Order CHARACIFORMES

Family CHARACIDAE Characins

Subfamily Spintherobolinae Piquiras

3 genera · 6 species

Amazonspinther Bührnheim, Carvalho, Malabarba & Weitzman 2008
Amazon, referring to Amazon basin, where it occurs; spinther, sparks or fire, referring to closely related Spintherobolus and appearance of yellow neuromasts on head, also observed on Spintherobolus

Amazonspinther dalmata Bührnheim, Carvalho, Malabarba & Weitzman 2008
Portuguese word referring to spotted color pattern of the Dalmatian dog breed, which this fish resembles; origin of word is linked to the Dalmatia region of Croatia, where the breed is said to have been developed

Atopomesus Myers 1927
atopos, peculiar; mesus, middle, probably referring to a series of large scales on each side of preventral region that overlap at midline of body

Atopomesus pachyodus Myers 1927
pachys, thick; odon, tooth, referring to “extremely massive and heavy” teeth

Spintherobolus Eigenmann 1911
spinther, fire or sparks (“emitting sparks,” according to Eigenmann); obolus, a small coin, referring to “yellow tactile organs” (Eigenmann wrote in 1915), or neuromasts, on head

Spintherobolus ankoseion Weitzman & Malabarba 1999
ankos, a mountain valley or glen; eïon, a beach, referring to its occurrence between coastal mountains and the sea

Spintherobolus broccae Myers 1925
in honor of aquarium-fish collector Rolf Brocca, Rio de Janeiro, Brazil, who collected type

Spintherobolus leptoura Weitzman & Malabarba 1999
leptos, small, thin or delicate; oura, tail, referring to relatively slender caudal peduncle

Spintherobolus papilliferus Eigenmann 1911
papillo, papilla; fero, to bear, referring to “excessively developed” tactile papillae

Subfamily Exodontinae Toothy Characins

3 genera · 4 species

Bryconexodon Géry 1980
brycon, generalized term used in generic names of many characiform fishes, derived from bryco, to bite, gnash teeth or eat greedily, originally an allusion to fully toothed maxillae but here possibly alluding to its “general characid shape” (translation); exodon, referring to similarity to Exodon

Bryconexodon juruenae Géry 1980
of upper Rio Juruena, tributary of Rio Tapajoz, Mato Grosso, Brazil, type locality

Bryconexodon trombetasi Jégu, Santos & Ferreira 1991
of Rio Trombetas, Pará, Brazil, type locality

Exodon Müller & Troschel 1844
ex-, outside; odon, tooth, referring to outward-projecting teeth

Exodon paradoxus Müller & Troschel 1844
strange, presumably referring to strange appearance of outward-projecting teeth

Roeboexodon Géry 1959
intermediate in form between Roeboides and Exodon (original genus of type species)

Roeboexodon guyanensis (Puyo 1948)
-ensis, suffix denoting place: French Guiana, where original specimens (now lost) were collected (also occurs in Brazil)
Tetragonopterus Cuvier 1816
misspelling of *Tetragonopterus*, coined by Klein in 1740, who said it meant “quadratus aspectu” (square appearance) and applied it to quadrate or rhomboidal fishes (e.g., butterflyfishes, Chaetodontidae); in 1759, Séba (not Arredi, as Cuvier and Günther reported) referred *T. argenteus* to Klein’s genus, which Cuvier misspelled as *Tetragonopterus* when his publication made the name available, thus creating false impression that name means square *pterus*, or fin

*Tetragonopterus* anostomus Silva & Benine 2011
*ano*-, upward or above; *stoma*, mouth, referring to superior mouth position, unique in the genus

*Tetragonopterus araguaensis* Silva, Melo, Oliveira & Benine 2013
*-ensis*, suffix denoting place: Rio Araguaia, a large tributary of the Amazon basin, central Brazil, where it is endemic

*Tetragonopterus argenteus* Cuvier 1816
silvery, referring to bright, silvery coloration (pre-Linnaean name coined by Séba in 1759)

*Tetragonopterus carvalhoi* Melo, Benine, Mariguela & Oliveira 2011
in honor of Marcelo Rodrigues de Carvalho, Universidade de São Paulo, leader of expedition that collected type, for his contributions to the knowledge of neotropical ichthology

*Tetragonopterus chalceus* Spix & Agassiz 1829
copper, presumably referring to light brown (“laete fuscus”) body coloration

*Tetragonopterus denticulatus* Silva, Melo, Oliveira & Benine 2013
small-toothed, referring to small teeth on dentary, unique to the genus

*Tetragonopterus franciscoensis* Silva, Melo, Oliveira & Benine 2016
*-ensis*, suffix denoting place: Rio São Francisco, northeastern Brazil, where it is well known and abundant

*Tetragonopterus georgiae* (Géry 1965)
matronym not identified but probably in honor of Géry’s wife, Georgie, or Georgette

*Tetragonopterus juruena* Silva, Melo, Oliveira & Benine 2016
named for the Rio Juruena, Mato Grosso, Brazil, type locality

*Tetragonopterus kuluene* Silva, Melo, Oliveira & Benine 2016
indigenous spelling of Rio Culuene, rio Xingu basin, Brazil, type locality

*Tetragonopterus manaos* Urbanski, Melo, Silva & Benine 2018
referring to the Manaós, indigenous tribe that inhabited the lower rio Negro, which includes type locality of this species

*Tetragonopterus ommatus* Silva, Melo, Oliveira & Benine 2016
eyed, referring to the “great” diameter of its orbits

Tetragonopterus rarus (Zarske, Géry & Isbrücker 2004)
rare, referring to small distribution and endangerment due to mining and mercury pollution

Tetragonopterus signatus Burmeister 1861
marked, probably referring to black dot at beginning of lateral line

Subfamily Characinae Characines
9 genera · 95 species

Acanthocharax Eigenmann 1912
resembling Charax, but with an acanthus, or thorn, referring to strong spine on angle of preopercle

Acanthocharax microlepis Eigenmann 1912
micro-, small; lepis, small, referring to small, imbricate scales, 47-53 along lateral line

Acestrocephalus Eigenmann 1910
akestra, ancient Greek for darning needle; cephalus, head, presumably referring to conspicuous needle-like teeth, i.e., “needle head”

Acestrocephalus acutus Menezes 2006
sharp, referring to “pointed nature” of snout

Acestrocephalus anomalus (Steindachner 1880)
odd or irregular, presumably referring to second row of teeth on front of lower jaw, which “differs strikingly” from other species then placed in Xiphorhamphus (=Acestrorhynchus)

Acestrocephalus boehlkei Menezes 1977
in honor of ichthyologist James E. Böhlke (1930-1982), Academy of Natural Sciences of Philadelphia, who made specimens under his care available for study

Acestrocephalus maculosus Menezes 2006
spotted, referring to dark spots and stripes on body

Acestrocephalus nigrifasciatus Menezes 2006
niger, black; fasciatus, banded or striped, referring to dark lateral stripe on body

Acestrocephalus pallidus Menezes 2006
pale, referring to overall body color

Acestrocephalus sardina (Fowler 1913)
latinization of sardinha, native name for this species along the Rio Madeira, Brazil

Acestrocephalus stigmatus Menezes 2006
marked or spotted, referring to dark spot on humeral region

Charax Scopoli 1777
from a non-binominal name introduced by Gronow (1763) for the typical genus of the Characiformes, from Greek word meaning “palisade of pointed sticks,” referring to densely packed sharp teeth

Charax apurensis Lucena 1987
-ensis, suffix denoting place: Estado Apure, Venezuela, where Rio Canito, type locality, is situated

Charax awa Guimarães, Brito, Ferreira & Ottoni 2018
Awa, Tupi-Guaraní word meaning “man, people, person,” the name by which the native tribe Guajá (from Maranhão State, Brazil, where this species occurs) calls itself

Charax caudimaculatus Lucena 1987
caud-, tail; maculatus, spotted, referring to conspicuous lozenge-shaped spot at end of caudal peduncle

Charax condei (Géry & Knöppel 1976)
in honor of zoologist Bruno Condé (1920-2004), director of l’Aquarium de Nancy

Charax delimai Menezes & Lucena 2014
in honor of Flávio César Thadeo de Lima (Universidade Estadual de Campinas), for “great contributions to the knowledge of neotropical freshwater fishes” and for collecting the paratypes

Charax gibbosus (Linnaeus 1758)
humpbacked, referring to projecting nape

Charax hemigrammus (Eigenmann 1912)
hemi-, partial; gramme, line, referring to incomplete lateral line “developed on a few anterior pores only”

Charax leticiae Lucena 1987
in honor of Lucena’s daughter, Leticia
Charax macrolepis (Kner 1858)
macro-, large; lepis, scale, referring to larger scales compared to C. gibbosus

Charax metae Eigenmann 1922
of the Río Meta, Orinoco system, Colombia, type locality

Charax michaei Lucena 1989
in honor of conservation ecologist Michael Goulding (b. 1950), who collected type

Charax niger Lucena 1989
black, referring to dark color pattern

Charax notulatus Lucena 1987
little-marked, referring to small spot at end of caudal peduncle

Charax pauciradiatus (Günther 1864)
paucus, few; radiatus, rayed, referring to fewer anal-fin rays compared to C. gibbosus

Charax rupununi Eigenmann 1912
referring to Rupununi River, Guyana, type locality (also occurs in Brazil)

Charax stenopterus (Cope 1894)
stenos, narrow; ptera, fin, allusion not explained nor evident in Cope's brief description, possibly referring to long and narrow anal fin

Charax tectifer (Cope 1870)
tectus, roof or covering; -ifer, to bear, “named for the fact that the free anterior margin of the nasal bones is more prolonged than in other species [of Anacyrtus (=Charax)], and overhangs the nares and premaxillaries”

Cynopotamus Valenciennes 1850
cyno-, dog; potamus, river, i.e., river dog, referring to their conspicuous needle-sharp teeth

Cynopotamus amazonum (Günther 1868)
although epithet translates as “of the Amazons,” referring to warrior women for whom Amazon was named, it actually refers to the Amazon River basin (Brazil and Peru), where it occurs

Cynopotamus argenteus (Valenciennes 1836)
silvery, referring to shiny silver coloration

Cynopotamus atratoensis (Eigenmann 1907)
-ensis, suffix denoting place: Río Atrato system, Colombia, type locality

Cynopotamus bipunctatus Pellegrin 1909
bi-, two; punctatus, spotted, referring to black humeral spot and a small black spot at base of median caudal-fin rays

Cynopotamus essequibensis Eigenmann 1912
-ensis, suffix denoting place: Essequibo River drainage, Guyana, type locality (also occurs in Brazil, Suriname and French Guiana)

Cynopotamus gouldingi Menezes 1987
in honor of conservation ecologist Michael Goulding (b. 1950), who collected type specimens and has contributed to the ichthyology of Brazil

Cynopotamus juruenae Menezes 1987
of the Río Juruena, Brazil, type locality

Cynopotamus kincaidi Schultz 1950
in honor of Schultz’ “good friend” Trevor Kincaid (1872-1970), zoologist and oyster farmer, University of Washington (Seattle, USA), in a Festschrift honoring Kincaid

Cynopotamus magdalenae (Steindachner 1879)
of the Río Magdalena or its basin, presumed type locality (name dates to a figure with no description)

Cynopotamus tocantinensis Menezes 1987
-ensis, suffix denoting place: Río Tocantins, Brazil, one of the major river systems where type material was collected

Cynopotamus venezuelae (Schultz 1944)
of Venezuela, where it is endemic to the Lake Maracaibo basin

Cynopotamus xinguano Menezes 2007
named after the Xinguano, an Amerindian tribe living in Parque Indígena do Xingu, a national park in the rio Xingu basin, Brazil, type locality

Galeocharax Fowler 1910
etymology not explained, possibly galeo-, shark, referring to shark-like appearance of needle-sharp teeth used to hold prey; Charax, typical genus of the Characiformes, from Greek word meaning “palisade of pointed sticks,” referring to densely
packed sharp teeth, now a common root-name formation in the order

**Galeocharax goeldii** (Fowler 1913)
in honor of Swiss-Brazilian zoologist Émil (or Emilio) Goeldi (1859-1917), Director of the Museu Paraense and author of numerous works on the natural history of Brazil

**Galeocharax gulo** (Cope 1870)
Latin for glutton, probably referring to large mouth filled with needle-sharp teeth used to hold prey

**Galeocharax humeralis** (Valenciennes 1834)
pertaining to shoulder, referring to blackish humeral spot

**Microschemobrycon** Eigenmann 1915
*micro*-, small and *schema*, form or shape, i.e., of small stature, referring to size of *M. guaporensis* (∼37 mm); *brycon*, generalized term used in generic names of many characiform fishes, derived from *bryco*, to bite, gnash teeth or eat greedily, originally an allusion to fully toothed maxillae

**Microschemobrycon callops** Böhlke 1953
callos, beautiful; *ops*, eye, referring to “extremely attractive” eye, with “heavily pigmented” eyeball and silvery iris that appears bluish from certain angles, even after 27 years of preservation

**Microschemobrycon casiquiare** Böhlke 1953
named after the Canal de Casiquiare, Venezuela, “the marvellous natural waterway which permits intermingling between the great faunas of the Orinoco system to the north and the Amazonas system to the south,” one of the locations where this characin occurs

**Microschemobrycon cryptogrammus** Ohara, Jerep & Cavallaro 2019
crypto-, hidden; *grammus*, line, referring to dark midlateral stripe composed by internal pigmentation, visible only in live specimens

**Microschemobrycon elongatus** Géry 1973
referring to elongate body, largest depth in front of dorsal fin 4.5-5.05 in SL

**Microschemobrycon geisleri** Géry 1973
in honor of German biologist and aquarist Rolf Geisler (1925-2012), who collected type with Linde Geisler (presumably his wife)

**Microschemobrycon guaporensis** Eigenmann 1915
-*ensis*, suffix denoting place: Rio Guaporé, Amazon River system, Brazil, type locality (and where it is endemic)

**Microschemobrycon melanotus** (Eigenmann 1912)
*melanos*, black; *notus*, back, referring to dusky margined scales on back

**Microschemobrycon meyburgi** Meinken 1975
in honor of physician Gert Meyburg (Bremen, Germany), who collected type

**Phenacogaster** Eigenmann 1907
*phenax*, a cheat; *gaster*, belly, referring to reduced number of preventral scales compared to other characins (per Eigenmann 1927, “The American Characidae”)

**Phenacogaster apletostigma** Lucena & Gama 2007
*apletos*, immense; *stigma*, mark or spot, referring to large and vertically elongate humeral blotch

**Phenacogaster beni** Eigenmann 1911
referring to Rio Beni, Bolivia, type locality (also occurs in Brazil)

**Phenacogaster calverti** (Fowler 1941)
in honor of entomologist Philip P. Calvert (1871-1961), University of Pennsylvania, “well known for his contributions on the Odonata” (dragonflies)

**Phenacogaster capitulata** Lucena, Antonetti & Malabarba 2010
diminutive of *capitulum*, head, referring to smaller head length compared to all congeners except *P. napoatilis* and *P. pectinatus* complex

**Phenacogaster carteri** (Norman 1934)
in honor of zoologist George Stuart Carter (1893-1969), Cambridge University, who led expedition to Guyana that collected type

**Phenacogaster eurytaenia** Lucena, Antonetti & Lucena 2018
eury-, wide; *taenia*, band or ribbon, referring to wide dark lateral stripe

**Phenacogaster franciscoensis** Eigenmann 1911
-*ensis*, suffix denoting place: Francisco River basin, Brazil, where it is endemic
**Phenacogaster jancupa** Malabarba & Lucena 1995
anagram composed from names of localities and drainages of the type locality: Janganda, rio Cuibá and rio Paraguay (Mato Grosso, Brazil)

**Phenacogaster maculoblonga** Lucena & Malabarba 2010
*maculus*, blotch; *oblongus*, oblong, referring to straight, elongate and vertical humeral spot

**Phenacogaster megalostictus** Eigenmann 1909
*megalo-* , long; *stictus*, spot, referring to “large conspicuous, sub-circular” humeral spot

**Phenacogaster microstictus** Eigenmann 1909
*micro-* , small; *stictus*, spot, referring to “very faint and small” humeral spot

**Phenacogaster naevata** Antonetti, Lucena & Lucena 2018
having birth marks, referring to series of chevron-shaped marks on midlateral stripe

**Phenacogaster napoatilis** Lucena & Malabarba 2010
-ilis, adjectival suffix: of the Napo River system, Ecuador, where it is endemic

**Phenacogaster ojitatus** Lucena & Malabarba 2010
diminutive of the Spanish *ojito*, eye, referring to smaller eye compared to congeners except *P. megalostictus*, *P. simulatus* and *P. tegatus*

**Phenacogaster pectinata** (Cope 1870)
comb-toothed, allusion not explained, perhaps referring to minute teeth along entire anterior margin of maxillary bone

**Phenacogaster prolata** Lucena & Malabarba 2010
*retro-* , behind; *pinna*, fin, referring to posterior placement of anal-fin origin

**Phenacogaster simulata** Lucena & Malabarba 2010
similar, referring to similarity to *P. megalostictus*

**Phenacogaster suborbitalis** Ahl 1936
referring to second suborbital, "sculptured in a heavily wrinkled way" (translation)

**Phenacogaster tegatus** (Eigenmann 1911)
etymology not explained, possibly adjectival form of *tegus*, covering, referring to black blotch over urinary bladder and/or to conspicuous spot on caudal peduncle [since etymology is uncertain, there is no requirement to change spelling (e.g, tegata) to agree with feminine gender of *Phenacogaster*]

**Phenacogaster wayampi** Le Bail & Lucena 2010
in honor of the Wayampi, indigenous people who live in the upper Rio Oiapoque system, French Guiana, where it is endemic

**Phenacogaster wayana** Le Bail & Lucena 2010
in honor of the Wayana, indigenous people who live in Rio Maroni system, French Guiana (also occurs in Suriname)

**Priocharax** Weitzman & Vari 1987
*prio*, saw, referring to numerous small jaw teeth; *Charax*, typical genus of the Characiformes, from Greek word meaning "palisade of pointed sticks," referring to densely packed sharp teeth, now a common root-name formation in the order

**Priocharax ariel** Weitzman & Vari 1987
an airy spirit, referring to tiny size (up to 15.1 mm SL) and translucent coloration in life

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

**Priocharax pygmaeus** Weitzman & Vari 1987
dwarf, referring to tiny size (up to 16.4 mm SL)

**Roeboides** Günther 1864
-oides: having the form of: presumably referring to similarity to *Roestes* (Acestrorhynchidae), which at the time was considered consubgeneric

**Roeboides affinis** (Günther 1868)
related, presumably referring to perceived close relationship and/or similarity to *Cynopotamus amazonum* (both species described in the genus *Anacyrtus* [=*Charax*] in the same publication)

**Roeboides araguaito** Lucena 2003
Araguaito, a stream in the Orinoco River basin, Venezuela, type locality

**Roeboides biserialis** (Garman 1890)
*bi-* , two; *serialis*, rowed, referring to two series of conical teeth on intermaxillaries and anterior halves of mandibles
Roeboides bouchellei Fowler 1923
in honor of chemist Theodore W. Bouchelle, Eden Mining Company, who sent a collection of Nicaraguan fishes to
the Academy of Natural Sciences of Philadelphia, including type of this one

Roeboides bussingi Matamoros, Chakrabarty, Angulo, Garita-Alvarado & McMahan 2013
in honor of ichthyologist William Bussing (1933-2014), Universidad de Costa Rica, for his contributions to the
knowledge of Costa Rican and Central American fishes; he was the first to suggest that this species was new to science

Roeboides carti Lucena 2000
referring to Río Cartí Grande, Comarca de San Blas, Panama, type locality

Roeboides dayi (Steindachner 1878)
patronym not identified, possibly in honor of Francis Day (1829-1889), Inspector-General of Fisheries in India and
author of many papers on Indian fishes (although this fish is not Indian)

Roeboides descalvadensis Fowler 1932
-ensis, suffix denoting place: Descalvados, Mato Grosso, Brazil, type locality (but widespread in South America)

Roeboides dientonito Schultz 1944
local name for this species in Venezuela, derived from the Spanish diente, teeth, referring to small, tooth-like
protuberances on upper lips

Roeboides dispar Lucena 2001
dissimilar, referring to a number of characters (e.g., 31-48 vs. 19 or fewer maxillary conical teeth) that makes this
species unique in the genus

Roeboides guatemalensis (Günther 1864)
-ensis, suffix denoting place: Guatemala, an apparent misnomer since it is endemic to Panama

Roeboides ilseae Bussing 1986
in honor of Bussing’s daughter Ilse, who accompanied her father on numerous collecting trips and assisted in the
collection and sorting of specimens

Roeboides loftini Lucena 2011
in honor of Horace Loftin (b. 1927), Florida State University, for his contributions to the knowledge of the distribution
of the freshwater fishes of Panama

Roeboides margareteae Lucena 2003
in honor of Lucena’s wife, Zilda Margarete

Roeboides microlepis (Reinhardt 1851)
-micro-, small; lepis, scale, referring to smaller, more numerous scales compared to Charax gibbosus (then placed in
same genus, Epicoryx)

Roeboides myersii Gill 1870
in honor of Philip V. Myers, a traveling companion of naturalist-explorer James Orton (1830-1877), who led expedition
that collected type (and requested that this species be named after Myers)

Roeboides numerosus Lucena 2000
many, referring to higher number (45-50) branched anal-fin rays compared to R. oligostos

Roeboides occidentalis Meek & Hildebrand 1916
western, referring to distribution on Pacific slope of Panama (compared to eastern distribution of R. guatemalensis on
the Atlantic slope)
Roeboides oligistos Lucena 2000
very few, referring to smaller number of branched anal-fin rays (38-44) compared to R. numerosus

Roeboides sazimai Lucena 2007
in honor of Ivan Sazima, Universidade de Campinas, for his contribution to the knowledge of the lepidophagous habits of Roeboides in particular and Brazilian fishes in general

Roeboides xenodon (Reinhardt 1851)
xenitos, strange; odontos, tooth, referring to several larger tooth-like prongs that extend forward from upper jaw at margin of lip; Reinhardt also called this species a “strange little fish” (translation)

Subfamily Aphyocharacinae Glass Characins
7 genera · 19 species

Aphyocharacidium Géry 1960
aphya, a small sardine-like fish, probably referring to Aphyocharax, characidium, diminutive of charax, a common suffix for characiform fishes, probably referring to Characidium, apparently reflecting Géry’s belief that it represents a “border genus” between cheirodontines (now in Cheirodontinae) and subfamily Characidini (in Crenuchidae)

Aphyocharacidium bolivianum Géry 1973
Bolivian, referring to country where it is endemic

Aphyocharacidium melanostum (Eigenmann 1912)
melanos, black; detus, given, i.e., blackened, probably referring to black margin on caudal peduncle

Aphyocharax Günther 1868
aphya, a small sardine-like fish, referring to small size of A. pusillus; charax, typical genus of the Characiformes, from Greek word meaning “palisade of pointed sticks,” referring to densely packed sharp teeth, now a common root-name formation in the order

Aphyocharax agassizii (Steindachner 1882)
in memory of zoologist-geologist Louis Agassiz (1807-1873), who gave the two type specimens to Steindachner

Aphyocharax anisitsi Eigenmann & Kennedy 1903
in honor of Juan Daniel Anisits (1856-1911), National University of Paraguay, who provided Indiana University with a “well-preserved” collection of fishes, including type of this one

Aphyocharax avary Fowler 1913
native name for this species in the Madeira River basin of Brazil

Aphyocharax collafax Taphorn & Thomerson 1991
collum, neck or stem; fax, torch, referring to bright red caudal peduncle, “like a flame of fire that it carries on its back” (translation)

Aphyocharax dentatus Eigenmann & Kennedy 1903
toothed, referring to more mandibular teeth compared to A. alburnus and A. pusillus

Aphyocharax erythrurus Eigenmann 1912
erythros, red; oura, tail, referring to brick-red caudal fin in life

Aphyocharax gracilis Fowler 1940
slender, referring to more slender body compared to A. nasutus (=dentatus)

Aphyocharax nattereri (Steindachner 1882)
patronym not identified, likely in honor of Johann Natterer (1787-1843), who explored South America and collected specimens for 18 years

Aphyocharax pusillus Günther 1868
very small, referring to size (~50 mm)

Aphyocharax rathbuni Eigenmann 1907
in honor of biologist and administrator Richard Rathbun (1852-1918), U.S. National Museum

Aphyocharax yekwanae Willink, Chernoff & Machado-Allison 2003
of the Ye’Kwana tribe that lives in and oversees most of the Río Caura basin, Brazil, type locality, for their “fervid desire to protect and manage their home territory and its environment”

Leptagoniates Boulenger 1887
leptos, thin, possibly referring to narrow mouth cleft compared to wide mouth cleft of Paragoniates, i.e., a thin Paragoniates

Leptagoniates steindachneri Boulenger 1887
patronym not identified but clearly in honor of Austrian ichthyologist Franz Steindachner (1834-1919), who described Paragoniates in 1876
Paragoniates Steindachner 1876
para-, near, referring to presumed close relationship with Agoniates (Triportheidae) based on similarly compressed abdomens

Paragoniates albumus Steindachner 1876
Latin for whitefish, from albus, white, presumably referring to pale, silvery coloration

Phenagoniates Eigenmann & Wilson 1914
phena-, misspelling of phanus (which Eigenmann later attempted to correct, but original spelling prevails), bright or clear, referring to translucent coloration; agoniates, referring to close relationship/similarity with Paragoniates

Phenagoniates macrolepis (Meek & Hildebrand 1913)
macro-, long or large; lepis, scale, probably referring to larger scales compared to other species in Roeboides (original genus)

Prionobrama Fowler 1913
prion, saw, probably referring to “completely denticulated maxillary,” i.e., saw-toothed; brama, referring to “superficial resemblance” to the European cyprinid Abramis brama

Prionobrama filigera (Cope 1870)
filum, thread; gero, to bear, referring to long and pointed anal fin on adults, the first ray being opaque white

Prionobrama paraguayensis (Eigenmann 1914)
-ensis, suffix denoting place: Río Paraguay, Brazil, type locality (also occurs in Argentina, Bolivia and Paraguay)

Xenagoniates Myers 1942
xeno-, different, allied to Leptagoniates and Phenagoniates but differing in the presence of a well-developed patch on each palatine and more posterior dorsal fin

Xenagoniates bondi Myers 1942
in honor of Franklyn F. Bond, University of Rochester (Rochester, New York, USA), who collected type while researching mosquito-control fishes in Venezuela

Subfamily Cheirodentinae
16 genera · 66 species

Acinocheirodon Malabarba & Weitzman 1999
akaina, thorn or spike, referring to spines on caudal-fin rays; cheirodon, referring to its placement in Cheirodentinae

Acinocheirodon melanogramma Malabarba & Weitzman 1999
melan, black; gramme, line, referring to distinctive black bar on large anterior unbranched dorsal-fin ray

Aphyocheirodon Eigenmann 1915
aphya, a small fish, i.e., a small Cheirodon, probably referring to small size of A. hemigrammus (39-48 mm in type series)

Aphyocheirodon hemigrammus Eigenmann 1915
hemi-, partial; grammus, line, referring to “median dusky line associated with a narrow silvery line on posterior half of body”
Cheirodon Girard 1855
*cheiros*, hand; *odon*, tooth, referring to teeth of *C. pisciculus*, dilated at apex with at least five subconical points, the middle one being the longest, resembling five fingers on a hand

Cheirodon australis Eigenmann 1928
southern, “the most southern of the Characidae” (a distinction that actually belongs to *Gymnocharacinus bergi*, Gymnocharacinae)

Cheirodon galusdae Eigenmann 1928
in honor of Pedro Galusda, “who has successfully introduced several species of trout into the rivers of Chile”

Cheirodon ibicuhiensis Eigenmann 1915
-ensis, suffix denoting place: Rio Ibicuí, Rio Grande do Sul, Brazil, type locality (also occurs in Argentina and Uruguay)

Cheirodon interruptus (Jenyns 1842)
referring to “interrupted” lateral line, “coming to an end before it has reached the length of the pectoral, and not carried over more than eight or nine scales in the length”

Cheirodon jaguaribensis Fowler 1941
-ensis, suffix denoting place: Rio Jaguaribe, Russas, Ceará State, Brazil, type locality [Incertae sedis in Characidae; likely belongs in a different genus]

Cheirodon kiliani Campos 1982
in honor of Campos' teacher, Ernst Kilian, founding director of Instituto de Zoología, Universidad Austral, Chile

Cheirodon luelingi Géry 1964
in honor of ichthyologist Karl Heinz Lüling (1913-1984), Forschungsmuseum Alexander Koenig (Bonn), who collected type

Cheirodon macropterus Fowler 1941
*macro-,* long; *pterus*, fin, referring to very long dorsal fin, which, when depressed, reaches well into adipose fin [Incertae sedis in Characidae; likely belongs in a different genus]

Cheirodon ortegaei Varí & Géry 1980
in honor of Peruvian ichthyologist Hernán Ortega, for collecting many “valuable” specimens for the senior author

Cheirodon parahybae Eigenmann 1915
of Rio Parahyba, Campos, Brazil, type locality

Cheirodon pisciculus Girard 1855
diminutive of *piscis*, fish, i.e., a little fish, allusion not explained, presumably referring to its size (size not mentioned by Girard and no types known; recorded elsewhere as up to 5.4 cm SL)

Cheirodon stenodon Eigenmann 1915
stenos, narrow; *odon*, tooth, referring to narrow premaxillary teeth

Cheirodontops Schultz 1944
*ops*, appearance, presumably referring to similarity to other cheirodontine fishes, from which it differs in having a complete lateral line

Cheirodontops geayi Schultz 1944
in honor of pharmacist and natural history collector Martin François Geay (1859-1910), who reported on the fishes of the Orinoco Basin in his work “Pêches dans les Affluentes de l’Orinoque” (1896-97)

Compsura Eigenmann 1915
*compsos-,* well-dressed (i.e., pretty); *oura*, tail, referring to conspicuous triangular spot on caudal fin

Compsura gorgonae (Evermann & Goldsborough 1909)
of Gorgona, Panama Canal Zone, type locality

Compsura heterura Eigenmann 1915
heteros, different; *oura*, tail, presumably referring to scaled caudal-fin base on males, unscaled on females

Ctenocheirodon Malabarba & Jerep 2012
c*ten-,* comb, referring to “ventral procurrent caudal-fin arrangement of males,” i.e., a ctenoid *Cheirodon*

Ctenocheirodon pristis Malabarba & Jerep 2012
saw, referring to “projected ventral procurrent caudal-fin rays along the ventral margin of the caudal peduncle”

Heterocheirodon Malabarba 1998
heteros, different, referring to absence of sexual dimorphism on ventral procurrent caudal-fin rays as found in other cheirodontine genera, i.e., a different *Cheirodon*

Heterocheirodon jacuiensis Malabarba & Bertaco 1999
-ensis, suffix denoting place: Rio Jacui, Cachoeira do Sul, Brazil, type locality (also occurs in Uruguay)
Heterocheirodon yatai (Casciotta, Miquelarena & Protogino 1992)
derived from Guaraní word for palm tree, referring to Butia yatay, a palm tree dominant at type locality (Entre Ríos, Argentina)

Kolpotocheirodon Malabarba & Weitzman 2000
kolpotos, folded, referring to caudal organ formed by hypertrophied dermal folds along caudal-fin rays; cheirodon, referring to placement in subfamily Cheirodontinae

Kolpotocheirodon figueiredoi Malabarba, Lima & Weitzman 2004
in honor of ichthyologist José Lima de Figueiredo, Museu de Zoologia da Universidade de São Paulo

Kolpotocheirodon theloura Malabarba & Weitzman 2000
thele, nipple; oura, tail, referring to papillae on ventral lobe of caudal fin

Macropsobrycon Eigenmann 1915
macro-, long and ops, face, i.e., with a long face, referring to large maxillary, nearly as long as eye; brycon, generalized term used in generic names of many characiform fishes, derived from bryco, to bite, gnash teeth or eat greedily, originally an allusion to fully toothed maxillae

Macropsobrycon uruguayanae Eigenmann 1915
of Uruguayana, Rio Grande do Sul, Brazil, type locality (also occurs in Argentina and Uruguay)

Macropsobrycon xinguensis Géry 1973
-ensis, suffix denoting place: Xingú River basin, Brazil, where it is endemic [Incertae sedis in Characidae, likely belongs in a different genus]

Nanocheirodon Malabarba 1998
nano, dwarf, referring to small size (mature at 15 mm SL) of adult N. insignis, i.e., a dwarf Cheirodon

Nanocheirodon insignis (Steindachner 1880)
conspicuous, allusion not explained, probably referring to conspicuous caudal spot

Odontostilbe Cope 1870
odontos, tooth; stilbe, lamp or mirror (i.e., shining), allusion not explained, but since Cope in the same paper used the name stilbe for Tetragnopotamus (now Astyanax) stilbe, which has a “very distinct” silver lateral band, it is reasonable to assume that the second part of this name also applies to coloration (“Olive silvery, with a silver band … Cheeks silvery”); Eigenmann (1915) suggests the name refers to the “brilliant” teeth of O. fugitiva, but we fail to see how that adjective applies to teeth described as “broadly spatulate and crenate”

Odontostilbe avanhandava Chuctaya, Bührnheim & Malabarba 2018
named for Salto (falls) do Avanhandava (meaning “man who speaks the Nhandeva dialect”), rio Tietê (São Paulo State, Brazil), locality of the oldest known specimen, collected by John D. Haseman in 1908; the falls were flooded by the Nova Avanhandava Hydroelectric Power Dam and no longer exist

Odontostilbe dialeptura (Fink & Weitzman 1974)
dialeptos, distinguishable; oura, tail, referring to recurved bony hooks on lower caudal-fin lobe and peduncle scolation of males

Odontostilbe dierythrura Fowler 1940
di-, two; erythros, red; oura, tail, referring to “brilliant vermilion” color at base of each caudal lobe

Odontostilbe ecuadorensis Bührnheim & Malabarba 2006
-ensis, suffix denoting place: Ecuador, type locality (occurs along Ecuador-Peru border)

Odontostilbe euspilurus (Fowler 1945)
eu-, well; spilos, blot (i.e., ink blot); urus, tail, referring to large black basal spot on caudal fin

Odontostilbe fugitiva Cope 1870
fleeing or flying, allusion not explained nor evident

Odontostilbe litoris (Géry 1960)
littoral (i.e., close to shore), presumably referring to distribution in coastal French Guiana

Odontostilbe microcephala Eigenmann 1907
micro-, small; cephalus, head, referring to “very small, slightly convex” head

Odontostilbe mitoptera (Fink & Weitzman 1974)
mitos, thread; ptera, fin, referring to threadlike extensions on dorsal and pelvic fins

Odontostilbe nareuda Bührnheim & Malabarba 2006
referring to rio Nareuda, Pando, Bolivia, type locality (also occurs in Brazil)

Odontostilbe pao Bührnheim & Malabarba 2007
named for the Pao River, Apure-Orinoco River basin, Venezuela, type locality
**Odontostilbe paraguayensis** Eigenmann & Kennedy 1903  
-ensis, suffix denoting place: Paraguay, referring to type locality in Asunción (also occurs in Argentina and Brazil)

**Odontostilbe parecis** Büchner & Malabarba 2006  
referring to the Chapada dos Parecis, a plateau situated east of the Guaporé tributaries, Brazil, type locality

**Odontostilbe pulchra** (Gill 1858)  
beautiful, presumably referring to coloration: greenish yellow body with a silvery lateral band, white dorsal and anal fins tinted with red, bright golden patches on operculum, and red or yellow blotches above and beneath black caudal spot

**Odontostilbe roloffi** Géry 1972  
in honor of German aquarist Erhard Roloff (1903-1980), who collected type and others described in Géry’s monograph

**Odontostilbe splendida** Bührnheim & Malabarba 2007  
splendid, grand or admirable, allusion not explained, perhaps attractively colored like its sympatric congener, *O. pulchra*

**Odontostilbe weitzmani** Chuctaya, Bührnheim & Malabarba 2018  
in honor of Smithsonian ichthyologist Stanley H. Weitzman (1927-2017), for his work on the systematics of neotropical characiforms, particularly of the characid subfamily Cheirodontiniae

**Prodontocharax** Eigenmann & Pearson 1924  
pro-, in front of, odontos, tooth, allusion not explained, perhaps referring to teeth on maxillary, by which it differs from the “closely related” *Parechthys* (Aphyoditeiniae), Charax, typical genus of the Characiformes, from Greek word meaning “palisade of pointed sticks,” referring to densely packed sharp teeth, now a common root-name formation in the order

**Prodontocharax allenii** Böhlike 1953  
in honor of zoologist William Ray Allen (1885-1955), University of Kentucky, for his contributions to the knowledge of South American fishes (he also collected type)

**Prodontocharax howesi** (Fowler 1940)  
in honor of “Mr. Arthur Howes” (although “Gordon Howes” is credited with collecting type and other fishes during a 1937 expedition to Bolivia)

**Prodontocharax melanotus** Pearson 1924  
melanos, black; notos, back, probably referring to large black irregular spot on first five rays of dorsal fin

**Protocheirodon** Vari, Melo & Oliveira 2016  
proto, first or earliest form of, referring to phylogenetic position of *P. pi* as sister to all other members of the Cheirodontiniae

**Protocheirodon pi** (Vari 1978)  
referring to shape of swimbladder, which is formed like the Greek letter π

**Pseudocheirodon** Meek & Hildebrand 1916  
pseudo-, False, referring to its close relationship with Cheirodon

**Pseudocheirodon arnoldi** (Boulenger 1909)  
in honor of German aquarist Johann Paul Arnold (1869-1952), who sent type to Boulenger from specimens “which have been or are still living in Mr. Arnold’s aquarium at Hamburg”

**Pseudocheirodon terrabae** Bussing 1967  
of the Rio Grande de Térraba basin, Costa Rica, where it is endemic

**Saccoderma** Schultz 1944  
sakke, bag; derma, skin or hide, referring to dermal sac on caudal fin

**Saccoderma hastata** (Eigenmann 1913)  
armed with a spear, presumably referring to retrorse hooks on anal-fin rays

**Saccoderma melanostigma** Schultz 1944  
melanos, black; stigma, spot or mark, referring to black caudal spot

**Saccoderma robusta** Dahl 1955  
robust or full-bodied, allusion not explained nor evident, perhaps referring to deeper body compared to *S. falcata* (a species inquirenda) described in same paper

**Serrapinnus** Malabarba 1998  
serra, saw; pinnus, fin, referring to peculiar shape of anal-fin rays of adult males

**Serrapinnus aster** Malabarba & Jerep 2014  
star, referring to star-shaped ventral profile of the set of hypertrophied procurent caudal-fin rays present in mature males

**Serrapinnus calliurus** (Boulenger 1900)  
calli-, beautiful; urus, tail, presumably referring to large black spot at base of tail and/or white patches on caudal-fin lobes
Serrapinnus gracilis (Géry 1960)
slender, more elongated and compressed than other Cheirodon (original genus) species

Serrapinnus heterodon (Eigenmann 1915)
heteros, different; odon, tooth, allusion not explained, possibly referring to variable number of maxillary teeth (1-4) based on geographic location

Serrapinnus kriegi (Schindler 1937)
in honor of German zoologist Hans Krieg (1888-1970), who helped collect type

Serrapinnus lucindai Malabarba & Jerep 2014
in honor of Brazilian ichthyologist Paulo Henrique Franco Lucinda, Universidade Federal do Tocantins (Porto Nacional, Brazil), for his contribution to the taxonomy of neotropical freshwater fishes, mainly those of the rio Tocantins basin

Serrapinnus malabarbai Jerep, Dagosta & Ohara 2018
in honor of Luiz Roberto Malabarba, Universidade Federal do Rio Grande do Sul (Porto Alegre, Brazil), for his “great” contribution to our knowledge on the Cheirodontinae and other neotropical freshwater fishes

Serrapinnus microdon (Eigenmann 1915)
micro-, small; odon, tooth, presumably referring to narrow premaxillary teeth

Serrapinnus micropterus (Eigenmann 1907)
micro-, small; pterus, fin, presumably referring to short pectoral fin, just reaching ventral fin

Serrapinnus notomelas (Eigenmann 1915)
notos, back; melas, black, presumably referring to black base of dorsal fin and/or its black anterior rays

Serrapinnus piaba (Lütken 1875)
a local Brazilian name applied to various characiform fishes, presumably including this one as well; today piaba is often applied to small ornamental characins popular in the aquarium trade

Serrapinnus potiguar Jerep & Malabarba 2014
a term traditionally used in Brazil to refer to someone born in the Rio Grande do Norte State, where it is endemic

Serrapinnus sterbai Zarske 2012
in honor of Zarske’s teacher, Günther Sterba (b. 1922), zoologist and aquarist, University of Leipzig, on the occasion of his 90th birthday

Serrapinnus tocantinensis Malabarba & Jerep 2014
-ensis, suffix denoting place: rio Tocantins-Araguaia basin, Brazil, where it is endemic

Serrapinnus zanatae Jerep, Camelier & Malabarba 2016
in honor of Brazilian ichthyologist Angela Maria Zanata (Federal University of Bahia), for her great contribution to our knowledge of neotropical freshwater fishes, and for collecting this new species