

Order CYPRINIFORMES

Freshwater Gudgeons

## Family **GOBIONIDAE**

Bleeker 1863



*Biwia yodoensis*, mature male, 57.8 mm SL. From: Kawase, S. and K. Hosoya. 2010. *Biwia yodoensis*, a new species from the Lake Biwa / Yodo River basin, Japan (Teleostei: Cyprinidae). *Ichthyological Exploration of Freshwaters* 21 (1): 1–7.

### Subfamily **GOBIONINAE**

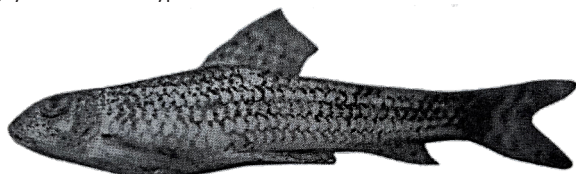
Bleeker 1863

#### **Abbottina**

Jordan & Fowler 1903

-*ina* (L.), belonging to: American zoologist James Francis Abbott (1876–1926), Japanese Military Academy at Etajima, who assisted the senior author and John Otterbein Snyder in collecting fishes in Japan

***Abbottina binhi* Nguyen 2001** in honor of Binh Nguyễn, who helped Nguyen collect holotype<sup>1</sup>



*Abbottina binhi*. From: Nguyen, V. H. and S. V. Ngô. 2001. *Cá nước ngọt Việt Nam. Tập 1. Họ cá chép (Cyprinidae)*. [Freshwater fishes of Viet Nam. Volume I. Family Cyprinidae]. Nhà Xuất Bản Nông Nghiệp [Agriculture Publishing House], Hanoi. 1–622.

***Abbottina lalinensis* Huang & Li 1995** -*ensis*, Latin suffix denoting place: Lalin, Heilongjiang Province, China, type locality [may belong in *Microphysogobio*<sup>2</sup>]

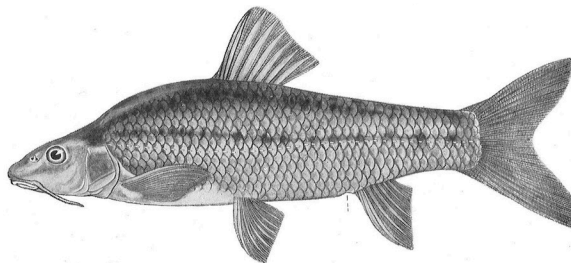
***Abbottina rivularis* (Basilewsky 1855)** Latin for of a small brook or rivulet, “occurring in the pools of a brook” (translation)

#### **Acanthogobio**

Herzenstein 1892

*acanthus* (L.), from *ákantha* (Gr. ἄκανθα), thorn, referring to strong osseous spine on dorsal fin, i.e., a spiny or thorny *Gobio*

***Acanthogobio guentheri* Herzenstein 1892** in honor of German-born British ichthyologist-herpetologist Albert Günther (1830–1914)



Possibly first-published image of *Acanthogobio guentheri*, 85 years after its description. From: Lu, Y.-L., P.-Q. Luo and Y.-Y. Chen. 1977. *Gobioninae*. Pp. 439-549, Pls. 66-102. In: X.-W. Wu (ed.) *The cyprinid fishes of China*. Vol. 2. Science Press, Peking.

#### **Biwia**

Jordan & Fowler 1903

-*ia* (L. suffix), belonging to: Lake Biwa, where *B. zezera* occurs

***Biwia springeri* (Bănărescu & Nalbant 1973)** in honor of American ichthyologist Victor G. Springer (1928–2022), U.S. National Museum, who collected holotype

***Biwia tama* Oshima 1957** named for Tama River, Denyenchofu, Japan, type locality

***Biwia yodoensis* Kawase & Hosoya 2010** -*ensis*, Latin suffix denoting place: Yodo River basin (including Lake Biwa), Japan, where it is endemic

***Biwia zezera* (Ishikawa 1895)** Japanese name of a small minnow from Zeze, a village near Lake Biwa, type locality

<sup>1</sup> Ngo Sy Van, Research Institute for Aquaculture No. 1, Bắc Ninh, Vietnam, pers. comm.

<sup>2</sup> Huan, H.-E., Y.-H. Li, K. Cao, M.-Y. Li and C.-Z. Fu. 2017. Taxonomy and phylogenetic relationships of the genus *Abbottina* fishes in the subfamily Gobionidae. *Acta Hydrobiologica Sinica* 41 (4): 843–852.

## Gobio

Cuvier 1816

tautonymous with *Cyprinus gobio* Linnaeus 1758, from the Greek *kóttos* (κόττος), *kóthos* (κῶθος) and a few similar words, denoting a bulging head, used as a name for small freshwater fishes with a large head (*Gobius*, goby, and *Cottus*, sculpin, which some early naturalists conflated with freshwater gudgeons, have the same etymological source)

***Gobio acutipinnatus* Men'shikov 1939** *acutus* (L.), sharp or pointed; *pinnatus* (L.), winged or finned, referring to its more-pointed pectoral and ventral fins compared with *G. g. gobio*

***Gobio alverniae* Kottelat & Persat 2005** of Alvernia, a Roman province inhabited by the Arverne tribe, approximately corresponding to the Auvergne region of France (Dept. Haute-Lorrie), type locality

***Gobio artvinicus* Turan, Japoshvili, Aksu & Bektaş 2016** *-icus* (L.), belonging to: Artvin, Turkey, city and eponymous province, type locality

***Gobio balcanicus* Dimovski & Grupche 1977** *-icus* (L.), belonging to: Balkan Peninsula, where type locality (Vardar River basin of North Macedonia), is situated

***Gobio baliki* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2017** in honor of ichthyologist Süleyman Balık, for his contributions to the knowledge of Turkish fishes

***Gobio brevicirris* Fowler 1976** *brevis* (L.), short; *cirris*, (L.), tuft of hair or fringe, referring to shorter barbels (reaching to, not beyond, anterior eye margin) compared with Black and Caspian Sea basin congeners (name coined by Berg in 1914 but not validly published)

***Gobio bulgaricus* Drensky 1926** *-icus* (L.), belonging to: Bulgaria, where type locality (Maritsa, a village) is situated

***Gobio carpathicus* Vladikov 1925** *-icus* (L.), belonging to: Carpathian Mountain region of Central Europe, where it occurs

***Gobio caucasicus* Kamensky 1901** *-icus* (L.), belonging to: northern Caucasus region (or Caucasia), where type locality (Rioni River basin, Georgia) is situated

***Gobio coriparoides* Nichols 1925** *-oides*, Neo-Latin from *eídos* (Gr. εἶδος), form or shape: *Coripareius* (=Coreius), into which Nichols was "tempted to place this species ... were its teeth not typical of *Gobio*"

***Gobio cynocephalus* Dybowski 1869** dog-headed, from *kynós* (Gr. κύνος), genitive of *kýōn* (κύων), dog, and *kephalé* (Gr. κεφαλή), head, allusion not explained, probably referring to its long snout

***Gobio fahrettini* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2018** in honor of zoologist Fahrettin Küçük, Süleyman Demirel University, for his contribution to the knowledge of fishes in Turkey

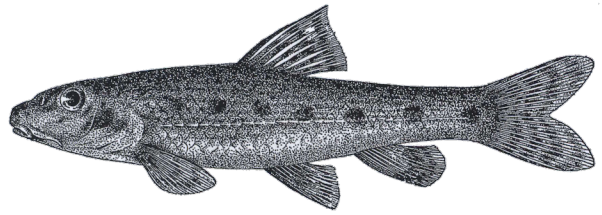
***Gobio feraeensis* Stephanidis 1973** *-ensis*, Latin suffix denoting place: Ferae, ancient town that once stood at type locality, ~25 km away from Veleshtinon, Greece

***Gobio fushunensis* Xie, Li & Xie 2007** *-ensis*, Latin suffix denoting place: Fushun, Liaoning Province, China, where type locality (Hun He ["Muddy"] River) is situated

***Gobio gobio* (Linnaeus 1758)** from the Greek *kóttos* (κόττος), *kóthos* (κῶθος) and a few similar words, denoting a bulging head, used as a name for small freshwater fishes with a large head (*Gobius*, goby, and *Cottus*, sculpin, which some early naturalists conflated with freshwater gudgeons, have the same etymological source)

***Gobio gymnostethus* Ladiges 1960** *gymnós* (Gr. γυμνός), bare or naked; *stéthos* (Gr. στήθος), breast or chest, referring to "mostly" (translation) scaleless throat

***Gobio hettitorum* Ladiges 1960** *-orum*, commemorative suffix (L.), plural: etymology not explained but probably referring to the Hittites (Latin: Hethaei), an ancient Anatolian culture (~1750–1180 BC), presumably referring to its distribution in south-central Turkey



*Gobio balcanicus*. From: Dimovski, A. and R. Grupčel 1977. Études morphologica-systématiques du genre *Gobio* (Pisces, Cyprinidae) en Macédoine. 4. *Gobio gobio balcanicus* n. ssp. de la rivière Vardar. Godišen Zbornik Biologija Fakultet na Univerzitetot Kiril i Metodij Skopje" 30: 79–106.

***Gobio holurus* Fowler 1976** full-tailed, from *hólos* (Gr. ὅλος), entire or whole, and *urus*, from *ourá* (Gr. οὐρά), tail, referring to less emarginated (slightly forked) caudal fin compared with *G. lepidolaemus*

***Gobio huanghensis* Luo, Le & Chen 1977** *-ensis*, Latin suffix denoting place: Huang He (Yellow River), which runs through Lanzhou, Gansu Province, China, type locality

***Gobio insuyanus* Ladiges 1960** *-anus* (L.), belonging to: Insuyu Creek, Cihanbeyli, Turkey, type locality

***Gobio intermedius* Battalgiil 1943** Latin for intermediate, referring to intermediate number of throat scales (20–22) between neck and anterior base of back compared with *G. gobio* (14–15) and *G. microlepidotus* (30–35)

***Gobio kizilirmakensis* Turan, Japoshvili, Aksu & Bektaş 2016** *-ensis*, Latin suffix denoting place: Kizilirmak River drainage, Turkey, where type locality (Uluşu Stream) is situated

***Gobio kovatschevi* Chichkoff 1937** in honor of the late Vasily Kovacev, for his research of Bulgarian fishes and especially for his book *Freshwater Fish Fauna of Bulgaria* (1922)

***Gobio krymensis* Bănărescu & Nalbant 1973** *-ensis*, Latin suffix denoting place: southern Crimea (Ukraine and Russia), where it is endemic

***Gobio kubanicus* Vasil'eva 2004** *-icus* (L.), belonging to: Kuban River basin, Russia, where it occurs

***Gobio latus* Anikin 1905** Latin for wide, broad or extensive, allusion not explained nor evident, perhaps referring to higher body depth compared with the similar *G. fluviatilis* (=gobio)

***Gobio lepidolaemus* Kessler 1872** *lepidos* (Gr. λεπίδος), genitive of *lepís* (λεπίς), scale; *laimós* (Gr. λαίμος), throat, referring to its usually scaled throat (naked anteriorly in some specimens)

***Gobio lingyuanensis* Mori 1934** *-ensis*, Latin suffix denoting place: Lingyuan, Liaoning Province, China, type locality

***Gobio lozanoi* Doadrio & Madeira 2004** in honor of Spanish zoologist Luis Lozano Rey (1878–1958), University of Madrid, for his contribution to the knowledge of Iberian freshwater fishes

***Gobio macrocephalus* Mori 1930** big-headed, from *makrós* (Gr. μακρός), long or large, and *kephalé* (Gr. κεφαλή), head, referring to longer head compared with *G. gobio*

***Gobio maeandricus* Naseka, Erk'akan & Küçük 2006** *-icus* (L.), belonging to: Great Menderes River at Likli, Turkey, type locality

***Gobio meridionalis* Xu 1987** Latin for southern, referring to its distribution south of the Yellow River in Henan Province, China

***Gobio microlepidotus* Battalgiil 1942** small-scaled, from *mikrós* (Gr. μικρός), small, and *lepidótos* (Gr. λεπιδωτός), scaly, referring to small throat scales, 30–35 between neck and anterior base of back

***Gobio multipunctatus* Vasil'eva, Mamilov & Sharakhmetov 2023** *multi-* (L.), many; *punctatus* (L.), spotted, referring to number of spots on body "significantly greater" than in other known congeners

***Gobio nigrescens* (Keyserling 1861)** Latin for blackish, presumably referring to 6–7 irregularly shaped, black or brown blotches on back behind dorsal-fin base

***Gobio obtusirostris* Valenciennes 1842** *obtusus* (L.), blunt; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, “characterized by short muzzle, fat and obtuse” (translation)

***Gobio occitaniae* Kottelat & Persat 2005** of Occitanie, the southern part of France, which encompasses most of the range of this species

***Gobio ohridanus* Karaman 1924** *-anus* (L.), belonging to: Lake Ohrid, Republic of Macedonia, type locality

***Gobio rivuloides* Nichols 1925** *-oides*, Neo-Latin from *eídos* (Gr. εἶδος), form or shape: presumably the cyprinodontiform genus *Rivulus*, perhaps referring to flat-topped head

***Gobio sakaryaensis* Turan, Ekmekçi, Luskova & Mendel 2012** *-ensis*, Latin suffix denoting place: Sakarya River, Turkey, one of two rivers (the other being Tozman Stream) where it occurs

***Gobio sarmaticus* Berg 1949** *-icus* (L.), belonging to: Sarmatia, ancient name for territory corresponding to modern southern Russia, the eastern Balkans, and the distribution of this species in Ukraine

***Gobio sibiricus* Nikolskii 1936** *-icus* (L.), belonging to: western Siberia (Russia, Kazakhstan and Mongolia), where it occurs

***Gobio skadarensis* Karaman 1937** *-ensis*, Latin suffix denoting place: Skadar Lake (Montenegro and Albania), type locality

***Gobio soldatovi* Berg 1914** in honor of ichthyologist Vladimir Konstantinovich Soldatov (1875–1941), Moscow Technical Institute of Fishing Industry and Fish Farming, who collected holotype

***Gobio tauricus* Vasil'eva 2005** *-icus* (L.), belonging to: Taurida, Latin name of Crimea, where it is endemic [*G. delyamurei*, published 5–6 days later, is a junior synonym]

***Gobio tchangi* Li 2015** in honor of Tchinlin Tchang (1897–1963), Curator of Zoology, Fan Memorial Institute of Biology

***Gobio tungussicus* Borisov 1928** *-icus* (L.), belonging to: Tunguska, region of eastern Siberia where type locality (Lena River near Zhigansk) is situated

***Gobio volgensis* Vasil'eva, Mendel, Vasil'ev, Lusk & Lusková 2008** *-ensis*, Latin suffix denoting place: Volga River basin (Russia), where it occurs

## ***Gobiobotia***

**Kreyenberg 1911**

*gobio*, gudgeon; *Botia*, an Asian loach, likely reflecting Kreyenberg's provisional placement of *G. pappenheimi* in the loach family Cobitidae

### Subgenus ***Gobiobotia***

***Gobiobotia brevibarba* Mori 1935** *brevis* (L.), short; *barba* (L.), beard, referring to its eight short barbels, shorter than those of *G. pappenheimi*

***Gobiobotia brevisrostris* Chen & Cao 1977** *brevis* (L.), short; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to shorter snout compared with *G. pappenheimi* and *G. tungi*

***Gobiobotia cheni* Bănărescu & Nalbant 1966** in honor of vertebrate zoologist Jianshen (“Johnson”) T. F. Chen (1898–1988), Director, National Taiwan Museum (Taipei), who provided type specimens

***Gobiobotia filifer* (Garman 1912)** *filum* (L.), thread; *fero* (L.), to have or bear, presumably referring to its maxillary barbels, which extend beyond the eye

***Gobiobotia guilingensis* Chen 1989** *-ensis*, Latin suffix denoting place: Guilin, Guangxi Province, China, type locality

***Gobiobotia homalopteroidea* Rendahl 1932** *-oides*, Neo-Latin from *eídos* (Gr. εἶδος), form or shape: generally resembling the loach genus *Homaloptera* (Balitoridae)

***Gobiobotia jiangxiensis* Zhang & Liu 1995** *-ensis*, Latin suffix denoting



*Gobiobotia lii*, holotype, 48.6 mm SL From: Chen, X., M. Wang, L. Cao and E Zhang. 2022. *Gobiobotia lii*, a new species of gudgeon (Teleostei, Gobiionidae) from the middle Chang-Jiang basin, central China, with notes on the validity of *G. nicholsi* Bănărescu & Nalbant, 1966. *Zoosystematics and Evolution* 98 (1): 93–107.

place: where type locality (Xinjiang River) is situated

***Gobiobotia kollerii* Bănărescu & Nalbant 1966** in honor of Austrian zoologist Otto Koller (1872–1950), Naturhistorisches Museum (Vienna), the first ichthyologist to examine specimens of this species (1927)

***Gobiobotia lii* Chen, Wang, Cao & Zhang 2022** in honor of Shi-Zhen Li (1518–1593), a native of Qichun County, China, where holotype and partial paratypes were collected, who, as an old man, is pictured as having a long, white and dense beard, reminiscent of the eight barbels of the genus *Gobiobotia*; Li was a well-known medical scientist in the Ming Dynasty, who compiled the 27-volume *Compendium of Materia Medica*, a valuable reference of traditional Chinese medicine

***Gobiobotia longibarba* Fang & Wang 1931** *longus* (L.), long; *barba* (L.), beard, referring to its long barbels, which extend beyond base of pectoral fin

***Gobiobotia macrocephala* Mori 1935** big-headed, from *makrós* (Gr. μακρός), long or large, and *kephalé* (Gr. κεφαλή), head, referring to its large head, 3.75 in body length

***Gobiobotia meridionalis* Chen & Cao 1977** Latin for southern, described as a southern subspecies of *G. longibarba*

***Gobiobotia naktongensis* Mori 1935** *-ensis*, Latin suffix denoting place: location not indicated, presumably from Naktong (also spelled Nakdong) River basin, South Korea

***Gobiobotia nicholsi* Bănărescu & Nalbant 1966** in honor of John Treadwell Nichols (1883–1958), curator of fishes, American Museum of Natural History, who recognized this species as *G. pappenheimi* in 1928

***Gobiobotia pappenheimi* Kreyenberg 1911** patronym not identified but clearly in honor of Paul Pappenheim (1878–1945), curator of fishes, Royal Museum of Berlin, who authored an addendum to the description reflecting Kreyenberg's uncertainty regarding the familial placement of the genus

***Gobiobotia paucirastella* Zheng & Yan 1986** *paucus* (L.), few or scanty; *rastella*, unnecessarily feminized spelling *rastellus*, diminutive of *rastrum* (L.), rake, referring to fewer number of gill rakers compared with *G. tungi*

***Gobiobotia tungi* Fang 1933** in honor of L. M. Tung, West Lake Museum zoologist and professor at University of Chekiang (Zhejiang), who loaned holotype to Fang

***Gobiobotia yuanjiangensis* Chen & Cao 1977** *-ensis*, Latin suffix denoting place: Yuanjiang system, Yunnan Province, China, type locality

### Subgenus ***Progobiobotia***

**Chen & Cao 1977**

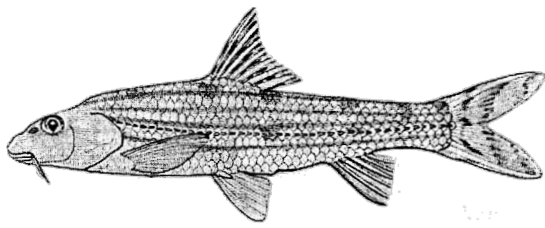
*pro-* (L.), in front of or forward, presumably referring to oval anterior portion of swim bladder, unique in the genus

***Gobiobotia abbreviata* Fang & Wang 1931** Latin for shortened, referring to shorter pectoral fins compared with *G. pappenheimi*, *G. ichangensis* (= *filifer*) and *G. kiatingensis* (= *filifer*)

## ***Mesogobio***

**Bănărescu & Nalbant 1973**

*mésos* (Gr. μέσος), middle, being intermediate between *Gobio* and other gobioid genera



*Mesogobio lachneri*, holotype, 106.2 mm SL. From: Bănărescu, P. M. and T. T. Nalbant. 1973. Pisces, Teleostei. Cyprinidae (Gobioninae). Das Tierreich 93: i–vii + 1–304.

***Mesogobio lachneri* Bănărescu & Nalbant 1973** in honor of Ernest A. Lachner (1916–1996), curator of fishes, U.S. National Museum, for facilitating the senior author's visits to several museums in the USA

***Mesogobio tumenensis* Chang 1980** *-ensis*, Latin suffix denoting place: Tumen River (boundary between China, North Korea and Russia), type locality

### ***Microphysogobio*** Mori 1934

*micro-*, from *mikrós* (Gr. μικρός), small, and *physo*, from *phýsa* (Gr. φύσα), bladder, referring to reduced swim bladder, its anterior chamber enclosed in a thick fibrous capsule and its posterior chamber small;  
*Gobia*, type genus of family

***Microphysogobio alticarpus* Bănărescu & Nalbant 1968** *altus* (L.), high; *corpus* (L.), body, referring to deeper body compared with *M. brevirostris*

***Microphysogobio amurensis* (Taranetz 1937)** *-ensis*, Latin suffix denoting place: Amur River system (including Khanka Lake), Russia and China, where it is endemic

***Microphysogobio anudarini* Holcík & Pivnicka 1969** in honor of “well known” Mongolian ichthyologist Anudarin Dashidorzhi, Ulaanbaatar State University

***Microphysogobio bicolor* (Nichols 1930)** *bi-*, from *bis* (L.), two, of two colors, described as “Sharply bicolor; dark above, pale below”

***Microphysogobio brevirostris* (Günther 1868)** *brevis* (L.), short; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to short, obtuse snout, “not much longer than the diameter of the eye”

***Microphysogobio chensienensis* (Fang 1938)** *-ensis*, Latin suffix denoting place: Chensien (now Shengzhou City), Zhejiang Province, China, type locality

***Microphysogobio chinssuensis* (Nichols 1926)** *-ensis*, Latin suffix denoting place: Chintzu, Shanxi Province, China, type locality

***Microphysogobio elongatus* (Yao & Yang 1977)** Latin for prolonged, referring to its longer, slenderer body compared with *M. kachekensis*

***Microphysogobio exilicauda* (Jiang & Zhang 2013)** *exilis* (L.), thin or meager; *cauda* (L.), tail, referring to slender caudal peduncle

***Microphysogobio fukiensis* (Nichols 1926)** *-ensis*, Latin suffix denoting place: Fukien Province, China, type locality

***Microphysogobio hsinglungshanensis* Mori 1934** *-ensis*, Latin suffix denoting place: Hsing-lung Shan (now Xinglong County), Jehol (now Hebei) Province, China, type locality

***Microphysogobio jeoni* Kim & Yang 1999** in honor of biologist Sang-Rin Jeon, Sangmyong University (Seoul), for his contributions to the study of ichthyology in Korea

***Microphysogobio kachekensis* (Oshima 1926)** *-ensis*, Latin suffix denoting place: Kachek River, Hainan Island, China, type locality

***Microphysogobio kiatingensis* (Wu 1930)** *-ensis*, Latin suffix denoting place: Kiating (now Lo-Shan), upper Yangtze River drainage, Sichuan Province, China, type locality

***Microphysogobio koreensis* Mori 1935** *-ensis*, Latin suffix denoting place: Korea, where it is endemic

***Microphysogobio labeoides* (Nichols & Pope 1927)** *-oides*, Neo-Latin from *eídos* (Gr. εἶδος), form or shape: “bearing a superficial resemblance” to *Hemibarbus labeo*

***Microphysogobio liaohensis* (Qin 1987)** *-ensis*, Latin suffix denoting place: Liaoning Province, China, where it appears to be endemic

***Microphysogobio linghensis* Xie 1986** *-ensis*, Latin suffix denoting place: Xiaolinghe River (sometimes shortened to Linghe), Liaoning Province, China, type locality

***Microphysogobio longidorsalis* Mori 1935** *longus* (L.), long; *dorsalis* (Neo-Latin), dorsal, referring to long dorsal fin (much longer than that of *M. koreensis*), which, when depressed, reaches beyond anal-fin origin

***Microphysogobio luhensis* Huang, Chen, Zhao & Shao 2018** *-ensis*, Latin suffix denoting place: Luhe County, Guangdong Province, China, where type locality (Rong River in Dongkeng Town), is situated

***Microphysogobio microstomus* Yue 1995** small-mouthed, from *mikrós* (Gr. μικρός), small, and *stóma* (Gr. στόμα), mouth, referring to smaller mouth (and thinner lips) compared with *M. linghensis*

***Microphysogobio nikolskii* (Dao & Mai 1959)** in honor of Russian ichthyologist-herpetologist Alexander Mikhailovich Nikolsky (also spelled Nikolskii, 1858–1942), who provided a specimen of *M. amurensis* for comparison

***Microphysogobio nudiventris* Jiang, Gao & Zhang 2012** *nudus* (L.), bare or naked; *ventris*, genitive of *venter* (L.), belly, referring to scaleless midventral region of body, extending slightly more than 2/3 of distance between pectoral- and pelvic-fin insertions

***Microphysogobio oujiangensis* Sun, Huang & Zhao 2022** *-ensis*, Latin suffix denoting place: Oujiang River basin, Zhejiang Province, China, where type locality (confluence of Panxi and Haoxi rivers), is situated

***Microphysogobio pseudoelongatus* Zhao & Zhang 2001** *pseudo-*, from *pseudēs* (Gr. ψεύδης), false, i.e., although similar to *M. elongatus*, such an appearance is false

***Microphysogobio rapidus* Chae & Yang 1999** Latin *rapidus*, quick or swift, and Anglo-Saxon *rapids*, referring to shallow, fast-sliding stream habitat

***Microphysogobio tafangensis* (Wang 1935)** *-ensis*, Latin suffix denoting place: Tafang, Yenchow, Chekiang, China, type locality

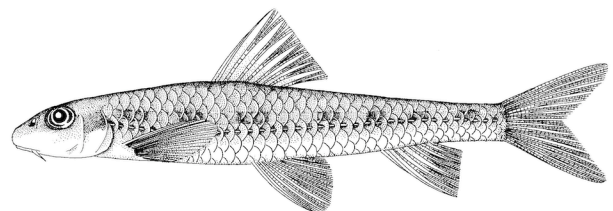
***Microphysogobio tungtingensis* (Nichols 1926)** *-ensis*, Latin suffix denoting place: Tungting Lake, Hunan Province, China, type locality

***Microphysogobio vietnamica* Mai 1978** *-ica* (L.), belonging to: northern Vietnam [*species inquirenda*, provisionally included here]

***Microphysogobio wulonghensis* Xing, Zhao, Tang & Zhang 2011** *-ensis*, Latin suffix denoting place: Wulonghe River, Laiyang County, Shandong Province, China, type locality

***Microphysogobio xianyouensis* Huang, Chen & Shao 2016** *-ensis*, Latin suffix denoting place: Xianyou County, eastern Fujian Province, China, where type locality (Mulan River, Daji Township) is situated

***Microphysogobio yaluensis* (Mori 1928)** *-ensis*, Latin suffix denoting



*Microphysogobio jeoni*, holotype, 63.2 mm SL. Illustration by Jae-Hwan Shim. From: Kim, I.-S. and H. Yang. 1999. A revision of the genus *Microphysogobio* in Korea with description of a new species (Cypriniformes, Cyprinidae). Korean Journal of Ichthyology 11 (1): 1–11.

place: Yalu River at Tsao-ho-kou, Korea, type locality

*Microphysogobio yunnanensis* (Yao & Yang 1977) *-ensis*, Latin suffix denoting place: Yunnan Province, China, where it occurs in the upper Red River (Yuanjiang) basin

*Microphysogobio zhang* Huang, Zhao, Chen & Shao 2017 in honor of Chun-Guang Zhang (b. 1955), Institute of Zoology, Chinese Academy of Sciences, for his “great” contributions to Chinese fish taxonomy

### *Platysmacheilus*

Lu, Luo & Chen 1977

*plátysma* (Gr. πλάτυσμα), flat object; *cheilus*, from *cheilos* (Gr. χείλος), lip, referring to flat and straight lower lip

*Platysmacheilus exiguus* (Lin 1932) Latin for paltry or inadequate, allusion not explained, perhaps referring to its “rudimentary” gill rakers

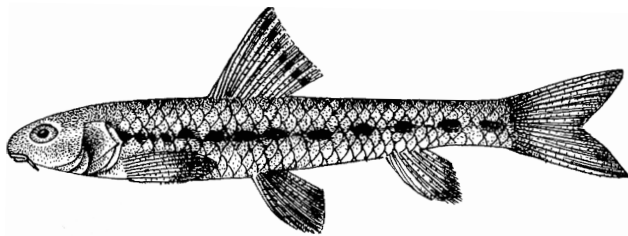
*Platysmacheilus longibarbat* Lu, Luo & Chen 1977 *longus* (L.), long; *barbatus* (L.), bearded, referring to thick barbels, which extend past edge of eye almost to operculum

*Platysmacheilus obtusirostris* (Wu & Wang 1931) *obtusus* (L.), blunt; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to its blunt snout, “without sudden incision”

*Platysmacheilus nudiventris* Luo, Le & Chen 1977 *nudus* (L.), bare or naked; *ventris*, genitive of *venter* (L.), belly, referring to scaleless chest and abdomen

*Platysmacheilus wangcangensis* Chen, Yang & Guo 2021 *-ensis*, Latin suffix denoting place: Wangcang County, Sichuan Province, China, where type locality (Dong River) is situated

*Platysmacheilus zhenjiangensis* Ni, Chen & Zhou 2005 *-ensis*, Latin suffix denoting place: Zhenjiang City, Jiangsu Province, China, type locality



*Platysmacheilus zhenjiangensis*. From: Ni, Y., X.-H. Chen and G. Zhou. On a new species of the genus *Platysmacheilus* Lo, Yao et Chen from China (Cypriniformes: Cyprinidae). Journal of Shanghai Fisheries University 14 (2): 122–126.

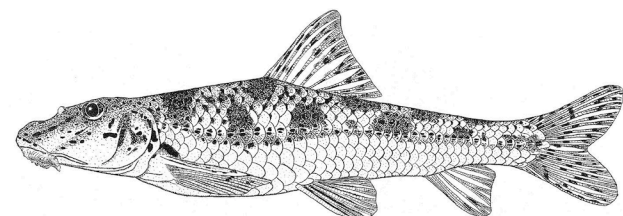
### *Pseudogobio*

Bleeker 1860

*pseudo-*, from *pseúdes* (Gr. ψεύδης), false, i.e., a false *Gobio*, presumably referring to previous placement of type species (*P. escocinus*) in *Gobio* and its apparent relationship to that genus

*Pseudogobio agathonectris* Tominaga & Kawase 2019 *agathós* (Gr. ἀγαθός), excellent, good or superior; *nēktēs* (Gr. νήκτης), swimmer, i.e., a good swimmer (inhabiting middle reaches of clear streams and preferring riffles) compared with Japanese congeners, particularly *P. escocinus*, which are benthic

*Pseudogobio banggiangensis* Nguyen 2001 *-ensis*, Latin suffix denoting place: Bàng Giang River, Cao Bàng Province, Vietnam, type locality



*Pseudogobio agathonectris*, holotype, 119.4 mm SL. From: Tominaga, K. and S. Kawase. 2019. Two new species of *Pseudogobio* pike gudgeon (Cypriniformes: Cyprinidae: Gobioninae) from Japan, and redescription of *P. escocinus* (Temminck and Schlegel 1846). Ichthyological Research 66 (4): 488–508.

*Pseudogobio escocinus* (Temminck & Schlegel 1846) scientific Neo-Latin for pike-like, referring to long, large and slightly upturned snout, which resembles the head of pikes (*Esox*)

*Pseudogobio guilinensis* Yao & Yang 1977 *-ensis*, Latin suffix denoting place: Guilin City, Guangxi Zhuang Autonomous Region, China, type locality

*Pseudogobio polystictus* Tominaga & Kawase 2019 *polý* (Gr. πολύ), many; *stictus*, from *stiktós* (Gr. σικτικός) spotted, referring to many distinct black spots on dorsal and lateral sides of body [spelling corrected from *polysticta* to agree with masculine gender of genus]

*Pseudogobio vaillanti* (Sauvage 1878) patronym not identified but clearly in honor of Sauvage’s colleague, French zoologist Léon Vaillant (1834–1914), Muséum national d’Histoire naturelle (Paris)

### *Romanogobio*

Bănărescu 1961

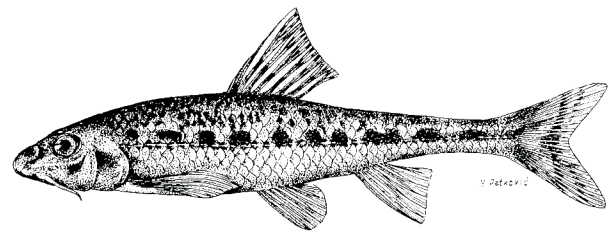
Romania + *Gobio*, referring to “frequency and strong differentiation” (translation) of select *Gobio* species in Romania

*Romanogobio albipinnatus* (Lukasch 1933) *albus* (L.), white; *pinnatus* (L.), finned, referring to white paired fins

*Romanogobio amplexilabris* (Bănărescu & Nalbant 1973) *amplexus* (L.), enlacing or embracing; *labris*, plural of *labrum* (L.), lip, referring to connected halves of lower lip

*Romanogobio antipai* (Bănărescu 1953) in memory of Romanian zoologist Grigore Antipa (1867–1944), who collected holotype

*Romanogobio banarescui* (Dimovski & Grupche 1974) in honor of Romanian ichthyologist Petru Bănărescu (1921–2009), who proposed the subgenus (now genus) *Romanogobio* in 1961; he shared literature and specimens with the authors and provided suggestions and advice



*Romanogobio banarescui*. Illustration by N. Petković. From: Dimovski, A. and R. Grupče. 1974. Études morphologico-systématiques du genre *Gobio* (Pisces, Cyprinidae) en Macédoine. 1. *Gobio kessleri banarescui* n. ssp. de la rivière Vardar. Acta Musei Macedonici Scientiarum Naturalium 14 (4 [122]): 69–92, 1 tab., 1 pl.

*Romanogobio banaticus* (Bănărescu 1960) *-icus* (L.), belonging to: Banat, historical region in Central Europe where it occurs, comprising parts of Romania, Serbia and Hungary bordered by the River Danube to the south, the River Tisza to the west, the River Mureș to the north, and the Southern Carpathian Mountains to the east

*Romanogobio belingi* (Slastenenko 1934) in honor of Demeter (Dimitry) E. Beling, Director of the Dnieper Biological Station, authority on Ukrainian fishes frequently cited in Slastenenko’s paper

*Romanogobio benacensis* (Pollini 1816) *-ensis*, Latin suffix denoting place: Lago di Benaco (Lake Garda), Verona, Italy, type locality

*Romanogobio ciscaucasicus* (Berg 1932) *-icus* (L.), belonging to: Ciscaucasia (North Caucasus), referring to its distribution in the region between the Black and Caspian Seas, from Russia to Azerbaijan

*Romanogobio elimeius* (Kattoulas, Stephanidis & Economidis 1973) *-ius* (L.), pertaining to: Elimeia, ancient name of area between Grevena and Servia in Greece, type locality

*Romanogobio johntreadwelli* (Bănărescu & Nalbant 1973) in honor of John Treadwell Nichols (1883–1958), curator of fishes, American Museum of Natural History, who first studied the holotype and paratypes (“*johntreadwelli*” was selected because *Gobio* (now *Gnathopogon*) *nicholsi* had been proposed in 1943)

**Romanogobio kesslerii** (Dybowski 1862) in honor of German-Russian zoologist Karl Federovich Kessler (1815–1881), who reported this species as *Gobio* (now *Romanogobio*) *uranoscopus* in 1856

**Romanogobio macropterus** (Kamensky 1901) big-finned, from *makrós* (Gr. μακρός), long or large, and *pterus*, from *pteron* (Gr. πτερόν) or *ptéryx* (πτέρυξ), fin, probably referring to its pectoral fins, which extend to or beyond base of pelvic fins

**Romanogobio parvus** Naseka & Freyhof 2004 Latin for little, referring to its small size (up to 66.8 mm SL) compared with other species in *Gobio* and *Romanogobio*

**Romanogobio pentatrachus** Naseka & Bogutskaya 1998 *penta-*, from *pénte* (Gr. πέντε), five; *trichus*, from *thrix* (Gr. θρίξ), hair or ray, referring to five branching rays of anal fin, a diagnostic feature of the species

**Romanogobio persus** (Günther 1899) incorrectly modified Latin for Persian (correct would be *persicus*), referring to northwestern Iran, where type locality (Ocksa in the Gader Chai) is situated

**Romanogobio skywalkeri** Friedrich, Wiesner, Zangl, Daill, Freyhof & Koblmüller 2018 in honor of Luke Skywalker, hero of the 1977 film *Star Wars: Episode IV—A New Hope* (according to a museum press release, named for its greenish hue in life, said to resemble Master Luke's green lightsaber)

**Romanogobio tanaiticus** Naseka 2001 *-icus* (L.), belonging to: Tanais, ancient name for Don River (Russia and Ukraine), where it occurs [treated as a synonym of *R. albipinnatus* by some workers]

**Romanogobio tenuicarpus** (Mori 1934) *tenuis* (L.), thin; *carpus* (L.), body, proposed as a subspecies of *Gobio gobio* with a slenderer body (posteriorly compressed and less deep) [retained in *Gobio* by some workers]

**Romanogobio uranoscopus** (Agassiz 1828) *ouranós* (Gr. οὐρανός), heaven or sky; *skopós* (Gr. σκοπός), looker, contemplator or viewer, referring to obliquely placed eyes, directed upward, more towards forehead

**Romanogobio vladykovi** (Fang 1943) in honor of Ukrainian-born Canadian ichthyologist Vadim D. Vladikov (1898–1986), who reported this species as a hybrid between *Gobio carpathicus* and *R. carpathorossicus* in 1931

## Saurogobio

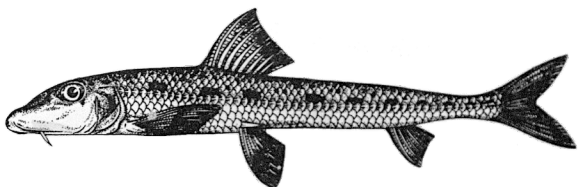
Bleeker 1870

*sauros*, from *saúra* (Gr. σαύρα), lizard, allusion not explained, probably referring to elongate, lizard-like body of *S. dabryi* and *S. dumerili*; *gobio*, described as related to *Pseudogobio* and *Rhinogobio*

**Saurogobio dabryi** Bleeker 1871 in honor of Claude-Philibert Dabry de Thiersant (1826–1898), fish culturist, French counsel to China, and student of Chinese fishes, who sent specimens to the Muséum d'Histoire naturelle de Paris

**Saurogobio dumerili** Bleeker 1871 in honor of August Duméril (1812–1870), herpetologist and ichthyologist, Muséum national d'Histoire naturelle (Paris), who invited Bleeker to examine Chinese cyprinoids in the museum's collection

**Saurogobio gracilicaudatus** Yao & Yang 1977 *gracilis* (L.), thin or slender; *caudatus* (L.), tailed, referring to longer, slimmer caudal peduncle compared to congeners



*Saurogobio xiangjiangensis*. From: Tang, J.-H. 1980. Two new species of cyprinid fishes of the subfamily Gobioninae from China. *Acta Zootaxonomica Sinica* 5 (4): 436–439.

**Saurogobio gymnocheilus** Lo, Yao & Chen 1998 bare-lipped, from *gymnós* (Gr. γυμνός), bare or naked, and *cheílos* (Gr. χείλος), lip, referring to absence of papillae on lips

**Saurogobio immaculatus** Koller 1927 *im-* (L.), not; *maculatus* (L.), spotted, referring to lack of black spots compared with spotted *S. dabryi*

**Saurogobio lissilabris** Bănărescu & Nalbant 1973 *lissós* (Gr. λισσός), smooth; *labris*, plural of *labrum* (L.), lip, referring to smooth or minutely papillose lips and mental pads compared with *S. dabryi*

**Saurogobio punctatus** Tang, Li, Yu, Zhu, Ding, Liu & Danley 2018 Latin for spotted, referring to dark spots scattered on dorsal and caudal fins and elongate round spots above lateral line

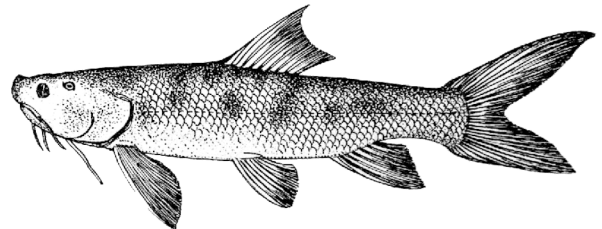
**Saurogobio xiangjiangensis** Tang 1980 *-ensis*, Latin suffix denoting place: Xiang Jiang River system, Hunan Province, China, type locality

## Xenophysogobio

Chen & Cao 1977

*xénos* (Gr. ξένος), strange or foreign, *physo*, from *phýsa* (Gr. φύσα), bladder, i.e., a *Gobio* with a strangely shaped swim bladder

**Xenophysogobio boulegeri** (Tchang 1929) in honor of Belgian-born British ichthyologist-herpetologist George A. Boulenger (1858–1937), British Museum (Natural History), who provided “some guidance” (translation) in the completion of Tchang's paper



*Xenophysogobio boulegeri*. Illustration by Fernand Angel. From: Tchang, T.-L. 1929. Un nouveau Cobitidé de Se-Tchuan (Chine). *Bulletin du Muséum National d'Histoire Naturelle* (Série 2) 1 (5): 307–308.

**Xenophysogobio nudicorpa** (Huang & Zhang 1986) *nudus* (L.), bare or naked; *corpa* (L.), body, referring to scaleless body except for lateral line

## Subfamily SARCOCHEILICHTHYINAE

Kryzanowsky 1947

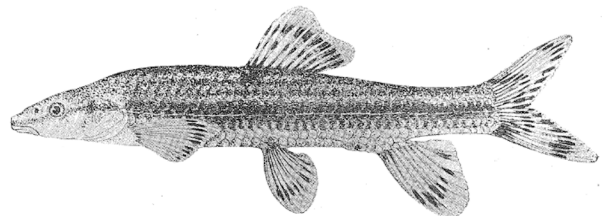
## Coreoleuciscus

Mori 1935

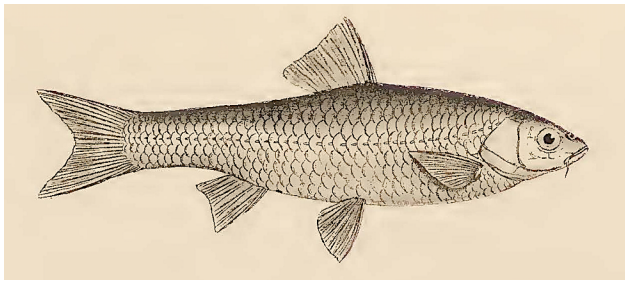
*Corea*, alternate spelling of Korea, where genus is endemic, presumed to be “closely related” to *Leuciscus* (Leuciscidae) and allied genera (i.e., the Korean *Leuciscus*)

**Coreoleuciscus aeruginos** Song & Bang 2015 incorrectly modified Latin for rusty (correct would be *aeruginosus*), referring to its bluish-green coloration, like verdigris (the bright bluish-green encrustation or patina formed on copper or brass by atmospheric oxidation)

**Coreoleuciscus splendidus** Mori 1935 Latin for bright or shining, presumably referring to its splendid coloration: sides with two longitudinal bands (one bluish, the other yellowish), and yellowish fins with two (dorsal and caudal) or one crossbars



*Coreoleuciscus splendidus*. From: Mori, T. 1935. Descriptions of two new genera and seven new species of Cyprinidae from Chosen. *Annotationes Zoologicae Japonenses* 15 (2): 161–181, Pls. 11–13.



*Gnathopogon elongatus*. From: From: Temminck, C. J. and H. Schlegel. 1846. Pisces. In: Siebold, P. F. de (ed.). Fauna Japonica. Lugduni Batavorum [Leiden] (A. Arnz et soc.). Parts 10–14: 173–269.

### **Gnathopogon**

**Bleeker 1860**

*gnáthos* (Gr. γνάθος), jaw; *pógōn* (Gr. πώγων), beard, referring to pair of barbels only on upper lip (or jaw) of *G. elongatus*

***Gnathopogon caeruleus* (Sauvage 1883)** Latin for bluish, referring to broad blue band along lateral line

***Gnathopogon elongatus* (Temminck & Schlegel 1846)** Latin for prolonged, referring to its elongate, compressed body

***Gnathopogon elongatus suwae* Jordan & Hubbs 1925** of Lake Suwa at Kamisuwa, Shinshu, Japan, type locality

***Gnathopogon herzensteini* (Günther 1896)** patronym not identified but clearly in honor of Russian ichthyologist Solomon Markovich Herzenstein (1854–1894), who named an *Acanthogobio* after Günther in 1892

***Gnathopogon imberbis* (Sauvage & Dabry de Thiersant 1874)** Latin for beardless, referring to absence of barbels (compared to other species of *Gobio*, genus in which it was described)

***Gnathopogon imberbis taeniatus* (Günther 1896)** Latin for banded, referring to blackish band from upper part of gill opening to root of caudal fin

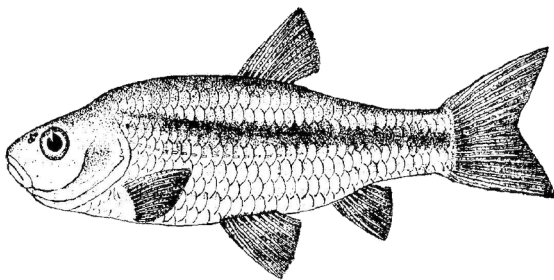
***Gnathopogon mantschuricus* (Berg 1914)** *-icus* (L.), belonging to: Manchuria, where type locality (Schansi River) is situated

***Gnathopogon nicholsi* (Fang 1943)** in honor of John Treadwell Nichols (1883–1958), curator of fishes, American Museum of Natural History, who described this species in 1925 but used a preoccupied name, *Leucogobio imberbis*

***Gnathopogon polytaenia* (Nichols 1925)** *poly-* (Gr. πολύ), many; *taenia* (L.), from *tainía* (Gr. ταινία), band or ribbon, probably referring to “in-distinct pale streaks along back” and/or “dark and silvery streaks” below lateral line

***Gnathopogon taeniellus* (Nichols 1925)** diminutive of *taenia* (L.), from *tainía* (Gr. ταινία), band or ribbon, allusion not explained, possibly referring to fewer, smaller and/or paler streaks on body compared with *G. polytaenia*

***Gnathopogon tsinanensis* (Mori 1928)** *-ensis*, Latin suffix denoting place: Tsi-nan (now Jinan), Shandong Province, China, type locality



*Gobiocypris rarus*. From: Ye, M.-R. and T.-Y. Fu. 1983. Description of a new genus and species of Danioninae from China (Cypriniformes: Cyprinidae). Acta Zootaxonomica Sinica 8 (4): 434–437.

### **Gobiocypris**

**Ye & Fu 1983**

etymology not explained, possibly a combination of *Gobio*, type genus of family, and *cypris*, from *Aphyocypris* (Xenocypridae), to which the authors believe this genus is “closely allied”

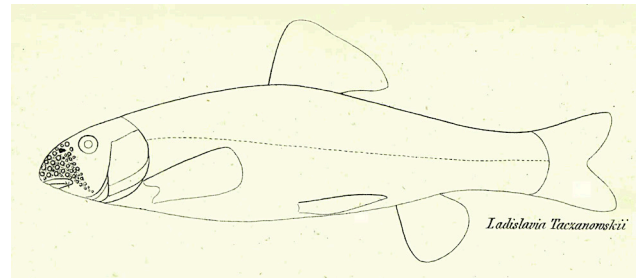
***Gobiocypris rarus* Ye & Fu 1983** Latin for rare or thinly scattered; although its scarcity is not discussed by the authors, it is quite rare<sup>3</sup>

### **Ladislavia**

**Dybowski 1869**

*-ia* (L. suffix), belonging to: patronym not identified but almost certainly a Slavic spelling of the Polish Władysław, referring to zoologist Władysław Taczanowski (1819–1890), whose complete name is formed by the binomial of the only species in the genus

***Ladislavia taczanowskii* Dybowski 1869** patronym not identified but almost certainly in honor of Polish zoologist Władysław Taczanowski (1819–1890)



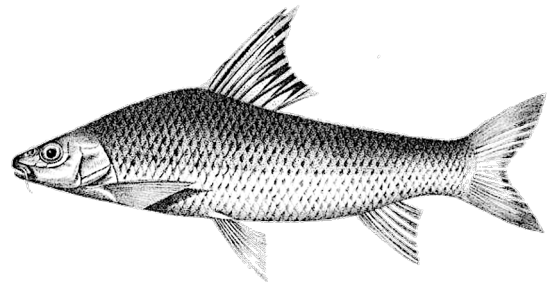
*Ladislavia taczanowskii*. Illustration by Anton Hartinger. From: Dybowski, B. N. 1869. Vorläufige Mitteilungen über die Fischfauna des Ononflusses und des Ingoda in Transbaikalien. Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien 19: 945–958, table, Pls. 14–18.

### **Paracanthobrama**

**Bleeker 1864**

*pará* (Gr. παρά), near, reflecting Bleeker’s belief that the genus belongs to a group of cyprinids he called *Acanthobramae* (based on the Old World leuciscid genus *Acanthobrama*)

***Paracanthobrama guichenoti* Bleeker 1864** in honor of French zoologist Antoine Alphonse Guichenot (1809–1876), Musée du Jardin des Plantes a Paris



Possibly first-published image of *Paracanthobrama guichenoti* (as *Hemibarbus dissimilis*, a junior synonym). Illustration by Ludwig Speigler. From: Bleeker, P. 1871. Mémoire sur les cyprinoïdes de Chine. Verhandlungen der Koninklijke Akademie van Wetenschappen (Amsterdam) 12 (2): 1–91, Pls. 1–14.

### **Pseudopungtungia**

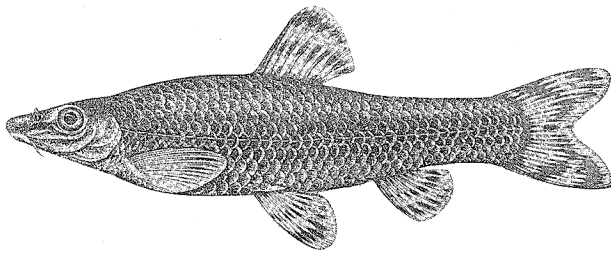
**Mori 1935**

*pseudo-*, from *pseudēs* (Gr. ψεύδης), false, i.e., although similar (and closely related) to *Pungtungia*, such an appearance is false

***Pseudopungtungia nigra* Mori 1935** Latin for black or dark, probably referring to dark-brown coloration (in formalin) and/or two broad blackish crossbars on dorsal, anal, ventral and caudal fins

***Pseudopungtungia tenuicorpus* Jeon & Choi 1980** *tenuis* (L.), thin or slender; *corpus* (L.), body, referring to its characteristically slender body compared with *P. nigra* and *Pungtungia herzi*

<sup>3</sup> Xiong, D., C. Xie, C. & L. Xia. 2009. Threatened fishes of the world: *Gobiocypris rarus* Ye and Fu, 1983 (Cyprinidae [sic]). Environmental Biology of Fishes 86: 107–108.



*Pseudopungtungia nigra*, 106 mm TL. From: Mori, T. 1935. Descriptions of two new genera and seven new species of Cyprinidae from Chosen. *Annotationes Zoologicae Japonenses* 15 (2): 161–181, Pls. 11–13.

### **Pseudorasbora**

**Bleeker 1859**

*pseudo-*, from *pseudēs* (Gr. ψεύδης), false, i.e., although *P. pusilla* (=parva) resembles *Rasbora* (Danionidae), such an appearance is false

***Pseudorasbora elongata* Wu 1939** Latin for prolonged, referring to its elongate body

***Pseudorasbora interrupta* Xiao, Lan & Chen 2007** Latin for interrupted, probably referring to its incomplete lateral line

***Pseudorasbora parva* (Temminck & Schlegel 1846)** Latin for little, referring to its small size, including small head and fins

***Pseudorasbora pugnax* Kawase & Hosoya 2015** Latin for aggressive or pugnacious, referring to how males aggressively protect their territory during spawning season (it is called “Kenka-Moroko” in Japan; *kenka* = fighting)



*Pseudorasbora pugnax*, holotype, male, 59.7 mm SL. Photo by Ryu Uchiyama. From: Kawase, S. and K. Hosoya. 2015. *Pseudorasbora pugnax*, a new species of minnow from Japan, and redescription of *P. pumila* (Teleostei: Cyprinidae). *Ichthyological Exploration of Freshwaters* 25 (4): 289–298.

***Pseudorasbora pumila* Miyadi 1930** Latin for dwarffish, referring to “dwarfish form of the body,” smaller than *P. parva*

***Pseudorasbora pumila uchidai* Okada & Kubota 1957** in honor and celebration of the 60th birthday of zoologist Toru (or Tohru) Uchida (1897–1981), Hokkaido University, alma mater of the junior author

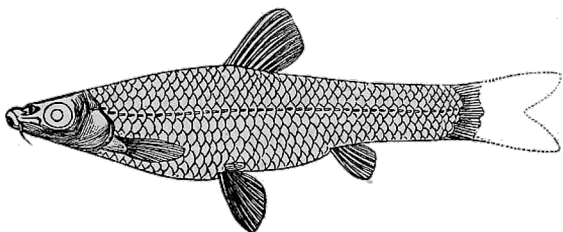
### **Pungtungia**

**Herzenstein 1892**

*-ia* (L. suffix), belonging to: Pungtung (Pyoktong), North Korea, type locality of *P. herzi*

***Pungtungia herzi* Herzenstein 1892** in honor of German entomologist Alfred Otto Herz (1856–1905), who collected holotype

***Pungtungia hilgendorfi* (Jordan & Fowler 1903)** in honor of German zoologist and paleontologist Franz Hilgendorf (1839–1904), lecturer at



*Pungtungia herzi*, with damaged caudal fin reconstructed. From: Herzenstein, S. M. 1892. Ichthyologische Bemerkungen aus dem Zoologischen Museum der Kaiserlichen Akademie der Wissenschaften. III. *Mélanges Biologiques*, tirés du Bulletin physico-mathématique de l'Académie Impériale des Sciences de St. Pétersbourg 13 (2): 219–235.

the Imperial Medical Academy Tokyo (1873–1876), whereupon he published articles and collected several specimens of Japanese fauna

***Pungtungia shiraii* Oshima 1957** in honor of Japanese ornithologist Kunihiro Shirai, Bureau of Game and Hunting of the Ministry of Agriculture and Forestry, who obtained a collection of fishes downstream of the Tame River, including holotype of this one, and “kindly forwarded to the writer for identification”

### **Rhinogobio**

**Bleeker 1870**

*rhinós* (Gr. ῥινός), genitive of *rhís* (ῥίς), nose, i.e., a *Gobio* with an elongated snout

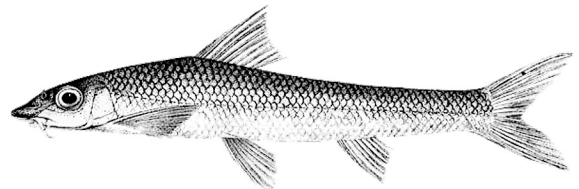
***Rhinogobio cylindricus* Günther 1888** Latin for cylindrical, referring to its “low, subcylindrical” body

***Rhinogobio hunanensis* Tang 1980** *-ensis*, Latin suffix denoting place: Hunan Province, China, where type locality (Yuanling, Yuan Shui River system) is situated

***Rhinogobio nasutus* (Kessler 1876)** Latin for large-nosed, referring to its much-produced snout

***Rhinogobio typus* Bleeker 1871** serving as type of genus

***Rhinogobio ventralis* Sauvage & Dabry de Thiersant 1874** Latin for of the belly, referring to its long ventral fins, which reach the anus



*Rhinogobio typus*. Illustration by Ludwig Speigler. From: Bleeker, P. 1871. *Mémoire sur les cyprinoides de Chine*. *Verhandelingen der Koninklijke Akademie van Wetenschappen* (Amsterdam) 12 (2): 1–91, Pls. 1–14.

### **Sarcocheilichthys**

**Bleeker 1860**

*sarco-*, from *sárx* (Gr. σάρξ), flesh, and *cheílos* (Gr. χείλος), lip, referring to thick lips of *S. variegatus*; *ichthýs* (Gr. ἰχθύς), fish

***Sarcocheilichthys biwaensis* Hosoya 1982** *-ensis*, Latin suffix denoting place: Lake Biwa, Japan, where it is endemic

***Sarcocheilichthys caobangensis* Nguyen & Vo 2001** *-ensis*, Latin suffix denoting place: Cao Bằng, Cao Bằng Province, Vietnam, type locality

***Sarcocheilichthys davidi* (Sauvage 1878)** in honor of Armand David (1826–1900), Lazarist missionary Catholic priest and biologist, who collected many specimens in China, including holotype of this one

***Sarcocheilichthys hainanensis* Nichols & Pope 1927** *-ensis*, Latin suffix denoting place: Hainan Island, China, type locality

***Sarcocheilichthys kiangsiensis* Nichols 1930** *-ensis*, Latin suffix denoting place: eastern Kiangsi Province, China, where type locality (Hokou, on the Yangtze River) is situated

***Sarcocheilichthys lacustris* (Dybowski 1872)** Latin for relating to or associated with lakes (lacustrine), referring to its occurrence in lakes of the lower Amur River basin, Russia

***Sarcocheilichthys nigripinnis* (Günther 1873)** *niger* (L.), black or dark; *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, i.e., finned, referring to black, “or at least partly black,” fins

***Sarcocheilichthys nigripinnis morii* Jordan & Hubbs 1925** in honor of biologist Tamezo Mori (1884–1962), Heijo High School, Seoul, Korea, who was studying Korean vertebrates at the time and presented paratype to authors while at Stanford University

***Sarcocheilichthys nigripinnis scaphignathus* (Nichols 1918)** *scaphi-*, from *skaphis* (Gr. σκαφίς), spade or shovel; *gnáthos* (Gr. γνάθος), jaw, referring to its broad, rounded and flat lower jaw





*Sarcocheilichthys vittatus*, holotype, male, 83.5 mm SL. An, C.-T., E Zhang and J.-Z. Shen. 2020. *Sarcocheilichthys vittatus*, a new species of gudgeon (Teleostei: Cyprinidae) from the Poyang lake basin in Jiangxi Province, South China. *Zootaxa* 4768 (2): 201–220.

***Sarcocheilichthys parvus* Nichols 1930** Latin for little, a “minnowlike dwarf” just 40 mm in length

***Sarcocheilichthys sciiustus* (Abbott 1901)** *scio-*, from *skiá* (Gr. σκιά), shade or shadow; *istius*, from *histion* (Gr. ἵστιον), sail (i.e., dorsal fin), referring to its “dark” dorsal fin

***Sarcocheilichthys sinensis* Bleeker 1871** *-ensis*, Latin suffix denoting place: Sinica (China), described from the Yangtze River

***Sarcocheilichthys sinensis fukiensis* Nichols 1925** *-ensis*, Latin suffix denoting place: Nanping, Fukien Province, China, type locality

***Sarcocheilichthys variegatus* (Temminck & Schlegel 1846)** Latin for “of different sorts,” particularly colors, probably referring to how juvenile specimens differ in color from adults, generally lighter and “usually varied with brown on the back” (translation)

***Sarcocheilichthys variegatus microoculus* Mori 1927** *mikrós* (Gr. μικρός), small; *oculus* (L.), eye, referring to its small eyes, 5.0–5.5 in head and 2.0 in snout

***Sarcocheilichthys variegatus wakiyae* Mori 1927** in honor of Yohiro Wakia (also spelled Yojiro Wakiya), superintendent of the Korean Government Fisheries Experiment Station, for help in the preparation of Mori’s paper [although named after a man, “*ae*” is an acceptable way to form a genitive from nouns that end in “*a*”]

***Sarcocheilichthys vittatus* An, Zhang & Shen 2020** Latin for striped, referring to longitudinal black band extending from anteriormost tip of snout, across eye, and along lateral line to caudal-fin base

#### Subfamily *Incertae sedis*

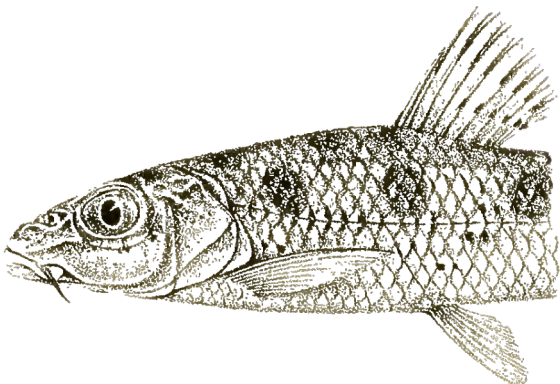
### ***Belligobio***

**Jordan & Hubbs 1925**

etymology not explained, perhaps *bellus* (L.), beautiful, referring to “striking” coloration of *B. eristigma* (= *Hemibarbus mylodon*), i.e., a beautiful *Gobio*

***Belligobio eristigma* Jordan & Hubbs 1925** *eri-*, (Gr. ἔρι), intensive particle (i.e., very); *stigma* (Gr. στίγμα), mark or spot, referring to “striking” coloration, comprising 7–8 large spots and smaller, blacker spots (arranged in longitudinal rows) on sides, and rows of spots on dorsal and caudal fins

***Belligobio nummifer* (Boulenger 1901)** *nummus* (L.), coin; *-ifer*, from



*Belligobio nummifer*. Illustration by J. Green. From: Boulenger, G. A. 1901. Descriptions of new freshwater fishes discovered by Mr. F. W. Styan at Ningpo, China. *Proceedings of the Zoological Society of London* 1 (2): 268–271, Pls. 23–24.

*fero* (L.), to have or bear, referring to series of six round (i.e., coin-shaped) black spots along body and tail, above lateral line

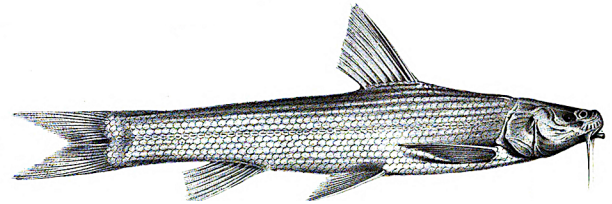
***Belligobio pengxianensis* Luo, Le & Chen 1977** *-ensis*, Latin suffix denoting place: Pengxian County, Sichuan Province, China, type locality

### ***Coreius***

**Jordan & Starks 1905**

etymology not explained, perhaps *-ius* (L.), pertaining to: Corea (alternate spelling of Korea), referring to two specimens of *C. cetopsis* collected at Chemulpo, South Korea, by Pierre Louis Jouy

***Coreius cetopsis* (Kner 1867)** *ceto-*, from *kētos* (Gr. κῆτος), whale; *ópsis* (Gr. ὄψις), appearance, allusion not explained nor evident



*Coreius cetopsis*. Illustration by Joh. Strohmayer. From: Kner, R. 1867. *Fische. Reise der österreichischen Fregatte “Novara” um die Erde in den Jahren 1857–1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbain*. Wien. Zool. Theil. 1 (3): 275–433, Pls. 12–16.

***Coreius guichenoti* (Sauvage & Dabry de Thiersant 1874)** patronym not identified but clearly in honor of the authors’ colleague, zoologist Antoine Alphonse Guichenot (1809–1876), Muséum national d’Histoire naturelle (Paris)

***Coreius heterodon* (Bleeker 1864)** *héteros* (Gr. ἕτερος), different; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth, having one row of raptorial (hooked inward at the tips) pharyngeal teeth instead of two

***Coreius septentrionalis* (Nichols 1925)** Latin for northern, probably referring to its occurrence in northern China (e.g., Mongolia)

### ***Hemibarbus***

**Bleeker 1860**

*hemi-*, from *hémisys* (Gr. ἡμισύς), half, presumed to be allied to *Barbus* (Cyprinidae: Barbinae) but differing in having two barbels instead of four

***Hemibarbus brevipennis* Yue 1995** *brevis* (L.), short; *pennis*, presumably a misspelling of *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, i.e., finned, referring to its shorter fins, especially the dorsal fin, compared with *H. labeo*

***Hemibarbus labeo* (Pallas 1776)** Latin for one with large lips, referring to its well-developed lips

***Hemibarbus longirostris* (Regan 1908)** *longus* (L.), long; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to long, recurved snout, 1½ as long as eye

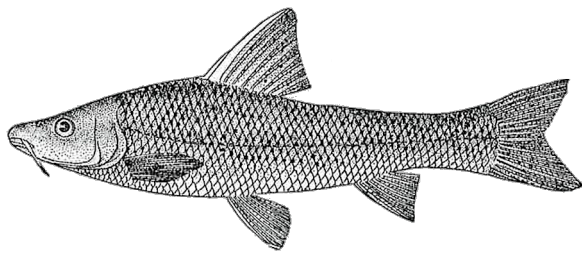
***Hemibarbus macracanthus* Lu, Luo & Chen 1977** big-spined, from *makrós* (Gr. μακρός), long or large, and *acanthus* (L.), from *ákantha* (Gr. ἄκανθα), thorn, referring to its long dorsal-fin spine, its length 1.20–1.25 times length of head

***Hemibarbus maculatus* Bleeker 1871** Latin for spotted, referring to small, irregular spots on back, fins and tail

***Hemibarbus medius* Yue 1995** Latin for middle, its main characters intermediate between *H. labeo* and *H. maculatus*

***Hemibarbus mylodon* (Berg 1907)** *mylo-*, from *mýlē* (Gr. μύλη), mill or millstone; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδοῦς (*odoús*), tooth, referring to large fourth pharyngeal tooth, thickened and rounded (molariform) with a small, round excavation on upper surface

***Hemibarbus qianjiangensis* Yu 1990** *-ensis*, Latin suffix denoting place: Qianjiang (i.e., Qian River), Zhejiang Province, China, type locality



*Hemibarbus qianjiangensis*. From: Chen, M.-K., H. Tong, T. Yu and Z. Diao. 1990. The fish resources of Qiantang River. Shanghai Scientific and Technological Literature Publishing House, Shanghai, China: i-v + i-iii + 1-267.

***Hemibarbus songloensis* Nguyen 2001** *-ensis*, Latin suffix denoting place: Sông Lô, Hà Giang Province, Vietnam, type locality

***Hemibarbus thacmoensis* Nguyen 2001** *-ensis*, Latin suffix denoting place: Thac Mo, Na Hang District, Tuyên Quang Province, Vietnam, type locality

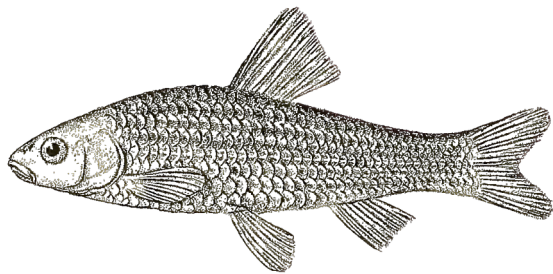
***Hemibarbus umbrifer* (Lin 1931)** Latin for shady, presumably referring to its brownish coloration

### ***Paraleucogobio*** Berg 1907

*pará* (Gr. παρά), near, resembling *Leucogobio* in general shape (differing in presence of dorsal-fin spine) [treated as a synonym of *Gnathopogon* by some workers]

***Paraleucogobio notacanthus* Berg 1907** *notus*, from *nótos* (Gr. νότος), back; *acanthus* (L.), from *ákantha* (Gr. ἄκανθα), thorn, referring to strong but flexible (at the top) dorsal-fin spine

***Paraleucogobio strigatus* (Regan 1908)** Latin for furrowed or grooved, presumably referring to dark longitudinal stripes along body, which appear to form a furrow between rows of scales



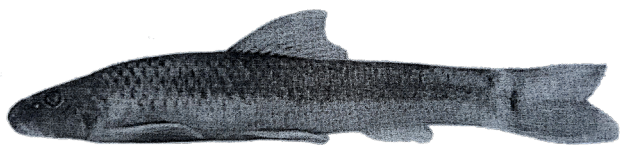
*Paraleucogobio strigatus*. Illustration by G. M. Woodward. From: Regan, C. T. 1908. The Duke of Bedford's Zoological Exploration in eastern Asia. VIII. A collection of freshwater fishes from Corea. Proceedings of the Zoological Society of London 1908 1 (3): 59-63, Pls. 2-3.

### ***Placogobio*** Nguyen 2001

combination of *placo-* from *Placocheilus* and *-gobio* from *Discogobio*, referring to adhesive lower lip common to all three genera

***Placogobio bacmeensis* Nguyen & Vo 2001** *-ensis*, Latin suffix denoting place: Bắc Mê County, Hà Giang Province, Vietnam, type locality

***Placogobio nahangensis* Nguyen 2001** *-ensis*, Latin suffix denoting place: Na Hang District, Tuyên Quang Province, Vietnam, type locality



*Placogobio nahangensis*. From: Nguyen, V. H. and S. V. Ngô. 2001. Cá nước ngọt Việt Nam. Tập 1. Ho cá chép (Cyprinidae). [Freshwater fishes of Viet Nam. Volume 1. Family Cyprinidae]. Nhà Xuất Bản Nông Nghiệp [Agriculture Publishing House], Hanoi. 1-622.

### ***Squalidus***

Dybowski 1872

etymology not explained, possibly *squalidus* (L.), dirty, referring to dusky markings on silvery ground color, but more likely a combination of the leuciscid names *Squaliosus* and *Idus* (= *Leuciscus*), inferring that *Squalidus* is an intermediate between these two genera

***Squalidus argentatus* (Sauvage & Dabry de Thiersant 1874)** Latin for plated with silver, although color is described as brownish yellow (other references describe color as "pale")

***Squalidus atromaculatus* (Nichols & Pope 1927)** *ater* (L.), black; *maculatus* (L.), spotted, probably referring to black spot at base of dorsal fin

***Squalidus banarescui* Chen & Chang 2007** in honor of Romanian ichthyologist Petru Bănărescu (1921-2009), for his "great" contributions to Taiwanese cyprinid taxonomy, especially the subfamily Gobioninae, between 1960 and 1973

***Squalidus chankaensis* Dybowski 1872** *-ensis*, Latin suffix denoting place: Lake Khanka (Chanka), Amur River drainage, Russia, type locality

***Squalidus chankaensis biwae* (Jordan & Snyder 1900)** *-ensis*, Latin suffix denoting place: Lake Biwa, Japan, type locality

***Squalidus chankaensis vietnamensis* Bănărescu & Nalbant 1964** *-ensis*, Latin suffix denoting place: Vietnam, where type locality (Phong-Thô) is situated

***Squalidus gracilis* (Temminck & Schlegel 1846)** Latin for thin or slender, referring to its slender body shape

***Squalidus gracilis majimae* (Jordan & Hubbs 1925)** in honor of Toyoji Majima, Imperial University of the Hokkaido [although named after a man, "ae" is an acceptable way to form a genitive from nouns that end in "a"]

***Squalidus gracilis minkiangensis* Bănărescu & Nalbant 1964** *-ensis*, Latin suffix denoting place: Minjiang River, Fujian Province, China, type locality

***Squalidus gracilis tsuchigae* (Jordan & Hubbs 1925)** in honor of Yasukei Tsuchiga, a science teacher at Yamada, Japan, who collected some of the fishes examined by Jordan and Hubbs [although named after a man, "ae" is an acceptable way to form a genitive from nouns that end in "a"]

***Squalidus ijimae* (Oshima 1919)** in honor of zoologist Isao Iijima (also spelled Ijima, 1861-1921), Science College, Imperial University of Tokyo [although named after a man, "ae" is an acceptable way to form a genitive from nouns that end in "a"]

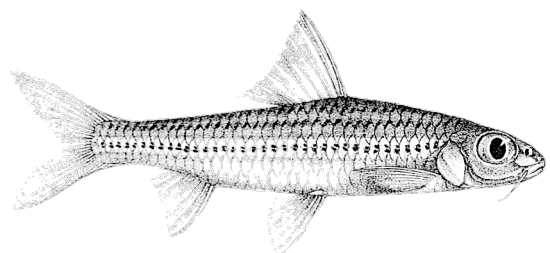
***Squalidus intermedius* (Nichols 1929)** Latin for intermediate, similar in appearance to *Gnathopogon elongatus* and *Leucogobio* (= *Gnathopogon taeniellus*, "being intermediate between these two genera of convenience"

***Squalidus japonicus* (Sauvage 1883)** *-icus* (L.), belonging to: Japan, where type locality (Lake Biwa) is situated

***Squalidus japonicus coreanus* (Berg 1906)** *-anus*, belonging to: Korea (alternate spelling of Korea), a subspecies of *S. japonicus* described from South Korea

***Squalidus maii* (Doi 2000)** in honor of Mai Dinh Yên (b. 1933), Hanoi Science University, "renowned" Vietnamese freshwater fish taxonomist; type specimens were collected with his "great help"

***Squalidus mantschuricus* (Mori 1927)** *-icus* (L.), belonging to: Manchuria, referring to type locality at Fushun, China



*Squalidus wolterstorffi*. Illustration by J. Green. From: Regan, C. T. 1908. Description of three new freshwater fishes from China. Annals and Magazine of Natural History (Series 8) 1 (1): 109-111, Pl. 4.

***Squalidus minor* (Harada 1943)** Latin for less, probably referring to its small size (32 mm)

***Squalidus multimaculatus* Hosoya & Jeon 1984** *multi-* (L.), many; *maculatus* (L.), spotted, referring to 6–12 small round dark brown spots on sides

***Squalidus nitens* (Günther 1873)** Latin for shining, presumably referring to silvery lower half of body and/or silvery blue band along middle of sides

***Squalidus wolterstorffi* (Regan 1908)** in honor of German geologist, herpetologist and curator Willy Wolterstorff (1864–1943), who “received” fishes from China collected by Martin Kreyenberg, including holotype of this species

***Squalidus wolterstorffi huapingensis* Wu & Wu 1989** *-ensis*, Latin suffix denoting place: Huaping, Yunnan Province, China, type locality