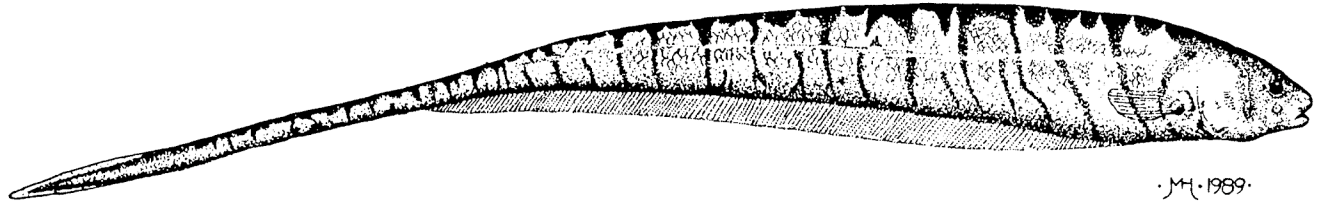


Order GYMNOTIFORMES

Bluntnose Knifefishes

Family **HYPOPOMIDAE**

Eigenmann 1912



Brachyhypopomus pinnicaudatus, holotype, male, 125.3 mm TL. Illustration by Marshall Hopkins. From: Hopkins, C. D. 1991. *Hypopomus pinnicaudatus* (Hypopomidae), a new species of gymnotiform fish from French Guiana. *Copeia* 1991 (1): 151–161. [Name dates to an earlier non-taxonomic publication (with a different illustration): Hopkins, C. D., N. C. Comfort, J. Bastian and A. H. Bass. 1990. Functional analysis of sexual dimorphism in an electric fish, *Hypopomus pinnicaudatus*, order Gymnotiformes. *Brain Behavior and Evolution* 35: 350–367.]

Akawaio

Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2014

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

Akawaio penak Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2014 Akawaio Amerindian word that is “apparently used unambiguously for this species”



Akawaio penak, holotype, 208 mm TL. From: Maldonado-Ocampo, J. A., H. López-Fernández, D. C. Taphorn, C. R. Bernard, W. G. R. Crampton and N. R. Lovejoy. 2014. *Akawaio penak*, a new genus and species of neotropical electric fish (Gymnotiformes, Hypopomidae) endemic to the upper Mazaruni River in the Guiana Shield. *Zoologica Scripta* 43 (1): 24–33. [First published online in 2013 without ZooBank registration; names date to the printed edition.]

Brachyhypopomus

Mago-Leccia 1994

brachys (Gr. βραχύς), 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 ichthyologist James S. Albert (b. 1964), University of Louisiana at Lafayette (Louisiana, USA), 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 Bolivian biologist Mariana Arraya, for her assistance in collecting the type series in Bolivia

Brachyhypopomus batesi Crampton, de Santana, Waddell & Lovejoy 2017 in honor of English naturalist Henry Walter Bates (1829–1892), who explored the Amazon with Alfred Russel Wallace in 1848 and collected many specimens (mostly insects), for his contributions to the natural history of the Tefé region of Brazil, type locality

Brachyhypopomus beebei (Schultz 1944) in honor of American naturalist and explorer William Beebe (1877–1962), New York Zoological Society, who collected holotype 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 and Irish diplomat, amateur ornithologist, and brother of first author, who collected holotype

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* (L.), short; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to its “greatly blunted muzzle” (translation), less than 1/3 length of head

Brachyhypopomus bullocki Sullivan & Hopkins 2009 in 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 lago Cuniã, type locality, 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 diaze (Fernández-Yépez 1972) in honor of Fernández-Yépez’ secretary, María Isabel (Betty) Diaz

Brachyhypopomus draco Giora, Malabarba & Crampton 2008 Latin for dragon, from *drákōn* (Gr. δράκων), 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* (L.), yellow; *pomus*, from *pōma* (Gr. πῶμα), lid or cover, i.e., operculum, referring to conspicuous patches of yellow guanine on operculum of live individuals

Brachyhypopomus gauderio Giora & Malabarba 2009 synonym of

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 aquatic biologist and doctoral co-advisor of the first author, for his contributions to Amazonian aquatic ecology

***Brachyhypopomus janeiroensis* (Costa & Campos-da-Paz 1992) -ensis**, Latin suffix denoting place: Rio de Janeiro, Brazil, where type locality (Corrego Salto-d'água, tributary of Rio São Joao) is situated

***Brachyhypopomus jureiae* Triques & Khamis 2003** of the Juréia Ecological Station, São Paulo, Brazil, type locality

***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)** Latin for western, presumably referring to type locality along Pacific slope of Colombia

***Brachyhypopomus palenque* Crampton, de Santana, Waddell & Lovejoy 2017** named for Rio Palenque, a Pacific Ocean drainage of Ecuador, type locality

***Brachyhypopomus pinnicaudatus* (Hopkins, Comfort, Bastian & Bass 1990) pinni**, from *pinna* (L.), feather; *caudatus* (L.), tailed, referring to “feather-like” appearance of caudal-fin filament in males [sometimes dated to (Hopkins 1991) but name is available from an earlier non-taxonomic publication]

***Brachyhypopomus provenzanoi* Crampton, de Santana, Waddell & Lovejoy 2017** in honor of Francisco Provenzano R., 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 English ichthyologist Charles Tate Regan (1878–1943), Natural History Museum (London) for his contributions to Neotropical ichthyology

***Brachyhypopomus sullivanii* Crampton, de Santana, Waddell & Lovejoy 2017** in honor of American ichthyologist John P. Sullivan (b. 1965), Cornell University, for his contributions to gymnotiform biology

***Brachyhypopomus verdi* Crampton, de Santana, Waddell & Lovejoy 2017** in honor of Peruvian conservation biologist Lorgio Verdi Olivares, for his support to the first and fourth authors

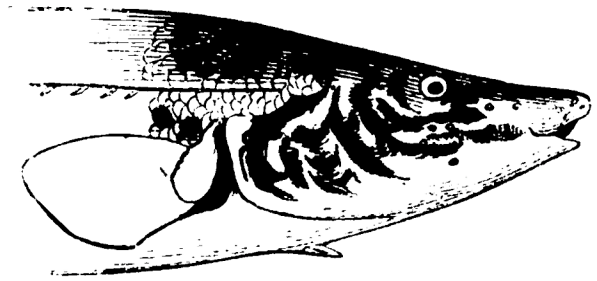
Subgenus *Odontohypopomus*

Sullivan, Zuanon & Cox Fernandes 2013

odontos, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth, referring to small teeth on premaxillae; *Hypopomus*, type genus of family

***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; in 1961 and 1971, Bennett 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 ethologist 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* (Sternopygidae), often described as the best-understood vertebrate behavior



Hypopomus artedi. From: Kaup, J. J. 1857. Catalogue of apodal fish in the collection of the British Museum. London. 1–163, Pls. 1–19.

Hypopomus

Gill 1864

etymology not explained and no description given, presumably *hypó* (Gr. ὑπό), under or beneath (i.e., ventral), and *pomus*, from *pōma* (Gr. πῶμα), lid or cover, i.e., operculum, perhaps referring to anus situated under gill opening

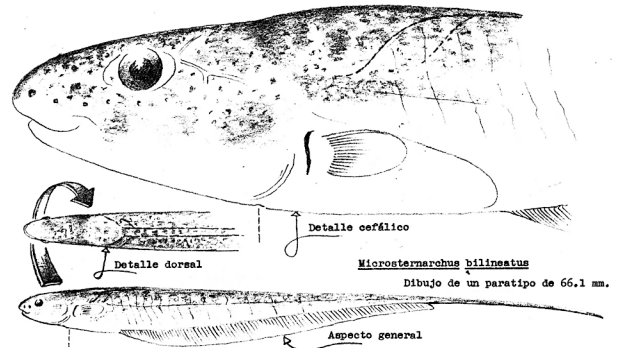
***Hypopomus artedi* (Kaup 1856)** patronym not identified but almost certainly in honor of Swedish naturalist Peter Artedi (1705–1735), widely known as the “father of ichthyology” [presumably a noun in apposition, without the patronymic “i”]

Microsternarchus

Fernández-Yépez 1968

micro-, from *mikrós* (Gr. μικρός), small, presumably referring to size of *M. bilineatus* (up to 82.8 mm TL); *sternarchus*, a common suffix in knife-fish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (= *Apterotonotus*, Apterotonotidae), *stérnon* (Gr. στέρνον), breast or chest (especially of men), and *archós* (Gr. ἀρχός), anus, referring to placement of anal opening near breast of *Apterotonotus albifrons* (and all other gymnotiforms)

***Microsternarchus bilineatus* Fernández-Yépez 1968** *bi-*, from *bis* (L.), twice; *lineatus* (L.), lined, referring to double dotted line (almost imperceptible) running along dorsal surface



Microsternarchus bilineatus, paratype. From: Fernández-Yépez, A. 1968. Contribución al conocimiento de los peces Gymnotiformes. Evencias 20: 6 unnumbered pp., 5 unnumbered pls.

***Microsternarchus brevis* Cox Fernandes, Nogueira, Williston & Alves-Gomes 2015** Latin for short, referring to overall size (up to 53.2 mm TL) and shorter caudal-fin filament compared with *M. bilineatus*

***Microsternarchus longicaudatus* Sousa, Wosiacki, Muriel-Cunha, Prudente, Sousa & Peixoto 2024** *longus* (L.), long; *caudatus* (L.), tailed, referring to its elongated caudal filament (35.1–36.8% of TL), unique in the genus

***Microsternarchus schonmanni* Cox Fernandes, Keffe & Pinilla 2024** in honor of Joseph Alois Schönmann (1872–1914), great-grandfather of the first author, trained at the Federal Polytechnic of Zurich, Switzerland, and who contributed much to the Museu Paraense Emilio Goeldi (Belém, Pará, Brazil), preparing fish specimens among other animals from the Amazon



Procerusternarchus pixuna, 126 mm TL. From: Cox Fernandes, C., A. Nogueira and J. A. Alves-Gomes. 2014. *Procerusternarchus pixuna*, a new genus and species of electric knife fish (Gymnotiformes: Hypopomidae, Microsternarchini) from the Negro River, South America. Proceedings of the Academy of Natural Sciences of Philadelphia 163: 95–118.

Procerusternarchus

Cox Fernandes, Nogueira & Alves-Gomes 2014

procerus (L.), high, long or tall, referring to its elongate, slender body; *sternarchus*, a common suffix in knife fish taxonomy, from *Sternarchus* Bloch & Schneider 1801 (= *Apteronotus*, Apterontidae), *stérnon* (Gr. στήρνον), 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)

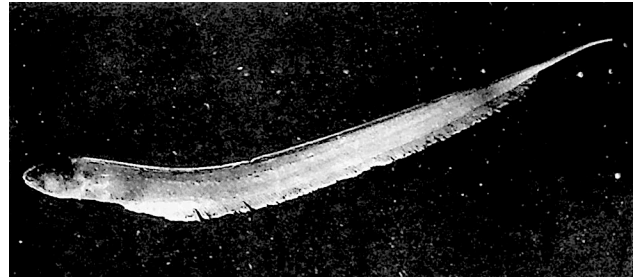
***Procerusternarchus pixuna* Cox Fernandes, Nogueira & Alves-Gomes 2014** Nheengatu (Amerindian language of the Tupí-Guaraní family) word meaning dark or black, presumably referring to “almost black” coloration on dorsal surface from snout to caudal filament on living specimens

Racenisia

Mago-Leccia 1994

-ia (L. suffix), belonging to: entomologist Janis Racenis (1915–1980), founder, Instituto de Zoología Tropical, Universidad Central de Venezuela, where Mago-Leccia worked

***Racenisia fimbriipinna* Mago-Leccia 1994** *fimbriata* (L.), fringe; *pinna* (L.), feather or 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”



Racenisia fimbriipinna, paratype, 88.3 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.