknown.

Distribution: Southern coast of Baja California and entire Gulf of California to Jalisco, Mexico.

Mycteroperca rubra (Bloch 1793)

Epinephelus ruber Bloch 1793: 22, Pl. 331 (Japan [erroneous]). Holotype (unique): ZMB 161.

Holocentrus japonicus Shaw 1803: 565 (Japan) (*nomen novum*, unneeded replacement name for *Epinephelus ruber* Bloch 1793). No types known.

Sparus scirenga Rafinesque 1810: 50 (Palermo, Sicily, Italy). No types known.

Serranus tinca Cantraine 1833: 176 (also in Cantraine 1835: 207 and Cantraine 1838: 4) (Port of Messina, Sicily, Mediterranean Sea). Holotype (unique): whereabouts unknown.

Cerna macrogenis Sassi 1846: 139 (off Liguria, Italy). Holotype: MSNG 43110 (= or MSNG 38933) (not found).

Cerna acutirostris var. *lata* Döderlein 1882: 243, Pl. 3 (fig.6) [misprinted fig. 2 on p. 243] (Palermo, Sicily, Italy). No types known.

Serranus nebulosus Cocco in Facciola 1884: 86 (Messina, Italy) (*nomen praeoccupatum*, preoccupied by *Serranus nebulosus* Valenciennes 1828). No types known.

Distribution: Southern Mediterranean and eastern Atlantic from Morocco to Angola, including Madeira.

Comments: Many poorly described species could represent this species; *Sparus shirenga* Rafinesque is regarded as a doubtful synonym by Tortonese (1973: 360), but not included by Heemstra and Randall (1993). *Cerna acutirostris* var. *lata* Döderlein is here regarded as a new synonym. Cocco (1833: 20) mentioned *Terranus [sic] nebulosus* (Cuvier) at the end of a letter to A. Risso about fishes from Messina, Italy. *Serranus nebulosus* Cocco (emended from *Terranus* regarded as a misprinting) is not an original description, but listed as valid species of the genus *Cerna* on page 86 of the *Indice ittiologico del Mar di Messina* (Facciola 1884-85).

Mycteroperca tigris (Valenciennes 1833)

Serranus tigris Valenciennes in Cuvier & Valenciennes 1833: 440 (San Domingo). Holotype (unique): MNHN 0000-7178.

Serranus camelopardalis Poey 1860: 132 (Cienfuegos, Cuba). No types known.

Serranus felinus Poey 1860: 134 (Havana, Cuba). Syntypes and/or Poey specimens: MCZ 9994-95 (2) 10004 (1) 10071 (1) 10073 (1) 10192 (1).

Serranus rivulatus Poey 1860: 135 (Cuba). No types known.

Serranus repandus Poey 1860: 135 (Havana, Cuba). Syntypes: MCZ 10076 (1) 10134 (1).

Trisotropis reticulatus Gill 1865: 105 (Barbados, West Indies). Syntypes: USNM (2).

Mycteroperca hopkinsi Jordan & Rutter 1897: 105 (Kingston, Jamaica). Holotype (unique): CAS-SU 5073.

Distribution: Bermuda, South Florida, Gulf of Mexico, West Indies and Caribbean Sea to southern Brazil.

Mycteroperca venenosa (Linnaeus 1758)

Perca venenosa Linnaeus 1758: 292 (Bahamas). No types known.

Bodianus apua Bloch 1790: 50, Pl. 229 (Brazil). No types known.

Johnius guttatus Bloch & Schneider 1801: 77 (no locality stated; based on the vernacular *bonaci cardenal* of Parra from Havana, Cuba). No types known.

Bodianus marginatus Bloch & Schneider 1801: 331 (Brazil). No types known.

Serranus cardinalis Valenciennes in Cuvier & Valenciennes 1828: 378 (Havana, Cuba). No types known.

Serranus rupestris Valenciennes in Cuvier & Valenciennes 1833: 437 (Santo Domingo). Syntypes: MNHN 0000-7180 (1), A-7712 (1, dry).

Serranus petrosus Poey 1860: 136 (Havana, Cuba). No types known.

Mycteroperca bowersi Evermann & Marsh 1900: 158, fig. 45 (Culebra Id, Puerto Rico). Holotype (unique): USNM 49530.

Distribution: Bermuda, Bahamas, Gulf of Mexico (rare), Honduras, Nicaragua, West Indies, northern South America to southern Brazil.

Comments: *Bonaci cardenal* Parra 1787: 29 is regarded as vernacular: this fish has been redescribed and named *Serranus cardinalis* by Valenciennes.

Mycteroperca xenarcha Jordan 1888

Mycteroperca xenarcha Jordan 1888: 387 (James Id, Galápagos Ids). Holotype: MCZ 24198.

Mycteroperca bouleengeri Jordan & Starks in Jordan 1895: 445, Pl. 38 (Astillero at Mazatlán, Sinaloa, western Mexico). Lectotype: CAS-SU 1621. Paralectotypes: BMNH 1895.5.27.13 (1); CAS-SU 2924 (1) 11621 (1); ZMB 14090 [from Jordan] (1). Lectotype established (as figured specimen) in Jordan and Evermann (1900: 3273, caption to Pl. 187).

Distribution: Southern California, Baja California, Gulf of California to Peru.

Genus *Paranthias* Guichenot 1868

Brachyrhinus Gill 1862b: 236 (type species *Serranus creolus* Valenciennes 1828. Type by monotypy. Objectively invalid, *nomen praeoccupatum*, preoccupied by *Brachyrhinus* Latreille 1802 in Crustacea). Gender masculine.

Paranthias Guichenot 1868: 87 (subgenus of *Anthias* Block 1792, type species *Serranus furcifer* Valenciennes 1828. Type by monotypy). Gender masculine.

Creolus Jordan & Gilbert 1883: xxxvi, 985 (type species *Serranus furcifer* Valenciennes 1828. Type by being a replacement name for *Brachyrhinus* Gill 1862). Gender masculine.

Menephorus Poey 1871: 50 (*Serranus dubius* Poey 1860. Type by original designation). Gender masculine. Eastern Pacific and western and eastern Atlantic; two species.

Comments: *Menephorus* is based on two hybrid specimens of *Paranthias furcifer* x *Cephalopholis fulva* (Smith 1966: 1, Heemstra and Randall 1993: 26; Randall & 2008). Based on DNA sequence analysis Craig and Hastings (2007:8) concluded that *Paranthias* is a synonym of *Cephalopholis*. This decision was adopted by some authors (e.g. Pinheiro et al. 2009, Page et al. 2013). Based on morphological diagnosis of the genus we prefer to maintain both genera as distinct, a decision also followed by the ECoF (Fricke et al. 2019b).

Paranthias colonus (Valenciennes 1846)

Serranus colonus Valenciennes 1846: Pl. 2 (fig. 1); text 1855: 300 (Galápagos Ids). Holotype (unique): ?MNHN A-521.

Paranthias pinguis Walford 1936: 2 (Guaymas, Mexico). Holotype: USNM 100980. Paratype: USNM 10167 (1).

Distribution: Gulf of California to Peru, including oceanic islands Revillagigedo, Cocos, Clipperton, Malpelo and Galápagos Ids.

Paranthias furcifer (Valenciennes 1828)

Serranus furcifer Valenciennes in Cuvier & Valenciennes 1828: 264 (Brazil). Holotype (unique): MNHN 0000-0131.

Serranus creolus Valenciennes in Cuvier & Valenciennes 1828: 265 (Caribbean Sea). Syntypes: MNHN 0000-4326 (1) Martinique, MNHN 0000-4327 (1) Santo Domingo.

Corvina oxyptera DeKay 1842: 77, Pl. 30 (fig. 96) (New York coast, U.S.A.). Holotype (unique): Cabinet of Lyceum of N.Y. (whereabouts unknown).

Centropristis nebulosus Castelnau 1855: 5, Pl. 1 (fig. 4) (Rio de Janeiro, Brazil). Holotype: MNHN 0000-7821 (dry).

Serranus castelnaui Jordan & Eigenmann 1890: 409 (*nomen novum*, replacement name for *Centropristis nebulosus* Castelnau 1855 regarded as preoccupied in *Serranus* by *S. nebulosus* Valenciennes 1828 [= *Epinephelus coioides*]). Holotype: MNHN 0000-7821 (dry).

Distribution: In the western Atlantic from Bermuda, South Florida and northern Gulf of Mexico to Brazil; in the eastern Atlantic from Bay of Biafra and Ascension Id.

Genus *Plectropomus* Oken 1817

Plectropomes Cuvier 1816: 277 (not available).

Plectropomus Oken (ex Cuvier) 1817: 1182 [type species *Bodianus maculatus* Bloch 1790. Type by monotypy, not by subsequent designation by Jordan, Tanaka and Snyder (1913: 152) as discussed by Pethiyagoda and Gill (2012: 11)]. Gender masculine.

Ptertopomus Cuvier in Goldfuss 1820: 66 (subgenus of *Holocentrus* Scopoli, 1777, type species *Holocentrus calcarifer* Bloch 1790. Type by monotypy). Gender masculine.

Plectropoma Quoy & Gaimard (ex Cuvier) 1824: 318 (type species *Plectropoma punctatum* Quoy & Gaimard 1824. Type by monotypy). Gender neuter.

Paracanthistius Bleeker 1874: 3, 13 (type species *Holocentrus leopardus* Lacepède 1802. Type by original designation). Gender masculine.

Pleuroperca Fowler & Bean 1930: 195, 201 (type species *Plectropoma oligacanthus* Bleeker 1855. Type by original designation). Gender feminine.

Indo-Pacific; Smith (1953) placed the genus in its own family, Plectropomidae. The genus has been revised by Randall and Hoese (1986); eight species.

Plectropomus areolatus (Rüppell 1830)

Plectropoma areolatum Rüppell 1830: footnote or second page of Index (Al Muwaylih, Tabuk Province, Saudi Arabia, Red Sea). Holotype (unique): SMF 3013.

Plectropomus truncatus Fowler & Bean 1930: 195, 196, fig. 5 (Atulayan Id, Lagonoy Gulf, eastern coast of Luzon Id, Philippines). Holotype: USNM 89984. Paratypes: (13) USNM 149324 (1) 149396 (1) 170588 (1).

Distribution: Red Sea, Maldives Ids, Cocos-Keeling Ids; in the West Pacific from Ryukyu Ids to northwestern Australia, Queensland, eastward to Marshall Ids, Phoenix Ids, Samoa, Fiji and New Caledonia.

Plectropomus laevis (Lacepède 1801)

Labrus laevis Lacepède 1801: 431, 477, Pl. 23 (fig. 2) (Grand golfe de l'Inde). No types known.

Bodianus cyclostomus Lacepède (ex Commerson) 1802: 282, 293 (no locality stated). No types known.

Bodianus melanoleucus Lacepède 1802: 283, 296 (Mauritius). Holotype (unique): MNHN 0000-7677 (dry).

Plectropoma maculatum var. *a-c* Playfair & Günther 1867: 13.

Distribution: East coast of Africa and insular localities of the Indian Ocean to Ryukyu Ids southward to Coral Sea, eastward to Marshall Ids, Marquesas Ids, Austral Id and Rapa (not recorded from Pitcairn Group).

Plectropomus leopardus (Lacepède 1802)

Holocentrus leopardus Lacepède 1802: 332, 367 (no locality stated). Holotype (unique): MNHN 0000-7673 (dry skin, right side).

Plectropoma leopardinus Cuvier in Cuvier & Valenciennes 1828: 392, Pl. 36 (*nomen novum* for *Holocentrus leopardus* Lacepède; unjustified emendation).

Paracanthistius suji Tanaka 1916: 415, Pl. 112 (fig. 336) (Saigasaki, Wakayama Prefecture, Japan). Holotype (unique): ZUMT 3911.

Distribution: Japan to South China Sea, Indo-Australian Archipelago, Western Australia, Queensland, New Caledonia eastward to Fiji and Caroline Ids.

Plectropomus maculatus (Bloch 1790)

Bodianus maculatus Bloch 1790: 48, Pl. 228 (Japan; probably erroneous, Java). Holotype (unique): ZMB 8599 (right skin).

Distribution: Western Australia to New South Wales, Solomon Ids, Indo-Australian Archipelago, Gulf of Thailand, Singapore and western coast of Malay peninsula.

Plectropomus marisrubri Randall & Hoese 1986

Plectropomus pessuliferus marisrubri Randall & Hoese 1986: 23, Pl. 3 (figs. b-c) and Pl. 5 (figs. f-g) (Dahab, Sinai peninsula, Gulf of Aqaba, Red Sea). Holotype: BPBM 18146.

Distribution: Red Sea.

Plectropomus oligacanthus (Bleeker 1854)

Plectropoma oligacanthus Bleeker 1854: 422. Lectotype: RMNH 5513. Paralectotypes: probably BMNH 1880.4.21.45 (1). Lectotype selected by Randall & Hoese 1986:21 (Jakarta, Java).

Plectropoma variegatum Castelnau 1875: 7. Holotype (unique): whereabouts unknown (Cape York, Queensland, Australia).

Distribution: Philippines, Indonesia, New Guinea, Solomon Ids, Marshall Ids and Cape York, northern Australia.

Plectropomus pessuliferus (Fowler 1904)

Plectropoma maculatum var. *d* Playfair & Günther 1867: 13.

Plectropoma pessuliferum Fowler 1904: 520, Pl. 17 (upper fig.) (Padang, Sumatra). Holotype (unique): ANSP 27546.

Distribution: Indian Ocean: Zanzibar, St. Brandon's Shoals, Maldives Ids, Sri Lanka and Sumatra and Fiji.

Plectropomus punctatus (Quoy & Gaimard 1824)

Plectropoma punctatum Quoy & Gaimard 1824: 318, Pl. 45 (fig. 1) (Mauritius). Holotype (unique): MNHN 0000-7676.

Plectropomus marmoratus Talbot 1959: 751, Pl. 21 (Zanzibar, Tanzania). Holotype: BMNH 1959.7.16.1 [ex SAM 21533]. Paratypes: EAMFRO uncat. (1); SAM 21534-36 (1 1 1).

Distribution: Kenya to Mozambique, Madagascar, Comoro Ids, Seychelles, Mascarene Ids and St. Brandon's Shoals.

Genus *Saloptia* Smith 1963

Saloptia Smith 1963: 719 (type species *Saloptia powelli* Smith 1964. Type by original designation). Gender feminine.

Monotypic; West to central Pacific.

Comments: Based on DNA sequence analysis Ma and Craig (2018: 453) regarded *Saloptia* as a synonym of *Plectropomus*. *Saloptia* can readily distinguished from *Plectropomus* by strong anal spines (*vs* anal spines weak and not apparent without dissection), preorbital depth 0.2 to 0.5 times orbit diameter (*vs* 0.7–2.0); and head length 2.5 to 2.6 times in standard length (*vs* 2.8–3.1). Therefore, we prefer to maintain *Saloptia* as valid.

Saloptia powelli Smith 1964

Saloptia powelli Smith 1964: 719, fig. 1, Pl. 23 (Cook Ids). Holotype (unique): SAIAB [formerly RUSI] 19.

Distribution: Okinawa, Taiwan, South China Sea, Mariana Ids, Cook Ids, Society Ids, Tuamotu Archipelago, American Samoa, Fiji.

Genus *Triso* Randall, Johnson & Lowe 1989

Triso Randall, Johnson & Lowe 1989: 415 (type species *Serranus dermopterus* Temminck & Schlegel 1842. Type by original designation). Gender masculine.

Monotypic; West Pacific.

Comments: Based to the molecular studies of Ma and Craig (2018: 453) *Triso* is a synonym of *Hyporthodus*. However, the presence of unique morphological traits readily diagnoses *Triso* as a distinct genus (Randall et al. 1989: 415).

Triso dermopterus (Temminck & Schlegel 1843)

Serranus dermopterus Temminck & Schlegel 1843: 10 (Nagasaki, Japan). Lectotype: RMNH D51 (dry). Paralectotypes: RMNH 149 (2). Lectotype selected by Boeseman (1947:28).

Altiserranus woorei Whitley 1951b: 396, fig. 5 (off Laurieton, New South Wales, Australia). Holotype: AMS IB.2489.

Distribution: Japan at 38°N to Taiwan and Hong Kong at 22°N; off eastern Australia from 25° to 32°S.

Genus *Variola* Swainson 1839

Variola Swainson 1839: 168 [subgenus of *Serranus* Cuvier 1816; type species *Variola longipinna* Swainson 1839 (= *Perca louti* Forsskål 1775). Type by monotypy]. Swainson's *V. longipinna* apparently is an unneeded replacement name for *Serranus louti* of Rüppell, which is *Perca louti* Forsskål 1775). Gender Feminine.

Pseudoserranus Klunzinger 1870: 687 (type species *Perca louti* Forsskål 1775. Type by monotypy). Gender masculine.

Indo-Pacific; two species.

Variola albimarginata Baissac 1953

Variola albimarginata Baissac 1953: 214 (Mauritius, Mascarenes, southwestern Indian Ocean). Holotype (unique): NHMI [Mus. Port Louis, Mauritius Inst.] (lost).

Distribution: Indo-west Pacific.

Comments: Sometimes misspelled *albomarginata* in literature (e.g. Randall et al. 2004:12).

Variola louti (Forsskål 1775)

Perca louti Forsskål 1775: xi, 40 (Jeddah, Saudi Arabia and Al-Luhayya, Yemen, Red Sea). Syntypes: ZMUC P43566 (1, dry skin).

Labrus punctulatus Lacepède 1801: 431, 477, Pl. 17, fig. 2 (Indian Ocean). Lectotype: MNHN A-5724 (dry) selected by Bauchot et al. (1984:17).

Serranus flavimarginatus Rüppell 1830: 109 (Al Muwaylih, Tabuk Province, Saudi Arabia, Red Sea). Holotype (unique): SMF (lost). Non-type: SMF 544 (1).

Serranus roseus Valenciennes in Cuvier & Valenciennes 1828: 306 (Tahiti, Society Ids). No types known.

Serranus luti Valenciennes in Cuvier & Valenciennes 1828: 363 (error or emendation for *louti*).

Serranus phaenistomus Swainson 1839: 201 (Red Sea). No types known.

Serranus (Variola) longipinna Swainson 1839: 202 (Red Sea). No types known.

Serranus melanotaenia Bleeker 1857: 33 (Ambon Id, Molucca Ids). Holotype (unique): whereabouts unknown.

? *Serranus cernipedis* Miranda-Ribeiro 1915: 31 (no locality stated). No types known.

Distribution: Red Sea to west and central Pacific.

Comments: *Serranus phaenistomus* Swainson and *S. longipinna* Swainson are based on the same specimen described and figured by Rüppell as *Serranus louti* [Rüppell 1830: Pl. 26 (fig. 2)].

Tribe Grammistini Bleeker 1857

(Soapfishes)

Grammisteoidei Bleeker 1857: 31 (proposed as a family, type genus *Grammistes*).

Rypticinae Gill 1861a: 31 (proposed as a subfamily; type genus *Rypticus* Cuvier 1829).

Rhypticinae Poey 1867: 205 based on *Rhypticus*.

Grammistidi Poey 1875: 79 108 (proposed as a family).

Grammisteiformes Bleeker 1875-76: 68 (proposed as subfamily).

Rhegmatinae Jordan & Evermann 1900: 3170 (proposed as a subfamily, type genus *Rhegma*).

Rhegmatidae Jordan 1923: 694.

Rhegmatidae Fowler 1944: 504.

Pseudogramminae Fowler 1931a: 3 (proposed as a subfamily; type genus *Pseudogramma* [stem emended to Pseudogrammat- by Steyskal (1980: 173); Randall & Baldwin (1997: 1) used the original stem Pseudogramm.

Grammistidae Whitley 1951a: 63 (proposed as new family).

Tulepinae [Tulelepiniae] Smith 1954b: 869 (subfamily) *Tulelepis* [correct stem is Tulelepid- Sheiko 2013: 81.

Small (usually less than 20 cm), grouper-like fishes inhabiting reef caves of all tropical seas. The common name derives from the soapy slime covering their body. They are distinguished by the following combination of characters: skin with epidermal cells and dermal glands containing the skin toxin grammistin; procurrent caudal-fin rays fewer than 10; soft dorsal fin with all except anteriormost pterygiophore trisegmental; Preopercle with 1-3 spines; dorsal fin II-IX, 12-27, anal fin 0-III, 8-17; lower jaw projecting; opercle with 2-3 distinct spines; innermost pelvic ray attached to the belly by a membrane. Eight genera and 29 species (Nelson et al. 2016); 33 species are listed here. Randall and Baldwin (1997) revised the subtribe Pseudogrammina, including three genera, *Pseudogramma*, *Aporops* and *Suttonia*. Pseudogrammina are cryptic fishes inhabiting all tropical and subtropical seas, usually in coral reefs. They feed on small crustaceans and lack grammistin.

Genus *Aporops* Schultz 1943

Aporops Schultz 1943: 112 (type species *Aporops bilinearis* Schultz 1943. Type by original designation). Gender masculine.

Indo-Pacific; monotypic (Randall and Baldwin 1997).

Aporops bilinearis Schultz 1943

Aporops bilinearis Schultz 1943: 112, fig.9 (Reef at Hull Id, Phoenix Ids [Kiribati Ids], western Pacific Ocean). Holotype: USNM 115336. Paratypes: MCZ 37301 [ex USNM 115340] (1); USNM 115335 (1) 115337-39 (1 1, 3) 115340 (orig. 8, now 7).

Aporops allfreei Smith 1953: 553, fig.2 (Kisiti Id, Kenya). Holotype: SAIAB [formerly RUSI] 128.

Aporops japonicus Kamohara 1957: 21, fig. 14 (Wan, Amami, Ryukyu Ids, Japan). Holotype (unique): BSKU 5425.

Distribution: From East Africa to Hawaiian Ids and Marquesas Ids; in the western Pacific from Ryukyu Ids to Great Barrier Reef, New Caledonia and Tonga.

Genus *Grammistes* Bloch & Schneider 1801

Grammistes Bloch & Schneider 1801: 182 (type species *Grammistes orientalis* Bloch & Schneider 1801 [= *Perca sexlineata* Thunberg 1792]. Type by subsequent designation by Jordan 1917: 58). Gender masculine.

Indo-Pacific in shallow water among rocky and coral reefs. One species.

Grammistes sexlineatus (Thunberg 1792)

Perca sexlineata Thunberg 1792: 142, Pl. 5 (Japan or East Indies). Type lost. Neotype designation by Fricke (1999:213) is invalid (Fricke et al. 2019b).

Perca grammistes Walbaum 1792: 335 (no locality stated). No types known.

Grammistes orientalis Bloch & Schneider 1801: 188 (Indian Ocean). Syntypes: ZMB 103 (1) 106 (1).

Bodianus sexlineatus Lacepède 1802: 285, 302 (no locality stated). Holotype (unique): MNHN 0000-7823.

Sciaena vittata Lacepède 1802: 310, 316 (Mauritius). No types known.

Perca pentacantha Lacepède 1802: 398, 424 (no locality stated). Holotype (unique): MNHN.

Perca triacantha Lacepède 1802: 398, 424 (no locality stated). Holotype (unique): MNHN 0000-7823.

Grammistes sexlineatus proerythraeus Fowler 1946: 130, fig. 3 (Agumi Shima, Ryukyu Ids). Holotype (unique): ANSP 72004.

Grammistes lineatus Arnault in Arnault et al. 1958: 62, fig. 2 (Aldabra, 9°23'S, 43°25'45"E). Holotype (unique): MNHN 1954-0144.

Distribution: Red Sea to Marquesas Ids and Mangareva, north to Japan, south to New Caledonia.

Comments: Taxonomic decisions of Bauchot et al. (1984) and Paepke (1999). The subspecies *G. s. proerythraeus*, described from a single specimen of 33 mm, is a synonym according to Randall et al. (1971: 184). *Bodianus sexlineatus* Lacepède 1802, *Perca pentacantha* Lacepède 1802, *Perca triacantha* Lacepède 1802 and *Grammistes lineatus* Arnault 1958 are new synonyms.

Genus *Grammistops* Schultz 1953

Grammistops Schultz in Schultz et al. 1953: 386 (type species *Grammistops ocellatus* Schultz 1953. Type by original designation). Gender masculine.

Tulelepis Smith 1954b: 869 (*Tulelepis canis* Smith 1954. Type by original designation). Gender feminine. Indo-Pacific in caves and crevices; all specimens have been collected with ichthyocides. One species.

Grammistops ocellatus Schultz 1953

Grammistops ocellatus Schultz in Schultz et al. 1953: 386, fig. 62 (Lagoon at Arji Id, Bikini Atoll, Marshall Ids, western Pacific). Holotype (unique): USNM 141871.

Tulelepis canis Smith 1954b: 869, Pl. 27 (fig. A) (Pemba Id, 5°S, 39°40'E, Tanzania, western Indian Ocean). Holotype: SAIAB [formerly RUSI] 145. Paratypes: SAIAB [formerly RUSI] (1).

Distribution: Widespread in the Indo-Pacific from East Africa to Society Ids, northward to Ryukyu Ids.

Genus *Jeboehlkia* Robins 1967

Jeboehlkia Robins 1967: 593 (type species *Jeboehlkia gladifer* Robins 1967. Type by original designation). Gender feminine.

Western Atlantic; one species.

Jeboehlkia gladifer Robins 1967

Jeboehlkia gladifer Robins 1967: 593, fig. 2 (Caribbean Sea 16°06'N, 81°10.5'W, Oregon station 4932). Holotype (unique): USNM 201422.

Distribution: Caribbean Sea.

Genus *Pogonoperca* Günther 1859

Pogonoperca Günther 1859: 51, 169 (type species *Pogonoperca ocellata* Günther 1859. Type by monotypy). Gender feminine.

Indo-Pacific; coral reefs. Two species.

Pogonoperca ocellata Günther 1859

Pogonoperca ocellata Günther 1859: 169 (no locality). Holotype (unique): BMNH 1841.6.0.1766.

Distribution: Indian Ocean: Réunion and Mauritius (Mascarenes), Seychelles and Maldives east to Andaman Sea and western Indonesia.

Pogonoperca punctata (Valenciennes 1830)

Grammistes punctatus Valenciennes in Cuvier & Valenciennes 1830: 504 (Vanikoro Id, Santa Cruz Ids, southwestern Pacific; Jakarta, Java, Indonesia). No types known.

Pogonoperca reticulata Bliss (ex Steindachner) 1883: 46 (Mauritius). Holotype (unique): MCZ 5933.

Distribution: KwaZulu-Natal (South Africa), Madagascar, Seychelles and western Mascarenes east to Japan to Line, Marquesas and Society Ids, south to New Caledonia.

Genus *Pseudogramma* Bleeker 1875

Pseudogramma Bleeker 1875: 2, 24 (type species *Pseudochromis polyacanthus* Bleeker 1856. Type by original designation). Gender feminine.

Rhegma Gilbert in Jordan & Evermann 1900: 3170 (type species *Rhegma thaumasium* Gilbert 1900. Type by original designation). Gender neuter.

Caribrhegma Breder 1927: 44 (type species *Caribrhegma gregoryi* Breder 1927. Type by monotypy). Gender neuter.

Pseudorhegma Schultz 1966: 191 (type species *Pseudorhegma diagramma* Schultz 1966. Type by original designation). Gender neuter.

All tropical coastal waters among coral reef crevices; 15 species (Randall and Baldwin 1997; Williams and Viviani 2016; Prokofiev 2019).

Pseudogramma astigma Randall & Baldwin 1997

Pseudogramma sp. Wass 1984: 13 (Samoa).

Pseudogramma astigmum Randall & Baldwin 1997: 14, Pl 1 (fig. B) (Cave in reef at drop-off, western side of Keroy (Rigili) Islet, Enewetak Atoll, Marshall Ids). Holotype: BPBM 18387. Paratypes: AMS I.37618-001 (2); BMNH 1996.6.27.2 (1); BPBM 9506 (1) 24128 (1), 32466 (1); CAS 33131 (1); ROM 56691 (3), 56692-94 (1 1 2); SAIAB [formerly RUSI] 35159 (1), 35170 (1), 46036 (1); USNM 223566 (1) 242123 (1) 259005-06 (1 1) 259063-64 (1 1), 342818 (1).

Distribution: Comoro Ids, western Indian Ocean, and West to central Pacific from New Guinea and Coral Sea to Samoa, north to Marshall and Caroline Ids. Also recorded from southwest coast of Sumatra, Indonesia.

Pseudogramma australis Randall & Baldwin 1997

Rhegma sp. Randall 1970: 52, fig. on p 52 (Easter Id).

Pseudogramma sp. Randall & Cea 1984: 9 (Easter Id).

Pseudogramma australis Randall & Baldwin 1997: 19, Pl. 1C (fig. 2) (offshore from Ahu Akapu, Easter Id, depth 21.5 meters). Holotype: BPBM 6623 [not BPBM 13531]. Paratypes: AMS I.37619-001 (1), BMNH 1996.6.27.1 (1); BPBM 13531 (1) 13974 (2) 16444 (1) 16893 (1), 37393 (4); CAS 13531 (1), 87907 (1); SAIAB 41659 (1); USNM 327795 (3), 303170 (2).

Pseudogramma australis pasquensis Randall & Baldwin 1997: 23 (offshore from Ahu Akapu, Easter Id, depth 21.5 meters). Holotype: BPBM 6623.

Distribution: Easter Id.

Comments: *P. australis* and *P. a. pasquensis* are based on the same name-bearing type specimen (BPBM 6623) established simultaneously. In this case, Art. 24.1 of the Code states that the name at higher rank takes precedence. *P. australis* when described was said to be distributed in the southern Pacific. The type BPBM 6623 applies to Easter Id specimen. The specimen collected at localities west to Easter Id belong to a different species, *P. xantha* Randall, Baldwin and Williams 2002.

Pseudogramma axelrodi Allen & Robertson 1995

Pseudogramma axelrodi Allen & Robertson 1995: 73, fig. 1 (Clipperton Id, about 10°18'N 109°13'W). Holotype: WAM P.30995-001. Paratypes: USNM 337446 (10), WAM P.30995-002 (5).

Distribution: Clipperton Id, eastern Pacific.

Pseudogramma brederi (Hildebrand 1940)

Rhegma brederi Hildebrand in Longley & Hildebrand 1940: 244, fig. 11 (exact locality unknown, but apparently from the Hawaiian Ids; erroneously listed as being from the Tortugas as discussed by Randall and Baldwin (1997: 39)). Holotype (unique): USNM 108865.

Pseudorhegma diagramma Schultz 1966: 193, fig. at p. 193 (Hawaii Ids). Holotype (unique): USNM 160672.

Pseudogramma polyacanthum hawaiiensis Randall & Baldwin 1997: 42 (Ke'ei, Hawaii Ids). Holotype: BPBM 28742.

Distribution: East-west disjunct geographic distribution with a Central Pacific population from Ogasawara, Johnston, Hawaii, Marquesas, Austral Ids, Tonga and Vanuatu and a southwestern Indian Ocean population currently known only from Agalega Ids, Mauritius and Reunion. Probably more widely distributed in appropriate subtropical habitats.

Comments: Resurrected from synonymy with *P. polyacantha* by Williams and Viviani (2016).

Pseudogramma cernunnos Prokofiev 2019

Pseudogramma cernunnos Prokofiev 2019:425, fig. 1 (Bay of Bengal, 6°40'04"N, 93°52'06"E, depth 52 meters). Holotype (unique): IOM 3582.

Distribution: Known only from the type locality.

Pseudogramma erythrea Randall & Baldwin 1997

Pseudogramma erythreum Randall & Baldwin 1997: 25, Pl. 1 (fig. D) (Northern side, Caban Id [off southwestern Luzon, Batangas], Philippines 13°39'N 120°50'E). Holotype (unique): BPBM 22233.

Distribution: Luzon, Philippines.

Pseudogramma galzini Williams & Viviani 2016

Pseudogramma galzini Williams & Viviani 2016: 256, fig. 8 (Kouaku Id, Gambier Archipelago). Holotype: USNM 402553. Paratypes: USNM.

Distribution: Gambier, Rapa and the Austral Ids.

Pseudogramma gregoryi (Breder 1927)

Caribrhegma gregoryi Breder 1927: 44, fig. 22 (Glovers Reef, Belize). Holotype: YPM 476. Paratypes: USNM 117797 (1), YPM 221 (orig. 2, now 1).

Rhegma bermudensis Kanazawa 1952: 82, fig. 11 (South side beaches, Bermuda [washed ashore]). Holotype: FMNH 48924. Paratypes: FMNH 49128 (1) 105535 [ex FMNH 48924] (3); USNM 157365 [ex FMNH 48924] (1).

Distribution: Widespread in the tropical western Atlantic from Bermuda to Colombia.

Pseudogramma guineensis (Norman 1935)

Rhegma guineensis Norman 1935: 10, fig. 2 (Off Annobón Id, Equatorial Guinea, Gulf of Guinea). Holotype (unique): BMNH 1935.5.11.50.

Distribution: off Annobon, Gulf of Guinea.

Pseudogramma megamyctera Randall & Baldwin 1997

Pseudogramma megamycterum Randall & Baldwin 1997: 32, Pl. 1 (fig. F) (Off desalination plant, Eilat, Israel, Gulf of Aqaba, Red Sea). Holotype: BPBM 18289. Paratypes: BPBM 37115 (1), USNM 231347 (1).

Distribution: Northern Red Sea.

Pseudogramma paucilepis Williams & Viviani 2016

Pseudogramma paucilepis Williams & Viviani 2016: 254, fig.7 (Austral Ids). Holotype: USNM 423375. Paratypes: USNM.

Distribution: Gambier Archipelago and Austral Ids, but expected in other localities of the subtropical South Pacific Ocean.

Pseudogramma pectoralis Randall & Baldwin 1997

Pseudogramma pectoralis Randall & Baldwin 1997: 35, Pl. 1 (fig. G) (Augulpelu Reef, 7°16'N 134°32'E, Palau Ids). Holotype: BPBM 9447. Paratype: USNM 3242077 (1).

Distribution: Palau and Philippines.

Pseudogramma polyacantha (Bleeker 1856)

Pseudochromis polyacanthus Bleeker 1856a: 375 (Ternate, Molucca Ids, Indonesia). Holotype (unique): RMNH.

Gnathypops samoensis Fowler & Silvester 1922: 118, fig. 1 (Cove south of Aua village 100 feet northwest of Dr. Mayor's "Aua line", Pago Pago, American Samoa). Holotype: ANSP 50563. Paratype: ANSP 50564.

Distribution: Widespread in the Indo-Pacific from South Africa and Aldabra to southern Japan, Great Barrier Reef to Moorea, but unknown in the Indian Ocean from Red Sea, Persian Gulf, and southern shelf of Asia, in the Pacific from Rapa and Easter Id.

Pseudogramma thaumasia (Gilbert 1900)

Rhegma thaumasium Gilbert in Jordan & Evermann 1900: 3170 (Panama, Pacific). Holotype (unique): CAS-SU 5978.

Distribution: Eastern Pacific, from Gulf of California to Colombia.

Pseudogramma xantha Randall, Baldwin & Williams 2002

Pseudogramma australis australis Randall & Baldwin 1997: 23 (Small cave on northern side, Temoe Atoll, Gambier Group, Tuamotu Archipelago).

Pseudogramma xanthum Randall, Baldwin & Williams 2002: 3, fig. 1. Holotype: BPBM 13531 (*nomen novum*, replacement name for *Pseudogramma australis australis* Randall & Baldwin 1997).

Distribution: Tonga; Tuamotu Archipelago, Pitcairn Id, Cooks Ids, Gambier Archipelago and Austral Ids.

Comments: The species described as *P. xanthum* was first treated as a subspecies of *P. australis* with type specimen from Temoe Atoll, but was mistakenly named *P. a. australis*. The name *P. australis* is occupied by the Easter Id species and there is no name available for the bearing-name type specimen BPBM 13531 (*P. australis*) from Tuamotu Archipelago.

Genus *Rypticus* Cuvier 1829

Rypticus Cuvier 1829: 144 (type species *Anthias saponaceus* Bloch & Schneider 1801. Type by subsequent designation of Desmarest 1856: 206). Gender masculine.

Rhypticus Agassiz 1846: 326 (unjustified emendation of *Rypticus* Cuvier 1829).

Smecticus Valenciennes 1855: 305 (type species *Rypticus bicolor* Valenciennes 1846. Type by monotypy). Gender masculine.

Promicropterus Gill 1861b: 31 (type species *Rypticus maculatus* Holbrook 1855. Type by monotypy). Gender masculine.

Eleutheractis Cope 1871: 467 (type species *Eleutheractis coriaceus* Cope 1871. Type by original designation). Gender feminine.

Amphiamerican and eastern Atlantic on rocky reefs; the genus has been revised by Schultz and Reid (1939) with the inclusion of a single species (*R. saponaceus*) and several subspecies. Courtenay (1967) reviewed the Atlantic species of the genus, elevating at the species level all the forms previously recognized as subspecies; 10 species. Western Atlantic species have been reviewed by Guimaraes (1999).

Rypticus bicolor Valenciennes 1846

Rypticus bicolor Valenciennes 1846: Pl. 2 (fig. 2) (Galápagos Ids). Holotype (unique): MNHN 0000-7846 (dry).

Rypticus xanti Gill 1862c: 250 Syntypes: (2) USNM 30740 (1) (Baja California, Mexico).

Distribution: eastern Pacific from Baja California to Peru, including Galápagos Ids and other offshore islands.

Rypticus bistrispinus (Mitchill 1818)

Bodianus bis-trispinus Mitchill 1818: 247 (Straits of Bahamas, Atlantic). Holotype (unique): whereabouts unknown.

Rypticus arenatus Cuvier in Cuvier & Valenciennes 1829: 65, Pl. 46 (Brazil). No types known.

Rhypticus [sic] pituitosus Goode & Bean 1880: 341 (Key West, Florida, U.S.A.). Holotype (unique): USNM 23555.

Bodianus bistrispineus Boulenger 1895: 350 (unjustified emendation of *Bodianus bistrispinus* Mitchill 1818).

Distribution: South Florida and Bahamas to northern South America.

Rypticus bornoi Beebe & Tee-Van 1928

Rypticus bornoi Beebe & Tee-Van 1928: 132, fig. (Lamentin Reef, Port-au-Prince Bay, Haiti, West Indies). Holotype: USNM 170572 [ex NYZS 7206].

Rypticus macrostigmus Courtenay 1967: 261, figs. 1c, 9 (Near Wood Cay, off Grand Bahama Id, Bahamas). Holotype: ANSP 100968. Paratypes: MCZ 43620 (1); UF 13420 (1) 13441 (1) 13457 (1) 13473 (4) 222737 [ex UMML 22737] (1); USNM 201408 (1).

Distribution: Off Port-au-Prince, Haiti.

Rypticus carpenteri Baldwin & Weigt 2012

Rypticus carpenteri Baldwin & Weigt 2012: 24, Figs 2-5 (Netherland Antilles, Saba Bank 17°34'54"N, 63°24'24"W). Holotype: USNM 387946. Paratypes: USNM 401039; USNM 401040; USNM 401041; USNM 401042; USNM 401043; USNM 401051 and USNM 387750, Saba; USNM 401044, Tobago; USNM 401045; USNM 401046; USNM 401047; USNM 386966, Bahamas; USNM 379513, Belize; USNM 360388, Navassa;

USNM 401052, Tobago; USNM 401048 and USNM 401049, Turks and Caicos; USNM 401050; UF 164326 and UF 158253, Virgin Ids.

Distribution: Western Atlantic.

Rypticus courtenayi McCarthy 1979

Rypticus courtenayi McCarthy 1979: 396, Figs 1b, 4, 5 (Socorro Id, Revilla Ggedo Ids, off western Mexico).

Holotype: SIO 72-67. Paratypes: ANSP 136546 [ex SIO 58-143] (3); CAS 2002 (1); LACM 31778-13 (12), 31780-18 (12), 31781-8 (4), 31782-13 (1), 31783-16 (2), 32097-19 (11); SIO 58-142 (1), 72-66 (7), 72-67 (26); USNM 218386 [ex SIO 72-66] (7).

Distribution: Revillagigedo Ids, eastern Pacific.

Rypticus maculatus Holbrook 1855

Rypticus maculatus Holbrook 1855: 39, Pl. 6 (fig. 2) (Off Cape Romain, South Carolina, U.S.A.). Holotype (unique): ANSP 13232.

Distribution: North Carolina to South Florida and eastern Gulf of Mexico.

Rypticus nigripinnis Gill 1861

Rhypticus [sic] nigripinnis Gill 1861c: 53 (Panama). Holotype (unique): USNM 3700.

Promicropterus decoratus Gill 1863: 164 (Panama [Pacific]). Holotype (unique): USNM 30961.

Rhypticus [sic] maculatus Gill 1862: 251 (Baja California, Mexico) (objectively invalid, *nomen praeoccupatum*, preoccupied by *Rypticus maculatus* Holbrook 1855). Holotype (unique): ?USNM 3689.

Distribution: Eastern Pacific from Gulf of California to Peru.

Rypticus randalli Courtenay 1967

Rypticus randalli Courtenay 1967: 275, figs. 3A 14 (Off mouth of Añasco River, north of Mayaguez, Puerto Rico). Holotype: USNM 197917. Paratypes: ANSP 31707-08 (2), 44980 (1), 87100 (1) 100970 (2) 101603 (1); BMNH 1964.4.3.3 (1); LACM 5293 (2); MNHN 1901-0473 (1); UF 213765 [ex UMML 13765] (1) 213801 [ex UMML 13801] (1, c&s); UPRM 1167 (2) 1208 (1); USNM 30130 (1), 50188 (1) 126136 (1) 132544 (1).

Rypticus brachyrhinus Courtenay 1967: 278, figs. 3B, 15 (Mindi Cut, Canal Zone, Panama). Holotype: USNM 80234. Paratypes: ?MCZ 36030 [ex USNM 120167] (1); UF 212571 [ex UMML 12571] (4); USNM 43278 (1), 44468 (1), 44716 (1) 106625 (6).

Distribution: French Guyana, tropical western Atlantic.

Comments: Heemstra et al. (2003: 1327) serve as first revisers selecting *randalli* over *brachyrhinus*.

Rypticus saponaceus (Bloch & Schneider 1801)

Anthias saponaceus Bloch & Schneider 1801: 310 (Eastern shore north of Cape Florida lighthouse, Key Biscayne, Dade County, Florida, U.S.A.). Neotype: USNM 198139 [ex UMML 1358]. Neotype designated by Courtenay 1967:253.

Rypticus microps Castelnau (ex Broussonet) 1855: 6 (Bahia, Brazil). Syntypes: MNHN 0000-7844 (2).

Eleutheractis coriaceus Cope 1871: 467, fig. 3 (St. Martin Id, West Indies). Holotype (unique): ANSP 13445.

Distribution: Eastern Atlantic from Mauritania to Angola, including the offshore Ids St. Helena, Ascension, and Cape Verde; western Atlantic from Bermuda and South Florida to Brazil.

Comments: The name *Perca microps* has been used by Broussonet for a specimen of 10 inches of length, collected off Jamaica; Cuvier (1829) identified it as *Anthias saponaceus* Schneider. The taxon due to Broussonet

(*in schedulis*) will be described and validated only by Castelnau 1855. Brown et al (2019:177) wrote: “*Rypticus saponaceus* specimens from the eastern Atlantic differed greatly from mid-Atlantic and western Atlantic specimens and mid-Atlantic specimens also differed from western Atlantic specimens. As the type locality of *Rypticus saponaceus* is from the western Atlantic, the eastern Atlantic (and possibly also the mid-Atlantic) populations may have to be described as separate species”.

Rypticus subbifrenatus Gill 1861

Rhypticus [*sic*] *subbifrenatus* Gill 1861: 53 (St. Thomas Id, Virgin Ids, West Indies). Neotype: USNM 106516 selected by Baldwin and Weigt (2012:30). Original genus should have been spelled *Rypticus*.

Rhypticus [*sic*] *nigromaculatus* Steindachner 1867: 348 (Barbados, West Indies). Holotype (unique): NMW 57867.

Distribution: Eastern Atlantic from Senegal to Angola, including Cape Verde Ids and Annobon; western Atlantic from Bahamas and Florida to northern Brazil.

Genus *Suttonia* Smith 1953

Suttonia Smith 1953: 556 (type species *Suttonia suttoni* Smith 1953. Type by original designation). Gender feminine.

Indo-West Pacific among corals in shallow waters. Three species (Randall & Baldwin 1997).

Suttonia coccinea Endo & Kenmotsu 2013

Suttonia coccinea Endo & Kenmotsu 2013: 12, figs. 1-5 (Kuboura, Okinoshima Id, Sukumo City, Kochi Prefecture, Shikoku Id, Japan, 32°44'44"N 132°33'32"E). Holotype (unique): NSMT-P 110917 [ex. NSKU 103900].

Distribution: Known only from the type locality.

Suttonia lineata Gosline 1960

Suttonia lineata Gosline 1960: 28, fig. 1 (off Waianae coast, Oahu Id, Hawaiian Ids). Holotype: USNM 177950. Paratype: UH 2460.

Distribution: Cocos-Keeling and Christmas Ids, eastern Indian Ocean, to Hawaiian Ids, Society and Line Ids, South to New Caledonia north to Philippines.

Suttonia suttoni Smith 1953

Suttonia suttoni Smith 1953: 556, fig. 3 (Pemba Id, off Tanzania). Holotype: SAIAB [formerly RUSI] 159. Paratypes: SAIAB [formerly RUSI] (3).

Distribution: Comoro Ids and off Zanzibar, western Indian Ocean.

Tribe Liopropomatini Poey 1867

Liopropomatina Poey 1867: 205 (proposed as a subfamily; type genus *Liopropoma*).

Liopropominae Jordan & Evermann 1896a: 1127; original stem Liopropomat- confirmed by Gosline 1966: 95 and by Eschmeyer 1998: 2476; Nelson 2006: 346 used as stem Liopropom-.

Rainfordiidae McCulloch 1923: 119 (proposed as a family; type genus *Rainfordia*)

Chorististiinae Fowler & Bean 1930: 175 (proposed as subfamily; type genus *Chorististium*).

From small (8 cm) to large size (25 cm), living on rocky bottom or in deep recesses in coral reefs even at depth of about 100 m. Skin toxin grammistin absent. The following characters are diagnostic for

Liopropomatini: presence of a prominent, anteriorly directed, hook-like process extending from posteroventral corner of maxilla; subocular shelf extending from more than one infraorbital; and scales with cteni fused to open ends of at least medialmost circuli. Mostly Indo-Pacific. Three genera with 36 species.

Genus *Bathyanthias* Günther 1880

Bathyanthias Günther 1880: 6 (type species *Bathyanthias roseus* Günther 1880. Type by monotypy). Gender masculine.

Western Atlantic; four species.

Comments: Tentatively assigned in the synonymy of *Pikea* Steindachner (Robins 1967); *Pikea* is regarded as a junior synonym of *Liopropoma* Gill by Randall and Taylor (1988). They pointed out that the species described by Schultz (1958) from western Atlantic do not belong to *Liopropoma*. The generic name *Bathyanthias* seems to be available for these species. The genus is in need of revision.

Bathyanthias atlanticus (Schultz 1958)

Pikea mexicanus atlanticus Schultz 1958: 326 (Off French Guiana, 7°18'N, 53°32'W, Oregon station 2021). Holotype: USNM 185005. Paratypes: FMNH 64545 [ex USNM] (1); USNM 185006-08 (9, 5 1) 185080 (1) 185081 (orig. 9, now 8) 185082 (1).

Distribution: French Guiana.

Bathyanthias cubensis (Schultz 1958)

Pikea cubensis Schultz 1958: 322, fig.1 (Northeast of Caibarién, Cuba 22°50'N, 79°08'W). Holotype: USNM 158138. Paratypes: USNM 175254 (3) 185083 (2).

Distribution: Cuba at depths of 400-450 m.

Bathyanthias mexicanus (Schultz 1958)

Pikea mexicanus Schultz 1958: 323, fig. 2 (Gulf of Mexico, southeast of Corpus Christi, Texas, U.S.A. 27°22'N, 96°08'W). Holotype: USNM 158246. Paratypes: FMNH 64544 [ex USNM] (1); TU 11004 (6) 11008 (1) 12972 (11) 12985 (1) 14739 (1); USNM 117191 (6) 155240 (2) 155508 (1) 156706-09 (1 1 1 1) 158240 (1) 158246 (1) 177730 (6).

Distribution: Florida, USA and the entire Gulf of Mexico to the Guianas.

Bathyanthias roseus Günther 1880

Bathyanthias roseus Günther 1880: 6, Pl. 1 (fig. B) (Off Pernambuco, Brazil, Challenger station 122). Holotype (unique): BMNH 1879.5.14.155.

Distribution: Brazil.

Genus *Liopropoma* Gill 1861

Liopropoma Gill 1861e: 52 (type species *Perca aberrans* Poey 1860. Type by original designation). Gender neuter.

Chorististium Gill 1862a: 15 (type species *Liopropoma rubre* Poey 1861. Type by original designation). Gender neuter.

Pikea Steindachner 1875: 375 [1] (type species *Grystes lunulatus* Guichenot 1863. Type by monotypy. On page 1 of separate. Correct spelling for genus of type species is *Gristes*). Gender feminine.

Labracopsis Döderlein in Steindachner & Döderlein 1883: 235 (type species *Labracopsis japonicus* Döderlein 1883. Type by monotypy). Gender feminine.

Ypsigramma Schultz in Schultz et al. 1953: 334 (type species *Ypsigramma lineata* Schultz 1953. Type by original designation). Gender feminine.

Flagelloserranus Kotthaus 1970: 5 (type species *Flagelloserranus meteori* Kotthaus 1970. Type by original designation). Gender masculine.

Tropical Indo-Pacific and western Atlantic (seven species) over rocky bottom and in deep recesses in coral reef or in deep waters of about 100 m or more. Randall (1963) reviewed the Atlantic species of the genus *Choristidium*; Robins (1967) redescribed *L. aberrans* on the basis of a new specimen from Bahamas and stated that *Choristidium* is a junior synonym of *Liopropoma*; Randall & Taylor (1988) revised the Indo-Pacific species; 31 species.

Liopropoma aberrans (Poey 1860)

Perca aberrans Poey 1860: 125, Pl. 12 (figs. 2-3). Holotype (unique): whereabouts unknown. (Havana, Cuba).

Distribution: Cuba, Bahamas.

Comments: Baldwin and Johnson (2014) noted differences in the descriptions of colour patterns of the specimen collected off Cuba in the 19th century by Poey and a single specimen collected off the Bahamas in the 20th century (Robins 1967). In particular, numbers of dorsal-fin rays (IX 12 in Poey's *L. aberrans*, VIII 12 in Robins' *L. aberrans*), and they questioned whether or not the two specimens represent the same species.

Liopropoma africanum (Smith 1954)

Choristidium africanum Smith 1954b: 866, fig.1, Pl. 27 (fig. B) (Tekomaji Id, Mozambique 10°50'S, 40°40'E). Holotype: SAIAB [formerly RUSI] 155. Paratypes: SAIAB [formerly RUSI] 842-844 (1 1 1).

Distribution: East coast of Africa off Djibouti, Gulf of Aden, and from Kenya to Mozambique; Seychelles, Maldives Ids; off southwestern coast of Sumatra, Indonesia.

Liopropoma aragai Randall & Taylor 1988

Liopropoma aragai Randall & Taylor 1988: 20, Pl. 4D (off Okinawa Id, Ryukyu Ids, Japan). Holotype (unique): SMBL 73181.

Distribution: Ryukyu Ids and Taiwan.

Comments: Masuda et al. (1975: 217) thought to be a variant of *L. lunulatum*. Reported from Taiwan by Shen (1993).

Liopropoma aurora (Jordan & Evermann 1903)

Pikea aurora Jordan & Evermann 1903: 178 (Hilo, Hawaiian Ids). Holotype: USNM 50675. Paratypes: FMNH 4248 (1); CAS-SU 6074 (4), 7484 (1); USFC 2734 [? = USNM 126553] (1); USNM 126553 [ex USBF 1044] (2).

Distribution: Hawaiian Ids.

Liopropoma carmabi (Randall 1963)

Choristidium carmabi Randall 1963: 98, Pl. 2, fig. B (6 miles south of La Parguera 17°52'12"N, 65°2'30"W, Puerto Rico). Holotype: USNM 179001. Paratypes: ANSP 98680 (1); RMNH 24609 (1); UPRM 1130 (1); USNM 179002 (1).

Distribution: Caribbean Sea.

Liopropoma collettei Randall & Taylor 1988

Liopropoma collettei Randall & Taylor 1988: 30, Pl. 3a (Northwestern end of Kaneohe Bay, Oahu Id, Hawaiian Ids). Holotype: BPBM 14652. Paratypes: ANSP 134570 (1); BPBM 22616-17 (1 1), 31044 (1), 31046 (1); USNM 217915 (1) 219867 (1) 219868 (publ. as 2, now 1) 220628 (1) 285948 (2) 285954 (1).

Distribution: Philippines, Indonesia, New Guinea, Johnston Atoll, and Hawaiian Ids.

Liopropoma danae (Kotthaus 1970)

Flagelloserranus danae Kotthaus 1970: 20, fig. 15 (West of Virgin Ids, Lesser Antilles 17°43'N, 64°56'W). Holotype: ZMUC P43208. Paratypes: ZMUC uncat. (373).

Distribution: Virgin Id, Caribbean Sea.

Liopropoma dorsoluteum Kon, Yoshino & Sakurai 1999

Liopropoma dorsoluteum Kon, Yoshino & Sakurai 1999: 67, figs. 1 2A (Okinawa fish market [from Yaeyama Ids], Okinawa, Japan). Holotype: URM-P 29743. Paratypes: NSMT-P 55181 (1).

Distribution: Taiwan, Yaeyama Ids, and Izu Peninsula, Japan.

Liopropoma emanueli Wirtz & Schliewen 2012

Liopropoma emanueli Wirtz & Schliewen 2012: 150, figs. 1-2 (near Tarrafal / Santiago Id, Cape Verde Ids 15°15'51.22"N 23°45'35.41"W). Holotype: ZSM 41221. Paratype: ZSM 41222 (1).

Distribution: known only from Cape Verde Ids.

Liopropoma erythraeum Randall & Taylor 1988

Pikea rubre Yoshino & Araga in Masuda, Araga & Yoshino 1975: 217, Pl. 49 (fig. f) (Ryukyu Ids, Japan) (*nomen praeoccupatum*; preoccupied in *Liopropoma* by *Liopropoma rubre* Poey 1861). Holotype: SMBL 73145. Paratypes: SMBL 73146 (1); URB 78-0117 (1).

Liopropoma erythraeum Randall & Taylor 1988: 15, Pl. 4b (*nomen novum* for *Pikea rubre* Yoshino & Araga 1975). Holotype: SMBL 73415 [not seen at FAKU]. Paratypes: (2) SMBL 73146 (1)

Distribution: Ryukyu Ids, Taiwan, and Moorea, Society Ids.

Comments: *Pikea* is a junior synonym of *Liopropoma*; therefore, *Pikea rubre* Yoshino and Araga becomes a secondary homonym of *L. rubre* Poey 1861 and it is subjectively invalid.

Liopropoma eukrines (Starck & Courtenay 1962)

Chorististium eukrines Starck & Courtenay 1962: 159, figs. 1a-b (2 1/2 miles south-southwest of Alligator Reef lighthouse, Monroe County, Florida, U.S.A.). Holotype: ANSP 94357. Paratypes: USNM 196728 (1) 208564 (1).

Distribution: North Carolina to Florida Keys.

Liopropoma fasciatum Bussing 1980

Liopropoma fasciatum Bussing 1980: 147, fig. 1 (Off Isla del Caño 17 kilometres west of Osa Peninsula, Pacific coast of Costa Rica). Holotype (unique): LACM 38650-1.

Distribution: Eastern Pacific from Gulf of California to Panama.

Liopropoma flavidum Randall & Taylor 1988

Liopropoma sp. Randall 1985: 470 (Austral Ids).

Liopropoma flavidum Randall & Taylor 1988: 35, Pl. 3C (Reef off Avera, Rurutu, Austral Ids). Holotype (unique): BPBM 13701.

Distribution: Austral Ids, known only from the holotype.

Liopropoma incandescens Pinheiro, Shepherd, Greene & Rocha 2019

Liopropoma incandescens Pinheiro, Shepherd, Greene & Rocha 2019:99, Figs. 1-2 (West side of Ahnd (Ant) Atoll, Pohnpei, Federated States of Micronesia, 6.75589N 157.91933E, depth 130 meters). Holotype (unique): CAS 246199.

Distribution: Known only from a single specimen from Pohnpei, but it is expected in a wider range.

Liopropoma incomptum Randall & Taylor 1988

Liopropoma incomptum Randall & Taylor 1988: 17, fig. 4 (outer reef slope of Kranket Id, Madang, New Guinea). Holotype (unique): BPBM 13436.

Distribution: Madang, northeastern coast of New Guinea; known only from the holotype.

Liopropoma japonicum (Döderlein 1883)

Labracopsis japonicus Döderlein in Steindachner & Döderlein 1883: 5o (Tokyo, Japan). Syntypes: (several) NMW 76565 (2).

Distribution: Japan, Korea, Ryukyu Ids, and Ogasawara Ids.

Comments: Illustrated and described in more details in Steindachner and Döderlein [1883: 235, Pl. 6 (fig. 3)].

Liopropoma latifasciatum (Tanaka 1922)

Pikea latifasciata Tanaka 1922: 595, Pl. 147 (fig. 405) (Tanabe, Wakayama prefecture, Japan). Holotype: ZUMT 8000. Paratypes: ZUMT 3423 (1, lost).

Distribution: Southern Japan and Korea.

Liopropoma lemniscatum Randall & Taylor 1988

Liopropoma lemniscatum Randall & Taylor 1988: 23, fig. 5 (Nahu fish market, Okinawa Id, Ryukyu Ids, Japan). Holotype: BPBM 19185. Paratypes: BPBM 19929 (1); USNM 213787 (1).

Distribution: Okinawa, Ryukyu Ids.

Liopropoma longilepis Garman 1899

Liopropoma longilepis Garman 1899: 45 (South of Gulf of Panama, 7°33'N, 78°34'20"W, Albatross station 3397). Syntypes: MCZ 28778 (3), USNM 153602 [ex MCZ 28778] (1).

Distribution: Eastern Pacific in deep water.

Liopropoma lunulatum (Guichenot 1863)

Grystes lunulatus Guichenot 1863: C4 (Réunion, western Mascarenes, southwestern Indian Ocean). Holotype (unique): MNHN 0000-1318.

Glaucosoma semilunifera Bliss (ex Steindachner) 1883: 47 (Mauritius, Mascarenes, southwestern Indian Ocean). Syntypes: MCZ 5986 (1), USNM 153568 [ex MCZ 5986] (1).

Anthias (Odontanthias) luteoroseus Liénard in Sauvage 1891: 136 (Mauritius, Mascarenes, southwestern Indian Ocean). Holotype (unique): whereabouts unknown.

Distribution: Known from scattered localities of the Indo-Pacific: Mauritius and Réunion, Ryukyu Ids, Izu Ids, Marianas, Cook Ids, and Society Ids.

Comments: Steindachner identified and determined some species in Bliss 1883; Bliss (ex Steindachner) is used as authorship for these species (Borodin 1934).

Liopropoma maculatum (Döderlein 1883)

Pikea maculata Döderlein in Steindachner & Döderlein 1883: 50 (Tokyo, Japan and Tokyo Bay). Holotype (unique): NMW 38846.

Distribution: Japan, Korea, Okinawa, Ogasawara Ids, and the Hawaiian Ids.

Comments: Species illustrated and described in more detail in Steindachner and Döderlein [1883: 234, Pl. 6 (figs. 1-1b)].

Liopropoma mitratum Lubbock & Randall 1978

Liopropoma sp. Burgess & Axelrod 1975: 1480.

Liopropoma sp.2 Allen & Steene 1979: 25.

Liopropoma mitratum Lubbock & Randall 1978: 191, fig. 2 (30 meters outside fringing reef, Al Korae, Jeddah, Saudi Arabia). Holotype: BMNH 1976.7.13.8. Paratypes: BPBM 17892 (1); HUIJ 8300 (1); SMF 13614 (1); USNM 216427-28 (1 2).

Distribution: Red Sea, Christmas Id, eastern Indian Ocean, and West to central Pacific, including Ogasawara Ids, Philippines to Rowley Shoals, eastward to Tuamotu Archipelago.

Liopropoma mowbrayi Woods & Kanazawa 1951

Liopropoma mowbrayi Woods & Kanazawa 1951: 633, fig. 134 (on beach after a storm, south shore of Bermuda). Holotype (unique): FMNH 48544.

Distribution: Bermuda, South Florida, Bahamas to northern South America.

Liopropoma multilineatum Randall & Taylor 1988

Liopropoma sp. Burgess & Axelrod 1975: 1481, fig. 165 (Marau, Solomon Ids.).

Liopropoma multilineatum Randall & Taylor 1988: 41, Pl. 2C (South side of Tanavulu Pt., Florida Id, Solomon Ids). Holotype: BPBM 15662. Paratypes: AMS I.25107-014 (1); BMNH 1987.3.31.1 (1); BPBM 15546 (1) 15939 (1); USNM 235750 (1) 235793 (2) 278050 (1) 285943 (2); WAM P.28024-007 (1), P.28186-017 (1).

Distribution: West Pacific from Philippines, Palau, New Guinea, Coral Sea, Solomon Ids, and Fiji; Rowley Shoals in the eastern Indian Ocean.

Liopropoma olneyi Baldwin & Johnson 2014

Liopropoma olneyi Baldwin & Johnson 2014: 7, figs. 5-7, 8A (Curaçao, west of Substation Curaçao downline, Sta. *Curasub* 13–10 154 m). Holotype: USNM 426805. Paratypes: (adults) USNM 406130 (1), 414828 (1), 426808(1), 426809 (1), 426810 (1), 426815 (1), 422698 (1), 426868 (1); VIMS 13590 (1).

Distribution: Florida Straits, Gulf of Mexico and Curaçao.

Liopropoma pallidum (Fowler 1938)

Chorististium pallidum Fowler 1938: 199, Pl. 9 (fig. 20) (Kiritimati, Line Ids). Holotype: ANSP 68397. Paratype: ANSP 68398.

Distribution: Pacific Plate, including Caroline Ids, Mariana Ids, Marshall Ids, Austral Ids, Pitcairn Group, Society Ids and Line Ids.

Liopropoma randalli Akhilesh, Bineesh & White 2012

Liopropoma randalli Akhilesh, Bineesh & White 2012: 44, fig. 1-2 (off Mangalore, Kochi Fisheries Harbor, Kerala State, southwestern India). Paratypes: CMFRI 31.139.31.1 (1); CSIRO H 7218-02 (1); MZB LM648 (1).

Distribution: India and Indonesia.

Liopropoma rubre Poey 1861

Liopropoma rubre Poey 1861: 418 (Cuba). Syntypes: (2) MCZ 9691 (1, as holotype).

Distribution: South Florida, Bahamas to northern South America.

Liopropoma santi Baldwin & Robertson 2014

Liopropoma santi Baldwin & Robertson 2014: 74, figs. 2-4, 5A, 6A (Curaçao, southern Caribbean). Holotype: USNM 426811. Paratypes: USNM 426813 (1), 424824 (1).

Distribution: Known only from Curaçao, southern Caribbean.

Liopropoma susumi (Jordan & Seale 1906)

Chorististium susumi Jordan & Seale 1906: 256, fig. 48 (Apia, Upola Id, Samoa Ids). Holotype: USNM 51738. Paratype: CAS-SU 8671.

Ypsigramma lineata Schultz in Schultz et al. 1953: 375, fig. 59 (Lagoon reef off Namu Id, Bikini Atoll, Marshall Ids, western Pacific). Holotype: USNM 141872. Paratypes: FMNH 62617 (1); USNM 141873-75 (1 1).

Ypsigramma brocki Schultz in Schultz et al. 1953: 379, fig. 60 (Lagoon coral head off Kieshiechi Id, Rongelap Atoll, western Pacific). Holotype: USNM 141876. Paratypes: USNM 154675 (1).

Flagelloserranus meteori Kotthaus 1970: 11, fig. 1 (Off the northwestern coast of New Guinea, 0°18'S 132°52'E). Holotype: ZMUC P43207. Paratypes: ZMUC uncat. (137).

Distribution: The most common species of the genus; widespread in the Indo-Pacific, including Red Sea but absent from Hawaiian Ids.

Liopropoma swalesi (Fowler & Bean 1930)

Chorististium swalesi Fowler & Bean 1930: 186 (Tongian Id., Gulf of Tomini, Sulawesi, Indonesia). Holotype: USNM 89983. Paratype: USNM 93393 (1).

Distribution: Indonesia and New Britain.

Liopropoma tonstrinum Randall & Taylor 1988

Liopropoma sp.2 Allen & Steene 1979: 24 (Christmas Id, Indian Ocean).

Liopropoma tonstrinum Randall & Taylor 1988: 38, Pl. 2b (Augulpelu Reef, Palau Id). Holotype: BPBM 9531. Paratypes: BPBM 13833 (1) 18723 (1) 19962 (1) 19982 (1) 22375 (1); MNHN 1976-0135 (1); USNM 223145 (1) 223287 (1) 235792 (1); WAM P.26082-015 (1), P.26087-011 (3), P.26121-002 (1).

Distribution: Christmas Id, eastern Indian Ocean and Oceania, including Samoa, Fiji, Palau, Caroline Ids and Marshall Ids.

Genus *Rainfordia* McCulloch 1923

Rainfordia McCulloch 1923: 119 (type species *Rainfordia opercularis* McCulloch 1923. Type by monotypy). Gender feminine.

Endemic to tropical Australia, in caves in coral reefs; one species.

Rainfordia opercularis McCulloch 1923

Rainfordia opercularis McCulloch 1923: 120, Pl. 16, fig. 3 (Middle Id, Edgecumbe Bay, Whitsunday Passage, Queensland, Australia). Holotype (unique): AMS IA.923.

Distribution: Northwestern shelf of Australia to Great Barrier Reef.

Tribe Nipponini Jordan 1923

Nipponidae Jordan 1923:191 (proposed as a family)

Molecular studies have suggested to remove Nippon from Serranidae and to place it in its own family. This conclusion is supported by studies of Smith and Craig (2007) and Betancur-R et al. (2017) but it is contrast with morphological investigations of Baldwin and Johnson (1993). Based on previous works of Johnson (1983, 1988), Baldwin and Johnson aligned Nipponini with the Epinephelinae and listed the following autapomorphies: two supraneurals anterior to the first dorsal spine; dorsal fin rays XIII,11; 30 vertebrae; ventral margin of lacrimal serrate; and preopercle with enlarged spine at angle.

Genus *Nippon* Cuvier 1828

Nippon Cuvier in Cuvier & Valenciennes 1828 (type species *Nippon spinosus* Cuvier 1828. Type by monotypy). Gender masculine.

West Pacific; monotypic.

Nippon spinosus Cuvier 1828

Nippon spinosus Cuvier in Cuvier & Valenciennes 1828: 131, Pl. 19. Holotype (unique): ZMB 49 (dry) (Sea of Japan). Holotype (unique): ZMB 49 (dry).

Distribution: Japan, Taiwan.

Subfamily Serraninae Swainson 1839

(Seabasses and hamlets)

Serraninae Swainson 1839: 19 168 201 (proposed as subfamily; type genus *Serranus*).

Centropristeoidei Bleeker 1859a:352 (family) *Centropristis* [genus inferred from the stem, article 11.7.1.1; stem corrected to Centroprist- by Fitzinger 1873: 29.

Dulinae Gill 1861a:31 (proposed as subfamily; type genus *Dules*). [stem changed to Dule- by Fowler 1907d:510 and Fowler 1907e 264, confirmed by Fowler & Bean 1930: 164 166 and by Whitley and Colefax 1938: 292].

Hypoplectrini Poey 1871: 34 (proposed as subfamily; type genus *Hypoplectrus*).

Paralabracinae Fowler 1907e: 249 (proposed as subfamily; type genus *Paralabrax*).

Paracentropristinae Fowler 1925: 4 (proposed as subfamily; type genus *Paracentropristis*).

Atlantic and eastern Pacific; only one genus (*Chelidoperca*) with six species found in the Indo-West Pacific. From shallow waters down to 500 m over sandy rocky areas or sea-grass beds. Carnivorous. Generally solitary. They show a diverse expression of sexual pattern ranging from gonochorism to simultaneous hermaphroditism,

protogyny and androdioecy (Erisman and Hastings 2011); 13 genera with 87 species (Nelson et al. 2016); 101 species are listed here.

Genus *Bullisichthys* Rivas 1971

Bullisichthys Rivas 1971: 718 (type species *Bullisichthys caribbaeus* Rivas 1971. Type by original designation). Gender masculine.

Western Atlantic; monotypic.

Bullisichthys caribbaeus Rivas 1971

Bullisichthys caribbaeus Rivas 1971: 719, fig.1 (Lesser Antilles, off Dominica, West Indies). Holotype: USNM 204938. Paratypes: UF 24457 [ex USNM 204939] (1), USNM 204939 (2).

Distribution: Caribbean Sea.

Genus *Centropristis* Cuvier 1829

Centropristis Cuvier 1829: 145 [type species *Centropristis nigricans* Cuvier 1829 (= *Coryphaena nigrescens* Bloch & Schneider 1801). Type by subsequent designation. Cuvier's *nigricans* is an unneeded substitute name for *nigrescens*. Type designated by Bleeker 1874a: 2. Spelled *Centropristes* by Cuvier in Cuvier & Valenciennes 1829 and in literature]. Gender feminine.

Triloburus Gill 1861b: 30 [type species *Centropristis trifurca* of Storer 1846 (= *Perca trifurca* Linnaeus 1766). Type by monotypy]. Gender masculine.

Western Atlantic in temperate waters over rocky bottoms from shallow to about 60 m depth. Five species (Bortone 1977a).

Centropristis fuscula (Poey 1861)

Centropristes [*sic*] *fuscus* Poey 1861: 342 (Havana, Cuba). Holotype (unique): MCZ 10015.

Distribution: Cuba.

Centropristis ocyura (Jordan & Evermann 1887)

Serranus ocyurus Jordan & Evermann 1887: 468 (Snapper banks off Pensacola, Florida, U.S.A.). Holotype: USNM 37997.

Centropristis springeri Weed 1937: 304 (Gulf of Mexico 28°45'00"N, 85°02'00"W, Albatross station 3405). Holotype: USNM 53054. Paratypes: USNM 30192 (1), 86133 (1).

Distribution: North Carolina to Florida and entire Gulf of Mexico.

Comments: Taxonomic decision as reported by Hoese and Moore (1977: 171). As *ocyurus* in current literature; the genus is feminine and the correct spelling should be *ocyura*. *Centropristis springeri* Weed 1937 has no status in ECoF and therefore it is treated as new synonym.

Centropristis philadelphica (Linnaeus 1758)

Perca philadelphica Linnaeus 1758: 291 (America). Holotype: Linn. Soc. Lond. 156 (left half-skin).

Perca trifurca Linnaeus 1766: 489 (Carolina, U.S.A.). No types known.

Lutjanus tridens Lacepède 1802: 196, 246 (Carolinas, U.S.A.) (*nomen novum*, unneeded replacement name for *Perca trifurca* Linnaeus 1766). No types known.

Distribution: North Carolina to Florida and northern Gulf of Mexico.

Centropristis rufa Cuvier 1829

Centropristes rufus Cuvier in Cuvier & Valenciennes 1829: 47 (Martinique Id, West Indies). Syntypes: MNHN 0000-6977 (2).

Distribution: Western Atlantic.

Comments: Genus is feminine and the correct spelling should be *rufa* not *rufus* as in current literature.

Centropristis striata (Linnaeus 1758)

Labrus striatus Linnaeus 1758: 285 (America). No types known.

Perca atraria Linnaeus (ex Garden) 1766: 485 (Carolina, U.S.A.). Holotype: Linnean Society of London 91 (right half-skin).

Perca furva Walbaum (ex Schöpfung) 1792: 336 (New York, U.S.A.). No types known.

Coryphaena nigrescens Bloch & Schneider (ex Schoepf) 1801: 297 (New York, U.S.A.). Holotype (unique): ZMB 8168 (stuffed).

Perca varia Mitchill 1814: 10. No types known. Also in Mitchill 1815:415, Pl. 3 (fig. 6) (New York, Sandy Hook, New Jersey, U.S.A.).

Centropristis nigricans Cuvier 1829: 145 (U.S.A.). Syntypes: MNHN 0000-6974 (1) New York, 0000-6975 (2) New York.

Centropristes [sic] melanus Ginsburg 1952: 84, fig.1 (Newport, Florida, U.S.A.). Holotype: FMNH 33719. Paratypes: FMNH 33717-18 (1 1), 33720-23 (1 1 1 1); USNM 21483 (1), 73009 (1), 92232 (1) 106990 (2).

Distribution: Western Atlantic from Gulf of Maine to northeastern Florida and eastern Gulf of Mexico; reaches extreme south Florida in cold winters.

Genus *Chelidoperca* Boulenger 1895

Chelidoperca Boulenger 1895: 304 (type species *Centropristis hirundinaceus* Valenciennes 1831. Type by subsequent designation by Jordan 1920: 466). Gender feminine.

Indo-West Pacific; 16 species (Kailola 1987; Matsunuma et al 2017; Lee et al. 2019; Ogino et al., 2019).

Chelidoperca africana Cadenat 1960

Chelidoperca africana Cadenat 1960: 1395 (Coast of Benin and Nigeria). Syntypes: IFAN (Institut Fondamental d'Afrique Noire, Dakar, Senegal).

Distribution: Eastern Atlantic from Mauritania to northern Angola.

Chelidoperca barazeri Lee, Lee, Matsunuma & Chen 2019

Chelidoperca barazeri Lee, Lee, Matsunuma & Chen 2019: 18, fig. 7; suppl. fig. 1A 2A, B, 3A (Gazelle Channel, New Ireland, Bismarck Sea). Holotype NTUM 15639.

Distribution: Bismarck Sea.

Chelidoperca cerasina Ogino, Lee, Chen & Matsunuma 2019

Chelidoperca cerasina Ogino, Lee, Chen & Matsunuma 2019: [2], fig. (Lord Howe Rise, Coral Sea, southwest of New Caledonia, 24°11'00"S, 159°41'00"E). Holotype: MNHN 2019-0021. Paratypes: MNHN 2003-182, 2018-0729 (3), 2018-0731, NSMT-P 116917, NTUM 13736, 13737, 13738, 13740, 15633.

Distribution: Known from the Gifford Guyot Seamount (east of Australia) and off New Caledonia (Norfolk, Lord Howe and Loyalty ridges) in the Coral Sea.

Chelidoperca flavolineata Matsunuma, Tan & Peristiwady 2020

Chelidoperca flavolineata Matsunuma, Tan & Peristiwady 2020: [2], figs. 1, 2, 3a-d, 4, 6. Holotype: MZB 25196 (formerly HUMZ 191394). Paratypes: BMNH 1986.11.28.11, HUMZ 191238, HUMZ 191239, LBRC-F 4715, LBRC-F 4967, LBRC-F 4968, LBRC-F 4969, LBRC-F 4970, LBRC-F 4971, LBRC-F 4972, LBRC-F 4979, ZRC 61051 (4), ZRC 61133 (formerly LBRC-F 4973), ZRC 61134 (formerly LBRC-F 4974), ZRC 61135 (formerly LBRC-F 4975), ZRC 61136 (formerly LBRC-F 4976), ZRC 61137 (formerly LBRC-F 4977), ZRC 61138 (formerly LBRCF 4978).

Distribution: Java to northern Australia.

Chelidoperca hirundinacea (Valenciennes 1831)

Centropristis hirundinaceus Valenciennes in Cuvier & Valenciennes 1831: 450 (Japan). Syntypes: MNHN 0000-7428 (1, dry, poor condition), 0000-3061 (1, dry); ZMB 6983 (1, not found) 10282 (1).

Distribution: Japan to northern Australia.

Chelidoperca investigatoris (Alcock 1890)

Centropristis investigatoris Alcock 1890: 199 (Off Madras coast, India 18°30'N, 84°46'E, Investigator station 96). Syntypes: ZSI F12820-21 (2).

Distribution: North Indian Ocean.

Chelidoperca lecromi Fourmanoir 1982

Chelidoperca lecromi Fourmanoir 1982: 63, fig. 4 (Chesterfield Id, Coral Sea). Holotype: MNHN 1981-1436. Paratypes: MNHN 1981-1437 (1).

Distribution: Depths ranging 244–300 m at Chesterfield Plateau, Coral Sea, and off Isle of Pines, New Caledonia.

Chelidoperca leucostigmata Lee, Lee, Matsunuma & Chen 2019

Chelidoperca leucostigmata Lee, Lee, Matsunuma & Chen 2019: 8, fig. 5, suppl. figs. 1B 2C, D, 3B (north Macclesfield Bank, South China Sea). Holotype: NTUM 14721. Paratypes: NTUM 15632 (5); NTUM 15634 (2); NTUM 15355 (2).

Distribution: Known only from six specimens collected at depths ranging 161–165m at the type locality.

Chelidoperca maculicauda Bineesh & Akhilesh 2013

Chelidoperca maculicauda Bineesh & Akhilesh 2013: 74, figs. 2-5 (off Kollam, Kerala coast, India). Holotype: CMFRI GB 31.138.14.5. Paratypes: CMFRI GB 31.139.14.5 (1), GB 31.139.5.2 (1).

Distribution: Known only from Kerala coast of India; probably more widespread.

Chelidoperca margaritifera Weber 1913

Chelidoperca margaritifera Weber 1913: 207, fig. 53 (between Misol Id and Guinea). Holotype (unique): ZMA 101029.

Distribution: Japan to northern Australia and New Guinea.

Chelidoperca microdon Lee, Lee, Matsunuma & Chen 2019

Chelidoperca microdon Lee, Lee, Matsunuma & Chen 2019: 14, fig. 6, suppl. figs. 1C 2E, F, 3C (off Isle of Pines, New Caledonia, Coral Sea). Holotype: MNHN 2019-0020. Paratype: NTUM 15636.

Distribution: Known from two specimens collected at depths ranging 260–305m on the Chesterfield Plateau, Coral Sea, and on the continental shelf around the Isle of Pines New Caledonia.

Chelidoperca occipitalis Kotthaus 1973

Chelidoperca occipitalis Kotthaus 1973: 30, fig. 299 (Southwest of Socotra, Arabian Sea). Holotype (unique): ZMH 5136.

Distribution: Southwest of Socotra, Arabian Sea.

Chelidoperca pleurospilus (Günther 1880)

Centropristis pleurospilus Günther 1880: 37, Pl. 16 (fig. D) (Kai Ids, Challenger station 192, Arafura Sea, Indonesia). Syntype: BMNH 1879.5.14.153.

Distribution: Southern Japan to the Philippines.

Chelidoperca santosi Williams & Carpenter 2015

Chelidoperca santosi Williams & Carpenter 2015: 288, fig. 1 (Iloilo City Fish Market, Panay, Philippines, in a mouth of an unidentified large grouper). Holotype: PNM 15190. Paratypes: NMV A16485, USNM 427531.

Distribution: Philippines.

Chelidoperca stella Matsunuma & Motomura 2016

Chelidoperca stella Matsunuma & Motomura 2016: 389, figs. 1-5 (off Thailand, Andaman Sea, 09°13'12"N, 97°51'00"E). Holotype: USNM 389093. Paratypes: PMBC, USNM.

Distribution: Andaman Sea.

Chelidoperca tosaensis Matsunuma, Yamakawa & Williams 2017

Chelidoperca tosaensis Matsunuma, Yamakawa & Williams 2017: [3], figs. 1a 2-5 (published on-line, the printed version dated 2018: 210, figs. 1a 2-5) (off Tosa Bay, Kochi Prefecture). Holotype: BSKU 53312. Paratypes: BSKU, FAKU, KAUM, MSM, NSMT, SPMN, UPVMI, USNM, WMHN.

Distribution: Japan, East China Sea and Philippines.

Genus *Cratinus* Steindachner 1878

Cratinus Steindachner 1878: 395 (*Cratinus agassizii* Steindachner 1878. Type by monotypy). Gender masculine.

Eastern Pacific; monotypic.

Cratinus agassizii Steindachner 1878

Cratinus agassizii Steindachner 1878b: 395 (Galápagos Ids). Syntypes: (several) ?MCZ 9801 (3), 9803 (1) 25738 (1); NMW 39649 (1), 42523 (1), 42526 (1).

Distribution: Galápagos Ids and Peru.

Genus *Diplectrum* Holbrook 1855

Diplectrum Holbrook 1855: 32, 42 (type species *Serranus fascicularis* Valenciennes 1828. Type by monotypy). Gender neuter.

Haliperca Gill 1862b: 236 (type species *Serranus bivittatus* Valenciennes 1828. Type by subsequent designation by Jordan and Gilbert 1883: 535). Gender feminine.

Paraserranus Bleeker 1874: 3, 6 (type species *Paraserranus hasseltii* Bleeker 1874. Type by monotypy). Gender masculine.

Amphiamerican over sandy and muddy bottoms; 12 species. Genus revised by Bortone (1977b).

Diplectrum bivittatum (Valenciennes 1828)

Serranus bivittatus Valenciennes in Cuvier & Valenciennes 1828: 241 (Martinique Id, West Indies). Syntypes: MNHN 0000-6988 (1) Martinique, 0000-5889 (1) Havana.

Diplectrum arcuarium Ginsburg 1948: 268 (off Breton Sound, Louisiana, U.S.A. 29°29'30"N, 88°41'W). Holotype: USNM 144213. Paratypes: (37) CAS-SU 50185 (1); USNM 118535 (18, now 11) 118536 (1) 129817 (1) 144213-16 (1 1, 9 1) 155173-77 (1 1 2 2 2).

Distribution: Florida, Gulf of Mexico, Caribbean Sea, and Brazil.

Comments: Bortone (1977b: 24) proposed two subspecies: *D. b. bivittatum* from northern Gulf of Mexico and *D. b. arcuarium* from Caribbean Sea and northern South America.

Diplectrum conceptione (Valenciennes 1828)

Serranus conceptionis Valenciennes in Cuvier & Valenciennes 1828: 246 (Concepción, Chile). Holotype (unique): MNHN 0000-1023 [or 0000-7023].

? *Plectropoma paytensis* Lesson 1830: 233 (Payta, Peru). Holotype (unique): not saved.

Distribution: Off Peru and Chile.

Comments: Taxonomic decision of Bortone (1977b: 32) and Bauchot et al. (1984: 43).

Diplectrum eumelum Rosenblatt & Johnson 1974

Diplectrum eumelum Rosenblatt & Johnson 1974: 185, fig. 1b (Bahía de Banderas, Jalisco, Mexico). Holotype: SIO 65-160. Paratypes: SIO 15-111 (1) (ex UCLA W56-118) 15-181 (54) (ex UCLA W63-148), 65-160 (8), 70-141 (2), 70-218 (24), 71-57 (8), 71-249 (2); UCLA 63-142 (12); USNM 216407 [ex SIO 62-51] (7).

Distribution: Eastern Pacific from Mexico to Panama.

Diplectrum euryplectrum Jordan & Bollman 1890

Diplectrum euryplectrum Jordan & Bollman 1890: 157 (off Pacific coast of Colombia). Syntypes: CAS-SU 1172 (6) 1458 (7); USNM 41141 (2), 41148 (1), ?41400 (1).

Distribution: Baja California to Peru.

Diplectrum formosum (Linnaeus 1766)

Perca formosa Linnaeus 1766: 488 (Carolina, U.S.A.). Syntypes: Linn. Soc. Lond. 92 (right half-skin).

Epinephelus striatus Bloch 1793: 20, Pl. 330 (Jamaica) (subjectively invalid, secondarily preoccupied in *Epinephelus* by *Anthias striatus* Bloch 1792 when both are in *Epinephelus*).

Lutjanus sciurus Lacepède 1802: 177, 206 (Molucca Ids; Bahamas; Antilles) (*nomen novum*, unneeded replacement name for *Perca formosa* Linnaeus 1766).

Holocentrus epinephelus Lacepède 1802, 330, 357 (Jamaica) (*nomen novum*, replacement name for *Epinephelus striatus* Bloch 1793).

Holocentrus decussatus Shaw 1803: 557 (*nomen novum*, replacement name for *Epinephelus striatus* Bloch 1793).

Serranus radians Quoy & Gaimard 1824: 313, Pl. 58 (fig. 2) (Rio de Janeiro, Brazil). Holotype (unique): MNHN 0000-7018.

Serranus irradians Valenciennes in Cuvier & Valenciennes 1828: 244 (Montevideo, Uruguay). Syntypes: MNHN 0000-7018 (1, holotype of *radians*) Rio de Janeiro, A-0461 (1, dry) Brazil, A-0462 (1), A-0464 (1, dry) Brazil.

Serranus fascicularis Valenciennes in Cuvier & Valenciennes 1828: 245, Pl. 30 (Brazil). Holotype (unique): MNHN 0000-7022.

Distribution: Virginia to southern Brazil, possibly to Uruguay.

Comments: *Lutjanus sciurus* Lacepède is based on *Perca formosa* Linnaeus and *Perca marina capite striato* of Catesby 1743: 6, Pl. 6 (fig. 1). The status given in ECoF (Fricke et al. 2019) as possible synonym of *Serranus scriba* is erroneous. *Epinephelus striatus* Bloch 1793 and the corresponding replacement names *Holocentrus epinephelus* Lacepède 1802 and *Holocentrus decussatus* Shaw 1803 are here regarded as a new synonyms. *Holocentrus epinephelus* Lacepède and *Holocentrus decussatus* Shaw are erroneously regarded as new name of *Epinephelus striatus* (Bloch, 1792) in the ECoF.

Diplectrum labarum Rosenblatt & Johnson 1974

Diplectrum labarum Rosenblatt & Johnson 1974: 181, fig. 1a (Bahía de Banderas, Jalisco, Mexico). Holotype: SIO 65-160. Paratypes: BMNH [ex SIO 65-250] (1); CAS 47785 [ex SIO 65-305] (2); 47786 [ex SIO 61-282] (3), 47787 [ex SIO 63-526] (10), 47788 [ex SIO 65-350] (7), 47789 [ex SIO 68-66] (7), 47790 [ex SIO 68-74] (14); FMNH 82963 [ex SIO 68-71] (57); Mexico [ex SIO 68-74] (14); SIO (56 lots 1503); UCLA 56-118 (1); USNM 216406 [ex SIO] (18).

Distribution: Baja California to Panama.

Diplectrum macropoma (Günther 1864)

Centropristis macropoma Günther 1864: 145 (Pacific coast of Panama). Syntypes: BMNH 1864.1.26.426 (1) 1977.8.30.1-2 (2); ZMB 6799 (1).

Diplectrum mexicanum Hildebrand 1948: 13, fig. 6 (Gulf of California, Mexico, 30°18'N 113°05'W, Albatross station 3018). Holotype (unique): USNM 46518.

Distribution: Baja California to Peru, including Galápagos Ids.

Diplectrum maximum Hildebrand 1946

Diplectrum conceptione Evermann & Radcliffe (*nec* Valenciennes) 1917: 75, Pl. 7, fig. 2 (Lobos de Tierra and Paita, Peru).

Diplectrum maximum Hildebrand 1946: 185, fig. 42 (Peru). Holotype: USNM 77624. Paratypes: USNM 77698 (1).

Distribution: Northern Peru.

Diplectrum pacificum Meek & Hildebrand 1925

Diplectrum pacificum Meek & Hildebrand 1925: 477, Pl. 46 (fig. 2) (Naos Id., Panama). Holotype: USNM 81756. Paratypes: FMNH 8394 (3), USNM 80228 (3).

Distribution: California to Panama Bay.

Diplectrum radiale (Quoy & Gaimard 1824)

Serranus radialis Quoy and Gaimard 1824: 316 (Rio de Janeiro, Brazil). Syntypes: MNHN 0000-7015 (1), B-3114.

Centropristes ayresi Steindachner 1868a: 965. Pl. 1 (fig. 1) (Santos, Brazil). Syntypes: (several) CAS 79615 [ex IU 7711, ex MCZ 761] (1), MCZ 31072 (1).

Paraserranus hasseltii Bleeker 1874: 7 (Java, Indonesia). Holotype (unique): whereabouts unknown.

Distribution: Southern Caribbean to Brazil.

Comments: *Paraserranus hasseltii* was described from Java, but this must be an error (Weber and de Beaufort 1931: 89). It is regarded as a new synonym.

Diplectrum rostrum Bortone 1974

Diplectrum rostrum Bortone 1974: 61, figs. 1-3 (Eastern Pacific off Ecuador, 3°39'S, 80°41'W). Holotype: USNM 208196. Paratypes: CAS 15295-96 (1 1); LACM W64-64 (4); SIO 64-867 (1), 65-160 (6, c&s), 65-257 (1), 65-285 (1), 65-304 (1), 65-349 (2), 70-62 (1); USNM 208197-99 (4 1 1).

Distribution: Gulf of California to Colombia, including Galápagos Ids.

Diplectrum sciurus Gilbert 1892

Diplectrum sciurus Gilbert 1892: 550 (Gulf of California, Mexico). Syntypes: CAS-SU 216 (14); USNM 46571 (1), 46630 (1) 125348 (1).

Distribution: Gulf of California.

Genus *Dules* Cuvier 1829

Dules Cuvier in Cuvier & Valenciennes 1829: 111 (type species *Dules auriga* Cuvier 1829. Type by subsequent designation of Bleeker 1874: 2). Gender masculine.

Dulichthys Bonaparte 1831: 167 (type species *Dules auriga* Cuvier 1829. Type by being a replacement name; unneeded replacement name for *Dules* Cuvier 1829, supposed to be preoccupied by *Dulus* Vieillot 1816 in Aves). Gender masculine.

Eudulus Fowler 1907: 264 (type species *Dules auriga* Cuvier 1829. Type by being a replacement name; unneeded replacement name for *Dules* Cuvier 1829, supposed to be preoccupied by *Dulus* Vieillot 1816 in Aves). Gender masculine.

Callidulus Fowler 1907: 265 (subgenus of *Eudulus* Fowler 1907, type species *Centropristis subligarius* Cope 1870. Type by original designation). Gender masculine.

Western Atlantic; monotypic.

Dules auriga Cuvier 1829

Dules auriga Cuvier in Cuvier & Valenciennes 1829: 112, Pl. 51 (Brazil). Syntypes: MNHN A-3003 (2), SMF 1082 [ex MNHN] (1).

Distribution: Brazil and Uruguay, occasionally out of this range.

Comments: Fowler (1907: 264) proposed *Eudulus* as a replacement name for *Dules* thought preoccupied by *Dulus* Vieillot 1816. However according the art. 34 of the ICZN names differing by even one character are not homonyms. Placed in Kuhlidae by Bauchot et al., (1984: 62). Placement is serraninae follows Kendall (1984) and Eschmeyer (1990). Sometimes regarded as valid in *Serranus* as *Serranus auriga* (e.g. Rojas and Pequeño 2001: 166).

Genus *Hypoplectrus* Gill 1861

Hypoplectrus Gill 1861c: 98 (type species *Plectropoma puella* Cuvier 1828. Type by monotypy). Gender masculine.

Mostly western Atlantic, with one species in the eastern Pacific. The number of species has remained an enigma for many years (Fischer 1980; Lobel 2011). Some authors have regarded all the nominal species as variant of a single species, *H. unicolor*. Domeier (1994) concluded from his study that the different colour morphs warrant full species rank. Randall (1996) favoured the maintenance of distinct species, on the basis of the colour pattern and ecological considerations. Lobel (2011) recognized 13 species and 14 colour-morphs, which vary too subtle to be distinguished at the species level. Victor (2012) in his mtDNA analysis of *Hypoplectrus* species flock described two more species and recognized six undescribed species. Three new species were described in recent times bringing the total number of described species to 18.

Hypoplectrus aberrans Poey 1868

Hypoplectrus aberrans Poey 1868: 291. Holotype (unique): whereabouts unknown. (Havana, Cuba).

Distribution: Florida Keys and Caribbean Sea.

Hypoplectrus atlahua Tavera and Acero 2013

Hypoplectrus atlahua Tavera and Acero 2013: 30, fig. 1 (Bajo de Tuxpan 21°8' N, 97°16'W, Tuxpan, Veracruz, Mexico). Holotype: CICIMAR-CI 8371. Paratypes: CICIMAR-CI 8372.

Distribution: Gulf of Mexico.

Hypoplectrus castroaguirrei Del Moral Flores, Tello-Musi and Martínez-Pérez 2012

Hypoplectrus castroaguirrei Del Moral Flores, Tello-Musi and Martínez-Pérez 2012: 2, figs. 1-4 (Arrecife de Isla Verde 19°12'00.0"N, 96°04'04.4"W, Veracruz Reef System, Mexico, Gulf of Mexico). Holotype: CNIP-IBUNAM 16846. Paratypes: CNIP-IBUNAM 16847 (1).

Distribution: Gulf of Mexico.

Hypoplectrus chlorurus (Cuvier 1828)

Plectropoma chlorurum Cuvier in Cuvier & Valenciennes 1828: 406 (Caribbean Sea). Syntypes: MNHN 0000-7785 (1) Martinique, 0000-7586 (1) Antilles, 0000-7787 (1) Martinique.

Distribution: West Indies, Venezuela and Texas.

Hypoplectrus ecosur Victor 2012

Hypoplectrus ecosur Victor 2012: 11, fig.10 (off Contoy, Quintana Roo, Mexico). Holotype: ECOCH 7180 (83 mm SL). Paratypes: ECOCH 7150 (1), 7180 (1).

Distribution: known only from off Contoy, at the northern tip of the Yucatan Peninsula.

Hypoplectrus floridae Victor 2012

Hypoplectrus floridae Victor 2012: 4, figs. 1-5, 7 (SW Florida, off Everglades, Ten Thousand Ids). Holotype: SIO 12-58 (40.3 mm SL). Paratypes: SIO 12-58 (3) 12-59 (1).

Distribution: Caribbean Sea and Florida.

Hypoplectrus gemma Goode and Bean 1882

Hypoplectrus gemma Goode and Bean 1882: 428 (Garden Key, Dry Tortugas, Florida, U.S.A.). Holotype (unique): USNM 3422.

Distribution: South Florida and Florida Keys.

Hypoplectrus gummigutta (Poey 1851)

Plectropoma gummigutta Poey 1851: 70, Pl. 3 (fig. 2) (Havana, Cuba). Holotype (?): USNM 2667.

Plectropoma crocota Cope 1871: 466 (St. Martin Id, West Indies). Lectotype: ANSP 13291. Paralectotypes: ANSP 13292 (1). Lectotype established by Fowler (1907:262, fig. 4).

Distribution: Florida, Bahamas, Cuba, Dominican Republic, Jamaica and Puerto Rico.

Hypoplectrus guttavarius (Poey 1852)

Plectropoma guttavarium Poey 1852: 70 (Havana, Cuba). Syntypes: MCZ 9781 (2).

Plectropoma melanorhina Guichenot 1853: 18, Pl. 1 (fig. 1) (Havana, Cuba). Holotype: MNHN 0000-7797.
Distribution: Florida Keys, Bahamas, Cuba, Cayman Ids, Jamaica, Hispaniola, Puerto Rico, Virgin Ids, Lesser Antilles and Panama.

Comments: *Plectropoma melanorhina* Guichenot 1853 is here regarded as new synonym.

Hypoplectrus indigo (Poey 1851)

Plectropoma indigo Poey 1851: 69, Pl. 3 (fig. 1) (Havana, Cuba). Poey specimens: ZMB 5960 (1).

Plectropoma accensum Poey 1852: 72 (Havana, Cuba). Holotype (unique): whereabouts unknown.

Plectropoma bovinum Poey 1852: 69, 75 (Havana, Cuba). Syntypes: MCZ 9795 (2).

Distribution: Scattered localities from the tropical western Atlantic: Cuba, Haiti, Jamaica, Bahamas, Florida and off Honduras.

Comments: Taxonomic decision of Duarte-Bello and Buesa (1973) except that *nigricans* is here regarded as distinct; *Plectropoma accensum* Poey is a synonym of *Hypoplectrus guttavarius* (Poey 1852) according to Domeier (1994: 105).

Hypoplectrus liberte Victor and Marks 2018

Hypoplectrus liberte Victor and Marks 2018: 10, figs. 1 2A (Haiti, Baie de Fort-Liberté). Holotype: UF 239538. Paratypes: UF, USNM.

Distribution: Known only from the type locality.

Hypoplectrus maculiferus Poey 1871

Hypoplectrus maculiferus Poey 1871: 78, Pl. 1 (Havana, Cuba). Holotype: MCZ 9783 or USNM 24783.

Distribution: Western Atlantic.

Comments: Previously regarded as a synonym of *H. unicolor*, valid species according to del Moral Flores et al. (2012: 4).

Hypoplectrus maya Lobel 2011

Hypoplectrus sp. "Belize" Heemstra et al. 2003: 1368 (Belize).

Hypoplectrus sp. Smith et al. 2003 (Pelican Cays, Belize).

Hypoplectrus maya Lobel 2011: 4, figs 1-2, 4 (Tunicate Cove, Pelican Cays 16°39.6'N, 88°11.1'W). Holotype: MCZ 169196. Paratypes: MCZ 166194 (1) 169195 (1) 169197 (1) 169198 (1) 169199 (1) 169200 (1) 169201 (1) 169202 (1).

Distribution: Coast of Belize: from the South Water Marine Reserve area at Wee Wee Cay southward throughout the Pelican Cays and to the Sapodilla Cays at the southernmost margin of the Mesoamerican Barrier Reef.

Hypoplectrus nigricans (Poey 1852)

Plectropoma nigricans Poey 1852: 71 (Havana, Cuba). Holotype: MCZ 34036.

Distribution: Southern Florida, Bahamas, Antilles, and Belize to Panama.

Hypoplectrus providencianus Acero and Garzón-Ferreira 1994

Hypoplectrus sp. 2 "masked hamlet" Domeier 1994: 108.

Hypoplectrus providencianus Acero & Garzón-Ferreira 1994: 6, figs. 1-2 (near Lawrence Reef, Isla Providencia, Colombia, Caribbean Sea). Holotype: INVEMAR-P 0450. Paratypes: USNM (1).

Distribution: Western Caribbean Sea.

Hypoplectrus puella (Cuvier 1828)

Plectropoma puella Cuvier in Cuvier & Valenciennes 1828: 405, Pl. 37 (Martinique Id., West Indies). Holotype: MNHN 0000-5404. Non-types or possible syntypes: ZMB 356 [ex MNHN] (1).

Plectropoma vitulinum Poey 1852: 68. (Havana, Cuba). No type known.

Distribution: West Indies, Bermuda, Florida Keys and Gulf coast of Florida.

Hypoplectrus randallorum Lobel 2011

Hypoplectrus sp "tan" Randall & Randall 1960, Thresher 1978, Domeier 1994.

Hypoplectrus sp "tan" Heemstra et al. 2003: 1368.

Hypoplectrus randallorum Lobel 2011: 7, figs. 5-7 (Carrie Bow Cay, ridge east of cay 16°48.2'N, 88°04.5'W, Belize). Holotype: MCZ 169250. Paratypes: BPBM 35766 (1); MCZ 169203 (1) 169204 (1).

Distribution: Western Caribbean from the West Indies to Central America.

Hypoplectrus unicolor (Walbaum 1792)

Perca unicolor Walbaum 1792: 352 (no locality stated). No types known.

Holocentrus unicolor Bloch & Schneider 1801: 322 (no locality stated). No types known.

Mesoprion annularis Cuvier in Guérin-Méneville 1828: no page number (no locality)

Plectropoma ephippium Cuvier in Cuvier & Valenciennes 1828: 408 (purchased at Amsterdam by Valenciennes, Cuvier believed to come from Java, Indonesia). Holotype: MNHN 0000-7794.

Plectropoma affine Poey 1861: 427 (Cuba). No type known.

Hypoplectrus pinnivaria Poey 1868: 291 (Havana, Cuba). Holotype (unique): MCZ 34035.

Distribution: Florida Keys, Bahamas, and Caribbean Sea.

Comments: *Plectropoma affine* and *Hypoplectrus pinnivaria* are synonyms of *H. chlorurus* (Cuvier 1828) and *H. guttavarius* (Poey 1852), respectively, according to Domeier (1994: 105). *Perca unicolor* Walbaum, *Holocentrus unicolor* Bloch & Schneider and *Mesoprion annularis* Cuvier are based on Seba 1759 (Pl. 27, fig. 10) and they are independently described. *Mesoprion annularis* Cuvier in Cuvier & Valenciennes 1828:484 is a synonym of *Lutjanus erythropterus* Bloch 1790.

Genus *Paralabrax* Girard 1856

Paralabrax Girard 1856: 131 (type species *Labrax nebulifer* Girard 1854. Type by subsequent designation of Jordan and Evermann 1890: 386). Gender masculine.

Atractoperca Gill 1861a: 164 (type species *Labrax clathratus* Girard 1854. Type by monotypy). Gender feminine.

Gonioperca Gill 1862b: 236 (type species *Serranus albomaculatus* Jenyns 1840. Type by monotypy). Gender feminine.

Eastern Pacific over rocky reefs and adjacent sandy bottoms; nine species.

Paralabrax albomaculatus (Jenyns 1840)

Serranus albomaculatus Jenyns 1840: 3, Pl. 2 (Santa María Id [Charles Id], Galápagos Ids). Syntypes: BMNH 1917.7.25.6 (left half skin attached to wood).

Distribution: Galápagos Ids.

Paralabrax auroguttatus Walford 1936

Paralabrax auroguttatus Walford 1936: 1 (Guaymas, western coast of Mexico). Holotype (unique): USNM 100981.

Distribution: Baja and Gulf of California.

Paralabrax callaensis Starks 1906

Paralabrax callaensis Starks 1906: 787, Pl. 65 (fig. 2) (Callao, Peru). Holotype (unique): USNM 53471.

Distribution: Peru.

Paralabrax clathratus (Girard 1854)

Labrax clathratus Girard 1854: 143 (San Diego, California, U.S.A.). Syntypes: USNM 283 (orig. 2, now 1).

Distribution: Colombia River (Washington, USA) to southern Baja California. Not present in the Gulf of California.

Paralabrax dewegeri (Metzelaar 1919)

Serranus (Paralabrax) dewegeri Metzelaar 1919: 52, fig. 20 (Guanta, Venezuela). Syntypes: (2) ZMA 113104 (1).

Distribution: southern Caribbean; one of the most abundant inshore fishes around islands of Venezuela (Randall 1996a).

Paralabrax humeralis (Valenciennes 1828)

Serranus humeralis Valenciennes in Cuvier & Valenciennes 1828: 246 (Coast of Chile). Holotype (unique): MNHN 0000-7072 (poor condition).

Serranus semifasciatus Guichenot 1848: 151, Pl. 1bis (fig.2) (Juan Fernández Id). No types known.

Distribution: Costa Rica to Chile.

Comments: Taxonomic decision of Rojas and Pequeño (2001: 163).

Paralabrax loro Walford 1936

Paralabrax loro Walford 1936: 2 (Mazatlán, Sinaloa, Mexico). Holotype: USNM 100978 (1).

Distribution: Gulf of California to Panama.

Paralabrax maculatofasciatus (Steindachner 1868)

Serranus maculatofasciatus Steindachner 1868b: 120 (Mazatlán, Sinaloa, Mexico). Holotype (unique): ZMB 8599 (right skin).

Serranus acanthophorus Bocourt 1868: 223 (Mazatlán, Sinaloa, western Mexico). Holotype (unique): MNHN 0000-4935.

Distribution: Baja and Gulf of California.

Paralabrax nebulifer (Girard 1854)

Labrax nebulifer Girard 1854: 142 (Monterey, California, U.S.A.). Syntypes: USNM 282 (2).

Distribution: Santa Cruz, CA (USA) to Magdalena Bay, Baja California. Vagrant population off Acapulco, Mexico.

Genus *Parasphyraenops* Bean 1912

Parasphyraenops Bean 1912: 124 (type species *Parasphyraenops atrimanus* Bean 1912. Type by monotypy). Gender masculine.

Western Atlantic; two species.

Parasphyraenops atrimanus Bean 1912

Parasphyraenops atrimanus Bean 1912: 124 [Argus Bank, Bermuda, depth 43 fathoms; stomach content of a *Seriola falcata* (= *Seriola rivoliana* Valenciennes 1833)]. Holotype: USNM 74085.

Distribution: Bermuda.

Parasphyraenops incisus (Colin 1978)

Serranus incisus Colin 1978: 191, figs. 1-3 (Piedra de Carabinero, Mona Id, Puerto Rico). Holotype: ANSP 137657. Paratypes: ANSP 137658 (1), UF 232963 [ex UMML 32963] (1), USNM 216596 (1).

Distribution: Jamaica, Puerto Rico, Turks and Caicos Ids, possibly Curaçao.

Genus *Schultzea* Woods 1958

Schultzea Woods 1958: 249 (type species *Schultzea campechanus* Woods 1958. Type by original designation). Gender feminine.

Schultzetta Whitley 1965: 26 (type species *Schultzea campechanus* Woods 1958. Type by being a replacement name; *nomen novum*, unneeded replacement name for *Schultzea* Woods 1958 thought to be preoccupied by *Shultzea* Zachvatkin 1941 in Arachnida). Gender feminine.

Tropical western Atlantic at 30-120 m depth, a foot or more above rocky or coral bottoms; one species. Genus revised by Robins and Starck (1961: 292).

Schultzea beta (Hildebrand 1940)

Serranus beta Hildebrand in Longley and Hildebrand 1940: 239, fig. 9 (South of Tortugas, Florida, U.S.A.). Holotype (unique): USNM 108878.

Schultzea campechanus Woods 1958: 250, fig. 40 [Off Campeche Bank 23°39'48"N, 88°01'00"W, Yucatán, Mexico, Oregon station 592-A, depth 45 fathoms (stomach content)]. Holotype (unique): USNM 174973.

Distribution: Florida Keys and Caribbean Sea.

Genus *Serraniculus* Ginsburg 1952

Serraniculus Ginsburg 1952: 86 (*Serraniculus pumilio* Ginsburg 1952. Type by original designation). Gender masculine.

Western Atlantic, mainly on seagrass beds. Monotypic.

Serraniculus pumilio Ginsburg 1952

Serraniculus pumilio Ginsburg 1952: 88, fig. 2 (Off Cedar Keys, Florida, U.S.A. 29°05'00"N, 83°22'30"W, Fish Hawk station 7177). Holotype: USNM 133791. Paratypes: (20) FMNH 50103 (1); CAS-SU 50183-84 (1 1); USNM 101521 (1) 131015 (4) 144164-65 (1 1) 149971 (1) 154939-44 (1 1 1, 3 2 1).

Distribution: South Carolina and northern Gulf of Mexico to northern South America.

Genus *Serranus* Cuvier 1816

Serranus Cuvier 1816: 276 (type species *Perca cabrilla* Linnaeus 1758. Type designated by ICZN; on Official List, Opinion 93). Gender masculine.

Prionodes Jenyns 1840: 46 (type species *Prionodes fasciatus* Jenyns 1840. Type by monotypy). Gender masculine.

Mentiperca Gill 1862b: 236 (type species *Serranus luciopercanus* Poey 1852. Type by monotypy). Gender feminine.

Paracentropristis Klunzinger 1884: 16 (type species *Labrus hepatus* Linnaeus 1758. Type by monotypy). Gender feminine.

Serranellus Jordan in Jordan & Eigenmann 1890: 399, 404 (subgenus of *Serranus* Cuvier 1816, type species *Perca scribe* Linnaeus 1758. Type by original designation). Gender masculine.

Neanthias Norman 1931: 354 (type species *Neanthias accraensis* Norman 1931. Type by original designation). Gender masculine.

Novanthias Whitley 1937a: 122 [type species *Neanthias accraensis* Norman 1931. Type by being a replacement name; *nomen novum*, unneeded replacement name for *Neanthias* Norman supposed to be preoccupied by *Neanthias* Rye 1881 an incorrect subsequent spelling of *Neonanthias* Castelnau 1879 (= *Caprodon* Temminck & Schlegel 1843)]. Gender masculine.

The genus has been revised by Robins and Stark (1961); about 20 species according to Heemstra & Randall (1986); about 27 species according to Allen & Robertson (1992). Atlantic, Mediterranean, eastern Pacific and western Indian Ocean; 34 species are included here.

Serranus accraensis (Norman 1931)

Neanthias accraensis Norman 1931: 354, fig. 2 (Accra, Ghana). Holotype (unique): BMNH 1930.8.26.28.

Distribution: Eastern Atlantic from Senegal to Angola, including São Tomé and Príncipe Islands.

Comments: Taxonomic decision of C.L. Smith (Quero et al. 1990)

Serranus aequidens Gilbert 1890

Serranus aequidens Gilbert 1890: 61 (Gulf of California, Mexico 24°30'15"N 110°29'W, Albatross station 2996). Holotype (unique): USNM 44277.

Distribution: Gulf of California to Costa Rica.

Serranus aliciae Carvalho Filho & Ferreira 2013

Serranus aliciae Carvalho Filho & Ferreira 2013: 810, figs. 1-2 (Rio de Janeiro, Arraial do Cabo, Ilha de Cabo Frio, Saco dos Ingleses 23°00'25"S, 42°00'19"W, Brazil). Holotype: MNRJ 38911. Paratypes: CIUFES 2368 (1) 2370 (2); MNRJ 38912 (1), 38913 (2); MZUSP 109159 (2); ZUEC 6354 (1), 6355 (1), 6356 (1).

Distribution: Southeastern Brazil.

Serranus annularis (Günther 1880)

Centropristis annularis Günther 1880: 6, Pl. 1 (fig. C) (off Pernambuco, Brazil). Holotype (unique): BMNH 1879.5.14.181.

Prionodes nigropunctatus Hildebrand in Longley and Hildebrand 1940: 236, fig. 7 (Tortugas, Florida). Holotype (unique): USNM 108877.

Distribution: Bermuda and West Indies to Brazil.

Comments: *Prionodes nigropunctatus* Hildebrand is here recognized as a new synonym.

Serranus atricauda Günther 1874

Serranus atricauda Günther 1874: 230 (Essaouira, Morocco, eastern Atlantic). Lectotype: BMNH 1874.1.30.7. Paralectotypes: BMNH 1840.12.9.41 (right half skin) 1840.12.9.45 (right half skin) 1840.12.9.51 (left half skin) 1860.7.14.18-20 (3) 1860.7.14.22-24 (3) 1860.7.14.32 (1); SMF 1769 (1); ZMB 8710 (1). Lectotype designation not researched.

Distribution: South Spain, Algeria, Morocco and from the Bay of Biscay to Madeira, Azores, southward to the Canary Ids.

Serranus atrobranchus (Cuvier 1829)

Centropristes atrobranchus Cuvier in Cuvier & Valenciennes 1829: 45 (Brazil). Holotype (unique): MNHN 0000-6980.

Paracentropristes pomospilus Ginsburg 1952: 89, fig. 3 (off St. Joseph Id, Texas, U.S.A. 28°03'30"N, 95°41'30"W). Holotype: USNM 151883. Paratypes: (56) USNM 117183-86 (12 1 2 2) 133790 (7) 154901-21 (1 1 1 1, 3 1 1 1 1 1 2 2, 3 1 1 2 2 1 1, 3 2).

Distribution: South Florida and northern Gulf of Mexico to Brazil.

Comments: Taxonomic decisions of Robins and Starck (1961: 284).

Serranus baldwini (Evermann and Marsh 1899)

Prionodes baldwini Evermann and Marsh 1899: 353 (Off Culebra Id, 5.25 miles southwest of Culebritas lighthouse, Puerto Rico, Fish Hawk station 6093). Holotype: USNM 49361. Paratypes: (34) FMNH 3233 (3), 3260 (2); CAS-SU 8612 (2); USNM 50159-60 (3 15) 125564 [ex USBF 874] (4).

Paralabrax maculata Howell Rivero 1936: 59 (Matanzas, Cuba). Holotype: MCZ 34040. Paratypes: MCZ 34041 (3).

Distribution: Southern Florida, Bahamas, and Caribbean Sea.

Serranus bulleri Boulenger 1895

Serranus bulleri Boulenger 1895: 288, Pl. 10 (Las Penas, Jalisco, Mexico). Holotype: BMNH 1892.9.5.139.

Distribution: Eastern Pacific.

Comments: Listed as valid by Robins and Starck (1961: 291). Questionably a synonym of *Serranus psittacinus* Valenciennes 1846 according to Heemstra in Fischer et al. (1995: 1613).

Serranus cabrilla (Linnaeus 1758)

Perca cabrilla Linnaeus 1758: 294 (no locality). No type known.

Labrus chanus Forsskål 1775: 36 (Istanbul, Turkey, Marmara Sea). No type known.

Labrus hiatula Bonnaterre 1788: 116, Pl. 52 (fig. 198) (Mediterranean Sea) (objectively invalid, *nomen praeoccupatum*; preoccupied by *Labrus hiatula* Linnaeus 1766).

Holocentrus virescens Bloch 1790: 67, Pl 233 (West Indies [apparently erroneous]). Holotype (unique): ZMB 5532 (stuffed).

Holocentrus argentinus Bloch 1790: 73, Pl 235 (fig. 2) (no locality). Holotype (unique): ZMB 127.

Labrus salviani Suckow 1799: 462 (Mediterranean Sea). No types known.

Lutjanus serran Lacepède 1802: 177 (Mediterranean Sea). No type known.

Holocentrus flavus Risso 1810: 293 (Nice, France). No type known.

Labrus caprulensis Nardo 1824: 251 (Adriatic Sea). No type known.

Holocentrus chana Nardo 1827a: col. 480 (Adriatic Sea). No type known.

Holocentrus hians Nardo 1827a: col. 480 (Adriatic Sea). No types known.

Holocentrus hians Nardo 1827b: 31, 38 (Adriatic Sea). No types known.

Serranus oxyrhynchus Valenciennes in Cuvier & Valenciennes 1828: 320 (Malabar, India). Holotype (unique): MNHN 0000-7206.

Serranus sarnicus Griffith and Smith 1834: 276, Pl. 4 [no locality stated (Island of Guernsey)]. No type known.

Pseudoserranus bicolor Kossmann and Raüber 1877: 384, Pl. 3 (fig. 1) (Red Sea). No type known.

Distribution: Mediterranean and Black sea, eastern Atlantic from English Channel to Angola and Red Sea (immigrant from Mediterranean Sea). Records from South Africa north to KwaZulu-Natal are represented by *Serranus knysnaensis* (Heemstra and Anderson in Carpenter and De Angelis 2016:2409).

Comments: *Labrus salviani* Suckow is a new synonym of *S. cabrilla* and the name is based on the fish described by Salviani as *hiatula sive channa* (1554: 229). *Labrus caprulensis* Nardo, *Holocentrus chana* Nardo, *Holocentrus hians* Nardo, and *Serranus sarnicus* Griffith and Smith represent new synonyms. The type locality of *S. sarnicus* was not stated, however the specific name *sarnicus* is derived from Sarnia, the name used by Romans for the Island of Guernsey, English Channel.

Serranus chionaraia Robins and Starck II 1961

Serranus chionaraia Robins and Starck II 1961: 270, fig. 1c (2.5 miles south-southwest of Alligator Reef Light, Monroe County, Florida, U.S.A.). Holotype: ANSP 93808. Paratypes: FMNH 64994 (1); UF 207803 [ex UMML 7803] (1); USNM 108389 (1) 150115 (1) 191120 [ex UMML 7044] (1).

Distribution: South Florida to northern Caribbean.

Serranus drewesi Iwamoto 2018

Serranus (Paracentropristis) drewesi Iwamoto 2018: 11, fig. 8 (São Tomé Id). Holotype (unique): CAS 234050.

Distribution: known only from the holotype.

Serranus flaviventris (Cuvier 1829)

Dules flaviventris Cuvier in Cuvier & Valenciennes 1829: 113 (Brazil). Syntypes: MNHN A-3018 (3).

Centropristis brasiliensis Brisout de Barneville 1847: 131 (Bahia, Brazil). Holotype (unique): MNHN A-7612.

Centropristis dispilurus Günther 1867: 99 (Trinidad Id, West Indies). Syntypes: BMNH 2013.7.2.1-2 (2).

Distribution: Caribbean Sea to Uruguay.

Comments: Taxonomic decisions of Robins and Starck (1961: 274). *Centropristis brasiliensis*, here regarded as new synonym, has been placed in synonymy of *Dules auriga* (Bauchot et al. 1984: 62); then a second examination of the holotype by M.R. Meisler revealed that it is a synonym of *Serranus flaviventris* (Bauchot et al. 1984 *corrigendum*).

Serranus hepatus (Linnaeus 1758)

Labrus hepatus Linnaeus 1758: 282 (Mediterranean Sea). No types known.

Labrus fuscovittatus Bonnaterre 1788: 110 (Split, Croatia, Adriatic Sea). No types known.

Labrus adriaticus Gmelin 1789: 1297 (Adriatic Sea; based on *Labrus* no. 11 of Brünnich 1768: 98). No type known.

Holocentrus striatus Bloch 1790: 71, Pl. 235 (fig. 1) (no locality). Holotype (unique): ZMB 123.

Labrus fasciatus Walbaum 1792: 265 (no locality). No type known.

Labrus spalatensis Bloch & Schneider 1801: 256 (Split, Croatia). No types known.

Holocentrus triacanthus Lacepède 1802: 337, 377 (no locality). Holotype (unique): ZMB 123.

Lutjanus adriaticus Lacepède 1802: 184, 222 (Adriatic Sea). No type known.

Holocentrus siagonotus Delaroche 1809: 352, Pl. 22 (fig. 8) (Ibiza, Balears Ids, Spain). Syntypes: 2, whereabouts unknown.

Holocentrus adriaticus Nardo 1827a: 480 (Adriatic Sea). No type known.

Distribution: Mediterranean, Adriatic, and eastern Atlantic from Portugal to Morocco and the Canary Ids.

Comments: *Holocentrus adriaticus* Nardo is reported again in Nardo's *Prodromus* (Nardo 1827: 31) that was reproduced with additions (Anonymous 1864: 74). Cuvier in Cuvier & Valenciennes (1828: 234) established most of the synonymies. *Labrus fasciatus* Walbaum 1792 and *Labrus spalatensis* are new synonyms: these names are based on *Labrus n. 11* of Brünnich (1768: 98) which can be clearly identified as *Serranus hepatus*.

Serranus heterurus (Cadenat 1937)

Paracentropristis heterurus Cadenat 1937: 456, figs. 13-14 (West Africa). Syntypes: MHNL P.407 (1) 1 lost.

Distribution: Eastern Atlantic off Senegal to Ghana, including Cape Verde Ids and São Tomé Id.

Comments: Synonym of *S. sanctaehelenae* Boulenger 1895 according to Robins and Starck (1961: 290). Valid according to Rojas and Pequeño (2001: 166) and Iwamoto and Wirtz (2018: 15).

Serranus huascarii Steindachner 1900

Serranus huascarii Steindachner 1900: 208 (Paita, northern Peru). Holotype (unique): ZSM [old collection] destroyed in WWII. Species illustrated and described in more detail in Steindachner 1902:112, Pl. 2 (fig. 1).

Distribution: Peru and Chile.

Serranus inexpectatus Wirtz and Iwamoto 2018

Serranus (Paracentropristis) inexpectatus Wirtz and Iwamoto in Iwamoto and Wirtz 2018: 18, figs. 13-15 (off Angola). Holotype: ZSM 45041. Paratypes: IRSNB 9534 (1); ZSM 32516 (1).

Distribution: Senegal to Angola.

Serranus knysnaensis Gilchrist 1904

Serranus knysnaensis Gilchrist 1904: 2, Pl. 19 (Knysna, Cape Province, South Africa). Holotype (unique): SAM 11647.

Distribution: South Africa to Madagascar.

Serranus luciopercanus Poey 1852

Serranus luciopercanus Poey 1852: 56, Pl. 9 (fig. 1) (Havana, Cuba). Poey specimens: ZMB 5965 (1).

Distribution: Bahamas, Cuba, Grand Cayman, Jamaica, Honduras, Martinique, and Puerto Rico.

Serranus maytagi Robins and Starck 1961

Serranus maytagi Robins and Starck 1961: 288, fig. 5a (Caribbean Sea 16°38'N, 81°39'W, depth 150 fathoms). Holotype: ANSP 95130. Paratypes: FMNH 65004 (1), UF 204795 [ex UMML 4795] (1).

Distribution: New Caribbean between Jamaica and Honduras.

Serranus notospilus Longley 1935

Serranus notospilus Longley 1935: 87 (Tortugas, Florida, U.S.A.). Holotype: USNM 103765.

Distribution: Caribbean Sea and northern South America.

Serranus novemcinctus Kner 1864

Serranus novemcinctus Kner 1864: 483, Pl. 2 (fig. 1) (Cape of Good Hope and St. Paul Id., southern Indian Ocean). Syntypes: BMNH 1883.7.4.76 (1); NMW 20562 (1), 39230 (1), 39425-29 (1 2 1, 5 2).

Distribution: South western Indian Ocean from St. Paul and Amsterdam Ids, Cape of Good Hope and Walters Shoals south of Madagascar.

Serranus peruanus Lesson 1831

Serranus peruanus Lesson 1831: 234 (Paita, Peru). Syntypes: whereabouts unknown.

Distribution: Peru.

Comments: Listed as valid by Robins and Starck (1961: 291). Hildebrand (1946: 181) in his shore fishes of Peru wrote: "I am unable to determine from the original description whether it belongs to this genus or one of several others. [...] There is no serranid in the collections now at hand that has the combination of the fin formula given." No status given in ECoF (Fricke et al. 2019).

Serranus phoebe Poey 1851

Serranus phoebe Poey 1851: 55, Pl. 2 (fig. 3) (Cuba). Syntypes: MCZ 26949 (1), 31437 (1).

Distribution: Caribbean Sea to Brazil.

Serranus psittacinus Valenciennes 1846

Serranus psittacinus Valenciennes 1846: Pl. 1 (fig. 1) (Galápagos Ids.). Holotype (unique): MNHN 0000-7546 (dry).

Prionodes fasciatus Jenyns 1840: 47, Pl. 9 (fig. 1) (San Cristóbal Id [Chatham Id], Galápagos Ids). Holotype (unique): whereabouts unknown.

Serranus calopteryx Jordan & Gilbert 1882: 350 (Astillero estuary at Mazatlán, Sinaloa, western Mexico). Syntypes: USNM 28123 (5 or 6, now 2).

Distribution: Gulf of California to Peru.

Comments: The description of *S. psittacinus* appeared in 1855 on p.299. *P. fasciatus* collected from Galápagos Ids is a synonym according to van der Heyden and Findley (1988), Heemstra in Fischer et al. (1995) and Chirichigno and Vélez (1998: 360). Valid as *Prionodes fasciatus* according to Jordan et al. 1930 and Hildebrand (1946: 181).

Serranus pulcher Wirtz and Iwamoto 2016

Serranus pulcher Wirtz and Iwamoto 2016: 192, figs. 1-9 (São Tomé Id). Holotype: ZSM 43868. Paratypes: CAS, CIUFES, ZSM.

Distribution: Gulf of Guinea.

Serranus sanctaehelena Boulenger 1895

Serranus sanctaehelena Boulenger 1895: 289, Pl. 11 (St. Helena Id, eastern Atlantic). Syntypes: BMNH 1867.12.26.6-7 (1) 2004.12.8.1 (stuffed).

Distribution: Endemic to Ascension and St Helena Islands, including Bonaparte seamount and Grattan Bank (Brown et al. 2019).

Serranus scriba (Linnaeus 1758)

Perca marina Linnaeus 1758: 290 (Norway and Italy). Syntypes: NRM 9 (1), ?442 (1).

Perca scriba Linnaeus 1758: 292 (no locality stated). Holotype (unique): NRM 442.

Perca marina Brünnich 1768: 63 (Mediterranean Sea) (objectively invalid, *nomen praeoccupatum*; preoccupied by *Perca marina* Linnaeus 1758).

Holocentrus fasciatus Bloch 1790: 86, Pl. 240 (no locality stated). No type known.

Holocentrus marinus variegatus Suckow 1799: 536 (no locality). No type known.

Holocentrus maroccanus Bloch & Schneider 1801: 320 (Morocco). Holotype (unique): ZMB 5531 (left skin).

Lutjanus scriptura Lacepède 1802: 187, 229 (probably Mediterranean Sea). No types known.

Holocentrus variegatus Shaw 1803: 559 (Mediterranean Sea and Norway) (*nomen novum*, replacement name for *Perca marina* Linnaeus 1758). No types known.

Holocentrus argus Spinola 1807: 372 (Gulf of Genoa, Italy). No types known.

Lutianus crapa Rafinesque 1810: 52 (Sicily, Italy). No types known.

Serranus papilionaceus Valenciennes in Cuvier & Valenciennes 1832: 471 (Gorée, Senegal, Canary Ids.). Syntypes: MNHN 0000-7279 (2).

Distribution: Mediterranean, Adriatic, and Black Sea; in the eastern Atlantic from Bay of Biscay to South Africa, including Madeira and Azores.

Comments: *Perca marina* predates *Perca scriba* but see Fernholm and Wheeler (1983: 238-240). *Perca marina* Linnaeus is based on Artedi's *Perca lineis utrinque septem, transversis...* which is the *Perca marina* of Bellon, Salviani, Gesner, Johnston, Willoughby, and Ray. *Perca marina* Brünnich is regarded as independently described even though based on *de Perca marina* Salviani (1554: 225, fig. 89). *Holocentrus marinus variegatus* Suckow is based on *Perca marina* Brünnich. Suckow's account is very concise including few words about the colour pattern and the meristics, however erroneously reporting twenty dorsal spine instead of ten as stated by Brünnich. *Holocentrus marinus variegatus* represents a new synonym *S. scriba*. *Lutjanus scriptura* Lacepède 1802 is a new synonym.

Serranus socorroensis Allen & Robertson 1992

Serranus socorroensis Allen & Robertson 1992: 38, fig. 1 (Socorro Id, Revillagigedo Ids, off Western Mexico). Holotype: USNM 321179. Paratypes: USNM 321180 (1), WAM P.30390-001 (1).

Distribution: Revillagigedo Ids, eastern Pacific.

Serranus stilbostigma (Jordan & Bollman 1889)

Prionodes stilbostigma Jordan & Bollman 1889: 158 (About 4 kilometres off western side of San Cristól, Galápagos Ids, 0°50'S, 89°36'W, Albatross station 2809). Holotype (unique): USNM 44278.

Distribution: Off Ecuador, tropical eastern Pacific.

Serranus subligarius (Cope 1870)

Centropristis subligarius Cope 1870: 120 (Pensacola, Florida, U.S.A.). Holotype (unique): ANSP 13675.

Serranus auriga Boulenger 1895: 287 (new combination for *Dules auriga*).

Distribution: North Carolina to Florida and eastern Gulf of Mexico from southern tip of Florida to Texas.

Serranus tabacarius (Cuvier 1829)

Centropristes tabacarius Cuvier in Cuvier & Valenciennes 1829: 44 (Martinique Id, West Indies). Holotype (unique): MNHN 0000-6978.

Serranus flavescens Valenciennes in Cuvier & Valenciennes 1830: 506 (Martinique Id, West Indies). Holotype: MNHN 0000-7028.

Serranus jacome Poey 1851: 57, Pl. 2 (fig. 1) (Cuba). Syntypes: MCZ 10008 (1) 10067 (1).

Distribution: Bermuda, southern Florida and throughout West Indies.

Comments: Taxonomic decisions of Robins and Starck (1961: 280).

Serranus tico Allen & Robertson 1998

Serranus tico Allen & Robertson 1998: 115, fig. (Isla del Coco, eastern Pacific). No types known.

Distribution: Cocos and Malpelo Ids, eastern Pacific.

Serranus tigrinus (Bloch 1790)

Holocentrus tigrinus Bloch 1790: 77, Pl. 237 (Indian Ocean [erroneous type locality]). Holotype (unique): ZMB 165 (lost).

Perca tigrina Walbaum 1792: 35 (no locality stated). No types known.

Serranus praestigiator Poey 1851: 58, Pl. 2 (fig. 2) (Havana, Cuba). Holotype: USNM 21228. Poey specimens: ZMB 5966 (1).

Serranus capurri Perugia 1896: 15 (St. Pierre, Martinique Id, West Indies). Holotype (unique): MSNG 13496.

Prionodes tigris Fowler 1952: 93 (error for *tigrinus*).

Distribution: Bermuda, southern Florida, Bahamas and throughout the Caribbean to Brazil.

Comments: Taxonomic decisions of Robins and Starck (1961: 271). *Perca tigrina* Walbaum, based on Seba 1759, Pl 27 (fig. 15), was independently described of *Holocentrus tigrinus* Bloch of which it represents a secondary homonym (Parenti 2003: 501).

Serranus tortugarum Longley 1935

Serranus tortugarum Longley 1935: 87 (Tortugas Ids., Florida, U.S.A.). Lectotype: USNM 107329. Paralectotypes: USNM 108881 (1). Designation unknown.

Distribution: Southern Florida and West Indies.

Genera and species *incertae sedis*

Anthias koehleri Curtiss 1938: 92 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Anthias maene Curtiss 1938: 87 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Anthias tautiranus Curtiss 1938: 85 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Anthias theresae Curtiss 1938: 90 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Anthias toau Curtiss 1938: 87 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Anthias tuhara Curtiss 1938: 86 (Lagoon near Tautira, Tahiti). No types known. Unidentifiable.

Labrus guaza Linnaeus 1758: 285 ("Pelago" [= Caribbean coast of Venezuela]) *nomen dubium*. No types known.

Comments: This species has been regarded as a doubtful percoid since Cuvier and Valenciennes (1839: 8), but see additional notes under *Epinephelus marginatus*; the name has been corrected to *guaza* by Gmelin (1789: 1289) and then used as such in subsequent literature. Gmelin probably followed the original spelling used by Löffling (1758: 104) from which Linnaeus literally copied the short diagnosis of this fish (*Labrus cauda rotundata, radis membranam superantibus*), except that he used *gvaza* instead of *guaza* and corrected the original word *membranaceam* of Löffling with *membranam*. In early Latin texts the character "u" was often written as "v"; although there are no additional instances of such usage in Linnaeus 1758, it could have been possible that it was his intention to follow ancient Latin when treating this name. Heemstra and Randall (1993: 188, 264) regarded *L. guaza* as doubtful synonym of *Mycteroperca cidi*. They translated the short Linnaean description as "caudal fin rays projecting beyond the membrane". This opinion, however, remains debatable: i) the sentence *cauda rotundata* does not fit with the shape of the caudal fin of *Mycteroperca cidi*; ii) the word *caudatus* is not present in the original Linnaean description nor in the Löffling's text and it has been erroneously added by Heemstra and Randall (1993: 188); iii) the brief Löffling's description is *Labrus cauda rotundata; radiis membranaceam superantibus* and it includes below the diagnosis a short sentence which may be of help in understanding the meaning of the diagnosis: *Pinnae dorsali et caudae membrana inaequaliter alta*. This latter sentence is translated as "the membrane of the dorsal fin and the caudal fin are not uniformly high." Recently, it has been regarded as a synonym of *Epinephelus marginatus* (Lowe 1834) by Bilecenoğlu et al. (2002:79), following the opinion of a number of ichthyologists (e.g. Tortonese 1973:359).

Labrus loeflingii Walbaum 1792: 262 (no locality stated). Based on a fish described by Löffling (1758: 150).

Comments: Regarded as unidentifiable serranid by Parenti and Randall (2000: 61).

Hypoplectrodes nigroruber maculatus Whitley 1965: 106, fig. 3 (Tuggerah, New South Wales). Holotype: AMS IB.886. Paratype: AMS I.9953.

Comments: Differs from the nominate species by having IX dorsal spines instead of X, 54 lateral line scales vs 55-65 most frequently 57-59, and a dark blotch below the lateral line instead of five blackish sloping cross-bars on the body. Described from a holotype of 225 mm SL (275 mm TL) and a smaller paratype, this species might represent a new species not belonging to *Hypoplectrodes*.

Menephorus punctiferus Poey 1875: 95 (Cuba). Based on a hybrid of *Paranthias furcifer* and *Cephalopholis fulva* according to Smith (1966: 4). Holotype (unique): MCZ 33938.

Genus *Odontolabrax* Bleeker 1872

(type species *Odontolabrax typus* Bleeker 1872a: 149. Type by monotypy). Gender masculine.

Odontolabrax typus Bleeker 1872a: 150 (China).

Comments: Described from a painting; no type known; an incompletely and doubtful species placed in Serranidae according to Fowler (1937: 249).

Paralabrax fasciatus Bleeker 1872a: 150 (China); *nomen dubium*. No type known.

Comments: Based on a painting, placed by Bleeker in *Paralabrax* with a question mark.

Paralabrax guttatus Bleeker 1872a: 150 (China); *nomen dubium*. No types known.

Comments: Based on a painting, placed by Bleeker in *Paralabrax* with a question mark.

Planctanthias longifilis Trunov 1976: 266, fig. 4 (Near St. Helena Id, southeastern Atlantic 15°40'S, 7°01'W, depth 150 meters).

Distribution: southeastern Atlantic.

Comments: Treated as valid in *Pseudanthias* by Maugé in Quero et al. (1990: 708). Anderson and Springer (2005: 30) wrote: "Trunov (1976) described *Planctanthias longifilis* (considering it to be a serranid) from a specimen of 115 mm SL collected from a depth of 150 m at a locality west of the Id of St. Helena in the South Atlantic Ocean. We have been unsuccessful in attempts to borrow that specimen (ZISP 42033). Nevertheless, the original description and illustration in Trunov (1976) indicate that *P. longifilis* is probably a junior synonym of *Symphysanodon berryi*. This conclusion is supported by the examination of four IIPB specimens from the eastern South Atlantic, listed by Allué et al. (2000) as *P. longifilis*, that are representatives of *S. berryi* and is further supported by records of *S. berryi* from off Ascension Id and from a locality about 260 nautical miles north of St. Helena in the eastern South Atlantic.

Serranus dubius Poey 1860: 142 (Cuba). Based on a hybrid of *Paranthias furcifer* and *Cephalopholis fulva* according to Smith (1966: 1) and Heemstra and Randall (1993: 26). Holotype (unique): MCZ 10019.

Serranus cuvierii Smith 1832: 20. *Nomen dubium* in genus *Acanthistius* (Heemstra 2010: 61). No types known.

Serranus marmoratus Klunzinger 1884: 5, Pl. 2, fig. 3 (Red Sea). Holotype: ZMB 208 (not found).

Comments: Randall and Heemstra (1991: 201) treated the name as a *nomen dubium*, possibly with incorrect type locality.

Serranus mysticalis De Vis 1884b: 390 (Queensland). Holotype: QM (whereabouts unknown).

Comments: Incertae sedis in Serraninae (Hoese and Bray in Hoese et al. 2006: 1033).

Serranus tonsor Valenciennes in Cuvier & Valenciennes 1828: 262 (Brazil). No types known.

Comments: Based on a painting of Delalande from Brazil; status uncertain (Bauchot et al. 1984). Anderson and Heemstra (1980: 85) stated: "Valenciennes' description may be of some anthianine serranid, but we are unable to associate it with any known species. In view of this and in the absence of a type-specimen, we consider *Serranus tonsor* Valenciennes 1828, as unidentifiable".

Genus *Stigmatonotus* Peters 1877

(type species *Stigmatonotus australis* Peters 1877. Type by monotypy). Gender masculine.

Stigmatonotus australis Peters 1877: 838 (Dirk-Hartog, Western Australia). Holotype (unique): ZMB 9811.

Comments: Type lost; apparently based on a juvenile anthianine (Johnson 1984: 465; Anderson 2018:52).

Trisotropis immaculatus Poey 1955: 119 (Cuba). No types known.

Nomina nuda

Hepatus Artedi in Röse 1793:113. No species included.

Perca atomaria Günther 1859: 120.

Perca merus Cabrera, Perez and Haensler in Machado 1857: 24 (Western Andalusia).

Perca microps Broussonet in Cuvier & Valenciennes 1829: 62 (Jamaica).

Perca variolosa Forster in Cuvier & Valenciennes 1828: 354.

Plectropoma cyanostigma Bleeker 1845. In synonymy of *Plectropomus leopardus* (Lacepède) in Randall and Hoese (1986: 16) and Randall and Heemstra (1991: 294).

Pomacentrus punctatus Günther 1859: 141. Name mentioned under *Serranus hexagonatus*.

Serranus armatus Saville-Kent 1893: 369.

Serranus mauritiae Gudger 1929: 527. Name on a drawing by Pike from Mauritius; in the synonymy of *Cephalopholis urodeta* (Forster 1801).

Serranus rubriniger Saville-Kent 1893: 369.

Serranus subniger Saville-Kent 1893: 369.

Serranus suilexus Saville-Kent 1893: 369.

Serranus thyrsites Saville-Kent 1893: 369.

Taeniodon maculatus Döderlein in Steindachner and Döderlein 1883: 235. Name mentioned in passing under *Pikea* from Tokyo, Japan, in the synonymy of *Liopropoma maculatum* (Döderlein 1883).

Historical specimens

Serranus phaeton Valenciennes in Cuvier & Valenciennes 1828: 309.

Eteles (Uripaeton) microleptes Swainson 1839: 202 (*nomen novum* for *Serranus phaeton* Valenciennes; unneeded replacement name).

Comments: As remarked by Vaillant (1873, *Bull. Soc. philomath.* Paris: 94) the holotype is an animal not existent in nature, but a reconstruction with a body of a serranid (possibly *Serranus nigripinnis*) and a caudal part from a fistularid.

Genera and species described in Serranidae that are currently recognized to belong to different families.

Bodianus macrolepidotus Bloch 1790:53, Pl. 230 (East Indies). No types known.

Comments: Placement in Serranidae by the ECoF is erroneous; redescribed by Cuvier (1830:473) as *Glyphisodon macrolepidotus* this nominal species belongs to Pomacentridae, possibly the genus *Chrysiptera*.

Serranus porosus Bianconi 1862: 389, Pl. 11 (fig.2) (Mozambique). No type known.

Comments: This is an unidentified lethrind.

Family Caesioscorpidae n. fam.

Type genus *Caesioscorpis* Whitley 1945 containing the single species *Caesioscorpis theagenes* Whitley 1945. The species was listed among Serranidae by Paxton et al. (1989:490), but with note "family placement uncertain at present". Placed in Serranidae without explanation by Hutchins (2001:29), in Percoidei *incertae sedis* by Johnson (1984) and Nelson (1994) and in Serranidae *incertae sedis* by Nelson et al. (2016: 447). Also in Serranidae in the ECoF (Fricke et al. 2019b). The family-group name Caesioscorpidae was used without diagnosis nor indication of type genus by Allen (1985: 2227) and by Hutchins and Swainston (1986: 131) and therefore the name is not available from these authors. Caesioscorpidae n. fam. is here erected to accommodate the genus *Caesioscorpis* Whitley 1945 (type genus). The family is characterized by the following combination of characters: D XI 20-21; A III 18-20; vertebrae 10+15; branchiostegals 7; mouth small, terminal, upturned; premaxillaries highly protrusible; scales ctenoid, an extremely long ascending process of the premaxillary extending nearly to posterior margin of the orbit, maxillary with a unique S-shaped configuration, procurrent spur present and two uroneurals. *Caesioscorpis theagenes* is the only species of the genus.

Genus *Caesioscorpis* Whitley 1945

Caesioscorpis Whitley 1945: 20 (*Caesioscorpis theagenes* Whitley 1945. Type by original designation). Gender feminine.

One species.

Caesioscorpis theagenes Whitley 1945

Caesioscorpis theagenes Whitley 1945: 21, fig. 11 (about 30 mi. north of Carnarvon, Western Australia). Holotype (unique): WAM P.2795-001.

Distribution: coastal waters of western and southern Australia, forming small schools in protected areas of sand, reef and weed.

Family Hemilutjanidae n. fam.

Type genus *Hemilutjanus* Bleeker 1876 containing the single species *Hemilutjanus macrophthalmos* (Tschudi 1846). The species placed in the suborder Percoidei *incertae sedis* by Johnson (1984), in Serranidae *incertae sedis* by Hildebrand (1946) and Pequeño (1989). According to Johnson (1983: 781) and McCosker and Rosenblatt (2010: 191) *H. macrophthalmos* is not a serranid and we erected the new family Hemilutjanidae to accommodate this species. *Hemilutjanus macrophthalmos* can be distinguished from Serranidae for the presence of a posterior uroneural, presence of the procurrent spur, presence of a third preural radial cartilage and absence of the third opercular spine below the primary spine. Diagnosis: body deep, compressed, back high; head compressed, pointed, profile from snout to nape almost straight or slightly concave; snout 4.1-4.6 in head length; eye large 3.5-4.2 in head length; mouth large, oblique, lower jaw strongly projecting; maxillary broad. Teeth villiform in bands on jaws, vomer and palatine; preopercle serrated; 29-32 long, slender rakers on 1st gill arch; lateral line from operculum to tail following humped contour of back. Scales in lateral line 108-115; scales small, ctenoid, on head, snout and jaws. Dorsal fin X,10-11, the fourth spine longest; anal III,9, the third spine longest; dorsal and anal fin with a scaly sheath at base; pectoral rays 16-18 with scales at base; pelvic fins inserted immediately behind pectoral base, reaching the anus; caudal fin rather deeply emarginated, finely scaled. Color brownish, somewhat lighter above than below; lateral line embedded in a conspicuous dark streak, anal and caudal fins darker, pectorals yellowish. Size: average length 30 cm; maximum length 55 cm.

Genus *Hemilutjanus* Bleeker 1876

Hemilutjanus Bleeker 1876: 277 (*Plectropoma macrophthalmos* Tschudi 1846. Type by original designation). Gender masculine.

Pomodon Boulenger 1895: 144 (*Plectropoma macrophthalmos* Tschudi 1846. Type by being a replacement name; unneeded replacement for *Hemilutjanus* Bleeker 1876). Gender masculine.

Hemilutjanus macrophthalmos (Tschudi 1846)

Plectropoma macrophthalmos Tschudi 1846: 6 (Lurin, Peru). Syntypes: (several) ZMB 291 (1).

Distribution: Galápagos Ids and coasts of Peru and Chile over rocky bottoms.

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