

Order SILURIFORMES

Banjo Catfishes

Family **ASPREDINIDAE**

Adams 1854



*Acanthobunocephalus scruggsi*, holotype, 21.7 mm SL. From: Carvalho, T. P. and R. E. Reis 2020. A new miniature species of *Acanthobunocephalus* (Siluriformes: Aspredinidae) from the lower Purus River basin, Amazon Basin, Brazil. *Copeia* 108 (2): 347–357.

Subfamily **PSEDOBUNOCEPHALINAE**

Carvalho, Arce H., Reis & Sabaj 2018

***Acanthobunocephalus***

Friel 1995

*acantho-*, from *ákantha* (Gr. ἄκανθα), thorn or spine, referring to rigid, locking dorsal spine, i.e., a spiny *Bunocephalus*

*Acanthobunocephalus nicoi* Friel 1995 in honor of American ichthyologist Leo G. Nico, U.S. Geological Survey, who collected holotype

*Acanthobunocephalus scruggsi* Carvalho & Reis 2020 in honor of Earl Scruggs (1924–2012), a prominent American banjo player known for popularizing a three-finger banjo picking style, known as the “Scruggs style,” which is characteristic of bluegrass music; name also alludes to the common name “banjo catfishes” and the “remarkable resemblance” of this species with this musical instrument

***Pseudobunocephalus***

Friel 2008

*pseudo-*, from *pseudēs* (Gr. ψεύδης), false or deceptive, referring to fact that members of this genus have previously been mistaken for juveniles of various species of *Bunocephalus*

*Pseudobunocephalus amazonicus* (Mees 1989) *-icus* (L.), belonging to: Amazon River, referring to distribution in the middle Amazon basin

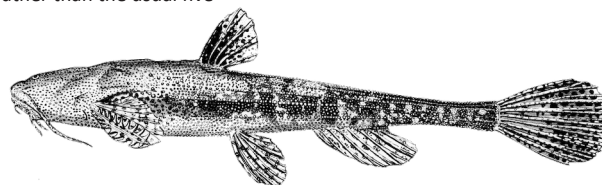
(including Rio Madeira) of Bolivia and Brazil

*Pseudobunocephalus bifidus* (Eigenmann 1942) Latin for cleft, parted or split, referring to bifid postmental barbels

*Pseudobunocephalus iheringii* (Boulenger 1891) in honor of German-Brazilian zoologist Hermann von Ihering (1850-1930), who helped collect holotype

*Pseudobunocephalus lundbergi* Friel 2008 in honor of John G. Lundberg (b. 1942), Academy of Natural Sciences of Philadelphia, Friel’s Ph.D. advisor, for numerous contributions to neotropical ichthyology and the systematics of siluriform and gymnotiform fishes

*Pseudobunocephalus quadriradiatus* (Mees 1989) *quadri-*, from *quatuor* (L.), four; *radiatus* (L.), rayed, referring to four-rayed pectoral fin rather than the usual five



*Pseudobunocephalus bifidus*, holotype. From: Eigenmann, C. H. and W. R. Allen. 1942. Fishes of Western South America. I. The intercordilleran and Amazonian lowlands of Peru. II. The high pampas of Peru, Bolivia, and northern Chile. With a revision of the Peruvian Gymnotidae, and of the genus *Orestias*. University of Kentucky. i–xv + 1–494, Pls. 1–2.

***Pseudobunocephalus rugosus* (Eigenmann & Kennedy 1903)** Latin for wrinkled or shriveled, presumably referring to “very conspicuous” warts all over its skin

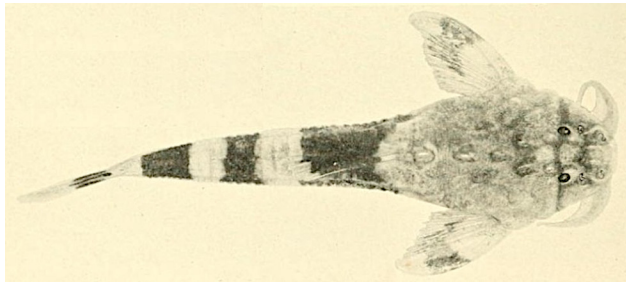
***Pseudobunocephalus timbira* Leão, Carvalho, Reis & Wosiacki 2019** named for the Timbira indigenous groups who live in the area (lower Tocantins and Mearim river basins in Maranhão, Pará and Tocantins states, Brazil) where this catfish occurs

Small Banjo Catfishes  
**Subfamily HOPLOMYZONTINAE**  
 Fernández-Yépez 1950

***Dupouyichthys***  
 Schultz 1944

in honor of Venezuelan anthropologist-biologist Walter Dupouy (1906–1978), director of the Museo de Ciencias Naturales (Caracas), who was “especially helpful” in regard to Schultz’ work with fishes; *ichthys* (Gr. ἰχθύς), fish

***Dupouyichthys sapito* Schultz 1944** common name of this catfish in the Maracaibo Basin, Venezuela



*Dupouyichthys sapito*. From: Schultz, L. P. 1944. The catfishes of Venezuela, with descriptions of thirty-eight new forms. Proceedings of the United States National Museum 94 (3172): 173–338, Pls. 1–14.

***Ernstichthys***

Fernández-Yépez 1953

in honor of Prussian-born Venezuelan biologist Adolfo (also spelled Adolf) Ernst (1832–1899), Chair of Natural Science at the Central University of Venezuela; *ichthys* (Gr. ἰχθύς), fish

***Ernstichthys anduzei* Fernández-Yépez 1953** in honor of Pablo J. Anduze (1902–1989), Venezuelan explorer, ethnologist and medical entomologist, and later governor of Amazonas State, Venezuela, whom Fernández-Yépez described as a “tireless researcher” (translation)

***Ernstichthys intonsus* Stewart 1985** Latin for unshaved or bearded, referring to “extreme proliferation of barbels”

***Ernstichthys megistus* (Orcés V. 1961) mégistos** (Gr. μέγιστος), largest, referring to its large size (up to 67 mm SL) compared with *Dupouyichthys sapito* and *Hoplomyzon atrizona*, its presumed congeners at the time

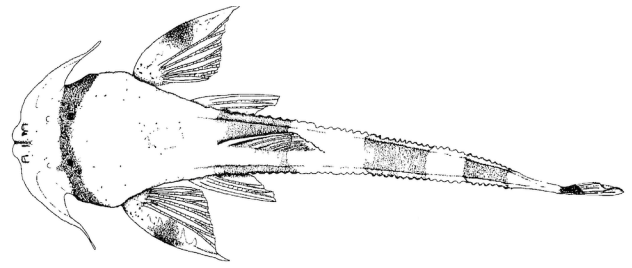
***Ernstichthys taquari* Dagosta & de Pinna 2021** named for upper Rio Taquari drainage, Mato Grosso do Sul, Brazil, where type locality (Rio Taquarizinho) is situated, from the Tupí word *takwa’ri*, combining *ta’kwara* (a common name for bamboo-like plants of family Poaceae) and a diminutive “i”

***Hoplomyzon***

Myers 1942

*hóplon* (Gr. ὄπλον), shield or armor, referring to body of *H. atrizona* “armed with six longitudinal series of bony bucklers”; *myzon*, Latinized from *mýzō* (Gr. μύζω), to suck, presumably referring to resemblance to Asian (*Exostoma*) and Neotropical (*Astroblepus*) catfishes (as noted by Myers) that have sucker mouths (a resemblance mainly due to adnate maxillary barbels in *Hoplomyzon*<sup>1</sup>)

***Hoplomyzon atrizona* Myers 1942** *ater*, from *ater* (L.), black; *zona* (L.), belt or girdle (i.e., band), referring to three black crossbands on body, “very bold and striking”



*Hoplomyzon sexpapilostoma*, holotype, ventral view. Illustration by Crispulo Marrero. From: Taphorn, D. C. and C. Marrero. 1990. *Hoplomyzon sexpapilostoma*, a new species of Venezuelan catfish (Pisces: Aspredinidae), with comments on the Hoplomyzontini. Fieldiana Zoology (New Series) 61: 1–9.

***Hoplomyzon cardosoi* Carvalho, Reis & Friel 2017** in honor and in memory of Alexandre Rodrigues Cardoso, a “dear colleague who prematurely passed away ... for his humbleness, positive attitude, and dedicated friendship,” and for his contributions to the taxonomy of neotropical fishes, including the family Aspredinidae

***Hoplomyzon papillatus* Stewart 1985** Latin for papillose (with buds), referring to numerous short, papillae-like mental barbels

***Hoplomyzon sexpapilostoma* Taphorn & Marrero 1990** *sex* (L.), six; *papilo* (=papilla, L.), bud or tubercle; *stóma* (Gr. στόμα), mouth, referring to six buccal papillae (four on upper lip, one at each corner of mouth)

***Micromyzon***

Friel & Lundberg 1996

*micro-*, from *mikrós* (Gr. μικρός), small, referring to size (<16 mm SL) of *M. akamai*; *myzon*, Latinized from *mýzō* (Gr. μύζω), to suck, but here referring to *Hoplomyzon*, type genus of tribe *Hoplomyzontini*

***Micromyzon akamai* Friel & Lundberg 1996** in honor of Brazilian ichthyologist Alberto Akama, Museu Paraense Emílio Goeldi (Belém, Pará), for his “enthusiastic help” in collecting the type series

***Micromyzon orinoco* Carvalho, Lundberg, Baskin, Friel & Reis 2016** named for the lower Río Orinoco, Venezuela, where it occurs



*Micromyzon orinoco*, paratype, 14.8 mm SL. From: Carvalho, T. P., J. G. Lundberg, J. N. Baskin, J. P. Friel and R. E. Reis. 2016. A new species of the blind and miniature genus *Micromyzon* Friel and Lundberg, 1996 (Siluriformes: Aspredinidae) from the Orinoco River: describing catfish diversity using high-resolution computed tomography. Proceedings of the Academy of Natural Sciences of Philadelphia 165 (1): 37–53.

Banjo Catfishes

**Subfamily ASPREDININAE**

Adams 1854

***Amaralia***

Fowler 1954

-*ia* (L. suffix), belonging to: Brazilian herpetologist (and anti-venom serum expert) Afrânio do Amaral (1894–1982), in honor of his work in Brazilian natural history

***Amaralia hypsiura* (Kner 1855)** high-tailed, from *hypsēlōs* (Gr. ὑψηλός), high or tall, and *ourá* (Gr. οὐρά), tail, referring to its thick (or high) caudal peduncle

<sup>1</sup> John P. Friel, Alabama Museum of Natural History, pers. comm.



*Amaralia oviraptor*, paratype, 108 mm SL. Friel, J. P. and T. P. Carvalho, 2016. A new species of *Amaralia* Fowler (Siluriformes: Aspredinidae) from the Paraná-Paraguay river basin. Zootaxa 4088 (4): 531–546.

*Amaralia oviraptor* Friel & Carvalho 2016 *ovi-*, from *ovum* (L.), egg; *rap-tor* (L.), robber or plunderer, often used as a term for predator, referring to apparent dietary specialization of *Amaralia* on eggs and developing embryos of other catfishes

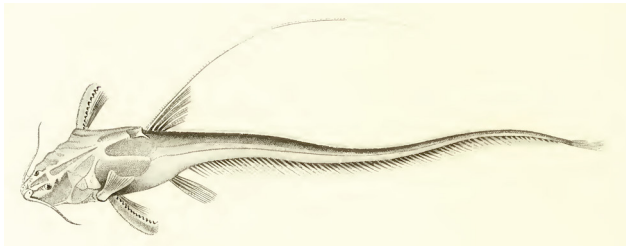
### Aspredinichthys

Bleeker 1858

*Aspredo*, type genus of family and former genus of *A. tibicen*; *ichthys* (Gr. ἰχθύς), fish

*Aspredinichthys filamentosus* (Valenciennes 1840) Latin for filamentous, referring to elongate first ray of dorsal fin

*Aspredinichthys tibicen* (Valenciennes 1840) Latinization of *trompeter*, or *trompetfisi* (trumpeter), Dutch-Surinamese local name for this and other aspredinid catfishes, alluding to the sound they make when taken out of the water<sup>2</sup>



*Aspredinichthys filamentosus*. Illustration by Jacques Reyne Isidore Acarie-Baron. From: Cuvier, G. and A. Valenciennes. 1840. Histoire naturelle des poissons. Tome quinzième. Suite du livre dix-septième. Siluroïdes. v. 15: i–xxxii + 1–540, Pls. 421–455. [Valenciennes authored volume.]

### Aspredo

Scopoli 1777

presumably tautonymous with *Silurus aspredo* (Scopoli [ex Gronow] did not indicate species), Latin for roughness, presumably referring to its tuberculate skin

*Aspredo aspredo* (Linnaeus 1758) Latin for roughness, presumably referring to its tuberculate skin

### Bunocephalus

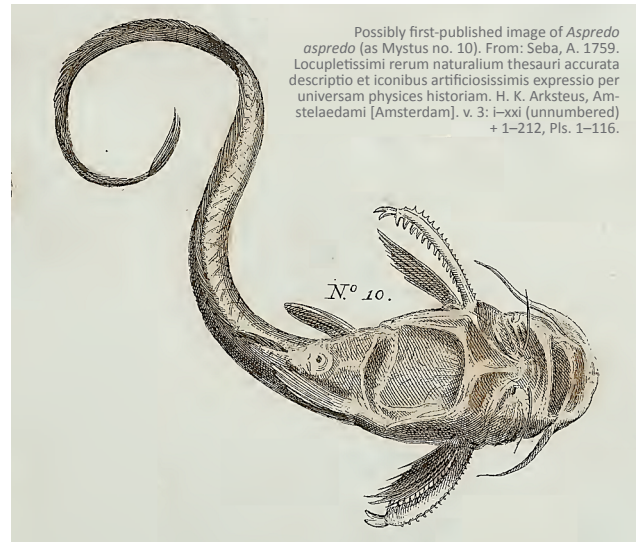
Kner 1855

*buno-*, from *bounós* (Gr. βουνός), mound or knob; *cephalus*, from *kephalé* (Gr. κεφαλή), head, referring to rounded cusps or bumps on head of *B. verrucosus*

*Bunocephalus aleuropsis* Cope 1870 etymology not explained, perhaps *a-* (Gr. ἄ), negative prefix, e.g., not; *leurós* (Gr. λευρός), smooth; *opsis* (Gr. ὄψις), appearance, referring to five series of “wartlets” each side of tail (another interpretation: *áleuron* (Gr. ἄλευρον), flour and *opsis*, appearance, referring to “head densely punctulated with white”)

*Bunocephalus aloikae* Hoedeman 1961 of Aloiké village, French Guiana, type locality

*Bunocephalus amaurus* Eigenmann 1912 *amaurós* (Gr. ἀμαυρός), dark, referring to its dark-chocolate coloration



Possibly first-published image of *Aspredo aspredo* (as *Mystus* no. 10). From: Seba, A. 1759. Locupletissimi rerum naturalium thesauri accurata descriptio et iconibus artificiosissimis expressio per universam physices historiam. H. K. Arksteus, Amstelædami [Amsterdam]. v. 3: i–xxi (unnumbered) + 1–212, Pls. 1–116.

*Bunocephalus chamaizelus* Eigenmann 1912 etymology not explained, perhaps *chamai* (Gr. χαμαί), on the ground, and *zélós* (Gr. ζήλος), zeal or fervor, referring to its sand-burrowing habits, described as having a “sand-like” general appearance

*Bunocephalus colombianus* Eigenmann 1912 *-anus* (L.), belonging to: Colombia, where it is endemic

*Bunocephalus coracoideus* (Cope 1874) etymology not explained, presumably adjectival form of coracoid, referring to longer postcoracoids compared with *B. melas* (= *aleuropsis*)

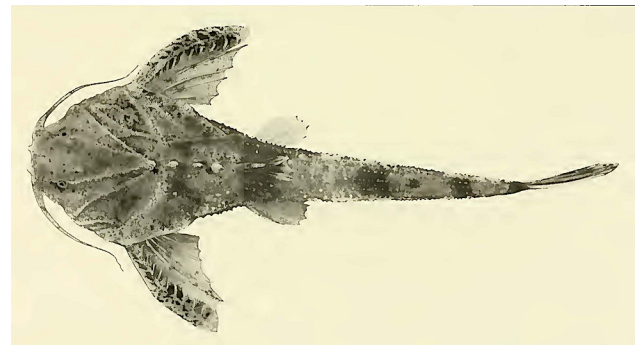
*Bunocephalus doriae* Boulenger 1930 in honor of Italian herpetologist Giacomo Doria (1840–1913), “eminent Director of the Genoa Civic Museum” (translation) [although named after a man, “*ae*” is an acceptable way to form a genitive from a masculine noun that ends in “*a*”]

*Bunocephalus erondinae* Cardoso 2010 in memory of the author’s mother, Erondina Rodrigues Cardoso

*Bunocephalus hartti* Carvalho, Cardoso, Friel & Reis 2015 in honor of Charles Frederick Hartt (1840–1878), Canadian geologist, paleontologist and naturalist; his notable accomplishments include the publication of “Geology and physical geography of Brazil” (1870), and serving as founder and director of the section of geology at the Museu Nacional of Brazil from 1866 to 1867

*Bunocephalus hertzi* Esguicero, Castro & Pereira 2020 in honor of Hertz Figueiredo dos Santos, Laboratório de Ictiologia de Ribeirão Preto (Universidade de São Paulo), co-discoverer of this species, “in deep appreciation for his approximately three decades of unflinching contribution” to the study of neotropical fishes

*Bunocephalus knerii* Steindachner 1882 patronym not identified but clearly in honor of Austrian ichthyologist Rudolf Kner (1810–1869), who was Steindachner’s teacher and friend



*Bunocephalus chamaizelus*, holotype. From: Eigenmann, C. H. 1912. The freshwater fishes of British Guiana, including a study of the ecological grouping of species, and the relation of the fauna of the plateau to that of the lowlands. Memoirs of the Carnegie Museum 5 (1): i–xxii + 1–578, Pls. 1–103.

<sup>2</sup> Isaïc J. H. Isbrücker, Zoölogisch Museum Amsterdam, pers. comm.

***Bunocephalus larai* Ihering 1930** in honor of Rodolpho Lara Campos, sponsor of expedition during which holotype was collected

***Bunocephalus minerim* Carvalho, Cardoso, Friel & Reis 2015** typically regional way of pronouncing the Portuguese word *mineirinho*, diminutive of *mineiro*, a person from Minas Gerais, Brazil, referring to region where it is found and to its relatively small size compared with congeners

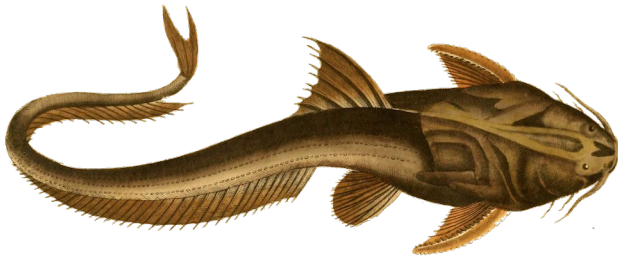
***Bunocephalus verrucosus* (Walbaum 1792)** Latin for covered with verrucae, or warts, referring to warty tubercles on body

### ***Platystacus***

**Bloch 1794**

*platýs* (Gr. πλατύς), flat, referring to short and flat body;  
*acus* (L.), needle, referring to long and compressed tail

***Platystacus cotylephorus* Bloch 1794** cup-bearing, from *cotyle*, from *kotúlē* (Gr. κοτύλη), cup or bowl, and *phoreús* (Gr. φορεύς), bearer or carrier, referring to cup-like hollows (now called cotylephores) on abdomen (to which developing embryos are attached, a fact not known at the time)



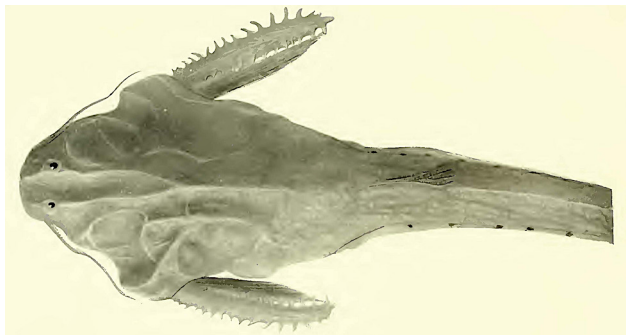
*Platystacus cotylephorus*. Illustration by Johann Friedrich Hennig. From: Bloch, M. E. 1794. Naturgeschichte der ausländischen Fische. Berlin. v. 8: i–iv + 1–174, Pls. 361–396.

### ***Pterobunocephalus***

**Fowler 1943**

*pterus*, from *pterón* (Gr. πτερόν) or *ptéryx* (πτέρυξ), wing or fin, referring to large anal fin of *Bunocephalus* (subgenus *Pterobunocephalus*) *albifasciatus* (= *P. depressus*)

***Pterobunocephalus depressus* (Haseman 1911)** Latin for pressed down, referring to its “greatly depressed” body



*Pterobunocephalus depressus*, dorsal view of head and upper body. From: Haseman, J. D. 1911. Descriptions of some new species of fishes and miscellaneous notes on others obtained during the expedition of the Carnegie Museum to central South America. Annals of the Carnegie Museum 7 (17): 315–328, Pls. 46–52.

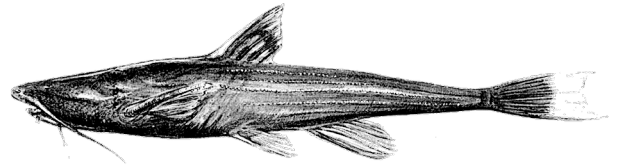
***Pterobunocephalus dolichurus* (Delsman 1941)** long-tailed, from *dolichós* (Gr. δολιχός), long, and *urus*, from *ourá* (Gr. ούρά), tail, referring to its “very long” tail relative to others then classified in the short-tailed subfamily Bunocephalinae

### ***Xylophius***

**Eigenmann 1912**

etymology not explained, perhaps from *xylódis* (Gr. ξυλώδης), woody, possibly referring to cryptic coloration of *X. magdalenae*, which can be said to resemble a small piece of wood

***Xylophius anachoretetes* Figueiredo & Britto 2010** *anachōrētēs* (Gr. ἀναχωρητής), “one that retired from the world” (i.e., hermit or recluse), referring to the rarity of the two known specimens, each one found



*Xylophius barbatus*. From: Alonso de Arámburu, A. S. and R. H. Arámburu. 1962. Una nueva especie de *Xylophius* de la Argentina (Siluriformes, Bunocephalidae). Physis (Buenos Aires) 23 (65): 219–222.

alone and far apart

***Xylophius barbatus* Alonso de Arámburu & Arámburu 1962** Latin for bearded, referring to 30 dendritic papillae on lower lip

***Xylophius kryptos* Taphorn & Lilyestrom 1983** *kryptós* (Gr. κρυπτός), hidden, referring to its difficult-to-sample habitat, at the “bottom of turbulent rivers with strong currents, in total darkness” (translation)

***Xylophius lepturus* Orcés V. 1962** thin-tailed, from *leptós* (Gr. λεπτός), fine or thin, and *urus*, from *ourá* (Gr. ούρά), tail, referring to comparatively slender caudal peduncle, its depth about 1/10 of SL

***Xylophius magdalenae* Eigenmann 1912** of the Magdalena River basin, Colombia, where it is endemic

***Xylophius melanopterus* Orcés V. 1962** black-finned, from *mélanos* (Gr. μέλανος), genitive of *mélas* (μέλας), black, and *pterus*, from *pterón* (Gr. πτερόν) or *ptéryx* (πτέρυξ), wing or fin, referring to its predominantly black fins

***Xylophius sofiae* Sabaj Pérez, Carvalho & Reis 2017** in honor of the first author’s daughter, Sofia, “for inspiring wisdom in her father”