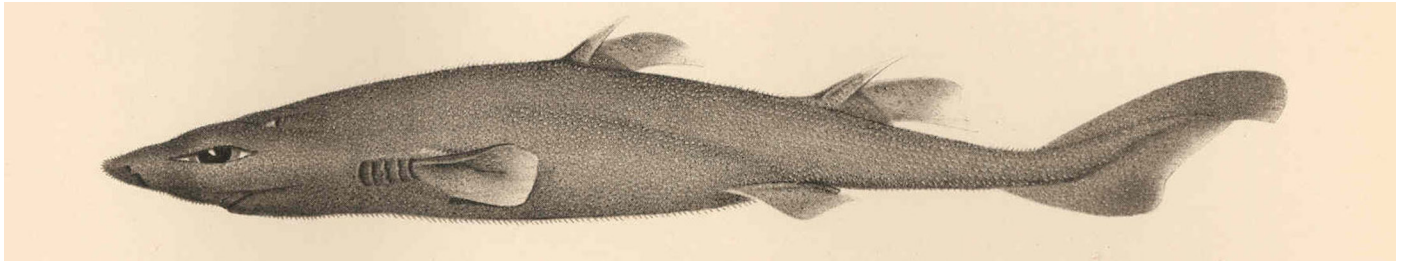


Order SQUALIFORMES

Lantern Sharks

Family **ETMOPTERIDAE**

Fowler 1934

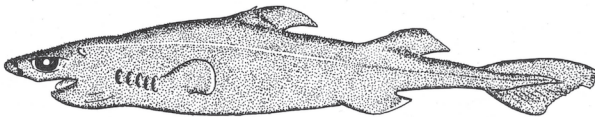


*Etmopterus villosus*, holotype, 170 mm TL. From: Gilbert, C. H. 1905. The deep-sea fishes of the Hawaiian Islands. In: The aquatic resources of the Hawaiian Islands. Bulletin of the U. S. Fish Commission 23 (2) [for 1903]: 577–713, Pls. 66–101.

***Aculeola***  
de Buen 1959

diminutive of *aculeus*, Latin for stinger or spur, referring to spines on both dorsal fins

***Aculeola nigra* de Buen 1959** Latin for black or dark, referring to uniform black color in formalin



First-published image of *Aculeola nigra*, holotype. Illustration by Fernando de Buen. From: de Buen, F. 1960. Tiburones, rayas y quimeras en la estación de Biología Marina de Montemar, Chile. Revista de Biología Marina, Valparaíso 10 (1–3): 3–50, 13 unnumb. pls.

***Centroscyllium***  
Müller & Henle 1841

*centrum* (L.), from *kéntron* (Gr. κέντρον), prickle or sharp point, allusion not explained, probably referring to spines on both dorsal fins; *scyllium*, from *skýlion* (Gr. σκύλιον), small dog or whelp, i.e., a small shark (sharks were derogatorily called “dogs” or “sea dogs” in ancient times)

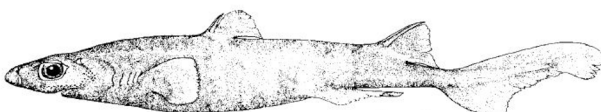
***Centroscyllium excelsum* Shirai & Nakaya 1990** Latin for high or elevated, referring to “very high” first dorsal fin, its height equal to or slightly larger than the length of its base

***Centroscyllium fabricii* (Reinhardt 1825)** in honor of Danish naturalist, missionary and ethnographer Otto Fabricius (1744–1822), the first to study the fishes of Greenland (including this shark)

***Centroscyllium granulatum* Günther 1887** Latin for grainy, referring to “epidermoid productions” of head and “granulated” body, much coarser than that of *C. fabricii*

***Centroscyllium kamoharai* Abe 1966** in honor of ichthyologist Toshiiji Kamohara (1901–1972), Kochi University, for his generosity to all ichthyologists

***Centroscyllium nigrum* Garman 1899** Latin (neuter) for black, referring to its deep-black coloration



*Centroscyllium excelsum*, holotype, male, 562 mm TL. From: Shirai, S. and K. Nakaya. 1990. A new squalid species of the genus *Centroscyllium* from the Emperor Seamount Chain. Japanese Journal of Ichthyology 36 (4): 391–398.

***Centroscyllium ornatum* (Alcock 1889)** Latin for adorned or decorated, probably referring to “head with minute white spots in the shape of a lute; ventrals with pale tips”

***Centroscyllium ritteri* Jordan & Fowler 1903** in honor of William Emerson Ritter (1856–1944), University of California, for his work on the tunicates and enteropneusta (acorn worms) of the Pacific Ocean

***Etmopterus***  
Rafinesque 1810

etymology not explained, presumably from *etmagen*, Latinized from *tmégō* (Gr. τμήγω), cut or cleave; *pterus*, from *pterón* (Gr. πτερόν) or *ptéryx* (πτέρυξι), wing or fin, referring to “laciniate” (i.e., frayed) fins of the *E. aculeatus* (=spinax) specimen that Rafinesque examined

***Etmopterus alphas* Ebert, Straube, Leslie & Weigmann 2016** *alphós* (Gr. ἀλφός), a type of leprosy typified by dull-white lesions, referring to characteristic white spot on cheeks

***Etmopterus bigelowi* Shirai & Tachikawa 1993** in honor of Henry B. Bigelow (1879–1967), Woods Hole Oceanographic Institution, who, with William C. Schroeder and Stewart Springer, provided the first descriptive account of this species (under the name *E. pusillus*) in 1955

***Etmopterus brachyurus* Smith & Radcliffe 1912** short-tailed, from *brachys* (Gr. βραχύς), short, and *ourá* (Gr. οὐρά), tail, referring to shorter caudal fin compared with *E. lucifer*

***Etmopterus brosei* Ebert, Leslie & Weigmann 2021** in honor of the late Barrie Rose (d. 2016), “friend and colleague for many years, an excellent naturalist who made a life-long study of vertebrate diversity and a love of chondrichthyans, and affectionately known as ‘Brose’ to his friends” (a pelagic birder and tour guide in Cape Town, South Africa, “Brose” died after slipping from sea cliffs while angling)

***Etmopterus bullisi* Bigelow & Schroeder 1957** in honor of American marine biologist Harvey R. Bullis, Jr. (1924–1992), presumably for collecting or supplying type, and/or furnishing the authors with other fishes collected off the coasts of Florida

***Etmopterus burgessi* Schaaf-Da Silva & Ebert 2006** in honor of American ichthyologist George Burgess (b. 1949), Florida Museum of Natural History, for his contributions to the systematics of *Etmopterus*

***Etmopterus carteri* Springer & Burgess 1985** in honor of American ichthyologist Carter Gilbert (1930–2022), Florida Museum of Natural History, for his 1967 revision of hammerhead sharks

***Etmopterus caudistigmus* Last, Burgess & Séret 2002** *cauda* (L.), tail; *stigmus*, from *stigma* (Gr. στίγμα) or *stigmé* (στιγμή), mark or spot, referring to oval markings on caudal fin

***Etmopterus compagnoi* Fricke & Koch 1990** in honor of American ichthyologist Leonard J. V. Compagno (b. 1943), for his research on South African sharks

***Etmopterus decacuspидatus* Chan 1966** *deca-*, from *dekas* (Gr.), ten; *cuspidatus* (L.), pointed, referring to five (sometimes four) pairs of cuspules on each side of every upper tooth

***Etmopterus dianthus* Last, Burgess & Séret 2002** Latinization of *dianthés* (Gr. διανθής), double flowering, but in this case named for the carnation genus *Dianthus* (often called “pinks”), referring to the shark’s pink upper body color in life

***Etmopterus dislineatus* Last, Burgess & Séret 2002** *dis* (L.), in two or asunder (i.e., broken); *lineatus* (L.), lined, referring to dark broken lines resembling dots and dashes extending horizontally along body

***Etmopterus evansi* Last, Burgess & Séret 2002** in honor of Australian fishery scientist David Evans, who “meticulously selected and donated valuable taxonomic specimens ... collected by commercial trawlers from the tropical deepwater of Western Australia”

***Etmopterus fusus* Last, Burgess & Séret 2002** Latin for spindle, referring to its torpedo-like (fusiform) shape

***Etmopterus gracilispinis* Krefft 1968** *gracilis* (L.), thin or slender; *spinis*, from *spina* (L.), thorn, referring to thin spines on both dorsal fins and/or short, slender thorn or prickle on scales

***Etmopterus granulatus* (Günther 1880)** *granum* (L.), seed or grain; *-osus*, Latin suffix connoting fullness, referring to rough conical denticles on skin

***Etmopterus hillianus* (Poey 1861)** *-[i]anus* (L.), belonging to: Jamaican magistrate and amateur naturalist Richard Hill (1795–1872), for his “Contributions to the Natural History of the Shark” (1851) and other writings on fishes

***Etmopterus jounji* Knuckey, Ebert & Burgess 2011** in honor of Shoo- Jeng Joung (b. 1958), National Taiwan Ocean University, for his contributions to chondrichthyan research in Taiwan and for his assistance and support during field surveys conducted by the second and third authors in Taiwanese fish markets

***Etmopterus lailae* Ebert, Papastamatiou, Kajiura & Wetherbee 2017** in honor of Laila Mostello-Wetherbee, shark enthusiast and daughter of co-author Brad Wetherbee

***Etmopterus lii* Ng, Liu & Joung 2024** in honor of Yong-Tai Li, captain of the fishing vessel *Xin Yong Tai*, for his assistance in not only obtaining type specimens, but also many other deep-sea organisms from the South China Sea for other researchers, and thus making a “great” contribution to marine science research

***Etmopterus litvinovi* Parin & Kotlyar 1990** in honor of Russian ichthyologist Fedor Fedorovich Litvinov (1954–2011), who helped collect type aboard the research vessel *Professor Shtockman* [Ninja Catshark *E. benchleyi* is a junior synonym]

***Etmopterus lucifer* Jordan & Snyder 1902** *lux* (L.), light; *-fer*, from *fero* (L.), to have or bear, referring to photophores on belly

***Etmopterus marshallae* Ebert & Van Hees 2018** in honor of Marsha Englebrecht, Facilities Curator for the Aquarium of the Bay (San Francisco, California, USA), and before that Director of Shark Experience at Marine World Africa USA (Vallejo, California) for her “innovative” contributions to elasmobranch husbandry

***Etmopterus molleri* (Whitley 1939)** in honor of Knud Moller, trawler captain who collected holotype (among other pelagic fishes for the Australian Museum)

***Etmopterus parini* Dolganov & Balanov 2018** patronym not identified but clearly in honor of ichthyologist Nikolai Vasil’evich Parin (1932–2012), P. P. Shirov Institute of Oceanology, Russian Academy of Sciences, who co-described *E. litvinovi* in 1990

***Etmopterus perryi* Springer & Burgess 1985** in honor of American marine biologist Perry W. Gilbert (1912–2000), Director, Mote Marine

Laboratory (Sarasota, Florida, USA), for his contributions to the knowledge of elasmobranch reproduction and other aspects of shark biology

***Etmopterus polli* Bigelow, Schroeder & Springer 1953** in honor of Belgian ichthyologist Max Poll (1908–1991), who discovered this shark and sent specimens to Harvard’s Museum of Comparative Zoology

***Etmopterus princeps* Collett 1904** Latin for chief, first or foremost, allusion not explained, possibly referring to larger size (largest *Etmopterus* in the western Atlantic) compared with *E. spinax*

***Etmopterus pseudosqualiolus* Last, Burgess & Séret 2002** *pseudo-*, from *pseudēs* (Gr. ψεύδης), false; *Squaliolus* (Dalatiidae), a genus of small squaloid sharks, i.e., although this genus may superficially resemble *Squaliolus* in body shape, such an appearance is false

***Etmopterus pusillus* (Lowe 1839)** Latin for very small (Lowe’s specimens were 28–30 cm in length)

***Etmopterus pycnolepis* Kotlyar 1990** *pycno-*, from *pyknos* (Gr.), dense or thick; *lepis* (Gr. λεπίς), scale, referring to dense rows of denticles on head, trunk and tail

***Etmopterus robinsi* Schofield & Burgess 1997** in honor of American ichthyologist C. Richard Robins (1928–2020), for his many years of service to systematic ichthyology and his development of the important University of Miami (Florida, USA) ichthyological collection

***Etmopterus samadiae* White, Ebert, Mana & Corrigan 2017** in honor of evolutionary biologist Sarah Samadi, Muséum National d’Histoire Naturelle (MNHN, Paris), one of the key principal investigators of the 2010 and 2012 MNHN expeditions in Papua New Guinea, during which all type specimens were obtained

***Etmopterus schultzi* Bigelow, Schroeder & Springer 1953** patronym not identified but almost certainly in honor of American ichthyologist Leonard P. Schultz (1901–1986), United States National Museum (later the Smithsonian Institution)

***Etmopterus sculptus* Ebert, Compagno & De Vries 2011** Latin for carved, referring to carved or sculpted appearance of its linear denticles

***Etmopterus sentosus* Bass, D’Aubrey & Kistnasamy 1976** Latin for thorny, referring to two longitudinal rows of greatly enlarged, hooked denticles along the flanks

***Etmopterus sheikoi* (Dolganov 1986)** in honor of marine biologist Boris A. Sheiko (b. 1957), Laboratory of Ichthyology at the Zoological Institute, St. Petersburg, Russia, and veteran of many oceanographic expeditions to the northwestern Pacific Ocean and northern Bering Sea

***Etmopterus spinax* (Linnaeus 1758)** zoological Neo-Latin for an animal having one or more spines, from *spina* (L.), thorn, prickle or spine, referring to spines on both dorsal fins

***Etmopterus splendidus* Yano 1988** Latin for bright or shining, probably referring to purplish-black back and bluish-black underside in life

***Etmopterus unicolor* (Engelhardt 1912)** *uni-*, from *unus* (L.), one, referring to uniform dark gray or brown coloration, i.e., without a sharp contrast between dorsal and ventral colors

***Etmopterus viator* Straube 2011** Latin for traveler, referring to how it occurs in two geographically distant locations in the Southern Hemisphere (off South Africa, Kerguelen Plateau, southern Indian Ocean, and Chatham Rise, New Zealand, southwestern Pacific)

***Etmopterus villosus* Gilbert 1905** Latin for hairy or shaggy, referring to skin thickly beset with small plates, each bearing a slender spine

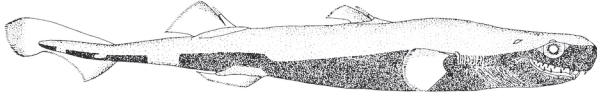
***Etmopterus virens* Bigelow, Schroeder & Springer 1953** Latin for green, referring to its bright-green iridescent belly in life

## ***Trigonognathus***

**Mochizuki & Ohe 1990**

*trígōnos* (Gr. τρίγωνος), triangular; *gnáthos* (Gr. γνάθος),  
jaw, referring to its triangular jaws

***Trigonognathus kabeyai* Mochizuki & Ohe 1990** in memory of Hiromichi Kabeya, captain of the bottom trawler *Seiryō-Marū*, who collected holotype and paratype in 1986



*Trigonognathus kabeyai*, holotype, male, 216 mm TL. From: Mochizuki, K. and F. Ohe. 1990. *Trigonognathus kabeyai*, a new genus and species of the squalid sharks from Japan. Japanese Journal of Ichthyology 36 (4): 385–390.