

# The ETYFish Project

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COMMENTS: 

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## Order STOMIIFORMES (also known as STOMIATIFORMES)

4 families · 66 genera/subgenera · 463 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 vicina* 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  $\frac{1}{7}$  its length (minus tail)

***Sigmops gracilis* (Günther 1878)**

slender, referring to “very slender and narrow” tail

***Sigmops longipinnis* (Mukhacheva 1972)**

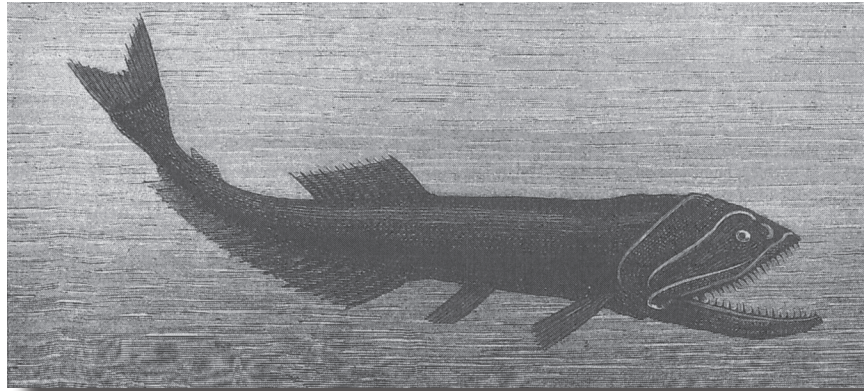
*longus*, long; *pinnis*, fin, referring to its longer paired fins compared to *S. elongatus*

***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**

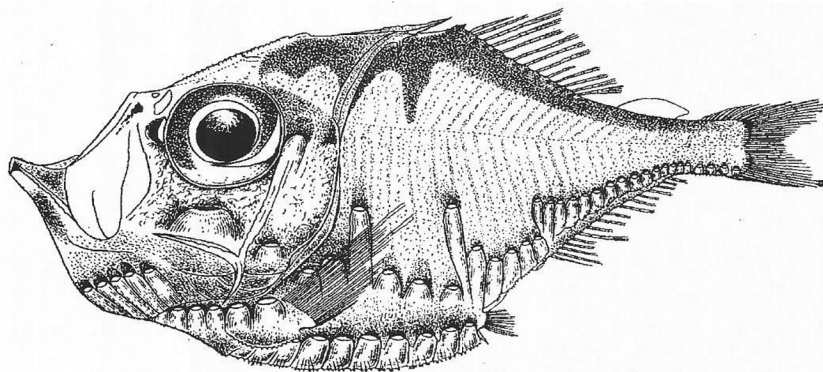
*sternon*, breast; *ptyx*, fold or plait, referring to fold of transparent skin on breast of *S. diaphana*

***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, Osteichthyes) 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 scharphi* 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 ateroscopus* 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 Pearlsides” 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 & Kobylansky 1993**  
somewhat short, referring to small size compared to congeners
- Maurolicus imperatorius* Parin & Kobylansky 1993**  
-*ius*, pertaining to: Emperor submarine ridge, Central North Pacific, type locality
- Maurolicus inventionis* Parin & Kobylansky 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 & Kobylansky 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 & Kobylansky 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 Prodrromus* (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 & Kobylansky 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 & Kobylansky 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 & Kobylansky 1993**  
-*ensis*, suffix denoting place: Port of Walvis Bay, Namibia, where it is common
- Maurolicus weitzmani* Parin & Kobylansky 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 Rehnitz & 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. mauii* in 1953; *ichthys*, fish

**Pollichthys mauii (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*

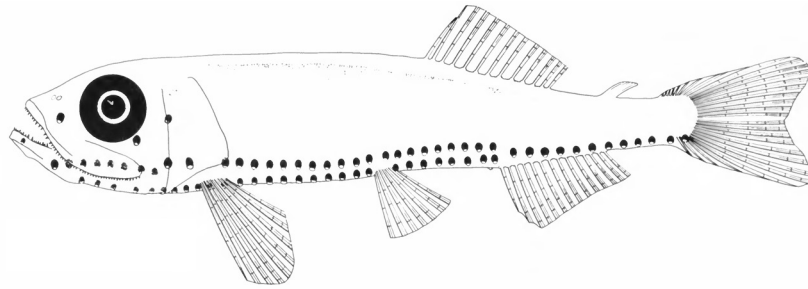
**Polymetme illustris McCulloch 1926**

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 *Mabahiss*, “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

***Yarella* 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

***Yarella 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”

***Yarella 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 · 327 species/subspecies

**Subfamily Chauliodontinae** Viperfishes***Chauliodus* Bloch & Schneider 1801***chaulios*, prominent; *odus*, tooth, referring to long, exerted 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 schmidtii* 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 brevibarbus* 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 longibarbus* (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; *fêro*, 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 krefftii* 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 similis* 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 tchuvassovi* 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 iijimai* 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 abyssorum* (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**

*rhadin*-, 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 pawnee* 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

Subgenus ***Chiostomias* 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

***Chiostomias pliopterus* Regan & Trewavas 1930**

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

Subgenus ***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**

*macro-*, 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. bulleyi*, *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 schmidtii* 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; *clonus*, 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 bituberoideus* Gibbs, Clarke & Gomon 1983**

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

***Eustomias bulbosus* 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,  $\sim 2/3$  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 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 caeruleus* 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**

*cyno-*, 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

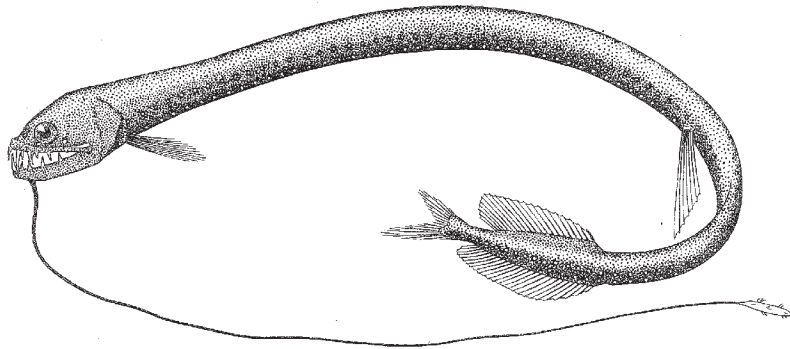
***Photonectes parvimanus* Regan & Trewavas 1930**

*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 *Trachinosto-*





*Leptostomias longibarba*. From: Regan, C. T. and E. Trewavas. 1930. *The fishes of the families Stomiidae 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.

*mias* 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 spilorrhynchus Regan & Trewavas 1930**

*spilos*, spot; *rhynchus*, 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,  $1\frac{1}{3}$  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,  $\frac{1}{4}$  to  $\frac{2}{3}$  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**

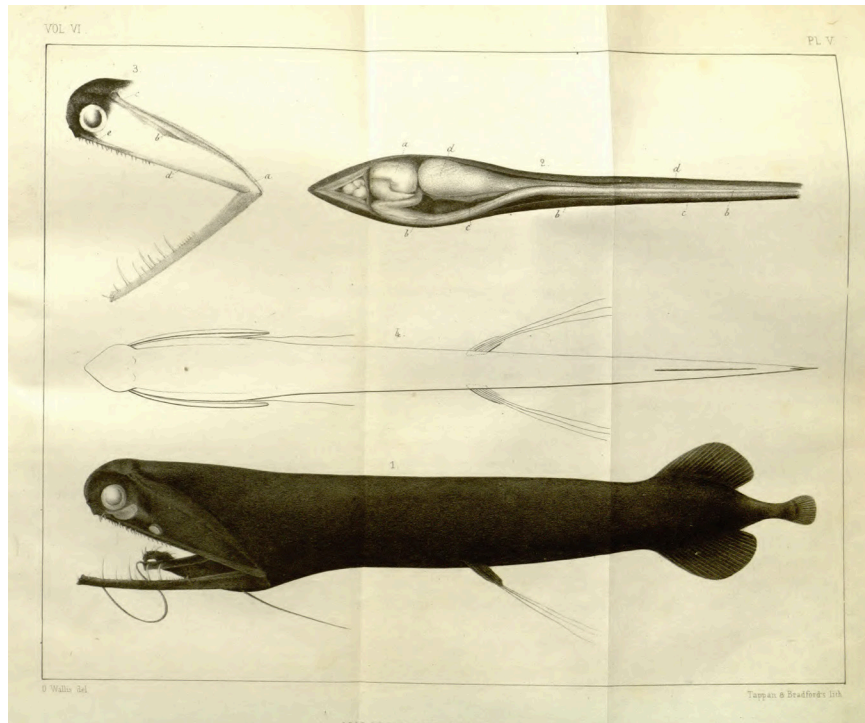
*poly*, many; *daktylos*, finger, referring to 14-17 pectoral-fin rays, the most in the genus

**Aristostomias scintillans (Gilbert 1915)**

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

**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



*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.

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 Limnología, Universidad de Panamá), 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