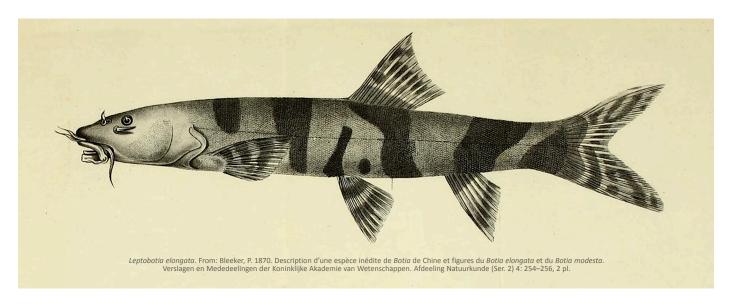
Order CYPRINIFORMES

Pointface Loaches

Family **BOTIIDAE**

Berg 1940



Subfamily LEPTOBOTIINAE

Nalbant 2002

Leptobotia Bleeker 1870

leptós (Gr. λεπτός), fine or thin, referring to elongate, compressed body of *L. elongata*, i.e., a thin *Botia*

Leptobotia bellacauda Bohlen & Šlechtová 2016 bella, from bellus (L.), beautiful; cauda (L.), tail, referring to prominent black bar on caudal fin

Leptobotia brachycephala Guo & Zhang 2021 short-headed, from *brachýs* (Gr. βραχύς), short, and *kephalé* (Gr. κεφαλή), head, referring to shorter head than that of *L. citrauratea* and *L. micra*

Leptobotia citrauratea (Nichols 1925) etymology not explained, possibly a combination of *citrus* (L.), citron tree (i.e., yellow), and a misspelling (minus the "n") of *aurantea* (L.), orange, referring to a sketch from life Nichols had seen, showing an orangeish body color, an orange stripe, and eight orange spots on back (which indeed it has)

Leptobotia elongata (Bleeker 1870) Latin for prolonged, "eminently recognizable by the extraordinary elongation of the body" (translation)

Leptobotia flavolineata Wang 1981 flavus (L.), yellow; *lineata* (L.), lined, referring to yellowish lines separating 14 dark brown vertical bands that encircle body

Leptobotia guilinensis Chen 1980 -ensis, Latin suffix denoting place: Guilin City, Guangxi Province, China, type locality

Leptobotia hansuiensis Fang & Hsu 1980 -ensis, Latin suffix denoting place: Han Shui (note spelling) River, tributary of Yangtze River, Shaanxi Province, China, type locality

Leptobotia hengyangensis Huang & Zhang 1986 -ensis, Latin suffix denoting place: Heng-yang, Hunan Province, China, type locality

Leptobotia micra Bohlen & Šlechtová 2017 from *mikrós* (Gr. μικρός), small, the smallest known species of the genus, with females as small as 45 mm SL developing oocytes

Leptobotia microphthalma Fu & Ye 1983 small-eyed, from *mikrós* (Gr. μικρός), small, and *ophthalmós* (Gr. ὀφθαλμός), eye, referring to smaller eye compared with *L. tientaiensis*

Leptobotia orientalis Xu, Fang & Wang 1981 Latin for eastern, allusion not explained, possibly referring to its distribution in the Orient (i.e., China)

Leptobotia paucipinna Guo, Cao & Zhang 2023 *paucus* (L.), few; *pinna* (L.), fin (but used here as an adjective, finned), referring to seven branched dorsal-fin rays, compared with the similar *L. bellicauda* and *L. microphthalma*, which have eight

Leptobotia pellegrini Fang 1936 in honor of French ichthyologist Jacques Pellegrin (1873–1944), Muséum national d'Histoire naturelle, who provided Fang with study material

Leptobotia posterodorsalis Lan & Chen 1992 posterior (L.), coming after; dorsalis (L.), dorsal, referring to more posterior dorsal-fin origin (behind ventral-fin origin) compared with *L. guilinensis*

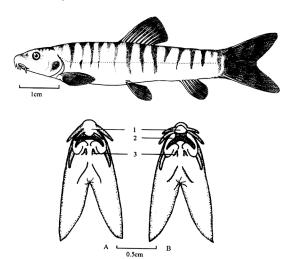
Leptobotia punctata Li, Li & Chen 2008 Latin for spotted, referring to white spots on body compared with no spots on L. posterodorsalis

Leptobotia rotundilobus Guo, Cao & Zhang 2023 rotundus (L.), round; lobus (L.), lobe, referring to its rounded (vs. broadly pointed or pointed) caudal-fin lobes

Leptobotia rubrilabris (Dabry de Thiersant 1872) rubrum (L.), red; labris, plural of labrum (L.), lip, presumably referring to its reddish lips (but entire loach is a vermilion color)

Leptobotia taeniops (Sauvage 1878) etymology not explained, perhaps $\acute{o}ps$ (Gr. $\dddot{\omega}\psi$), eye, face or countenance: since Sauvage described this loach as brownish (although coloration in life is quite variable), perhaps name refers to its similarity to the brownish Old World loach *Cobitis taenia* (Cobitidae)

Leptobotia tchangi Fang 1936 in honor of Tchunlin (or Tchung-Lin Tchang (1897–1963), curator of zoology at the Fan Memorial Institute of Biology and lecturer in zoology at the National University of Peking



Parabotia heterocheilus. (A) ventral view of head of this species. (B) ventral view of other Parabotia species. 1 = fleshy snout process (raised in A, showing gap of upper lip). 2 = upper lip. 3 = mental barbels. From: Ni, W. and H-L. Wu. 2006. Fishes of Jiangsu Province. Chinese Agriculture Press, Beijing. 2 + 3 + 34 + 963, 19 Pls.

Leptobotia tientainensis (Wu 1930) -ensis, Latin suffix denoting place: a creek in Tien-Tai Mountain, Chekiang Province, China, type locality

Parabotia¹

Guichenot 1872

pará (Gr. $\pi\alpha$ ρά), near, referring to its similarity to and/or presumed close relationship with *Botia* [authorship often attributed to Dabry de Thiersant, who published Guichenot's description]

Parabotia banarescui (Nalbant 1965) in honor of Romanian ichthyologist Petru Bănărescu (1921–2009), for his work on Chinese fishes

Parabotia bimaculatus Chen 1980 bi-, from bis (L.), two; maculatus (L.), spotted, referring to two black spots at caudal-fin base

Parabotia brevirostris Zhu & Zhu 2012 brevis (L.), short; rostris, Neo-Latin scientific adjective of rostrum (L.), snout, referring to its short snout, shorter than head length after eye

Parabotia curtus (Temminck & Schlegel 1846) Latin for short, referring to shorter tail compared with three other Japanese loaches (Cobitidae): Cobitis taenia japonica (=C. biwae) and C. rubripinnis and C. maculata (both junior synonyms of Misgurnus anguillicaudatus)

Parabotia dubius Kottelat 2001 Latin for doubtful, of uncertain status, possibly a synonym of *P. fasciatus* [replacement name for *Botia elongata* Mai 1978, preoccupied by *B.* (=Leptobotia) elongata Bleeker 1870]

Parabotia fasciatus Guichenot 1872 Latin for banded, referring to numerous transverse grayish stripes on body [authorship often attributed to Dabry de Thiersant, who published Guichenot's description]

Parabotia heterocheila Zhu & Chen 2006 héteros (Gr. ἔτερος), different; cheila, from cheīlos (Gr. χεῖλος), lip, presumably referring to deep gap in median part of upper lip, which is filled by an "elevated decending [sic] process" on the snout [spelled heterocheilus by some workers, who incorrectly treat name as an adjective]

Parabotia kiangsiensis Liu & Guo 1986 -ensis, Latin suffix denoting place: Kiangsi, postal map spelling of Jiangxi Province, China, where it is endemic

Parabotia kimluani Nguyen 2005 of Kim Luân, a village near the Gâm River, Nà Hang District, Tuyên Quang Province, Vietnam, type locality [possibly a junior synonym of *P. dubius*]

Parabotia lijiangensis Chen 1980 -ensis, Latin suffix denoting place: Lijiang River, Guilin, Guangxi, China, type locality

Parabotia maculosus (Wu 1939) Latin for dappled or spotted, referring to blackish rounded spots covering its head

Parabotia mantschuricus (Berg 1907) -icus (L.), belonging to: Manchuria, referring to distribution in northeast Asia, where Mudanjiang River, type locality, is situated

Parabotia parvus Chen 1980 Latin for little, presumably referring to its small size (up to 91 mm TL) compared with congeners

Parabotia vancuongi Nguyen 2005 of Văn Cuong, a village near the Gâm River, Nà Hang District, Tuyên Quang Province, Vietnam, type locality [possibly a junior synonym of *P. dubius*]

Subfamily BOTIINAE

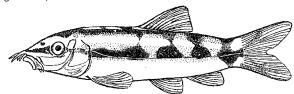
Berg 1940

Ambastaia Kottelat 2013

named for Ambastai (or Ambastus in Latin), a river in Ptolemy's (ca. 90–168) *Handbook of Geography*, now identified as the Mekong, in whose drainage both species occur

Ambastaia nigrolineata (Kottelat & Chu 1987) nigro-, from niger (L.), dark or black; lineata (L.), lined, referring to dark-brown mid-dorsal and mid-lateral stripes in adults

Ambastaia sidthimunki (Klausewitz 1959) patronym not identified, possibly in honor of Aree Sidthimunk (d. 2012, actually spelled Ariya Sidthimunka), a researcher at Department of Fisheries, Ministry of Agriculture, Thailand



Ambastaia sidthimunki, holotype, 29.9 mm TL. Illustration by Marianne Bechtle. From: Klausewitz, W. 1959. Botia sidthimunki, eine neue Schmerle aus Thailand (Pisces, Cobitidae). Senckenbergiana Biologica 40 (1/2): 51–53.

Botia

Gray 1831

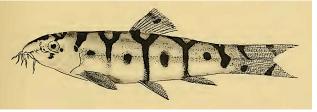
etymology not explained, presumably a local vernacular in India, possibly derived from balli-potiah, an Assamese name for a different Indian loach, Paracanthocobitis botia (Nemacheilidae); several aquarium websites state that Botia is an "Asian" word for warrior or soldier (alluding to the suborbital spine?) but do not provide a source

Botia almorhae Gray 1831 of Almorha, Uttar Pradesh, northern India, type locality

Botia birdi Chaudhuri 1909 in honor of W. J. A. Bird, Superintending Engineer (irrigation), Sirhind Circle, Rupar, Punjab, India, who collected holotype

Botia dario (Hamilton 1822) Latinization of *Dari*, local Bengali name for this loach in India

Botia histrionica Blyth 1860 Latin for harlequin-like, probably referring



Botia Iohachata. From: Chaudhuri, B. L. 1912. Descriptions of some new species of freshwater fishes from north India. Records of the Indian Museum (Calcutta) 7 (pt. 5) (art. 35): 437–444,

¹ Guichenot did not indicate the gender of *Parabotia*. "As *Parabotia* is neither a Latin, a Greek nor a Western European name (*Code* art. 30.2.1), its gender is determined by that of the adjectival species-group names originally included. Two nominal species were originally included, *P. fasciatus* and *P. rubrilabris*. *Rubrilabris* is a noun in apposition and therefore uninformative. *Fasciatus* is an adjective with a masculine declension; therefore the gender of *Parabotia* is masculine. This is unfortunate, since all other genus names ending in *-botia* are feminine, but it cannot be changed." Quoted from: Kottelat, M. 2013. The fishes of the inland waters of southeast Asia: a catalogue and core bibliography of the fishes known to occur in freshwaters, mangroves and estuaries. Raffles Bulletin of Zoology Supplement No. 27: 1–663.

to its "very remarkable beauty," consisting of black bands across body

Botia kubotai Kottelat 2004 in honor of Katsuma Kubota, Managing Director, Siam Pet Fish Trading Co. (Bangkok, Thailand), for "help with various projects and for the gift of valuable material, including the first known specimens of this species with locality information"

Botia lohachata Chaudhuri 1912 Latinization of *Lohachat*, local name for this loach in Bihar, India

Botia rostrata Günther 1868 Latin for beaked, referring to its long, pointed snout, longer than "remaining part of the head"

Botia striata Narayan Rao 1920 Latin for striped, probably referring to dark and narrow yellow bands that completely surround body

Botia udomritthiruji Ng 2007 in honor of Kamphol Udomritthiruj (b. 1963), aquarist and ornamental-fish trader, who provided holotype and associated data for this species, as well as material and data for other projects

Chromobotia

Kottelat 2004

chróma (Gr. χρῶμα), skin or color, referring to bright coloration of C. macracanthus; Botia, type genus of family

Chromobotia macracanthus (Bleeker 1852) macro-, from makrós (Gr. μακρός), long or large; acanthus, from ákantha (Gr. ἄκανθα), thorn, referring to large suborbital spine



Probably first-published image of *Chromobotia macracanthus*. Note large suborbital spine for which it is named. From: Bleeker, P. 1863–64. Atlas ichthyologique des Indes Orientales Néêrlandaises, publié sous les auspices du Gouvernement colonial néêrlandais. Tome III. Cyprins. 1–150, Pls. 102–144. [This plate published 1863.]

Sinibotia

Fang 1936

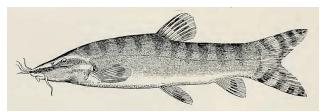
Sinica (China), proposed as a subgenus of Botia endemic to western China

Sinibotia Iani Wu & Yang 2019 in honor of Lan Jiahu, Du'an Fisheries Technology Extension Department (Guangxi, China), who collected holotype; since 1987, his explorations in south China have revealed about 50 new species

Sinibotia longiventralis (Yang & Chen 1992) longus (L.), long; ventralis (L.), of the belly, referring to "particularly long" ventral fin

Sinibotia pulchra (Wu 1939) Latin for beautiful or lovely, probably referring to dark-blue bands or rings encircling its trunk or tail and/or its overall attractive coloration

Sinibotia reevesae (Chang 1944) in honor of Cora D. Reeves (1873-



Sinobotia superciliaris. From: Günther, A. 1892. List of the species of reptiles and fishes collected by Mr. A. E. Pratt on the upper Yang-tze-kiang and in the province Sze-Chuen, with description of the new species. Appendix II. Pp. 238–250, Pls. 1–4. *In*: Pratt, A. E. (ed.): To the Snows of Tibet through China. Longmans, Green & Co., London.

1953), former Head of Department of Biology, Ginling College (Nanjing, China), for her "valuable suggestion" and her "kindness" in allowing Chang to study the fish collection of her department

Sinibotia robusta (Wu 1939) Latin for robust or full-bodied, probably referring to its deeper body compared with S. superciliaris

Sinibotia superciliaris (Günther 1892) super (L.), over, above or beyond; ciliaris (L.), fringed, allusion not explained, possibly referring to six of its eight barbels "prolonged into filaments"

Sinibotia zebra (Wu 1939) referring to ~17 irregular zebra-like light vertical stripes on body

Syncrossus

Blyth 1860

syn (Gr. συν), together or joined; krossós (Gr. κροσσός), fringe or tassel, probably referring to "one flat filament that ramifies into four" at end of snout of S. berdmorei

Syncrossus beauforti (Smith 1931) in honor of Dutch zoologist Lieven Ferdinand de Beaufort (1879–1968), University of Amsterdam, "accomplished" co-author of *Fishes of the Indo-Australian Archipelago*

Syncrossus berdmorei **Blyth 1860** in honor of the late Major Hugh Thomas Berdmore (1811–1859), Madras Artillery, Assistant to the Commissioner and in charge of the forests' office, who collected holotype

Syncrossus helodes (Sauvage 1876) $hel \dot{\delta} d\bar{e}s$ (Gr. ἐλώδης), marshy or fenny, allusion not explained, perhaps referring to its being collected in rice fields

Syncrossus hymenophysa (Bleeker 1852) hymḗn (Gr. ὑμήν), thin skin or membrane; phýsa (Gr. ψύσα), bladder, referring to the presence of a membranous swim bladder, divided into two lobes



Probably first-published image of *Synocrossus hymenophysa*. From: Bleeker, P. 1863–64. Atlas ichthyologique des Indes Orientales Néërlandaises, publié sous les auspices du Gouvernement colonial néërlandais. Tome III. Cyprins. 1–150, Pls. 102–144. [This plate published 1863.]

Syncrossus lucasbahi (Fowler 1937) in honor of Lucas Bah, who collected Thai specimens for the Academy of Natural Sciences of Philadelphia, "whose industry has added much to the value of our Siamese collections of fishes"

Syncrossus reversus (Roberts 1989) Latin for turned back, similar to S. hymenophysa but differing in the width of its 12–13 dark stripes and their margins, which are wider than their adjacent pale intervals, giving the impression (at least for Roberts) that its color pattern is "reversed"

Yasuhikotakia

Nalbant 2002

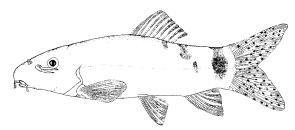
-ia (L. suffix), belonging to: Japanese ichthyologist Yasuhiko Taki (1931–2020), "who contributed very much" to the study of loaches (including the descriptions of three species in the genus)

Yasuhikotakia caudipunctata (Taki & Doi 1995) cauda (L.), tail; punctata (L.), spotted, referring to large blackish blotch on caudal peduncle

Yasuhikotakia eos (Taki 1972) named for $\bar{\it E}$ ós (Ἡώς), Greek goddess of the dawn, referring to its shining yellowish or reddish-brown body and brilliant orange fins

Yasuhikotakia lecontei (Fowler 1937) in honor of John L. LeConte (1825–1883), "distinguished entomologist of past generations," and a contributor to the fish collection of the Academy of Natural Sciences of Philadelphia

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Yasuhikotakia caudipunctata, holotype, 82 mm SL. From: Taki, Y. and A. Doi. 1995. Two new species of the cobitid genus *Botia* from the Lao Mekong basin. Japanese Journal of Ichthyology 42 (2): 147–155.

Yasuhikotakia longidorsalis (Taki & Doi 1995) longus (L.), long; dorsalis (L.), dorsal, referring to its long dorsal-fin base

Yasuhikotakia modesta (Bleeker 1864) Latin for moderate or modest, referring to the lack of bands or spots on its body and fins (which Bleeker incorrectly attributed to preservation in alcohol)

Yasuhikotakia morleti (Tirant 1885) in honor of conchologist Laureut-Joseph Morlet (1823–1893), French colonial civil servant, diplomat, explorer, and student of Cambodian mollusks collected by Auguste Jean-Marie Pavie

Yasuhikotakia splendida (Roberts 1995) Latin for bright, shining or brilliant, referring to its "distinctive" coloration, including pale yellowish to bright canary yellow dorsal, pelvic, anal and caudal fins