**Family AMBASSIDAE** Asiatic Glassfishes

8 genera · 45 species · Taxonomic note: Some recent authors now use Chandidae instead of Ambassidae; the available names in date order are (1) Bogodidae Bleeker 1859, (2) Ambassidae Klunzinger 1870, and (3) Chandidae Fowler 1905.

*Ambassis* Cuvier 1828
tautonymous with *Centropomus ambassis* (see *A. ambassis*, below)

*Ambassis agassizii* Steindachner 1867
patronym not identified but almost certainly in honor of zoologist-geologist Louis Agassiz (1807-1873)

*Ambassis agrammus* Günther 1867
*a*--, without; *grammus*, line, referring to near-absence of lateral line (visible on foremost scale only)

*Ambassis ambassis* (Lacepède 1802)
latinization of *l’ambasse* (later spelled *l’ambache*), a manuscript name of unknown provenance coined by Commerçon that supposedly means “de deux sous” (two pennies); *sou* is an old French coin of very little value and “deux sous” is a 19th-century French euphemism for a cheap or worthless thing, referring (per Valenciennes 1867) to this glassfish’s abundance at Bourbon, Reunion Island, Mascarenes (type locality)

*Ambassis buton* Popta 1918
named for Buton (also spelled Butung), Indonesia, type locality

*Ambassis elongata* (Castelnau 1878)
elongate, referring to its more elongate body compared to *A. macleayi*, described in the same paper

*Ambassis fontoynonti* Pellegrin 1932
in honor of pathologist Maurice Fontoymont (1869-1948), president of the Malagasy Academy (this glassfish is endemic to Madagascar)

*Ambassis gymnocephalus* (Lacepède 1802)
gymnus, bare or naked; *cephalus*, head, referring to lack of scales on head and opercle

*Ambassis interrupta* Bleeker 1853
interrupted, very similar to *A. nalua* but easily distinguished by its interrupted lateral line

*Ambassis jacksoniensis* (Macleay 1881)
*-ensis*, suffix denoting place: Port Jackson, New South Wales, Australia, type locality

*Ambassis kopsii* Bleeker 1858
in honor of its discoverer and Bleeker’s friend, George François de Bruijn (sometimes spelled Bruyn) Kops (1820-1881), a Dutch naval officer who studied the geology, history and ethnography of the Riau Archipelago

*Ambassis macleayi* (Castelnau 1878)
in honor of William John Macleay (1820-1891), Scotland-born Australian politician and zoologist, who has “done so much for the zoology of Australia, and who most nobly devotes a large fortune to promote the knowledge of the productions of his adopted country”

*Ambassis macracanthus* Bleeker 1849
*macro-*, long; *acanthus*, spine, related to *A. commersonii* (=*ambassis*) and *A. nalua* but distinguished by longer second spine on first dorsal fin

*Ambassis marianus* Günther 1880
*-anus*, belonging to: Mary River, near Tiaro, Queensland, Australia, type locality

*Ambassis miops* Günther 1872
*mi-o-*, less; *ops*, eye, referring to smaller eyes than the related *A. urtaenia*

*Ambassis nalua* (Hamilton 1822)
from *Nalua-chanda*, Bengali vernacular for this glassfish
**Ambassis natalensis** Gilchrist & Thompson 1908
-ensis, suffix denoting place: Durban, Natal (now called KwaZulu-Natal), South Africa, type locality (but widely occurs in Red Sea and western Indian Ocean from South and East Africa, Madagascar and western Mascarenes east to Philippines, north to China and Taiwan, south to northern Australia)

**Ambassis thermalis** Cuvier 1829
Latin for hot spring, referring to occurrence in hot springs of Cania (now Kanniya), Sri Lanka (a nominal species, known only from original description)

**Ambassis urotaenia** Bleeker 1852
*oura*, tail; *taenia*, band, similar to *Ambassis commersonii (=Ambassis*) but “recognized at first glance” (translation) by a black, longitudinal band on either lobe of tail

**Ambassis vachellii** Richardson 1846
in honor of Rev. George Vachell (1799-1839), chaplain, British East India Company, who collected type

**Chanda Hamilton 1822**
local name for glassfishes in India (also spelled *Chenna*, *Channe* and *Chanaria*, based on dialect)

**Chanda nama** Hamilton 1822
from *Namchanda*, Assamese name for this glassfish in India

**Denariusa Whitley 1948**
denarius, an ancient Roman silver coin, allusion not explained but perhaps referring to *Ambassis*, said to mean “two sous [pennies],” perhaps referring to its silvery sheen in life

**Denariusa australis** (Steindachner 1867)
southern, referring to type locality in Queensland, Australia (also occurs in New Guinea)

**Denariusa bandata** Whitley 1948
banded, referring to up to six vertical dark brown bars on body

**Gymnochanda Fraser-Brunner 1955**
gymnos, bare or naked, referring to its lack of scales; *chanda*, then placed in the centropomid subfamily Chandinae [Boeseman 1957 independently chose the same name for this genus and its type species]

**Gymnochanda filamentosa** Fraser-Brunner 1955
filamentous, referring to greatly elongated rays of first-dorsal and anal fins of males [Boeseman 1957 independently chose the same genus and species names for this glassfish]

**Gymnochanda flamea** Roberts 1995
flaming, presumably referring to red dorsal- and anal-fin extensions on males, and red chromatophores on snout, predorsum and spinous (first) dorsal fin

**Gymnochanda limi** Kottelat 1995
in honor of Kelvin K. P. Lim, Lee Kong Chian Natural History Museum, National University of Singapore, for his “enthusiastic” support of Kottelat's visits and research

**Gymnochanda ploegi** Tan & Lim 2014
in memory of Dutch ichthyologist Alex Ploeg, a “good friend, fellow taxonomist, advisor and fellow conservationist against alien aquatic species; for his services to the ornamental fish trade in this region and abroad in his role as the Secretary General of the Ornamental Fish International” [Ploeg died, along with his wife and son and son's friend, when Malaysia Airlines flight MH17 was shot down by a missile over the Ukraine on 17 July 2014]

**Gymnochanda verae** Tan & Lim 2011
in honor of Vera Kasim, wife of good friend and fish exporter Gunawan Kasim, for her generous assistance and logistic support

**Paradoxodacna** Roberts 1989
paradoxus, strange or contrary to explanation; danko, bite, referring to its highly modified dentition: upper and lower jaws possess two rows of large conical teeth, outer row with crowns labially (towards the mouth) directed, inner row with crowns lingually (towards the tongue) directed; in addition, upper jaw has a separate innermost row of very small lingually directed conical teeth, and lower jaw has similar small teeth in anteriormost portion of inner tooth row, designed for eating scales (usually those of cyprinids)

**Paradoxodacna piratica** Roberts 1989
sea-robber or pirate, referring to its lepidophagous diet

**Parambassis** Bleeker 1874
para-, near, similar to *Ambassis* but differing in their dentition

**Parambassis alleni** (Datta & Chaudhuri 1993)
in honor of “noted” ichthyologist Gerald R. Allen (b. 1942), Western Australia Museum (Perth), “who had already contributed a worthy account of Australian ambassids”

**Parambassis baculis** (Hamilton 1822)
Latin for stick or rod, allusion not explained nor evident

**Parambassis notatus** (Blyth 1860)
marked, referring to a “large dusky” spot at humerus

**Parambassis ranga** (Hamilton 1822)
from *Ranga-chanda*, local Bengali name for this glassfish in India

**Parambassis robertsi** (Datta & Chaudhuri 1993)
in honor of “eminent” ichthyologist Tyson R. Roberts (b. 1940), then with the Tiburon Centre for Environmental Studies (California, USA) [misspelled “roberti” throughout description but “Roberts” is correctly spelled in the etymology]

**Parambassis serrata** Mayanglambam & Vishwanath 2015
serrated, referring to its serrated preopercular ridge

**Parambassis siamensis** (Fowler 1937)
-ensis, suffix denoting place: Siam (Thailand), type locality (occurs throughout Indo-Chinese Peninsula, from Laos, Thailand, Cambodia, Viet Nam, and peninsular Malaysia; introduced in Singapore and Indonesia)

**Parambassis tenasserimensis** Roberts 1995
-ensis, suffix denoting place: Tenasserim River basin of Myanmar and India, where it is endemic

**Parambassis thomassi** (Day 1870)
in honor of angler Henry Sullivan Thomas, Madras Civil Service, “who has paid great attention to the fishy inhabitants of his range” and procured the “finest specimen” of this glassfish (Day credited “H. E. Thomas”; the “E.” is likely an error, but Day’s spelling of “thomassi” with an extra “s” appears to be intentional since he had spelled it that way for two other fishes, *Hypselobarbus thomassi* and *Osteochilichthys thomassi*, both cyprinids)

**Parambassis vollmeri** Roberts 1995
in honor of the late Ernest Vollmer, Jr. (San Luis Obispo, California, USA), for his “interest in ichthological exploration”

**Parambassis waikhomi** Geetakumari & Basudha 2012
in honor of Waikhom Vishwanath, Manipur University, for his contributions to the ichthology of freshwater fishes of northeastern India (where this glassfish occurs)

**Parambassis wolffii** (Bleeker 1850)
in honor of Bleeker’s friend J. Wolff, military doctor, who collected type

**Pseudambassis** Bleeker 1874
pseudo, false, i.e., although this genus may superficially resemble *Ambassis*, such an appearance is false

**Pseudambassis lala** (Hamilton 1822)
from *Lal-chanda* (also spelled *Laal-chanda*), local Bengali name for this glassfish in India
**Tetracentrum Macleay 1883**

*tetra-* four; *centrum*, spine, referring to four strong spines in anal fin of *T. apogonoides*

**Tetracentrum apogonoides Macleay 1883**

-oideis, having the form of: *Apogon* (cardinalfishes), referring to its “general resemblance in form”

**Tetracentrum caudovittatus** (Norman 1935)

-caudo-, tail; *vittatus*, banded, referring to broad black longitudinal band extending from below middle of spinous (first) dorsal fin to base of caudal fin

**Tetracentrum honessi** (Schultz 1945)

in honor of Capt. Ralph F. Honess, United States Navy Reserve, who collected type

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**Family EMBIOTOCIDAE** Surfperches

13 genera - 27 species/subspecies

**Amphistichus Agassiz 1854**

*amphi-*, double; *stichus*, series, presumably referring to two series of slender, conical teeth in each jaw, the outer series longer

**Amphistichus argenteus** Agassiz 1854

silvery, referring to silvery sides (with “occasional indistinct and irregular transverse bands of olive color”)

**Amphistichus koelzi** (Hubbs 1933)

in honor of fisheries biologist Walter Koelz (1895-1989), a “well-known explorer,” for his studies on American coregonine (Salmoniformes) fishes

**Amphistichus rhodoterus** (Agassiz 1854)

*rhodo-*, rosy; *terus*, fin, referring to its red or pink dorsal, anal and caudal fins

**Brachyistius Gill 1862**

*brachy*, short; *istius*, sail, presumably referring to shorter dorsal fin, with 8 vs. 9-10 spines compared to most related genera

**Brachyistius frenatus** Gill 1862

bridled, referring to “longitudinal band on head interrupted by eye”

**Cymatogaster Gibbons 1854**

*cymatos*, fetus; *gaster*, belly, referring to their viviparity

**Cymatogaster aggregata aggregata** Gibbons 1854

crowded together, allusion not explained, possibly referring to its shoaling habits and abundance in sandy or muddy shallows

**Cymatogaster aggregata gracilis** Tarp 1952

slender, referring to its “graceful, slim form”

**Ditrema Temminck & Schlegel 1844**

*di-*, two; *trema*, aperture, referring to distinct openings for its digestive and reproductive organs

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Ditrema jordani Franz 1910
in honor of David Starr Jordan (1851-1931), who reviewed Japanese surfperches, including a color variety now recognized as this species, in 1902

Ditrema temminckii temminckii Bleeker 1853
in honor of Coenraad Jacob Temminck (1778-1858), director of the National Natural History Museum at Leiden, who, with Hermann Schlegel (1804-1884), named this genus in 1844 but did not include a species

Ditrema temminckii pacificum Katafuchi & Nakabo 2007
referring to its distribution from Pacific coast of Japan southward from Kanto District and Seto

Ditrema viride Oshima 1940
green, referring to its dorsally yellowish-green body when fresh

Embiotoca Agassiz 1853
embius, living (or living within); tokos, offspring, referring to how mother carries and nourishes her young in-utero

Embiotoca caryi Agassiz 1853
in honor of Thomas Cary (1824-1888) of San Francisco, businessman, amateur naturalist, and Agassiz’ brother-in-law; Cary was honored for procuring specimens that confirmed Jackson’s claims (see E. jacksoni) of viviparity

Embiotoca jacksoni Agassiz 1853
in honor of A. C. Jackson, who, while surveying port locations in San Francisco for the U.S. Navy, caught an unusual fish that had living fish inside, which he described as “perfect miniatures of the mother”; he sketched an outline of the fish and sent it along with a letter to Louis Agassiz (1807-1873), then the most famous zoologist in America

Embiotoca lateralis Agassiz 1854
of the side, presumably referring to “alternate silver-gray and rusty bands” on sides

Hyperprosopon Gibbons 1854
hypero-, above; prosopon, face or front, referring to upward-facing forehead (“Back irregularly arched with a slight incurvation along the frontal lobe”)

Hyperprosopon argenteum Gibbons 1854
silver, presumably referring to “silver white [color] below the lateral line”

Hyperprosopon ellipticum (Gibbons 1854)
eliptical, allusion not explained, presumably referring to body outline

Hypocritichthys Gill 1862
hypocrite, pretender, resembling Cymatogaster in form and size, thus belying its presumed affinities with Hyperprosopon (original genus); ichthys, fish

Hypocritichthys analis (Agassiz 1861)
anal, presumably referring to anal fin, which is anteriorly yellow with an inky blotch in the middle [described by Alexander Agassiz (1835-1910), son of Louis Agassiz, who described Amphistichus, Embiotoca and Rhacochilus]

Hysterocarpus Gibbons 1854
hystera, womb; karpos, fruit, referring to their viviparity

Hysterocarpus traskii traskii Gibbons 1854
in honor of Gibbons’ friend, John B. Trask (1824-1879), physician, amateur geologist, and founding member of the California Academy of Sciences, who obtained type specimens “through the kindness of Mr. Morris, from the fresh water lagoons of the Sacramento river, and from the river [itself], where they are found as high up as the fishermen have yet been"

Hysterocarpus traskii lagunae Hopkirk 1974
of laguna, Spanish for lake, referring to early Spanish residents’ name for Clear Lake (California, USA), type locality (also occurs in upper and lower Blue Lakes)

Hysterocarpus traskii pomo Hopkirk 1974
name for the Native American tribe that occupied the Russian River drainage and adjacent regions (California, USA), where this subspecies occurs, prior to the arrival of the Spanish

Micrometrus Gibbons 1854
micro-, small; metrus, measure, allusion not explained, perhaps referring to smaller size of M. minimus and Cymatogaster aggregata (its presumed congener) compared to other surfperches Gibbons had studied

Micrometrus aurora (Jordan & Gilbert 1880)
sunrise, presumably referring to light-orange or rose-red shading in opercles and lower half of sides

Micrometrus minimus (Gibbons 1854)
smallest, allusion not explained, perhaps referring to smaller size compared to Hyperprosopon argenteum and Hysterocarpus traskii, described in the same paper
**Neoditrema Steindachner 1883**

*neo-*-, new, i.e., a new genus similar in body shape to *Ditrema*

**Neoditrema ransonnetii Steindachner 1883**

in honor of Eugen von Ransonnet-Villez (1838-1926), Austrian diplomat, painter, lithographer, biologist and explorer, who procured type specimens at a market in Yokohama, Japan

**Phanerodon Girard 1854**

*phaneros*, visible or evident; *odon*, tooth, presumably referring to its large, subconical teeth

**Phanerodon atripes (Jordan & Gilbert 1880)**

*ater*, black; *pes*, foot, referring to its pelvic fins, which are fringed with black

**Phanerodon furcatus Girard 1854**

forked, referring to deeply forked caudal fin of adults

**Phanerodon vacca (Girard 1855)**

cow, allusion not explained, perhaps referring to its viviparity (i.e., gives birth to fully formed young the way a cow gives birth to a calf)

**Rhacochilus Agassiz 1854**

*racho-*-, ragged; *cheilus*, lip, referring to its thick, incised lips

**Rhacochilus toxotes Agassiz 1854**

bowman or archer, allusion not explained, perhaps referring to a vague resemblance to the archerfishes (Toxotidae: *Toxotes*)

**Zalembius Jordan & Evermann 1896**

*zale*, surging sea or storm; *embios*, living (or living within), presumably referring to its deepwater habitat (91 m or more) compared to confamilials, most of which live in the surf in very shallow waters

**Zalembius rosaceus (Jordan & Gilbert 1880)**

rosy, referring to its color in alcohol, "silvery, strongly infused with rose-red"

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**Family GRAMMATIDAE Basslets**

2 genera · 17 species

**Gramma Poey 1868**

*line*, referring to interrupted lateral line, almost touching outline of back, falling interrupted below last dorsal spine, then beginning again on caudal peduncle

**Gramma brasiliensis Sazima, Gasparini & Moura 1998**

*spi-, suffix denoting place: Brazilian [biogeographical] Province, where it is endemic

**Gramma dejongi Victor & Randall 2010**

in honor of marine aquarium-fish supplier Arie De Jong, De Jong Marinelife, who first recognized this new species and provided type specimens

**Gramma linki Starck & Colin 1978**

in honor of Edwin Link (1904-1981), developer of the diver lock-out submarine *Deep Diver*, which collected type; his "imaginative developments in undersea technology and generous support of marine science have made untouched realms of the sea accessible" (he also invented the flight simulator)

**Gramma loreto Poey 1868**

in honor of Loreto Martinez, who caught type specimen while fishing in the bay at Matanzas, Cuba, and who took advantage of the beach where she lived to enrich museums and educate lovers of natural history [presumably a noun in apposition, without the matronymic "ae"]

**Gramma melacara Böhlke & Randall 1963**

*melas*, black; *kara*, head, referring to black spot on top of head

**Lipogramma Böhlke 1960**

*lipo-*-, lacking or wanting, referring to absence of lateral line; *gramma*, type genus of family and/or referring to *Grammatonotus* (Spariformes: Callanthiidae), its presumed closest relative at the time

**Lipogramma anabantoides Böhlke 1960**

*anabantoides*, having the form of: with its "short, deep body, pointed face, small mouth and prolonged ventral fins, this species looks much more like an anabantid [Anabantiformes] than a bass—hence the specific name"

**Lipogramma barrettorum Baldwin, Nonaka & Robertson 2018**

*barrettorum*, commemorative suffix, plural: in honor of Craig Barrett (b. 1939), former chairman of Intel, and his wife Barbara (b. 1950), chairman of Aerospace Corporation, for their support of the Smithsonian's Deep Reef Observation Project (DROP), during which type was collected
Lipogramma evides Robins & Colin 1979
comely, presumably referring to its coloration: pale buff or cream body crossed by three dark, violet-brown to brownish black crossbars

Lipogramma flavescens Gilmore & Jones 1988
yellowish, referring to prominent body coloration: yellow or yellowish

Lipogramma haberorum Baldwin, Nonaka & Robertson 2016
-orum, commemorative suffix, plural: in honor of Spencer (hedge fund manager) and Tomoko Haber, who funded and participated in a submersible dive by the Smithsonian's Deep Reef Observation Project that resulted in the collection of a paratype [originally spelled "haberi," but since name honors more than one person, emendment is necessary]

Lipogramma klayi Randall 1963
in honor of aquarium-fish collector Gerrit Klay (later director of the Shark Quarium at Marathon, Florida, USA), who collected type

Lipogramma levinsoni Baldwin, Nonaka & Robertson 2016
in honor of fiber-optics entrepreneur Frank Levinson, for his generous, continuing support of research on neotropical biology at the Smithsonian Tropical Research Institute (Panama), where the third author works

Lipogramma regia Robins & Colin 1979
royal, presumably referring to its coloration: head with four broad lines, body crossed by six broad bands with pale centers, ocellus on body and soft portion of dorsal fin

Lipogramma robinsi Gilmore 1997
in honor of C. Richard Robins (b. 1928), “whose work and students have contributed significantly to our understanding of the neritic, bathyal and abyssal faunas of the tropical western Atlantic and Caribbean Sea” (where this basslet occurs)

Lipogramma rosea Gilbert 1979
rosy, referring to its body coloration

Lipogramma schrieri Baldwin, Nonaka & Robertson 2018
in honor of Adriaan (Dutch) Schrier, owner of Substation Curaçao, whose Curasub submersible collected type; although not built originally for scientific research, “Dutch’s enthusiastic support of research use of his sub has exponentially expanded our understanding of fish and invertebrate faunas of Caribbean mesophotic and deeper reefs”

Lipogramma trilineata Randall 1963
-tri-, three; lineata, lined, referring to three dark-edged blue lines on head and anteriorly on body, one mid-dorsally and one on each side extending posteriorly from upper edge of eye

Family OPISTOGNATHIDAE  Jawfishes
4 genera · 88 species

Anoptoplacus Smith-Vaniz 2017
anoptos, unseen; plakos, flat round plate, referring to its externally hidden and plate-like infraorbital bones

Anoptoplacus pygmaeus Smith-Vaniz 2017
dwarf or pygmy-like, referring to its diminutive size (20.5-22.5 mm SL)

Lonchopisthus Gill 1862
lonchos, spear; opisten, behind, referring to lanceolate caudal fin of O. micrognathus

Lonchopisthus ancistrus Smith-Vaniz & Walsh 2017
ankistron, Greek for fish hook, referring to strongly hooked posterior end of maxilla

Lonchopisthus higmani Mead 1959
in honor of James B. Higman (1922-2009), U.S. Fish and Wildlife Service, whose efforts aboard the Coquette, a shrimp trawler, helped secure a collection of fishes off Suriname, including type of this species

Lonchopisthus lemur (Myers 1935)
ghost, allusion not explained, perhaps referring to its “very large” (i.e., lemur-like) eyes and/or the fact that the color of the type specimen was “mostly lost” due to its poor condition

Lonchopisthus micrognathus (Poey 1860)
micro-, small; gnathus, jaw, presumably referring to its shorter maxillary compared to Opistognathus macrognathus (described by Poey in the same paper), its presumed congener at the time

Lonchopisthus sinuscalifornicus Castro-Aguirre & Villavicencio-Garayzar 1988
-sicus, belonging to: sinus, gulf, referring to Gulf of California, type locality

Opistognathus Cuvier 1816
opisten, behind; gnathus, jaw, referring to very large maxillaries prolonged backward in a long, flexible lamina, reaching to about base of pectoral fin

Opistognathus adelus Smith-Vaniz 2010
dim or obscure, referring to its uncertain phylogenetic relationships

Opistognathus afer Smith-Vaniz 2010
African, referring to type locality, Maputoland Reef, off the coast of South Africa

Opistognathus albicaudatus Smith-Vaniz 2011
albus, white; caudatus, tailed, referring to its “abruptly white” caudal fin

Opistognathus alleni Smith-Vaniz 2004
in honor of ichthyologist Gerald R. Allen (b. 1942), Western Australia Museum (Perth), who recognized the undescribed status of this species, generously made his material available to the author, and whose publications have contributed significantly to the knowledge of Indo-Pacific fishes

Opistognathus annulatus (Eibl-Eibesfeldt & Klausewitz 1961)
ringed, proposed as a subspecies of G. rosenbergii with dark-rimmed, bright ocellar patches along bases of dorsal and anal fins

Opistognathus aurifrons (Jordan & Thompson 1905)
aureus, gold; frons, forehead, referring to large golden (actually yellow) patch on top of head in living specimens

Opistognathus brasiliensis Smith-Vaniz 1997
-ensis, suffix denoting place: Brazil, off whose coast it appears to be endemic

Opistognathus brochus Bussing & Lavenberg 2003
projecting, referring to teeth in both jaws slightly protruding and interlocking, visible when mouth is closed

Opistognathus castelnaui Bleeker 1859
in honor of French naturalist Francis de Castelnau (1810-1880), who provided the illustration from which Bleeker proposed the name [often dated to 1860]

Opistognathus crassus Smith-Vaniz 2010
thick, fat or stout, referring to its general appearance

Opistognathus cuvierii Valenciennes 1836
in honor of Georges Cuvier (1769-1832), who proposed the genus in 1816 and “marked its true natural affinities” (translation); in addition, Valenciennes was Cuvier’s pupil and successor as author of the 22-volume Histoire Naturelle des Poissons (1828-1850)

Opistognathus cyanospilotus Smith-Vaniz 2009
cyanus, dark blue; spilotus, spotted, referring to characteristic blue markings on head
Opistognathus darwiniensis Macleay 1878
-ensis, suffix denoting place: Darwin, Northern Territory, Australia, type locality

Opistognathus decorus Smith-Vaniz & Yoshino 1985
beautiful, “especially appropriate for this attractive and brightly colored species”

Opistognathus dendriticus (Jordan & Richardson 1908)
dendritic, referring to top and sides of head and predorsal region with “numerous, variously connected, branching mucous channels, those immediately in front of the dorsal fin disposed in a tree-like pattern”

Opistognathus dipharus Smith-Vaniz 2010
di-, two; pharos, beacon, referring to pair of conspicuous pale basicaudal spots against a dark background

Opistognathus elizabethensis Smith-Vaniz 2004
-ensis, suffix denoting place: Elizabeth Reef, New South Wales, Australia, type locality

Opistognathus ensiferus Smith-Vaniz 2016
sword-bearing, referring to scimitar-shaped upper jaw

Opistognathus evermanni (Jordan & Snyder 1902)
in honor of ichthyologist Barton Warren Evermann (1853-1932), U.S. Fish Commission

Opistognathus eximius (Ogilby 1908)
beautiful, referring to its coloration (golden-yellow above and blue-purple below, with blue-edged yellow spots on sides, a deep-blue blotch on operculum, yellow stripes on dorsal fin, and yellow spots on anal fin)

Opistognathus fenmutis Acero P. & Franke 1993
FEN + Mutis, an arbitrary combination of letters in honor of the José Celestino Mutis Fund of the National Electric Finance Company (FEN, Bogotá), a patron of natural sciences in Colombia that financed the senior author’s studies

Opistognathus fossoris Bussing & Lavenberg 2003
adapted for digging, a behavioral trait of jawfishes (they typically reside in burrows that they dig in the sand using their mouths)

Opistognathus galapagensis Allen & Robertson 1991
-ensis, suffix denoting place: Urvina Bay, Isabela Island, Galápagos Islands (also occurs off Costa Rica)

Opistognathus gilberti Böhlke 1967
in honor of ichthyologist Carter R. Gilbert (b. 1930), Florida State Museum of Natural History, friend, colleague and collector of type

Opistognathus hongkongiensis Chan 1968
-ensis, suffix denoting place: about 32 miles south of Hong Kong (presumed type locality), via a wholesale fish market in Aberdeen, Hong Kong [replacement name for O. fasciatus Chan 1966, preoccupied by O. fasciatum (=macrognathus) Longley & Hildebrand 1940]

Opistognathus hopkinsi (Jordan & Snyder 1902)
in honor of philanthropist Timothy Hopkins (1859-1936) of Menlo Park, California, USA, for his “invaluable aid” in the authors’ explorations of Japan (where this jawfish occurs)

Opistognathus inornatus Ramsay & Ogilby 1887
undecorated, referring to uniform brown coloration

Opistognathus iyonis (Jordan & Thompson 1913)
-iz, genitive singular of: Iyo Province, Shikoku, Japan, type locality

Opistognathus jacksoniensis Macleay 1881
-ensis, suffix denoting place: Port Jackson, New South Wales, Australia, type locality

Opistognathus latabundus (Whitley 1937)
etymology not explained, probably latibulum, hiding place; -undus, adjectival suffix, i.e., hiding, presumably referring to how, at the first sign of danger, jawfishes seek refuge in the burrows they construct

Opistognathus leprocarus Smith-Vaniz 1997
lepros, scaly; kara, head, referring to well-developed cephalic squamation

Opistognathus liturus Smith-Vaniz & Yoshino 1985
blotted, referring to conspicuous dark markings on head

Opistognathus lonchurus Jordan & Gilbert 1882
lonchos, lance; oura, tail, referring to long caudal fin, its middle rays the longest

Opistognathus longinaris Smith-Vaniz 2010
longus, long; naris, nostril, referring to length of nasal tentacle on anterior nostril, at least four times maximum diameter of posterior nostril
Opistognathus macrognathus Poey 1860
*macro-* long; gnathus, jaw, presumably referring to maxillary reaching slightly beyond edge of opercle, longer than that of *Lonchopisthus micropogon* (described by Poey in the same paper), its presumed congener at the time

Opistognathus macrolepis Peters 1866
*macro-* long or large; lepis, scale, referring to larger scales on caudal peduncle than on body

Opistognathus margaretae Smith-Vaniz 1983
in honor of Margaret Mary Smith (1916-1987), first director of the J.L.B. Smith Institute of Ichthyology (now the South African Institute for Aquatic Biodiversity), for her “many and varied” contributions to South African ichthyology

Opistognathus maxillosus Poey 1860
pertaining to the jaw, allusion not explained, perhaps referring to color of maxillary, yellowish on its posterior border, blackish in the middle

Opistognathus megalepis Smith-Vaniz 1972
*mega-* large; lepis, scale, referring to larger and therefore fewer scales, referring to as few as 32 lateral scales rows compared to 48 in most other western Atlantic congeners

Opistognathus melachasme Smith-Vaniz 1972
melas, black; chasme, a yawn, referring to black markings on underside of maxilla and adjacent membranes, which are largely hidden from view except when gape is extended

Opistognathus muscatensis Smith-Vaniz 1983
*ensis*, suffix denoting place: Muscat, Oman, Gulf of Oman, Arabian Sea, type locality

Opistognathus nigromarginatus Rüppell 1830
*nigro-* black; marginatus, enclosed with a border, referring to conspicuous black stripe on lining of upper jaw and adjacent membranes that touches ventral margin of maxilla for most of its length

Opistognathus nothus Smith-Vaniz 1997
false or counterfeit, referring to erroneous initial belief that female holotype was the sexually dimorphic counterpart of *O. melachasme* males

Opistognathus panamaensis Allen & Robertson 1991
*ensis*, suffix denoting place: Panama, where type locality (Uva Island, Gulf of Chiriqui) is situated (but occurs north to the Gulf of California)

Opistognathus papuensis Bleeker 1868
*ensis*, suffix denoting place: Papua New Guinea (specifically, Waigeo, Indonesia), type locality (also occurs off Australia)

Opistognathus pardus Smith-Vaniz, Bineesh & Akhilesh 2012
leopard, referring to series of small, irregular, dark brown spots on a light-tan background, like those of a leopard, which completely cover head except for venter, upper jaw and lower half of opercle

Opistognathus punctatus Peters 1869
spotted, referring to any or all of the following: head finely speckled with black; body more coarsely and irregularly spotted; pectoral fin finely and closely speckled and dusky ventral fin similarly marked; dorsal fin finely spotted, the spots behind gradually forming the boundaries of white ocelli; base of the fins having rings of white around black spots, the upper part with dark rings around pale spots; caudal fin with pale spots; anal fin dark spots, those near the base the largest

Opistognathus randalli Smith-Vaniz 2009
in honor of ichthyologist John E. Randall (b. 1924), Bishop Museum (Honolulu), “whose generosity in sharing his collections, photographs and observations has greatly aided [the author’s] research, and in recognition of his numerous publications that have contributed to knowledge of reef fishes generally”

Opistognathus reticeps Smith-Vaniz 2004
*rete*, net; cep, head, referring to reticulated dorsum of head, its distinguishing feature

Opistognathus reticulatus (McKay 1969)
net-like or netted, referring to “pale chain-like reticulate network enclosing one or more dark brown spots” on body

Opistognathus rhomaleus Jordan & Gilbert 1882
able-bodied or strong, referring to its “rather robust” body, described at 40.64 cm in length, “unusually large for a member of this genus”

Opistognathus robinsi Smith-Vaniz 1997
in honor of C. Richard Robins (b. 1928), for his “many and varied contributions to ichthyology, and as a token of my appreciation for his guidance as teacher, friend and colleague”

Opistognathus rosenbergii Bleeker 1856
in honor of German naturalist and cartographer Hermann von Rosenberg (1817-1888), who collected type
Opistognathus rosenblatti Allen & Robertson 1991
in honor of Richard H. Rosenblatt (1930-2014), Scripps Institution of Oceanography, for his many contributions to the knowledge of eastern Pacific fishes

Opistognathus rufilineatus Smith-Vaniz & Allen 2007
rufus, reddish; lineatus, lined, referring to its striped color pattern

Opistognathus schrieri Smith-Vaniz 2017
in honor of Adriaan (Dutch) Schrier, owner of Substation Curaçao in Willemstad and the Curasub submersible, from which type was collected

Opistognathus scops (Jenkins & Evermann 1889)
named for Otus scops, the Scops Owl, derived from scopus, to watch, referring to its large eyes, 2½ times in head

Opistognathus seminudus Smith-Vaniz 2004
semi-, half; nudus, bare or naked, referring to scaleless anterior half of body

Opistognathus signatus Smith-Vaniz 1997
marked, referring to its prominent dark scale spots

Opistognathus simus Smith-Vaniz 2010
pug-nosed, referring to its blunt snout

Opistognathus smithvanizi Bussing & Lavenberg 2003
in honor of ichthyologist William F. Smith-Vaniz, for his “wide variety of studies, especially dealing with carangids and for setting the standards for the systematic treatment of opistognathids”

Opistognathus solorensis Bleeker 1853
-ensis, suffix denoting place: Solor Island, Indonesia, type locality (type now lost; widely occurs in western Pacific from Indonesia and Papua New Guinea, north to Brunei, Philippines and Taiwan, east to Palau)

Opistognathus stigmosus Smith-Vaniz 2004
full of marks, referring to conspicuous, small dark spots on head

Opistognathus thionyi Smith-Vaniz, Tornabene & Macieira 2018
in honor of colleague and “dear friend” Thiony Simon (1985-2016), who passed away during preparation of this description (diving accident while exploring mesophotic reefs); he collected most of the type material and dedicated his life to the study and conservation of Brazilian reef ecosystems

Opistognathus trimaculatus Hiramatsu & Endo 2013
tri-, three; maculatus, spotted, referring to three blotches on dorsal fin

Opistognathus variabilis Smith-Vaniz 2009
named for its highly variable color pattern and jaw morphology

Opistognathus verecundus Smith-Vaniz 2004
bashful or shy, referring to its burrow-dwelling habit

Opistognathus vicinus Smith-Vaniz, Tornabene & Macieira 2018
neighboring or near, referring to allopatric distribution and sister-species phylogenetic relationship of this Brazilian species and the Caribbean O. whitehursti

Opistognathus walkeri Bussing & Lavenberg 2003
in honor of fisheries biologist Boyd W. Walker (1917-2001), University of California, Los Angeles, for his “long-time“
contributions to the study of eastern Pacific fishes

Opistognathus whitehursti (Longley 1927)
in honor of Dr. D. D. Whitehurst, who collected specimens for the Smithsonian Institution, including type of this species [Longley later changed spelling to "whitehurstii" (with a second "i") but original spelling stands]

Stalix Jordan & Snyder 1902
forked stick, referring to how five anterior spines of dorsal fin are forked or Y-shaped, the arms of the "Y" extending transversely

Stalix davidsheni Klausewitz 1985
in honor of David Shen, who discovered this jawfish and photographed it; he has sponsored field studies in the Red Sea and other ichthyological research, and is also an "excellent" diver and underwater photographer

Stalix dicra Smith-Vaniz 1989
dicra, forked or cloven, referring to its forked dorsal-fin spines

Stalix eremia Smith-Vaniz 1989
eremia, solitary, referring to capture of a single individual of this species together with a series of S. dicra

Stalix flavida Smith-Vaniz 1989
yellowish, referring to its apparent predominant color

Stalix histrio Jordan & Snyder 1902
harlequin, referring to its bold color pattern

Stalix immaculata Xu & Zhan 1980
im-, without; maculatus, spotted, similar to S. omanensis but lacking spots on cheeks and top of head

Stalix moenensis (Popta 1922)
-ensis, suffix denoting place: Muna (Moena in Dutch) Island, Sunda Islands, Indonesia, type locality

Stalix novikovi Prokofiev 2015
in memory of ichthyologist Georgii Gennadievich Novikov (1942-2007), Moscow State University, with whom the first scheduled trawls in Nha Trang Bay, Viet Nam (type locality) in May 2005 were organized

Stalix omanensis Norman 1939
-ensis, suffix denoting place: Gulf of Oman, where it appears to be endemic

Stalix sheni Smith-Vaniz 1989
in honor of Shih (or Shieh)-Chieh Shen, National Taiwan University, who made holotype available, and for his contributions to knowledge of the fishes of Taiwan

Stalix toyoshio Shinohara 1999
named for the research vessel Toyoshio-maru, from which type was collected

Stalix versluysi (Weber 1913)
patronym not identified, almost certainly in honor of zoologist and anatomist Jan Versluys (1873-1939), Weber’s assistant on the Siboga Expedition to the Netherlands East Indies, during which type was collected

Family PLESIOPIDAE Roundheads
12 genera · 49 species

Subfamily Plesiopinae Roundheads or Longfins

Assessor Whitley 1935
assistant or helper, allusion not explained, perhaps referring to Francis (Frank) A. McNeill (1896-1969), Whitley’s colleague at the Australian Museum, who, as carcinologist, probably helped Whitley with his ichthyological collections (and for whom A. macneilli is named)

Assessor flavissimus Allen & Kuiter 1976
very yellow, referring to its “striking” yellow coloration

Assessor macneilli Whitley 1935
in honor of carcinologist Francis (Frank) A. McNeill (1896-1969, note latinization of “Mc” to “Mac”), Australian Museum, who collected type

Assessor randalli Allen & Kuiter 1976
in honor of ichthyologist John E. Randall (b. 1924), Bishop Museum (Honolulu), who collected type

Calloplesiops Fowler & Bean 1930
callos, beautiful, presumably referring to large white spots on C. niveus (=altivelis), a “very handsome fish”; Plesiops, type genus of family
**Calloplesiops altivelis** (Steindachner 1903)

*altus*, high; *velum*, sail, presumably referring to slightly elevated (and therefore sail-like) dorsal and/or anal fins

**Fraudella Whitley 1935**

eytymology not explained, perhaps *fraudus*, deceit, and -*ella*, a diminutive suffix, i.e., a small deceit, referring to how specimens of *E. carassius* were initially labeled as *Paraplesiops* and *Pseudochromis* (Pseudochromidae) in the collections of the fisheries research vessel *Endeavour*

**Fraudella carassiops** Whitley 1935

*Carassius*, goldfish genus; *ops*, appearance, referring to “brilliant” color in life, “like the rich reddish orange of a goldfish”

**Paraplesiops Bleeker 1875**

*para-*-, near, referring to resemblance to and/or affinity with *Plesiops*, in which type species (*P. blekeri*) had originally been placed

**Paraplesiops alisonae** Hoese & Kuiter 1984

in honor of the junior author’s wife, Alison; “She was the one who saw it first,” he said in a 2004 news article

**Paraplesiops blekeri** (Günther 1861)

patronym not identified but clearly in honor of Dutch medical doctor and ichthyologist Pieter Bleeker (1819-1878), who described *Plesiops corallicola* and *P. oxycephalus*, its presumed congeners at the time

**Paraplesiops meleagris** (Peters 1869)

guinea fowl, presumably referring to numerous bluish pearlescent spots on head, body and fins, resembling color pattern of a guinea fowl

**Paraplesiops poweri** Ogilby 1908

in honor of Percy Power, who caught type and presented it to the Amateur Fishermen’s Association of Queensland

**Paraplesiops sinclairi** Hutchins 1987

in memory of Nick Sinclair, who, while a member of the Western Australian Museum’s Department of Ichthyology, was involved in the collection of the holotype and two paratypes

**Plesiops Oken 1817**

based on “Les Pléiops” of Cuvier (1816), *pleio-*-, close; *ops*, eye, referring to close-set eyes of unnamed species (possibly *P. nigricans*)

**Plesiops auritus** Mooi 1995

eared, referring to dark spot at upper edge of opercle

**Plesiops cephalotaenia** Inger 1955

*cephalus*, head; *taenia*, band, referring to black stripe from center of orbital border to end of opercle

**Plesiops coeruleolineatus** Rüppell 1835

*coerulea*, blue; *lineatus*, lined, presumably referring to blue lines on dorsal and anal fins

**Plesiops corallicola** Bleeker 1853

museum name coined by van Hasselt, who provided a figure identified as *Cirriptera corallicola* at least 18 years before Bleeker’s description; -*icola*, dweller or inhabitant, i.e., coral dwelling, presumably referring to its habitat

**Plesiops facicavus** Mooi 1995

*facies*, face; *cavus*, excavated, referring to large sensory pores on head

**Plesiops genaricus** Mooi & Randall 1991

genvus, cheek; *rica*, veil, referring to expansion of skin on cheek that covers a large portion of the cheek scales

**Plesiops gracilis** Mooi & Randall 1991

slender, referring to elongate and thin first pelvic-fin ray

**Plesiops insularis** Mooi & Randall 1991

of islands, referring to its occurrence off islands in the Coral and Tasman seas, including Lord Howe Island and the nearby Elizabeth and Middleton reefs, Norfolk Island, New Caledonia, and Chesterfield Bank

**Plesiops malalaxus** Mooi 1995

*mala*, jaw; *laxus*, loose, referring to its maxilla, which lacks fibers of the adductor mandibulae attaching it to the skull, otherwise present in most congeners

**Plesiops multisquamata** Inger 1955

*multi-*-, many; *squamata*, scaled, referring to more upper lateral-line scales compared to congeners known at the time

**Plesiops mystaxus** Mooi 1995

moustache, referring to unique dark dorsal margin of maxilla

**Plesiops nakaharae** Tanaka 1917

in honor of Mr. Kōsaku Nakahara (no other information available), who was “fortunate enough to obtain this rare
species” from a fish monger at Tomita, Ise Province, Japan

*Plesiops nigricans* (Rüppell 1828)
blackish, presumably referring to its dark coloration

*Plesiops oxycephalus* Bleeker 1855
oxy, sharp or pointed; cephalus, head, referring to its pointed snout

*Plesiops polydactylus* Mooi 1995
poly, many; daktylos, finger, referring to high number of pectoral-fin rays compared to congeners

*Plesiops thysonopterus* Mooi 1995
thyson, tassel or fringe; pteryx, fin, referring to relatively high number of free, branched rays on pectoral fin

*Plesiops verecundus* Mooi 1995
unassuming, referring to lack of distinguishing or obvious features that make it different from congeners

*Steeneichthys* Allen & Randall 1985

in honor of Australian naturalist and underwater photographer Roger C. Steene (b. 1942), who greatly assisted the authors on numerous expeditions in the Indo-Pacific region, usually at his own expense, and helped collect type of *S. plesiopsus*; ichthys, fish

*Steeneichthys nativitatus* Allen 1987
nativity, referring to Christmas Island, type locality

*Steeneichthys plesiopsus* Allen & Randall 1985
Plesiops-like, referring to its similar appearance with members of that genus

*Trachinops* Günther 1861
etylology not explained; none of three possible explanations seem to apply: (1) trachys, rough and ops, eye; (2) trachys, rough and ops, appearance; (3) Trachinus, genus of weever-fishes (Perciformes: Trachinidae) and ops, appearance

*Trachinops brauni* Allen 1977
in honor of John Braun (Perth, Australia), for his “much appreciated assistance in the field”

*Trachinops caudimaculatus* McCoy 1890
caudus-, tail; maculatus, spotted, referring to large blackish blotch at base of caudal fin

*Trachinops noarlungae* Glover 1974
of Port Noarlunga, St. Vincent Gulf, South Australia, type locality

*Trachinops taeniatus* Günther 1861
banded, referring to white band commencing above orbit, running along upper part of back into base of soft portion of dorsal fin

*Subfamily Acanthoclininae* Spiny Basslets

*Acanthoclinus* Jenyns 1841
acanthus, spine, referring to “sharp and moderately strong” dorsal- and anal-fin spines; Clinus, presumed to be related to the blennies of that genus (Blenniiformes: Clinidae)

*Acanthoclinus fuscus* Jenyns 1841
dark or dusky, referring to its “nearly uniform bister brown” color in spirits

*Acanthoclinus littoreus* (Forster 1801)
littoral (i.e., close to shore), allusion not explained, possibly referring to its occurrence in shallow water (up to 15 m)

*Acanthoclinus marilynae* (Hardy 1985)
in honor of Hardy’s wife Marilyn, “whose encouragement and help have continued unabated over the years”

*Acanthoclinus matti* (Hardy 1985)
in honor of Hardy’s son Matthew, “who, even from an early age, has shown considerable awareness and appreciation of his natural surroundings”

*Acanthoclinus rua* (Hardy 1985)
Maori word variously meaning fish, two and pit, i.e., a New Zealand fish and only member of its genus with two sensory pits at the lower jaw symphysis

*Acanthoplesiops* Regan 1912
combination of Acanthoclinus and Plesiops, two related genera

*Acanthoplesiops cappuccino* Gill, Bogorodsky & Mal 2013
referring to its various brown and white markings, reminiscent of a cappuccino

*Acanthoplesiops echinatus* Smith-Vaniz & Johnson 1990
spiny, referring to superficially spine-like papillae that cover much of head of some specimens
**Acanthoplesiops hiatti** Schultz 1953

In honor of zoologist Robert W. Hiatt (1913-1997), University of Hawaii, part of Schultz’ team to the Marshall Islands in connection with the atom-bomb tests of Operation Crossroads (1946); he collected some paratypes and was one of three biologists Schultz praised for their skill in “swimming, diving, and collecting unusual fishes.”

**Acanthoplesiops indicus** (Day 1888)

Indian, referring to Madras, India, type locality (and endemic to Indian Ocean)

**Acanthoplesiops naka** Mooi & Gill 2004
derived from the first letters of the authors’ children’s names, Aaron and Adam (Mooi) and Nat and Kelly (Gill); minute size (9.9 mm SL) of holotype is reflective of the “still comparatively small sizes” of their children

**Acanthoplesiops psilogaster** Hardy 1985

_psilos_, smooth; _gaster_, belly, referring to absence of scales from most of its ventral surface anterior to the vent

**Beliops** Hardy 1985

combination of the names _Belonepterygion_ and _Acanthoplesiops_, referring to how it incorporates a number of characteristics from both genera

**Beliops batanensis** Smith-Vaniz & Johnson 1990

_-ensis_, suffix denoting place: Batan Island, Philippines, type locality, and also acknowledging the authors’ appreciation of the friendly and hospitable people of the Batanes Province

**Beliops xanthokrossos** Hardy 1985

_xanthos_, yellow; _krossos_, tassel, referring to yellow fleshy appendages on tips of dorsal- and anal-fin spines

**Belonepterygion** McCulloch 1915

_belone_, needle; _pterygion_, diminutive of _pteryx_, fin, allusion not explained nor evident

**Belonepterygion fasciolatum** (Ogilby 1889)

banded, referring to 9-16 narrow dark bands on body

**Notograptus** Günther 1867

_notus_, back; _graptus_, marked, presumably referring to numerous blue spots on dorsal fin and upper and lateral parts of body of _N. guttatus_

**Notograptus gregoryi** Whitley 1941

in honor of John Gregory, who “greatly assisted” Whitley in his capacity as Fisheries Officer at Shark Bay, Western Australia, type locality

**Notograptus guttatus** Günther 1867

spotted, referring to numerous blue spots on dorsal fin and upper and lateral parts of body

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**Family POLYCENTRIDAE** Afro-American Leaffishes

4 genera · 5 species

**Afronandus** Meinken 1955

_afrus-, African; _Nandus_, type (and only) genus of the Asian Leaffish family Nandidae (Anabantiformes), presumed to be an African representative of that family [replacement name for _Nandopsis_ Meinken 1954, preoccupied by _Nandopsis_ Gill 1862 in fishes]

**Afronandus sheljuzhkoii** (Meinken 1954)
in honor of Ukrainian-German entomologist Leo Sheljuzhko (1890-1969), one of the first aquarium amateurs and tropical-fish breeders in the Russian Empire, who collected type and sent specimens to Meinken

**Monocirrhus** Heckel 1840

_monoe-, one; _cirrhus_, curl or tendril, referring to fleshy barbel on lower lip

**Monocirrhus polyacanthus** Heckel 1840

_poly_, many; _acanthus_, spine, referring to numerous dorsal- and anal-fin spines
Polycentropsis Boulenger 1901

*opis*, appearance, presumably referring to the resemblance of this African genus to the South American *Polycentrus*

**Polycentropsis abbreviata** Boulenger 1901

short, presumably referring to its short but deep body, its depth twice in total length

**Polycentrus** Müller & Troschel 1849

*poly*, many; *centron*, thorn or spine, referring to numerous anal-fin spines

**Polycentrus jundia** Coutinho & Wosiacki 2014

*jundía*, Tupí word meaning "head with spine," referring to large number of serrations on head bones

**Polycentrus schomburgkii** Müller & Troschel 1849

in honor of explorer Robert Hermann Schomburgk (1804-1865), who collected type

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