The ETYFish Project

COMMENTS:

v. 3.0 - 24 May 2026

Order PERCIFORMES (part 19)

Suborder COTTOIDEI

Infraorder COTTALES (part 1 of 4)

Family TRICHODONTIDAE Sandfishes

Arctoscopus **Jordan & Evermann 1896**
arctos, northern, referring to occurrence in North Pacific; *scopus*, presumed to be related to *Uranoscopus* (Uranoscopiformes: Uranoscopidae) based on its "fringed lips and other characters" (per Jordan & Evermann 1898)

Arctoscopus japonicus **(Steindachner 1881)**
Japanese, described, in part, from the Sea of Japan (occurs in North Pacific from Aleutian Islands to Bering Sea, Okhotsk Sea and Sea of Japan)

Trichodon **Tilesius 1813**
trichos, hair; *odon*, tooth, referring to slender and sharp (but not setiform) teeth [name not strictly a tautonym since it first appeared published in synonymy of *Trachinus* then treated as valid by Cuvier 1829; authorship could be attributed to Georg Wilhelm Steller (1709-1746), who is extensively quoted in description]

Trichodon trichodon **(Tilesius 1813)**
trichos, hair; *odon*, tooth, referring to slender and sharp (but not setiform) teeth

Family JORDANIIDAE Longfin Sculpin and Thornback Sculpin

Jordania **Starks 1895**
-ia, belonging to: David Starr Jordan (1851-1931), Starks' "teacher in ichthyology"

Jordania zonope **Starks 1895**
etymology not explained; per Jordan & Evermann (1898): *zona*, zone (i.e., band), and *opi*, window (actually hole), referring to dark bar half as wide as eye, running from eye downward across cheek to anterior end of interopercle, bordered on each side by a light streak

Paricelinus **Eigenmann & Eigenmann 1889**
para-, near, described as related to *Icelinus* (Cottidae), its presumed confamilial at the time

Paricelinus hopliticus **Eigenmann & Eigenmann 1889**
armed (with a weapon), referring to its "well armed" head, i.e., with spines on occiput, preopercle, suborbital stay, preorbital, and part of supraorbital

Family RHAMPHOCOTTIDAE Grunt Sculpins

3 genera · 5 species · Taxonomic note: includes the former Ereuniidae, Deepwater Bullheads.

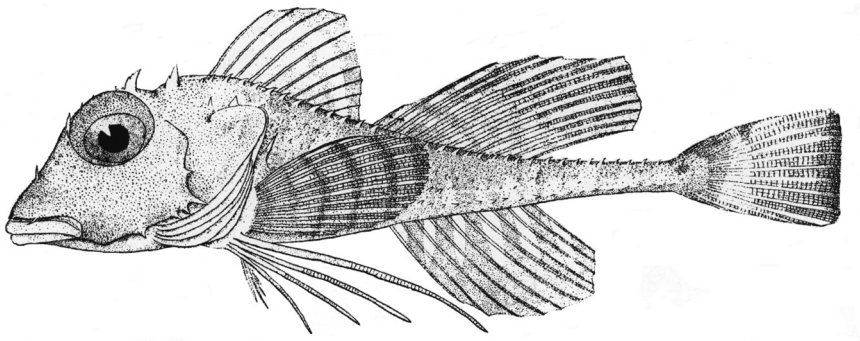
Ereunias **Jordan & Snyder 1901**
ereunao, to explore, allusion not explained, perhaps referring to how it explores the sea floor using its elongate pectoral-fin rays as feelers or "feet"; *-ias*, suffix used in some Greek names of fishes (e.g., *Xiphias*)

Ereunias grallator **Jordan & Snyder 1901**
Latin for one who walks on stilts, presumably referring to lower four pectoral-fin rays, elongated and free, by which it presumably "walks" across the sea floor

Marukawichthys **Sakamoto 1931**
in honor of Hisatoshi Marukawa, Imperial Fisheries Experimental Station, who "kindly" put his collection of fishes from Tosa Bay, Japan, including type of this species, at the author's disposal [Sakamoto later known as Matsubara]

Marukawichthys ambulator **Sakamoto 1931**
a walker, presumably referring to lower four pectoral-fin rays, elongated and free, by which it presumably "walks" across the sea floor [Sakamoto later known as Matsubara]

Marukawichthys pacificus **Yabe 1983**
-icus, belonging to: Pacific Ocean, known only from the Emperor Seamount Chain of the North Pacific Ocean



Marukawichthys ambulator. From: Sakamoto, K. 1931. Type of a new family of mailed-cheek fish from the Japan Sea, *Marukawichthys ambulator*, n. g. n. sp. *Journal of the Imperial Fisheries Institute* v. 26 (no. 2): 53-56.

Rhamphocottus **Günther 1874**
rhamphos, beak, referring to prolonged, beak-like snout; *Cottus*, type genus of Cottidae, presumed family at the time

Rhamphocottus nagaakii **Munehara, Yamazaki & Tsuruoka 2022**
in honor of Nagaaki Satoh, a professional diving instructor, who first observed the reproductive behavior of this species underwater and informed the authors of his observations

Rhamphocottus richardsonii **Günther 1874**
patronym not identified, probably in honor of surgeon-naturalist John Richardson (1787-1865)

Family SCORPAENICHTHYIDAE Cabezon

Taxonomic note: placed in Cottidae by some workers.

Scorpaenichthys **Girard 1854**
Scorpaena (scorpionfishes, Scorpaenidae), described as having a *Scorpaena*-like cutaneous, branching flap above posterior rim of orbit; *ichthys*, fish

Scorpaenichthys marmoratus **(Ayres 1854)**
marbled, referring to body and fins mottled with various shades of white, yellow, brown, green, and blue

Family NAUTICHTHYIDAE Sailfin Sculpins

Nautichthys **Girard 1858**
nautes, sailor, referring to very tall first dorsal fin of *N. oculofasciatus*; *ichthys*, fish

Nautichthys oculofasciatus **(Girard 1858)**
oculus, eye; *fasciatus*, banded, referring to black band crossing through eye and extending across cheeks

Nautichthys pribilovius **(Jordan & Gilbert 1898)**
-ius, adjectival suffix: Pribilof Islands, Bering Sea, type locality (islands are named for their discoverer, Russian navigator Gavriil Pribylov [d. 1796])

Nautichthys robustus **Peden 1970**
named for its more robust body shape compared with the slenderer *N. pribilovius*

Family HEMILEPIDOTIDAE Irish Lords

Hemilepidotus Cuvier **1829**
tautonymous with *Cottus hemilepidotus* Tilesius 1811

Hemilepidotus gilberti **Jordan & Starks 1904**
in honor of ichthyologist, fisheries biologist and Jordan's Stanford University colleague Charles H. Gilbert (1859-1928)

Hemilepidotus hemilepidotus **(Tilesius 1811)**
hemi-, half; *lepidotus*, scaled, referring to two bands of ctenoid scales along sides of body, the skin otherwise scaleless above and below them

Hemilepidotus jordani **Bean 1881**
patronym not identified but clearly in honor of ichthyologist David Starr Jordan (1851-1931)

***Hemilepidotus papilio* (Bean 1880)**
butterfly, allusion not explained, perhaps referring to wing-like pectoral fins that resemble a butterfly's (when seen from above)

***Hemilepidotus spinosus* Ayres 1854**
spiny, allusion not explained, perhaps referring to "strong and prominent" nasal spines and/or four "strong" spines on margin of preoperculum (per Ayres 1855)

***Hemilepidotus zapus* Gilbert & Burke 1912**
za-, very or exceedingly; *pous*, foot, referring to "greatly produced" ventral fins of males

Family HEMITRIPTERIDAE Searavens
2 genera · 5 species

***Blepsias* Cuvier 1829**
a fish name from an ancient Greek text that Cuvier applied to this genus (as he had done with other genera he proposed, e.g., *Synodontis*, *Salanx*, *Premnas*)

***Blepsias bilobus* Cuvier 1829**
bi-, two; *lobus*, lobe, referring to deeply notched dorsal fin, creating appearance that it consists of two fin lobes, compared with *B. trilobus* (=*cirrhosus*), which Cuvier mistakenly believed consisted of three fin lobes

***Blepsias cirrhosus* (Pallas 1814)**
curled or bearing tendrils, referring to several elongate, whisker-like barbels on snout and lower jaw

***Hemitripterus* Cuvier 1829**
hemi-, partial; *tri-*, three; *pterus*, fin, referring to deeply emarginate first dorsal fin of *H. tripterygius* (=*americanus*), which has led some authors to believe it has three dorsal fins

***Hemitripterus americanus* (Gmelin 1789)**
American, then presumed to be an American (western North Atlantic) relative of the European (eastern North Atlantic and Mediterranean) scorpaenid genus *Scorpaena*

***Hemitripterus bolini* (Myers 1934)**
in honor of ichthyologist Rolf Bolin (1901-1973), Hopkins Marine Station, Stanford University, whose then unpublished monograph on Californian cottoids (published in 1944) "will mark a great step forward in our knowledge of the interrelationships of these interesting fishes"

***Hemitripterus villosus* (Pallas 1814)**
rough and/or hairy, referring to body covered with many small tubercles that feel rather harsh to the touch

Family AGONIDAE Poachers
19 genera · 49 species

Subfamily Hypsagoninae Dragon Poachers
Taxonomic note: treated as Subfamily Percidinae by some workers, based on *Percis* being the oldest genus-level name.

***Agonomalus* Guichenot 1866**
Agonus, presumed to be a related genus at the time; *homalus*, level, even, or flat, i.e., an *Agonus*-like fish with a compressed body and head (name does not mean "no corners" as reported by Miller 2020; see *A. jordani*)

***Agonomalus jordani* Jordan & Starks 1904**
in honor of David Starr Jordan (1851-1931), for his contributions to the study of Pacific fishes; manuscript name coined by Russian ichthyologist Peter Schmidt (1872-1949), which Jordan & Starks incorporated into their paper, giving Schmidt credit for the name, but since they used their own description and not Schmidt's they are considered the author of the name (Jordan did not name the fish after himself as suggested by Lulu Miller in her 2020 analysis of Jordan's life, work and influence, *Why Fish Don't Exist: A Story of Loss, Love, and the Hidden Order of Life*; after we pointed out the error, Miller added an endnote to the 2021 paperback edition suggesting that Schmidt was the author of the name and directed readers to The ETYFish Project)

***Agonomalus mozinoi* Wilimovsky & Wilson 1979**
in honor of Mexican physician-naturalist José Mariano Moziño (1757-1820, aka Mociño), "one of the earliest contributors to the natural history of western North America," the "extent of [his] activities has only recently become generally known"; in 1791, he joined the Royal Botanical Expedition, which explored the Pacific Northwest (where this species occurs), creating one of the most important natural history collections of his time [placed in *Hypsagonus* by some workers]

***Agonomalus proboscidalis* (Valenciennes 1858)**
bearing a proboscis, referring to barbel on snout "projecting in front of the muzzle like a small proboscis" (translation)

Agonomalus jordani. From: Jordan, D. S. and E. C. Starks. 1904. A review of the Japanese fishes of the family of Agonidae. *Proceedings of the United States National Museum* v. 27 (no. 1365): 575-599.

***Hypsagonus* Gill 1861**
hypsos, high, presumably referring to tall spinous dorsal fin of *H. quadricornis*; *Agonus*, type genus of family

***Hypsagonus corniger* Taranetz 1933**
cornis, horn; *-iger*, to bear, referring to two pairs of horn-like spines on top of head

***Hypsagonus quadricornis* (Valenciennes 1829)**
quadri-, four; *cornis*, horn, referring to two pairs of horn-like spines on top of head

***Percis* Scopoli 1777**
perch, allusion not explained nor evident

***Percis japonica* (Pallas 1769)**
Japanese, presumably referring to the Kuril Islands, type locality, then considered a territory of Japan

***Percis matsuii* Matsubara 1936**
in honor of Yoshiichi Matsui, "chief-expert" of the Toyohashi Branch of the Fisheries Experimental Station, who supplied holotype (and that of *Coelorinchus hubbsi*, Gadiformes: Macrouridae)

Subfamily Agoninae Hooknose Poachers

***Agonus* Bloch & Schneider 1801**
etymology not explained, perhaps from *agónos*, Greek for combat (per Holger Funk, pers. comm.), referring to *A. cataphractus*, whose specific name means "clad in armor" (i.e., bony plates); Jordan & Evermann (1898) translate name as *a-*, without and *gonia*, joint, referring to rigidity of body, but *gonia* only rarely means "joint" and more commonly means "corner" or "angle," which would make it a poor name for such an angular fish ("Corpus angulatum")

***Agonus cataphractus* (Linnaeus 1758)**
clad in armor, referring to entire body encased in rows of fused, slightly overlapping bony plates

***Bothragonus* Gill 1883**
bothros, cavity, referring to deep pit at nape; *Agonus*, type genus of family

***Bothragonus occidentalis* Lindberg 1935**
western, referring to distribution in northwestern Pacific compared to northeastern Pacific distribution of *B. swanii*

***Bothragonus swanii* (Steindachner 1876)**
in honor of James G. Swan (1818-1900), Port Townsend, Washington, USA, maritime lawyer who collected Indian artifacts for the Smithsonian Institution and fishes for the U.S. Fish Commission; he handed holotype to Steindachner when the Austrian ichthyologist visited Port Townsend in 1872

Subfamily Anoplagoninae Alligator Fishes
Taxonomic note: treated as Subfamily Aspidophoroidinae by some workers, based on *Aspidophorides* being the older genus-level name.

***Anoplagonus* Gill 1861**
anoplos, Greek for unarmed, presumably referring to no spines above snout of *A. inermis*; *Agonus*, type genus of family

***Anoplagonus inermis* (Günther 1860)**
Latin for unarmed, presumably referring to no spines above snout

***Anoplagonus occidentalis* Lindberg 1950**
western, referring to distribution in northwestern Pacific compared to northeastern Pacific distribution of *A. inermis*

***Aspidophoroides* Lacepède 1801**
-oides, having the form of: *Aspidophorus* (=*Agonus*; *aspido-*, shield and *phorus*, carrying, referring to plates covering body and caudal peduncle), but lacking a spinous dorsal fin

***Aspidophoroides bartoni* Gilbert 1896**
in honor of Barton A. Bean (1860-1947), assistant curator of ichthyology at the U.S. National Museum, from whom Gilbert received "many courtesies" during the production of the paper in which description appeared

***Aspidophoroides monopterygius* (Bloch 1786)**
mono-, one; *pterygius*, finned, described as a sculpin (*Cottus*) lacking a spinous dorsal fin

***Aspidophoroides olrikii* Lütken 1877**
in honor of the late Christian Søren Marcus Olrik (1815-1870), zoologist, botanist, teacher, and Royal Inspector of North Greenland (where this species occurs); he was in some way responsible for the deposition of syntypes (from the stomach of the flounder *Hippoglossus hippoglossus*) at the University of Denmark's Zoological Museum

Subfamily Podothecinae Sturgeon Poachers

***Freemanichthys* Kanayama 1991**
in honor of Harry Wyman Freeman (1923-2012), College of Charleston (South Carolina, USA), who worked on the family Agonidae for his doctoral thesis; *ichthys*, fish

***Freemanichthys thompsoni* (Jordan & Gilbert 1898)**
in honor of D'Arcy Wentworth Thompson (1860-1948), University at Dundee, Scottish mathematician, biologist and classics scholar noted for his 1910 translation of Aristotle's *History of Animal*s and 1947 *Glossary of Greek Fishes*; he was honored for his work representing the British Government in an international inquiry (1896-97) to assess the declining numbers of fur seals in the Bering Sea, in which Jordan and Gilbert also took part and during which type was collected

***Leptagonus* Gill 1861**
leptos, thin or slender, presumably referring to "compressed" body of *L. spinosissimus* (=*decagonus*)

***Leptagonus decagonus* (Bloch & Schneider 1801)**
deca-, ten; *gonus*, angle or corner, referring to decagonal body in front of anus (hexagonal behind)

***Leptagonus frenatus* (Gilbert 1896)**
bridled, presumably referring to bluish-black stripe from rostral spine to front of orbit

***Leptagonus knipowitschi* (Lindberg & Andriashev 1937)**
patronym not identified but almost certainly in honor of Nikolai Mikhailovich Knipowitsch (1862-1939, often spelled Knipovich in English), Russian oceanographer and zoologist, who led many scientific expeditions to the Russian Arctic and whose works are cited several times by the authors

***Leptagonus leptorhynchus* (Gilbert 1896)**
leptos, slender; *rhynchus*, snout, referring to "elongate slender" snout, more so than *L. frenatus*, described in the same publication

***Podothecus* Gill 1861**
podos, foot; *theca*, case or enclosure, referring to pelvic fins, which appear to originate from an "elongated triangular groove or furrow" due (per Jordan & Evermann 1898), "through the sinking of the naked skin in preserved specimens"

***Podothecus accipenserinus* (Tilesius 1813)**
-inus, adjectival suffix: *acipenser*, Latin for sturgeon, referring to its sturgeon-like appearance

***Podothecus hamlini* Jordan & Gilbert 1898**
in honor of Charles Sumner Hamlin (1861-1938), Assistant Secretary of the Treasury (USA), under whose auspices the fur seal investigations of 1896-97 (in which Jordan and Gilbert took part and during which type was collected) were carried out by the United States Fur Seal Commission (see also *Freemanichthys thompsoni*)

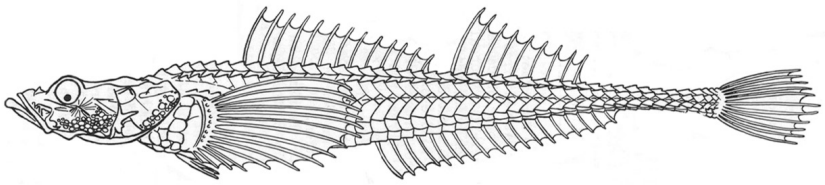
***Podothecus sachi* (Jordan & Snyder 1901)**
Japanese for good fortune, local name for this species at Aomori Bay, Japan, type locality

***Podothecus sturioides* (Guichenot 1869)**
-oides, having the form of: Latin for sturgeon, referring to its sturgeon-like appearance

***Podothecus veternus* Jordan & Starks 1895**
per Jordan & Evermann 1898: "an old man, veteran, in allusion to the want of teeth"

Subfamily Brachyopsinae Uppermouth Poachers

***Brachyopsis* Gill 1861**
brachys, short; *opsis*, face or appearance, allusion not explained, perhaps referring to short jaws at end of long, almost tubular, snout



Occella kuronumai. From: Freeman, H. W. 1951. Two new agonid fishes from the Sea of Japan. *Stanford Ichthyological Bulletin* v. 4 (no. 1): 22-26.

***Brachyopsis segaliensis* (Tilesius 1809)**
-ensis, suffix denoting place: Isle Ségalian, French spelling of Sakhalin Island, Russia, where type locality (Terpeniya Bay) is situated (occurs in northwestern Pacific from southern Okhotsk Sea to northern Japan Sea and Pacific coast of northern Japan)

***Chesnonia* Iredale & Whitley 1969**
-ia, belonging to: Cygnus G. Chesnon (life dates unknown), who published a rare and previously unnoticed book on the natural history of Normandy, France, in 1835, in which he proposed *Occa* (=*Somateria*), a genus of elders or seaducks; noticing that the original name for this genus, *Occa* Jordan & Evermann 1898, was thus preoccupied by *Occa* Chesnon 1835, Iredale & Whitley renamed it in honor of Chesnon

***Chesnonia verrucosa* (Lockington 1880)**
covered with verrucae, or warts, allusion not explained, perhaps referring to "numerous prickles" on head and anterior portion of body

***Occella* Jordan & Hubbs 1925**
presumably a diminutive of *Occa* (a harrow, referring to strongly spined plates on body); unlike *Occa* (replaced by *Chesnonia*, see above), plates on *O. dodecaedron* are "much smoother," with some "scarcely spined" [often misspelled as *Ocella*]

***Occella dodecaedron* (Tilesius 1813)**
duodecim, twelve; *hedra*, surface, referring to six (sometimes five) rows of bony plates per side, for a total of 12 "surfaces" per fish

***Occella iburia* (Jordan & Starks 1904)**
-ia, belonging to: off Iburi, Hokkaido, Japan, type locality

***Occella kasawae* (Jordan & Hubbs 1925)**
in honor of Masunosuke Kasawa (1890-?) of Sapporo, Japan, a graduate student at Stanford University (where Jordan was president), "engaged in the study of the fishes of the Hokkaido," later affiliated with the Imperial University of Japan [name spelled "Kazawa" in the dedication, an apparent lapsus; although named after a man, some classically trained zoologists latinized the names of individuals whose names ended with the letter "a" by adding an "e" to the spelling]

***Occella kuronumai* (Freeman 1951)**
in honor of Katsuzô Kuronuma (1908-1992), later president of the Tokyo University of Fisheries, who wrote a description of this species in 1930 while working as a graduate student at the University of Michigan, but whose manuscript was destroyed by fire in WW2

***Pallasina* Cramer 1895**
-ina, belonging to: patronym not identified but almost certainly in honor of naturalist and explorer Peter Simon Pallas (1741-1811), author of *Zoographia Rosso-Asiatica* (1811)

***Pallasina aix* Starks 1896**
Greek for goat, referring to barbel at tip of lower jaw, and also Greek for a darter (the bird, not the fish), referring to its slender form

***Pallasina barbata* (Steindachner 1876)**
bearded, referring to barbel at tip of lower jaw

***Pallasina eryngia* Jordan & Richardson 1907**
from *eryngos*, the goat's beard, referring to extremely elongate barbel at tip of lower jaw

***Stellerina* Cramer 1896**
-ina, belonging to: per Jordan & Evermann (1898), in honor of Georg Wilhelm Steller (1709-1746), naturalist and explorer, the first to study the fishes of Bering Sea

***Stellerina xyosterna* (Jordan & Gilbert 1880)**
xyo, scrape; *sternon*, breast, referring to breast, not covered with plates like rest of body, but with minute tubercles, each of which has a central spine

***Tilesina* Schmidt 1904**
-ina, belonging to: Wilhelm Gottlieb Tilesius von Tilenau (1769-1857, known as Tilesius), German naturalist, physician, explorer, and professor at Moscow University, who served as ship surgeon, marine biologist and expedition artist on the frigate *Nadezhda*, in the first Russian circumnavigation of the globe (1803-1806); he also described several agonid taxa

***Tilesina gibbosa* Schmidt 1904**
humpbacked, referring to convex dorsal profile

Subfamily Agonopsinae Spearnose Poachers

***Agonopsis* Gill 1861**
Agono-, *Agonus*; *opsis*, appearance, i.e., presumably referring to its *Agonus*-like appearance

***Agonopsis asperoculis* Thompson 1916**
asper, rough; *oculis*, eye, referring to series of small spines on upper surface of eyeball (absent on *A. chiloensis*)

***Agonopsis chiloensis* (Jenyns 1840)**
-ensis, suffix denoting place: Isla de Chiloé, Chile, type locality (occurs in southeastern Pacific and southwestern Atlantic from Chile to Uruguay)

***Agonopsis sterletus* (Gilbert 1898)**
modern Latin for sturgeon, probably referring to its sturgeon-like appearance, especially its barbels

***Agonopsis vulsa* (Jordan & Gilbert 1880)**
Latin for beardless, referring to "under side of snout with few barbels or none"

Subfamily Bathyagoninae Starsnouts
Taxonomic note: treated as Subfamily Odontopyxinae by some workers, based on *Odontopyxis* being the oldest genus-level name.

***Bathyagonus* Gilbert 1890**
bathys, deep, referring to capture of *B. nigripinnis* at 872 m; *Agonus*, type genus of family

***Bathyagonus alascanus* (Gilbert 1896)**
Alaskan, described from vicinity of Pribilof Islands, Unimak Pass, and Shumagin Islands, Alaska (occurs in northeastern Pacific from southeastern Bering Sea to northern California)

***Bathyagonus infraspinatus* (Gilbert 1904)**
infra-, below; *spinatus*, spined, allusion not explained, perhaps referring to cheeks below suborbital ridge "covered with 2 or 3 heavy gibbous plates, coalesced and immovable, the centers elevated and bearing minute backwardly-directed spines"

***Bathyagonus latifrons* (Gilbert 1890)**
latus, broad or wide; *frons*, forehead, presumably referring to "very short snout" compared with *B. triacanthus* and *B. pentacanthu*

***Bathyagonus leiops* (Gilbert 1915))**
leios, smooth; *ops*, eye, referring to absence of spinelets on eyeball, unlike its congeners

***Bathyagonus nigripinnis* Gilbert 1890**
niger, black; *pinnis*, fin, referring to "intense blue-black" fins

***Bathyagonus pentacanthus* (Gilbert 1890)**
penta-, five; *acanthus*, thorn or spine, referring to star-like whorl (hence the common name) of five spines on rostral plate

***Bathyagonus ritteri* (Gilbert 1915)**
in honor of marine biologist William Emerson Ritter (1856-1944), director of the Scripps Institution for Biological Research (now Scripps Institution of Oceanography)

***Bathyagonus triacanthus* (Gilbert 1890)**
tri-, three; *acanthus*, thorn or spine, referring to three spines at tip of snout

***Odontopyxis* Lockington 1880**
odontos, tooth; *pyxis*, in classical literature, a cylindrical box with a separate lid, allusion not explained; according to Pietsch & Orr 2019, *Fishes of the Salish Sea*, name may refer to its cylindrical, box-like construction with the "lid" being the presence of teeth on vomer and palatines, which Lockington used to distinguish it from *Agonus*

***Odontopyxis trispinosa* Lockington 1880**
tri-, three; *spinosus*, spiny, presumably referring to three prominent spines on snout (single rostral spine and two nasal spines behind)