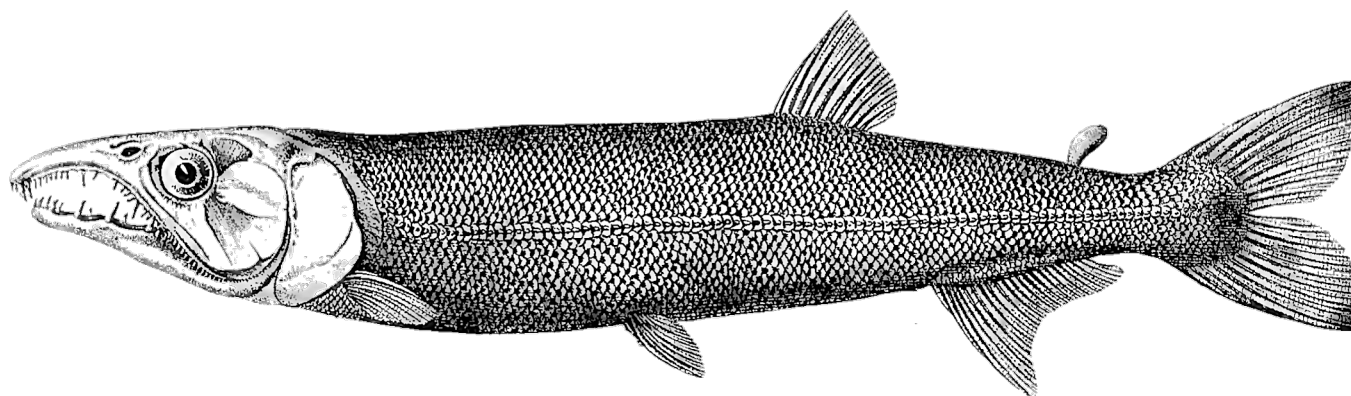


Order CHARACIFORMES

Freshwater Barracudas and Biting Tetras

Family **ACESTRORHYNCHIDAE**

Eigenmann 1912



Acestrorhynchus falcirostris. From: Cuvier, G. 1819. Sur les poissons du sous-genre *Hydrocyn* [sic], sur deux nouvelles espèces de *Chalceus*, sur trois nouvelles espèces du *Serrasalmes*, et sur l'*Argentina glossodonta* de Forskahl, qui est l'*Albula gonorhynchus* de Bloch. Mémoires du Muséum National d'Histoire Naturelle, Paris (N. S.) (Série A) Zoologie 5: 351–379, Pls. 26–28.

Freshwater Barracudas

Subfamily ACESTRORHYNCHINAE

Eigenmann 1912

Acestrorhynchus

Eigenmann & Kennedy 1903

akéstra (Gr. ἀκέστρα), darning needle; *rhynchus*, from *rhýnchos* (Gr. ῥύγχος), snout (i.e., jaw), referring to sharp canine teeth on both jaws

***Acestrorhynchus abbreviatus* (Cope 1878)** Latin for shortened, probably referring to its “relatively short muzzle”

***Acestrorhynchus altus* Menezes 1969** *altus* (L.), high or deep, probably referring to its “very deep” body

***Acestrorhynchus britskii* Menezes 1969** in honor of Brazilian ichthyologist Heraldo A. Britski, Universidade de São Paulo, who collected holotype

***Acestrorhynchus falcatus* (Bloch 1794)** Latin for sickle-shaped, referring to its falcate anal fin (“in pinna ani falcata”)

***Acestrorhynchus falcirostris* (Cuvier 1819)** *falci-*, from *falcatus* (L.), sickle-shaped; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout (i.e., jaw), referring to its concave upper jaw

***Acestrorhynchus grandoculis* Menezes & Géry 1983** *grandis* (L.), large; *oculis*, from *oculus* (L.), eye, referring to “enormous” eye which, in proportion to head length, is larger than that of all congeners

***Acestrorhynchus heterolepis* (Cope 1878)** *héteros* (Gr. ἕτερος), different; *lepis* (Gr. λεπίς), scale, referring to lateral-line scales larger than other scales on body

***Acestrorhynchus isalineae* Menezes & Géry 1983** in honor of the late Isaline Dreca, wife of Guy van den Bossche, participant in expedition during which holotype was collected

***Acestrorhynchus lacustris* (Lütken 1875)** Latin for of or belonging to a lake (lacustrine), referring to Lagoa Santa, Brazil, type locality

***Acestrorhynchus maculipinna* Menezes & Géry 1983** *macula* (L.), spot; *pinna* (L.), fin, referring to conspicuous large black spot on dorsal fin

***Acestrorhynchus microlepis* (Jardine 1841)** *micro-*, from *mikrós* (Gr. μικρός), small; *lepis* (Gr. λεπίς), scale, referring to its “very minute”

scales, 108–122 along lateral line

***Acestrorhynchus minimus* Menezes 1969** Latin for least, probably referring to “small” (36–84 mm SL) and “low” body

***Acestrorhynchus nasutus* Eigenmann 1912** Latin for long-nosed, referring to long, soft-tipped snout

***Acestrorhynchus pantaneiro* Menezes 1992** inhabitant of the Pantanal region, Mato Grosso do Sul, Brazil, where it is abundant

Biting Tetras

Subfamily ROESTINAE

Lucena & Menezes 1998

Gilbertolus

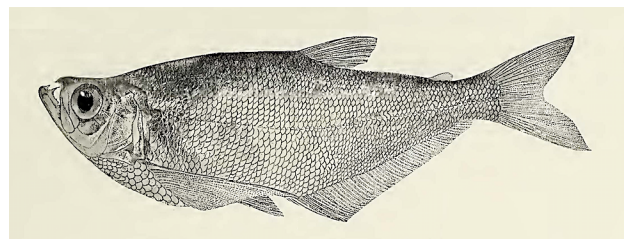
Eigenmann 1907

-olus (L.), diminutive connoting endearment: in honor of American ichthyologist Charles Henry Gilbert (1859–1928) [replacement name for *Gilbertella* Eigenmann 1903, preoccupied by *Gilbertella* Waite 1902 in Serranidae]

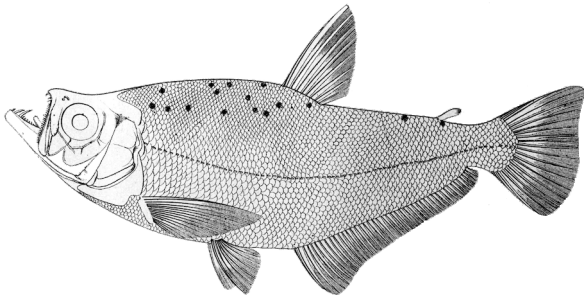
***Gilbertolus alatus* Steindachner 1878** Latin for winged, referring to long pectoral fins, reaching beyond anal-fin origin

***Gilbertolus atratoensis* Schultz 1943** *-ensis*, Latin suffix denoting place: Atrato River basin, Colombia, where it is endemic

***Gilbertolus maracaiboensis* Schultz 1943** *-ensis*, Latin suffix denoting place: Lake Maracaibo basin, Venezuela and Colombia, where it is endemic



First-published image of *Gilbertolus atratoensis*, then identified as *G. alatus*. From: Eigenmann, C. H. 1922. The fishes of western South America, Part I. The fresh-water fishes of northwestern South America, including Colombia, Panama, and the Pacific slopes of Ecuador and Peru, together with an appendix upon the fishes of the Rio Meta in Colombia. Memoirs of the Carnegie Museum 9 (1): 1–346, Pls. 1–38.



First-published image of *Roestes molossus*. From: Kner, R. 1860. Zur Familie der Characinen. III. Folge der ichthyologischen Beiträge. Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe. 18: 9–62, Pls. 1–8.

Roestes
Günther 1864

etymology not explained, perhaps from *rodo* (L.), to gnaw or bite, and *-estes*, Neo-Latin noun combining form derived from *edestés* (Gr. ἔδεστής), eater, referring to well-developed canine teeth of *R. molossus*

Roestes itupiranga Menezes & Lucena 1998 named for Itupiranga, a town and municipality in Pará, Brazil, where type locality (Rio Tocantins) is situated

Roestes molossus (Kner 1858) etymology not explained, probably alluding to Molossus, an extinct ancient breed of dog (ancestor to the Mastiff, used by shepherds and known for its wide, short muzzle, solid build and pugnacious appearance, attributes, along with dog-like teeth, that easily apply to this fish (an interpretation supported by its original placement in *Cynopotamus*, meaning “river dog”)

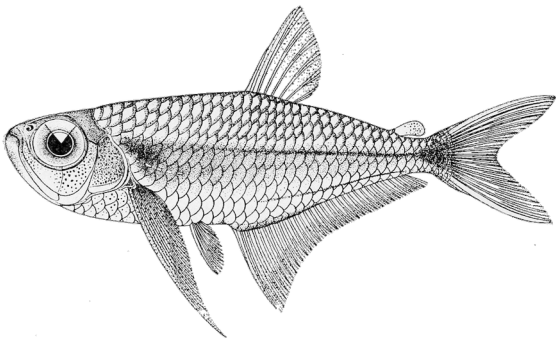
Roestes ogilviei (Fowler 1914) in honor of Scottish adventurer John Ogilvie, who collected holotype

Small Biting Tetras
Subfamily **HETEROCHARACINAE**
Géry 1966

Gnathocharax
Fowler 1913

gnáthos (Gr. γνάθος), jaw, referring to oblique, elongate maxillary; *Charax*, typical genus of the Characiformes, from *chárax* (Gr. χάραξ), a pointed stake of a palisade, referring to densely packed sharp teeth, a common root-name formation in the order

Gnathocharax steindachneri Fowler 1913 in honor of Austrian ichthyologist Franz Steindachner (1834–1919)



Gnathocharax steindachneri. From: Fowler, H. W. 1913. Fishes from the Madeira River, Brazil. Proceedings of the Academy of Natural Sciences of Philadelphia 65: 517–579.

Heterocharax
Eigenmann 1912

héteros (Gr. ἕτερος), different, allusion not explained, perhaps referring to different dentition and/or squamation compared with *Acanthocharax* (Characidae: Characine), proposed by Eigenmann in the same publication and presumed to be closely related to this genus; *Charax*, typical genus of the Characiformes, from *chárax* (Gr. χάραξ), a pointed stake of a palisade, referring to densely packed sharp teeth, a common root-name formation in the order

Heterocharax leptogrammus Toledo-Piza 2000 *leptós* (Gr. λεπτός), fine or thin; *grammus*, scientific Neo-Latin from *grammé* (Gr. γραμμή), line or stroke of the pen, referring to thin stripe above anal-fin base

Heterocharax macrolepis Eigenmann 1912 *macro-*, from *makrós* (Gr. μακρός), long or large; *lepis* (Gr. λεπίς), scale, referring to its large, “regularly imbricate” scales

Heterocharax virgulatus Toledo-Piza 2000 Latin for striped, referring to two distinctive stripes, one extending longitudinally along middle of body, the other on lower portion of body from dorsal-fin origin to anal-fin base

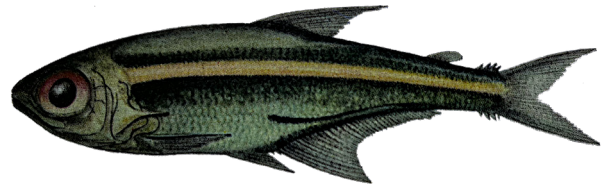


Heterocharax virgulatus, holotype, 37.7 mm SL. From: Toledo-Piza, M. 2000. Two new *Heterocharax* species (Teleostei: Ostariophysi: Characidae), with a redescription of *H. macrolepis*. Ichthyological Exploration of Freshwaters 11 (4): 289–304.

Hoplocharax
Géry 1966

hoplo-, from *hóplon* (Gr. ὄπλον), shield or armor (but here meaning armed), referring to strong and pointed pectoral fin spine and three opercular spines;¹ *Charax*, typical genus of the Characiformes, from *chárax* (Gr. χάραξ), a pointed stake of a palisade, referring to densely packed sharp teeth, a common root-name formation in the order

Hoplocharax goethei Géry 1966 in honor of the late Charles M. Goethe (1875–1966), American philanthropist, conservationist, eugenicist, and founding father of Sacramento State College (now California State University, Sacramento), for his “support of scientists and students in the fields of biology, conservation, and education”



Hoplocharax goethei. From: Géry, J. 1966. *Hoplocharax goethei*, a new genus and species of South American characoid fishes, with a review of the sub-tribe Heterocharacini. Ichthyologica, the Aquarium Journal 38 (3): 281–296.

Lonchogenys
Myers 1927

lónchos (Gr. λόγχος), lance; or spear; *génys* (Gr. γένυς), jaw (usually the cheek or lower jaw in ichthyology) referring to strong acute point on angle of interopercle

Lonchogenys ilisha Myers 1927 “A replica in miniature” of the clupeiform (Pristigasteridae) genus *ilisha*



Lonchogenys ilisha, holotype, collected by Carl Ternetz, 14 Feb. 1925. From California Academy of Sciences Type Imagebase. CAS 61719 (ex IU 17696a).

¹ Curiously, Géry neglected to mention the dorsal and ventral spines on the caudal peduncle in his description, although they are clearly evident in his illustration.

Priocharax

Weitzman & Vari 1987

priō (Gr. πρίω), to saw, referring to numerous small jaw teeth;
Charax, typical genus of the Characiformes, from *chárax* (Gr. χάραξ),
a pointed stake of a palisade, referring to densely packed sharp
teeth, a common root-name formation in the order [placed in
Acestrorhynchidae: Heterocharacinae by some workers]

***Priocharax ariel* Weitzman & Vari 1987** from *aériios* (Gr. ἀέριος), aerial,
applied by Shakespeare (*The Tempest*) for the name of an airy spirit (its
meaning here), referring to this fish's tiny size (up to 15.1 mm SL) and
translucent coloration in life

***Priocharax britzi* Mattox, de Souza, Toledo-Piza & Oliveira 2021** in
honor of Ralf Britz, Natural History Museum (London), “noteworthy
ichthyologist and a dear friend” who “mastered the world of small
fishes and has described more than 20 miniature species, including two
species of *Priocharax*”

***Priocharax marupiara* Mattox, Britz, Souza, Casas, Lima & Oliveira
2023** both a noun and an adjective in the native common language
(Nheengatu) meaning luck/lucky in fishing, and in life in general, allud-
ing to the abundance of this species in the type locality and the fact
that it was discovered while searching for *P. toledopizae*

***Priocharax nanus* Toledo-Piza, Mattox & Britz 2014** Latin for dwarf
(noun), referring to its tiny size, referring to tiny size of adults (up to
15.4 mm SL)

***Priocharax pygmaeus* Weitzman & Vari 1987** Latin for dwarfish, refer-
ring to its tiny size (up to 16.4 mm SL)

***Priocharax toledopizae* Mattox, Britz, Souza, Casas, Lima & Oliveira
2023** in honor of Mônica Toledo-Piza, “dear friend” and ichthyologist;
as former advisor of the first and fourth authors, “she has played an im-
portant role in our scientific training and shaping our critical thinking,”
and has contributed to characiform taxonomy and systematics for more
than 25 years, including that of *Priocharax*

***Priocharax varii* Mattox, Souza, Toledo-Piza, Britz & Oliveira 2020**
in honor of the late Richard P. Vari (1949–2016), National Museum of
Natural History, Smithsonian Institution (Washington, D.C., USA), “our
dear friend and mentor, and one of the most influential researchers in
Neotropical ichthyology of the past 40 years”; in addition to being co-
author of the genus *Priocharax*, he “continuously encouraged the first
author to study this taxon further and in more detail”



Priocharax nanus. Photo by Ralf Britz. From: Toledo-Piza, M., G. M. T. Mattox and R. Britz. 2014. *Priocharax nanus*, a new miniature characid from the rio Negro, Amazon basin (Ostariophysi: Characiformes), with an updated list of miniature neotropical freshwater fishes. *Neotropical Ichthyology* 12 (2): 229–246.