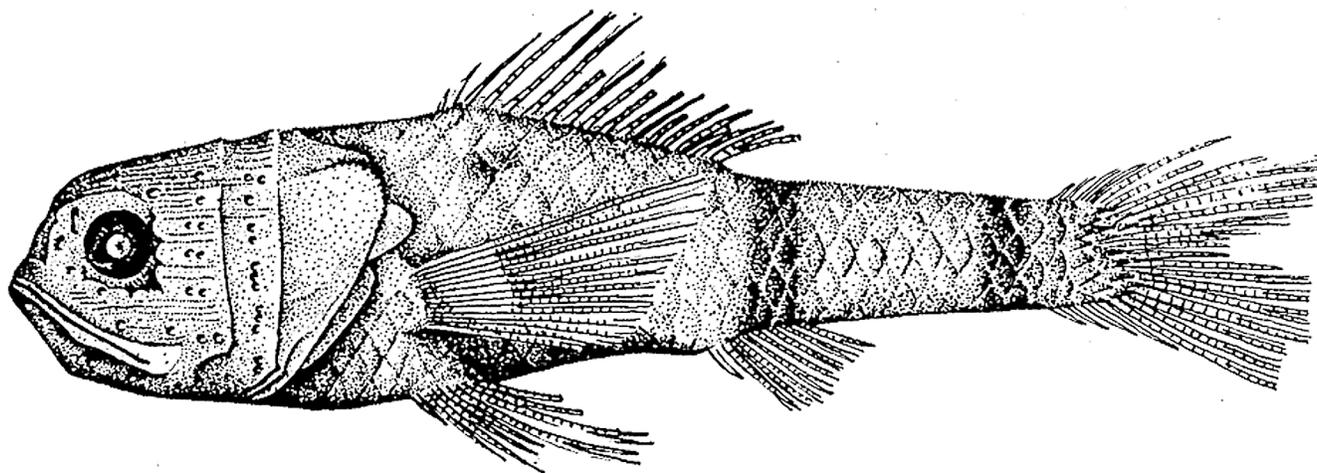


## Order BERYCIFORMES

Bigscales

## Family MELAMPHAIDAE

Gill 1893



*Melamphaes ebeling*, holotype, 29.3 mm SL, with banded coloration of juveniles. Illustration by J. R. Schroeder. From: Keene, M. J. 1973. *Melamphaes ebelingi*, a new species of beryciform fish (Melamphaidae) from the North Atlantic. *Copeia* 1973 (4): 794–800.

**Melamphaes**

Günther 1864

*mélas* (μέλας), black; *amphaes*, presumably a feminine suffix-like word component derived from *amphi-* (ἀμφί), on both sides, presumably referring to “entirely black” color of *M. typhlops*

***Melamphaes acanthomus* Ebeling 1962** *acantho-*, from *ákantha* (ἄκανθα), thorn or spine; *omos*, from *hómōs* (ῥώμος), shoulder, referring to its antrorse post-temporal spines

***Melamphaes brachysomus* Kimura, Kawai & Aungtonya 2019** short-bodied, from *brachýs* (βραχύς), short, and *sóma* (σῶμα), body, referring to its relatively short and stout body

***Melamphaes contradictorius* Kotlyar 2015** Latin for contradictory, presumably referring to how its characters “contradict” those of closely related species of the *M. longivelis* complex

***Melamphaes danae* Ebeling 1962** named for the Danish fishery research vessel *Dana*, which collected holotype, “in honor of her scientific party and crew, who, by compiling and interpreting vast quantities of facts concerning the biology, physics, and chemistry of the oceans, have contributed much more than their share to the establishment of the science of biological oceanography”

***Melamphaes ebelingi* Keene 1973** in honor of American ichthyologist Alfred W. Ebeling (1931–2022), University of California (Santa Barbara), for “outstanding” contributions to the knowledge of the family Melamphaidae and to the ecology of deep-sea fishes

***Melamphaes eulepis* Ebeling 1962** *eú-* (εὐ), well or very; *lepís* (λεπίς), scale, referring to its “intact squamation” (scales usually missing on congeners) and its “palate-like, sculptured” opercular scales

***Melamphaes eurous* Kotlyar 2016** Latin for eastern, referring to its distribution in the eastern Pacific Ocean

***Melamphaes falsidicus* Kotlyar 2011** Latin for speaking falsely or lying, referring to previous mistakes made in its identification, which led to its being classified as *M. microps*

***Melamphaes hubbsi* Ebeling 1962** in honor of American ichthyologist Carl L. Hubbs (1894–1979), for his broad interests in oceanography and

the systematics of pelagic fishes (Hubbs also served as chair of Ebeling’s doctoral committee, suggested this line of research, advised on and corrected the manuscript, and gathered data on type specimens from Europe)

***Melamphaes inconspicuus* Kotlyar 2015** Latin for not conspicuous or not remarkable, referring to how previous specimens of this species were probably attributed to *M. longivelis* by mistake

***Melamphaes indicus* Ebeling 1962** *-icus* (L.), belonging to: India, referring to its distribution mainly in the Indo-Pacific (Madagascar east to Hawaiian Islands and Central America)

***Melamphaes janae* Ebeling 1962** in honor of Ebeling’s wife, Jan, who sorted the first specimens of this species from collections made during the Scripps Institution of Oceanography Eastropic Expedition

***Melamphaes kobylyanskyi* Kotlyar 2015** in honor of friend and colleague Stanislav Genrikhovich Kobylyansky, Shirshov Institute of Oceanology, a “famous” (translation) researcher of mesopelagic animals who provided Kotlyar with melamphaid fishes collected on cruise 29 of the *Akademik Ioffe* research vessel

***Melamphaes laeviceps* Ebeling 1962** *laevis* (L.), smooth; *-ceps* (Neo-Latin), headed, referring to the “trim contours” of its “smoothly sculptured” head

***Melamphaes lentiginosus* Kotlyar 2015** Latin for freckled, referring to black dotted spots of pigment on head, body and fins of young and semi-adult specimens

***Melamphaes leprus* Ebeling 1962** from *leprós* (λεπρός), scaly or rough, referring to its relatively coarse-ridged spines

***Melamphaes longivelis* Parr 1933** *longus* (L.), long; *velis*, from *velum*, sail (i.e., dorsal fin), proposed as a subspecies of *M. microps* with a “slightly higher dorsal fin count”

***Melamphaes lugubris* Gilbert 1890** Latin for mourning or funereal, presumably referring to uniform brownish-black body with dusky fins

***Melamphaes macrocephalus* Parr 1931** big-headed, from *makrós* (μακρός), long or large, and *kephalé* (κεφαλή), head, referring to its

“very large” head, 2–2½ times in SL

**Melamphaes manifestus** Kotlyar 2011 Latin for remarkable, obvious or easily defined, allusion not explained (nor obvious), possibly referring to its bigger head and larger eyes compared with *M. microps*

**Melamphaes microps** (Günther 1878) *micro-*, from *mikrós* (μικρός), small; *ōps* (ὤψ), eye, ½ length of head and more than ½ length of snout

**Melamphaes nikolayi** Kotlyar 2012 in honor of Kotlyar’s father, Nikolay Efimovich Kotlyar (1908–1994)

**Melamphaes oclusus** Kotlyar 2012 Latin for closed up (i.e., hidden or concealed), referring to how it was possibly included into the composition of another species, *M. microps*

**Melamphaes pachystomus** Kotlyar 2011 *pachýs* (παχύς), thick; *stomus*, lapsus for *somus*, from *soma* (σῶμα), body, referring to its stout body shape

**Melamphaes papavereus** Kotlyar 2016 *-eus* (L.), adjectival suffix: *Papaver*, poppy genus, referring to small dotted pigments on body and fins, which resemble poppy seeds

**Melamphaes parini** Kotlyar 1999 in honor of the “well-known” (translation) ichthyologist Nikolai Vasil’evich Parin (1932–2012), Russian Academy of Sciences

**Melamphaes parvus** Ebeling 1962 Latin for small, referring to its relatively small size compared with sympatric congeners

**Melamphaes polylepis** Ebeling 1962 *polý-* (πολύ-), many; *lepis* (λεπίς), scale, referring to relatively large number of horizontal and oblique scale rows

**Melamphaes proximus** Kotlyar 2015 Latin for nearest or near, referring to its close relation to the Atlantic *M. longivelis*

**Melamphaes pumilus** Ebeling 1962 Latin for dwarfish, referring to small size of adults (18.0–22.5 mm SL)

**Melamphaes shcherbachevi** Kotlyar 2015 in honor of friend and colleague Yuri Nikolayevich Shcherbachev, Shirshov Institute of Oceanology, “famous” (translation) researcher of deep-sea fauna

**Melamphaes simus** Ebeling 1962 Latin for flat- or pug-nosed, referring to the “fancied flat or pug-nosed appearance rendered by the raised antorbital ridge”

**Melamphaes spinifer** Ebeling 1962 *spinus* (L.), thorn; *-ifer*, from *fera* (L.), to have or bear, referring to enlarged spines on preopercle

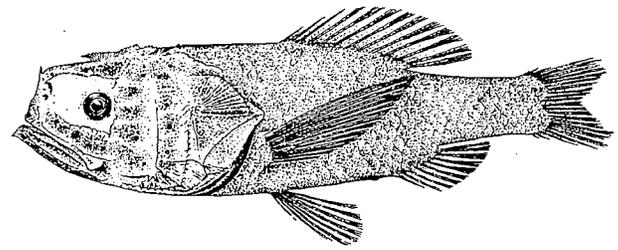
**Melamphaes suborbitalis** (Gill 1883) *sub* (L.), under; *orbitus* (L.), orbit, allusion not explained, perhaps referring to end of maxillary reaching to below hind margin of orbit

**Melamphaes succedanaes** Kotlyar 2015 translated from Latin into Russian as “replacing,” referring to how it replaces in the eastern Pacific Ocean closely related species of the *M. longivelis* complex from the Indian Ocean and western Pacific [misspelled *succedanaus* in title of English translation]

**Melamphaes typhlops** (Lowe 1843) *typhlós* (τυφλός), blind; *ōps* (ὤψ), eye, presumably referring to its minute eyes (“oculu minuti”)

**Melamphaes uniformis** Kotlyar 2013 Latin for uniform (i.e., simple), referring to its external similarity to other species of the genus and monochrome coloration of the holotype

**Melamphaes xestoachidus** Kotlyar 2011 etymology not explained but said by Kotlyar to mean “smooth-spined” (translation), referring to absence of a spur on haemal arch of first caudal vertebrae, presumably from *xestós* (ξεστός), smoothed (i.e., shaven), and *achidus*, a word that does not occur in Latin or Greek but believed by Kotlyar (pers. comm.) to mean sharp or needle (perhaps a misspelling of *acidus*, Latin for a different kind of “sharp,” i.e., tart or sour)



*Poromitra gibbsi*, holotype, male, 97 mm SL. Illustration by G. N. Pokhil’skaya. From: Parin, N. V. and O. D. Borodulina. 1989. A new species of the genus *Poromitra* (Melamphaeidae) from the southeastern part of the Pacific Ocean. Voprosy Ikhtologii 29 (6): 1028–1030. English translation in Journal of Ichthyology 30 (1):164–168.

## Poromitra

Goode & Bean 1883

*póros* (πόρος), hole or passage; *mitra* (L.), headband, coif or turban; per Goode & Bean (1896)<sup>1</sup>, name means with “openings in its shields,” referring to “central depression in each round, concentrically-grooved scale” of *P. capito* (apparently the cycloid scales, or “shields,” reminded the authors of conical peaked caps)

**Poromitra agafonovae** Kotlyar 2009 in honor of Tat’yana Borisovna Agafonova (1950–2004), friend and research colleague, for her contribution to the study of open-ocean fishes, particularly the family Nomeidae; in addition, she and Kotlyar collaborated on the monograph *Commercial Fishes of Russia* (2006)

**Poromitra atlantica** (Norman 1929) *-ica* (L.), belonging to: described from the South Atlantic Ocean (also occurs in southeastern Indian Ocean and southwestern Pacific)

**Poromitra capito** Goode & Bean 1883 Latin for one with a large head, referring to its “very large” head, nearly as long as trunk in young specimens

**Poromitra coronata** (Gilchrist & von Bonde 1924) Latin for crowned, referring to “crenulated crown-like crest” on head and above eye

**Poromitra crassa** Parin & Ebeling 1980 Latin for thick, fat or stout, referring to its body shape

**Poromitra crassiceps** (Günther 1878) *crassus* (L), thick, fat or stout; *-ceps* (Neo-Latin), headed, described as “very thick, with short snout”

**Poromitra cristiceps** (Gilbert 1890) *crista* (L.), crest; *-ceps* (Neo-Latin), headed, referring to well-developed system of mucous canals on head, “their margins raised into high thin crests”

**Poromitra curilensis** Kotlyar 2008 *-ensis*, Latin suffix denoting place: referring to its distribution not far from the Kuril Islands of the Russian Far East [note “k” Latinized as “c”]

**Poromitra decipiens** Kotlyar 2008 Latin for deceiving, referring to how it is easily confused with the closely related *P. crassiceps*

**Poromitra frontosa** (Garman 1899) Latin for many-browed or with a large forehead, referring to its “massive” head

**Poromitra gibbsi** Parin & Borodulina 1989 in honor of the late Robert H. Gibbs, Jr. (1929–1988), U.S. National Museum, “one of the foremost authorities on mesopelagic ichthyofauna” (translation)

**Poromitra glochidiata** Kotlyar 2008 botanical Latin for barbed at the tip, from *glōchís* (γλωχίς), barb of an arrow or projecting point, referring to hook-like spinules on preoperculum

**Poromitra indoceanica** Kotlyar 2008 *-ica* (L.), belonging to: Indian Ocean, where it occurs in the subtropical zone

<sup>1</sup> Goode, G. B. and T. H. Bean. 1896. Oceanic ichthyology, a treatise on the deep-sea and pelagic fishes of the world, based chiefly upon the collections made by the steamers Blake, Albatross, and Fish Hawk in the northwestern Atlantic, with an atlas containing 417 figures. Special Bulletin U. S. National Museum No. 2: Text: i-xxv + 1-26 + 1-553, Atlas: i-xxiii, 1-26, 123 pls. Jordan and Evermann (1896) translate *mitra* as stomacher, a V-shaped piece of decorative cloth worn over chest and stomach, but we fail to see how that interpretation applies. Jordan, D. S. and B. W. Evermann. 1896. The fishes of North and Middle America: a descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, north of the Isthmus of Panama. Part I. Bulletin of the United States National Museum No. 47: i-lx + 1–1240.

**Poromitra jucunda** Kotlyar 2010 Latin for attractive or pleasant, allusion not explained nor evident

**Poromitra kukuevi** Kotlyar 2008 in honor of Russian ichthyologist Yefim Izrailevich Kukuev (1947–2022, also spelled Kukujev and Kukuyev), Atlantic Scientific Research Institute of Marine Fisheries & Oceanography (AtlantNIRO), for his contributions to the study of deep-sea fishes

**Poromitra macrophthalma** (Gilchrist 1903) large-eyed, from *makrós* (μακρός), long or large, and *ophthalmós* (ὀφθαλμός), eye, its diameter ½ height of body and nearly two times in length of head

**Poromitra megalops** (Lütken 1878) *mégas* (μέγας), large or great; *ὄψ* (ὄψ), eye, referring to its larger eyes compared with *Melamphe typhlops*, its presumed congener at the time

**Poromitra nigriceps** (Zugmayer 1911) *nigro-*, from *niger* (L.), dark or black; *-ceps* (Neo-Latin), headed, allusion not explained but clearly referring to its large black head

**Poromitra nigrofulva** (Garman 1899) *nigro-*, from *niger* (L.), dark or black; *fulva* (L.), brown (actually tawny or reddish brown), allusion not explained, perhaps referring to its brown-yellow color in life and black color in alcohol

**Poromitra oscitans** Ebeling 1975 Latin for listless, lazy or sluggish, referring to the “presumed sluggish nature of this large-mouthed fish”

**Poromitra rugosa** (Chapman 1939) Latin for wrinkled or shriveled (*rugose*), referring to “rough and spinous nature” of head

**Poromitra unicornis** (Gilbert 1905) Latin for one-horned, i.e., a unicorn, referring to a slender horn-like spine arising from middle of snout above nostrils, directed vertically upwards

### Scopeloberyx

Zugmayer 1911

*Scopelus*, an old name of some large-eyed fish, from *skopós* (σκοπός), looker, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes, here referring to “slightly compressed and scopeliform” (translation) body shape of *S. opercularis*; *beryx*, a beryciform fish

**Scopeloberyx bannikovi** Kotlyar 2004 in honor of Russian ichthyopaleontologist Aleksandr Fedorovich Bannikov (b. 1954), Russian Academy of Sciences, who “repeatedly rendered [Kotlyar] invaluable aid in his investigations” (translation)

**Scopeloberyx malayanus** (Weber 1913) *-anus* (L.), belonging to: Malay Archipelago, where Manipa Strait, type locality, is situated

**Scopeloberyx malayanus balushkini** Kotlyar 2004 in honor of “prominent” Russian ichthyologist Arkadii Vladimirovich Balushkin (1948–2021), Russian Academy of Sciences, whose numerous publication on systematics of oceanic fishes of the Southern Hemisphere are “well known in Russia and abroad” (translation)

**Scopeloberyx maxillaris** (Garman 1899) Latin for of or belonging to the jaw, presumably referring to maxillary “more than half as long as the head, reaching one diameter of the orbit farther backward than the latter”

**Scopeloberyx microlepis** (Norman 1937) *micro-*, from *mikrós* (μικρός), small; *lepis* (λεπίς), scale, referring to its smaller scales compared with *S. opisthopterus*



*Scopeloberyx opercularis*, holotype, SL 80 mm. Illustration by Emma Kissling. From: Zugmayer, E. 1911. Poissons provenant des campagnes du yacht Princesse-Alice (1901-1910). Résultats des campagnes scientifiques accomplies sur son yacht par Albert 1er Monaco. Fasc. 35: 1-174, Pls. 1-6.

**Scopeloberyx opercularis** Zugmayer 1911 Latin for opercular, presumably referring to operculum bearing a pointed membranous extension supported by an outgrowth of the opercular bone

**Scopeloberyx opisthopterus** (Parr 1933) rear-finned, from *ópisthen* (ὀπισθεν), behind, and *pterus*, from *pterón* (πτερόν) or *ptéryx* (πτέρυξ), fin, referring to “very posterior” insertion of ventral fins

**Scopeloberyx pequenoii** Kotlyar 2004 in honor of German Pequeño R. (b. 1941), Universidad Austral de Chile, a “great expert” in the ichthyofauna of the southeastern Pacific Ocean (translation)

**Scopeloberyx robustus** (Günther 1887) Latin for of oak or oaken and, by extension, hard, firm or solid (but often used by ichthyologists to mean fat or stout), allusion not explained, perhaps referring to its “thick” head

**Scopeloberyx rossicus** Kotlyar 2004 *-icus* (L.), belonging to: Rossiya (Latinization of Russia in the Russian language), referring to its distribution in the Far East marine waters of Russia

**Scopeloberyx rubriventer** (Koefoed 1953) *rubri-*, from *ruber* (L.), red; *venter* (L.), belly, referring to a “red tinge” from base of pectoral fin towards anus

**Scopeloberyx shakhovskoyi** Kotlyar 2024 in honor of Ilya Borisovich Shakhovskoy, P. P. Shirshov Institute of Oceanology (Moscow), a “great expert in flying fishes of the World Ocean” and Kotlyar’s colleague for many years

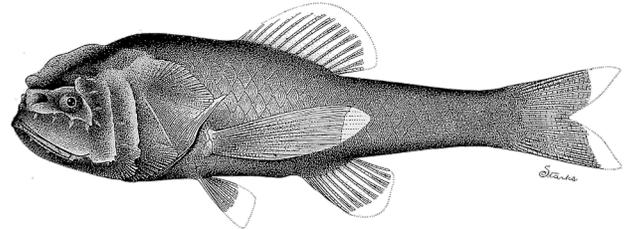
### Scopelogadus

Vaillant 1888

combining the form of *Scopelus* (=Myctophum, Myctophidae) with the thoracic ventral fins of *Gadus*, or cod

**Scopelogadus beanii** (Günther 1887) in honor of ichthyologist Tarleton H. Bean (1846-1916), U.S. National Museum, who described this species as *Plectromus crassiceps* in 1885, secondarily preoccupied by *Scopelus* (now *Promittra*) *crassiceps* Günther 1878 when Günther placed both in *Melamphaes*

**Scopelogadus bispinosus** (Gilbert 1915) *bi-*, from *bis* (L.), twice; *spinus* (L.), thorny, referring to two spinous rays in dorsal fin



*Scopelogadus bispinosus*, holotype, damaged fins reconstructed. Illustration by Chloe Lesley Starks. From: Gilbert, C. H. 1915. Fishes collected by the United States Fisheries steamer “Albatross” in southern California in 1904. Proceedings of the United States National Museum 48 (2075): 305–380, Pls. 14–22.

**Scopelogadus mizolepis** (Günther 1878) *mizo-*, from *meizón* (μείζων), greater; *lepis* (λεπίς), scale; although scales were missing on the specimen Günther examined, he surmised they were of an “unusually large size”

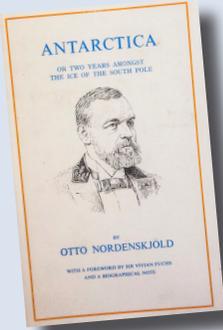
**Scopelogadus multilamellatus** Kotlyar 2021 *multi-* (L.), many; *lamellatus* (L), arranged in thin layers or plates, referring to larger number of pseudobranchial filaments (9–11) compared with *S. mizolepis*, *S. bispinosus* and *S. beanii* (2–8)

**Scopelogadus perplexus** Kotlyar 2021 Latin for confusing or ambiguous, referring to how it had been misidentified as *S. mizolepis* and *S. bispinosus*

**Scopelogadus unispinis** Ebeling & Weed 1963 *uni-*, from *unus* (L.), one; *spinis*, from *spinus* (L.), thorn, referring to single spinous ray of dorsal fin

## Otto Nordenskjöld: stranded in Antarctica, killed by a bus

Swedish zoologist Einer Lönnberg (1865–1942) described *Melamphaes* (now *Sio*) *nordenskjöldii* in 1905.



He named the fish in honor of his friend, Finnish-Swedish geologist Otto Nordenskjöld (1869–1928), who led the 1901–1904 Swedish Antarctic Expedition. Nordenskjöld visited Buenos Aires and the Falkland Islands (where *S. nordenskjöldii* was collected), then made camp at Snow Hill Island off the Antarctic Peninsula while their ship returned to the

Falklands to get food and supplies. But the ship got stuck in the ice and sank. Nordenskjöld and his party endured two years on the ice before another ship arrived. They survived in makeshift structures and by eating the occasional seal, fish caught through holes in the ice, and lots and lots of penguins.

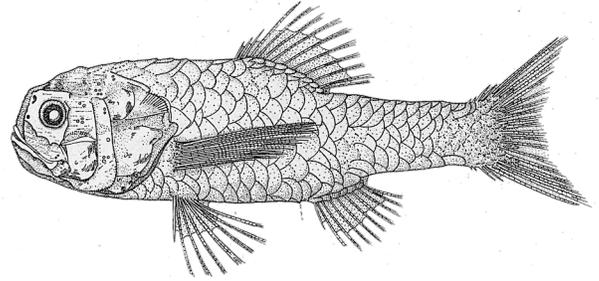
Nordenskjöld later explored Greenland, Chile and Peru. Despite the inherent dangers of these voyages, it was an urban accident that claimed his life. In 1928, in Gothenburg, Sweden, where he lived and taught at the university, the great explorer was struck and killed by a bus.

## Sio

Moss 1962

“an arbitrary combination of letters, neuter in gender” (allusion not explained, but of the 34 specimens that Moss examined, five were from the Scripps Institution of Oceanography, whose official abbreviation is SIO)

*Sio nordenskjöldii* (Lönnberg 1905) in honor of Lönnberg’s friend Otto Nordenskjöld (1869–1928), Finnish-Swedish geologist, geographer and polar explorer, who led expedition during which holotype was collected [see inset at left]



Probably first-published image of *Sio nordenskjöldii*, 57 years after its description. From: Moss, S. A. 1962. Melamphaidae II. A new melamphaid genus, *Sio*, with a redescription of *Sio nordenskjöldii* (Lönnberg). Dana Report No. 56: 1–10.