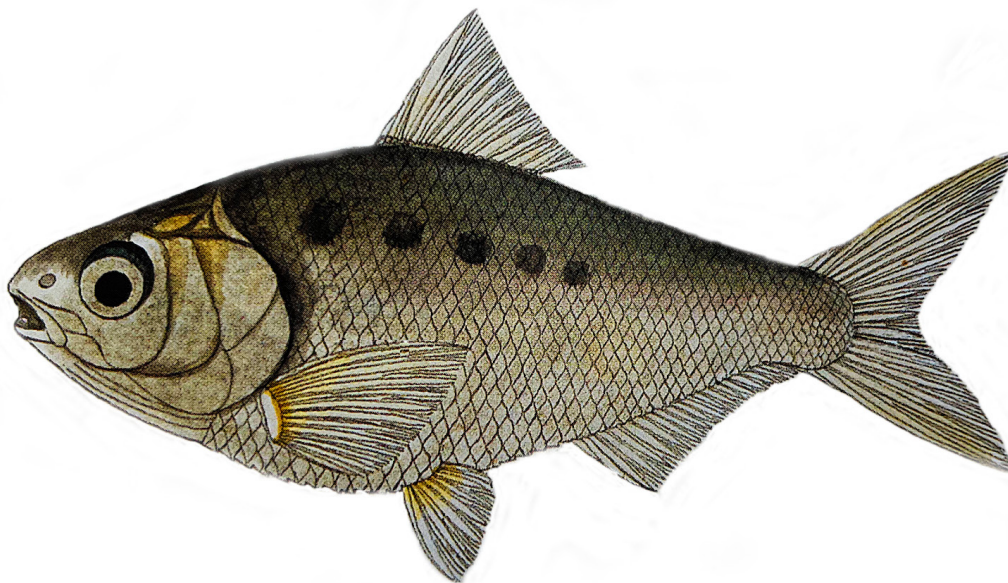


Order CLUPEIFORMES

Gizzard Shads and Sardinellas

Family **DOROSOMATIDAE**

Bleeker 1872



Anodontostoma chacunda (as *Clupanodon chanpole*, a simultaneous synonym with precedence given to *chacunda*). Hamilton's original illustration, unpublished at the time, reproduced in: Britz, R. 2019. Francis Hamilton's Gangetic Fishes in colour. A new edition of the 1822 monograph, with reproductions of unpublished coloured illustrations. Ray Society, London: 1–48, i–vii, 1–405, i–vii, Pls. 1–228.

Amblygaster

Bleeker 1849

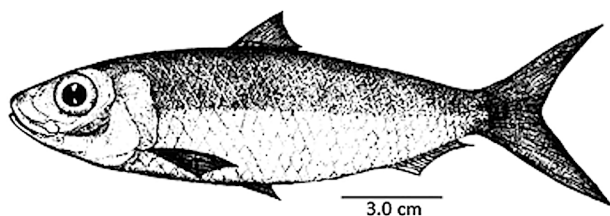
amblýs (Gr. ἀμβλύς), blunt; *gastēr* (Gr. γαστήρ), belly or stomach, referring to obtuse, round and smooth (unserrated) belly (“ventre obtuso rotundata non serrato”) of *A. clupeioides*

Amblygaster clupeioides Bleeker 1849 -*oides*, Latinized suffix adopted from *eídos* (Gr. εἶδος), form or shape: *clupea*, Latin vernacular for a herring-like fish, possibly referring to *Clupea*, which at the time was a catch-all genus for many herring-like fishes

Amblygaster indiana Mary, Balasubramanian, Selvaraju & Shiny 2017 -*ana* (L.), belonging to: India, type specimens collected at fish landing centers and fish markets at Eraviputhenthurai, west coast of India

Amblygaster leiogaster (Valenciennes 1847) *leiōs* (Gr. λειός) smooth; *gastēr* (Gr. γαστήρ), belly or stomach, referring to less prominent belly scutes compared with *Sardinella aurita*, its presumed congener at the time

Amblygaster sirm (Walbaum 1792) Arabic vernacular for this herring along the Red Sea



Amblygaster indiana, holotype, 21 cm SL. From: Mary, A. A., T. Balasubramanian, S. Selvaraju and A. Shiny. 2017. Description of a new species of clupeid fish, *Amblygaster indiana* (Clupeiformes: Clupeidae), off Eraviputhenthurai, west coast of India. Zootaxa 4247 (4): 461–468.

Anodontostoma

Bleeker 1849

án- (Gr. ἄν-), without; *odontos*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth; *stóma* (Gr. στόμα), mouth, presumably referring to toothless mouth

Anodontostoma chacunda (Hamilton 1822) local Indian vernacular for this shad

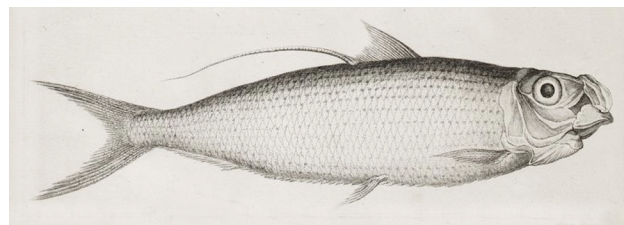
Anodontostoma selangkat (Bleeker 1852) from *Ikan Selangkat*, local name in Jakarta (formerly Batavia), Indonesia (*Ikan* = fish)

Anodontostoma thailandiae Wongratana 1983 of Thailand, referring to Gulf of Thailand, type locality (Wongratana believes this is first use of name *thailandiae* in ichthyological literature, all previous references to country being styled as *siamensis* and variations thereof)

Clupanodon

Lacepède 1803

clupea, Latin vernacular for a herring-like fish; *án-* (Gr. ἄν-), without; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth, referring to toothless vomer compared with toothed vomer of *Clupea* (Clupeidae), its original genus



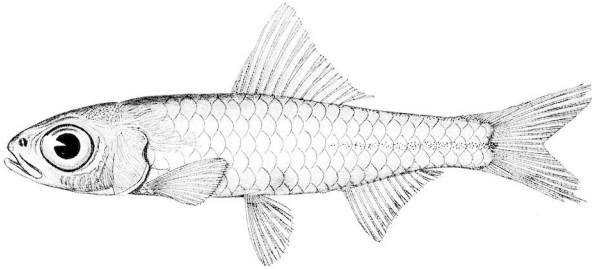
“Cailleu-Tassart,” possibly first-published image of *Clupanodon thrissa*. Engraving by Angélique Moitte. From: Duhamel du Monceau, H. L. 1777-1782. *Traité général des pêches, et histoire des poissons, ou les animaux qui vivent dans l'eau*, seconde partie. Saillant & Nyon, Paris. Tome 3. Paris. 1–406, Pls. 1–28. [Plate dates to Section 10, published after 25 Mar. 1781.]

***Clupanodon thrissa* (Linnaeus 1758)** *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (θρίξ), hair, referring to hair-like bones, but in this case probably referring to filamentous dorsal-fin ray [specific name coined by Swedish explorer Pehr Osbeck in his 1757 journal of his voyage to China¹]

Congothrissa
Poll 1964

Congo, referring to Congo River, type locality; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to the anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes (literally, the Congo Anchovy)

***Congothrissa gosseii* Poll 1964** in honor of Jean-Pierre Gosse (1924–2001), curator of vertebrates, Institut Royal des Sciences Naturelles de Belgique, who discovered this clupeid and recognized its distinctiveness despite small size and “benign appearance” (translation)



Congothrissa gosseii, overall figure combined with the help of paratypes. From: Poll, M. 1964. Une famille dulcicole nouvelle de poissons africains: les Congothrissidae. Académie Royal des Sciences Naturelles et Médicales, Bruxelles (N. S.). 5 (2): 1–40, Pls. 1–8.

Dorosoma
Rafinesque 1820

dóratos (Gr. δόρατος), genitive of *dóry* (δόρυ), lance or spear; *sóma* (Gr. σῶμα), referring to “lanceolate” body of *D. notata* (= *cepedianum*), “tapering gradually towards the tail”

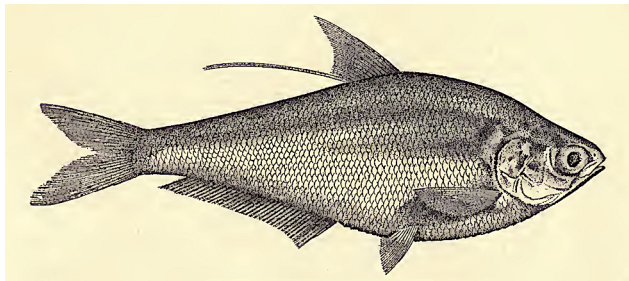
Subgenus ***Dorosoma***

***Dorosoma anale* Meek 1904** Latin (neuter) for anal, referring to its long anal fin

***Dorosoma cepedianum* (Lesueur 1818)** *-anum* (L., neuter), belonging to: Bernard-Germain-Étienne de La Ville-sur-Ilion, comte de [count of] La Cepède (also spelled as La Cépède, Lacépède, or Lacepède, 1756–1825), whose five-volume *Histoire Naturelle des Poissons* (1798–1803) was the standard ichthyological reference of his day; Lesueur may have honored his fellow countryman for having proposed the tarpon genus *Megalops*, into which this species was originally assigned

***Dorosoma chavesi* Meek 1907** in honor of Nicclesiano Chaves (1844–1936), taxidermist, National Museum of Nicaragua, for his assistance in collecting in Lakes Tiscapa and Managua

***Dorosoma smithi* Hubbs & Miller 1941** in honor of Hugh M. Smith (1865–1941), “worthy colleague of such masters as Jordan and Gilbert and Evermann,” all members of America’s “greatest school of ichthyologists”



Dorosoma cepedianum. From: Meek, S. E. 1904. The fresh-water fishes of Mexico north of the isthmus of Tehuantepec. Field Columbian Museum, Zoological Series 5: i–lxiii + 1–252, Pls. 1–17.

¹ Osbeck, Pehr. 1757. Dagbok öfwer en Ostindisk resa åren 1750, 1751, 1752, med anmärknigar uti naturkunnigheten, främmande folkslags språk. Stockholm: Ludv. Grefing. Translated into German (1765) and English (1771).

Subgenus ***Signalosa***

Evermann & Kendall 1898

signum (L.), flagstaff or pole (per the authors), referring to long dorsal-fin ray of *S. atchafalaya* (= *D. petenense*); *alosa*, from *alausea*, Latin name for *Alosa alosa* (Alosidae) from the river Moselle in Germany, now used as a general suffix for shads and herrings

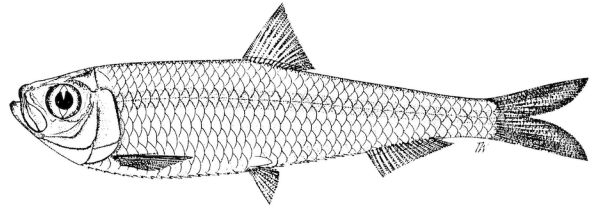
***Dorosoma petenense* (Günther 1867)** *-ense*, Latin suffix (neuter) denoting place: Lake Petén (now Petén Itzá), Guatemala, type locality

Escualosa
Whitley 1940

etymology not explained, perhaps *escu-*, from *esculentus* (L.), edible, referring to fisheries importance of *E. macrolepis* (= *thoracata*); *alosa*, from *alausea*, Latin name for *Alosa alosa* (Alosidae) from the river Moselle in Germany, now used as a general suffix for shads and herrings

***Escualosa elongata* Wongratana 1983** Latin for prolonged, referring to its slenderer body compared with *E. thoracata*

***Escualosa thoracata* (Valenciennes 1847)** Latin for armed with a breast-plate, referring to spines or serrations on abdomen



Escualosa elongata, holotype, 64.5 mm SL. Illustration by Thosaporn Wongratana. From: Wongratana, T. 1983. Diagnoses of 24 new species and proposal of a new name for a species of Indo-Pacific clupeoid fishes. Japanese Journal of Ichthyology 29 (4): 385–407.

Ethmalosa
Regan 1917

ēthmós (Gr. ἔθμός), sieve or strainer, referring to its fine and numerous gill rakers, which filter phytoplankton from the water; *alosa*, from *alausea*, Latin name for *Alosa alosa* (Alosidae) from the river Moselle in Germany, now used as a general suffix for shads and herrings

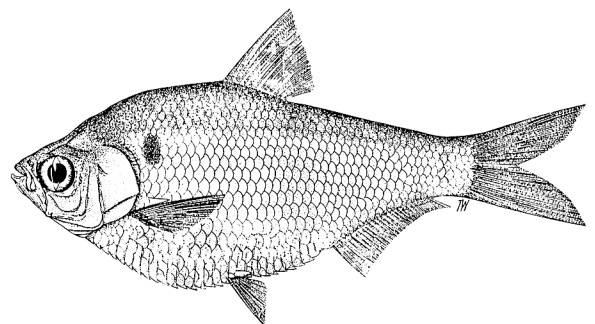
***Ethmalosa fimbriata* (Bowdich 1825)** Latin for fringed, referring to its fringed scales, “which makes the fish have a very peculiar appearance” [see essay on next page]

Gonialosa
Regan 1917

gōnía (Gr. γωνία), corner or angle, allusion not explained, perhaps referring to angular mouth clefts of *G. manmina* and *G. modesta*; *alosa*, from *alausea*, Latin name for *Alosa alosa* (Alosidae) from the river Moselle in Germany, now used as a general suffix for shads and herrings

***Gonialosa manmina* (Hamilton 1822)** presumably a local Bengali name, as it was Hamilton’s practice to derive trivial names “from some of those used by the natives of India” (sometimes spelled *manminna*)

***Gonialosa modesta* (Day 1870)** Latin for moderate, modest or unassum-



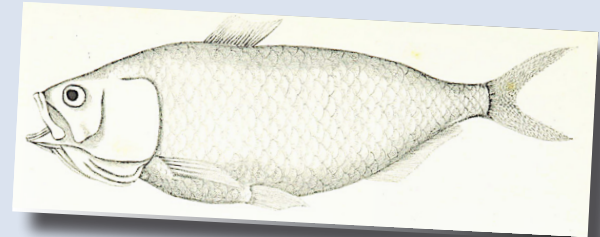
Gonialosa whiteheadi, holotype, 68.5 mm SL. Illustration by Thosaporn Wongratana. From: Wongratana, T. 1983. Diagnoses of 24 new species and proposal of a new name for a species of Indo-Pacific clupeoid fishes. Japanese Journal of Ichthyology 29 (4): 385–407.

Sarah Bowdich, the first woman to scientifically describe a new species of fish

Sarah Bowdich was born Sarah Wallis in England in 1791. In 1813, she married naturalist Thomas Edward Bowdich. They seemed the perfect couple, both attracted to nature, travel and adventure. In Paris, they befriended the zoologist (and important early ichthyologist) Georges Cuvier, spending the better part of four years learning what they could from the famous naturalist. In 1823, Sarah and Thomas explored Madeira, the archipelago southwest of mainland Portugal. From there they sailed to Africa, arriving at Bathurst (now Banjul), Gambia, planning to go to Sierra Leone and explore the interior. This leg of the journey never happened. Thomas died from malaria while in Bathurst on 10 January 1824, leaving Sarah a widow with three children.

In March 1825, Sarah published her husband's account of the Madeira trip. She appended the account with three entries penned by herself, including one called "Zoological, Meteorological, and Barometric Observations" under the byline "Mrs. Bowdich." (At that time, in order to be taken seriously, a woman had to either publish under a male pseudonym, adopt a non-gender specific initial, e.g., S. Bowdich, or else be recognized as the "Mrs." — and thereby the extension of — a noteworthy man.) Here Sarah described and named 27 fishes brought to her by fishermen. Eight of her species remain valid today, representing the first new fish species described by a woman:

Blue Jack Mackerel, *Trachurus picturatus*
Bonga Shad, *Ethmalosa fimbriata*
Bobo Croaker, *Pseudotolithus elongatus*
Bastard Grunt, *Pomadasys incisus*



Sara Bowdich's illustration of *Clupea* (now *Ethmalosa*) *fimbriata*. From: Bowdich, S. L. 1825. *Fishes of Madeira*. In: T. E. Bowdich. *Excursions in Madeira and Porto Santo during the autumn of 1823, while on his third voyage to Africa*. London. i-xii + 1-278, 11 pls. + 10 pls.

Offshore Rockfish, *Pontinus kuhlii*
Cape Verde Mullet, *Chelon bispinosus*
Guinean Grunt, *Parapristipoma humile*
Blackbar Hogfish, *Bodianus speciosus*

No verifiable image of Sarah Bowdich is known to exist. One wonders if her portrait was ever painted, or if she ever sat for a daguerreotype. Shown here is *Ethmalosa fimbriata* from her Madeira descriptions, illustrated by Sarah herself.

After the death of her husband, Sarah returned to Paris and to Cuvier, who served as her mentor. Thanks to this partnership, she was able to study collections and libraries that few other women of her time were permitted to access. Sarah published several more books on natural history, including a work on taxidermy, a biography of Cuvier, and a beautifully illustrated guide to *The Fresh-Water Fishes of Great Britain* (1828-1838), as "Mrs T. Edward Bowdich." Sarah spent 10 years on this book, carefully drawing and painting each fish fresh from the water before its colors faded. Unfortunately, the book was largely ignored by others in the field because it was by a woman.

Sarah Bowdich remarried and in subsequent years published — per Victorian mores — under the name "Mrs. Robert Lee." In 1917, American ichthyologist David Starr Jordan, in his *Genera of Fishes*, credited Thomas Edward Bowdich as the author of the Madeira fishes.

Sarah Bowdich died in 1856.

ing, allusion not explained, perhaps referring to its snout "moderately projecting over the lower jaw" and/or its "uniform" coloration

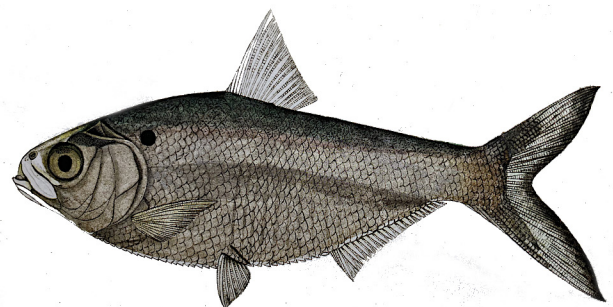
***Gonialosa whiteheadi* Wongratana 1983** in honor of ichthyologist Peter J. P. Whitehead (1930–1993), British Museum (Natural History), who encouraged Wongratana to make Indo-Pacific clupeoids the subject of his thesis

Gudusia Fowler 1911

from *Gudusa*, a "native name" in India, presumably of the type species, *G. chapra*; spelled *Gudua* in Odissa (now Odisha), India²

***Gudusia chapra* (Hamilton 1822)** probably referring to Chapra District (also known as Saran), Bihar, India, type locality

***Gudusia variegata* (Day 1870)** Latin for "of different sorts" (particularly colors), referring to its combination of colors and markings: silvery glossed with gold, a dark humeral spot, ~18 dorsal saddles, black band on lower posterior half of dorsal fin, and black tips on end of tail



Gudusia chapra. Hamilton's original illustration, unpublished at the time, reproduced in: Britz, R. 2019. Francis Hamilton's Gangetic Fishes in colour. A new edition of the 1822 monograph, with reproductions of unpublished coloured illustrations. Ray Society, London: 1-48, i-vii, 1-405, i-vii, Pls. 1-228.

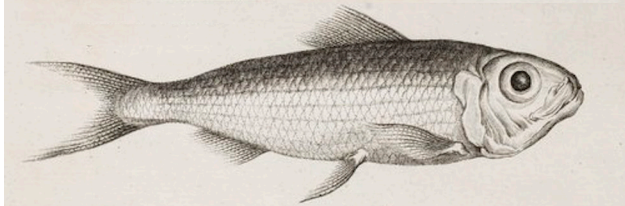
² Talwar, P. K. and A. G. Jhingran. 1991. Inland fishes of India and adjacent countries. 2 vols. Oxford & IBH Publishing Co., New Delhi, Bombay, Calcutta. i-xvii + 36 unnumbered + 1-1158, 1 pl, 1 map.

Harengula

Valenciennes 1847

diminutive of *harengus*, Medieval Latin for herring [see *Clupea harengus*, Clupeidae, for a detailed etymology], i.e., similar to herrings but distinguished by the absence of vomerine teeth

***Harengula clupeiola* (Cuvier 1829)** diminutive of *Clupea* (Clupeidae, original genus), perhaps reflecting its 18th-century French vernacular “Petit Cailleu”



“Petit Callieu,” possibly first-published image of *Harengula clupeiola*. Engraving by Angélique Moitte. From: Duhamel du Monceau, H. L. 1777-1782. *Traité général des pêches, et histoire des poissons, ou les animaux qui vivent dans l'eau, seconde partie*. Saillant & Nyon, Paris. Tome 3. Paris. 1–406, Pls. 1–28. [Plate dates to Section 10, published after 25 Mar. 1781.]

***Harengula humeralis* (Cuvier 1829)** Latin for humeral, referring to silvery, dark humeral spot (in the area analogous to the humerus, or shoulder) seen on many specimens

***Harengula jaguana* Poey 1865 -ana (L.)**, belonging to: “bahía de Jagua” (bay of Jagua, but likely a port on the Bay of Cienfuegos), Cuba, presumed type locality (no type specimens are known)

***Harengula thrissina* (Jordan & Gilbert 1882)** diminutive of *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly derived from *thrix*, hair, referring to the anchovy’s hair-like bones (but used here as a general term for herring or shad) [*thrissina* may intentionally mirror the construction of the name of its closest congener, *H. clupeiola*]

***Harengula thrissina peruana* Fowler & Bean 1923 -ana (L.)**, belonging to: Peru, referring to Callao, Peru, type locality

Herklotsichthys

Whitley 1951

Herklots + *ichthys* (Gr. ἰχθύς), fish: replacement name for *Herklotsella* Fowler 1934, preoccupied by *Herklotsella* Herre 1933 (=Pterocryptis, Siluridae), originally named for Fowler’s friend, botanist and ornithologist G. A. C. Herklots (1902–1986), University of Hong Kong, “with many fond memories of the China Sea and Java”

***Herklotsichthys blackburni* (Whitley 1948)** in honor of Australian marine biologist Maurice Blackburn (1915–2012), for his work on the bionomics of Australian clupeoids; he discovered this species but placed his specimens and notes at Whitley’s disposal

***Herklotsichthys castelnaui* (Ogilby 1897)** patronym not identified but clearly in honor of French naturalist François Louis Nomp de Caumont La Force, comte de [count of] Castelnau (1810–1880), who published several papers on Australian fishes in the 1870s

***Herklotsichthys collettei* Wongratana 1987** in honor of American ichthyologist Bruce B. Collette (b. 1934), Director, National Marine Fisheries Service Systematics Laboratory, for his “hospitality, encouragement, and interest” in Wongratana’s work on Indo-Pacific clupeoid fishes

***Herklotsichthys dispilonotus* (Bleeker 1852)** δι- (Gr. prefix), derived from *dýo* (δύο), two; *spilos* (Gr. σπῖλος), mark or spot; *nótos* (Gr. νότος), back, referring to two dark blotches on back, one at posterior end of dorsal fin base and the other a short distance behind

***Herklotsichthys gotoi* Wongratana 1983** in honor of entomologist H. E. Goto, Imperial College, University of London, director of Wongratana’s studies in London

***Herklotsichthys koningsbergeri* (Weber & de Beaufort 1912)** in honor of Jacob Christian Koningsberger (1867-1951), Dutch biologist and politician, “distinguished” director of ‘s Lands Plantentuin (National Botanical Garden), Buitenzorg, Java, who sent holotype to the authors [“s” is a Dutch abbreviation meaning “of the” or “in the”]



Herklotsichthys punctatus. From: Rüppell, W. P. E. S. 1835-1838. *Neue Wirbelthiere zu der Fauna von Abyssinien gehörig. Fische des Rothen Meeres*. Frankfurt-am-Main. 1–148, Pls. 1–33. [Description and plate published in 1837.]

***Herklotsichthys lippa* (Whitley 1931)** etymology not explained, perhaps *lippus* (L.), bleary-eyed or dim-sighted, referring to adipose lids on eyes

***Herklotsichthys lossei* Wongratana 1983** in honor of German biologist and fishery officer Georg F. Losse, who collected most of the type material, and for his “most useful” studies of East African clupeoids

***Herklotsichthys ovalis* (Anonymous [Bennett] 1830)** Latin for oval, referring to its body shape

***Herklotsichthys punctatus* (Rüppell 1837)** Latin for spotted, referring to round black spots on dorsal surface

***Herklotsichthys quadrimaculatus* (Rüppell 1837)** quadri- (L.), four; *maculatus* (L.), spotted, presumably referring to orange spots, two at edge of each gill opening

***Herklotsichthys spilura* (Guichenot 1863)** *spilos* (Gr. σπῖλος), mark or spot; *ura*, from *ourá* (Gr. οὐρά), tail, referring to “large black spots” (translation) on tail (although this character does not appear to be confirmed in more recent literature)

Hilsa

Regan 1917

Bengali vernacular for large clupeiform fishes (usually referring to *Tenulosa ilisha*) often used as food

***Hilsa kelee* (Cuvier 1829)** local vernacular for this shad in Andhra Pradesh, India, where type locality (Bay of Bengal at Vishakhapatnam) is situated

Konosirus

Jordan & Snyder 1900

Latinization of *Konoshiro*, Japanese name of *K. punctatus*

***Konosirus punctatus* (Temminck & Schlegel 1846)** Latin for spotted, referring to dark spot behind gill opening and/or several lines of dark dots along flank

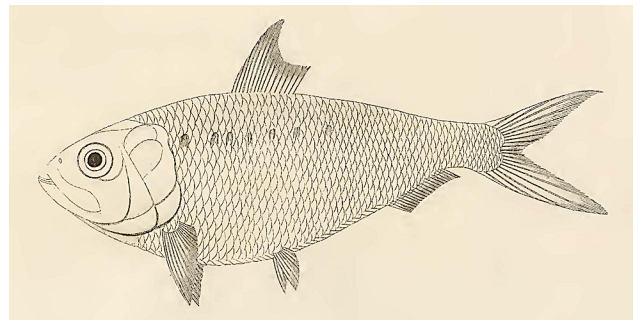
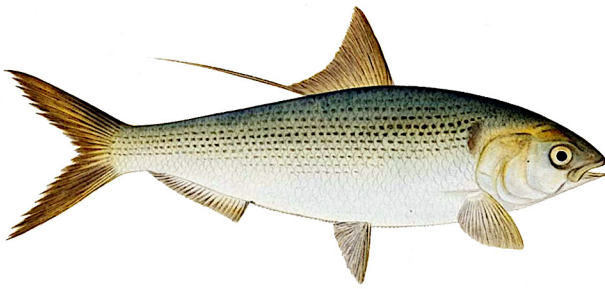


Image upon which description of *Hilsa kelee* was based. From: Russell, P. 1803. *Descriptions and figures of two hundred fishes: collected at Vizagapatam on the coast of Coromandel*. London, in 2 vols. v. 1-2: i–vii + 78 pp. + 85 pls., 197 pls.

Laeviscutella

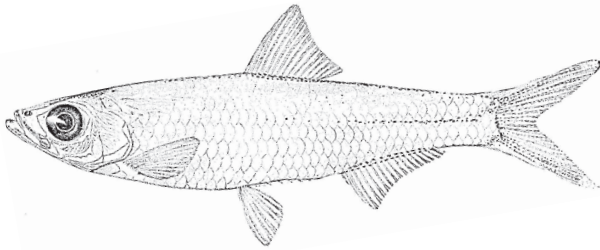
Poll, Whitehead & Hopson 1965

laevis (L.), smooth; *scutella*, diminutive of *scutum* (L.), shield, i.e., a small scute, referring to unkeeled pre-pelvic scutes and/or post-pelvic scutes lacking ascending arms



Konosirus punctatus. From: Temminck, C. J. and H. Schlegel. 1846. Pisces. In: Siebold, P. F. de (ed.): Fauna Japonica. Lugduni Batavorum [Leiden] (A. Arnz et soc.). Parts 10–14: 173–269.

***Laeviscutella dekimpei* Poll, Whitehead & Hopson 1965** in honor of Paul De Kimpe (b. 1927), Fisheries Officer at Cotonou (Dahomey, now Republic of Benin), for his services in collecting this and other species for the Musée de l'Afrique Centrale in Tervuren



Laeviscutella dekimpei. From: Poll, M., P. J. P. Whitehead and A. J. Hopson. 1965. A new genus and species of clupeoid fish from West Africa. Bulletin de la Classe des Sciences, Académie Royale de Belgique (Ser. 5) 51 (3): 277–292, Pl. 1.

Lile

Jordan & Evermann 1896

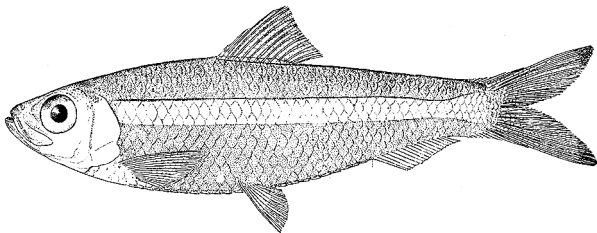
from *matt-lile*, Tamil name for the east-Indian *Clupea lile* (= *Escualosa thoracata*), presumed to be congeners at the time

***Lile gracilis* Castro-Aguirre & Vivero 1990** Latin for thin or slender, referring to its slender body (“cuerpo grácil”)

***Lile nigrofasciata* Castro-Aguirre, Ruiz-Campos & Balart 2002** *nigro*, from *niger* (L.), black; *fasciata* (L.), banded, referring to obvious dark or black band on midlateral part of body, from posterior edge of operculum to end of caudal peduncle

***Lile piquitinga* (Schreiner & Miranda Ribeiro 1903)** presumably a local Brazilian name for this species first reported in Markgraf von Liebstadt's *Historiae naturalis brasiliae* (1648)

***Lile stolifera* (Jordan & Gilbert 1882)** *stolé* (Gr. στολή), an ecclesiastical vestment usually made of a band of silk and worn over the shoulders during liturgical functions; *-fer*, from *fero* (L.), to have or bear, referring to distinct lateral silvery band

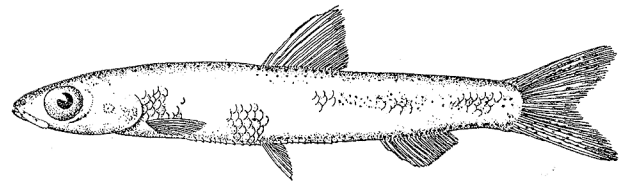


First-published image of *Lile stolifera*. Illustration by Anna L. Brown. From: Jordan, D. S. and B. W. Evermann. 1900. The fishes of North and Middle America: a descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, north of the Isthmus of Panama. Part IV. Bulletin of the United States National Museum No. 47: i–ci + 3137–3313, Pls. 1–392.

Limnothrissa

Regan 1917

limno, from *limnē* (Gr. λίμνη), marsh (but also applied to lakes and pools), referring to distribution in Lake Tanganykia; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes



Limnothrissa stappersii, holotype, 28 mm TL. From: Poll, M. 1948. Poissons recueillis au Katanga par H. J. Bredo. Bulletin du Musée Royal d'Histoire Naturelle de Belgique 24 (21): 1–24.

***Limnothrissa miodon* (Boulenger 1906)** *mio-*, from *meiōn* (Gr. μείων), lesser or smaller; *odontos*, Latinized and grammatically adjusted from the Greek nominative ὀδούς (*odoús*), tooth, referring to smaller teeth compared with *Pellonula vorax*, its presumed congener at the time

***Limnothrissa stappersii* (Poll 1948)** in honor of physician-biologist Louis Stappers (1883–1916), head of the Belgian colony in the Congo, who led an expedition to Lake Moero in 1912 and collected holotype

Microthrissa

Boulenger 1902

micro-, from *mikrós* (Gr. μικρός), small, probably referring to much smaller size (*M. royauxi* described at 6.5 cm TL) compared with its Congo relative *Odaxothrissa losera* (16 cm TL); *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes

Subgenus *Microthrissa*

***Microthrissa minuta* Poll 1974** Latin for very small, referring to its size (to 3.5 cm SL)

***Microthrissa royauxi* Boulenger 1902** in honor of Louis-Joseph Royaux (1866–1936), Belgian Army captain and station chief in the Belgian Congo, who led expedition that collected holotype and supplied indigenous names of the species he collected

***Microthrissa whiteheadi* Gourène & Teugels 1988** in honor of Peter J. P. Whitehead (1930–1993), British Museum (Natural History), “whose numerous publications on clupeoid fishes have contributed substantially to our knowledge of this group”

Subgenus *Poecilothrissa*

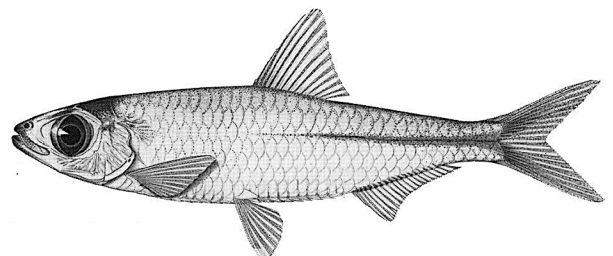
Regan 1917

poecilio-, from *poikilos* (Gr. ποικίλος), varicolored, allusion not explained nor evident, perhaps referring to lateral band present only on posterior half of *M. congica*; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes

***Microthrissa centralis* (Poll 1974)** Latin for central, referring to its centralized distribution in the Lake Tumba region of the Democratic Republic of the Congo

***Microthrissa congica* (Regan 1917)** *-ica* (L.), belonging to: Congo River, Zaire (now Democratic Republic of the Congo), type locality

***Microthrissa moeruensis* (Poll 1948)** *-ensis*, Latin suffix denoting place: Lake Moero (or Mweru), Kilwa, Zaire (Democratic Republic of the Congo), where it is endemic



Microthrissa centralis, holotype, 50 mm SL. From: Poll, M. 1974. Synopsis et distribution géographique des Clupeidae d'eau douce africains, descriptions de trois espèces nouvelles. Bulletin de la Classe des Sciences, Académie Royale de Belgique (Ser. 5) 60 (2): 141–161, 3 pls.

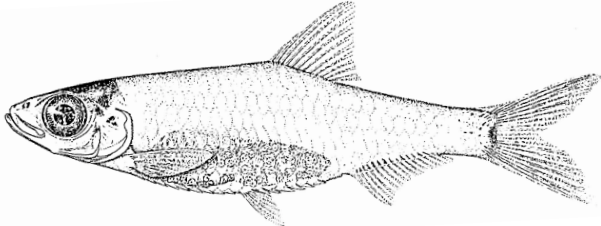
Nannothrissa

Poll 1965

nánnos (Gr. νάννος), dwarf, referring to small size of *N. parva* (up to 4.2 cm SL); *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes

***Nannothrissa parva* (Regan 1917)** Latin for small, referring to small size (up to 4.2 cm SL)

***Nannothrissa stewarti* Poll & Roberts 1976** in honor of ichthyologist Donald J. Stewart (b. 1946), then with the Museum of Zoology, University of Michigan, who helped collect holotype



Nannothrissa stewarti, holotype, 22.5 mm SL. From: Poll, M. and T. R. Roberts. 1976. *Nannothrissa stewarti*, espèce nouvelle de Clupeidae du lac Mai-ndombe (Zaire) (Pisces, Clupeidae). Revue de Zoologie Africaine 90 (1): 235–239.

Nematalosa

Regan 1917

néματος (Gr. νήματος), threaded, referring to long, filamentous last ray of dorsal fin; *alosa*, from *alaua*, Latin name for *Alosa alosa* (Alosidae) from the river Moselle in Germany, now used as a general suffix for shads and herrings

***Nematalosa arabica* Regan 1917** -ica (L.), belonging to: Arabia, referring to type locality at Muscat, Gulf of Oman, Arabian Sea

***Nematalosa come* (Richardson 1846)** apparent Latinization of *kome*, local vernacular for this species off the Coromandel Coast of India

***Nematalosa erebi* (Günther 1868)** in honor of H.M.S. *Erebus*, from which holotype, first reported as *Chatoes* (=N.) *come*, was collected

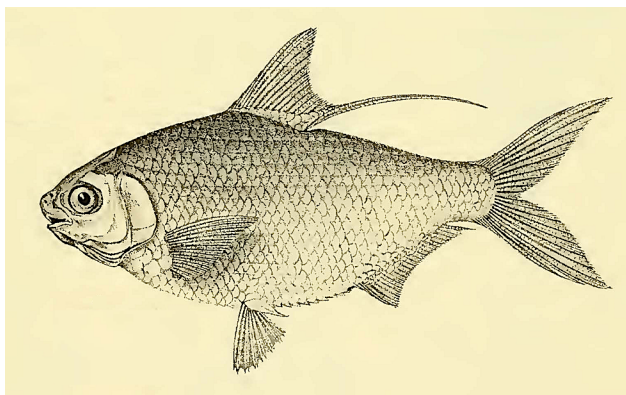
***Nematalosa flyensis* Wongratana 1983** -ensis, Latin suffix denoting place: Fly River, Papua New Guinea, type locality

***Nematalosa galathea* Nelson & Rothman 1973** in honor of the Danish *Galathea* Expedition, which collected first-known specimens

***Nematalosa japonica* Regan 1917** -ica (L.), belonging to: Inland Sea of Japan, type locality

***Nematalosa nasus* (Bloch 1795)** Latin for nose, referring to its rounded and projected snout (characteristic of the genus)

***Nematalosa papuensis* (Munro 1964)** -ensis, Latin suffix denoting place: Papua New Guinea, where it is endemic



Nematalosa come. Illustration by W. Mitchell. From: Richardson, J. 1844-48. Ichthyology of the voyage of H.M.S. *Erebus* & *Terror*. In: J. Richardson & J. E. Gray (eds.). The zoology of the voyage of H.M.S. *Erebus* & *Terror*, under the command of Captain Sir J. C. Ross, R.N., F.R.S., during the years 1839 to 1843. E. W. Janson, London. [Pages 53–74 published in 1846.]

***Nematalosa persara* Nelson & McCarthy 1995** combination and abbreviation of Persian and Arabian, referring to its distribution in the Persian/Arabian Gulf and northern Arabian Sea to Pakistan

***Nematalosa resticularia* Nelson & McCarthy 1995** artificial adjective of *resticula* (L.), cord or line, i.e., cord-like (but authors say it means “maker of small ropes”), referring to large size and texture of its intestinal diverticula

***Nematalosa vlaminghi* (Munro 1956)** patronym not identified but probably in honor of Willem de Vlamingh (1640–ca. 1698), Dutch sea captain who explored western Australia (general location of this species), or his son, Admiral Cornelis de Vlamingh (ca. 1678–1735), explorer and naval officer, who collected and illustrated many fishes for the Muséum national d'Histoire naturelle (Paris)

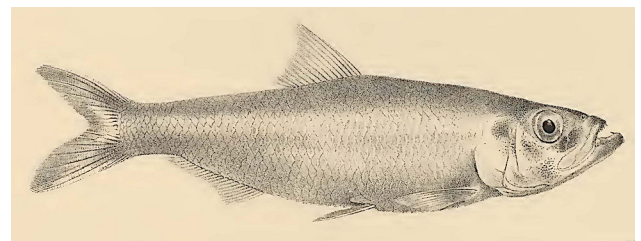
Odaxothrissa

Boulenger 1899

odáx (Gr. ὀδάξ), biting, referring to strong canines on lower jaw of *O. losera*; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy's hair-like bones, often used as a standard suffix for clupeiform fishes

***Odaxothrissa ansorgii* Boulenger 1910** in honor of English explorer and collector William John Ansorge (1850–1913), who collected holotype

***Odaxothrissa losera* Boulenger 1899** indigenous name for this species in the Congo River basin of Africa



Odaxothrissa losera. Illustration by Pierre Jacques Smit. From: Boulenger, G. A. 1899. Matériaux pour la faune du Congo. Zoologie. Série I. Poissons nouveaux du Congo. Quatrième Partie. Polyptères, Clupes, Mormyres, Characins. Annales du Musée du Congo (Ser. Zoology) 1 (fasc. 4): 59–96, Pls. 30–39.

***Odaxothrissa mento* (Regan 1917)** from the Latin *mentum*, chin, probably referring to its strongly projecting lower jaw

***Odaxothrissa vittata* Regan 1917** Latin for banded, referring to its well-defined silvery lateral band

Opisthonema

Gill 1861

opistho-, from *ópisthen* (Gr. ὀπισθεν), behind; *néma* (Gr. νήμα), thread, referring to long, filamentous last ray of dorsal fin

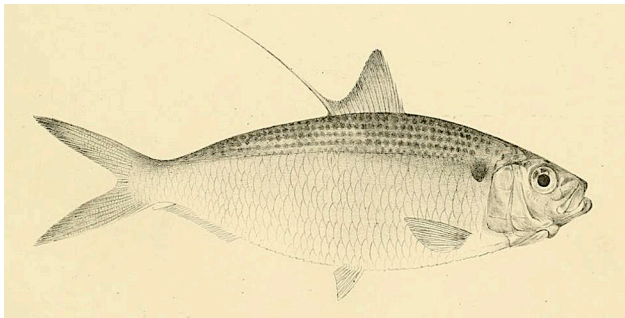
***Opisthonema berlangai* Berry & Barrett 1963** in honor of Fray Tomás de Berlanga (1487–1551), fourth bishop of Panama, who is credited with discovery of the Galapagos Islands (distribution of this species) in May 1535

***Opisthonema bulleri* (Regan 1904)** in honor of American naturalist Audley Cecil Buller (1853–1894), who collected many specimens of Mexican vertebrates, including holotype of this one

***Opisthonema libertate* (Günther 1867)** of La Libertad, El Salvador, type locality

***Opisthonema medirastre* Berry & Barrett 1963** *medius* (L.), middle; *ras-trum* (L.), rake, referring to intermediate number of gill rakers compared with two other coastal Pacific congeners, *O. berlangai* and *O. libertate*

***Opisthonema oglinum* (Lesueur 1818)** etymology unexplained, unless from the word *ogle*, referring to its large eyes



Possibly first-published image *Opisthonema oglinum* (as *Chatoessus signifer*, a junior synonym). Illustration by John William Hill. From: DeKay, J. E. 1842. Zoology of New-York, or the New-York fauna; comprising detailed descriptions of all the animals hitherto observed within the state of New-York, with brief notices of those occasionally found near its borders, and accompanied by appropriate illustrations. Part IV. Fishes. W. & A. White & J. Visscher, Albany, i–xv + 1–415, Pls. 1–79.

Pellonula Günther 1868

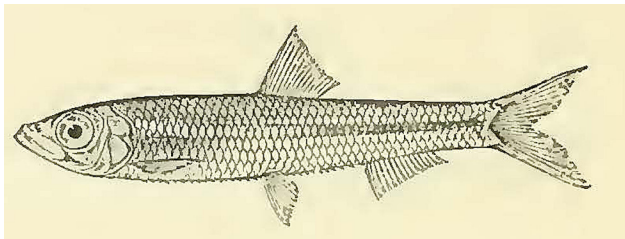
etymology not explained, presumably a diminutive of *Pellona* (now in Pristigasteridae); if so, reason not evident

***Pellonula leonensis* Boulenger 1916** *-ensis*, Latin suffix denoting place: Sierra Leone (Northern Sherbo District), type locality

***Pellonula leonensis afzeliusi* Johnels 1954** in honor of biologist-biophysicist Björn Afzelius (1925–2008), member of expedition that collected type in Gambia River

***Pellonula leonensis miri* (Daget 1954)** vernacular used by indigenous fishermen of Bambara (Diafarabé, Mali)

***Pellonula vorax* Günther 1868** Latin for voracious, probably referring to its “well developed” dentition, with premaxillary teeth pointing outward

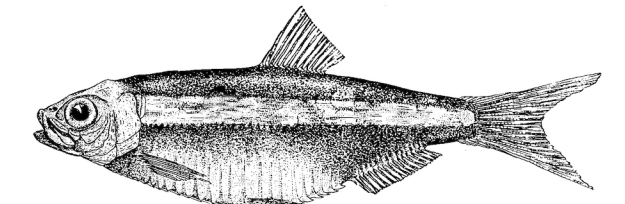


Pellonula leonensis, holotype, 57 mm TL. From: Boulenger, G. A. 1916. Catalogue of the freshwater fishes of Africa in the British Museum (Natural History). London. v. 4: i–xxvii + 1–392.

Platanichthys Whitehead 1968

platan[a], *-ana* (L.) belonging to: referring to Río de la Plata (Argentina), type locality of its one species; *ichthys* (Gr. ἰχθύς), fish

***Platanichthys platana* (Regan 1917)** *-ana* (L.), belonging to: Río de la Plata (Argentina), type locality



Possibly first-published image of *Platanichthys platana*. From: Whitehead, P. J. P. 1968. A new genus for the South American clupeid fish, *Lile platana* Regan. Journal of Natural History 2 (4): 477–486.

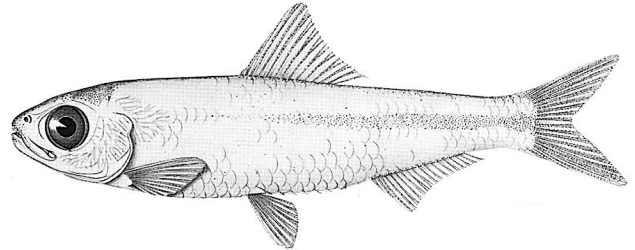
Potamothrissa Regan 1917

potamós (Gr. ποταμός), river, referring to their occurrence in fresh water; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy’s hair-like bones, often used as a standard suffix for clupeiform fishes

Potamothrissa acutirostris* (Boulenger 1899) *acutus (L.), sharp or pointed; *rostris* (scientific Neo-Latin), snout, referring to pointed snout

Potamothrissa obtusirostris* (Boulenger 1909) *obtusus (L.), blunt or dull; *rostris* (scientific Neo-Latin), snout, referring to blunt snout compared with pointed snout of *P. acutirostris*

***Potamothrissa whiteheadi* Poll 1974** in honor of ichthyologist (and clupeoid specialist) Peter J. P. Whitehead (1930–1993), British Museum (Natural History), who examined Poll’s specimens and reported the existence of this species



Potamothrissa whiteheadi, holotype, 45 mm SL. From: Poll, M. 1974. Synopsis et distribution géographique des Clupeidae d’eau douce africains, descriptions de trois espèces nouvelles. Bulletin de la Classe des Sciences, Académie Royale de Belgique (Ser. 5) 60 (2): 141–161, 3 pls.

Rhinosardinia Eigenmann 1912

rhinós (Gr. ῥινός), genitive of *rhís* (ῥίς), nose or snout, allusion not explained, perhaps referring to retrorse spine on upper part of maxilla at about eye level (and near snout), unique among clupeoids; *sardinia*, presumably a variation of *Sardina*, a sardine, perhaps referring to its *Sardinella*-like shape

Rhinosardinia amazonica* (Steindachner 1879) *-ica (L.), belonging to: Amazon River at Pará, Brazil (type locality)

Rhinosardinia bahiensis* (Steindachner 1879) *-ensis, Latin suffix denoting place: Bahia, Brazil, type locality



Rhinosardinia bahiensis. Illustration by Eduard Konopicky. From: Steindachner, F. 1879. Ichthyologische Beiträge (VIII). Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 80 (1–2): 119–191, Pls. 1–3.

Sardinella

Valenciennes 1847

diminutive of *Sardina*, a sardine, “similar to the external form of a sardine” (translation)

Subgenus *Sardinella*

***Sardinella aurita* Valenciennes 1847** Latin for eared, probably referring to black spot at hind border of gill cover

***Sardinella lemuru* Bleeker 1853** from *Ikan Lemuru*, its local name in Jakarta (formerly Batavia), Indonesia, type locality (*Ikan* = fish) [treated as a junior synonym of *S. aurita* by some workers]

Sardinella longiceps* Valenciennes 1847 *longus (L.), long; *-ceps* (Neo-Latin), headed, referring to “long, thick head” (translation) [treated as a subspecies of *S. aurita* by some workers]

Subgenus *Clupeonia*

Valenciennes 1847

-ia (L. suffix), pertaining to: *Clupea* (Clupeidae), genus to which some species had originally been assigned



Sardinella alcyone, holotype, 96.1 mm SL. From: Hata, H. and H. Motomura. 2019. *Sardinella alcyone* n. sp., a new sardine (Teleostei: Clupeiformes: Clupeidae) from the northwestern Pacific Ocean. In: Ho, H.-C., K. Koeda and E. J. Hilton (eds.). Study on the fish taxonomy and diversity of Taiwan. Zootaxa 4702 (1): 19–25.

***Sardinella albella* (Valenciennes 1847)** presumably a diminutive of *albus* (L.), white, referring to its bright silver coloration

***Sardinella alcyone* Hata & Motomura 2019** *αλκυών* (Gr. ἄλκυών), kingfisher, referring to its “brilliant” blueish dorsum, like that of the bird

***Sardinella atricauda* (Günther 1868)** *atri-*, from *ater* (L.), black; *cauda* (L.), tail, referring to deep black tip of each caudal lobe (which may disappear in preserved specimens)

***Sardinella brachysoma* Bleeker 1852** *brachýs* (Gr. βραχύς), short; *sóma* (Gr. σῶμα), body, presumably referring to its shorter (but deeper) body compared with *S. lemuru*

***Sardinella dayi* Regan 1917** in memory of Francis Day (1830–1889), Inspector-General of Fisheries in India and author of the “Fishes of India” series (1875–1888)

***Sardinella electra* Hata & Motomura 2019** from *ἤλεκτρον* (Gr. ἤλεκτρον), an alloy of gold and silver, now used as a metaphor for splendor, i.e., something bright, referring to its “brilliant” silver body

***Sardinella fijiensis* (Fowler & Bean 1923)** *-ensis*, Latin suffix denoting place: Fiji Islands, type locality

***Sardinella fimbriata* (Valenciennes 1847)** Latin for fringed, referring to scales with fringed (i.e., striated, serrated or indented) margins

***Sardinella gibbosa* (Bleeker 1849)** Latin for humpbacked, referring to its elevated back (“*dorso medio in gibbam elevato*”)

***Sardinella goni* Stern, Rinkevich & Goren 2016** in honor of Ofer Gon (b. 1949), South African Institute for Aquatic Biodiversity, for his “extensive study” of the taxonomy of Indian Ocean fishes

***Sardinella hualiensis* (Chu & Tsai 1958)** *-ensis*, Latin suffix denoting place: Hualien, Taitung, east coast of Taiwan Island, type locality

***Sardinella jussieu* (Lacepède 1803)** in honor of French botanist Antoine Laurent de Jussieu (1748–1836), for sharing an unpublished 1770 manuscript about this fish written by Philibert Commerçon [presumably a noun in apposition, without the patronymic “*i*”]

***Sardinella maderensis* (Lowe 1838)** *-ensis*, Latin suffix denoting place: off the coast of Madeira, type locality

***Sardinella marquesensis* Berry & Whitehead 1968** *-ensis*, Latin suffix denoting place: Marquesas Islands, where it is endemic

***Sardinella melanura* (Cuvier 1829)** *μέλανος* (Gr. μέλανος), genitive of *mélas* (μέλας), black; *ourá* (Gr. οὐρά), tail, referring to black tips of caudal fin

***Sardinella pacifica* Hata & Motomura 2019** *-ica* (L.), belonging to: Pacific Ocean, distinguishing it from *S. fimbriata*, with which it had been confused, now considered to be restricted to the Indian Ocean

***Sardinella richardsoni* Wongratana 1983** in honor of Scottish surgeon-naturalist John Richardson (1787–1865), who described this fish in 1846 as *Clupea isingleena* (a name suppressed by the ICZN for not having been used for more than 50 years)

***Sardinella rouxi* (Poll 1953)** in honor of marine zoologist Charles Roux (1920–ca. 2000), director, Centre Oceanographique de Pointe-Noire (Republic of the Congo), who provided some “interesting material” (translation) regarding this fish

***Sardinella sindensis* (Day 1878)** *-ensis*, Latin suffix denoting place: Sindh province of Pakistan, referring to type locality at Karachi

***Sardinella tawilis* (Herre 1927)** local Tagalog (Philippines) name for this fish

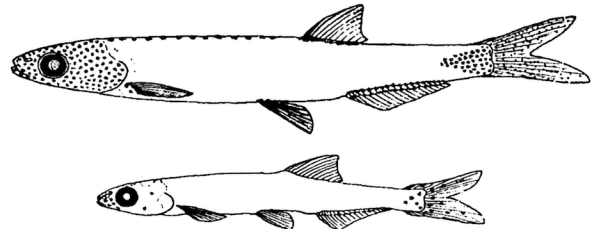
***Sardinella ventura* Hata & Motomura 2021** Italian for fortune (authors say it is Latin, which would be *fortuna*), reflecting the “unexpected find” of type specimens at the British Museum (Natural History)

***Sardinella zunasi* (Bleeker 1854)** Japanese vernacular for this fish (described from Nagasaki); also spelled *zunashi*

Sierrathrissa

Thys van den Audenaerde 1969

Sierra, referring to Sierra Leone, type locality; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy’s hair-like bones, often used as a standard suffix for clupeiform fishes



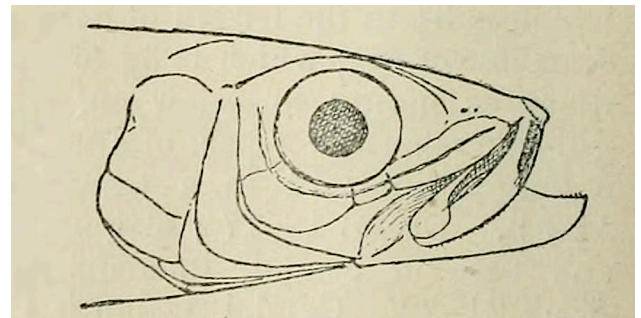
Sierrathrissa leonensis, adult holotype (30.5 mm TL) above, juvenile paratype (16.5 mm TL) below. From: Thys van den Audenaerde, D. F. E. 1969. Description of a new genus and species of clupeoid fish from Sierra Leone. Revue de Zoologie et de Botanique Africaines 80 (3–4): 385–390.

***Sierrathrissa leonensis* Thys van den Audenaerde 1969** *-ensis*, Latin suffix denoting place: Sierra Leone, type locality

Stolothrissa

Regan 1917

stolé (Gr. στολή), an ecclesiastical vestment usually made of a band of silk and worn over the shoulders during liturgical functions; *thrissa* (Gr. θρίσσα), a kind of anchovy, possibly related to *thrix* (Gr. θρίξ), hair, referring to an anchovy’s hair-like bones, often used as a standard suffix for clupeiform fishes



Stolothrissa tanganicae, detail of head. From: Regan, C. T. 1917. A revision of the clupeid fishes of the genus *Pellonula* and of related genera in the rivers of Africa. Annals and Magazine of Natural History (Series 8) 19 (110): 198–207.

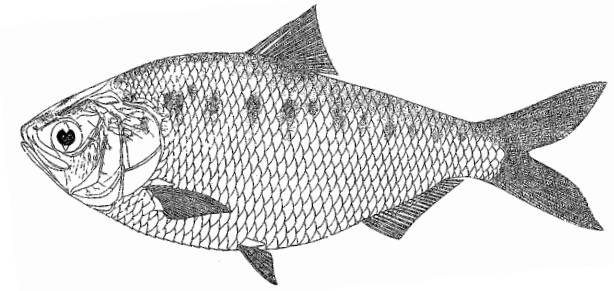
***Stolothrissa tanganicae* Regan 1917** of Lake Tanganyika, where it is endemic

Tenualosa

Fowler 1934

tenuis (L.), slender, allusion not explained nor evident; *alosa*, from *alause*, Latin for shad, possibly referring to original generic placement of type species, *T. reevesii*

***Tenualosa ilisha* (Hamilton 1822)** Latinization of *ilish*, Bengali vernacular usually applied to this species



Tenualosa thibaudeaui. From: Durand, J. 1940. Notes sur quelques poissons d'espèces nouvelles ou peu connues des eaux douces cambodgiennes. Institut Océanographique de l'Indochine Note 36: 1–40, table, Pls. 1–8.

***Tenualosa macrura* (Bleeker 1852)** large-tailed, from *makrós* (Gr μακρός), long or large, and *ourá* (Gr. οὐρά), tail, referring to its long caudal fin, 40–42% of standard length, with long pointed lobes

***Tenualosa reevesii* (Richardson 1846)** in honor of John Reeves (1774–1856), who acquired fish specimen and commissioned Chinese artists to paint or illustrate them while working as a tea inspector in China (1812–1831), including holotype of this one

***Tenualosa thibaudeaui* (Durand 1940)** in honor of French Colonial administrator Leon Emmanuel Thibaudeau (1883–1946), Résident Supérieur, Cambodia; he worked with Cambodia's Oceanographic Institute to help local fishers gain more control over fish sales by grouping into co-operatives

***Tenualosa toli* (Valenciennes 1847)** presumably vernacular for this

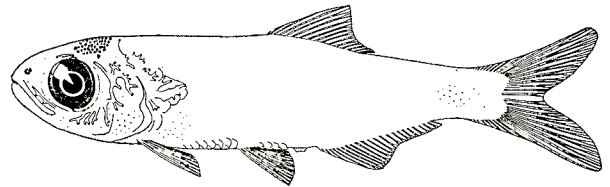
species in Puducherry, India, as recorded by Jean-Jacques Dussumier (1792–1883), voyager and merchant who collected zoological specimens from southeastern Asia and the Indian Ocean

Thrattidion

Roberts 1972

neuter diminutive of *thrátta* (Gr. θράττα), literally a “Thracian woman” but used in ancient times as a name for a small herring-like fish, referring to its small size (21.4 mm)

***Thrattidion noctivagus* Roberts 1972** *noctis*, genitive of *nox* (L.), night; *vagus* (L.), wandering, referring to its upward and shoreward migrations at nightfall in mixed aggregations with other small fishes



Thrattidion noctivagus, paratype, 19.4 mm SL. From: Roberts, T. R. 1972. Osteology and description of *Thrattidion noctivagus*, a minute, new freshwater clupeid fish from Cameroon, with a discussion of pellonulin relationships. Breviora No. 382: 1–25.