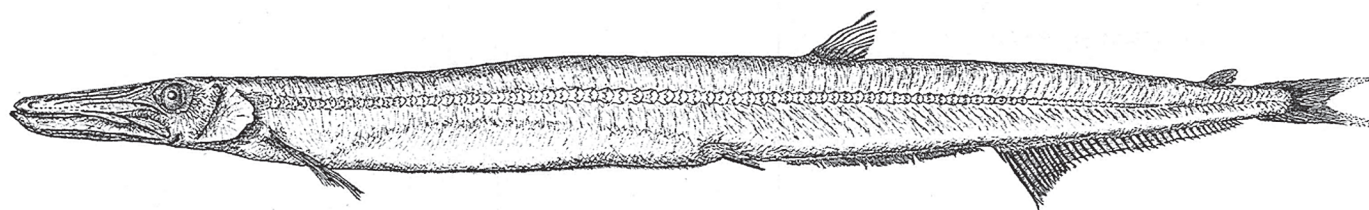


## Order AULOPIFORMES

## Barracudinas

Family **PARALEPIDIDAE**

Bonaparte 1835



*Dolichosudis fuliginosa*. From: Post, A. 1969. Ergebnisse der Forschungsreisen des FFS "Walther Herwig" nach Südamerika. VIII. *Dolichosudis fuliginosa* gen. nov. spec. nov. (Osteichthyes, Iniomi, Paralepididae). Archiv für Fischereiwissenschaft 20 (1): 15–21.

**Arctozenus**

Gill 1864

*arcto-*, from *árktos* (Gr. ἄρκτος) north; *zenus*, from *xeníkós* (Gr. ξενικός), strange or foreign (i.e., different), proposed as a subgenus of *Paralepis*, referring to the "remarkable distribution" of the genus, with the type species (a misidentified *P. coregonoides borealis*) from Greenland and the rest of the genus then known only from the Mediterranean

***Arctozenus australis* Ho & Duhamel 2019** Latin for southern, referring to its distribution, which appears to be restricted to the Southern Ocean

***Arctozenus risso* (Bonaparte 1840)** in honor of French naturalist Antoine Risso (1777–1845), who described *Paralepis coregonoides* (its presumed congener at the time) in 1820<sup>1</sup> [presumably a noun in apposition, without the genitive "i", although often misspelled as "*rissoi*"]

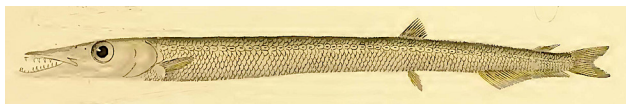


Illustration (identified as *Paralepis coregonoides*) by Jean Charles Werner upon which description of *Arctozenus risso* is based. From: Cuvier, G. and A. Valenciennes. 1829. Histoire naturelle des poissons. Tome troisième. Suite du Livre troisième. Des percoides à dorsale unique à sept rayons branchiaux et à dents en velours ou en cardes. F. G. Levrault, Paris. 3: i–xxviii + 2 pp. + 1–500, Pls. 41–71.

**Dolichosudis**

Post 1969

*dolichós* (Gr. δολιχός), long, referring to elongate, slender and strongly compressed body; *sudis* (L.), stake or pile and an ancient name for the barracuda (Carangiformes: Sphyraenidae), used as a suffix for several aulopiform genera (referring to their barracuda-like shape)

***Dolichosudis fuliginosa* Post 1969** Late Latin for sooty, referring to its "shiny black" (translation) coloration

**Lestidiops**

Hubbs 1916

*ōps* (Gr. ὤψ), eye or face (i.e., appearance), referring to close relationship with (and presumed similarity to) *Lestidium*

***Lestidiops affinis* (Ege 1930)** Latin for related, referring to close relationship with *L. sphyrenoides* and *L. pseudosphyraenoides*, so close "that only a more thorough comparative investigation can establish the actual differences" between them

***Lestidiops bathypteryx* (Fowler 1944)** *bathýs* (Gr. βαθύς), deep; *ptéryx* (Gr. πτέρυξ), fin, referring to its deep anal fin, "greatly higher than body depth"

***Lestidiops blanci* (Kantha 1971)** in honor of ichthyologist Maurice Blanc

(1923–2015), Muséum national d'Histoire naturelle (Paris), "whose help in identifying the specimen and the preparation of this paper was invaluable"

***Lestidiops cadenati* (Maul 1962)** in honor of French ichthyologist Jean Cadenat (1908–1992), Director, Marine Biological Section of the Institut Français d'Afrique Noire (Gorée, Senegal)

***Lestidiops distans* (Ege 1953)** Latin for distant or standing apart, allusion not explained, perhaps referring to how it differs from the sympatric *L. similis* and/or other closely related congeners [Ege also used the *distans/similis* naming pair in *Stemonosudis*, also without explanation]

***Lestidiops extremus* (Ege 1953)** Latin for outermost, allusion not explained, perhaps referring to how the oldest postlarval specimen examined "shows some proportional values that differ so much from the corresponding values" of *L. mirabilis*

***Lestidiops gracilis* (Ege 1953)** Latin for thin or slender, described as "much more slender" (among younger post-larvae) than *L. sphyrenoides*

***Lestidiops indopacificus* (Ege 1953)** *-icus* (L.), belonging to: Indo-Pacific area, where it occurs

***Lestidiops jayakari* (Boulenger 1889)** in honor of Atmaram Sadashiva Grandin Jayakar (1844–1911), surgeon, Indian Medical Service, and collector of natural history, who presented holotype to the British Museum

***Lestidiops mirabilis* (Ege 1933)** Latin for wonderful, strange, striking or remarkable, allusion not explained nor evident

***Lestidiops neles* (Harry 1953)** *nēlēs* (Gr. νηλής), ruthless, allusion not explained, perhaps referring to its well-armed mouth and/or predatory behavior [author later known as Rofen]

***Lestidiops pacificus* (Parr 1931)** *-icus* (L.), belonging to: Pacific Ocean, where it occurs

***Lestidiops pseudosphyraenoides* (Ege 1918)** *pseudo-*, from *pseúdēs* (Gr. ψεύδης), false, named "in order to suggest that it is closely related" to *L. sphyrenoides*

***Lestidiops ringens* (Jordan & Gilbert 1880)** gaping, referring to its large, horizontal mouth, "the gape extending more than half the length of the head"

***Lestidiops similis* (Ege 1933)** Latin for like or resembling, "rather closely related" to *L. pseudosphyraenoides*

***Lestidiops sphyraenopsis* Hubbs 1916** etymology not explained, probably *ōpsis* (Gr. ὄψις), appearance, perhaps referring to similarity to and/or close relationship with *L. sphyrenoides*

***Lestidiops sphyrenoides* (Risso 1820)** *-oides*, Neo-Latin from *eídos* (Gr.

<sup>1</sup> Risso named a spiny eel, *Notacanthus bonaparte*, in honor of Bonaparte, the same year.



*Lestidiops sphyraenopsis*, holotype, 230 mm SL, with damaged fins reconstructed. Illustration by W. S. Atkinson. From: Hubbs, C. L. 1916. Notes on the marine fishes of California. University of California Publications in Zoology 16 (13): 153–169, Pls. 18–20.

ἑίδος), form or shape: allusion not explained but probably referring to its superficial resemblance to barracudas (Sphyraenidae, *Sphyraena*)

### **Lestidium**

**Gilbert 1905**

etymology not explained, presumably *lēstēs* (Gr. ληστής), plunderer or pirate, and *-idium*, Latin diminutive connoting resemblance; if so, allusion not evident, possibly referring to fang-like teeth of *L. nudum* and/or its presumed predatory behavior

***Lestidium atlanticum* Borodin 1928** *-icum* (L.), belonging to: only known species of genus that occurs in the Atlantic Ocean

***Lestidium bigelowi* Graae 1967** in honor of marine biologist Henry B. Bigelow (1879–1967), Woods Hole Oceanographic Institution, for his “kindness and generosity”

***Lestidium longilucifer* Ho, Graham & Russell 2020** *longus* (L.), long; *lucifer* (L.), light-bearing, referring to long luminescent duct that extends well in front of eye



*Lestidium longilucifer*, paratype, 205 mm SL. From: Ho, H.-C., K. Graham and B. Russell 2020. Three new species of the barracudina genus *Lestidium* (Aulopiformes: Paralepididae) from the Indo-West Pacific. Zootaxa 4767 (1): 71–88.

***Lestidium nigristrostrum* Ho, Graham & Russell 2020** *niger* (L.), black or dark; *rostrum* (L.), snout, referring to blackish anterior portions of snout and lower jaw [erroneously called “*australis*” in the description’s abstract]

***Lestidium nudum* Gilbert 1905** Latin for naked or bare, “skin wholly naked, except for a series of small scales along course of lateral line, which are wholly embedded and concealed beneath the skin”

***Lestidium orientale* Ho, Tsai & Li 2019** Latin for eastern, referring to its occurrence in the northwestern Pacific (e.g., Taiwan) in contrast to its similar congener in the Atlantic, *L. atlanticum*

***Lestidium prolixum* Harry 1953** Latin for long, extended or drawn out, referring to its elongate form [author later known as Rofen]

***Lestidium rofeni* Ho, Graham & Russell 2020** in honor of Robert R. Rofen (formerly Harry, 1925–2015), former research director of George Vanderbilt Foundation, Stanford University, for his contributions to the knowledge of paralepidid fishes

### **Lestrolepis**

**Harry 1953**

*lestro*, from *lēstēs* (Gr. ληστής), plunderer or pirate, proposed as a subgenus of *Lestidium* and perhaps referring to that genus; *lepís* (Gr. λεπίς), scale (although genus is scaleless except for small scales embedded on the lateral line), allusion not explained, perhaps used as a shorthand suffix for the family based on *Paralepis* (type genus) and *Notolepis* [author later known as Rofen]

***Lestrolepis intermedia* (Poey 1868)** Latin for intermediate, allusion not explained, perhaps intermediate in form among its presumed congeners in *Paralepis* at time of description

***Lestrolepis japonica* (Tanaka 1908)** *-ica* (L.), belonging to: Japan, where type locality (Sagami Sea) is situated

***Lestrolepis luetkeni* (Ege 1933)** in honor of the late Danish zoologist Christian Frederik Lütken (1827–1901)

***Lestrolepis luxiocula* Ho & Golani 2019** *lux* (L.), light; *oculus* (L.), eye (but unnecessarily feminized as *ocula*), referring to single light organ at front



*Lestrolepis pofi*, holotype, 130.3 mm SL, with damaged fins reconstructed. Illustration by Janet Roemhild. From: Harry, R. R. 1953. Studies on the bathypelagic fishes of the family Paralepididae (order Iniom). 2. A revision of the North Pacific species. Proceedings of the Academy of Natural Sciences of Philadelphia 105: 169–230.

margin of orbit

***Lestrolepis philippina* (Fowler 1934)** *ina-* (L.), belonging to: Philippines, where type locality (Varadero Harbor) is situated

***Lestrolepis pofi* (Harry 1953)** named for POFI, Pacific Oceanic Fisheries Investigations (Honolulu, Hawai‘i), part of the U.S. Fish and Wildlife Service, which conducted oceanographic surveys of the tropical and subtropical central Pacific and collected holotype [author later known as Rofen]

### **Macroparalepis**

**Harry 1953<sup>2</sup>**

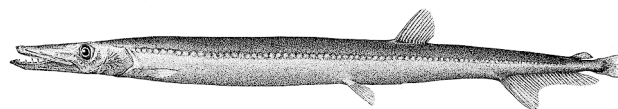
*macro-*, from *makrós* (Gr. μακρός), long or large, allusion not explained, perhaps referring to longer, more elongate body compared with *Paralepis* [author later known as Rofen]

***Macroparalepis affinis* Ege 1933** Latin for related, presumably referring to its similarity to *M. brevis*

***Macroparalepis brevis* Ege 1933** Latin for short, allusion not explained, perhaps referring to shorter anal fin compared with the similar *M. affinis*

***Macroparalepis danae* Ege 1933** in honor of the Danish fishery research vessel *Dana*, which procured “a very comprehensive material of fishes” belonging to the family, including type of this species and several others

***Macroparalepis johnfitchi* (Rofen 1960)** in honor of John E. Fitch (1918–1982), marine and fisheries biologist, California Department of Fish and Game, “indefatigable researcher” of the California marine fauna, who provided type and helped Rofen in his investigations of iniomous [aulopiform] fishes [author previously known as Harry]



*Macroparalepis johnfitchi*, holotype, 299 mm SL. Illustration by Janet (Roemhild) Canning. From: Rofen, R. R. 1960. *Lestidium johnfitchi*, a new bathypelagic fish of the family Paralepididae from off California. Copeia 1959 (4): 284–288.

***Macroparalepis longilateralis* Post 1973** *longus* (L.), long; *lateralis* (L.), of the side, referring to lateral line extending to base of caudal-fin rays

***Macroparalepis macrogeneion* Post 1973** *macro-*, from *makrós* (Gr. μακρός), long or large; *gēneion* (Gr. γένειον), cheek or goatee, referring to long, unossified process at tip of lower jaw

***Macroparalepis nigra* (Maul 1965)** Latin for black or dark, referring to “uniform deep black” coloration of body, head and more basal parts of all fins

### **Magnisudis**<sup>3</sup>

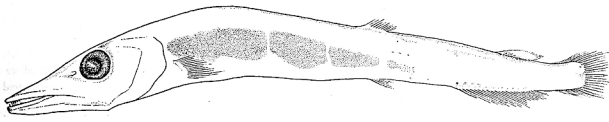
**Harry 1953**

*magnus* (L.), great, referring to large size of *M. barysoma* (=atlantica), at 30–50 cm, the largest barracudina known at the time; *sudis* (L.), stake or pile and an ancient name for the barracuda (Carangiformes: Sphyraenidae), used as a suffix for several aulopiform genera (referring to their barracuda-like shape) [author later known as Rofen]

***Magnisudis atlantica* (Krøyer 1868)** *-ica* (L.), belonging to: presumably referring to its occurrence in the northeastern Atlantic, near type locality at Skagen, Denmark

<sup>2</sup> Name proposed by Ege in 1933 but unavailable per ICZN Art. 13.3 since he included multiple species without designating which one was the type. Many sources credit authorship to Burton 1934 (an entry in the *Zoological Record* for 1933, published 1934), but Burton merely repeated Ege’s list of species without designating type. Harry was the first to designate a type and thus becomes the author of the genus.

<sup>3</sup> Placed in Alepisauridae by some workers



*Magnisudis indica*, holotype, adolescent stage, 66 mm SL. Illustration by Poul H. Winther. From: Ege, V. 1953. Paralepididae I (*Paralepis* and *Lestidium*). Taxonomy, ontogeny, phylogeny and distribution. Dana Report 40: 1–184.

***Magnisudis indica* (Ege 1953) -ica** (L.), belonging to: Indian Ocean and the Indo-Malayan Archipelago, where it occurs

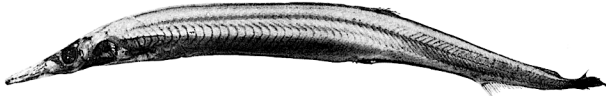
***Magnisudis prionosa* (Rofen 1963)** Neo-Latin (scientific) adjective of *prion* (Gr. πρίων), saw, i.e., saw-like, referring to its teeth [author previously known as Harry]

### **Notolepis**

**Dollo 1908**

etymology not explained, perhaps *nótos* (Gr. νότος), south wind (more broadly, southern), referring to distribution of *N. coatsi* in Southern Ocean, and/or *nótos* (Gr. νῶτος), back (i.e., rear, or back, portion of fish), referring to extreme posterior placement of second dorsal fin; *lepis* (Gr. λεπίς), scale, perhaps used here as a shorthand suffix for the family based on *Paralepis* (type genus), i.e., a southern *Paralepis*

***Notolepis annulata* Post 1978** Latin for ringed, referring to long dorsal and ventral extensions of lateral-line scales, which create the appearance that its body is divided into light and dark rings



*Notolepis annulata*, holotype, 382.4 mm SL. From: Post, A. 1978. Beschreibung zweier Notolepisarten, *N. coatsi* Dollo, 1908 und *N. annulata* sp. n. aus der Antarktis (Osteichthyes, Myctophiformes, Paralepididae). Archiv für Fischereiwissenschaft 29 (1–2): 1–22.

***Notolepis coatsi* Dollo 1908** in honor James Coats, Jr. (1834–1913), Paisley cotton thread manufacturer, and his brother Major Andrew Coats (1852–1930), who together donated £30,000 towards the Scottish National Antarctic Expedition, during which holotype was collected [preferably spelled *coatsorum* since name honors more than one person, but ICZN 32.5.1 forbids such a correction]

### **Paralepis**

**Cuvier 1816**

*pará* (Gr. παρά), near; *lepis* (Gr. λεπίς), scale, referring to body of *P. coregonoides* covered with deciduous scales, those of the lateral line being the largest [proposed without species; Cuvier may have treated *Paralepis* as a common name, in which case authorship dates to Bosc (1817)]

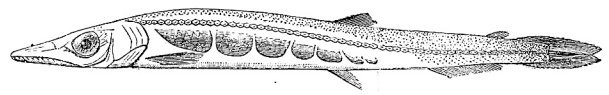
***Paralepis brevirostris* (Parr 1928)** *brevis* (L.), short; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to shorter snout compared to *P. speciosa*

***Paralepis coregonoides* Risso 1820 -oides**, Neo-Latin from *eídos* (Gr. εἶδος), form or shape: *Coregonus* (whitefishes, Salmonidae); per Cuvier (1829<sup>4</sup>), Risso mistook the fish's frail ("frêle") second dorsal fin for an adipose fin and considered it to be a whitefish

***Paralepis coregonoides borealis* Reinhardt 1837** Latin for northern, referring to occurrence off the coast of Julianehåb, Greenland, type locality

***Paralepis elongata* (Brauer 1906)** Latin for prolonged, presumably referring to its more elongate body compared with *Omosudis lowii* (Alepisauridae), its presumed congener at the time

***Paralepis speciosa* Bellotti 1878** Latin for beautiful or showy, allusion not explained, perhaps referring to its milky white body in life with seven large black spots on sides



*Paralepis speciosa*. From: Bellotti, C. 1878. Note ittologiche. Osservazioni fatte sulla collezione ittiologica del civico Museo di Storia Naturale in Milano. I - III. Atti della Società Italiana di Scienze Naturali di Milano 20 (1): 53–60.

### **Stemonosudis**

**Harry 1951**

etymology not explained, possibly *stēmōn* (Gr. στήμων), thread, referring to "eel-like, very elongate and thin" body of *S. intermedius*; *sudis* (L.), stake or pile and an ancient name for the barracuda (Carangiformes: Sphyraenidae), used as a suffix for several aulopiform genera (referring to their barracuda-like shape) [author later known as Rofen]

***Stemonosudis bullisi* Rofen 1963** in honor of American marine biologist Harvey R. Bullis, Jr. (1924–1992), to whom many American ichthyologists, Rofen included, are "greatly indebted" for supplying valuable marine collections from the cruises of the *Oregon* and other vessels of the U. S. Fish and Wildlife service, including type of this species [author previously known as Harry]

***Stemonosudis distans* (Ege 1957)** Latin for distant or standing apart, allusion not explained, perhaps referring to how it differs from *S. similis* and/or other closely related congeners [Ege also used the *distans/similis* naming pair in *Lestidiops*, also without explanation]

***Stemonosudis elegans* (Ege 1933)** Latin for fine, select or well-proportioned, allusion not explained nor evident (perhaps Ege, who measured body proportions in great detail, considered it to be well-proportioned)

***Stemonosudis elongata* (Ege 1933)** Latin for prolonged, allusion not explained, but it is an elongate fish, its maximum body height (of an adolescent specimen) ~3% of SL

***Stemonosudis gracilis* (Ege 1933)** Latin for thin or slender, allusion not explained, but it is a slender fish, its maximum height (of an adolescent specimen) ~4% of SL

***Stemonosudis intermedia* (Ege 1933)** Latin for intermediate, allusion not explained nor evident, perhaps intermediate in one or more characters among its congeners

***Stemonosudis macrura* (Ege 1933)** big-tailed, from *makrós* (Gr. μακρός), long or large, and *ourá* (Gr. οὐρά), tail; per Ege (1957)<sup>5</sup>: "the preanal length takes in only a little more than half of standard length, a relationship which has led to the choice of the species name" (in other words, longer postanal length compared with congeners then placed in *Macroparalepis*)

***Stemonosudis miscella* (Ege 1933)** Latin for mixed, allusion not explained nor evident, perhaps reflecting a "mix" or combination of characters found among its congeners

***Stemonosudis molesta* (Marshall 1955)** Latin for troublesome or irksome, allusion not explained, probably referring to its "awkwardly intermediate" position between *Stemonosudis* and *Macroparalepis* (its original genus)

***Stemonosudis multifasciatus* Ho, Russell, Graham & Psomadakis 2019** *multi-* (L.), many; *fasciatus* (L.), banded, referring to 16 dorsal saddles and 9 ventral saddles

***Stemonosudis retrodorsalis* Ho, Russell, Graham & Psomadakis 2019** *retro-* (L.), behind; *dorsalis* (L.), of the back, referring to posterior position of dorsal fin



*Stemonosudis retrodorsalis*, paratype, 146.4 mm SL. Photo by Thomas Gloerfelt-Tarp. From: Ho, H.-C., B. Russell, K. Graham and P. N. Psomadakis. 2019. Review of the *Stemonosudis rothschildi* species complex, with descriptions of two new species from the Indo-west Pacific Ocean (Aulopiformes: Paralepididae). In: Ho, H.-C., K. Koeda and E. J. Hilton (eds.). Study on the fish taxonomy and diversity of Taiwan. Zootaxa 4702 (1): 216–229.

<sup>4</sup> Cuvier, G. and A. Valenciennes. 1829. Histoire naturelle des poissons. Tome troisième. Suite du Livre troisième. Des percoides à dorsale unique à sept rayons branchiaux et à dents en velours ou en cardes. F. G. Levrault, Paris. v. 3: i–xxviii + 2 pp. + 1–500, Pls. 41–71. [Cuvier authored volume.

<sup>5</sup> Ege, V. 1957. Paralepididae II (Macroparalepis). Taxonomy, ontogeny, phylogeny and distribution. Dana Report 43: 1–101.

***Stemonosudis rothschildi* Richards 1967** in honor of Brian J. Rothschild (b. 1934), Bureau of Commercial Fisheries (Honolulu, Hawaii), who supplied holotype (which was taken from the stomach of a lancetfish, presumably *Alepisaurus ferox*)

***Stemonosudis siliquiventer* Post 1970** *siliqua* (L.), pod or husk; *venter* (L.), belly, referring to striking pattern of peritoneal septum (or abdominal membrane), which resembles the infructescence (fruiting head) of numerous legumes or cruciferous vegetables

***Stemonosudis similis* (Ege 1957)** Latin for like or resembling, allusion not explained, a curious choice for its name since Ege did not compare this species to its congeners because only young postlarval specimens were available

## ***Uncisudis***

**Maul 1956**

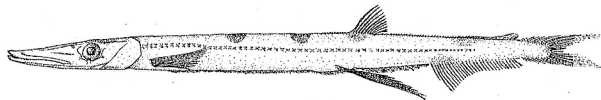
*uncus* (L.), hook or barn, referring to “sturdy, hook-shaped” teeth of the lower jaw and palatines of *U. longirostra*; *sudis* (L.), stake or pile and an ancient name for the barracuda (Carangiformes: Sphyrnaenidae), used as a suffix for several aulopiform genera (referring to their barracuda-like shape)

***Uncisudis advena* (Rofen 1963)** Latin for a stranger or foreigner, allusion not explained, possibly referring to its color pattern (solid black spot on back before adipose fin) and prolonged dorsal and ventral fins, described as “unique and approaching nothing else in the family” [author previously known as Harry]

***Uncisudis longirostra* Maul 1956** *longus* (L.), long; *rostra*, plural of *rostrum* (L.), snout, referring to its “very long” snout, its length 1.7 in head

***Uncisudis posteropelvis* Fukui & Ozawa 2004** *postero-*, from *posterior* (L.), coming after; *pelvis* (L.), shallow bowl or basin, precursor to the anatomical pelvis, here referring to its posteriorly located pelvic fins

***Uncisudis quadrimaculata* (Post 1969)** *quadri-*, from *quattuor* (L.), four; *maculata* (L.), spotted, referring to four blackish spots on dorsal surface



*Uncisudis longirostra*. From: Maul, G. E. 1956. Additions to previously revised orders or families of fishes of the Museu Municipal do Funchal (Stomiidae, Astronesthidae, Paralepididae). Boletim do Museu Municipal do Funchal 9: 75–96.