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COMMENTS' v. 29.0 - 31 Dec. 2023

Order GYMNOTIFORMES Neotropical Knifefishes

5 families · 37 genera/subgenera · 275 species/subspecie

Family GYMNOTIDAE Nakedback Knifefishes

2 genera · 56 species/subspecies · Taxonomic note: Craig et al. (2019) proposed six subgenera for Gymnotus, but these names are currently unavailable because they were published without Zoobank registration in an electronic journal.

Electrophorus Gill 1864

electro-, electricity; *phorus*, bearer, referring to its ability to generate a powerful electric shock (may also allude to an 18th-century manual capacitive generator of the same name)

Electrophorus electricus (Linnaeus 1766)

referring to its ability to generate a powerful electric shock

Electrophorus multivalvulus Nakashima 1941

multi-, many; valvulus, with folding doors, referring to a series of irregular lichen-like skin folds inside the mouth; Nakashima guessed that their function was related to the generation of electricity, but they actually serve as lungs, allowing electric eels to absorb oxygen from atmospheric air [multivalvulatus, sometimes seen in the literature, is a misspelling]

Electrophorus varii de Santana, Wosiacki, Crampton, Sabaj, Dillman, Mendes-Júnior & Castro e Castro 2019 in honor of Richard P. Vari (1949-2016), Smithsonian Institution, for his contributions to ichthyology [may be a junior synonym of E. multivalvulus]

Electrophorus voltai de Santana, Wosiacki, Crampton, Sabaj, Dillman, Castro e Castro, Bastos & Vari 2019

in honor of Alessandro Giuseppe Antonio Anastasio Volta (1745-1827), inventor of electric battery and for whom the "volt" is named (with a discharge of 860 V, this species is the strongest living bioelectricity generator known)

Gymnotus Linnaeus 1758

gymnos, bare or naked; notus, back, referring to absence of dorsal fin (a trait common to all knifefishes)

Gymnotus anguillaris Hoedeman 1962

eel-like, referring to the long, "eel-like configuration" of its body compared to G. carapo

Gymnotus arapaima Albert & Crampton 2001

named for the osteoglossomorph fish Arapaima gigas, which it resembles in having an elongate and slightly depressed head

Gymnotus arapiuns Kim, Crampton & Albert 2020

named for the Rio Arapiuns, a blackwater river and tributary of the Tapajós River in Pará, Brazil, where this knifefish occurs

Gymnotus ardilai Maldonado-Ocampo & Albert 2004

in honor of Carlos A. Ardila Rodriguez, President of the Colombian Ichthyological Association (ACICTIOS), for contributions to the knowledge of Colombian ichthyology

Gymnotus aripuana Kim, Crampton & Albert 2020

named for the Rio Aripuanã River in Mato Grosso, Brazil, where this knifefish occurs

Gymnotus bahianus Campos-da-Paz & Costa 1996

-anus, belonging to: Bahia State, Brazil, where it is endemic

Gymnotus capanema Milhomem, Crampton, Pierczeka, Shetka, Silva & Nagamachi 2012

named for the municipality of Capanema, Pará, Brazil, type locality

Gymnotus capitimaculatus Rangel-Pereira 2014

capitis, head; maculatus, blotchy, referring to a pair of blotches on ventral portion of head

Gymnotus carapo carapo Linnaeus 1758

local Brazilian name for knifefishes

Gymnotus carapo australis Craig, Crampton & Albert 2017

southern, known from southern humid neotropics of Uruguay and Argentina, the most southernly subspecies

Gymnotus carapo caatingaensis Craig, Crampton & Albert 2017

-ensis, suffix denoting place: Caatinga ecoregion of northeastern Brazil, where it occurs



Gymnotus coatesi. From: La Monte, F. R. 1935. Two new species of *Gymnotus*. *American Museum Novitates* No. 781: 1-3.

Gymnotus carapo madeirensis Craig, Crampton & Albert 2017

-ensis, suffix denoting place: Río Madeira basin, Bolivia, where it occurs (also occurs in Peru)

Gymnotus carapo occidentalis Craig, Crampton & Albert 2017

western, known from western Amazon basin of Peru (and elsewhere), the most westernly subspecies

Gymnotus carapo orientalis Craig, Crampton & Albert 2017

eastern, known from eastern Amazon basin of Brazil (and elsewhere, but not the most easternly subspecies, which is *G. c. caatingaensis*)

Gymnotus carapo septentrionalis Craig, Crampton & Albert 2017

northern, known from Orinoco basin (Colombia, Venezuela) and Trinidad, the most northernly subspecies

Gymnotus cataniapo Mago-Leccia 1994

f

named for the Río Cataniapo (Amazonas, Venezuela), which provided the largest number of specimens

Gymnotus chaviro Maxime & Albert 2009

common name for *Gymnotus* among the Asheninka indigenous people of Peru, where it occurs

Gymnotus chimarrao Cognato, Richer-de-Forges, Albert & Crampton 2008

named for *chimarrão*, traditional *mate* tea (*Ilex paraguariensis*) of Rio Grande do Sul, Brazil (where this gymnotid occurs), referring to its olive-green ground coloration, similar to the color of dried tea leaves (see *G. cuia* and *Brachybypopomus bombilla* [Hypopomidae] for other *mate*-related knifefish names)

Gymnotus choco Albert, Crampton & Maldonado-Ocampo 2003

named for the Chocó region of the Pacific slope of Colombia, where it occurs

Gymnotus coatesi La Monte 1935

in honor of Christopher W. Coates (1899-1974), Curator (later Director), New York Aquarium, and student of electric fishes, who provided type (note: Coates was also the first to use captive electric eels to power light bulbs, a staple exhibit an public aquaria worldwide)

Gymnotus coropinae Hoedeman 1962

of Coropina Creek, Suriname, type locality

Gymnotus cuia Craig, Malabarba, Crampton & Albert 2018

named for the *cuia* gourd used to drink traditional *mate* popular through this fish's range, referring to its especially deep body and head (and continuing a tradition of *mate*-related names in gymnotiform taxonomy; see *G. chimarrao* and *Brachyhypopomus bombilla* [Hypopomidae])

Gymnotus curupira Crampton, Thorsen & Albert 2005

named for Igarapé Curupira, a forest stream near Tefé, Amazonas, Brazil, type locality (the Curupira is a mythical spirit of the Amazon rain forest)

Gymnotus cylindricus La Monte 1935

referring to its cylindrical body

Gymnotus darwini Campos-da-Paz & de Santana 2019

in honor of English naturalist Charles Darwin (1809-1882), "well known from his extensive and genial contribution to the study of evolution through natural selection," and because holotype and a number of paratypes were collected at the Refúgio Ecológico Charles Darwin in Igarassu, Pernambuco, Brazil, where Darwin himself visited in August 1836 while aboard the H.M.S. *Beagle*

Gymnotus diamantinensis Campos-da-Paz 2002

-ensis, suffix denoting place: municipality of Diamantino, Mato Grosso, Brazil, type locality

Gymnotus esmeraldas Albert & Crampton 2003

named for the Río Esmeraldas drainage, Ecuador, type locality

Gymnotus eyra Craig, Correa-Roldán, Ortega, Crampton & Albert 2018

local (Peru) name for red form of the jaguarundi, *Herpailurus yagouaroundi*, continuing a convention of naming *Gymnotus* species after felids (*onca, pantherinus, tigre*) due to their shared nocturnal, predatory, banded or spotted attributes

Gymnotus henni Albert, Crampton & Maldonado-Ocampo 2003

in honor of Carl Eigenmann's student (and successor) Arthur Wilbur Henn (1890-1959), a "pioneer" in neotropical ichthyology, who collected type in 1913

Gymnotus inaequilabiatus (Valenciennes 1839)

inequalis, unequal or uneven; *labiatus*, lipped, referring to lower jaw projecting beyond the upper, with thick lips on the former and none on the latter

Gymnotus interruptus Rangel-Pereira 2012

interrupted, referring to pale interbands, anterior to vertical through first ventral lateral line ramus, ventrally and/ or dorsally fragmented (=interrupted), allowing union of adjacent dark bands

Gymnotus javari Albert, Crampton & Hagedorn 2003

named for the Río Yavari (Rio Javarí), Loreto Department, Peru, type locality

Gymnotus jonasi Albert & Crampton 2001

in honor of naturalist Jonas Alves de Oliveira, Mamirauá Sustainable Development Reserve (Amazonas, Brazil), where it occurs

Gymnotus maculosus Albert & Miller 1995

spotted, referring to its "conspicuous" color pattern

Gymnotus mamiraua Albert & Crampton 2001

named for Mamirauá lake system and Mamirauá Sustainable Development Reserve (Amazonas, Brazil), type locality

Gymnotus melanopleura Albert & Crampton 2001

melano-, dark; pleura, rib or side, referring to dark bands along lateral body surface

Gymnotus obscurus Crampton, Thorsen & Albert 2005

dark, referring to its predominantly dark coloration

Gymnotus omarorum Richer-de-Forges, Crampton & Albert 2009

-orum, commemorative suffix, plural: in honor of Omar Macadar and Omar Trujillo-Cenoz (b. 1933), both pioneers in the anatomical and physiological study of electrogenesis in *Gymnotus*

Gymnotus onca Albert & Crampton 2001

named for the jaguar *Panthera onca*, referring to its characteristic color pattern of broad irregular dark pigment blotches

Gymnotus panamensis Albert & Crampton 2003

-ensis, suffix denoting place: Panama, where it is endemic

Gymnotus pantanal Fernandes, Albert, Daniel-Silva, Lopes, Crampton & Almeida-Toledo 2005

referring to the Pantanal Matogrossense of Brazil, the hydrological region of the type locality (also occurs in Paraguay and Bolivia)

Gymnotus pantherinus (Steindachner 1908)

leopard-like, presumably referring to irregularly shaped spots and dots that are sometimes connected in a zigzag and "halfbow-like" manner (translation)

Gymnotus paraguensis Albert & Crampton 2003

-ensis, suffix denoting place: Paraguay River basin, Brazil and Paraguay, where it is endemic

Gymnotus pedanopterus Mago-Leccia 1994

pedanos, short; pterus, fin, referring to shortness of anal-fin rays

Gymnotus refugio Giora & Malabarba 2016

Portuguese for sanctuary, referring to its abundance only in two conservation areas of Rio Grande do Sul, Brazil: Refúgio da Vida Silvestre Banhado dos Pachecos, and Parque Estadual de Itapeva

Gymnotus riberalta Craig, Correa-Roldán, Ortega, Crampton & Albert 2018

named for Riberalta, Beni Department, Bolivia, type locality

Gymnotus stenoleucus Mago-Leccia 1994

stenos, narrow; leukos, white, referring to narrow pale bands on anterior third of body

Gymnotus sylvius Albert & Fernandes-Matioli 1999

-*ius*, pertaining to: Silvio de Almeida Toledo Filho, a "pioneer" in the electrobiology of *Gymnotus* from southeastern Brazil; also alludes to the Latin *sylvi*, forest, referring to the Atlantic rainforest where this species dwells

Gymnotus tigre Albert & Crampton 2003

Portuguese for tiger, based in its common name in the local aquarium trade, referring to its tiger-like markings

Gymnotus tiquie Maxime, Lima & Albert 2011

named for the Rio Tiquié, upper Rio Negro basin, Brazil, where this species is known only from small tributaries

Gymnotus ucamara Crampton, Lovejoy & Albert 2003

named for the Ucamara Depression, a geological term for the low-lying region between the lower reaches of the Ucayali and Marañon rivers of Peru (where it occurs), caused by subsidence in the Upper Amazon foreland basin

Gymnotus varzea Crampton, Thorsen & Albert 2005

named for the várzea (freshwater swamp forest) floodplains near Tefé, Amazonas, Brazil, where it occurs

Family RHAMPHICHTHYIDAE Sand Knifefishes

5 genera - 26 species

Gymnorhamphichthys Ellis 1912

gymnos, bare or naked, i.e., "much the same as" Rhamphichthys except scaleless on anterior portion of body

Gymnorhamphichthys bogardusi Lundberg 2005

in honor of Joan Bogardus Spears (1939-2002), "a descendant of the earliest Dutch settlers in New York, whose avid interests in life's diversity on Earth taught and inspired her children to support its scientific discovery and documentation" (Spears' daughter Dorothy provided "generous support" of Lundberg's work) [preferably spelled *bogardusae* since name honors a woman, but ICZN 32.5.1 forbids such a correction]

Gymnorhamphichthys britskii Carvalho, Ramos & Albert 2011

in honor of Heraldo A. Britski (Universidade de São Paulo), for his many contributions to our understanding of neotropical fishes, and his "paramount" work on the fishes of the Paraguay basin

Gymnorhamphichthys hypostomus Ellis 1912

hypo-, under; *stomus*, mouth, referring small mouth, "somewhat under the upper jaw"

Gymnorhamphichthys rondoni (Miranda Ribeiro 1920)

in honor of Cândido Rondon (1865-1958), Brazilian army engineer and explorer, whose Rondon Commission to install telegraph poles from Mato Grosso to Amazonas included expedition that collected type

Gymnorhamphichthys rosamariae Schwassmann 1989

of Rosa María, Amazonas, Brazil, type locality

Hypopygus Hoedeman 1962

a combination of the generic names *Hypopomus* and *Parupygus* (Hypopomidae, now considered congeneric), putatively related to both at time of description

Hypopygus benoneae Peixoto, Dutra, de Santana & Wosiacki 2013

in honor of Naraiana Benone, Universidade Federal do Pará, who collected most of the type series

Hypopygus cryptogenes (Triques 1997)

cryptos, hidden; *genesis*, generation, referring to its "obscure origins and phyletic relationships" (Triques believed the species shared characters with *Hypopygus* and *Steatogenys*, but did not feel confident placing it in either; therefore he proposed a new genus, *Stegostenopos*, now a synonym)

Hypopygus hoedemani de Santana & Crampton 2011

in honor of Dutch ichthyologist Jacobus Johannes Hoedeman (1917-1982), for his contributions to neotropical ichthyology, including description of *H. lepturus*, type species of genus

Hypopygus isbruckeri de Santana & Crampton 2011

in honor of Isaäc J. H. Isbrücker (b. 1944), Zoölogisch Museum, Amsterdam, for contributions to neotropical ichthyology, including *Hypopygus* [sometimes spelled "*isbrueckeri*" but ICZN Art. 32.5.1-2 does not apply]

Hypopygus lepturus Hoedeman 1962

leptos, thin; oura, tail, referring to slender, pointed tail beyond anal fin

Hypopygus minissimus de Santana & Crampton 2011

smallest, the smallest known gymnotiform (up to 64.0 mm TL)

Hypopygus neblinae Mago-Leccia 1994

of La Neblina National Park (Amazonas, Venezuela), where Mago-Leccia first spotted the differences between it and *H. lepturus*

Hypopygus nijsseni de Santana & Crampton 2011

in honor of Han Nijssen (1935-2013), Zoölogisch Museum, Amsterdam, for his contributions to neotropical ichthyology

Hypopygus ortegai de Santana & Crampton 2011

in honor of Peruvian ichthyologist Hernán Ortega Torres, for his many contributions to neotropical ichthyology and his participation in the expedition that discovered this species

Hypopygus varii Campos-da-Paz 2018

in honor of Richard P. Vari (1949-2016), Smithsonian Institution, who "greatly" contributed to the knowledge of neotropical characiphysan fishes, and also produced a number of papers on gymnotiform taxonomy and systematics, for his "work, enthusiasm and encouragement to many ichthyologists"

Iracema Triques 1996

name of a "literary beautiful female native" from an eponymous 1865 Brazilian novel and a female personal name in Brazil, allusion not explained nor evident

Iracema caiana Triques 1996

Tupí word for cane, referring to its elongate form

Rhamphichthys Müller & Troschel 1846

rhamphos, beak, referring to snout produced into a tube; *ichthys*, fish [originally spelled *Ramphichthys*, probably an error, then corrected to *Rhamphichthys* when the authors republished their description in 1849]

Rhamphichthys apurensis (Fernández-Yépez 1968)

-ensis, suffix denoting place: Río Apure, Orinoco basin, Apure, Venezuela, type locality

Rhamphichthys drepanium Triques 1999

diminutive of *drepanon*, i.e., a little sickle, referring to pattern of upper part of oblique transversal bars on body

Rhamphichthys hahni (Meinken 1937)

in honor of friend and "fish connoisseur" Carlos Hahn (Corrientes, Argentina), for "many stimulating observations [via mail] on numerous fishes, from outdoors and aquaria" (translation)

Rhamphichthys heleios Carvalho & Albert 2015

Greek for "dwelling in the marsh," referring to floodplain habitat where it has been collected

Rhamphichthys lineatus Castelnau 1855

lined, referring to distinct longitudinal line on sides

Rhamphichthys pantherinus Castelnau 1855

Latin for panther-like, referring to numerous dark-brown spots on head and back

Rhamphichthys rostratus (Linnaeus 1766)

beaked, referring to snout produced into a tube

Steatogenys Boulenger 1898

steatos, fat; genys, cheek, referring to filament of adipose tissue in a groove along each side of mental region of S. elegans

Steatogenys duidae (La Monte 1929)

of Mt. Duida, Venezuela, type locality (also occurs in Brazil)

Steatogenys elegans (Steindachner 1880)

elegant, fine or select, allusion not explained, probably referring to attractive barred color pattern

Steatogenys ocellatus Crampton, Thorsen & Albert 2004

having little eyes, referring to diagnostic eye-like markings at pectoral-fin base

Family HYPOPOMIDAE Bluntnose Knifefishes

7 genera/subgenera · 35 species

Akawaio Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2013

named in honor of the Akawaio Amerindians who populate the region of the upper Mazaruni River, Guyana (where the only species is endemic), for their valuable help while studying the fishes of their lands

Akawaio penak Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2013

Akawaio word that is "apparently used unambiguously for this species"

Brachyhypopomus Mago-Leccia 1994

brachys, short, i.e., similar and/or related to Hypopomus but distinguished by their short snouts

Subgenus Brachyhypopomus

Brachyhypopomus alberti Crampton, de Santana, Waddell & Lovejoy 2017

in honor of James S. Albert (b. 1964), University of Louisiana at Lafayette, collector of part of the type series, for his "enormous" contributions to the systematic biology of gymnotiform fishes

Brachyhypopomus arrayae Crampton, de Santana, Waddell & Lovejoy 2017

in honor of biologist Mariana Arraya, for her assistance in collecting the type series in Bolivia

Brachyhypopomus batesi Crampton, de Santana, Waddell & Lovejoy 2017

in honor of Henry Walter Bates (1825-1892), British naturalist and explorer, for his contributions to the natural history of the Tefé region of Brazil, type locality (also occurs in Colombia)

Brachyhypopomus beebei (Schultz 1944)

in honor of naturalist and explorer William Beebe (1877-1962), New York Zoological Society, who collected type and "kindly" loaned the specimens to Schultz

Brachyhypopomus belindae Crampton, de Santana, Waddell & Lovejoy 2017

in honor of evolutionary biologist Belinda Siew-Woon Chang, University of Toronto (Canada), for her "inspiration to [the fourth author] during the preparation of this work"

Brachyhypopomus benjamini Crampton, de Santana, Waddell & Lovejoy 2017

in honor of Benjamin T. D. Crampton (b. 1972), British diplomat and amateur ornithologist, who collected type

Brachyhypopomus bombilla Loureiro & Silva 2006

local name for metal straw used to drink *mate*, a popular herbal infusion in the Río de la Plata region of Uruguay, whose shape resembles the shape of this knifefish; in memory of friend and colleague Pablo Errandonea (1973-2000), who coined the name (see *Gymnotus chimarrao* and *G. cuia* [Gymnotidae] for other *mate*-related knifefish names)

Brachyhypopomus brevirostris (Steindachner 1868)

brevis, short; rostris, snout, referring to its "greatly blunted muzzle" (translation), less than 1/3 length of head

Brachyhypopomus bullocki Sullivan & Hopkins 2009

is honor of Theodore Holmes Bullock (1915-2005), a pioneer of the comparative neurobiology of both invertebrates and vertebrates; he is credited with the first physiological recordings from an electroreceptor and for championing electric fishes as a model system in neurobiology

Brachyhypopomus cunia Crampton, de Santana, Waddell & Lovejoy 2017

named for the type locality, lago Cuniã, a floodplain lake of the lower rio Madeira inside the Reserva Extrativista do lago do Cuniã, Rondônia, Brazil

Brachyhypopomus degy Dutra, Peixoto, Ochoa, Ohara, de Santana, Menezes & Datovo 2021

acronym for Diversity and Evolution of Gymnotiformes, a project that supported the authors' research and is funded by a cooperation agreement between the Fundação de Amparo à Pesquisa do Estado de São Paulo (Brazil) and the Smithsonian Institution (USA)

Brachyhypopomus diazae (Fernández-Yépez 1972)

in honor of Fernández-Yépez' secretary, María Isabel (Betty) Diaz

Brachyhypopomus draco Giora, Malabarba & Crampton 2008

dragon, referring to shape of distal portion of caudal filament in mature males, similar to that illustrated in these imaginary creatures

Brachyhypopomus flavipomus Crampton, de Santana, Waddell & Lovejoy 2017

flavus, yellow; poma, lid or cover, referring to conspicuous patches of yellow guanine on operculum of live individuals

Brachyhypopomus gauderio Giora & Malabarba 2009

synonym for *gaúcho*, a person who lives in the countryside (*Pampas*) of Rio Grande do Sul, southern Brazil, Uruguay and Argentina, referring to geographic distribution of this species

Brachyhypopomus hamiltoni Crampton, de Santana, Waddell & Lovejoy 2017

in honor of William D. Hamilton (1936-2000), British evolutionary biologist and doctoral advisor of the first author, for his contributions to Amazonian ecology

Brachyhypopomus hendersoni Crampton, de Santana, Waddell & Lovejoy 2017

in honor of Peter A. Henderson (b. 1954), British fish biologist, and doctoral co-advisor of the first author, for his contributions to Amazonian aquatic ecology

Brachyhypopomus janeiroensis (Costa & Campos-da-Paz 1992)

-ensis, suffix denoting place: Rio de Janeiro, Brazil, where it occurs

Brachyhypopomus jureiae Triques & Khamis 2003

of the Juréia Ecological Station, São Paulo, Brazil, type locality



Brachybypopomus bennetti. From: Sullivan, J. P., J. Zuanon and C. Cox Fernandes. 2013. Two new species and a new subgenus of toothed *Brachybypopomus* electric knifefishes (Gymnotiformes, Hypopomidae) from the central Amazon and considerations pertaining to the evolution of a monophasic electric organ discharge. *ZooKeys* No. 327: 1-34.

Brachyhypopomus menezesi Crampton, de Santana, Waddell & Lovejoy 2017

in honor of Brazilian ichthyologist Naércio Aquino Menezes (b. 1937), Museu de Zoologia, Universidade de São Paulo (Brazil), for his important contributions to neotropical fish systematics

Brachyhypopomus occidentalis (Regan 1914)

western, presumably referring to type locality in Pacific slope of Colombia (also occurs in Costa Rica, Ecuador, Panama and Suriname)

Brachyhypopomus palenque Crampton, de Santana, Waddell & Lovejoy 2017

named for the río Palenque, a Pacific Ocean drainage of Ecuador, type locality

Brachyhypopomus pinnicaudatus (Hopkins 1991)

pinni-, feather or fin; caudatus, tailed, referring to "feather-like" appearance of caudal-fin filament in males

Brachyhypopomus provenzanoi Crampton, de Santana, Waddell & Lovejoy 2017

in honor of ichthyologist Francisco Provenzano Rizzi (Instituto de Zoología Tropical de la Universidad Central de Venezuela), for his contributions to neotropical ichthyology

Brachyhypopomus regani Crampton, de Santana, Waddell & Lovejoy 2017

in honor of ichthyologist Charles Tate Regan (1878-1943), Natural History Museum (London), for his contributions to neotropical ichthyology

Brachyhypopomus sullivani Crampton, de Santana, Waddell & Lovejoy 2017

in honor of ichthyologist John P. Sullivan (b. 1965), Cornell University, for his contributions to gymnotiform biology

Brachyhypopomus verdii Crampton, de Santana, Waddell & Lovejoy 2017

in honor of Peruvian conservation biologist Lorgio Verdi Olivares, for his support to the first and fourth authors

Subgenus Odontohypopomus Sullivan, Zuanon & Cox Fernandes 2013

odontos, tooth, referring to small teeth on premaxillae; Hypopomus, type genus of subfamily

Brachyhypopomus bennetti Sullivan, Zuanon & Cox Fernandes 2013

in honor of Michael V. L. Bennett (b. 1931), Albert Einstein College of Medicine of Yeshiva University (Bronx, New York, USA), for his "pioneering" work on electric-fish neurophysiology; Bennett (1961, 1971) reported studying a knifefish with a monophasic EOD (electric organ discharge) likely to have been this species

Brachyhypopomus walteri Sullivan, Zuanon & Cox Fernandes 2013

in honor of Walter Heiligenberg (1938-1994), for his discoveries in electric-fish neurophysiology and behavior made at the Scripps Institution of Oceanography, most notably the "jamming avoidance response" in *Eigenmannia*, often described as the best-understood vertebrate behavior

Hypopomus Gill 1864

etymology not explained and no description given, presumably, *hypo*- under or less than; *pomus*, covering or operculum, perhaps referring to anus situated under gill opening

Hypopomus artedi (Kaup 1856)

patronym not identified, probably in honor of Swedish naturalist Peter Artedi (1705-1735), known as the "father of ichthyology"

Microsternarchus Fernández-Yépez 1968

micro-, small, presumably referring to size of M. bilineatus (up to 82.8 mm TL); sternarchus, a common suffix in knife-

fish taxonomy, historically used for the putative subfamily Sternarchinae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast; *archus*, anus, referring to placement of anal opening near breast

Microsternarchus bilineatus Fernández-Yépez 1968

bi-, two; lineatus, lined, referring to double dotted line (almost imperceptible) running along dorsal surface

Microsternarchus brevis Cox Fernandes, Nogueira, Williston & Alves-Gomes 2015

short, referring to overall size (up to 53.2 mm TL) and shorter caudal-fin filament compared to M. bilineatus

Procerusternarchus Cox Fernandes, Nogueira & Alves-Gomes 2014

procerus, slender or long, referring to its elongate, slender body; *sternarchus*, a common suffix in knifefish taxonomy, historically used for the putative subfamily Sternarchiae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast; *archus*, anus, referring to placement of anal opening near breast

Procerusternarchus pixuna Cox Fernandes, Nogueira & Alves-Gomes 2014

Nheengatu (Amerindian language of the Tupí-Guaraní family) word meaning dark or black, presumably referring to "almost black" coloration on dorsal surface from snout to caudal filament on living specimens

Racenisia Mago-Leccia 1994

-*ia*, belonging to: entomologist Janis Racenis (1915-1980), founder, Institutio de Zoología Tropical, Universidad Central de Venezuela, where Mago-Leccia worked

Racenisia fimbriipinna Mago-Leccia 1994

fimbriae, fringe; *pinna*, fin, referring to how anal-fin rays are "covered by a thick tissue that gives an undulated shape to the fin in recently preserved specimens"

Family STERNOPYGIDAE Glass Knifefishes

7 genera · 58 species

Subfamily Eigenmanniinae

Archolaemus Korringa 1970

archos, anus; laimos, throat, referring to location of vent under eye

Archolaemus blax Korringa 1970

Latin for doltish, referring to its general appearance

Archolaemus ferreirai Vari, de Santana & Wosiacki 2012

in honor of Efrem Ferreira (b. 1954), Instituto Nacional de Pesquisas da Amazônia, one of the collectors of the type series, for his many contributions to our understanding of Amazonian fishes

Archolaemus janeae Vari, de Santana & Wosiacki 2012

in honor of Jane Mertens, Humboldt Universität zu Berlin, for her assistance to the second author

Archolaemus Iuciae Vari, de Santana & Wosiacki 2012

in honor of Lucia Rapp Py-Daniel, Instituto Nacional de Pesquisas da Amazônia, for her many contributions to the knowledge of Amazonian fishes and her assistance to the authors over the years

Archolaemus orientalis Stewart, Vari, de Santana & Wosiacki 2012

eastern, referring to its presence in the Rio São Francisco (Minas Gerais, Brazil), the easternmost known occurrence in the genus

Archolaemus santosi Vari, de Santana & Wosiacki 2012

in honor of Geraldo Mendes dos Santos, Instituto Nacional de Pesquisas da Amazônia, who collected type, for his many contributions to our knowledge of Amazonian fishes

Distocyclus Mago-Leccia 1978

disto-, different; cyclos, ring or circle, different from Eigenmannia in having a long and conical snout

Distocyclus conirostris (Eigenmann & Allen 1942)

conus, cone; rostris, referring to conical head, or snout

Eigenmannia Jordan & Evermann 1896

-*ia*, belonging to: Carl H. Eigenmann (1863-1927), for his "excellent work" on the freshwater fishes of South America [replacement for *Cryptops* Eigenmann 1894, preoccupied by *Cryptops* Leach 1814 in Myriopoda, *Cryptops* Schoenherr 1823 and *Cryptops* Solier 1851 in Coleoptera]

Eigenmannia antonioi Peixoto, Dutra & Wosiacki 2015

in memory of Antônio da Silva Wanderley, grandfather of the first author

Eigenmannia besouro Peixoto & Wosiacki 2016

Portuguese for beetle, in honor of Manoel Henrique Pereira (1895-1924), known as Besouro Mangangá (The Mangangá Beetle), a native of the Recôncavo region of Bahia, Brazil (where this knifefish occurs), and a legendary figure in the Afro-Brazilian martial art capoeira [see also *Hypostomus bimbai* and *H. pastinhai*, Siluriformes: Loricariidae: Hypostominae]

Eigenmannia camposi Herrera-Collazos, Galindo-Cuervo, Maldonado-Ocampo & Rincón-Sandoval 2020

in honor of Ricardo Campos-da-Paz (Universidade de São Paulo), for contributions to our knowledge of gymnotiform fishes

Eigenmannia catira Cardoso & Dutra 2023

catira, a popular dance in Brazilian folklore performed by herdsmen and farmers in the areas of influence of the sertaneja culture in São Paulo and Mato Grosso do Sul states, Brazil, where this knifefish occurs

Eigenmannia correntes Campos-da-Paz & Queiroz 2017

named for the rio Correntes (main river of the rio Piquiri system, upper rio Paraguai basin, Mato Grosso do Sul, Brazil), where all type specimens were collected

Eigenmannia desantanai Peixoto, Dutra & Wosiacki 2015

in honor of ichthyologist Carlos David de Santana, for his contributions to our knowledge of the Gymnotiformes

Eigenmannia dutrai Peixoto, Pastana & Ballen 2021

in honor of Guilherme M. Dutra, Universidade de São Paulo, for his contribution to ichthyology, in particular to the taxonomy of *Eigenmannia*

Eigenmannia guchereauae (Meunier, Jégu & Keith 2014)

in honor of Corinne Guchereau, Muséum national d'Histoire naturelle (Paris), who facilitated the technical aspects of the authors' work for 15 years

Eigenmannia guairaca Peixoto, Dutra & Wosiacki 2015

named for the legendary Guairacá, a brave Indian chief who protected the Guaraní people and their land

Eigenmannia humboldtii (Steindachner 1878)

in honor of Prussian geographer-naturalist Alexander von Humboldt (1769-1859), one of the first ichthyological explorers of the Río Magdalena, Colombia, type locality (also occurs in Brazil and Venezuela)

Eigenmannia limbata (Schreiner & Miranda Ribeiro 1903)

bordered, referring to white anal fin bordered in black

Eigenmannia loretana Waltz & Albert 2018

-ana, belonging to: in honor of the residents and inhabitants of Loreto, Peru, type locality

Eigenmannia macrops (Boulenger 1897)

macro-, large; *ops*, eye, referring to "much larger" eye compared to congeners in *Sternopygus*, genus at time of description

Eigenmannia magoi Herrera-Collazos, Galindo-Cuervo, Maldonado-Ocampo & Rincón-Sandoval 2020

in honor of Francisco Mago Leccia (1931-2004), for his contributions to our knowledge of gymnotiform fishes

Eigenmannia matintapereira Peixoto, Dutra & Wosiacki 2015

named for Matinta Pereira, a mythical figure that haunts people in search of tobacco and coffee in northern Brazil; according to reports, its appearance is marked by a blackened aspect, alluding to color pattern of this species

Eigenmannia meeki Dutra, de Santana & Wosiacki 2017

in honor of ichthyologist Seth Eugene Meek (1859-1914), who made many contributions to the knowledge of the diversity of the fishes of Panama (where this knifefish occurs)

Eigenmannia microstoma (Reinhardt 1852)

micro-, small; stoma, mouth, referring to its "extremely small" mouth (translation)

Eigenmannia muirapinima Peixoto, Dutra & Wosiacki 2015

named for the indigenous people of the tribe Muirapinima, who inhabit region near type locality in Pará, Brazil

Eigenmannia nigra Mago-Leccia 1994

black, referring to its "peculiar black phase coloration"

Eigenmannia oradens Dutra, Peixoto, de Santana & Wosiacki 2018

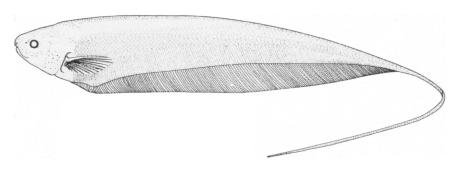
ora, edge; dens, teeth, referring to bony dorsolateral flange on dentary in which teeth are attached

Eigenmannia pavulagem Peixoto, Dutra & Wosiacki 2015

named for Arraial do Pavulagem, a cultural movement created in Pará, Brazil, characterized by music of a unique traditional style that originated in Amazon region

Eigenmannia sayona Peixoto & Waltz 2017

referring to La Sayona, a spirit of philanderous vengeance in Venezuelan lore (knifefish occurs in the río Orinoco basin, Venezuela); name is intended as an homage to the Venezuelan people with no meaning or significance to the fish itself (Luiz Peixoto, pers. comm.)



Rhabdolichops electrogrammus. From: Lundberg, J. G. and F. Mago-Leccia. 1986. A review of Rhabdolichops (Gymnotiformes, Sternopygidae), a genus of South American freshwater fishes, with descriptions of four new species. Proceedings of the Academy of Natural Sciences of Philadelphia v. 138: 53-85.

Eigenmannia sirius Peixoto & Ohara 2019

Sirius, brightest star in night sky (Canis Major constellation), representing state of Mato Grosso (where this species is probably endemic) in Brazilian national flag

Eigenmannia trilineata López & Castello 1966

tri-, three; *lineata*, lined, referring to three dark horizontal stripes, one across middle of body, one along bottom, and one along base of anal fin

Eigenmannia vicentespelaea Triques 1996

spelaeum, cave; vicente, referring to Cave São Vicentie II, Tocantins River basin, Goiás, Brazil, only known area of occurrence

Eigenmannia virescens (Valenciennes 1836)

viridis, green; *-escens*, becoming, i.e., greenish, name dates to a plate, allusion not explained in subsequent written description (1847) but likely referring to green-tinted transparent body in life

Eigenmannia waiwai Peixoto, Dutra & Wosiacki 2015

named for the Waiwai, indigenous people whose home territory is near type locality in Pará, Brazil

Eigenmannia zenuensis Herrera-Collazos, Galindo-Cuervo, Maldonado-Ocampo & Rincón-Sandoval 2020

-ensis, suffix denoting place but in this case in honor of the Amerindian Colombian tribe Zenú, who historically occurred throughout the San Jorge River basin of Colombia, where this knifefish occurs

Japigny Meunier, Jégu & Keith 2011

named for Japigny, a tributary of Approuague River, French Guiana, where J. kirschbaum was first found

Japigny kirschbaum Meunier, Jégu & Keith 2011

in honor of Frank Kirschbaum, Humboldt University of Berlin, a specialist in gymnotiform fishes who has spawned and bred several species in the laboratory [a noun in apposition, without the patronymic "*i*"]

Rhabdolichops Eigenmann & Allen 1942

rhabdos, rod, stick or staff; *lichanos*, forefinger; *ops*, appearance or aspect of, allusion not explained, perhaps referring to "enormously exaggerated" tails on some specimens of *R. longicaudatus* (=*R. troscheli*), which, on one specimen, exceeded length of body

Rhabdolichops caviceps (Fernández-Yépez 1968)

cavus, cavity; ceps, head, referring to a series of cavities around the eyes

Rhabdolichops eastwardi Lundberg & Mago-Leccia 1986

of the research ressel *Eastward*, formerly of the Duke University Oceanographic Program, the ship that supported two productive ichthyological expeditions to the lower Orinoco of Venezuela, where this knifefish occurs

Rhabdolichops electrogrammus Lundberg & Mago-Leccia 1986

electro-, electric; *gramme*, line, referring to narrow transparent electric organ on tail base and above posterior part of anal fin

Rhabdolichops jegui Keith & Meunier 2000

in honor of ichthyologist Michael Jégu, ORSTOM (Office de la Recherche Scientifique et Technique d'Outre-Mer), specialist in serrasalmid fishes, who collected type

Rhabdolichops lundbergi Correa, Crampton & Albert 2006

in honor of John G. Lundberg (b. 1942), Academy of Natural Sciences of Philadelphia, for his contributions to the study of gymnotiform and other neotropical fishes

Rhabdolichops navalha Correa, Crampton & Albert 2006

Portuguese word for razor, referring to its highly laterally compressed body

Rhabdolichops nigrimans Correa, Crampton & Albert 2006

nigrum, black; manus, hand, referring to diagnostic black pectoral fin

Rhabdolichops stewarti Lundberg & Mago-Leccia 1986

in honor of friend and colleague Donald J. Stewart (b. 1946), Museum of Zoology, University of Michigan, who brought this knifefish to the authors' attention

Rhabdolichops troscheli (Kaup 1856)

in honor of zoologist Franz Hermann Troschel (1810-1882), who, with Johann Müller, recognized this knifefish as *Sternopygus* (now *Eigenmannia*) virescens in 1849

Rhabdolichops zareti Lundberg & Mago-Leccia 1986

in honor of the late Thomas M. Zaret (1945-1984), the authors' "close friend, who contributed much to our knowledge of *Rhabdolichops*, planktivorous fishes and fish ecology"

Rhinosternarchus Dutra, Peixoto, Abrahão, Wosiacki, Menezes & de Santana 2021

rhinos, nose, referring to its elongated snout; *sternarchus*, a common suffix in knifefish taxonomy, historically used for the putative subfamily Sternarchinae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast; *archus*, anus, referring to placement of anal opening near breast

Rhinosternarchus goajira (Schultz 1949)

referring to area inhabited by the Goajira Indians in Venezuela, where type was collected (also occurs in Colombia)

Subfamily Sternopyginae

Sternopygus Müller & Troschel 1846

sterno-, breast; *pygus*, rump or buttock, allusion not explained, perhaps referring to placement of anal opening near breast

Sternopygus aequilabiatus (Humboldt 1805)

aequalitas, equal; *labiatus*, lipped, referring to how lower jaw does not project beyond upper jaw as in *Gymnotus carapo*, its presumed congener at the time

Sternopygus arenatus (Eydoux & Souleyet 1850)

sanded, referring to its brown-yellow coloration, "very finely dotted with black" (translation)

Sternopygus astrabes Mago-Leccia 1994

Greek for saddle, referring to 2-4 black, wide and saddle-like vertical bands on body

Sternopygus branco Crampton, Hulen & Albert 2004

Portuguese for white, referring to characteristic pale color of freshly netted live specimens

Sternopygus dariensis Meek & Hildebrand 1916

-ensis, suffix denoting place: Darién, Atlantic slope of Panama, where type locality (Río Tuyra at Marriganti) is situated

Sternopygus macrurus (Bloch & Schneider 1801)

macro-, long; oura, tail, referring to its long (but finless) tail

Sternopygus obtusirostris Steindachner 1881

obtusus, blunt; *rostris*, snout, referring to shorter, more rounded snout compared to *Gymnotus carapo*, its presumed congener at the time

Sternopygus sabaji Torgersen & Albert 2022

in honor of American ichthyologist Mark Henry Sabaj (b. 1969), Academy of Natural Sciences of Philadelphia, for his "many contributions to the exploration and understanding of Neotropical aquatic diversity," and his "role in collecting and photographing the specimens of the type series and his help to the authors in obtaining specimen loans for this study"

Sternopygus sarae Torgersen, Galindo-Cuervo, Reis & Albert 2023

in honor of Sara Holmberg Albert, the last author's wife, for her "perennial support"

Sternopygus pejeraton Schultz 1949

latinization of *peje ratón* (mouse fish), its local name in the Lake Maracaibo region of Venezuela, probably referring to its mouse- or rat-like tail

Sternopygus xingu Albert & Fink 1996

named for the Río Xingú basin, Mato Grosso, Brazil, type locality

Family APTERONOTIDAE Ghost Knifefishes

16 genera · 100 species

Subfamily Apteronotinae

Adontosternarchus Ellis 1912

a-, without and *odonto*-, tooth, referring to absence of teeth from both jaws; *sternarchus*, referring to then-placement in the subfamily Sternarchinae

Adontosternarchus balaenops (Cope 1878)

balaena, whale; *ops*, 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 Clark, who ran a research station in Venezuela with her husband, and who collected type

Adontosternarchus devenanzii Mago-Leccia, Lundberg & Baskin 1985

in honor of Francisco De Venanzi (1917-1987), 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

clouded, 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 type

Apteronotus Lacepède 1800

a-, without; *pterus*, fin; *notus*, 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

akidos, point; ops, 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 µCT scan images for MZUSP researchers, especially for the project "Diversity and Evolution of the Gymnotiformes"

Apteronotus albifrons (Linnaeus 1766)

albis, white; frons, forehead, 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, suffix denoting place: Apure River basin, Venezuela, type locality (also where it is endemic)

Apteronotus baniwa de Santana & Vari 2013

name of the indigenous people whose home territory encompasses type locality, Río Orinoco basin, Venezuela

Apteronotus bonapartii (Castelnau 1855)

in honor of 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, suffix denoting place: Brazil, where Rio das Velhas (type locality) is situated (also occurs in Argentina)

Apteronotus camposdapazi de Santana & Lehmann A. 2006

in honor of 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

caudi-, tail; *maculosus*, 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 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 Galvis 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 Río Jurubidá, Nuquí, Pacific Slope, Colombia, type locality

Apteronotus leptorhynchus (Ellis 1912)

leptos, narrow; rhynchos, snout, referring to "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-, large, lepis, scale, referring to large scales on upper sides of body

Apteronotus macrostomus (Fowler 1943)

macro-, long; stomus, mouth, which extends beyond eye and is half the length of the head

Apteronotus magdalenensis (Miles 1945)

-ensis, 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), 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), Director, Museum at the Instituto de La Salle, Bogotá, who provided Eigenmann with "valuable collections" of fishes from the Meta River basin of Colombia

Apteronotus milesi de Santana & Maldonado-Ocampo 2005

in honor of Cecil (spelled Celis by the authors) 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, suffix denoting place: Paraná River Basin, Brazil, where it is endemic

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

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)

beaked, allusion not explained, presumably referring to its blunt, very slightly compressed snout

Apteronotus spurrellii (Regan 1914)

in honor of British zoologist Henry George Flaxman Spurrell (1882-1919), who collected type

Compsaraia Albert 2001

from the Greek kompsos, neat or elegant; raia, ray, referring to elegant appearance of long anal fin

Compsaraia iara Bernt & Albert 2017

named for the 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 the Greek kompsos, elegant or beautiful, referring to its elongate body

Compsaraia samueli Albert & Crampton 2009

in honor of the senior 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.)

Megadontognathus Mago-Leccia 1994

mega-, large; odontos, tooth; gnathos, mandible, referring to 2-3 big, recurved teeth on posterior half of dentary bone

Megadontognathus cuyuniensis Mago-Leccia 1994

-ensis, suffix denoting place: Río Cuyuni at Paruruvaca rapids, Bolivar, Venezuela, type locality

Megadontognathus kaitukaensis Campos-da-Paz 1999

-ensis, suffix denoting place: Cachoeiras (rapids) de Kaituká, Rio Xingu drainage, Pará, Brazil, type locality

Melanosternarchus Bernt, Crampton, Orfinger & Albert 2018

melanos, black, referring to its dark pigmentation and occurrence in blackwater rivers; *sternarchus*, a common suffix in knifefsh taxonomy, historically used for the putative subfamily Sternarchinae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast; *archus*, anus, referring to placement of anal opening near breast

Melanosternarchus amaru Bernt, Crampton, Orfinger & Albert 2018

amaru, a serpent in Quechuan mythology, referring to its snake-like shape

Parapteronotus Albert 2001

para-, near, referring to phylogenetic position of this lineage as sister taxon to other members of proposed subfamily Apteronotinae; *Apteronotus*, type genus of family

Parapteronotus hasemani (Ellis 1913)

in honor of John D. Haseman (1882-1969), field collector in the Carnegie Museum of Natural History's Department of Ichthyology from 1908-1911, who collected type

Pariosternarchus Albert & Crampton 2006

pario, cheek, referring to expanded ventrolateral surface of head; *sternarchus*, a common suffix in knifefish taxonomy, historically used for the putative subfamily Sternarchinae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast, *archus*, anus, referring to placement of anal opening near breast

Pariosternarchus amazonensis Albert & Crampton 2006

-ensis, suffix denoting place: known from the main Amazon river channels of Brazil and Peru

Platyurosternarchus Mago-Leccia 1994

platys, broad and *oura*, tail, referring to deep caudal peduncle of *P. macrostomus*; *sternarchus*, a common suffix in knifefish taxonomy, historically used for the putative subfamily Sternarchinae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast, *archus*, anus, referring to placement of anal opening near breast

Platyurosternarchus crypticus de Santana & Vari 2009

hidden or secret, referring to its previously undetected, albeit very distinct, differences between it and P. macrostomus

Platyurosternarchus macrostomus (Günther 1870)

macro-, long or large; stomus, mouth, referring to wide mouth cleft, more than half the length of the snout

Porotergus Ellis 1912

poro, pore; tergum, 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 gimbeli Ellis 1912

in honor of Indiana philanthropist Jacob (Jake) Gimbel (1876-1943), whose generosity made the Gimbel Expedition to British Guiana, where type was collected, possible

Porotergus gymnotus Ellis 1912

gymnos, bare or naked; notus, back, referring to absence of scales along back to beyond origin of dorsal-fin filament

Sternarchella Eigenmann 1905

-ella, a diminutive, 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, curved; operculata, opercle, referring to concavity of dorsal margin of opercle [possibly a species of Apteronotus]

Sternarchella duccis (Lundberg, Cox Fernandes & Albert 1996)

named for DUCCIS (pronounced *du⁻ssi⁻s*), 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

straight, referring to 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 senior author's mother, K. M. Evans, pers. comm.)

Sternarchella raptor (Lundberg, Cox Fernandes & Albert 1996)

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

king, referring to its body size and robust appearance (the largest known species in the genus, reaching 412 mm LEA (length 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), who collected fishes in Colombia in 1857

Sternarchella sima Starks 1913

blunt-nosed, referring to blunt, rounded snout overhanging a small mouth

Sternarchogiton Eigenmann 1905

geiton, neighbor; Sternarchus (=Apternotus), referring to previous placement of S. nattereri in that genus

Sternarchogiton labiatus de Santana & Crampton 2007

lipped, referring to "unusual" and diagnostic three-lobed structure on lower lip

Sternarchogiton nattereri (Steindachner 1868)

in honor of Johann Natterer (1787-1843), who explored South America and collected specimens for 18 years, including type of this species

Sternarchogiton porcinum Eigenmann & Allen 1942

porcine or pig-like, referring to the "strong inclusion of the lower jaw within the upper"

Sternarchogiton zuanoni de Santana & Vari 2010

in honor of Jansen 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 type)

Sternarchorhynchus Castelnau 1855

a *Sternarchus* (=*Apteronotus*) with a curved *rhynchus*, or snout, referring to snout produced into a long tube, slightly arched downwards

Sternarchorhynchus axelrodi de Santana & Vari 2010

in honor of pet-book publisher Herbert R. Axelrod (1927-2017), 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 Heraldo A. Britski (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 Labish 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 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 derivate of the Tupí-Guarani word for child, *curumi*, or *kurumí*, referring to its small size (up to 211 mm TL)

Sternarchorhynchus curvirostris (Boulenger 1887)

curvis, bent; rostris, snout, referring to long, tubular snout, "bent downwards"

Sternarchorhynchus freemani de Santana & Vari 2010

in honor of Bryon J. Freeman (b. 1950), University of Georgia, for "invaluable" assistance to the senior author at the Georgia Museum of Natural History

Sternarchorhynchus galibi de Santana & Vari 2010

name 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 dwarf, the smallest member of the genus (152 mm TL)

Sternarchorhynchus goeldii de Santana & Vari 2010

in honor of Swiss-Brazilian zoologist Émil (or Emílio) Goeldi (1859-1917), Director of the Museo Paraense, for many contributions to our knowledge of many groups of Amazonian animals, including fishes

Sternarchorhynchus hagedornae de Santana & Vari 2010

in honor of physiologist Mary Hagedorn, Smithsonian Institution, who collected type series and has made many contributions to our understanding of the diversity of gymnotiform fishes

Sternarchorhynchus higuchii de Santana & Vari 2010

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 jaimei de Santana & Vari 2010

in honor of 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 Críspulo Marrero, 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 George Nilson Mendes, Universidade Federal de Pernambuco, for his assistance to the senior author during the early phases of his studies of gymnotiform fishes

Sternarchorhynchus mesensis Campos-da-Paz 2000

-ensis, suffix denoting place: Serra da Mesa, an area of the upper River Tocantins region (Goiás, Brazil), type locality

Sternarchorhynchus montanus de Santana & Vari 2010

mountain, referring to type locality in the foothills of the Andean Cordilleras (Río Marañon, 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)

oxys, sharp; rhynchus, 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 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 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 biologist William Severi, for his contribution to the knowledge of the fishes of northeastern Brazil

Sternarchorhynchus starksi de Santana & Vari 2010

in honor of ichthyologist Edwin Chapin Starks (1867-1932), Stanford University, 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 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 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 $a_{c}u$, large, with the " $_{c}$ " changed to "ss," referring to enlarged fleshy lateral lobe on chin

Tembeassu marauna Triques 1998

from the native Tupí maraúna, ghost, referring to its being "hidden" in its habitat

Tembeassu titanicus Peixoto, Campos-da-Paz, Menezes, de Santana, Triques & Datovo 2022

-icus, belonging to: Titan, the pre-Olympian god, referring to its larger size compared with T. marauna

Tenebrosternarchus Bernt, Fronk, Evans & Albert 2020

tenebrae, darkness, referring to black pigmentation of *T. preto*; *sternarchus*, a common suffix in knifefish taxonomy, historically used for the putative subfamily Sternarchiae, based on *Sternarchus* Bloch & Schneider 1801 (*=Apteronotus*), *sterno-*, breast; *archus*, anus, referring to placement of anal opening near breast

Tenebrosternarchus preto (de Santana & Crampton 2007)

Portuguese for black, referring to its diagnostic dark pigmentation

Subfamily Sternarchorhamphinae

Orthosternarchus Ellis 1913

ortho-, straight, probably referring to "long, straight" tubular snout; sternarchus, referring to its then-placement in the subfamily Sternarchinae

Orthosternarchus tamandua (Boulenger 1898)

genus name for edentate anteaters of tropical America, from the Portuguese *tamanduá*, derived from the Tupí *taa*, ant, and *mundeu*, trap or catch, presumably referring to long and nearly straight tubular snout, resembling that of an anteater

Sternarchorhamphus Eigenmann 1905

described as intermediate between *Sternarchus* (=*Apteronotus*) and *Sternarchorhynchus*, with the long snout (*rhamphus*) of the latter and mouth size approaching that of the former

Sternarchorhamphus muelleri (Steindachner 1881)

in honor of Johannes Müller (1801-1858), who, with Franz Hermann Troschel (1810-1882), described its presumed congener at the time, *Sternarchorhynchus oxyrhynchus*, in 1849