

# The ETYFish Project

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COMMENTS: 

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## Section CTENOSQUAMATA

*cteno-*, ctenoid; *squamata*, scaled, referring to predominance of ctenoid scales among its taxa, compared to the Cyclosquamata, in which cycloid scales predominate

## Subsection MYCTOPHATA

*-atus*, having the nature of: *mycto-*, myctophiform fishes

## Order MYCTOPHIFORMES

### Family NEOSCOPELIDAE Blackchins

3 genera · 7 species

#### *Neoscopelus* Johnson 1863

*neo-*, new, a new genus presumed to be allied to *Scopelus* (= *Myctophum*, Myctophidae) at the time, with a “scopeloid form of body” [*Scopelus* is an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes]

#### *Neoscopelus macrolepidotus* Johnson 1863

*macro-*, large; *lepidotus*, scaled, referring to body covered with “large caducous” scales

#### *Neoscopelus microchir* Matsubara 1943

*micro-*, small; *cheiros*, hand, referring to smaller pectoral fins (15-16 rays) compared to *N. macrolepidotus* (18-19 rays)

#### *Neoscopelus porosus* Arai 1969

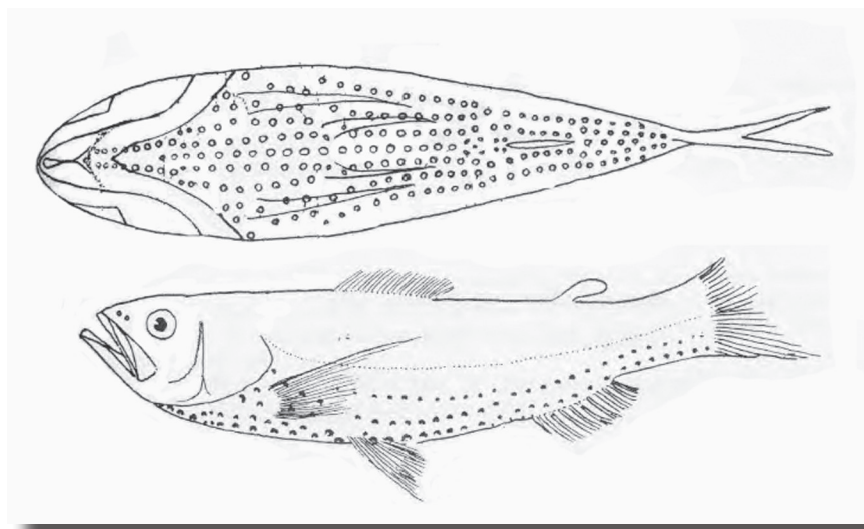
full of holes or pores, allusion not explained, perhaps referring to many photophores when viewed from below, which in the figures accompanying the description could be said to resemble holes or pores

#### *Neoscopelus serranoi* Bañón, Barros-García, Arronte, Rábade, del Río, Baldó & Carlos 2024

in honor of Alberto Serrano, Instituto Español de Oceanografía (Madrid, Spain), leader of the expedition that carried out the scientific sampling at the Galicia Bank (northwest of Spain), where this species has been found most frequently

#### *Scopelengys* Alcock 1890

*engys*, near, presumed at the time to be “nearly allied” to *Scopelus* (= *Myctophum*, Myctophidae) [*Scopelus* is an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes]



*Neoscopelus porosus*, ventral and lateral views. From: Arai, R.1969. A new iniomous fish of the genus *Neoscopelus* from Suruga Bay, Japan. *Bulletin of the National Science Museum* (Tokyo) v. 12 (no. 3): 465-471, Pl. 1.

**Scopelengys clarkei** Butler & Ahlstrom 1976

in honor of ichthyologist Thomas A. Clarke (1940-2013), Hawaii Institute of Marine Biology, who provided additional specimens, helping to confirm it is distinct from *S. tristis*

**Scopelengys tristis** Alcock 1890

sad, mournful, or dark or dull in color or tone, perhaps referring to uniform black coloration in life

**Solivomer** Miller 1947

*soli-*, solitary, i.e., single, referring to single patch of vomerine teeth (compared to two patches on other neoscopelids)

**Solivomer arenidens** Miller 1947

*arena*, sand; *dens*, tooth, referring to sandpaper-like (i.e., granular) dentition

**Family MYCTOPHIDAE** Lanternfishes

39 genera/subgenera · 260 species

**Subfamily Gymnoscopelinae** Luminous Lanternfishes

**Gymnoscopelus** Günther 1873

*gymnos*, bare or naked, referring to “naked” (translation, i.e., scaleless) body of *G. aphyia*; *Scopelus*, junior synonym of *Myctophum*, an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes

Subgenus **Gymnoscopelus**

**Gymnoscopelus bolini** Andriashev 1962

in honor of ichthyologist (and lanternfish specialist) Rolf Bolin (1901-1973), Hopkins Marine Station, Stanford University, whose 1959 paper on myctophids of the North Atlantic “contains numerous highly valuable new conclusions” on the taxonomy of many genera “merits special attention” (translations)

**Gymnoscopelus braueri** (Lönnerberg 1905)

in honor of friend and fellow zoologist August Brauer (1863-1917), Berlin Zoological Museum, “whose works have made studying scopelids [lanternfishes] much easier” and who shared his views about this new species in an “amiable” way (translations)

**Gymnoscopelus nicholsi** (Gilbert 1911)

in honor of John Treadwell Nichols (1883-1958), curator of fishes, American Museum of Natural History, who collected holotype [*G. aphyia* Günther 1873, a senior synonym, is considered a *nomen oblitum*]

**Gymnoscopelus opisthopterus** Fraser-Brunner 1949

*opistho-*, behind; *pterus*, fin, referring to its shorter tail, “which gives the dorsal and pelvic fins the appearance of being farther back than in other species of the genus”

Subgenus **Nasolychnus** Smith 1933

*nasus*, nose; *lychnos*, light or lamp, referring to enlarged luminous organs above and below nostrils of *Myctophum florentii* (= *G. piabilis*)

**Gymnoscopelus fraseri** (Fraser-Brunner 1931)

in honor of Capt. Hugh Fraser, who collected type with a net he constructed

**Gymnoscopelus hintonoides** Hulley 1981

*-oides*, having the form of: resembling *Hintonia candens* in general appearance and color

**Gymnoscopelus microlampas** Hulley 1981

*micro-*, small; *lampas*, a light or lantern, referring to its “noticeably small” body photophores

**Gymnoscopelus piabilis** (Whitley 1931)

expiable (capable of being atoned for), allusion not explained nor evident

**Hintonia** Fraser-Brunner 1949

*-ia*, belonging to: Martin Alister Campbell Hinton (1883-1961), Keeper of Zoology, Natural History Museum (London), for “friendly help and encouragement of the most practical kind”

**Hintonia candens** Fraser-Brunner 1949

shining or gleaming, presumably a general reference to its luminous organs and photophores

**Lampanyctodes** Fraser-Brunner 1949

*-oides*, having the form of: this new genus is “clearly indicative of the form from which *Lampanyctus* [and other related genera] have derived”

**Lampanyctodes hectoris** (Günther 1876)

*-is*, genitive singular of: James Hector (1834-1907), Director, Geological Survey of New Zealand, who presented holotype

**Lampichthys Fraser-Brunner 1949**

*lampa*, lantern; *ichthys*, fish, literally a lanternfish

**Lampichthys procerus (Brauer 1904)**

tall, slender or long, probably referring to its elongate body

**Notoscopelus Günther 1864**

*notos*, back, proposed as a subgenus of *Scopelus* (= *Myctophum*) with more dorsal-fin rays than anal-fin rays [*Scopelus* is an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes]

Subgenus **Notoscopelus****Notoscopelus caudispinosus (Johnson 1863)**

*cauda*, tail; *spinosus*, spiny, referring to eight small sharp spines on upper edge of tail followed by two larger spines, and nine small spines on lower edge followed by two larger spines

**Notoscopelus elongatus (Costa 1844)**

elongate, probably referring to the “very elongated shape” (translation) of its scales

**Notoscopelus japonicus (Tanaka 1908)**

Japanese, referring to type locality, “in all probability” off Misaki, Sagami Sea, Japan

**Notoscopelus kroyeri (Malm 1861)**

patronym not identified but almost certainly in honor of Danish marine biologist Henrik Nikolai Krøyer (1799-1870) [often incorrectly spelled *kroeyeri*]

**Notoscopelus resplendens (Richardson 1845)**

resplendent, “brilliant objects, their large scales being resplendent with prismatic colours”

Subgenus **Pareiophus Nafpaktitis 1975**

etymology not explained, probably *pareion*, cheek; *ophrys*, brow, referring to patches of luminous tissue on cheeks and above eyes

**Notoscopelus bolini Nafpaktitis 1975**

in honor of ichthyologist (and lanternfish specialist) Rolf Bolin (1901-1973), Hopkins Marine Station, Stanford University, who “all but named” this species in his 1959 review of the genus

**Scopelopsis Brauer 1906**

*-opsis*, like, referring to how it “agrees in most characters” (translation) with *Myctophum*, formerly known as *Scopelus* (an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes)

**Scopelopsis multipunctatus Brauer 1906**

*multi-*, many; *punctatus*, spotted, presumably referring to head and body studded with minute photophores

Subfamily **Notolychninae** Topside Lanternfish**Notolychnus Fraser-Brunner 1949**

etymology not explained, perhaps *noto-*, back; *lychnus*, light or lamp, referring to “single deep-set, translucent supra-caudal luminous gland before procurrent caudal rays in both sexes,” only on dorsal surface compared to both dorsal and ventral surfaces on the similar *Lampadena* and *Lampanyctus*

**Notolychnus valdiviae (Brauer 1904)**

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

Subfamily **Lampanyctinae** Toothy Lampfishes**Bolinichthys Paxton 1972**

named after ichthyologist (and lanternfish specialist) Rolf Bolin (1901-1973), Hopkins Marine Station, Stanford University, who gave Paxton “much advice and encouragement”; *ichthys*, fish

**Bolinichthys distofax Johnson 1975**

*disto-*, different or to stand apart; *fax*, light or flame, referring to rearward displacement of the Vn photophore (in front of eye below olfactory capsule), unique among congeners

**Bolinichthys indicus (Nafpaktitis & Nafpaktitis 1969)**

Indian, referring to Indian Ocean, type locality (also occurs in the Atlantic)

**Bolinichthys longipes (Brauer 1906)**

*longus*, long; *pes*, foot, presumably referring to ventral fins, which usually reach a point behind anus

**Bolinichthys nikolayi Becker 1978**

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

18th cruise of the research vessel *Dmitry Mendeleev*, from which type was collected

***Bolinichthys photothorax* (Parr 1928)**

*photo-*, light; *thorax*, breast, presumably referring to characteristic luminous scale, one on each side of throat

***Bolinichthys pyrsobolus* (Alcock 1890)**

*pyrsos*, torch, fire or beacon; *bolus*, lump or morsel, allusion not explained, perhaps referring to photophores in general, or to “membranous expansion of the suboperculum which reaches considerably beyond the root of the pectoral fin”

***Bolinichthys supralateralis* (Parr 1928)**

*supra-*, above; *lateralis*, of the side, referring to position of PLO (suprapectoral), superior SAO (supra-anal), Pol (posterolateral) and Prc (precaudal) photophores above lateral line

***Ceratoscopelus* Günther 1864**

*cerato-*, hook, proposed as a subgenus of *Scopelus* (= *Myctophum*) for *C. maderensis*, referring to bony projection or horn on each side above eye [*Scopelus* is an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes]

***Ceratoscopelus maderensis* (Lowe 1839)**

*-ensis*, suffix denoting place: off Madeira, eastern Atlantic, type locality (occurs in North Atlantic and Mediterranean Sea)

***Ceratoscopelus townsendi* (Eigenmann & Eigenmann 1889)**

in honor of Charles H. Townsend (1859-1944), naturalist on the U.S. Fish Commission steamer *Albatross*, from which type was collected

***Ceratoscopelus warmingii* (Lütken 1892)**

in honor of Danish botanist (and founding figure of ecology) Eugen Warming (1841-1924), who collected type

***Lampadena* Goode & Bean 1893**

*lampa*, lantern; *adenos*, gland, referring to luminous glands above and below caudal peduncle of *L. speculigera*

Subgenus ***Lampadena***

***Lampadena anomala* Parr 1928**

anomalous, perhaps referring to “somewhat twisted position” in which type specimen had been preserved and/or its small pectoral fins, which may “prove to be longer in better preserved specimens”

***Lampadena atlantica* Maul 1969**

*-ica*, belonging to: proposed as a subspecies of the Pacific *L. urophaos* from the Atlantic Ocean

***Lampadena chavesi* Collett 1905**

in honor of Francisco Alfonso Chaves e Melo (1857-1926), naturalist, meteorologist, geophysicist, and Director of the Museum at Ponta Delgada (Azores, Portugal), who supplied type

***Lampadena dea* Fraser-Brunner 1949**

Latin for goddess, allusion not explained nor evident

***Lampadena notialis* Nafpaktitis & Paxton 1968**

southern, referring to occurrence at high-southern latitudes

***Lampadena pontifex* Krefft 1970**

bridge builder, referring to how it appears to be an intermediate form (or bridge) between the northern *L. speculigera* and the southern *L. notialis*

***Lampadena speculigera* Goode & Bean 1896**

*speculum*, mirror; *fero*, to bear, presumably referring to “glistening mirrors” (i.e., silvery luminous glands) above and below caudal peduncle

***Lampadena urophaos* Paxton 1963**

*uro*, tail; *phaos*, light, referring to “distinctive” luminous glands on caudal peduncle

Subgenus ***Dorsadena* Coleman & Nafpaktitis 1972**

*dorsa-*, dorsal; *adena*, gland, referring to large, elongate luminous gland immediately in front of adipose fin

***Lampadena yaquinae* (Coleman & Nafpaktitis 1972)**

of the research vessel *Yaquina*, Oregon State University, from which type was collected

Subgenus ***Lychnophora* Fraser-Brunner 1949**

*lychnus*, light or lamp; *phora*, to bear, i.e., presumably referring to “remarkable” luminous glands on caudal peduncle

***Lampadena luminosa* (Garman 1899)**

bright, presumably a general reference to its luminous organs and photophores

**Lampanyctus Bonaparte 1840**

*lampa*, lantern, referring to its luminous organs; *nyctos*, night, possibly referring to the nocturnal migration of lanternfishes to the sea surface, but possibly also a misspelling of *myctos*, from *Myctophum* [some species placed in *Nannobranchium*, treated here as a junior synonym]

**Lampanyctus acanthurus Wisner 1974**

*acanthus*, spiny; *urus*, tail, referring to unusually high number of spiny procurrent rays in caudal fin

**Lampanyctus achirus (Andriashev 1962)**

*a-*, without; *cheiros*, hand, referring to absence of “distinct” (translation) pectoral-fin rays (rudiments of two or three minute rays may be visible microscopically)

**Lampanyctus alatus Goode & Bean 1896**

winged, referring to long, wing-like pectoral fins, reaching to at least middle of anal-fin base

**Lampanyctus ater Tåning 1928**

black, briefly described in a key, allusion not explained, perhaps referring to dark or dusky coloration

**Lampanyctus australis Tåning 1932**

southern, proposed as a subspecies of *L. alatus* from southern waters off New Zealand, Australia and the Cape of Good Hope, South Africa

**Lampanyctus bensoni (Fowler 1934)**

in honor of Richard Dale Benson, Jr. (1876-1949), of Philadelphia, to whom Fowler was indebted for many collections of American fishes

**Lampanyctus bistori (Zahuranec 2000)**

in honor of Zahuranec’s “good friend,” the late William B. Bristor, Jr. (1939-1999) of Washington, D.C.

**Lampanyctus crocodilus (Risso 1810)**

crocodile, referring to its large mouth, “rather like that of a crocodile” (translation)

**Lampanyctus crypticus (Zahuranec 2000)**

obscure or hidden, referring to its unrecognized existence (initially confused with *L. ater* and *L. niger*) and relationships

**Lampanyctus cuprarius Tåning 1928**

bronze or coppery; briefly described in a key, allusion not explained nor evident

**Lampanyctus fernae Wisner 1971**

in honor of Wisner’s “good wife” Ferne, “who deserves far more than this small token of my gratitude for her long sufferance of the preoccupation and associated neglectful acts so prevalent among workers in ichthyology”

**Lampanyctus festivus Tåning 1928**

pleasing or handsome; briefly described in a key, allusion not explained nor evident

**Lampanyctus gemmifer Goode & Bean 1896**

*gemma*, gem; *fèro*, to bear, presumably referring to “pearly mirror” on upper edge of caudal peduncle as long as eye, and a shorter one extending from end of anal fin to root of caudal fin

**Lampanyctus gibbsi (Zahuranec 2000)**

in honor of the late Robert H. Gibbs, Jr. (1929-1988), U.S. National Museum, for his “his many contributions to our understanding of open-ocean midwater ichthyology” and the first to recognize the distinctness of this species

**Lampanyctus hawaiiensis (Zahuranec 2000)**

*-ensis*, suffix denoting place: Hawaiian Islands, near the center of its range, where it is abundant in surrounding midwaters

**Lampanyctus hubbsi Wisner 1963**

a “unique species” dedicated to the “equally unique” ichthyologist Carl L. Hubbs (1894-1979)

**Lampanyctus idostigma Parr 1931**

*ido-*, form or resemblance; *stigma*, mark or spot, presumably referring to humeral photophore, described as a “dot”

**Lampanyctus indicus (Zahuranec 2000)**

Indian, only species of genus evidently restricted to the Indian Ocean, where it is limited to the Equatorial Region

**Lampanyctus intricarius Tåning 1928**

intricate; briefly described in a key, allusion not explained nor evident

**Lampanyctus isaacsi Wisner 1974**

in honor of John D. Isaacs (1913-1980), Scripps Institution of Oceanography, for his development of the Isaacs-Kidd midwater trawl and many other contributions to marine science

***Lampanyctus iselinoides* Bussing 1965**

-oides, having the form of: similar to *L. iselini* (= *macdonaldi*) in having two cheek photophores and short pectoral fins

***Lampanyctus jordani* Gilbert 1913**

in honor of David Starr Jordan (1851-1931), for his “epoch-making researches on the fish-fauna of Japan” (he also obtained type in 1900)

***Lampanyctus lepidolichnus* Becker 1967**

*lepto-*, scale; *lychnus*, lamp or lantern, referring to small photophores on each scale, a diagnostic character of this species

***Lampanyctus lineatus* Tåning 1928**

lined, briefly described in a key, allusion not explained, perhaps referring to higher number of lateral-line scales and/or luminous organs along lateral line compared to *L. cuprarius*, described in the same paper

***Lampanyctus macdonaldi* (Goode & Bean 1896)**

in honor of Marshall McDonald (1835-1895, note latinization of “Mc” to “Mac”), U.S. Commissioner of Fisheries

***Lampanyctus macropterus* (Brauer 1904)**

*macro-*, long; *pterus*, fin, referring to long pectoral fin, extending past beginning of anal fin

***Lampanyctus niger* (Günther 1887)**

black, referring to uniform black coloration

***Lampanyctus nobilis* Tåning 1928**

well-known or excellent; briefly described in a key, allusion not explained nor evident

***Lampanyctus omostigma* Gilbert 1908**

*omo-*, shoulder; *stigmatus*, mark or spot, allusion not explained, probably referring to presence of humeral photophore

***Lampanyctus parvicauda* Parr 1931**

*parvus*, small; *cauda*, tail; proposed as a subspecies of *L. omostigma*, presumably referring to smaller number (4-6) of infracaudal luminous scales compared to 9 on the nominate form

***Lampanyctus photonotus* Parr 1928**

*photo-*, light; *notos*, back, referring to series of “simple” photophores (not “luminous scales”) along each side of back from nape to behind dorsal fin

***Lampanyctus phyllisae* (Zahuranec 2000)**

in honor of Zahuranec’s former wife Phyllis E. Fabian, “as a token of recognition for her many years of support, which culminated in this study”

***Lampanyctus pusillus* (Johnson 1890)**

very small (Johnson’s specimen was 34 mm SL)

***Lampanyctus regalis* (Gilbert 1892)**

royal or kingly, allusion not explained, perhaps referring to size of type specimen, described as “large” (~12.5 cm long)

***Lampanyctus reinhardti* (Jordan 1921)**

in honor of Hawaiian boatman Tom Reinhardt, who collected a number of “boiled” fish floating in the water, including type of this species, after a Mauna Loa eruption and lava flow in November 1919 [*species inquirenda*, provisionally included here]

***Lampanyctus ritteri* Gilbert 1915**

in honor of marine biologist William Emerson Ritter (1856-1944), Marine Biological Association of San Diego (now Scripps Institution of Oceanography), who collected type

***Lampanyctus sibogae* (Weber 1913)**

of the ship *Siboga* and Indonesian expedition (1898-1899) of same name, during which type was collected

***Lampanyctus simulator* Wisner 1971**

referring to presence of an extra photophore just above pectoral origin and its “simulation of the same organ” heretofore found exclusively on *L. jordani*

***Lampanyctus steinbecki* Bolin 1939**

in honor of Bolin’s friend, American author John Steinbeck (1902-1968)

***Lampanyctus tenuiformis* (Brauer 1906)**

*tenuis*, thin or slender; *formis*, form or shape, allusion not explained, perhaps referring to body height, the lowest recorded by Brauer among the *Lampanyctus* species he examined

***Lampanyctus turneri* (Fowler 1934)**

in honor of Percy J. Turner, of Suva, Fiji, to whom Fowler was indebted for “interesting” fishes from that island country

**Lampanyctus vadulus** Hulley 1981

shallow, referring to its occurrence in shallower waters (50-300 m) compared to most lanternfishes

**Lampanyctus wisneri** (Zahuranec 2000)

in honor Robert L. Wisner (1921-2005), Scripps Institution of Oceanography, for his contributions to the systematics of myctophids and other oceanic fishes

**Lepidophanes Fraser-Brunner 1949**

*lepido-*, scaled; *phanes*, visible, presumably referring to median “luminous scales” anterior to procurrent caudal-fin rays

**Lepidophanes gausi** (Brauer 1906)

in honor of German mathematician and physicist Carl Friedrich Gauss (1777-1855) and/or the ship named after him, which collected type in the first German expedition to the South Pole (1901-1903)

**Lepidophanes guentheri** (Goode & Bean 1896)

in honor of ichthyologist-herpetologist Albert Günther (1830-1914), author of *Catalogue of the Fishes of the British Museum* and the fish sections of *Report on the Scientific Results of the Voyage of H. M. S. Challenger*, “monumental works, which are the foundations of ichthyological work in the last half of the nineteenth century”

**Parvilux Hubbs & Wisner 1964**

*parvus*, little; *lux*, light, referring to “unusually small” photophores

**Parvilux boschmai** Hubbs & Wisner 1964

in honor of Hilbrand Boschma (1893-1976), Dutch zoologist and director of the Rijksmuseum of Natural History in Leiden, “a man who, with spirit as notably erect as his body, has ably carried on in the fine tradition of the great naturalists of Leiden” [published in a volume of papers honoring Boschma]

**Parvilux ingens** Hubbs & Wisner 1964

immoderately large, referring to its “relatively immense size” (160 mm SL)

**Stenobranchius Eigenmann & Eigenmann 1890**

*stenos*, narrow; *branchium*, arm, referring to “very narrow” pectoral fins of *S. leucopsarus*

**Stenobranchius leucopsarus** (Eigenmann & Eigenmann 1890)

*leukos*, white; *psaros*, speckled, referring to light-colored body (lighter than any other lanternfish found near San Diego, California, USA) “dotted with black”

**Stenobranchius nanochir** (Gilbert 1890)

*nanus*, small; *cheiros*, hand, referring to “very short and narrow” pectoral fins

**Taaningichthys Bolin 1959**

in honor of Danish lanternfish expert Åge Vedel Tåning (1890-1958), who discovered two of the species included in the genus, for his contributions to the knowledge of Myctophidae and for “many gracious favors” bestowed upon Bolin; *ichthys*, fish

**Taaningichthys bathyphilus** (Tåning 1928)

*bathys*, deep; *philios*, loving, i.e., lover of the deep, probably referring to depth of capture of type specimen, ~2000 meters (4000 meters of wire out)

**Taaningichthys minimus** (Tåning 1928)

least, probably referring to its small size, up to ~65 mm

**Taaningichthys paurolychnus** Davy 1972

*pauros*, few or small; *lychnus*, light or lamp, referring to absence of primary photophores and presence of limited, presumably secondary photophores

**Triphoturus Fraser-Brunner 1949**

*tri-*, three; *photos*, light; *uros*, tail, referring to three Prc (precaudal) photophores “equally spaced in [an] oblique line”

**Triphoturus mexicanus** (Gilbert 1890)

Mexican, referring to type locality, off Baja California, México (but widespread in Eastern Pacific)

**Triphoturus microchir** (Gilbert 1913)

*micro-*, small; *cheiros*, hand, referring to “very short and slender” pectoral fins, not reaching ventral fins

**Triphoturus nigrescens** (Brauer 1904)

blackish, allusion not explained nor evident, perhaps referring to body coloration in life

**Triphoturus oculoem** (Garman 1899)

sharp-eyed, referring to its large eyes,  $\frac{1}{4}$  as long as head

**Subfamily Diaphinae** Headlightfishes**Diaphus Eigenmann & Eigenmann 1890**

*dia-*, divided; *phos*, light, referring to how most or all photophores of *D. theta* are divided by a horizontal cross septum

of black pigment

***Diaphus adenomus* Gilbert 1905**

*adenos*, gland; *omos*, shoulder, allusion not explained, perhaps referring to “semicircular white glandular body between pectoral base and upper pectoral spot” at tip of opercular flap

***Diaphus agassizii* Gilbert 1908**

in honor of Alexander Agassiz (1835-1910), Curator, Museum of Comparative Zoology (Harvard), in charge of the *Albatross* expedition that collected type

***Diaphus aliciae* Fowler 1934**

in honor of American herpetologist Alice Boring (1883-1955), Yenching University, Peiping (now Beijing), China

***Diaphus anderseni* Tåning 1932**

in honor of Tåning's late friend, N. C. Andersen, physician on board Danish research vessel *Dana* “during different cruises in northern and southern seas”

***Diaphus antonbruuni* Nafpaktitis 1978**

in honor of the late Danish marine biologist Anton Frederick Bruun (1901-1961) and the research vessel (*Anton Bruun*) that bore his name (and collected type)

***Diaphus arabicus* Nafpaktitis 1978**

Arabian, referring to the Arabian Sea, only known area of occurrence at time of description (may occur more widely in the Indian Ocean)

***Diaphus balanovi* Prokofiev, Emelyanova, Orlov & Orlova 2022**

in honor of ichthyologist Andrei A. Balanov, A. V. Zhirmunsky National Scientific Center of Marine Biology, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, for his “significant contribution to studies of the North Pacific ichthyofauna, including mesopelagic fishes and fishes of the Emperor Seamount Chain in particular”

***Diaphus basileusi* Becker & Prut'ko 1984**

of Basileus, latinization of Basil, in honor of Basil Nafpaktitis (1929-2015), for his important investigations of myctophid systematics, especially of the genus *Diaphus*

***Diaphus bertelseni* Nafpaktitis 1966**

in honor of ichthyologist Erik Bertelsen (1912-1993), Director of the Danish Marine Biological Institute, who made available funds and facilities for study at his laboratory

***Diaphus brachycephalus* Tåning 1928**

*brachys*, short; *cephalus*, head, briefly described in a key, allusion not explained; a curious epithet since this fish's head is actually quite large relative to its body (but the snout is very short)

***Diaphus burtoni* Fowler 1934**

in honor of E. Milby Burton (1898-1977), Director of the Charleston Museum, South Carolina, USA, who collected local fishes for his museum and invited Fowler to study them

***Diaphus chryso-rhynchus* Gilbert & Cramer 1897**

*chryso-*, gold; *rhynchus*, snout, referring to “orange-colored” photophore that covers snout

***Diaphus coeruleus* (Klunzinger 1871)**

blue, referring to blue-black dorsal coloration and/or “beautiful blue and silvery shimmering” luminous glands (translation)

***Diaphus confusus* Becker 1992**

confused or unclear, reflecting the “absence of any clear diagnostic trait” for this species, a word that “well described the author's state of mind when searching for a name for this taxon” (translations)

***Diaphus dahlgreni* Fowler 1934**

in honor of zoologist Ulric Dahlgren (1870-1946), Princeton University (New Jersey, USA), for his work on “luminous animals”

***Diaphus danae* Tåning 1932**

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

***Diaphus dehaveni* Fowler 1934**

in honor of the late Isaac Norris De Haven (1847-1924), birder and sportsman (Philadelphia, Pennsylvania, USA), for whom Fowler was “indebted for many local fishes”

***Diaphus diadematus* Tåning 1932**

crowned, allusion not explained, presumably referring to luminous organs on head, including an “extraordinarily large” suborbital luminous organ on males, “occupying the whole space between eye and maxilla”



***Diaphus diademophilus* Nafpaktitis 1978**

a combination of the names *D. diadematus* and *D. termophilus*, alluding to the close relationship between the three species and to the fact that in several characters this species is intermediate between the other two

***Diaphus drachmanni* Tåning 1932**

in honor of Danish classical philologist Anders Bjørn Drachmann (1860-1935), president of the Carlsberg Foundation, which financed the *Dana* expedition that collected type

***Diaphus dumerilii* (Bleeker 1856)**

in honor of August Duméril (1812-1870), herpetologist and ichthyologist, Muséum national d'Histoire naturelle (Paris)

***Diaphus effulgens* (Goode & Bean 1896)**

gleaming or phosphorescent, probably referring to luminous gland in front of head before the eye

***Diaphus ehrhorni* Fowler 1934**

in honor of entomologist Edward M. Ehrhorn (1862-1941), Honolulu, Hawaii, USA, “with memories of many pleasant Australian days”

***Diaphus faustinoi* Fowler 1934**

in honor of Leopoldo A. Faustino (1892-1935), geologist, mineralogist and conchologist (Bureau of Science, Manila, Philippines), “with pleasant memories of our trip to Krakatau” (or Krakatoa)

***Diaphus fragilis* Tåning 1928**

fragile or brittle; briefly described in a key, allusion not explained, perhaps referring to deciduous scales common to most lanternfishes

***Diaphus fulgens* (Brauer 1904)**

bright, presumably referring to suborbital luminous organ

***Diaphus garmani* Gilbert 1906**

in honor of Harvard ichthyologist-herpetologist Samuel Garman (1843-1927)

***Diaphus gigas* Gilbert 1913**

large, at 170 mm TL, the largest species in Gilbert's monograph on the lanternfishes of Japan

***Diaphus gracilis* Kulikova 1961**

slender, referring to its body form

***Diaphus handi* Fowler 1934**

in honor of the late H. Walker Hand (Cape May, New Jersey, USA), to whom Fowler was indebted for many fishes from Cape May

***Diaphus holti* Tåning 1918**

in honor of Irish ichthyologist Ernest William Lyons Holt (1864-1922), “the first who has ever identified a post-larva of the genus *Myctophus*”

***Diaphus hudsoni* Zurbrigg & Scott 1976**

named for the Canadian Coast Guard Ship *Hudson*, in honor of the *Hudson 70* Cruise around the Americas, during which type was collected

***Diaphus impostor* Nafpaktitis, Robertson & Paxton 1995**

imitator or pretender, referring to how it may be mistaken for *D. aliciae*

***Diaphus jenseni* Tåning 1932**

in honor of Danish zoologist Adolf Severin Jensen (1866-1953), member of committee that edited the oceanographic reports of the *Dana* expeditions

***Diaphus kapalae* Nafpaktitis, Robertson & Paxton 1995**

in honor of the fisheries research vessel *Kapala*, which has collected numerous specimens off the coast of New South Wales, including type of this species

***Diaphus knappi* Nafpaktitis 1978**

in honor of Smithsonian ichthyologist Leslie W. Knapp (1929-2017), for providing Nafpaktitis with lanternfishes from both the Indian and Pacific Oceans

***Diaphus kora* Nafpaktitis, Robertson & Paxton 1995**

Maori word for spark, referring to its bioluminescence (occurs near New Zealand, hence a Maori word)

***Diaphus kuroshio* Kawaguchi & Nafpaktitis 1978**

named for its occurrence in the Kuroshio Waters of Japan

***Diaphus lobatus* Nafpaktitis 1978**

lobed, referring to pronounced posterodorsal lobe of its operculum

***Diaphus lucidus* (Goode & Bean 1896)**

bright or shining, perhaps referring to luminous glands in general, or specifically to large, apparently luminous, pearl-colored spot under tip of opercular flap

***Diaphus lucifrons* Fowler 1934**

*lux*, light; *frons*, front, referring to large antorbital luminous organ “all along front eye edge”

***Diaphus luetkeni* (Brauer 1904)**

in honor of Danish zoologist Christian Frederik Lütken (1827-1901), whose 1892 classification of 24 lanternfish species was of “great systematic value” (translation)

***Diaphus malayanus* Weber 1913**

-*anus*, belonging to: Malaya, presumably referring to its occurrence in Halmahera and Banda Seas, both in the Malay Archipelago

***Diaphus mascarensis* Becker 1990**

-*ensis*, suffix denoting place: on the banks of the Mascarene Ridge, Indian Ocean, type locality

***Diaphus meadi* Nafpaktitis 1978**

in honor of ichthyologist Giles W. Mead (1928-2003), who as cruise leader on the *Anton Bruun* Cruises 6 (Indian Ocean) and 13 (eastern South Pacific) was largely responsible for much of the material reported on by Nafpaktitis

***Diaphus megalops* Nafpaktitis 1978**

*mega-*, large; *ops*, eye, referring to its “remarkably large eye”

***Diaphus metopoclampus* (Cocco 1829)**

etymology not explained, presumably *metopon*, brow or forehead, and *lampos*, light or lantern, referring to prominent luminous gland on front of head before the eyes

***Diaphus microps* (Brauer 1904)**

*micro-*, small; *ops*, eye, referring to its “very small eye” (translation)

***Diaphus minax* Nafpaktitis 1968**

threatening, referring to the “angry looks of this fish”

***Diaphus mollis* Tåning 1928**

soft, flabby or gelatinous; briefly described in a key, allusion not explained nor evident

***Diaphus nielsenii* Nafpaktitis 1978**

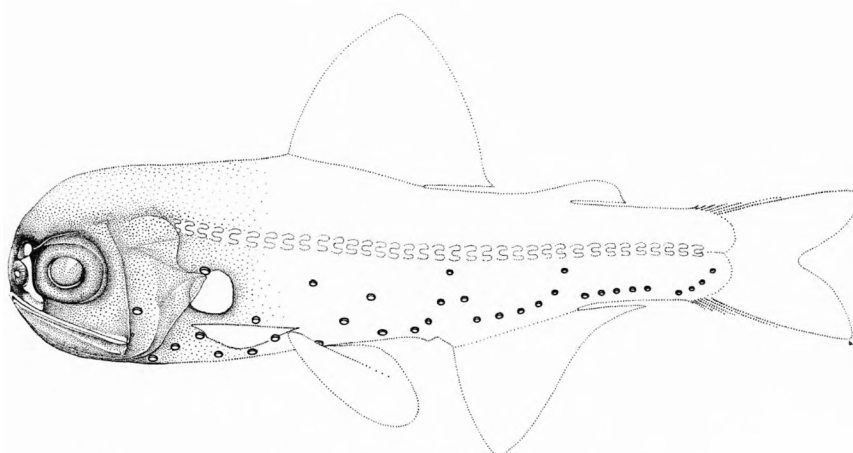
in honor of Jørgen G. Nielsen (b. 1932), Curator of Fishes, Zoological Museum of Copenhagen, to whom Nafpaktitis was most grateful for hospitality and help during the long period of his study of the *Dana* Collections, which are housed at Nielsen’s museum

***Diaphus ostenfeldi* Tåning 1932**

in honor of the late Carl Hansen Ostenfeld (1873-1931), Danish botanist and chairman of the committee that edited the oceanographic reports of the *Dana* expeditions

***Diaphus pacificus* Parr 1931**

-*icus*, belonging to: the Pacific Ocean (described from the Eastern Pacific [Gulf of California] but occurring in the Central Pacific [Johnston Atoll] as well)



*Diaphus minax*. From: Nafpaktitis, B. G. 1968. Taxonomy and distribution of the lanternfishes, genera *Lobianchia* and *Diaphus*, in the North Atlantic. Dana Report No. 73: 1-131, Pls. 1-2.

***Diaphus pallidus* Gjøsaeter 1989**

pale, referring to pale, light gray color when recently caught

***Diaphus parini* Becker 1992**

in honor of ichthyologist Nikolai Vasil'evich Parin (1932-2012), Russian Academy of Sciences, who had reservations about its identification as *D. suborbitalis* in the field

***Diaphus parri* Tåning 1932**

in honor of marine biologist Albert Eide Parr (1900-1991), for his “valuable” contribution to lanternfish taxonomy

***Diaphus perspicillatus* (Ogilby 1898)**

spectacled, referring to pair of supernumerary photophores in front of eyes

***Diaphus phillipsi* Fowler 1934**

in honor of the late Dr. Richard J. Phillips of Philadelphia, who collected many local fishes for Fowler

***Diaphus problematicus* Parr 1928**

problematic, reflecting Parr's concern that this species may prove to be conspecific with *D. tanakae* (=malayanus)

***Diaphus rafinesquii* (Cocco 1838)**

in honor of naturalist Constantine Samuel Rafinesque (1783-1840), who Cocco believes misidentified this species as *Myctophum punctatum* in 1810

***Diaphus regani* Tåning 1932**

in honor of ichthyologist Charles Tate Regan (1878-1943), Natural History Museum (London)

***Diaphus richardsoni* Tåning 1932**

in honor of surgeon-naturalist John Richardson (1787-1865), the first collector and writer on lanternfishes from the Indo-Pacific

***Diaphus rivatoni* Bourret 1985**

in honor of friend and colleague for 20 years, Jacques Rivaton (1921-2009), ORSTOM (Office de la Recherche Scientifique et Technique d'Outre-Mer), New Caledonia, who has devoted much effort to the identification of *Diaphus* from the Western Pacific

***Diaphus roei* Nafpaktitis 1974**

in honor of Richard N. Roe (1936-2016), National Marine Fisheries Service (NMFS), Southeast Fisheries Center, Pascagoula, Mississippi, USA, who provided specimens collected from the NMFS research vessel *Oregon*

***Diaphus sagamiensis* Gilbert 1913**

-ensis, suffix denoting place: Sagami Bay, Japan, type locality

***Diaphus schmidti* Tåning 1932**

in honor of Danish biologist Johannes Schmidt (1877-1933), who led the *Dana* expedition that collected type

***Diaphus signatus* Gilbert 1908**

marked, allusion not explained, perhaps referring to any or all of the following: a) distinct luminous dot surrounded by black pigment immediately above preocular luminous organ; b) dorsal-, anal- and caudal-fin rays finely dotted with black; c) two broad dark bars across mandibles

***Diaphus similis* Wisner 1974**

like or resembling, referring to its similarity to *D. trachops* and, to a lesser degree, *D. suborbitalis*

***Diaphus splendidus* (Brauer 1904)**

bright or shining, presumably a general reference to its luminous organs

***Diaphus suborbitalis* Weber 1913**

named for its roundish suborbital luminous organ below posterior half of eye

***Diaphus subtilis* Nafpaktitis 1968**

very fine, referring to “relatively small morphological differences, some of them difficult to define,” between this species and others of the *D. rafinesquii* species group

***Diaphus taaningi* Norman 1930**

in honor of Danish lanternfish expert Åge Vedel Tåning (1890-1958), who loaned type specimens to Norman and provided information about them

***Diaphus termophilus* Tåning 1928**

termo-, presumably a variant or misspelling of *thermos*, heat; *philo*, to love, probably referring to its occurrence within the warm waters of the Caribbean Sea and its immediate vicinity

***Diaphus theta* Eigenmann & Eigenmann 1890**

named for how most or all photophores are divided by a horizontal cross septum of black pigment, giving them the form of the Greek letter  $\theta$ , theta

***Diaphus thiollierei* Fowler 1934**

in honor of Victor Joseph de l'Isle Thiollière (1801-1859), French civil engineer, geologist and paleoichthyologist, who reported on fishes collected by French priest and biologist Xavier Montrouzier (1820-1897) from the Woodlark Archipelago (Papua, New Guinea) in 1857

***Diaphus trachops* Wisner 1974**

*trachos*, rough; *ops*, eye, referring to uneven surface of lower orbital margin caused by “small domed intrusions of pigmented tissue” covering minute, probably luminous, dots anterior to Vn (ventronasal) luminous organ

***Diaphus umbroculus* Fowler 1934**

*umbra*, shade; *oculus*, eye, referring to dark antorbital luminous organ

***Diaphus vanhoeffeni* (Brauer 1906)**

in honor of German zoologist Ernst Vanhöffen (1858-1918), who studied medusa jellies aboard the research vessel *Valdivia*, the first German expedition to explore the deep sea, during which type was collected

***Diaphus watasei* Jordan & Starks 1904**

in honor of biologist Shozaburo Watasé (1862-1929), Imperial University of Tokyo, who presented type to Stanford University

***Diaphus whitleyi* Fowler 1934**

in honor of Australian ichthyologist-malacologist Gilbert Percy Whitley (1903-1975), to whom Fowler was indebted for much assistance in his studies of Indo-Pacific fishes

***Diaphus wisneri* Nafpaktitis, Robertson & Paxton 1995**

in honor of Robert L. Wisner (1921-2005), Scripps Institution of Oceanography, for his work on the taxonomy and distribution of myctophids

***Idiolychnus* Nafpaktitis & Paxton 1978**

*idios*, peculiar; *lychnos*, light or lamp, referring to “peculiar combination and arrangement” of luminous organs (a small dorsonasal luminous organ and well-developed sexually dimorphic luminous glands on caudal peduncle)

***Idiolychnus urolampus* (Gilbert & Cramer 1897)**

*uro-*, tail; *lampus*, torch or lantern, presumably referring to supra- and infra-caudal luminous glands in adult males and females, respectively

***Lobianchia* Gatti 1904**

*-ia*, belonging to: fellow marine biologist Salvatore Lo Bianco (1860-1910), preparator, Stazione Zoologica Anton Dohrn (Naples, Italy)

***Lobianchia dofleini* (Zugmayer 1911)**

in honor of zoologist Franz Doflein (1873-1924), University of Munich, who recommended Zugmayer for the job of studying fishes obtained by the *Princesse-Alice* of Monaco (1901-1910)

***Lobianchia gemellarii* (Cocco 1838)**

in honor of Cocco's friend, Italian geologist Carlo Gemellaro (1787-1866), “well known for his interesting geognostic [geological] works on many places in Sicily” (translation)

**Subfamily Myctophinae** Lanternfishes***Benthoosema* Goode & Bean 1896**

*benthos*, of the deep, referring to its habitat; *sema*, a constellation of stars, allusion not explained, probably referring to photophores, which could be said to resemble bright stars in the sky

***Benthoosema fibulatum* (Gilbert & Cramer 1897)**

fastened together with a fibula (a brooch or pin), allusion not explained, perhaps referring to how its photophores and “silvery, steel blue, iridescent” scales could resemble a jeweled and decorative brooch

***Benthoosema glaciale* (Reinhardt 1837)**

icy or frozen, presumably referring to its occurrence in the Arctic waters of Greenland (type locality)

***Benthoosema panamense* (Tåning 1932)**

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

***Benthoosema pterotum* (Alcock 1890)**

finned, presumably referring to its long pectoral fins, extending to first or second anal-fin ray

***Benthoosema suborbitale* (Gilbert 1913)**

suborbital, referring to small round photophore on cheek below posterior portion of eye

***Centrobranchus* Fowler 1904**

*kentron*, thorn or spine; *branchus*, gill, referring to poorly developed gill rakers, reduced to a few small protuberances topped by slender spinules or, per Fowler, “small inconspicuous prickles”

**Centrobranchus andreae (Lütken 1892)**

in honor of the “tireless collector” (translation) Capt. A. F. Andréas, who collected this and other sea fishes for the University of Copenhagen Zoological Museum [*andreae* is presumably a latinization of Andréas]

**Centrobranchus choerocephalus Fowler 1904**

*choero-*, pig; *cephalus*, head, presumably referring to snout protruding beyond mouth (despite the name he selected, Fowler said head resembles that of an anchovy)

**Centrobranchus nigroocellatus (Günther 1873)**

*niger*, black; *ocellatus*, spotted, referring to “thick black ring” (translation) surrounding light organs

**Ctenoscopelus Fraser-Brunner 1949**

*cteno-*, comb, allusion not explained, possibly referring to “strongly dentate” opercular margin; *Scopelus*, junior synonym of *Myctophum*, an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes

**Ctenoscopelus phengodes (Lütken 1892)**

bright or shining, allusion not explained, presumably a general adjective for a lanternfish

**Dasyscopelus Günther 1864**

*dasy-*, rough, proposed as a subgenus of *Scopelus* (= *Myctophum*), referring to denticulate scales of *D. asper* [*Scopelus* is an old name of some large-eyed fish, from *scopus*, to look, historically applied to lanternfishes and other pelagic or deep-sea fishes with large eyes]

**Dasyscopelus asper (Richardson 1845)**

rough, referring to its “deeply toothed” scales, “the teeth being readily visible to the naked eye, and rendering the fish rough to the touch”

**Dasyscopelus brachygnathos (Bleeker 1856)**

*brachys*, short; *gnathos*, jaw, presumably referring to jaws not extending beyond posterior margin of eye

**Dasyscopelus lychnobius (Bolin 1946)**

according to Bolin, “one who lives by lamplight, who turns night into day”

**Dasyscopelus obtusirostris (Tåning 1928)**

*obtusus*, blunt; *rostris*, snout, probably referring to its “very short” snout

**Dasyscopelus orientalis Gilbert 1913**

eastern, “evidently one of the most abundant species in Japanese waters”

**Dasyscopelus selenops (Tåning 1928)**

*selene*, moon; *ops*, eye, allusion not explained but clearly referring to its large eyes, their diameter 1.4-1.6 in length of upper jaw, 2.2-2.4 in length of head, and 7.0-7.5 in SL

**Dasyscopelus spinosus (Steindachner 1867)**

thorny, referring to long spine (sometimes two) on lower extremity of each scale at anal-fin base

**Diogenichthys Bolin 1939**

Diogenes (412 or 404 BC-323 BC), a Cynic philosopher who went about in daytime with a lighted lantern looking for an honest man, allusion not explained but clearly referring to luminous organs (lanterns) of *D. laternatus*; *ichthys*, fish

**Diogenichthys atlanticus (Tåning 1928)**

*-icus*, belonging to: Atlantic Ocean, proposed as an Atlantic subspecies of the Pacific *D. laternatus*

**Diogenichthys laternatus (Garman 1899)**

*-atus*, provided with: lanterns, i.e., luminous organs

**Diogenichthys panurgus Bolin 1946**

Greek for a rascal, allusion not explained nor evident

**Electrona Goode & Bean 1896**

full of light, presumably referring to its luminous glands in general (on top of caudal peduncle and none on head) and/or photophores on body

**Electrona antarctica (Günther 1878)**

*-ica*, belonging to: Antarctic Ocean, type locality (but cosmopolitan in distribution)

**Electrona carlsbergi (Tåning 1932)**

in honor of the Carlsberg Laboratory, Copenhagen, research arm of the Carlsberg Foundation, which financed the *Dana* expedition that collected type

**Electrona paucirastra Bolin 1962**

*paucus*, few; *rastrum*, rake, referring to fewer number of gill rakers (21-23) compared to some congeners

***Electrona risso* (Cocco 1829)**

in honor of Italian-French naturalist Antoine Risso (1777-1845), whose 1827 work on the fishes of Southern Europe greatly influenced Cocco [a noun in apposition, without the genitive “i”]

***Electrona subaspera* (Günther 1864)**

*sub-*, less than; *asper*, rough, referring to “coarsely denticulated” scales, but presumably less so than the “strongly serrated” scales of *Myctophum asperum* (now *Dasyscopelus asper*), its presumed congener at the time

***Gonichthys* Gistel 1850**

etymology not explained, perhaps *gonio-*, angle, i.e., angular, possibly referring to “large, wide, diamond-shaped lateral line scales” (translation) of *G. loricata* (=cocco); *ichthys*, fish

***Gonichthys barnesi* Whitley 1943**

in honor of taxidermist William Barnes (d. 1962), who collected fishes in New South Wales and at Lord Howe Island, and whose labors “contributed largely” to a recent reorganization of the Australian Museum’s fish collection

***Gonichthys cocco* (Cocco 1829)**

according to Cocco (1838), “dedicated to the memory of my dear father, who died very prematurely, and whose loss will never stop bringing me to tears” (translation) [a noun in apposition, without the genitive “i”]

***Gonichthys tenuiculus* (Garman 1899)**

very thin or slight, referring to its compressed, elongate body, “very slender near the caudal fin”

***Gonichthys venetus* Becker 1964**

blue or sea-colored, referring to its bluish color, well-retained in preserved specimens

***Hygophum* Bolin 1939**

proposed as a subgenus of *Myctophus* by Tåning in 1932 but not available until Bolin 1939; etymology not explained but possibly a combination of *hygo-* (referring to *H. hygomii*, which Tåning included in the subgenus) and *-phum*, the second half of the putative nominate genus *Myctophum*

***Hygophum atratum* (Garman 1899)**

dressed in black, referring to body coloration, “lighter and silvery on the lower portions of the head and the anterior parts of the abdomen”

***Hygophum benoiti* (Cocco 1838)**

in honor of Cocco’s friend, Italian naturalist Luigi Benoit (1804-1890), author of the (then) upcoming *Ornitologia Siciliana* (1840)

***Hygophum bruuni* Wisner 1971**

in honor of Danish oceanographer Anton F. Bruun (1901-1961), and of the research vessel that bore his name, which “served to enhance greatly the knowledge of biology and hydrology of the Indian and southeastern Pacific oceans”

***Hygophum hanseni* (Tåning 1932)**

in honor of G. Hansen, who “for about 30 years has been attached to the Danish Marine investigations,” as captain of the *Thor*, the first Danish research ship specially equipped for scientific work on the oceans, and later as captain of the *Dana*, from which type was collected

***Hygophum hygomii* (Lütken 1892)**

in honor of Capt. Vilhelm Johannes Willaius Hygom (1818-?), Danish merchant seaman who collected marine organisms, including some of Lütken’s “Spoils of the Atlantic” (translation)

***Hygophum macrochir* (Günther 1864)**

*macro-*, long; *cheiros*, hand, referring to long pectoral fin, which extends to anal fin

***Hygophum proximum* Becker 1965**

near, referring to the close relationship of this Indo-Pacific species with the Atlantic *H. macrochir*

***Hygophum reinhardtii* (Lütken 1892)**

in honor of the late Johannes Theodor Reinhardt (1816-1882), Danish zoologist and student of phosphorescent fishes

***Hygophum taaningi* Becker 1965**

in honor of Danish ichthyologist Åge Vedel Tåning (1890-1958), who first noted that specimens previously identified as *H. macrochir* from the north Atlantic (this species) differ from those of the tropical Atlantic

***Kreftichthys* Hulley 1981**

in honor of Gerhard Krefft (1912-1993), Institut für Seefischerei (Hamburg), for his valuable contribution to the knowledge of lanternfishes, and whose “unfailing interest and critical supervision” made Hulley’s monograph possible; *ichthys*, fish

***Kreftichthys anderssoni* (Lönnberg 1905)**

in honor of Karl Andreas Andersson (1875-1968), zoologist of the Swedish Antarctic Expedition, who collected holotype

**Loweina Fowler 1925**

*-ina*, belonging to: eponym not identified, perhaps in honor of British biologist-clergyman Richard Thomas Lowe (1802-1874), who described several fishes, including one lanternfish, *Ceratospelus maderensis*

**Loweina interrupta (Tåning 1928)**

interrupted, allusion not explained, possibly referring to incomplete (or weakly developed) lateral line (a character of the genus), its external pores (perforated scales) seldom extending much beyond pelvic-fin origin

**Loweina rara (Lütken 1892)**

rare or thinly scattered, allusion not explained, perhaps referring to paucity of type material (Lütken made a point of mentioning that he had only four specimens)

**Loweina terminata Becker 1964**

bounded or limited, referring to its distribution, representing the northern limit of tropical myctophids

**Metelectrona Wisner 1963**

*meta*, change or transposition; *Electrona*, a myctophid genus, denoting the “evolutionary advancement expressed by the distinct elevation of two photophores of the normally unbroken anal series characteristic of the electronid fishes”

**Metelectrona ahlstromi Wisner 1963**

in honor of Elbert H. Ahlstrom (1910-1979), Southwest Fisheries Center, National Marine Fisheries Service, for his work on the Pacific sardine and other pelagic fishes of the eastern North Pacific

**Metelectrona herwigi Hulley 1981**

in honor of the German fisheries research vessel *Walther Herwig*, from which type was collected

**Metelectrona ventralis (Becker 1963)**

ventral, named for second VO (ventral) photophore higher than the others, a diagnostic feature of the species

**Myctophum Rafinesque 1810**

etymology not explained, probably a combination of *myktos*, nose or nostril and [*I*]ophus, crest or ridge, referring to “big nose [of *M. punctatus*] with two oblong openings separated by a ridge, and margined by another” (translation); earlier scholars suggested that *myktos* is a misspelling of *nyctos* (night) and that *phus* is derived from *phos* (light), but Rafinesque did not know that the fish’s “shiny” spot were luminous

**Myctophum affine (Lütken 1892)**

related, presumably referring to similarity and/or close relationship to *Scopelus caninianus* (= *M. punctatum*)

**Myctophum aurolaternatum Garman 1899**

*auro*, gold; *laternatum*, provided with lanterns, referring to golden luminous organs

**Myctophum fissunovi Becker & Borodulina 1971**

in honor of Georgy Kasyanovich Fissunov (or Fisunov, see *Tryssogobius fissunovi* in Gobiidae), a senior technician-oceanologist aboard the research vessel *Vityaz*, an “enthusiastic and unsurpassed master in the art of fishing with a cast net,” and to whom the P. P. Shirnov Institute of Oceanology owes for creating “one of the world’s largest collections of epipelagic fishes numbering many thousands of specimens” (translations)

**Myctophum imperceptum Becker & Borodulina 1971**

undiscovered or unnoticed, having been identified as *M.* (now *Dasyscopelus*) *brachygnathos* and *M. pristilepis* (= *D. brachygnathos*) by previous authors

**Myctophum indicum (Day 1877)**

Indian, referring to Vizagapatam, India, where a single specimen “now in bad shape” (disintegrated) was collected [*species inquirenda*, provisionally included here]

**Myctophum lunatum Becker & Borodulina 1978**

lunate, referring to shape of luminous gland at posterodorsal edge of orbit

**Myctophum nitidulum Garman 1899**

diminutive of *nitidus*, bright, allusion not explained, perhaps referring to smaller and/or fewer luminous organs compared to other lanternfishes described by Garman in the same publication

**Myctophum novaeseelandiae (Steindachner 1900)**

*novae*, new, i.e., of New Zealand, type locality [*species inquirenda*, provisionally included here]

**Myctophum ovcharovi Tsarin 1993**

in honor of myctophid specialist Oleg Petrovich Ovcharov, Ukrainian Academy of Sciences, who first noted that *M. asperum* (now *Dasyscopelus asper*) in the Indian Ocean did not approach the surface in its diurnal vertical migrations

**Myctophum punctatum Rafinesque 1810**

spotted, referring to “shiny silvery round dots, scattered regularly on the lower body” (translation) [note: Rafinesque did not know that these “dots” were luminous]

**Protomyctophum Fraser-Brunner 1949**

*protos*, first, proposed as a subgenus of *Electrona*, “clearly the most primitive genus” of myctophids

Subgenus **Protomyctophum****Protomyctophum andriashevi Becker 1963**

in honor of Soviet ichthyologist Anatoly Petrovich Andriashev (1910–2009), author of a 1962 review on systematics and distribution of lanternfishes of the Southern Hemisphere

**Protomyctophum bolini (Fraser-Brunner 1949)**

in honor of ichthyologist (and lanternfish specialist) Rolf Bolin (1901–1973), Hopkins Marine Station, Stanford University, who discovered this species but generously insisted that Fraser-Brunner describe it

**Protomyctophum choriodon Hulley 1981**

*choris*, asunder or apart; *odon*, tooth, referring to evenly spaced teeth on palatine

**Protomyctophum gemmatum Hulley 1981**

adorned with jewels, referring to luminous caudal glands of males

**Protomyctophum kolaevi Prokofiev 2004**

in honor of V. F. Kolaev, who collected type in 1981 (Kolaev was probably a fishery worker for TINRO [Pacific Scientific Research Fisheries Centre]; Artém Prokofiev, pers. comm.)

**Protomyctophum luciferum Hulley 1981**

bearing lights, presumably a general reference to its luminous glands and photophores

**Protomyctophum mcginnisi Prokofiev 2004**

in honor of Richard Frank McGinnis, for his contribution (a 1982 monograph on biogeography) to the study of lanternfishes of the Southern Hemisphere

**Protomyctophum normani (Tåning 1932)**

in honor of ichthyologist J. R. (John Roxborough) Norman (1898–1944), British Museum (Natural History), who described the related *M. tenisoni* in 1930

**Protomyctophum tenisoni (Norman 1930)**

in honor of Lt.-Col. William Percival Cosnahan Tenison (1884–1983), British Army officer who was also a painter and scientific illustrator, and who provided the illustrations in Norman’s report

Subgenus **Hierops Fraser-Brunner 1949**

*hieros*, presumably sacred or holy (e.g., heavenly); *ops*, eye, referring to their “telescopic” eyes

**Protomyctophum arcticum (Lütken 1892)**

Arctic, probably referring to type locality, Davis Strait, Greenland

**Protomyctophum beckeri Wisner 1971**

in honor of ichthyologist Vladimir Eduardovich Becker (1925–1995), Institute of Oceanology (Moscow), who first recognized the distinctness of this species, for his “extensive and valuable” studies on myctophid fishes collected by various Russian expeditions

**Protomyctophum chilense Wisner 1971**

*-ensis*, suffix denoting place: southeastern Pacific Ocean off Chile, type locality and where it appears to be confined

**Protomyctophum crockeri (Bolin 1939)**

in honor of San Francisco philanthropist and self-proclaimed explorer Charles Templeton Crocker (1884–1948), who used his yacht *Zaca* as a research vessel and thus “played an important role in the zoological exploration of the Pacific”

**Protomyctophum paralellum (Lönnberg 1905)**

a Southern Atlantic (or sub-Antarctic) species whose distribution parallels that of the closely related *P. arcticum* from the Northern Atlantic

**Protomyctophum subparalellum (Tåning 1932)**

*sub-*, somewhat, presumably referring to its resemblance to *P. paralellum*, both of which Tåning considered to be subspecies of *P. arcticum*

**Protomyctophum thompsoni (Chapman 1944)**

in honor of fishery biologist William Francis Thompson (1888–1965), Chapman’s mentor at the University of Washington (Seattle, USA), for his work in economic fisheries, ichthyology and teaching

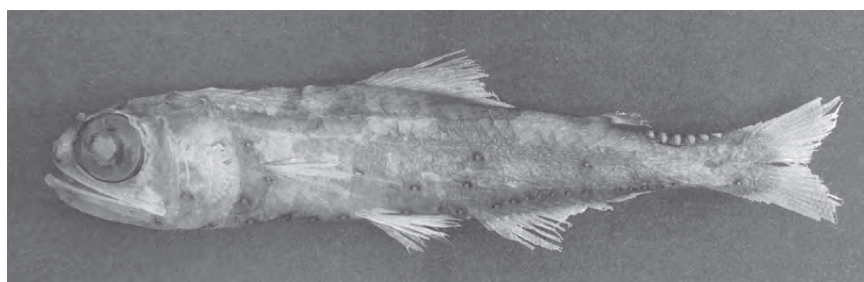
**Symbolophorus Bolin & Wisner 1959**

*symbolum*, symbol or sign; *fero*, to bear, referring to “very strongly angulated” SAO (supra-anal) photophore, which distinguishes it from *Myctophum*

**Symbolophorus barnardi (Tåning 1932)**

in honor of Keppel Harcourt Barnard (1887–1964), South African Museum, who raised the possibility that this





*Symbolophorus reversus*. From: Gago, F. J. and R. C. Ricord. 2005. *Symbolophorus reversus*: a new species of lanternfish from the eastern Pacific (Myctophiformes: Myctophidae). *Copeia* 2005 (no. 1): 138-145.

species is distinct from *Myctophum humboldti* (= *punctatum*) in 1925

***Symbolophorus boops* (Richardson 1845)**

*bo*, ox; *ops*, eye, referring to its “large round eye, which fills about half the space between the tip of the snout and edge of the gill-cover”

***Symbolophorus californiensis* (Eigenmann & Eigenmann 1889)**

*-ensis*, suffix denoting place: California, referring to type locality at Cortez Banks, off San Diego, California, USA

***Symbolophorus evermanni* (Gilbert 1905)**

in honor of ichthyologist Barton Warren Evermann (1853-1932), United States Fish Commission, which published Gilbert's monograph

***Symbolophorus krefftii* Hulley 1981**

in honor of Gerhard Krefft (1912-1993), Institut für Seefischerei (Hamburg), the first to realize that specimens of *Symbolophorus* from near the Cape Verde Islands might be specifically distinct from *S. veranyi*

***Symbolophorus reversus* Gago & Ricord 2005**

turned back, referring to “reverse-concavity form” of luminous plates on supracaudal gland of males; these plates are turned backward in position when compared to the closely related *S. evermanni*

***Symbolophorus rufinus* (Tåning 1928)**

rufous or rosy; briefly described in a key, allusion not explained nor evident, perhaps referring to color of photophores in life

***Symbolophorus veranyi* (Moreau 1888)**

in honor of French pharmacist-naturalist Jean Baptiste V é r a n y (1800-1865), director and co-founder of the Mus é u m d'histoire naturelle de Nice

***Tarletonbeania* Eigenmann & Eigenmann 1890**

*-ia*, belonging to: ichthyologist Tarleton H. Bean (1846-1916), U.S. National Museum

***Tarletonbeania crenularis* (Jordan & Gilbert 1880)**

slightly scalloped, referring to crenulate scales on sides

***Tarletonbeania taylori* Mead 1953**

in honor of oceanographer Frederick Henry Carlyle Taylor (b. 1919), Pacific Biological Station (Namaimo, British Columbia, Canada), “whose initiative and enterprise, coupled with the material support of the three governments involved [USA, Canada, Japan], made the trawling experiments [during which type was collected] possible”

***Tarletonbeania tenua* Eigenmann & Eigenmann 1890**

slender, referring to greatly compressed body, highest at shoulders, tapering to a very slender caudal peduncle