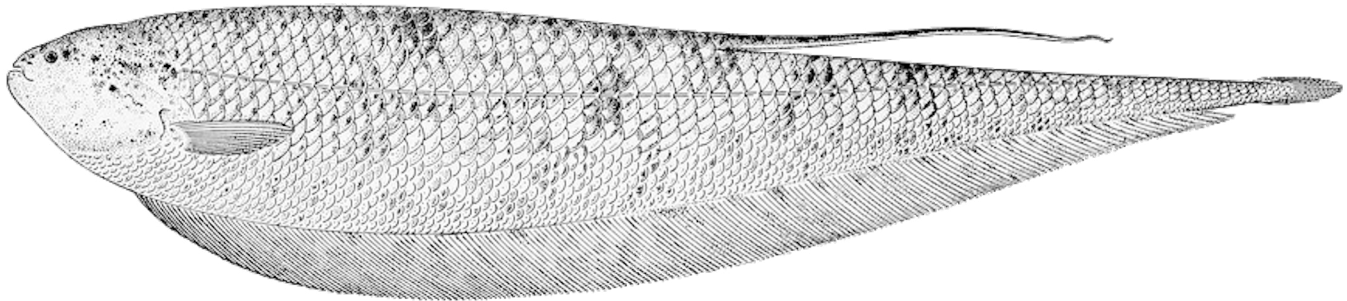


Order GYMNOTIFORMES

Ghost Knifefishes

Family **APTERONOTIDAE**

Jordan 1923



Probably first-published image of *Adontosternarchus balaenops* (misidentified as *A. sachsi*). From: Ellis, M. M. 1913. The gymnotid eels of tropical America. *Memoirs of the Carnegie Museum* 6 (3): 109–195, Pls. 15–23.

Ghost Knifefishes

Subfamily **APTERONOTINAE**

Jordan 1923

Subgenus ***Adontosternarchus***

Ellis 1912

ἀ, Greek privative, i.e., without, and *odontos*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth, referring to absence of teeth from both jaws; *sternarchus*, referring to then-placement in the subfamily Sternarchinae (=Apteronotinae)

***Adontosternarchus balaenops* (Cope 1878)** *balaena* (L.), whale; ὄψ (Gr. ὄψ), eye or face (i.e., appearance), referring to lower jaw projecting beyond upper jaw, “enclosing the latter somewhat as in a whalebone [or baleen] whale”

***Adontosternarchus clarkae* Mago-Leccia, Lundberg & Baskin 1985** in honor of Kate Rodriguez-Clark, who ran a research station in Venezuela with her husband, and who collected holotype

***Adontosternarchus devenanzii* Mago-Leccia, Lundberg & Baskin 1985** in honor of Francisco De Venanzi (1917–1987), physician, medical school professor, and first Rector of the Universidad Central de Venezuela (Caracas), who encouraged the first author to study fishes

***Adontosternarchus duartei* de Santana & Vari 2012** in honor of Cleber Duarte, Instituto Nacional de Pesquisas da Amazônia, who collected most of the specimens that served as the basis for its description

***Adontosternarchus nebulosus* Lundberg & Cox Fernandes 2007** Latin for cloudy, referring to bold color pattern of dark irregular blotches

***Adontosternarchus sachsi* (Peters 1877)** in honor of physician and electric-fish researcher Carl Sachs (1853–1878), who collected holotype

Subgenus ***Apteronotus***

Lacepède 1800

ἀ, Greek privative, i.e., without; *pterus*, from *pterón* (Gr. πτερόν) or *ptéryx* (πτέρυξ), fin; *notus*, from *nōtos* (Gr. νῶτος), back, referring to absence of dorsal fin (a trait common to all knifefishes, however, apteronotids do possess a “dorsal organ,” a longitudinal strip of fleshy tissue firmly attached to posterodorsal midline)

***Apteronotus acidops* Triques 2011** *acid-*, from *akidos* (ἀκίδος), genitive singular of *ákis* (ἀκίς), any pointed object; ὄψ (Gr. ὄψ), eye or face, referring to its very elongated and pointed head morphology

***Apteronotus albertoi* Peixoto, Dutra, Datovo, Menezes & de Santana**

2021 in honor of Alberto Carvalho, manager of the Laboratório Multiusuário de Processamento de Imagens de Microtomografia Computadorizada de Alta Resolução do Museu de Zoologia da Universidade de São Paulo (MZUSP), for his “kind support” in generating μ CT scan images for MZUSP researchers, especially for the project “Diversity and Evolution of the Gymnotiformes”

***Apteronotus albifrons* (Linnaeus 1766)** *albi-*, from *albus* (L.), white; *frons* (L.), face or brow, referring to whitish band extending from tip of snout to occiput

Apteronotus anu de Santana & Vari 2013 named for the Añu indigenous people who lived along the shores of Lake Maracaibo, Venezuela, in traditional houses termed *Palafitos*, which they built above the lake; such housing reminded early European explorers of Venice, Italy, and may have been the basis for the application of the name Venezuela to the region

***Apteronotus apurensis* Fernández-Yépez 1968** *-ensis*, Latin suffix denoting place: Río Apure system, Orinoco basin, Venezuela, where type locality (Río Bucaral, Paso Mirabal) is situated

Apteronotus baniwa de Santana & Vari 2013 named for the indigenous *Baniwa* people of Venezuela, whose home territory encompasses the Río Orinoco basin, type locality

***Apteronotus bonapartii* (Castelnau 1855)** in honor of French biologist Charles Lucien Bonaparte (1803–1857), 2nd Prince of Canino and Musignano, “who even if he was not a member of the imperial house, is still one of the princes of science” (translation)

***Apteronotus brasiliensis* (Reinhardt 1852)** *-ensis*, Latin suffix denoting place: Brazil, where type locality (rio das Velhas) is situated

Apteronotus camposdapazi de Santana & Lehmann A. 2006 in honor of Brazilian biologist Ricardo Campos-da-Paz, Universidade de São Paulo, for contributions to the knowledge of gymnotiform fishes, and for discovering this species

***Apteronotus caudimaculosus* de Santana 2003** *cauda* (L.), tail; *maculosus* (L.), spotted, referring to irregular dark spots on first of two bands that circle caudal peduncle

***Apteronotus cuchillejo* (Schultz 1949)** Spanish for a small knife, the common name for this small, knife-shaped fish in Venezuela

***Apteronotus cuchillo* Schultz 1949** Spanish for knife, a common name for gymnotiform fishes in Venezuela, referring to their knife-like shape

***Apteronotus ellisi* (Alonso de Arámburu 1957)** in honor of zoologist Max Mapes Ellis (1887–1953), Indiana University, for his 1913 monograph on knifefishes

***Apteronotus eschmeyeri* de Santana, Maldonado-Ocampo, Severi & Mendes 2004** in honor of William N. Eschmeyer (b. 1939), California Academy of Sciences, who greatly contributed to ichthyology with his “Catalog of Fishes”

***Apteronotus ferrarisi* de Santana & Vari 2013** in honor of American ichthyologist Carl J. Ferraris, Jr. (b. 1950), for his many contributions to our knowledge of tropical freshwater fishes worldwide and his “invaluable” assistance to the authors, particularly the second author, over the years

***Apteronotus galvisi* de Santana, Maldonado-Ocampo & Crampton 2007** in honor of Germán Vergara, Universidad Nacional de Colombia, Sede Bogotá, for his “vast” contributions to our knowledge of the freshwater fishes of Colombia

***Apteronotus jurubidae* (Fowler 1944)** of the Río Jurubidá, Nuquí, Pacific Slope, Colombia, type locality

***Apteronotus leptorhynchus* (Ellis 1912)** narrow-snouted, from *leptós* (Gr. λεπτός), narrow or delicate, and *rhýnchos* (Gr. ῥύγχος), snout, referring to its “rather long” pointed snout

***Apteronotus lindalvae* de Santana & Cox Fernandes 2012** in honor of Lindalva Sales da Costa Serrão, who has been contributing to the organization of INPA’s (Instituto Nacional de Pesquisas da Amazônia) fish collection for more than 20 years

***Apteronotus macrolepis* (Steindachner 1881)** *macro-*, from *makrós* (Gr. μακρός), long or large; *lepis* (Gr. λεπίς), scale, referring to large scales on upper sides of body

***Apteronotus macrostomus* (Fowler 1943)** big-mouthed, from *makrós* (Gr. μακρός), long or large, and *stóma* (Gr. στόμα), mouth, which extends beyond eye and is half the length of the head

***Apteronotus magdalenensis* (Miles 1945)** *-ensis*, Latin suffix denoting place: Río Magdalena, Honda, Tolima, Colombia, type locality

***Apteronotus magoi* de Santana, Castillo & Taphorn 2006** in honor of the late Francisco Mago-Leccia (1931–2004), Venezuelan ichthyologist, for his “enormous” contributions to our knowledge of gymnotiform fishes, and for having recognized this species as undescribed

***Apteronotus mariae* (Eigenmann & Fisher 1914)** in honor of Hermano Apolinar Maria (1867–1949), missionary monk, ornithologist, and Director, Museum at the Instituto de La Salle, Bogota, who provided Eigenmann with “valuable collections” of fishes from the Rio Meta basin of Colombia

***Apteronotus milesi* de Santana & Maldonado-Ocampo 2005** in honor of Cecil (spelled Celis by the authors) W. Miles, Secretary of the Dorada Railway (and an ichthyologist), Mariqueta, Tolima Department, Colombia, who “greatly” contributed to the knowledge of fishes from the Magdalena-Cauca hydrographic region of Colombia

***Apteronotus paranaensis* (Schindler 1940)** *-ensis*, Latin suffix denoting place: rio Paraná basin, Brazil, type locality [*species inquirenda*, provisionally included here]

***Apteronotus pemon* de Santana & Vari 2013** named for the Pemon indigenous group, whose traditional lands included much of the Río Caroni basin, Venezuela, type locality

***Apteronotus quilombola* Peixoto, Datovo, Menezes & Santana 2021**



Apteronotus pemon, paratype, female, 165 mm TL. From: de Santana, C. D. and R. P. Vari. 2013. Brown ghost electric fishes of the *Apteronotus leptorhynchus* species-group (Ostariophysi, Gymnotiformes); monophyly, major clades, and revision. Zoological Journal of the Linnean Society 168 (3): 564–596.

named for the *quilombolas*, Afro-Brazilian residents of the *quilombos*, which are Brazilian hinterland settlements first established by escaped enslaved Africans; in the Rio Trombetas, over 145 *quilombolas* families live near the Cachoeira Porteira waterfalls (Pará, Brazil), one of two places where this knifefish is known to occur

***Apteronotus rostratus* (Meek & Hildebrand 1913)** Latin for beaked, allusion not explained, presumably referring to its blunt and slightly compressed snout

***Apteronotus spurrellii* (Regan 1914)** in honor of British zoologist Henry George Flaxman Spurrell (1882–1919), who collected holotype

Compsaraia

Albert 2001

comps-, from *kompós* (Gr. κομψός), neat or elegant; *raia* (L.), ray (as in stingray, but here meaning rays of a fin), referring to elegant appearance of long anal fin of *C. compsus*

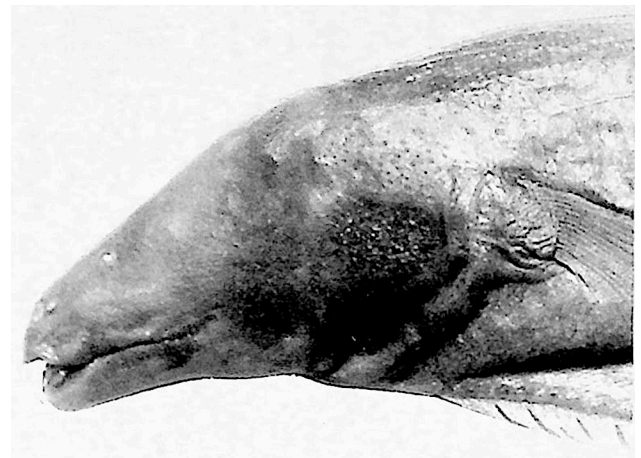
***Compsaraia iara* Bernt & Albert 2017** named for Iara, a water nymph from Tupí-Brazilian folklore said to reside in the rivers of the Brazilian Amazon and often blamed for the disappearance of fishermen

***Compsaraia compsus* (Mago-Leccia 1994)** from *kompós* (Gr. κομψός), elegant or beautiful, referring to its elongate body

***Compsaraia samueli* Albert & Crampton 2009** in honor of the first author’s father, Samuel Albert, who accompanied his son on an electric fish collecting trip to Peru, and purchased type specimens from a fish market near Iquitos when he recognized that they differed from all the other electric fishes they had been collecting by the prominent elongate jaws of mature males (James S. Albert, pers. comm.)



Compsaraia samueli, holotype, male, detail of head, 226 mm TL. From: Albert, J. S. and W. G. R. Crampton. 2009. A new species of electric knifefish, genus *Compsaraia* (Gymnotiformes: Apteronotidae) from the Amazon River, with extreme sexual dimorphism in snout and jaw length. Systematics and Biodiversity 7 (1): 81–92.



Megadontognathus cuyuniensis, paratype, detail of head, 213 mm TL. From: Mago-Leccia, F. 1994. Electric fishes of the continental waters of America. Caracas, Fundación para el Desarrollo de las Ciencias Físicas, Matemáticas y Naturales. 1–206, 16 unnumbered tables.

Megadontognathus

Mago-Leccia 1994

mégas (Gr. μέγας), large or great; *odontos*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth; *gnáthos* (Gr. γνάθος), jaw or mandible, referring to 2–3 big, recurved teeth on posterior half of dentary bone

Megadontognathus cuyuniensis Mago-Leccia 1994 *-ensis*, Latin suffix denoting place: Río Cuyuni at Paruruvaca rapids, Bolívar, Venezuela, type locality [originally spelled *cuyuniense*; emended to agree with masculine genus]

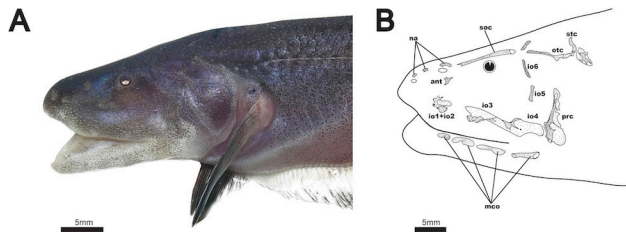
Megadontognathus kaitukaensis Campos-da-Paz 1999 *-ensis*, Latin suffix denoting place: Cachoeiras (rapids) de Kaituká, rio Xingu drainage, Pará, Brazil, type locality

Melanosternarchus

Bernt, Crampton, Orfinger & Albert 2018

mélanos (Gr. μέλανος), genitive of *mélas* (μέλας), black, referring to its dark pigmentation and occurrence in blackwater rivers; *sternarchus*, a common suffix in knifefish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (=Apteronotus), *stérnon* (Gr. στέρνων), breast or chest (especially of men), and *archós* (Gr. ἀρχός), anus, referring to placement of anal opening near breast of *Apteronotus albifrons* (and all other gymnotiforms)

Melanosternarchus amaru Bernt, Crampton, Orfinger & Albert 2018 *amaru*, a serpent in Quechuan mythology, referring to its snake-like shape



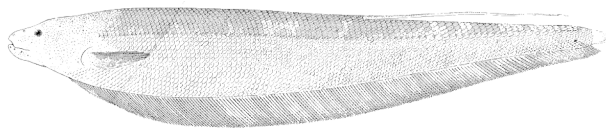
Melanosternarchus amaru. (A) Detail of head of paratype, 187 mm TL. (B) Cephalic lateral line bones of non-type specimen, 237 mm TL. From: Bernt, M. J., W. G. R. Crampton, A. B. Orfinger and J. S. Albert. 2018. *Melanosternarchus amaru*, a new genus and species of electric ghost knifefish (Gymnotiformes: Apteronotidae) from the Amazon Basin. *Zootaxa* 4378 (4): 451–479.

Parapteronotus

Albert 2001

pará (Gr. παρά), near, referring to phylogenetic position of this lineage as sister taxon to other members of Apteronotinae; *Apteronotus*, type genus of family

Parapteronotus hasemani (Ellis 1913) in honor of American zoologist John D. Haseman (1882–1969), field collector in the Carnegie Museum of Natural History's Department of Ichthyology from 1908–1911, who collected holotype



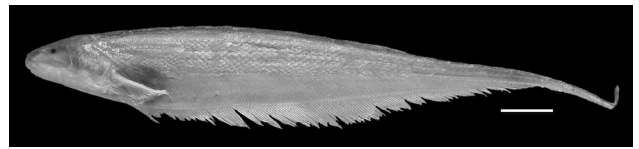
Parapteronotus hasemani. Diagonal mark behind pectoral fin is a scratch on the printed plate. See *Adontosternarchus balaenops* caption for source.

Pariosternarchus

Albert & Crampton 2006

pario-, from *paraiá* (Gr. παραιά), cheek, referring to expanded ventrolateral surface of head; *sternarchus*, a common suffix in knifefish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (=Apteronotus), *stérnon* (Gr. στέρνων), breast or chest (especially of men), and *archós* (Gr. ἀρχός), anus, referring to placement of anal opening near breast of *Apteronotus albifrons* (and all other gymnotiforms)

Pariosternarchus amazonensis Albert & Crampton 2006 *-ensis*, Latin suffix denoting place: main Amazon River channels of Brazil and Peru, where it occurs



ariosternarchus amazonensis, holotype, 121 mm TL. scale bar = 10 mm. From: Albert, J. S. and W. G. R. Crampton. 2006. *Pariosternarchus amazonensis*: a new genus and species of neotropical electric fish (Gymnotiformes: Apteronotidae) from the Amazon River. *Ichthyological Exploration of Freshwaters* 17 (3): 267–274.

Platyrosteronarchus

Mago-Leccia 1994

platýs (Gr. πλατύς), broad, and *uro*, from *ourá* (Gr. ούρά), tail, referring to deep caudal peduncle of *P. macrostomus*; *sternarchus*, a common suffix in knifefish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (=Apteronotus), *stérnon* (Gr. στέρνων), breast or chest (especially of men), and *archós* (Gr. ἀρχός), anus, referring to placement of anal opening near breast of *Apteronotus albifrons* (and all other gymnotiforms)

Platyrosteronarchus crypticus de Santana & Vari 2009 Latin for hidden or secret, referring to its previously undetected, albeit very distinct, differences between it and *P. macrostomus*

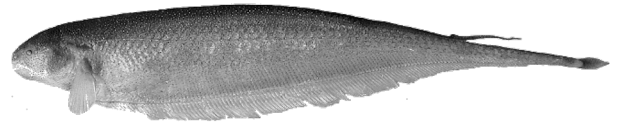
Platyrosteronarchus macrostomus (Günther 1870) big-mouthed, from *makrós* (Gr. μακρός), long or large, and *stóma* (Gr. στόμα), mouth, referring to wide mouth cleft, more than half the length of the snout

Porotergus

Ellis 1912

póros (Gr. πόρος), hole or passage; *tergus* (L.), the back, referring to numerous mucous pores on mid-dorsal band or stripe of *P. gymnotus* and *P. gimbeli*

Porotergus duende de Santana & Crampton 2010 Portuguese word for elf or imp, referring to its “diminutive” size (up to 140 mm TL)



Porotergus duende, holotype, 104 mm TL. From: de Santana, C. D. and W. G. R. Crampton. 2010. A review of the South American electric fish genus *Porotergus* (Gymnotiformes: Apteronotidae) with description of a new species. *Copeia* 2010 (1): 165–175.

Porotergus gimbeli Ellis 1912 in honor of American philanthropist Jacob (Jake) Gimbel (1876–1943), whose generosity made possible the Gimbel Expedition to British Guiana, where holotype was collected

Porotergus gymnotus Ellis 1912 *gymnós* (Gr. γυμνός), bare or naked; *notus*, from *nótos* (Gr. νῶτος), back, referring to absence of scales along back to beyond origin of dorsal-fin filament

Sternarchella

Eigenmann 1905

-ella (L.), a diminutive suffix, referring to previous placement of *S. schotti* in *Sternarchus* (=Apteronotus), distinguished by its “much shorter” snout and “very much smaller” mouth

Sternarchella calhamazon Lundberg, Coz Fernandes, Campos da Paz & Sullivan 2013 named for the Calhamazon Project, a 1992–1997 Brazilian-U.S. collaborative ichthyological inventory of the deep river channels of the Brazilian Amazon; derived from the Portuguese *calha* for channel plus *Amazon* (pronounced *cal-yah-mazon*)

Sternarchella curvioperculata Godoy 1968 *curvus* (L.), curved; *operculata* (L.), furnished with a lid (i.e., opercle), referring to concave dorsal



Sternarchella calhamazon, paratype. Photo by Mark Sabaj Peréz. From: *Sternarchella calhamazon* n. sp., the Amazon's most abundant species of apteronotid electric fish, with a note on the taxonomic status of *Sternarchus capanemae* Steindachner, 1868 (Gymnotiformes, Apteronotidae). *Proceedings of the Academy of Natural Sciences of Philadelphia* 162: 157–173.

margin of opercle [possibly a species of *Apteronotus*]

***Sternarchella ducis* (Lundberg, Cox Fernandes & Albert 1996)** named for DUC CIS (pronounced dü'ssis), acronym of an ichthyological club, the Duke University Center for Creative Ichthyological Studies

***Sternarchella orinoco* Mago-Leccia 1995** named for the Río Orinoco basin of Venezuela, where it lives in the main channel of large rivers

***Sternarchella orthos* Mago-Leccia 1994** *orthós* (Gr. ὀρθός), straight, referring to straight dorsal profile of head and body

***Sternarchella patriciae* Evans, Crampton & Albert 2017** in honor of Patricia Evans, a civil-rights activist and community leader in Philadelphia, Pennsylvania, USA (and the first author's mother, K. M. Evans, pers. comm.)

***Sternarchella raptor* (Lundberg, Cox Fernandes & Albert 1996)** Latin for robber or plunderer, a commonly used term in zoology for a predacious animal, here referring to its well-toothed jaws and tail-eating habit

***Sternarchella rex* Evans, Crampton & Albert 2017** Latin for king, referring to its body size and robust appearance (the largest known species in the genus, reaching 412 mm LEA (from tip of snout to end of anal fin)

***Sternarchella schotti* (Steindachner 1868)** patronym not identified, probably in honor of German-American cartographer, botanist and geologist Arthur Schott (1814–1875)

***Sternarchella sima* Starks 1913** Latin for blunt-nosed, referring to blunt, rounded snout overhanging a small mouth

Sternarchogiton

Eigenmann 1905

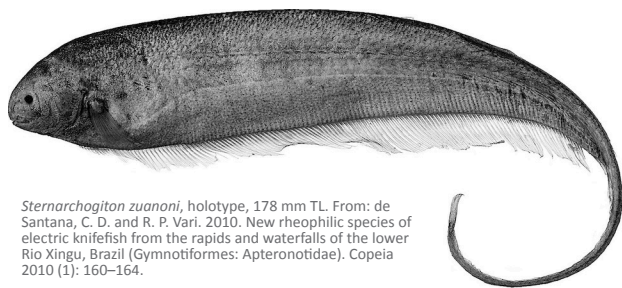
geítōn (Gr. γείτων), neighbor, i.e., close to *Sternarchus* (= *Apteronotus*), in which *S. nattereri* had been placed

***Sternarchogiton labiatus* de Santana & Crampton 2007** Latin for lipped, referring to “unusual” and diagnostic three-lobed structure on lower lip

***Sternarchogiton nattereri* (Steindachner 1868)** in honor of Austrian naturalist Johann Natterer (1787–1843), who explored South America and collected specimens for 18 years, including holotype of this species

***Sternarchogiton porcinum* Eigenmann & Allen 1942** Latin for porcine or pig-like, referring to the “strong inclusion of the lower jaw within the upper” [correctly spelled *porcinus* to agree with masculine genus, but *porcinum* may be retained due to prevailing usage]

***Sternarchogiton zuanoni* de Santana & Vari 2010** in honor of Brazilian ichthyologist Jansen Alfredo Sampaio Zuanon, Instituto Nacional de Pesquisas da Amazônia (Manaus), who has contributed “enormously” to our knowledge of the ecology and taxonomy of fishes from the Amazon basin (he also helped collect holotype)



Sternarchogiton zuanoni, holotype, 178 mm TL. From: de Santana, C. D. and R. P. Vari. 2010. New rheophilic species of electric knife fish from the rapids and waterfalls of the lower Rio Xingu, Brazil (Gymnotiformes: Apteronotidae). *Copeia* 2010 (1): 160–164.

Sternarchorhynchus

Castelnau 1855

a *Sternarchus* (= *Apteronotus*) with a curved *rhýnchos* (Gr. ῥύγχος), snout, referring to snout produced into a long tube, slightly arched downwards

***Sternarchorhynchus axelrodi* de Santana & Vari 2010** in honor of American pet-book publisher and aquarist Herbert R. Axelrod (1927–2017),



Sternarchorhynchus cramptoni, holotype, female, 290 mm TL. From: de Santana, C. D. and R. P. Vari. 2010. Electric fishes of the genus *Sternarchorhynchus* (Teleostei, Ostariophysi, Gymnotiformes); phylogenetic and revisionary studies. *Zoological Journal of the Linnean Society* 159 (1): 223–371.

whose “generous support of ichthyological research” assisted with the completion of the authors’ revision of the genus

***Sternarchorhynchus britskii* Campos-da-Paz 2000** in honor of Brazilian ichthyologist Heraldo A. Britski (b. 1934), Universidade de São Paulo, who first noted the presence of this species in the upper Rio Paraná system (Brazil), and who has contributed much to advance our knowledge of neotropical fishes both through his own and his students’ studies

***Sternarchorhynchus caboclo* de Santana & Nogueira 2006** Brazilian-Portuguese word for a person of mixed Brazilian Indian and European or African ancestry, named in honor of the *caboclos* of northern Brazil, whose field knowledge has contributed greatly to our understanding of neotropical fishes

***Sternarchorhynchus chaoi* de Santana & Vari 2010** in honor of ichthyologist Ning Labbish Chao, Universidade Federal do Amazonas, for “invaluable” assistance and financial support to the senior author during his studies of gymnotiform fishes in Manaus, Brazil

***Sternarchorhynchus cramptoni* de Santana & Vari 2010** in honor of British ichthyologist William Crampton (b. 1969), University of Central Florida, for many contributions to our knowledge of the biology and systematics of gymnotiform fishes

***Sternarchorhynchus curumim* de Santana & Crampton 2006** Brazilian-Portuguese derivative of the Tupi-Guarani word for child, *curumi*, or *kurumí*, referring to its small size (up to 211 mm TL)

***Sternarchorhynchus curvirostris* (Boulenger 1887)** *curvus* (L.), curved; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to long, tubular snout, “bent downwards”

***Sternarchorhynchus freemani* de Santana & Vari 2010** in honor of zoologist Bryon J. Freeman (b. 1950), University of Georgia (USA), for “invaluable” assistance to the senior author at the Georgia Museum of Natural History

***Sternarchorhynchus galibi* de Santana & Vari 2010** named for Galibi, Suriname, of town that began as a major settlement of the indigenous Caribs, at the mouth of the Marowijne, the drainage system that includes type locality along border between Suriname and French Guiana

***Sternarchorhynchus gnomus* de Santana & Taphorn 2006** Latin for gnome (authors say dwarf), a diminutive fabled being, referring to its size (up to 152 mm TL), the smallest member of the genus

***Sternarchorhynchus goeldii* de Santana & Vari 2010** in honor of Swiss-Brazilian zoologist Émil (or Emilio) Goeldi (1859–1917), Director of the Museu Paraense, for many contributions to our knowledge of many groups of Amazonian animals, including fishes

***Sternarchorhynchus hagedornae* de Santana & Vari 2010** in honor of marine biologist and fish physiologist Mary Hagedorn, Smithsonian Institution (Washington, D.C., USA), who collected type series and has made many contributions to our understanding of the diversity of gymnotiform fishes

***Sternarchorhynchus higuchii* de Santana & Vari 201** in honor of ichthyologist Horácio Higuchi, Museu Paraense Emilio Goeldi, for “invaluable” assistance to the senior author during his early studies of gymnotiform fishes

***Sternarchorhynchus inpai* de Santana & Vari 2010** of INPA, acronym of Instituto Nacional de Pesquisas da Amazônia (Manaus, Brazil), a center for the study of the biodiversity of the Brazilian Amazon for over 50 years

***Sternarchorhynchus jaimeni* de Santana & Vari 2010** in honor of Brazilian molecular biologist Jaime Ribeiro Carvalho, Jr., Centro do Jovem Aquarista, for “invaluable” assistance to the senior author during the early phases of his studies of gymnotiform fishes

***Sternarchorhynchus kokraimoro* de Santana & Vari 2010** named for the Kokraimoro, a group within the Kayabo tribe whose ancestral lands included type locality (rio Xingu, Pará, Brazil)

***Sternarchorhynchus mareikeae* de Santana & Vari 2010** in honor of German biologist Mareike Roeder, who has “greatly added to the senior author’s life”

***Sternarchorhynchus marreroi* de Santana & Vari 2010** in honor of aquatic biologist Crispulo Marrero (b. 1954), Universidad Nacional Experimental de los Llanos Occidentales, who has “greatly” contributed to our knowledge of gymnotiform biology in Venezuela

***Sternarchorhynchus mendesi* de Santana & Vari 2010** in honor of fisheries scientist and oceanographer George Nilson Mendes, Universidade Federal de Pernambuco (Brazil), for his assistance to the first author during the early phases of his studies of gymnotiform fishes

***Sternarchorhynchus mesensis* Campos-da-Paz 2000** *-ensis*, Latin suffix denoting place: Serra da Mesa, an area of the upper River Tocantins region (Goiás, Brazil), type locality

***Sternarchorhynchus montanus* de Santana & Vari 2010** Latin for pertaining to mountains, referring to type locality in the foothills of the Andean Cordilleras (Río Marañón, Amazonas, Peru)

***Sternarchorhynchus mormyrus* (Steindachner 1868)** referring to *Mormyrus* (*sensu lato*), a genus of weakly electric, ecologically convergent African fishes (Osteoglossiformes: Mormyridae), many of which, like this species, possess a long, tubular snout, bent downwards

***Sternarchorhynchus oxyrhynchus* (Müller & Troschel 1849)** sharp-snouted, from *oxys* (Gr. ὀξύς), sharp, and *rhynchus* (Gr. ῥύγχος), snout, referring to snout produced into a long tube, slightly arched downwards

***Sternarchorhynchus retzeri* de Santana & Vari 2010** in honor of Michael Retzer, Curator of Fishes, Illinois Natural History Survey, for “invaluable” assistance through the years to both authors in the course of this and other research projects

***Sternarchorhynchus roseni* Mago-Leccia 1994** in honor of American ichthyologist Donn Eric Rosen (1929–1986), American Museum of Natural History, for his “outstanding” contributions to the biology and systematics of fishes

***Sternarchorhynchus schwassmanni* de Santana & Vari 2010** in honor of American ichthyologist Horst O. Schwassmann (b. 1922), University of Florida, for contributions to the knowledge of electric knifefishes

***Sternarchorhynchus severii* de Santana & Nogueira 2006** in honor of Brazilian biologist William Severi, for his contribution to the knowledge of the fishes of northeastern Brazil

***Sternarchorhynchus starksi* de Santana & Vari 2010** in honor of American ichthyologist Edwin Chapin Starks (1867–1932), Stanford University (California, USA), who in 1911 collected a portion of the series that served as the basis for this description and who made a number of contributions to our knowledge of the anatomy of fishes

***Sternarchorhynchus stewarti* de Santana & Vari 2010** in honor of Donald J. Stewart (b. 1946), College of Environmental Science of Forestry, State University of New York, who collected the specimens that first brought this species to the authors’ attention, and who has made many contributions to our knowledge of the fishes of the western portions of the Amazon basin

***Sternarchorhynchus taphorni* de Santana & Vari 2010** in honor of American ichthyologist Donald C. Taphorn (b. 1951), Universidad Nacional Experimental de los Llanos Occidentales, who “generously” assisted the authors with this and other publications over the years, and who has made many contributions to our understanding of South American freshwater fishes

***Sternarchorhynchus villasboasi* de Santana & Vari 2010** in honor of Brazilian activist Orlando Villa Bôas (1914–2002), who was instrumental in the designation of the Xingu National Park, for his diverse endeavors to ameliorate the impact of development projects on the indigenous peoples of that region

***Sternarchorhynchus yepezi* de Santana & Vari 2010** in honor of Venezuelan ichthyologist Augustin Fernández-Yépez (1916–1977), whose research on *Sternarchorhynchus* demonstrated that the diversity within the genus was greater than had been recognized

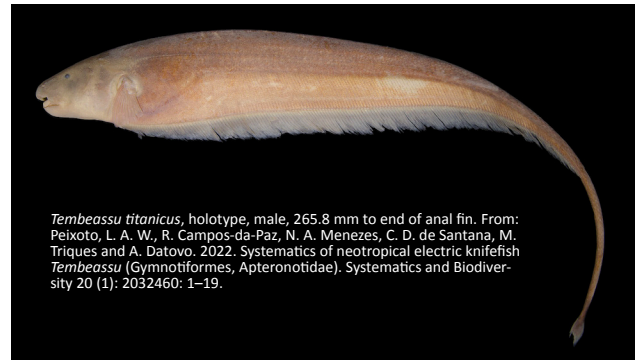
Tembeassu

Triques 1998

from the native Tupí words *tembé*, lip, and *açú*, large, with the “c” changed to “ss,” referring to enlarged fleshy lateral lobe on chin

***Tembeassu marauna* Triques 1998** from the native Tupí *marauína*, ghost, referring to its being “hidden” in its habitat

***Tembeassu titanicus* Peixoto, Campos-da-Paz, Menezes, de Santana, Triques & Datovo 2022** *-icus* (L.), belonging to: *titán* (Gr. τιτάν), one of the Titans (giant deities in Greek mythology), representing brute force and large size, referring to its larger size compared with *T. marauna*



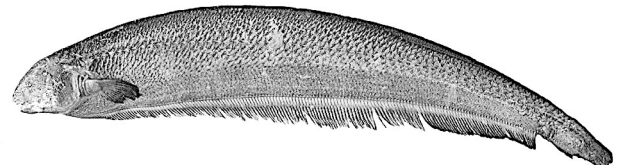
Tembeassu titanicus, holotype, male, 265.8 mm to end of anal fin. From: Peixoto, L. A. W., R. Campos-da-Paz, N. A. Menezes, C. D. de Santana, M. Triques and A. Datovo. 2022. Systematics of neotropical electric knifefish *Tembeassu* (Gymnotiformes, Apterontidae). Systematics and Biodiversity 20 (1): 2032460: 1–19.

Tenebrosternarchus

Bernt, Fronk, Evans & Albert 2020

tenebrae (L.), darkness or gloom, referring to black pigmentation of *T. preto*; *sternarchus*, a common suffix in knifefish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (=Apterontus), *stérnon* (Gr. στέρνων), breast or chest (especially of men), and *archós* (Gr. ἀρχός), anus, referring to placement of anal opening near breast of *Apterontus albifrons* (and all other gymnotiforms)

***Tenebrosternarchus preto* (de Santana & Crampton 2007)** Portuguese for black, referring to its diagnostic dark pigmentation



Tenebrosternarchus preto, paratype, female. From: de Santana, C. D. and W. G. R. Crampton. 2007. Revision of the deep-channel electric fish genus *Sternarchogiton* (Gymnotiformes: Apterontidae). Copeia 2007 (2): 387–402.

Longsnout Knifefishes

Subfamily STERNARCHORHAMPHINAE

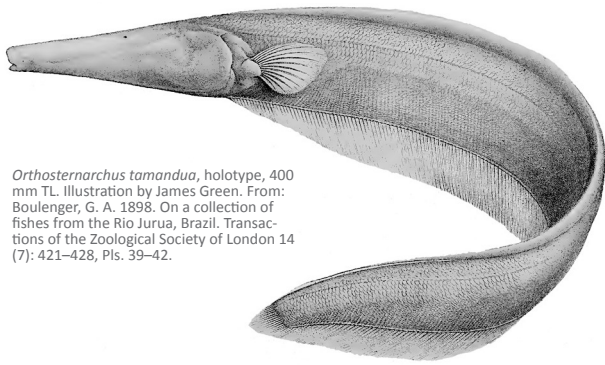
Albert 2001

Orthosternarchus

Ellis 1913

orthós (Gr. ὀρθός), straight, probably referring to its “long, straight” tubular snout; *sternarchus*, referring to then-placement in the subfamily Sternarchinae (=Apterontinae)

***Orthosternarchus tamandua* (Boulenger 1898)** named for Tamandua, genus of edentate anteaters of tropical America, from the Portuguese *tamanduá*, derived from the Tupí *taa*, ant, and *mundeu*, trap or catch, presumably referring to its long and nearly straight tubular snout, resembling that of an anteater



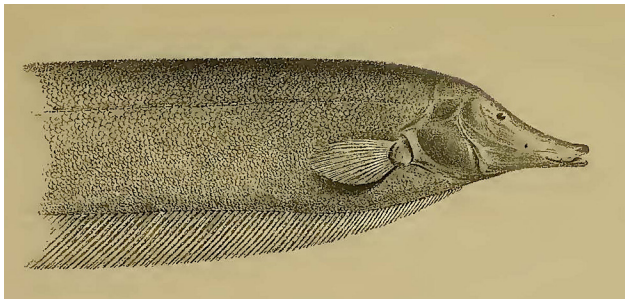
Orthosternarchus tamandua, holotype, 400 mm TL. Illustration by James Green. From: Boulenger, G. A. 1898. On a collection of fishes from the Rio Jurua, Brazil. Transactions of the Zoological Society of London 14 (7): 421–428, Pls. 39–42.

Sternarchorhamphus

Eigenmann 1905

rhamphus, from *rhámphos* (Gr. ῥάμφος), beak or bill; *sternarcho-*, described as intermediate between *Sternarchus* (=Apteronotus) and *Sternarchorhynchus*, with the long snout of the latter and mouth size approaching that of the former

***Sternarchorhamphus muelleri* (Steindachner 1881)** in honor of German biologist Johannes Müller (1801–1858), who, with Franz Hermann Troschel (1810–1882), described its presumed congener at the time, *Sternarchorhynchus oxyrhynchus*, in 1849



First-published image of *Sternarchorhamphus muelleri*. Illustration by Eduard Konopicky. From: Steindachner, F. 1881. Beiträge zur Kenntniss der Flussfische Südamerikas. III. Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe 44 (in 1882): 1–18, Pls. 1–5.