The ETYFish Project

COMMENTS: = v. 24.0 - 27 June 2024

Order STOMIFORMES (also known as STOMIATIFORMES)

4 families · 66 genera/subgenera · 464 species/subspecies

Family GONOSTOMATIDAE Bristlemouths

8 genera · 34 species

Cyclothone Goode & Bean 1883

cyclo-, around; othone, linen or veil, allusion not explained, perhaps referring to thin, semitransparent, veil- or parchment-like body covering

Cyclothone acclinidens Garman 1899

acclinis, inclined; dens, teeth, referring to maxillary teeth "more or less closely inclined forward toward the jaw, slightly bent outward near the points"

Cyclothone alba Brauer 1906

albus, white, proposed as a lighter-colored (off-white) variety of C. signata

Cyclothone atraria Gilbert 1905

blackish, referring to uniform black coloration on head and body, and apparently also on vertical fins

Cyclothone braueri Jespersen & Tåning 1926

in honor of zoologist August Brauer (1863-1917), Berlin Zoological Museum, who, in 1906, was "the first to reduce to order the chaos in which the *Gonostoma-Cyclothone* group was then entangled"

Cyclothone kobayashii Miya 1994

in honor of B. N. Kobayashi, who first recognized this species as distinct from *C. pseudopallida* in a Ph.D. dissertation (1973)

Cyclothone livida Brauer 1902

black and blue, referring to its coloration

Cyclothone microdon (Günther 1878)

micro-, small; odon, tooth, referring to "very fine" teeth in upper jaw

Cyclothone obscura Brauer 1902

dark, referring to its dark black coloration

Cyclothone pallida Brauer 1902

pale or pallid, presumably referring to its coloration, although it is described as light to dark brown

Cyclothone parapallida Badcock 1982

para-, near, i.e., "closely related" to C. pallida

Cyclothone pseudoacclinidens Quéro 1974

pseudo-, false, referring to similarity to and previous misidentification as C. acclinidens

Cyclothone pseudopallida Mukhacheva 1964

pseudo-, false, referring to similarity to and previous misidentification as C. pallida

Cyclothone pygmaea Jespersen & Tåning 1926

dwarf, a "mere dwarf" compared to *C. microdon*, "the species whose name it has hitherto borne," attaining maturity at a length of 20 mm or less

Cyclothone signata Garman 1899

mark, presumably referring to any or all of the following: a pair of elongate spots on forehead; a series of spots or short transverse stripes on flank; spots between bases of dorsal- and anal-fin rays; one or two transverse streaks across bases of caudal-fin rays; a number of irregular flecks and dots on back and gill covers

Diplophos Günther 1873

diplo-, twofold; phos, light, referring to double series of phosphorescent organs that run along lower side of body and tail

Diplophos australis Ozawa, Oda & Ida 1990

southern, referring to distribution in the Southern Ocean and/or its being the most southernly species of the genus

Diplophos orientalis Matsubara 1940

eastern, described as an eastern (i.e., Japanese) subspecies of D. taenia

Diplophos pacificus Günther 1889

-icus, belonging to: mid-Pacific Ocean, type locality (but cosmopolitan in distribution), in contrast to *D. taenia*, known only from the Atlantic

Diplophos proximus Parr 1931

near, allusion not explained, possibly referring to its similarity to D. taenia

Diplophos rebainsi Krefft & Parin 1972

in honor of Eduard Rebains, captain of the Soviet research vessel Akademic Kurchatov, which collected type

Diplophos taenia Günther 1873

band or ribbon, allusion not explained, but there are two possibilities: 1) illustration shows a thin band running along the side, although this character is not mentioned in the text; 2) refers to band-shaped body

Diplophos vicinia Koeda & Ho 2019

Latin for neighbor, referring to last two AC (between anal-fin origin and end of caudal peduncle) photophores closer to each other than distance in between preceding photophores

Gonostoma Rafinesque 1810

gonos, angle; stoma, mouth, referring to angular jaws of G. denudatum

Gonostoma atlanticum Norman 1930

proposed as an Eastern Atlantic subspecies of *G. denudatum* (although it is circumglobal in warm seas, including the Hawaiian Islands)

Gonostoma denudatum Rafinesque 1810

denuded (i.e., made naked), referring to scaleless body, apparently having lost its thin deciduous scales

Manducus Goode & Bean 1896

Latin for glutton, allusion not explained, possibly referring to "very wide" mouth of M. maderensis

Manducus greyae (Johnson 1970)

in honor of the late Marion Grey (1911-1964), Chicago Natural History Museum, for her contributions to our knowledge of deep-sea fishes, especially gonostomatids

Manducus maderensis (Johnson 1890)

-ensis, suffix denoting place: Madeira, where type was obtained from a fish market in Funchal

Margrethia Jespersen & Tåning 1919

-ia, belonging to: Danish "investigation ship" Margrethe, from which type was collected

Margrethia obtusirostra Jespersen & Tåning 1919

obtusus, blunt; rostris, snout, allusion not explained, but illustration appears to show a blunt or rounded snout

Margrethia valentinae Parin 1982

in honor of Valentina Aleksandrovna Mukhacheva, specialist in gonostomatid systematics, who was the first to notice this species as distinct from *M. obtusirostra*

Sigmops Gill 1883

sigma, the letter S; ops, appearance, allusion not explained nor evident

Sigmops bathyphilus (Vaillant 1884)

bathy, deep; philos, fond of, referring to capture of type specimen at 2,220 m

Sigmops ebelingi (Grey 1960)

in honor of Alfred W. Ebeling (1931-2022), Scripps Institution of Oceanography, for his "interest and assistance" during the course of Grey's preliminary review of the family

Sigmops elongatus (Günther 1878)

presumably referring to its body shape, its height 1/7 its length (minus tail)

Sigmops gracilis (Günther 1878)

slender, referring to "very slender and narrow" tail

Sigmops longipinnis (Mukhacheva 1972)

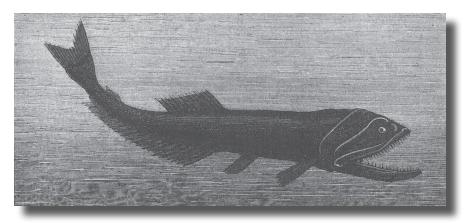
longus, long; pinnis, fin, referring to its longer paired fins compared to S. elongatus

Triplophos Brauer 1902

triplo-, threefold; phos, light, referring to triple series of phosphorescent organs that run along the sides

Triplophos hemingi (McArdle 1901)

in honor of Thomas Henry Heming (1856-?), Commander of the Royal Indian Marine Survey steamer *Investigator*, from which type was collected, for his interest in and the "trouble he has invariably taken" during the vessel's zoological work



Sigmops bathyphilus. From: Filhol, H. 1884. Explorations sous-marines. Voyage du "Talisman." La Nature (Paris) No. 559, 16 Feb. 1884: 182-186.

Zaphotias Goode & Bean 1898

za-, very; photos, light; -ias, suffix used in some Greek names of fishes (e.g., Xiphias), referring to row of single row of photophores on body [replacement name for Bonapartia Goode & Bean 1896, preoccupied in birds]

Zaphotias pedaliotus (Goode & Bean 1896)

having rudder-like fins, presumably referring to anterior third of anal fin, which is "greatly prolonged, falcate in form, giving to the lower outline of the fin a paraboloid curve," which can be said to resemble the rudder of a ship

Family STERNOPTYCHIDAE Marine Hatchetfishes

10 genera · 79 species

Subfamily Sternoptychinae

Argyropelecus Cocco 1829

argyros, silvery; pelekys, axe, referring to silvery pigment and hatchet-shaped body of A. hemigymnus

Argyropelecus aculeatus Valenciennes 1850

sharp-pointed, referring to double row of spines along lower side of tail

Argyropelecus affinis Garman 1899

related, presumably referring to its similarity to, and previous misidentification as, A. hemigymnus

Argyropelecus gigas Norman 1930

large, the largest marine hatchetfish, described at 87 mm SL (but reaching 110 mm)

Argyropelecus hemigymnus Cocco 1829

hemi-, half; *gymnus*, naked, allusion not explained, perhaps referring to phosphorescent spots that run along lower portion of body, which might create the impression that half of the otherwise scaleless body is scaled

Argyropelecus lychnus Garman 1899

light or lamp (hung from a ceiling), referring to luminous organs, which Garman called "lanterns," on head and body (a feature of the genus) [often misspelled *lynchus*]

Argyropelecus olfersii (Cuvier 1829)

in honor of German naturalist and diplomat Ignaz von Olfers (1793-1871), who provided specimens from the Canary Islands

Argyropelecus sladeni Regan 1908

in honor of British echinoderm biologist Percy Sladen (1849-1900) and the Percy Sladen Memorial Trust, which funded Indian Ocean expedition that collected type

Polyipnus Günther 1887

poly, many; ipnos, lantern, referring to its luminous organs, which, in P. spinosus, have reached "an extraordinary degree of development as regards size and number"

Polyipnus aquavitus Baird 1971

latinization of *akavit*, the Danish national drink, allusion not explained but possibly an indirect allusion to the research vessel *Galathea*, also Danish

Polyipnus asper Harold 1994

rough, referring to presence of denticles in the ACB (above anal fin) photophore scales

Polyipnus asteroides Schultz 1938

-oides, having the form of: aster, star, referring to its star-like photophores

Polyipnus bruuni Harold 1994

in honor of the research vessel *Anton Bruun* (named for the Danish marine biologist, 1901-1961), from which type was collected during the International Indian Ocean Expeditions

Polyipnus clarus Harold 1994

bright or distinct, referring to its very light pigmentation compared to *P. asteroides*, with which it has been confused

Polyipnus danae Harold 1990

named to acknowledge the contributions of the Carlsberg Foundation *Dana* Expeditions (1928-1930) to deep-sea ichthyology; the *Dana* also collected type

Polyipnus elongatus Borodulina 1979

elongate, referring to its characteristic body shape

Polyipnus fraseri Fowler 1934

in honor of marine biologist Charles McLean Fraser (1872-1946), University of British Columbia (Vancouver, Canada), "with pleasant memories of the Fourth Pacific Congress in Java 1929"

Polyipnus indicus Schultz 1961

-icus, belonging to: India, referring to distribution in Western Indian Ocean

Polyipnus inermis Borodulina 1981

unarmed, referring to its smooth photophore scales, i.e., without denticles

Polyipnus kiwiensis Baird 1971

-ensis, suffix denoting place: Kiwi, a native of New Zealand, where it is known from Red Mercury Island off the northeastern coast of North Island

Polyipnus laruei Vourey, Dupoux & Harold 2017

in honor of fisherman William Larue, who collected (and photographed) type

Polyipnus laternatus Garman 1899

-atus, provided with: lanterns (luminous organs), "very well developed in both disks and reflectors"

Polyipnus latirastrus Last & Harold 1994

latus, side; *rastrum*, comb or rake, referring to exceptionally long spine-like denticles on scales covering lateral surfaces of many photophores

Polyipnus limatulus Harold & Wessel 1998

diminutive of *limatus*, filed, polished or smoothed, referring to characteristic lack of denticles on scales covering ACB (above anal fin) photophores

Polyipnus matsubarai Schultz 1961

in honor of "esteemed colleague" Kiyomatsu Matsubara (1907-1968), ichthyologist, Imperial Fisheries Institute (Tokyo), who loaned specimens for study (and translated Japanese papers for Schultz)

Polyipnus meteori Kotthaus 1967

in honor of the German research vessel Meteor, from which type was collected

Polyipnus notatus Harold, Kemp & Shore 2016

marked, referring to "distinctive" shape of lateral pigment bar, narrow and triangular

Polyipnus nuttingi Gilbert 1905

in honor of Charles Cleveland Nutting (1858-1927), naturalist of the *Albatross* Hawaiian expedition in 1902, which collected type

Polyipnus oluolus Baird 1971

latinization of oluolo, Hawaiian for happy, allusion not explained nor evident

Polyipnus omphus Baird 1971

Marathi word that roughly translates as "unwanted," allusion not explained, perhaps alluding to its extremely disjunct distribution: a few specimens north of Madagascar in the Indian Ocean and one specimen from the Central Pacific north of the Marquesas Islands

Polyipnus ovatus Harold 1994

oval, referring to its general body shape

Polyipnus parini Borodulina 1979

in honor of ichthyologist Nikolai Vasil'evich Parin (1932-2012), Russian Academy of Sciences

Polyipnus paxtoni Harold 1989

in honor of John R. Paxton (b. 1938), Australian Museum (Sydney), for his contributions to the study of oceanic fishes, and for providing collections of this species

Polyipnus polli Schultz 1961

in honor of "esteemed colleague" Max Poll (1908-1991), Belgian ichthyologist, who loaned specimens to Schultz

Polyipnus ruggeri Baird 1971

of rugger, a slang word for rugby football, in honor of New Zealand's national sport, referring to this species' only known area of occurrences off Wellington, New Zealand, and west of the Kermadec Islands

Polyipnus soelae Harold 1994

of the Australian fishing vessel Soela, from which many specimens of this species were collected

Polyipnus spinifer Borodulina 1979

spina, spine; fero, to bear, referring to spinulose scales of anal photophores

Polyipnus spinosus Günther 1887

spiny, referring to pair of horizontal spines, pointing backwards, on the occiput

Polyipnus stereope Jordan & Starks 1904

stereos, solid, hard or three-dimensional; *ope*, opening, hole or cavity, allusion not explained, perhaps referring to large cavity in skull above and behind eye (not mentioned in text but clearly seen in illustration)

Polyipnus surugaensis Aizawa 1990

-ensis, suffix denoting place: Suruga Bay, Japan, only known area of occurrence

Polyipnus tridentifer McCulloch 1914

tri-, three and dentatus, toothed, i.e., having three points; fero, to bear, referring to three very large spines on each side of the post-temporals

Polyipnus triphanos Schultz 1938

tri-, three; *phanos*, light or torch, referring to characteristic position of the three supra-abdominal photophores (last or third organ above middle organ by a distance equal to its width; first organ extends above second organ a distance equal to 1.5-2.0 times its width)

Polyipnus unispinus Schultz 1938

uni-, one; spinus, one, referring to its single post-temporal spine

Sternoptyx Hermann 1781

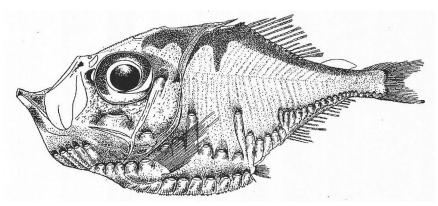
sternon, breast; ptyx, fold or plait, referring to fold of transparent skin on breast of S. diaphana

Sternoptyx diaphana Hermann 1781

transparent, referring to pellucid fold of skin on breast

Sternoptyx obscura Garman 1899

dark, presumably referring to upper half of body, "clouded brown or blackish"



Polyipnus spinifer. From: Borodulina, O. D. 1979. Composition of the "Polyipnus spinosus species complex" (Sternoptychidae, Osteichtyes) with a description of three new species of this genus. Voprosy Ikhtiologii v. 19 (no. 2) (art. 115): 198-208. [English translation in Journal of Ichthyology v. 19 (no. 2) 1980:1-10.]

Sternoptyx pseudobscura Baird 1971

pseudo-, false, i.e., although it may closely resemble S. obscura, such an appearance is false

Sternoptyx pseudodiaphana Borodulina 1977

pseudo-, false, referring to its close relationship to S. diaphana

Subfamily Maurolicinae

Araiophos Grey 1961

araios, few; phos, light, referring to reduced number of photophores compared to other maurolicine genera

Araiophos eastropas Ahlstrom & Moser 1969

derived from name of expedition, EASTROPAC (Eastern Tropical Pacific Ocean Survey Cruise), during which type material was collected

Araiophos gracilis Grey 1961

slender, referring to its "elongate, slender" body

Argyripnus Gilbert & Cramer 1897

argyros, silvery, presumably referring to primary body coloration in life of A. ephippiatus; ipnos, lantern, referring to numerous photophores on body

Argyripnus atlanticus Maul 1952

-icus, belonging to: Atlantic Ocean, referring to type locality at Funchal Harbor, Madeira, in the eastern Atlantic (also occurs in the Pacific)

Argyripnus boreopacificus Prokofiev 2017

borealis, northern, referring to its distribution in underwater elevations of the subtropical zone of the Northwestern Pacific Ocean (also, most northern record of this genus in the Pacific)

Argyripnus brocki Struhsaker 1973

in honor of the late Vernon E. Brock (1912-1971), ichthyologist-herpetologist, for his contributions to marine biology and his encouragement and support of Struhsaker's studies of Hawaiian bathyal fishes

Argyripnus electronus Parin 1992

elektron, ancient Greek for amber, referring to unofficial name used by Russian fishermen at seamount where it was collected, *gora Yantarnaya* (Amber seamount); also describes its general coloration, "reminiscent of light and semitransparent Baltic amber"

Argyripnus ephippiatus Gilbert & Cramer 1897

saddled, referring to black saddle-shaped markings behind head

Argyripnus hulleyi Quéro, Spitz & Vayne 2009

in honor of Percy (misstated as Paul) Alexander Hulley (b. 1941), Curator of Fishes, Iziko South African Museum, for assistance to the authors

Argyripnus iridescens McCulloch 1926

referring to iridescent colors on otherwise black occiput and portions of opercles, throat and chest

Argyripnus pharos Harold & Lancaster 2003

lighthouse or beacon, referring to dorsally displaced elements of VAV (ventral, pelvic-fin to anal-fin base) + ACA (above anal photophores) photophore cluster

Argyripnus scharpfi Prokofiev 2023

in honor of Christopher Scharpf (b. 1961), author of The ETYFish Project

Danaphos Bruun 1931

Dana, name of Danish fishery research vessel that collected type of D. ateroscopus; phos, light, referring to its "large and conspicuous" photophores

Danaphos asteroscopus Bruun 1931

aster, star; scopus, watcher, referring to its telescopic eyes

Danaphos oculatus (Garman 1899)

eyed, allusion not explained, perhaps referring to its large eyes, "nearly two fifths of the length of the head"

Maurolicus Cocco 1838

etymology not explained, presumably a latinization of *Maurolico*, honoring Italian mathematician-astronomer Francesco Maurolico (1494-1575), who taught and died in Messina, where type of *M. amethystinopunctatus* originated

Maurolicus amethystinopunctatus Cocco 1838

amethystino, small amethyst; punctatus, spotted, presumably referring to small photophores imbedded in skin of body, tail and lower sides of head

Maurolicus australis Hector 1875

southern, dubbed the "Southern Pearlside" by Hector, referring to its New Zealand type locality (occurs in southwestern Pacific and southeastern Indian oceans off Australia and New Zealand)

Maurolicus breviculus Parin & Kobyliansky 1993

somewhat short, referring to small size compared to congeners

Maurolicus imperatorius Parin & Kobyliansky 1993

-ius, pertaining to: Emperor submarine ridge, Central North Pacific, type locality

Maurolicus inventionis Parin & Kobyliansky 1993

invention or discovery, referring to Discovery Seamount (named for R/V Discovery), southeastern Atlantic, type locality

Maurolicus japonicus Ishikawa 1915

Japanese, referring to occurrence in Japanese waters: Japan Sea and Pacific coast of Japan (also off Hawaiian Islands)

Maurolicus javanicus Parin & Kobyliansky 1993

-icus, belonging to: Java, referring to type locality off the coast of Java in the Eastern Indian Ocean (also occurs in the West Pacific)

Maurolicus kornilovorum Parin & Kobyliansky 1993

-orum, commemorative suffix, plural: in honor of fisheries scientists Nikolay Pavlovich Kornilov and his wife Galina Nikolayevna Kornilova, for their help receiving samples, organizing research expeditions, and sharing data on the ecology and distribution of deep-sea fishes

Maurolicus mucronatus Klunzinger 1871

-atus, provided with: *mucro*-, sharp point, referring to slightly protruding lower jaw, which forms a small tip (Klunzinger said name refers to its "small chin" [translation], presumably the same feature)

Maurolicus muelleri (Gmelin 1789)

in honor of Danish naturalist Otto Friedrich Müller (1730-1784), who briefly described this species in his *Zoologiae Danicae Prodromus* (1766) but did not provide a Linnaean name

Maurolicus parvipinnis Vaillant 1888

parvus, small; pinnis, fin, presumably referring to smaller number of dorsal- and anal-fin rays compared to M. amethystinopunctatus

Maurolicus rudjakovi Parin & Kobyliansky 1993

in honor of Yuri Alexandrovich Rudjakov (b. 1938), researcher of suprabenthic plankton and participant of cruises to Nazca and Sala y Gomez ridges, Eastern South Pacific, where this species occurs

Maurolicus stehmanni Parin & Kobyliansky 1993

in honor of skate taxonomist Matthias Stehmann (b. 1943), Institut für Seefischerei (Hamburg), who participated with the authors in a number of expeditions and helped to collect type

Maurolicus walvisensis Parin & Kobyliansky 1993

-ensis, suffix denoting place: Port of Walvis Bay, Namibia, where it is common

Maurolicus weitzmani Parin & Kobyliansky 1993

in honor of Smithsonian ichthyologist Stanley H. Weitzman (1927-2017), for his 1974 monograph on sternoptychid osteology and phylogeny

Sonoda Grey 1959

named for Pearl Sonoda (1918-2015), then Assistant in the Division of Fishes, Chicago Natural History Museum, where Grey worked

Sonoda megalophthalma Grey 1959

megalo-, large; ophthalmos, eye, referring to its "very large" eyes

Sonoda paucilampa Grey 1960

paucus, few; lampa, torch, referring to "greatly reduced number" of AC (anal-fin base to caudal-fin base) photophores compared to S. megalophthalma

Thorophos Bruun 1931

named after *Thor*, the first Danish research ship specially equipped for scientific work on the oceans; *phos*, light, referring to its "large and conspicuous" photophores

Thorophos euryops Bruun 1931

eury, broad or wide; ops, eye, referring to its large eyes

Thorophos nexilis (Myers 1932)

tied together or interwoven, presumably referring to photophores on trunk, which are arranged in a "close set row

with a few breaks"

Valenciennellus Jordan & Evermann 1896

-ella, diminutive connoting endearment: named for Achille Valenciennes (1794-1865), author of most of *Histoire Naturelle des Poissons* (1828-1850), "a noble work which is the foundation of modern ichthyology"

Valenciennellus carlsbergi Bruun 1931

in honor of the Carlsberg Foundation, which financed the Dana fishery research cruise that collected type

Valenciennellus tripunctulatus (Esmark 1871)

tri-, three; punctulatus, diminutive of punctum, spot, i.e., having tiny spots, referring to luminous organs above anal-fin base, each with three silver little spots

Family PHOSICHTHYIDAE Lightfishes

7 genera · 24 species

Ichthyococcus Bonaparte 1840

ichthyo- fish; coccus, latinization of Cocco, referring to Italian naturalist-pharmacist Anastasio Cocco (1799-1854), who described three species of the family in 1838

Ichthyococcus australis Mukhacheva 1980

southern, referring to its distribution in the Southern Hemisphere

Ichthyococcus elongatus Imai 1941

elongate, referring to its more elongate body compared to *I. ovatus*

Ichthyococcus intermedius Mukhacheva 1980

intermediate in form between *I. ovatus* and *I. polli*

Ichthyococcus irregularis Rechnitzer & Böhlke 1958

referring to irregular arrangement of ventral photophores in front of pectoral fin

Ichthyococcus ovatus (Cocco 1838)

oval, referring to its body shape ("Il suo corpo è ovato")

Ichthyococcus parini Mukhacheva 1980

in honor of Nikolai Vasil'evich Parin (1932-2012), Russian Academy of Sciences, for his work on oceanic fishes

Ichthyococcus polli Blache 1964

in honor of Belgian ichthyologist Max Poll (1908-1991), for his "considérable" contributions to the science

Phosichthys Hutton 1872

phos, light, referring to series of phosphorescent spots along lower side of body and tail; ichthys, fish

Phosichthys argenteus Hutton 1872

silvery, referring to silvery sides and/or numerous silvery bands on abdomen

Pollichthys Grey 1959

Poll, in honor of Belgian ichthyologist Max Poll (1908-1991), who described P. mauli in 1953; ichthys, fish

Pollichthys mauli (Poll 1953)

in honor of ichthyologist-taxidermist Günther Edmund Maul (1909-1997), Museu Municipal do Funchal (Portugal), who described several deep-sea fishes

Polymetme McCulloch 1926

poly, many, allusion not explained, perhaps referring to numerous photophores on lower sides of body; metme, etymology not explained and meaning unknown (context suggests it is related to light)

Polymetme andriashevi Parin & Borodulina 1990

in honor of the "outstanding" ichthyologist and taxonomist Anatoly Petrovich Andriashev (1910-2009), on the occasion of his 80th birthday

Polymetme corythaeola (Alcock 1898)

corythos, helmet; aiolos, glittering, possibly referring to how "whole crown of head (from the snout to the occiput) appears to have been luminous"

Polymetme elongata (Matsubara 1938)

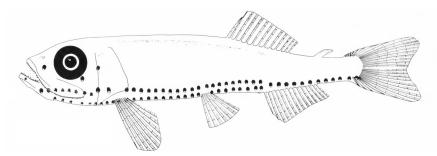
referring to more elongate body compared to P. illustris

Polymetme illustris McCulloch 1926

bright, lighted or lit up, presumably referring to numerous photophores on lower sides of body

Polymetme surugaensis (Matsubara 1943)

-ensis, suffix denoting place: Suruga Bay, Sea of Japan, where type locality (Heta) is situated



Vinciguerria mabahiss. From: Johnson, R. K. and R. M. Feltes. 1984. A new species of Vinciguerria (Salmoniformes: Photichthyidae) from the Red Sea and Gulf of Aqaba, with comments on the depauperacy of the Red Sea mesopelagic fish fauna. Fieldiana Zoology (New Series) No. 22: i-vi + 1-35.

Polymetme thaeocoryla Parin & Borodulina 1990

anagram of the specific name of P. corythaeola, its closest relative

Vinciguerria Jordan & Evermann 1896

-ia, belonging to: physician-ichthyologist Decio Vinciguerra (1856-1934), "director of the Acquario Romano, and one of the most active and scholarly of the naturalists of Italy"

Vinciguerria attenuata (Cocco 1838)

thin or tapered, referring to its thin, elongate body

Vinciguerria lucetia (Garman 1899)

named for Lucetius (also known as Lucerius), the giver of light in Roman mythology, referring to photophores on head and two lateral rows of pearl-like photophores on underside of body

Vinciguerria mabahiss Johnson & Feltes 1984

named for the Egyptian research ship *Mababiss*, "for her captain and crew, for the scientists aboard, for the organizing committee and supporters, and for scientists serving as authors of the 11 volumes (November 1935-May 1967) issued as Scientific Reports of the John Murray Expedition 1933-1934" to the Red Sea, where this species occurs

Vinciguerria nimbaria (Jordan & Williams 1895)

-ia, belonging to: nimbus, rain cloud, referring to how type specimens "were cast up in a storm and thrown by the waves on the deck of a vessel coming in from Australia" (somewhere northeast of Hawaii, actual type locality in the central Pacific not known)

Vinciguerria poweriae (Cocco 1838)

in honor of Cocco's friend and colleague Jeanne Villepreux-Power (1794-1871, also known as Jeanette Power), a marine biologist, famous for her work on the octopus *Argonauta argo* (she demonstrated that this octopus produced its own shell, rather than acquiring it from a different organism the way a hermit crab does; in addition, she was the first person to create aquaria for experimenting with aquatic organisms)

Woodsia Grey 1959

-ia, belonging to: Loren P. Woods (1914-1979), Curator of Fishes, Chicago Natural History Museum, where Grey worked

Woodsia meyerwaardeni Krefft 1973

in honor of Paul-Friedrich Meyer-Waarden (1902-1975), Executive Director, Bundesforschungsanstalt für Fischerei (Federal Research Centre for Fisheries), on the occasion of his 70th birthday, and for his contribution to the publication of Krefft's series of papers on fishes collected during research cruises of the *Walther Herwig* in South America

Woodsia nonsuchae (Beebe 1932)

of Nonsuch Island, Bermuda, near where type was collected at a depth of 600 fathoms

Yarrella Goode & Bean 1896

-ella, diminutive connoting endearment: named for English zoologist William Yarrell (1784-1856), whose A History of British Fishes (1835-36) is cited three times in Goode and Bean's monograph

Yarrella argenteola (Garman 1899)

diminutive of *argenteum*, silver, i.e., somewhat silvery, presumably referring to silvery coloration on cheeks, eyes and sides and/or skin below the scales "more or less of silver color"

Yarrella blackfordi Goode & Bean 1896

in honor of E. G. Blackford, president of the board of fish commissioners of the State of New York (USA), for "services in the promotion of ichthyological studies"

Family STOMIIDAE Barbled Dragonfishes

41 genera/subgenera · 328 species/subspecies

Subfamily Chauliodontinae Viperfishes

Chauliodus Bloch & Schneider 1801

chaulios, prominent; odus, tooth, referring to long, exserted teeth on both jaws

Chauliodus barbatus Garman 1899

bearded, referring to "more developed" barbel compared to C. sloani

Chauliodus danae Regan & Trewavas 1929

in honor of the Danish fishery research vessel Dana, from which type was collected

Chauliodus dentatus Garman 1899

toothed, referring to "stouter and more erect" maxillary teeth compared to C. sloani

Chauliodus macouni Bean 1890

in honor of explorer-naturalist John C. Macoun (1831-1920), Geological Survey of Canada

Chauliodus minimus Parin & Novikova 1974

least, referring to its dwarf size (up to 14.5 cm SL) compared to congeners

Chauliodus pammelas Alcock 1892

pam-, all; melas, black, referring to "uniform jet-black" coloration

Chauliodus schmidti Ege 1948

patronym not identified, probably in honor of Danish biologist Johannes Schmidt (1877-1933), who led the *Dana* fishery research cruise that collected type

Chauliodus sloani Bloch & Schneider 1801

in honor of Hans Sloane (1660-1753), British physician and naturalist, whose 1725 *Voyage to Jamaica* is cited several times by Bloch and Schneider (and whose collection formed the foundation of the British Museum)

Chauliodus vasnetzovi Novikova 1972

in honor of the late Vladimir Viktorovich Vasnetsov (1889-1953), "eminent" Russian ichthyologist (translation)

Subfamily Stomiinae Scaly Dragonfishes

Stomias Cuvier 1816

mouthy, referring to "mouth cleft almost to the gills" (translation)

Stomias affinis Günther 1887

related, presumably referring to its similarity to S. boa

Stomias atriventer Garman 1899

atri-, black; venter, abdomen, referring to its black belly

Stomias boa boa (Risso 1810)

a large serpent, described as having "the head of a reptile on the body of a pike" (translation)

Stomias boa ferox Reinhardt 1842

ferocious, allusion not explained, probably referring to ferocious appearance of its mouth and sharp fangs

Stomias brevibarbatus Ege 1918

brevis, short; barbatus, bearded, referring to its short barbel, just 3.5 mm

Stomias colubrinus Garman 1899

snake-like, referring to its long, slender body (a characteristic of the genus)

Stomias danae Ege 1933

in honor of the Danish fishery research vessel Dana, from which type was collected

Stomias gracilis Garman 1899

slender, presumably referring to its long, slender body (a characteristic of the genus)

Stomias lampropeltis Gibbs 1969

Lampropeltis, a genus of colubrid snakes, presumably referring to its snake-like appearance

Stomias longibarbatus (Brauer 1902)

longus, long; barbatus, bearded, referring to long barbel, seven times length of head and >1/3 of body length

Stomias nebulosus Alcock 1889

cloudy, presumably referring to a "salient white line" on abdomen, "which is resolved by the lens [of magnifying glass] into a linear cloud of thick-set white specks"

Stomias pacificus (Fedorov & Mel'chikova 1971)

-icus, belonging to: the first species of Macrostomias (genus at time of description) known from the Pacific Ocean

Subfamily Astronesthinae Snaggletooths

Astronesthes Richardson 1845

astro-, star; esthes, dress or clothing, i.e., clothed in stars, allusion not explained, presumably referring to skin "thickly studded" with white "microscopical papillæ" and/or ~22 luminous spots, "conspicuous to the naked eye, and very ornamental," between chin and ventral, which, on the black skin of A. niger, can be said to appear like stars in a black sky [historically treated as a masculine name based on incorrect translation of esthes ("to eat"); gender is feminine and the spellings of adjectival names have been adjusted]

Subgenus Astronesthes

Astronesthes atlantica Parin & Borodulina 1996

-icus, belonging to: Atlantic Ocean, where it is endemic to equatorial warm waters

Astronesthes barbata Kner 1860

bearded, referring to longer barbel compared to A. niger, its length nearly equal to half of its TL

Astronesthes bilobata Parin & Borodulina 1996

bi-, two; lobatus, lobed, referring to two flattened lobes at distal part of barbel

Astronesthes boulengeri Gilchrist 1902

in honor of ichthyologist-herpetologist George A. Boulenger (1858-1937), British Museum (Natural History), "for his ready assistance and advice"

Astronesthes caulophorus Regan & Trewavas 1929

etymology not explained, presumably *caulis*, stalk or stem; *phoros*, bearer, possibly referring to "stout" barbel, as long as head

Astronesthes cyanea (Brauer 1902)

blue, presumably referring to bluish-black coloration (with a slightly metallic sheen)

Astronesthes decorata Parin & Borodulina 2002

decorative or adorned, referring to greater development of spots of luminous tissue on body compared to other closely related species

Astronesthes dupliglandis Parin & Borodulina 1997

duplex, double; glandis, gland, referring to spot of luminous tissue on gill cover, formed by two vertical and closely attached glands

Astronesthes exsul Parin & Borodulina 2002

exiled or outcast, the only species of the *A. niger* species group that does not occur in the Atlantic (it occurs in the Indian Ocean)

Astronesthes formosana Liao, Chen & Shao 2006

-ana, belonging to: Formosa, or Taiwan, referring to its restricted distribution off the coast of that island

Astronesthes galapagensis Parin, Borodulina & Hulley 1999

-ensis, suffix denoting place: referring to numerous collection records east and west of the Galapagos Islands

Astronesthes gemmifer Goode & Bean 1896

gemma, gem; fero, to bear, referring to numerous "gem-like dots" on lower part of body

Astronesthes gibbsi Borodulina 1992

in honor of ichthyologist Robert H. Gibbs, Jr. (1929-1988), for outstanding contributions to our knowledge of stomiid fishes, and for being the first to recognize this species as undescribed

Astronesthes gudrunae Parin & Borodulina 2002

in honor of Gudrun Schulze, a technician of the fish collection of the Institut für Seefischerei (Hamburg), in "sincere gratitude for all her help" in the authors' study (translation)

Astronesthes haplophos Parin & Borodulina 2002

haplos, simple; phos, light, referring to weak development of aggregations of luminous tissue

Astronesthes illuminata Parin, Borodulina & Hulley 1999

illuminated, possessing more luminous patches than other species in the A. boulengeri species group

Astronesthes indica Brauer 1902

Indian, referring to type locality in western Indian Ocean (but widely occurs in the Indo-Pacific)

Astronesthes indopacifica Parin & Borodulina 1997

-icus, belonging to: referring to distribution in warm-water regions of the Indian and Pacific oceans

Astronesthes karsteni Parin & Borodulina 2002

in honor of Karsten E. Hartel (b. 1944), curator of fish collection at Harvard's Museum of Comparative Zoology, which housed many specimens used in the authors' study

Astronesthes kiyofujii Nakayama, Ohashi & Tanaka 2021

in honor of Hidetada Kiyofuji, who encouraged and supported the authors' study as group leader of the Skipjack and Albacore Group, Tuna and Skipjack Resources Division, National Research Institute of Far Seas Fisheries (Shizuoka, Japan)

Astronesthes kreffti Gibbs & McKinney 1988

in honor of Gerhard Krefft (1912-1993), Institut für Seefischerei (Hamburg), who enabled Gibbs to participate in the cruise whereupon this species was first recognized

Astronesthes lamellosa Goodyear & Gibbs 1970

-osus, suffix indicating abundance: lamella, plate, referring to numerous gill lamellae

Astronesthes lampara Parin & Borodulina 1998

Lampara, nickname of the ichthyological laboratory aboard the 4th (1968) cruise of the research vessel Akademik Kurchatov, during which type was collected; name refers to the lampara seine, a net used to catch Peruvian anchovies

Astronesthes leucopogon Regan & Trewavas 1929

leuco-, white; pogon, beard, referring to white barbel

Astronesthes lucibucca Parin & Borodulina 1996

luci-, from lucidus, light; bucca, cheek, referring to luminous patches in cheek region

Astronesthes luetkeni Regan & Trewavas 1929

in honor of Danish zoologist Christian Frederik Lütken (1827-1901), who reported this species as distinct from *A. richardsoni* in 1892 but did not name it

Astronesthes lupina Whitley 1941

presumably a diminutive of lupus, wolf, referring to its common name in Australia, "Little Wolf"

Astronesthes macropogon Goodyear & Gibbs 1970

macro-, long; pogon, beard, referring to longer barbel compared to the other Atlantic species, A. micropogon

Astronesthes micropogon Goodyear & Gibbs 1970

micro-, small; pogon, beard, referring to shorter barbel compared to the other Atlantic species, A. macropogon

Astronesthes neopogon Regan & Trewavas 1929

neo-, new; pogon, beard, allusion not explained, perhaps referring in some way to its barbel, described as "thick, laterally compressed, white, without any slender proximal part"

Astronesthes nigra Richardson 1845

black, referring to "pitch black" color of head and body

Astronesthes nigroides Gibbs & Aron 1960

-oides, having the form of: A. niger, which it resembles in structure of barbel

Astronesthes oligoa Parin & Borodulina 2002

oligos, few; oa, abbreviation (OA) used for lateral photophores, referring to fewer number of OA photophores in lateral row compared to A. niger

Astronesthes psychrolutes (Gibbs & Weitzman 1965)

psychro-, cold; lutes, a bather, referring to its midwater habitat

Astronesthes quasiindica Parin & Borodulina 1996

quasi-, seemingly but not really, referring to close similarity to A. indicus

Astronesthes richardsoni (Poey 1852)

in honor of surgeon-naturalist John Richardson (1787-1865), who proposed the genus in 1845 [placed in *Astronesthes* in text, but name, as *Chauliodus richardsoni*, dates to a plate published 5-6 months earlier]

Astronesthes similus Parr 1927

probably a variant or misspelling of *similis*, like or resembling, described as "very closely related" to *A*. [since etymology is unclear, name is treated as an indeclinable noun]

Astronesthes spatulifera Gibbs & McKinney 1988

spatula, a broad, flat tool; fero, to bear, referring to flat tip of barbel

Astronesthes splendida Brauer 1902

bright or shining, allusion not explained, presumably referring to luminescent barbel and/or luminescent organs on head and body

Astronesthes tanibe Parin & Borodulina 2001

in honor of Tat'yana Nikolaevna Belyanina (fish named formed by the first two letters of each of her names), P. P. Shirshov Institute of Oceanology (Moscow), a "well-known specialist" (translation) in oceanic fishes

Astronesthes tatyanae Parin & Borodulina 1998

in honor of Tatyana Borisovna Agafonova, All-Russian Research Institute of Fisheries and Oceanography (VNIRO), who collected type during 1989 cruise of the Fishery Research Vessel *Vozrozhdenie*

Astronesthes tchuvasovi Parin & Borodulina 1996

in honor of Vladimir Mikhailovich Chuvasov, lead technician of the Laboratory of Oceanic Fauna, P. P. Shirshov Institute of Oceanology (Moscow), and the authors' companion on many research cruises

Astronesthes trifibulata Gibbs, Amaoka & Haruta 1984

tri-, three; fibulatus, brooch-like or fitted with clasps (our translation; the authors did not provide one), "alluding to the three filaments characteristically present on the barbel bulb"

Astronesthes zetgibbsi Parin & Borodulina 1997

zeta, the letter Z; gibbsi, in honor of Robert H. Gibbs, Jr. (1929-1988), "one of the most authoritative investigators" (translation) of the family and other stomiiform fishes, who called this taxon "species Z" in his unpublished materials

Astronesthes zharovi Parin & Borodulina 1998

in honor of ichthyologist Viktor L. Zharov (1932-1998), one of the first Russian researchers of the epipelagic fishes of the World Ocean and a specialist in scombroid fishes

Subgenus Stomianodon Bleeker 1849

etymology not explained, presumably *stomion*, mouth and *odon*, tooth, perhaps referring in a general way to the strong dentition of stomiiform fishes

Astronesthes chrysophekadion (Bleeker 1849)

chrysos, gold; phekadion, presumably from phakoeides, shaped like a lentil, presumably referring to four series of golden spots on belly

Astronesthes fedorovi Parin & Borodulina 1994

in honor of ichthyologist Vladimir Vladimirovich Fedorov (1939-2011), Russian Academy of Sciences, who first reported this species as new in 1968

Astronesthes ijimai Tanaka 1908

in honor of zoologist Isao Ijima (also spelled Iijima, 1861-1921), Science College, Imperial University of Tokyo

Astronesthes lucifera Gilbert 1905

lux, light; *fero*, to bear, presumably referring to numerous photophores on body [often spelled *lucifer*; name is an adjective and not a reference to the Prince of Darkness]

Astronesthes martensii Klunzinger 1871

patronym not identified but probably in honor of German zoologist Karl Eduard von Martens (1831-1904)

Borostomias Regan 1908

boros, devouring or gluttonous, referring to very wide mouth of B. braueri (=elucens); Stomias, type genus of family

Borostomias abvssorum (Köhler 1896)

-orum, belonging to: the abyss, or deep sea, collected at a depth of 800 m

Borostomias antarcticus (Lönnberg 1905)

-icus, belonging to: the Antarctic, ship that collected type (and was destroyed in 1903 when it was crushed in the ice)

Borostomias elucens (Brauer 1906)

shining out, presumably referring to photophores on body and tail

Borostomias mononema (Regan & Trewavas 1929)

mono-, one; nema, thread, referring to one filament (compared to two) near end of barbel

Borostomias pacificus (Imai 1941)

-icus, belonging to: Pacific Ocean, the first Pacific representative of a genus (originally described in *Diplolychnus*, now a synonym) known only from the Atlantic

Borostomias panamensis Regan & Trewavas 1929

-ensis, suffix denoting place: Gulf of Panama, type locality

Eupogonesthes Parin & Borodulina 1993

eu-, true and pogon, beard, referring to long barbel with a markedly elongated glandular bulb at anterior portion of shaft; esthes, suffix referring to Astronesthes

Eupogonesthes xenicus Parin & Borodulina 1993

foreign or exotic, referring to unique structure of barbel (see genus) and intermediate position of genus between *Borostomias* and *Astronesthes*

Heterophotus Regan & Trewavas 1929

heteros, different; photos, light, referring to ventral photophores mostly in linear groups as opposed to in a series spread out along the body

Heterophotus ophistoma Regan & Trewavas 1929

ophis, snake; stoma, mouth, referring to "very wide" (and snake-like) cleft of mouth

Neonesthes Regan & Trewavas 1929

neo-, new; esthes, suffix referring to Astronesthes, i.e., a new genus of Astronesthes

Neonesthes capensis (Gilchrist & von Bonde 1924)

-ensis, suffix denoting place: the Cape, presumably referring to type locality off Table Bay, Cape Town, South Africa

Neonesthes microcephalus Norman 1930

micro-, small; cephalus, referring to smaller head and mouth compared to N. macrolychnus (=capensis)

Rhadinesthes Regan & Trewavas 1929

rhadinos, slender or tapering; esthes, suffix referring to Astronesthes, i.e., a "much more elongate" genus compared to others in the subfamily

Rhadinesthes decimus (Zugmayer 1911)

tenth, believed to be the tenth species of its genus (originally *Astronesthes*) known with any certainty at time of description

Subfamily Melanostomiinae Scaleless Black Dragonfishes

Bathophilus Giglioli 1882

bathys, deep; philios, loving, i.e., lover of the deep, referring to deep-sea habitat of B. nigerrimus

Subgenus Bathophilus

Bathophilus abarbatus Barnett & Gibbs 1968

a-, without; barbatus, bearded, only known member of genus without a barbel

Bathophilus altipinnis Beebe 1933

altus, high; pinnis, fin, presumably referring to pelvic fins inserted "extremely high" on sides, "about equidistant from dorsal and ventral profiles"

Bathophilus ater (Brauer 1902)

black, referring to body colorations (fins and barbel are white)

Bathophilus cwyanorum Barnett & Gibbs 1968

-orum, commemorative suffix, plural: "the surnames of two very capable colleagues who were largely responsible for the success of the midwater trawling program" that collected type in the Indian Ocean, Edward Cwynar (b. 1942) of Hawai'i and Shigeru Yano, a long-line fisherman (name includes both Cwynar and Yano)

Bathophilus digitatus (Welsh 1923)

having fingers, referring to having more pectoral-fin rays compared to the similar B. ater

Bathophilus filifer (Garman 1899)

filum, thread; fero, to bear, presumably referring to single "slender, filamentary" ray of pectoral fin

Bathophilus flemingi Aron & McCrery 1958

in honor of oceanographer Richard H. Fleming (1909-1989), University of Washington, for his contributions to "biological oceanography"

Bathophilus indicus (Brauer 1902)

Indian, referring to its distribution in the Indian Ocean

Bathophilus irregularis Norman 1930

irregular, probably referring to the "peculiar" arrangement of its lateral photophores

Bathophilus kingi Barnett & Gibbs 1968

in honor of Joseph E. King (1914-?), U.S. Fish and Wildlife Service, whose studies of central Pacific midwater fishes resulted in the first known specimens of this species

Bathophilus longipinnis (Pappenheim 1914)

longus, long; pinnis, fin, etymology not explained, perhaps referring to its extended pelvic-fin rays, which are said to extend past beginning of anal fin (but subsequent accounts do not show the pelvics reaching this far), or to its having longer fins (which ones not specified) compared to Melanostomias melanops, its presumed congener at the time

Bathophilus metallicus (Welsh 1923)

referring to its color in alcohol, "head and body dark greenish bronze with bright metallic reflections"

Bathophilus nigerrimus Giglioli 1882

very black, a "singular fish of deep black colour with small eyes, a naked skin, and a most abyssal physiognomy"

Bathophilus novicki Barnett & Gibbs 1968

in honor of Yale biologist Alvin Novick (1925-2005), "who taught the senior author how to see in the dark" (Barnett attended Yale where Novick was a specialist in the sonar systems of bats)

Bathophilus pawneei Parr 1927

named for *Pawnee II*, yacht (specially designed for deep-sea trawling and research) from which type was collected, owned by businessman Harry Payne Bingham (1887-1955), who sponsored expedition and founded the Bingham Oceanographic Collection at Yale University

Bathophilus proximus Regan & Trewavas 1930

near, presumably referring to its similarity to B. nigerrimus

Bathophilus schizochirus Regan & Trewavas 1930

schizo-, to split or cleave; cheiros, hand, referring to its pectoral-fin rays, which comprise two "well-separated" groups

Bathophilus vaillanti (Zugmayer 1911)

in honor of Léon Vaillant (1834-1914), zoologist, Muséum national d'Histoire naturelle (Paris)

Subgenus Notopodichthys Regan & Trewavas 1930

notos, back and podus, foot, referring to pelvic fins inserted much closer to dorsal than ventral profile; ichthys, fish

Bathophilus brevis Regan & Trewavas 1930

short, referring to much shorter, deeper body compared to congeners

Chirostomias Regan & Trewavas 1930

cheiros, hand, presumably referring to pectoral fins, "far forward and close together; sixth ray longest, sometimes more than twice as long as head, with a club-shaped luminous swelling"; *Stomias*, type genus of family

Chirostomias pliopterus Regan & Trewavas 1930

pleion, more; pterus, fin, possibly referring to presence of small adipose fin, unique in family

Eustomias Vaillant 1884

eu-, "tout à fait," according to Vaillant (1888), a French term that means absolutely, exactly or completely; stomias, mouthy, probably referring to its jaws "strongly armed with teeth" (translation) and/or its affinity to Stomias, type genus of family

Subgenus Eustomias

Eustomias obscurus Vaillant 1884

dark, referring to its "deep velvety black" coloration (translation from Vaillant [1888] but name dates to 1884)

Subgenus Biradiostomias Gomon & Gibbs 1985

bi-, two and radius, ray, referring to two separate pectoral-fin rays, characteristic of the subgenus; Stomias, type genus of family

Eustomias brevibarbatus Parr 1927

brevis, short; barbatus, bearded, referring to its short barbel, 33% longer than head or less

Eustomias contiguus Gomon & Gibbs 1985

adjacent or bordering, referring to two juxtaposed bulbs near end of barbel

Eustomias digitatus Gomon & Gibbs 1985

having fingers, referring to long projections from barbel bulb

Eustomias dispar Gomon & Gibbs 1985

different or unequal, referring to contrasting shapes of terminal barbel bulbs

Eustomias dubius Parr 1927

doubtful or uncertain, allusion not explained (described from one specimen with lower jaw "torn away")

Eustomias globulifer Regan & Trewavas 1930

globus, ball or sphere; fero, to bear, presumably referring to "small oval bulb" on barbel

Eustomias hulleyi Gomon & Gibbs 1985

in honor of colleague and shipmate Percy Alexander Hulley (b. 1941), Curator of Fishes, Iziko South African Museum, "who so appreciated the shapes and colors of *Eustomias* [barbel] bulbs"

Eustomias hypopsilus Gomon & Gibbs 1985

hypo-, less than; psilos, bald or naked, referring to absence, or virtual absence, of filaments on barbel bulbs

Eustomias ignotus Gomon & Gibbs 1985

unknown or strange, referring to its uncertain taxonomic status (with growth, elongate barbel bulb of *E. leptobolus* could divide in two, making the two species difficult to distinguish)

Eustomias ioani Parin & Pokhil'skaya 1974

in honor of IOAN, acronym for Institut Okeanologii Akademii Nauk (Institute of Oceanology, Academy of Sciences of the USSR), which published the description and where the authors worked

Eustomias leptobolus Regan & Trewavas 1930

lepto-, thin; bolus, lump or morsel, referring to elongate barbel bulb

Eustomias macrophthalmus Parr 1927

marco-, large; ophthalmos, eye, referring to its "very large" eyes, diameter ~1/4 length of head

Eustomias micropterygius Parr 1927

micro-, small; pterygius, finned, referring to "very small" paired fins, the ventrals less than half length of head

Eustomias metamelas Gomon & Gibbs 1985

meta, between; melas, black, referring to darkly pigmented axis between barbel bulbs

Eustomias polyaster Parr 1927

poly, many; aster, star, presumably referring to three or more conspicuous luminous bodies (bulbs) on barbel

Eustomias precarius Gomon & Gibbs 1985

doubtful or uncertain, referring to the "uncertainty involved in basing a new species on a single specimen" (E. hulleyi, pyrifer and xenobolus resemble this species in one way or another)

Eustomias pyrifer Regan & Trewavas 1930

pyrum, pear; fero, to bear, referring to pear-shaped barbel bulb

Eustomias quadrifilis Gomon & Gibbs 1985

quadri-, four; filum, thread, referring to two pairs of filaments at end of barbel

Eustomias schiffi Beebe 1932

in memory of American banker Mortimer L. Schiff (1877-1931), "whose interest in the work of this expedition [to Bermuda] was very deep and sincere"

Eustomias securicula Prokofiev & Orlov 2022

diminutive of securis, Latin for hatchet, i.e., a small hatchet, referring to characteristic shape of barbel bulb, narrowed ventrally, with a sharp lower edge

Eustomias variabilis Regan & Trewavas 1930

variable, referring to distal bulb of barbel, which is either elongate, ovate or pear-shaped

Eustomias xenobolus Regan & Trewavas 1930

xenos, different; bolus, lump or morsel, referring to barbel bulb divided into a proximal slender half and a broadly rounded distal half

Subgenus Dinematochirus Regan & Trewavas 1930

di-, two; nemato-, thread; cheiros, hand, referring to two filamentous rays of pelvic fin (authors did not mention that these rays are closely bound together in a black membrane)

Eustomias achirus Parin & Pokhil'skaya 1974

a-, without; *cheiros*, hand, referring to absence of pectoral-fin rays

Eustomias aequatorialis Clarke 1998

referring to its occurrence in the eastern equatorial Atlantic

Eustomias albibulbus Clarke 2001

albi-, white; bulbus, bulb, referring to completely unpigmented barbel bulb

Eustomias bigelowi Welsh 1923

in honor of marine biologist Henry B. Bigelow (1879-1967), Museum of Comparative Zoology, Harvard University

Eustomias binghami Parr 1927

in honor of businessman Harry Payne Bingham (1887-1955), who sponsored expedition that collected type and founded the Bingham Oceanographic Collection at Yale University

Eustomias borealis Clarke 2000

northern, referring to its distribution in the western North Atlantic north of 30°N

Eustomias bulbiramis Clarke 2001

bulbus, bulb; ramis, branch, referring to similar bulblets on all three branches of barbel

Eustomias cryptobulbus Clarke 2001

cryptos, hidden; bulbus, bulb, referring to terminal bulb of barbel partially hidden by dorsal pigment patch and

semi-opaque sheath

Eustomias curtifilis Clarke 2000

curtus, short; filum, thread, referring to "short and simple" terminal filaments

Eustomias danae Clarke 2001

in honor of the Danish fishery research vessel *Dana*, "whose collections continue to advance knowledge of pelagic organisms and provided the only confirmed specimens of this species"

Eustomias dendriticus Regan & Trewavas 1930

dendritic, referring to branch of barbel stem, which in turn comprises several secondary branches

Eustomias dendrobium Koeda & Ho 2019

Dendrobium, genus of orchids, referring to branches of chin barbel with many dendritic appendages of tiny luminous swellings, resembling the flowers of an orchid

Eustomias dinema Clarke 1999

di-, two; nema, thread, referring to pair of simple, thread-like filaments near end of barbel

Eustomias elongatus Clarke 2001

referring to elongate terminal bulb of barbel, the "relatively longest barbel" known within the subgenus

Eustomias fissibarbis (Pappenheim 1912)

fissus, cloven (i.e., split in two); barbis, barbel, referring to how barbel bifurcates into two equally strong branches

Eustomias flagellifer Clarke 2001

flagellum, whip; fero, to bear, referring to whip-like branches off main stem of barbel

Eustomias insularum Clarke 1998

of an island, referring to its occurrence near the Cape Verde Islands

Eustomias intermedius Clarke 1998

referring to branches of barbel, which are intermediate in relative length between long-branched species (*E. achirus*, aequatorialis, tomentosis) and short-branched species (*E. insularum*, woollardi)

Eustomias interruptus Clarke 1999

interrupted, referring to break in stem pigment between branch and bulb of barbel

Eustomias lanceolatus Clarke 1999

referring to lancet-like swelling on branch of barbel

Eustomias lipochirus Regan & Trewavas 1930

lipo-, lacking or wanting; cheiros, hand, referring to absence of pelvic fins

Eustomias longiramis Clarke 2001

longus, long; ramis, branch, referring to "extremely long" medial branch of barbel

Eustomias macronema Regan & Trewavas 1930

macro-, long or large; nema-, thread, referring to "long and stout" terminal filament of barbel stem

Eustomias magnificus Clarke 2001

large and ornate, referring to numerous branches on terminal bulb of barbel

Eustomias minimus Clarke 1999

least, referring to "shortness, slimness, and simplicity" of its barbel's branch and terminal filaments

Eustomias monoclonoides Clarke 1999

-oides, having the form of: referring to similarity of bulb shape and pigmentation to those of E. monoclonus

Eustomias monoclonus Regan & Trewavas 1930

mono-, one; clonus, twig, referring to one slender, simple branch of barbel stem

Eustomias natalisa Prokofiev 2020

a coined name without significance; Prokofiev (pers. comm.) had grown weary of finding available, unique yet suitable names for such a diverse genus, so he opted to coin an arbitrary name instead, one that sounded nice to the ear

Eustomias parini Clarke 2001

in honor of ichthyologist Nikolai Vasil'evich Parin (1932-2012), Russian Academy of Sciences, who collected half the known specimens of this species, for his contributions to the biology of mesopelagic fishes

Eustomias paucifilis Parr 1927

paucus, few; filum, thread, proposed as a subspecies of E. bigelowi, presumably referring to fewer (4) filaments at end of barbel compared to the nominate form (7)

Eustomias paxtoni Clarke 2001

in honor of John R. Paxton (b. 1938), Australian Museum (Sydney), for contributions to the knowledge of pelagic fishes

Eustomias pinnatus Clarke 1999

feather-like, referring to pinnate pattern of side filaments on terminal filaments of barbel

Eustomias problematicus Clarke 2001

problematic, referring to the "initial enigma posed" by the short branches of its barbel; variability in their relative lengths "may well reflect damage undetectable in these tiny structures"

Eustomias satterleei Beebe 1933

in honor of American lawyer Herbert L. Satterlee (1863-1947), a patron of the New York Zoological Society, where Beebe worked

Eustomias schmidti Regan & Trewavas 1930

in honor of Danish biologist Johannes Schmidt (1877-1933), who led the *Dana* fishery research cruise that collected holotype

Eustomias silvescens Regan & Trewavas 1930

silva-, forest; -escens, becoming, presumably referring to three tree-like filamentous branches at end of barbel, some of which are beaded or bear oval bulbs on short stalks

Eustomias similis Parin 1978

similar, referring to similarity to "some species, e.g., E. fissibarbus" (translation)

Eustomias tomentosis Clarke 1998

having a mass of rough hairs, referring to numerous hair-like filaments on branches of barbel

Eustomias triramis Regan & Trewavas 1930

tri-, three; ramis, branch, referring to three relatively simple branches arising from stem of barbel

Eustomias uniramis Clarke 1999

uni-, one; ramis, branch, referring to single, mostly unadorned branch of barbel

Eustomias vulgaris Clarke 2001

simple, referring to branchless barbel

Eustomias woollardi Clarke 1998

in honor of the late George P. Woollard (1908-1979), who, as director of the Hawaii Institute of Geophysics, "had a vision that extended well beyond his own discipline and did much to foster growth of all aspects of oceanography in the Pacific"

Eustomias zygolampas Prokofiev 2019

zygos, pair; lampas, lamp, i.e., paired lamp, referring to three appendages of barbel trunk, each of which carries a pair of luminous bulbs

Subgenus Furcostomias Prokofiev 2018

furca, fork, referring to stem of chin barbel bifurcate in the middle; *Stomias*, type genus of Stomiidae and a common ending for genus-level names in the family

Eustomias crucis Gibbs & Craddock 1973

cross, referring to the Southern Cross, "the constellation that watches over the waters inhabited by this fish" (i.e., Southeastern Pacific)

Eustomias diplomastiga Prokofiev 2018

diplo-, double; mastiga, whip, referring to very long chin barbel that divides in the middle into two main branches

Subgenus Haploclonus Regan & Trewavas 1930

haplo-, single or simple; clonos, twig, referring to barbel with a "simple tapering branch proximal to bulb"

Eustomias acinosus Regan & Trewavas 1930

grape-like, referring to appendage on distal half of barbel bulb that resembles a bunch of grapes

Eustomias antea Villarins, Fischer, Prokofiev & Mincarone 2023

named for *Antea*, the research vessel of the French oceanographic fleet, which conducts many deep-sea exploratory surveys around the world, including the ABRACOS (Acoustics along the BRAzilian COaSt) expedition during which holotype was collected

Eustomias bifilis Gibbs 1960

bi-, two; filum, thread, referring to main stem of barbel branching into a separate stem with distal bulb and branched terminal filament

Eustomias enbarbatus Welsh 1923

en-, very; barbatus, bearded, "calling attention" to its "remarkable" barbel: "long, filamentous, an ovoid bulb at tip;

near the base of this bulb arises a long filament containing at intervals yellowish ovoid bodies; from the distal portion of the bulb arise five short filaments, four of which are simple, two of them containing ovoid bodies; the fifth terminates in an ovoid body from which spring two longer filaments, tridentlike, both of which bifurcate; each of these latter contains in its proximal half several yellow bodies, the distal half being threadlike"

Eustomias lucenae Villarins, Fischer, Prokofiev & Mincarone 2023

in honor of Flávia Lucena-Frédou, Universidade Federal Rural de Pernambuco (Brazil), for her "tireless efforts in supervising and supporting many students in the field of marine biology and conservation"

Eustomias mavka Prokofiev 2018

a type of female spirit in scary Russian fairy tales, usually the souls of girls who had died unnatural, tragic or premature deaths; Prokofiev did not explain the allusion but told us in a personal communication he selected the name because stomiids are "horror" (i.e., scary-looking) fishes for people who don't appreciate or understand them

Eustomias simplex Regan & Trewavas 1930

onefold or single, referring to barbel "ending in a simple oblong bulb"

Eustomias stamen Koeda & Ho 2019

pollen-producing reproductive organ of a flower, referring to simple, thin, stamen-like appendage of branch arising near base of terminal chin-barbel bulb

Eustomias trewavasae Norman 1930

in honor of Ethelwynn Trewavas (1900-1993), British Museum (Natural History), for her work on the stomiid fishes of the *Dana* Expedition

Subgenus Neostomias Gilchrist 1906

neo-, new, proposed as a new genus very close to Eustomias

Eustomias filifer (Gilchrist 1906)

filum, thread; fero, to bear, presumably referring to pectoral fins, which are "reduced (apparently) to single filaments"

Eustomias jimcraddocki Sutton & Hartel 2004

in honor of oceanographer James E. Craddock (1937-2009), Woods Hole Oceanographic Institution, for his many contributions to our knowledge of deep-sea fishes

Eustomias monodactylus Regan & Trewavas 1930

mono-, one; dactylus, finger, referring to one pectoral-fin ray

Eustomias tetranema Zugmayer 1913

tetra, four; nema, thread, referring to four filaments (three branches and one main stem) at end of barbel

Subgenus Nominostomias Regan & Trewavas 1930

etymology not explained and allusion not evident, possibly *nomino*-, nominal, existing or being something in name or form only, i.e., being a nominal genus of *Stomias* (or nominal subgenus of *Eustomias*)

Eustomias appositus Gibbs, Clarke & Gomon 1983

apposite or placed aside, referring to contiguous terminal bulbs of barbel

Eustomias arborifer Parr 1927

arbor, tree; fero, to bear, referring to "richly branched" terminal appendage of barbel, "more or less filled with strings of microscopical bodies of luminous tissue"

Eustomias australensis Gibbs, Clarke & Gomon 1983

-ensis, suffix denoting place: Australia, known only from the Tasman Sea off southeastern Australia

Eustomias austratlanticus Gibbs, Clarke & Gomon 1983

auster, south; atlanticus, of the Atlantic, referring to its occurrence in the South Atlantic Ocean

Eustomias bertelseni Gibbs, Clarke & Gomon 1983

in honor of Danish ichthyologist Erik Bertelsen (1912-1993), for his contributions to deep-sea biology and his long service to ichthyologists, especially those who have worked with the *Dana* Expedition collections under his care

Eustomias bertrandi Villarins, Fischer, Prokofiev & Mincarone 2023

in honor of Arnaud Bertrand, Senior Researcher at the Institut de Recherche pour le Développement (France), for his "commitment, enthusiasm, and leadership" in conducting the ABRACOS (Acoustics along the BRAzilian COaSt) expeditions and many other marine biology-related projects

Eustomias bibulboides Gibbs, Clarke & Gomon 1983

-oides, having the form of: E. bibulbosus, both of which possess a "similarly simple" barbel filament

Eustomias bibulbosus Parr 1927

bi-, two; bulbosus, bulbed, referring to two conspicuous luminous bodies (bulbs) on barbel

Eustomias bimargaritatus Regan & Trewavas 1930

bi-, two; margaritatus, adorned with pearls, presumably referring to two bulbs on barbel

Eustomias bimargaritoides Gibbs, Clarke & Gomon 1983

-oides, having the form of: E. bimarginatus, referring to the similarity of their terminal barbel filaments

Eustomias bituberatus Regan & Trewavas 1930

bi-, two; tuberatus, bulbous, referring to two bulbs on barbel, "the distal the larger, separated by a distance greater than the diameter of either"

Eustomias bituberoides Gibbs, Clarke & Gomon 1983

-oides, having the form of: E. bituberatus, referring to the "similarly very long" barbel of both species

Eustomias bulbornatus Gibbs 1960

budded or bulbous, referring to single terminal bulb bearing an ornate assemblage of terminal appendages

Eustomias cancriensis Gibbs, Clarke & Gomon 1983

-ensis, suffix denoting place: referring to its distribution along the Tropic of Cancer

Eustomias cirritus Gibbs, Clarke & Gomon 1983

filamentous, referring to delicate filaments at end of barbel

Eustomias crossotus Gibbs, Clarke & Gomon 1983

fringed, referring to branched filament of barbel

Eustomias curtatus Gibbs, Clarke & Gomon 1983

shortened, referring to short barbel and "diminutive projection" of its single terminal bulb

Eustomias deofamiliaris Gibbs, Clarke & Gomon 1983

deus, god; familiaris, knowing intimately, an "allusion to the fact that we mortals are uncertain whether this specimen represents a valid species or a wildly different anomalous condition of some other species"

Eustomias gibbsi Johnson & Rosenblatt 1971

in honor of ichthyologist Robert H. Gibbs, Jr. (1929-1988), for his many contributions to the biology and systematics of stomiatoid fishes

Eustomias grandibulbus Gibbs, Clarke & Gomon 1983

grandis, large; bulbus, swelling, referring to large distal bulb of barbel

Eustomias inconstans Gibbs, Clarke & Gomon 1983

changeable, referring to the variable presence or absence of a second terminal bulb on barbel

Eustomias kreffti Gibbs, Clarke & Gomon 1983

in honor of Gerhard Krefft (1912-1993), Institut für Seefischerei (Hamburg), "whose scientific contributions have enriched our knowledge, and whose inspiration and leadership of the 'Walther Herwig' expeditions and sharing of the resulting materials have revolutionized studies of the systematics and zoogeography of deep-sea fishes"

Eustomias kukuevi Prokofiev 2018

in honor of associate, friend and occasional coauthor Efim Izrailevich Kukuev (b. 1947), who has made a "large contribution" (translation) to the study of mesobathypelagic fishes of the Atlantic Ocean

Eustomias longibarba Parr 1927

longus, long; barbus, barbel, referring to its "very long" barbel, ~2/3 length of body

Eustomias medusa Gibbs, Clarke & Gomon 1983

name of a gorgon with snaky locks, referring to the numerous filaments arising from its distal barbel bulb

Eustomias melanonema Regan & Trewavas 1930

melanos, black; nema, thread, referring to six "pigmented" filaments that arise together, but separately, from end of distal barbel bulb

Eustomias melanostigma Regan & Trewavas 1930

melanos, black; stigma, spot or mark, referring to spot of pigment at base of distal barbel bulb

Eustomias melanostigmoides Gibbs, Clarke & Gomon 1983

-oides, having the form of: E. melanostigma, referring to the "basic similarity" of their barbels

Eustomias mesostenus Gibbs, Clarke & Gomon 1983

meso-, middle; stenos, narrow, referring to terminal barbel bulb, which is constricted in the middle

Eustomias micraster Parr 1927

micro-, small; aster, star, presumably referring to "whitish" luminous bodies on barbel, with "scattered, microscopical dots" on terminal filament

Eustomias multifilis Parin & Pokhil'skaya 1978

multi-, many; filis, thread, referring to multiple filaments or appendages at terminal bulb of barbel

Eustomias ophioglossa Villarins, Fischer, Prokofiev & Mincarone 2023

ophis, snake; glossa, tongue, referring to terminal filament splitting at the tip

Eustomias orientalis Gibbs, Clarke & Gomon 1983

eastern, referring to its distribution in the part of world known as the Orient (from the westernmost Pacific north of New Guinea to Suruga Bay, Japan)

Eustomias pacificus Gibbs, Clarke & Gomon 1983

-icus, belonging to: the Pacific Ocean, where it is endemic

Eustomias patulus Regan & Trewavas 1930

open, spread out or broad, presumably referring to branched terminal filament at end of barbel

Eustomias perplexus Gibbs, Clarke & Gomon 1983

puzzling, referring to its "perplexing combination" of characters of E. longibarba and E. curtatus

Eustomias posti Gibbs, Clarke & Gomon 1983

in honor of Alfred Post (b. 1935), Institut für Seefischerei (Hamburg), for his contributions to the knowledge of deep-sea fishes and his continuing services to the ichthyological community

Eustomias robertsi Stewart, Kenaley & Sutton 2024

in honor of Clive Roberts (b. 1952), former Curator of Fishes at the Museum of New Zealand Te Papa Tongarewa; he "conceived, secured funding for, and directed a 20-year project to describe the fish fauna of New Zealand, culminating in publication of the award-winning multi-volume 2,000 page *The Fishes of New Zealand*" (2015)

Eustomias spherulifer Gibbs, Clarke & Gomon 1983

spherula, little sphere or ball; fero, to bear, referring to spherical or granular inclusions in distal half of barbel stem

Eustomias suluensis Gibbs, Clarke & Gomon 1983

-ensis, suffix denoting place: Sulu Sea, off the Philippine Islands, only known area of occurrence

Eustomias teuthidopsis Gibbs, Clarke & Gomon 1983

teuthidos, squid; -opsis, appearance, referring to terminal filaments of barbel, which resemble the arms and enlarged pair of tentacles of a squid

Eustomias tritentaculatus Koeda & Ho 2019

tri-, three; tentaculatus, with small tentacles, referring to three terminal filaments of chin barbel

Eustomias vitiazi Parin & Pokhil'skaya 1974

in honor of the research vessel Vitiaz (also spelled Vityaz), from which type was collected

Subgenus Rhynchostomias Regan & Trewavas 1930

rhynchos, snout or muzzle, allusion not explained, perhaps referring to "somewhat swollen filament" at end of barbel bulb of *E. parri*

Eustomias parri Regan & Trewavas 1930

in honor of marine biologist Albert Eide Parr (1900-1991), for his work on the Bingham Collection of marine fishes, which included several stomiids

Subgenus Spilostomias Regan & Trewavas 1930

spilos, spot, referring to small white spots above and below lateral photophores of *E. braueri*; *Stomias*, type genus of family (perhaps used here as an abridgement of *Eustomias*)

Eustomias braueri Zugmayer 1911

in honor of zoologist August Brauer (1863-1917), Berlin Zoological Museum, at that time one of the world's leading authorities on deep-sea fishes

Subgenus Urostomias Regan & Trewavas 1930

ouros, tail, referring to long tail of *E. macrurus*; *Stomias*, type genus of family (perhaps used here as an abridgement of *Eustomias*)

Eustomias macrurus Regan & Trewavas 1930

macro-, long; ouros, tail, referring to its long tail (posterior portion of body is relatively elongate)

Eustomias mikhailini Prokofiev 2020

in honor of Soviet ichthyologist Sergey Vladimirovich Mikhailin (1943-1981), member of 1976 R/V *Fiolent* cruise during which type was collected, and who mentioned this species in his report [biographical footnote: Mikhailin died while saving people from a burning train]

Eustomias shunyo Kimura, Tsuda & Nakayama 2023

named for the FRV (Fishery Research Vessel) Shunyo-maru, which collected the type specimens

Subgenus Triclonostomias Regan & Trewavas 1930

tri-, three and clonos, twig, referring to three branches that arise from barbel stem before bulb; Stomias, type genus of family (perhaps used here as an abridgement of Eustomias)

Eustomias decoratus Gibbs 1971

decorative or adorned, referring to its "spectacular" barbel (with yellow bulbs in freshly caught specimens and multiple branches and filaments)

Eustomias drechseli Regan & Trewavas 1930

in honor of Commodore Christian Frederik "Frits" Drechsel (1854-1927), President of the Dana Committee for the Study of the Sea, which managed *Dana* Expedition that collected the stomiiform species the authors described

Eustomias furcifer Regan & Trewavas 1930

furca, fork; fero, to bear, referring to forked median branch of barbel stem

Eustomias kikimora Prokofiev 2015

named for "petty forest evil spirits of Russian fairy tales," because melanostomiins are "somewhat terrible in appearance" (Artém Prokofiev, pers. comm.)

Eustomias radicifilis Borodin 1930

radicis, root; filum, thread, referring to several long filaments on barbel, "some of them ending in minute bulbs resembling those on plant roots"

Eustomias tenisoni Regan & Trewavas 1930

in honor of Lt.-Col. William Percival Cosnahan Tenison (1884-1983), British Army officer who was also a painter and scientific illustrator, whose "accurate and artistic drawings" are reproduced as plates in the authors' monograph

Diplostomias Kotthaus 1967

diplo-, double, referring to second and third teeth of premaxilla, which are placed close to each other; Stomias, type genus of family

Diplostomias indicus Kotthaus 1967

Indian, referring to its occurrence in the Western Indian Ocean

Echiostoma Lowe 1843

echis, adder or viper; stoma, mouth, presumably referring to snake-like appearance of wide mouth cleft and/or fang-like teeth

Echiostoma barbatum Lowe 1843

bearded, referring to its chin barbel, "thick or broad and subcartilaginous, equalling in length the depth of the head"

Photonectes Günther 1887

photos, light, probably referring to suborbital phosphorescent organ, and two series of luminous dots along lower part of sides, with numerous rudimentary similar organs scattered over skin of body; nectes, swimmer

Subgenus Photonectes

Photonectes achirus Regan & Trewavas 1930

a-, without; cheiros, hand, referring to absence of pectoral fins (a diagnostic feature of subgenus)

Photonectes albipennis (Döderlein 1882)

albus, white; pennis, fin, referring to "opaque white" (translation) anal and caudal fins

Photonectes banshee Koeda & Ho 2019

name of female spirit in Irish mythology meaning "keening fairy or female" in Old Irish, referring to series of blue luminous tissue on ventral side of body that resemble the tears of the keening fairy

Photonectes barnetti Klepadlo 2011

in honor of the late Michael Barnett (1945-1988), Scripps Institution of Oceanography, who collected type in 1971 and recognized it as a new species

Photonectes braueri (Zugmayer 1913)

in honor of zoologist August Brauer (1863-1917), Berlin Zoological Museum, at that time one of the world's leading authorities on deep-sea fishes

Photonectes caerulescens Regan & Trewavas 1930

bluish, referring to "luminous blue" mid-ventral stripe from chest to pelvics and small patches of blue luminous tissue on sides of isthmus, under lower jaw, and above end of maxillary

Photonectes coffea Klepadlo 2011

referring to shape of terminal chin-barbel bulb, which resembles a coffee bean

Photonectes cornutus Beebe 1933

horned, allusion not explained, possibly referring to thick, short, black, club-shaped appendage on barbel stem [species inquirenda because several key characters cannot be established due to poor condition of only known specimen]

Photonectes corynodes Klepadlo 2011

-odes, having the form of: koryne, mace or club, referring to appearance of terminal barbel bulb

Photonectes cyanogrammicus Prokofiev & Klepadlo 2019

cyano-, blue; grammicus, linear (i.e., streaked), referring to transverse streaks of blue luminous tissue on ventral side of body

Photonectes dinema Regan & Trewavas 1930

di-, two; nema, thread, referring to pair of short filaments at end of second barbel bulb

Photonectes distichodon Prokofiev 2019

distichus, of two rows; odon, tooth, referring to biserial dentition of premaxillary

Photonectes gracilis Goode & Bean 1896

slender, referring to "much more slender" body compared to P. albipennis

Photonectes klepadloae Prokofiev & Frable 2021

in honor of Cynthia Klepadlo (1945-2020), former collection manager, Marine Vertebrates Collection, Scripps Institution of Oceanography (La Jolla, California, USA); she was an expert in midwater fishes, specializing in myctophids and stomiiforms with a particular interest in *Photonectes*, describing seven species (25% of all known species)

Photonectes leucospilus Regan & Trewavas 1930

leuco-, white; spilos, spot, referring to medial white spot on snout

Photonectes litvinovi Prokofiev 2014

in memory of Prokofiev's comrade, ichthyologist Fedor Fedorovich Litvinov (1954-2011)

Photonectes mirabilis Parr 1927

wonderful or strange, presumably referring to "peculiar development of luminous tissue in the floor of the mouth inside the lower jaw"

Photonectes paxtoni Flynn & Klepadlo 2012

in honor of John R. Paxton (b. 1938), Australian Museum (Sydney), for his many contributions to the study of mesopelagic fishes and for his encouragement to the authors

Photonectes phyllopogon Regan & Trewavas 1930

phyllon, leaf; pogon, beard, referring to "leaf-like expansion" on distal appendage of barbel bulb

Photonectes sphaerolampas Prokofiev & Klepadlo 2019

sphaero-, spherical; lampas, lantern, referring to characteristic shape of the bulb of mental barbel

Photonectes uncinatus Prokofiev 2015

hooked, referring to very short barbel, hooked at the top

Photonectes venetaenia Prokofiev 2016

venetus, blue; taenia, band or ribbon, referring to stripes of blue luminous tissue on body

Photonectes waitti Flynn & Klepadlo 2012

in honor of American businessman and philanthropist Theodore (Ted) Waitt (b. 1963), founder of the Waitt Family Foundation and the Waitt Institute, the latter of which sponsored and directed the expedition of the research vessel *Seward Johnson* to the equatorial western Pacific Ocean, during which type was collected

Subgenus Trachinostomias Parr 1927

etymology not explained, presumably trachys, rough, perhaps referring to thick, black skin covering anal and dorsal fins of *P. margarita*

Photonectes filipendulus Prokofiev 2019

filis, thread; pendulus, hanging, referring to very small and weak (and sometimes possibly missing) pectoral-fin ray compared to rigid ray of *P. margarita*

Photonectes gorodinskii Prokofiev 2015

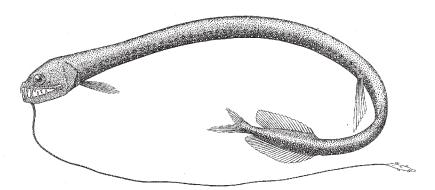
in honor of Prokofiev's friend, naturalist-explorer Andrei Aleksandrovich Gorodinskii

Photonectes margarita (Goode & Bean 1896)

pearl, referring to "pearl-colored" spot above maxilla

Photonectes munificus Gibbs 1968

bountiful, referring to high meristic counts and large body size (371 mm) of holotype



Leptostomias longibarba. From: Regan, C. T. and E. Trewavas. 1930. The fishes of the families Stomiatidae and Malacosteidae. Danish Dana Expedition 1920-22 in the North Atlantic and the Gulf of Panama, Oceanographical Reports. v. 2 (no. 6): 1-143, Pls. 1-14.

Photonectes parvimanus Regan & Trewavas 1930

parvus, small; manus, hand, referring to pectoral fins, which consist of two "minute" rays

Photonectes xenopogon Prokofiev 2019

xenos, alien; pogon, beard, referring to barbel structure resembling not related members of subgenus *Trachinostomias* but those of *P.* (*Photonectes*) dinema

Flagellostomias Parr 1927

flagellum, whip, perhaps referring to "isolated and strongly produced" pectoral-fin ray; Stomias, type genus family

Flagellostomias boureei (Zugmayer 1913)

in honor of Lt. Henri Bourée (1873-?), aide-de-camp to Albert Honoré Charles Grimaldi (1848-1922), Albert I, Prince of Monaco, who founded his country's Institut Océanographique, which published this fish's description

Grammatostomias Goode & Bean 1896

gramme, line, referring to series of pigment cells along median line of body of G. dentatus, "so arranged as to simulate a lateral line"; Stomias, type genus of family

Grammatostomias circularis Morrow 1959

circular, referring to nearly circular shape of lateral loop of luminous tissue on sides above lateral row of serial photophores

Grammatostomias dentatus Goode & Bean 1896

toothed, presumably referring to its "fang-like" teeth

Grammatostomias flagellibarba Holt & Byrne 1910

flagellum, whip; barbus, barbel, referring to long and slender barbel, about six times as long as body

Grammatostomias ovatus Prokofiev 2014

oval, referring to typical ring-shaped pattern of luminous tissue on sides

Leptostomias Gilbert 1905

leptos, thin, referring to "extremely elongate" body of L. macronema; Stomias, type genus of family

Leptostomias analis Regan & Trewavas 1930

anal, referring to more anal-fin rays (28) compared to congeners at time of description

Leptostomias bermudensis Beebe 1932

-ensis, suffix denoting place: 7.5 miles southeast of Nonsuch Island, Bermuda, type locality

Leptostomias bilobatus (Koefoed 1956)

bi-, two; lobatus, lobed, referring to terminal barbel bulb divided into two lobes furnished with filaments

Leptostomias gladiator (Zugmayer 1911)

a nickname for the English Bulldog; Zugmayer said its large head, with its flattened snout and prominent teeth, resembled the head of a "bouledogue"

Leptostomias gracilis Regan & Trewavas 1930

slender, referring to its elongate body, body depth about 13 times in the length

Leptostomias haplocaulus Regan & Trewavas 1930

haplo-, single or simple; caulus, stem, referring to stem of barbel "without filaments or appendages"

Leptostomias leptobolus Regan & Trewavas 1930

lepto-, slender; bolus, lump or morsel, referring to elongate bulb of barbel

Leptostomias longibarba Regan & Trewavas 1930

longus, long; barbus, barbel, referring to long barbel, nearly as long as fish

Leptostomias macronema Gilbert 1905

macro-, long; nema, thread, referring to long barbel (here called a "gular filament"), 60% of body length

Leptostomias macropogon Norman 1930

macro-, long; pogon, beard, referring to long barbel, nearly 75% total length

Leptostomias multifilis Imai 1941

multi-, many; filum, thread, presumably referring to numerous short filaments on distal half of barbel bulb

Leptostomias robustus Imai 1941

stout, probably referring to middle section of body, deeper than that of L. multifilis, described in the same paper

Melanostomias Brauer 1902

melanos, black, referring to overall black coloration of M. melanops and M. valdiviae; Stomias, type genus of family

Melanostomias bartonbeani Parr 1927

in honor of ichthyologist Barton A. Bean (1860-1947), U.S. National Museum (where he worked with his brother, ichthyologist Tarleton H. Bean, and where Parr discovered the type specimen)

Melanostomias biseriatus Regan & Trewavas 1930

bi-, two; seriatus, rowed, referring to two rows of "white luminous bodies" on distal half of barbel

Melanostomias dio Villarins, Fischer, Prokofiev & Mincarone 2023

in honor of the late Ronald James Padavona (1942-2010), professionally known as Ronnie James Dio, a heavy metal vocalist who popularized the hand gesture commonly referred to as "horns up," which resembles the shape of the terminal bulb on the chin barbel of this species

Melanostomias globulifer Fowler 1934

globula, little sphere; fero, to bear, referring to two sets of "globular or ovoid white bodies" along "median axis or midrib" of barbel

Melanostomias macrophotus Regan & Trewavas 1930

macro-, large; photos, light, referring to large luminous bulb at end of barbel

Melanostomias margaritifer Regan & Trewavas 1930

margarita, pearl; fero, to bear, i.e., pearly, presumably referring to luminous bulb, described as a "large oval white body," on distal half of barbel stem

Melanostomias melanopogon Regan & Trewavas 1930

melanos, black; pogon, beard, referring to barbel in adults, which is "black right up to the bulb, except for a white spot near proximal end of swollen point"

Melanostomias melanops Brauer 1902

melanos, black; ops, appearance, referring to velvety black body coloration and/or black iris

Melanostomias niger Gilchrist & von Bonde 1924

black, referring to its color

Melanostomias nigroaxialis Parin & Pokhil'skaya 1978

nigro-, black; axialis, of the axil, referring to black pigmentation of entire barbel axis (compared to partial pigmentation of M. melanops)

Melanostomias paucilaternatus Parin & Pokhil'skaya 1978

paucus, few; laternatus, lighted, referring to single luminous bulb in expanded part of barbel

Melanostomias pauciradius Matsubara 1938

paucus, few; radius, rayed, referring to fewer pectoral-fin rays compared to "allied species"

Melanostomias pollicifer Parin & Pokhil'skaya 1978

pollicis, thumb; fero, to bear, referring to how tip of barbel stem covers terminal bulb the way a thumb covers a fist

Melanostomias spilorhynchus Regan & Trewavas 1930

spilos, spot; rhynchos, snout or muzzle, referring to bluish-white spot on middle of snout

Melanostomias stewarti Fowler 1934

in honor of zoologist Norman H. Stewart, Bucknell University (Pennsylvania, USA), who "furnished [Fowler] with ichthyological material"

Melanostomias tentaculatus (Regan & Trewavas 1930)

tentacled, referring to barbel with a "terminal fringe of 7 to 10 minute filaments"

Melanostomias valdiviae Brauer 1902

of the Valdivia Expedition (1898-99), named for the research vessel Valdivia, the first German expedition to

explore the deep sea, during which type was collected

Melanostomias vierecki Fowler 1934

in honor of the late Henry L. Viereck (1881-1831), an American entomologist who specialized in Hymenoptera, to whom Fowler was "indebted" for collections of fishes

Odontostomias Norman 1930

odontos, teeth, possibly referring to how fangs of lower jaw, unlike *Opostomias*, do not perforate premaxillaries when mouth is closed; *Stomias*, type genus of family

Odontostomias masticopogon Norman 1930

mastax, mouth or jaw; pogon, beard, presumably referring to long barbel, 11/3 times length of fish (possibly a misspelling of mastigos, whip, which would clearly refer to the long barbel)

Odontostomias micropogon Norman 1930

micro-, small; pogon, beard, referring to small barbel, 1/4 to 2/3 length of head

Opostomias Günther 1887

opo-, eye, referring to luminous organ above maxillary, small and round "like a rudimentary eye" and/or to other numerous "eye-like" luminous organs on O. micripnus; Stomias, type genus of family

Opostomias micripnus (Günther 1878)

micro-, small; ipnos, lantern, referring to luminous organs, which, according to Günther 1887, "appear as innumerable minute tubercles more or less raised above the surface of the skin," covering sides of body

Opostomias mitsuii Imai 1941

in honor of Takanaga Mitsui (1892-?), founder, Mitsui Institute of Marine Biology, for "affording [Imai] the facility of the study"

Pachystomias Günther 1887

pachys, thick, presumably referring to head of P. microdon, "enveloped in rather thick skin"; Stomias, type genus of family

Pachystomias microdon (Günther 1878)

micro-, small; odon, tooth, referring to its "rather small" teeth

Tactostoma Bolin 1939

tactos, ordered or arranged; stoma, mouth, referring to teeth "arranged in linear groups" with each series "progressively increasing in length posteriorly"

Tactostoma macropus Bolin 1939

macro-, long; pous, foot, referring to its "strikingly increased number" (10) of ventral-fin rays

Thysanactis Regan & Trewavas 1930

thysanos, fringe or tassel; aktis, ray, referring to isolated and produced pectoral-fin ray, with a "tassel of 5 or 6 long unpigmented filaments"

Thysanactis dentex Regan & Trewavas 1930

with large teeth, referring to long anterior fangs on both upper and lower jaws

Trigonolampa Regan & Trewavas 1930

trigonos, triangular; lampa, torch, referring to large triangular luminous patch of skin extending backwards from eye

Trigonolampa miriceps Regan & Trewavas 1930

mirus, wonderful or strange; ceps, head, presumably referring to large luminous patch of skin on head behind eye

Subfamily Malacosteinae Loosejaws

Aristostomias Zugmayer 1913

etymology not explained, perhaps *aristos*, the best, a fitting adjective for a genus whose type species, *A. grimaldii*, is named after royalty; *Stomias*, type genus of family

Aristostomias grimaldii Zugmayer 1913

in honor of Albert Honoré Charles Grimaldi (1848-1922), Albert I, Prince of Monaco, who founded his country's Institut Océanographique, which published this fish's description

Aristostomias lunifer Regan & Trewavas 1930

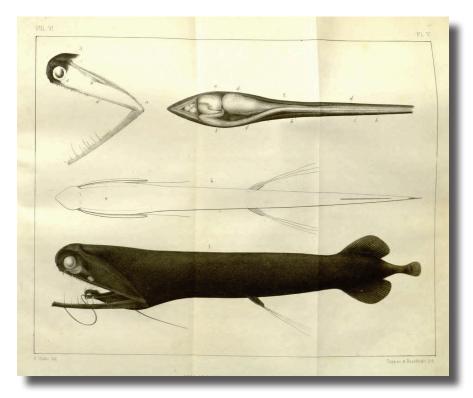
luna, moon; fero, to bear, presumably referring to "semicircular strip of luminous tissue" behind eye

Aristostomias polydactylus Regan & Trewavas 1930

poly, many; daktylos, finger, referring to 14-17 pectoral-fin rays, the most in the genus

Aristostomias scintillans (Gilbert 1915)

shiny or bright, presumably referring to its "very numerous minute, luminous organs"



Malacosteus niger, clockwise from top left: bones of cheek and jaw; view from beneath (abdomen opened); outline as seen from above; side view. From: Ayres, W. O. 1849. Description of a new genus of fishes, Malacosteus. Boston Journal of Natural History v. 6 (no. 1, art. 6): 53-64, Pl. 5.

Aristostomias tittmanni Welsh 1923

in honor of Otto Hilgard Tittmann (1850-1938), former Superintendent of the United States Coast and Geodetic Survey, who authorized the use of the survey steamer *Bache* for the South Atlantic expedition, during which type was collected (Tittmann was also co-founder of the National Geographic Society)

Aristostomias xenostoma Regan & Trewavas 1930

xenos, strange or different; *stoma*, mouth, allusion not explained nor evident, perhaps referring in a general way to the unique jaw structure diagnostic of the subfamily (floor of lower jaw lacks membranes, which allows jaws to swing widely while feeding)

Malacosteus Ayres 1848

malacos, soft; osteus, bony, referring to the "extreme softness of the bones, which can be pierced even in their hardest parts by a needle, with the greatest ease" (in 1849, Ayres wondered if a different generic name, one drawn from the "peculiarities" of its bizarre head, would be "more characteristic" than the one he proposed, but decided against it since the head was "so remarkably different from those of any other fish known that it is difficult to settle their relations, and it is very probable that in our conjectures as to their analogy we may err widely from the truth")

Malacosteus australis Kenaley 2007

southern, referring to its geographical range (subtropical and temperate waters of the Southern Hemisphere and equatorial waters of the Indian Ocean and Indo-Australian Archipelago, south to New Caledonia)

Malacosteus niger Ayres 1848

black, referring to its color

Photostomias Collett 1889

photos, light, referring to two light-producing postorbital (PO) photophores and/or serial ventral photophores; Stomias, type genus of family

Photostomias atrox (Alcock 1890)

fierce, presumably referring to its "enormous" mouth, its cleft as long as the head

Photostomias goodyeari Kenaley & Hartel 2005

in honor of Richard Hugo Goodyear (Centre de Ciencias del Mar y Limnologia, Universidad de Panama), for his contributions to the systematics of stomiid fishes

Photostomias guernei Collett 1889

in honor of Jules de Guerne (1855-1931), who served for three years as Prince Albert of Monaco's personal zoologist on the research cruises aboard his yacht *L'Hirondelle*

Photostomias liemi Kenaley 2009

in honor of Karel F. Liem (1935-2009), for over three decades of curation and support of scientists, students, and staff as Curator of Ichthyology and Henry Bryant Bigelow Professor of Ichthyology at the Museum of Comparative Zoology, Harvard University

Photostomias lucingens Kenaley 2009

lucis, light; *ingens*, of remarkable size, referring to extreme size of light-producing postorbital (PO) photophores in males

Photostomias tantillux Kenaley 2009

tantillus, so little or so small; lux, light, referring to small size of its light-producing postorbital (PO) photophores

Subfamily Idiacanthinae Black Dragonfishes

Idiacanthus Peters 1877

idio-, from *idiogenes*, distinctive or peculiar; *acanthus*, thorn, presumably referring to pair of short, pointed, bony projections anterior to and flanking each dorsal- and anal-fin ray

Idiacanthus antrostomus Gilbert 1890

antrum, cavern; stomus, mouth, allusion not explained, probably referring to its large (i.e., cavernous) mouth

Idiacanthus atlanticus Brauer 1906

-icus, belonging to: referring to type locality in the South Atlantic (but found circumglobally in southern subtropical and temperate oceans)

Idiacanthus fasciola Peters 1877

fasciola, diminutive of fascia, band, presumably referring to its band- or ribbon-shaped ("bandförmigen") body