

# BEAUFORTIA

SERIES OF MISCELLANEOUS PUBLICATIONS  
INSTITUTE OF TAXONOMIC ZOOLOGY (ZOOLOGICAL MUSEUM)  
UNIVERSITY OF AMSTERDAM

No. 300

Volume 23

April 24, 1975

*Pseudohemiodon thorectes*, a new species of Mailed Catfish  
from the Rio Mamoré system, Bolivia  
(Pisces, Siluriformes, Loricariidae)

I. J. H. ISBRÜCKER

ABSTRACT

*Pseudohemiodon thorectes*, a new species of Mailed Catfish of the subfamily Loricariinae, is described and figured after the holotype (the only known specimen), originating from Buena Vista, west of Rio Palacios, a tributary of Rio Mamoré, Bolivia. The relationships of the new species with the others of the genus *Pseudohemiodon* are discussed, and a preliminary key to the nominal species and subspecies is given.

INTRODUCTION

The new species herein described as *Pseudohemiodon thorectes* was located amongst unidentified material during a visit to the British Museum (Natural History), London. *Pseudohemiodon thorectes* is based on the unique holotype, apparently an immature specimen of only 117 mm standard length. For some time I have hesitated to describe this species, based as it is on a single specimen. However, since the specimen adds much information to our still poor knowledge of the genus *Pseudohemiodon*, I think the description as a new species is justified.

The genus *Pseudohemiodon* was established by Bleeker (1862: 3) for the reception of the single species "*Hemiodon? platycephalus*" Kner (1854: 89—91, pl. 1 fig. 6, and pl. 6 fig. 2). Eigenmann & Eigenmann (1889, 1890, 1891), A. de Miranda Ribeiro (1911), Isbrücker (1971, 1973), and Isbrücker & Nijssen (1974a, 1974b) recognized *Pseudohemiodon* either as a separate genus, or as a subgenus of *Loricaria* Linnaeus, 1758; until 1971 *Pseudohemiodon* contained only *P. platycephalus*. All other authors considered Kner's "*Hemiodon? platycephalus*" a species of the genus *Loricaria*. Some of these authors

Received: November 27, 1974

divided *Loricaria* into subgenera, the nominate subgenus containing "*Loricaria platycephala*" (Kner, 1854), e.g. Regan (1904), Eigenmann, 1910 (based on Regan, 1904), Gosline, 1945 (based on Eigenmann, 1910), and Ringuelet, Aramburu & Alonso de Aramburu (1967). Isbrücker (1971) described a second species of *Pseudohemiodon*, *P. cryptodon*, which was made the type-species of a new subgenus, *Planiloricaria*. This taxon was raised to generic rank by Isbrücker & Nijssen (1974a). A list of additional nominal species and subspecies of *Pseudohemiodon* was published by Isbrücker (1973), who included *Pseudohemiodon lamina* (Günther, 1868), *P. laticeps* (Regan, 1904), *P. amazonum* (Delsman, 1941), *P. variegatus variegatus* (Steindachner, 1879), *P. variegatus venezuelae* (Schultz, 1944), and *P. macromystax* (Günther, 1869). All but the last of these species were placed in the nominate subgenus of *Pseudohemiodon*, whereas *P. macromystax* was not classified into a subgenus. Isbrücker & Nijssen (1974a) established a new genus, *Rhadinoloricaria*, for the reception of *R. macromystax* (Günther, 1869).

The genus *Pseudohemiodon* now consists of the following nominal species and subspecies: *P. platycephalus* (type-species of the genus), *P. lamina*, *P. laticeps*, *P. amazonum*, *P. variegatus variegatus*, *P. variegatus venezuelae*, and *P. thorectes*. Material (including type-specimens) of all of the previously described nominal species and subspecies of *Pseudohemiodon* has been studied, except the holotype and only known specimen of *P. platycephalus* — which is lost. Ironically, the new species seems to be most closely related to *Pseudohemiodon platycephalus*. Comparison is only possible because of the accuracy of the original description and figures.

I am grateful to Mr. A. W. Wheeler & Mr. G. J. Howes (British Museum (Natural History), London, BMNH) for the loan of the holotype of *Pseudohemiodon thorectes* and several other specimens used for this study. For the loan of comparative material thanks are due to Mrs. M. M. Dick (Museum of Comparative Zoology, Harvard University, Cambridge, Mass., MCZ), Dr. J. P. Gosse & Mr. E. Walschaerts (Institut Royal des Sciences Naturelles de Belgique, Brussels, IRScNB), Dr. P. Kähsbauer (Naturhistorisches Museum Wien, Vienna, NMW), and to Dr. S. H. Weitzman (National Museum of Natural History, Washington, D.C., USNM). The abbreviation ZMA refers to specimens in the collection of Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam.

#### KEY TO THE SPECIES AND SUBSPECIES OF *Pseudohemiodon*

- 1a Abdomen covered by a few large plates in a single series; 13 to 14 coalescing scutes; 4 thoracic scutes (data after Kner, 1854) . . . . .  
. . . . . *Pseudohemiodon platycephalus* (Kner, 1854)
- 1b Abdomen with a median row of six transverse scutes between pectoral and pelvic fins, surrounded anteriorly and posteriorly by small irregular scutelets; 20 to 21 coalescing scutes; 10 to 11 thoracic scutes . . . . .  
. . . . . *Pseudohemiodon thorectes* new species
- 1c Abdomen completely covered with small irregular scutelets (developing

- with age); 14 to 16 coalescing scutes; 5 to 9 thoracic scutes . . . . . 2
- 1d Abdomen naked except for a median strip of rather small scutelets; 14 to 15 coalescing scutes; 5 to 10 thoracic scutes . . . . . 4
- 2a Orbital diameter plus notch 8.2 in head length . . . . .  
. . . . . *Pseudohemiodon amazonum* (Delsman, 1941)
- 2b Orbital diameter plus notch 7.3 or less in head length . . . . . 3
- 3a Interorbital width 6.0 or more in head length . . . . .  
. . . . . *Pseudohemiodon laticeps* (Regan, 1904)
- 3b Interorbital width 5.5 or less in head length . . . . .  
. . . . . *Pseudohemiodon lamina* (Günther, 1868)
- 4a Interorbital width 5.7 in head length . . . . .  
. . . . . *Pseudohemiodon variegatus variegatus* (Steindachner, 1879)
- 4b Interorbital width 5.3 or less in head length . . . . .  
. . . . . *Pseudohemiodon variegatus venezuelae* (Schultz, 1944)

***Pseudohemiodon thorectes* new species (figs. 1—3)**

Material.— One specimen (holotype), BMNH 1927.10.4:43, standard length 117 mm, Bolivia, Est. Santa Cruz, Buena Vista (17°28' S, 63°37' W), west of Río Palacios, tributary of Río Mamoré, which is a tributary of Río Madeira, Rio Amazonas system; purch. Steinbach. (The specimen had previously been identified simply as *Loricaria* sp.).

Description.— Standard length (sl) 117 mm; axial length 127.6 mm; predorsal length 37.9 mm, 3.1 in sl; head length (hl) 26.3 mm, 4.4 in sl; head width 23.6 mm, 5.0 in sl, 1.1 in hl; head depth 8.8 mm, 13.3 in sl, 3.0 in hl;

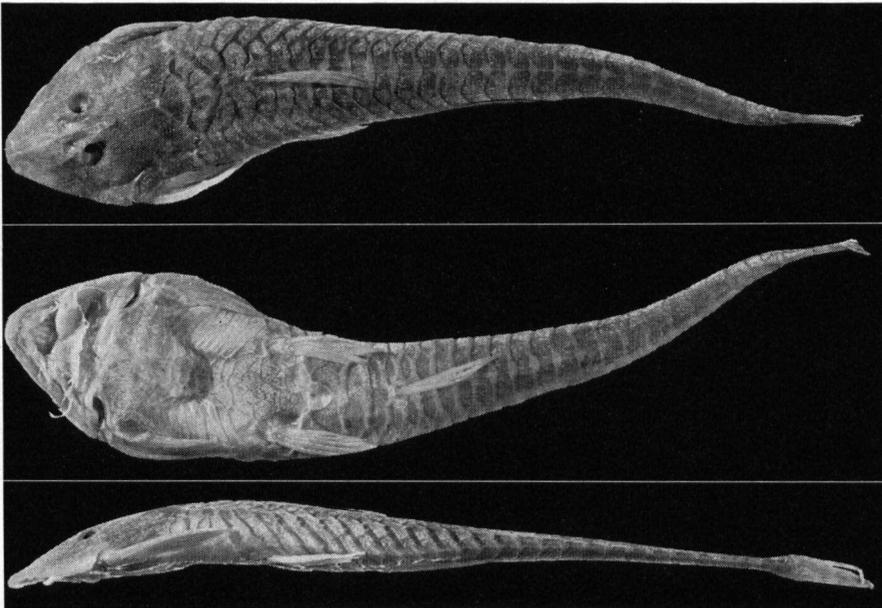


FIG. 1. *Pseudohemiodon thorectes*, holotype in dorsal, ventral, and lateral view. L. A. van der Laan (ZMA) fecit.

snout length 13.5 mm, 8.7 in sl, 1.9 in hl; ventrorostral length 1.2 mm, 97.5 in sl, 21.9 in hl; orbital diameter minus notch 2.1 mm, 12.5 in hl; orbital diameter plus notch 4.4 mm, 6.0 in hl; interorbital width 4.7 mm, 5.6 in hl; internasal width 3.3 mm, 8.0 in hl; dorsal spine length 17.6 mm, 6.6 in sl, 1.5 in hl; length first dorsal ray 17.4 mm, 6.7 in sl, 1.5 in hl; length last dorsal ray 6.8 mm, 17.2 in sl, 3.9 in hl; dorsal fin base 12.7 mm, 9.2 in sl, 2.1 in hl; anal spine length 14.0 mm, 8.4 in sl, 1.9 in hl; pectoral spine length 18.2 mm, 6.4 in sl, 1.4 in hl; pelvic spine length 15.0 mm, 7.8 in sl, 1.8 in hl; both upper and lower unbranched rays ('spines') of caudal fin damaged; cleithral width 24.3 mm, 4.8 in sl, 1.1 in hl; supra-cleithral width 15.9 mm, 7.4 in sl, 1.7 in hl; thoracic length 21.5 mm, 5.4 in sl, 1.2 in hl; abdominal length 17.2 mm, 6.8 in sl, 1.5 in hl; peduncular length 55.9 mm, 2.1 in sl; depth caudal peduncle 1.7 mm, 15.5 in hl; width caudal peduncle 3.3 mm, 8.0 in hl; distance between anus and anal fin origin 10.9 mm, 10.7 in sl, 2.4 in hl; length rictal barbel about 15.3 mm, about 7.6 in sl, about 1.7 in hl; axial length lower lip 4.0 mm, 29.3 in sl, 6.6 in hl; barbels of lower lip shrunken.

Lateral scutes (left/right) 34/33; coalescing scutes (left/right) 21/20; thoracic scutes (left/right) 11/10; teeth upper jaws (left/right) 4/6; teeth lower jaws (left/right) 5/7. About 27 barbels along edge of upper and lower lips.

Fin spine and ray counts: dorsal fin I,6, last ray split to its base; anal fin I,4, last ray split to its base; pectoral fin I,6; pelvic fin I,5; principal caudal



FIG. 2. *Pseudohemiodon thorectes*, abdomen of holotype, showing median row of interthoracic scutes. L. A. van der Laan (ZMA) fecit.

fin rays I,10,I, outer rays unbranched, probably forming filamentous extensions.

In this description measurements and counts are taken in accordance with the methods adopted for a redescriptive procedure with *Pseudohemiodon* species. In the forthcoming publication on this genus, these methods are fully explained.

No anal plate; anus in broad-oval naked area. This area bordered anteriorly by two rather large scutes. More rather large, irregularly arranged scutes cover the abdomen to about the height of the tips of pectoral fins. Anterior to this series there are six irregular transverse scutes, isolated from the thoracic scutes (fig. 2). Anterior to these scutes there are numerous minute to small irregular scutelets, reaching the gill-openings.

Teeth (fig. 3) spoon-shaped, all simple or almost simple, some of them with a slight outer notch indicating that a small lobe could be present.

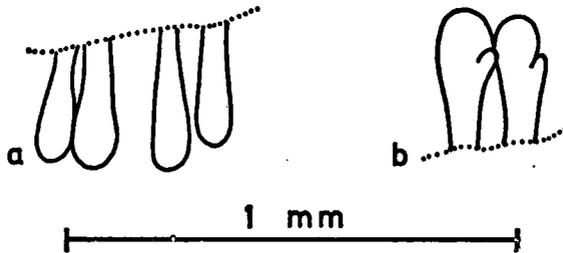


FIG. 3. *Pseudohemiodon thorectes*, teeth of holotype. a - four teeth from left upper jaw, b - two teeth from left lower jaw.

All dermal ossifications and fin spine and rays with a comparatively smooth cover of minute, acute denticles.

Two quite inconspicuous, close-set median ridges run from the dorsal tip of snout through the nostrils; two slight indications of such ridges occur anterior to bony orbit on the head. Posterior to the bony orbit there are also two such converging ridges, which meet almost at the end of the occipital process.

Orbit with a posterior and an anterior notch; iris with a small flap.

Lips in quite poor condition, with about 27 barbels along edge. Surface of lower lip smoothly papillose, without barbel-like papillae.

Pores of sensory canal system present on head and between converging and parallel longitudinal lateral body scutes.

Colour in alcohol (fig. 1).— Presumably the holotype has lost much of its original colour pattern; at present the specimen is reddish tan all over, without visible pigment on dorsum of body and head. Dorsal, caudal, dorsum of pectoral, and pelvic fins faintly spotted with light brown; the spots arranged into about three vertical bands on the caudal fin, and in about four oblique bands on dorsum of pectoral fins.

Etymology.— The specific name is from the Greek *thorektes*, meaning warrior armed with a breastplate, alluding to the peculiar interthoracic scutes.

Discussion.— *Pseudohemiodon thorectes* differs from all other *Pseudohemiodon* species in the number of coalescing longitudinal lateral body scutes: 20 to 21 in *P. thorectes* against 13 to 14 in *P. platycephalus*, 14 to 15 in *P. lamina*, 14 to 16 in *P. laticeps*, 15 in *P. amazonum*, 14 to 15 in *P. variegatus variegatus* and *P. variegatus venezuelae*. There are 17 to 18 coalescing scutes in the related *Rhadinoloricaria macromystax* (Günther, 1869), and 19 to 20 in *Planiloricaria cryptodon* (Isbrücker, 1971).

In the development of abdominal scutes, *Pseudohemiodon thorectes* seems most closely related to *P. platycephalus*, both having a median row of large scutes in a single series. *Pseudohemiodon variegatus* and its presumed subspecies *P. v. venezuelae* have a peculiar median row of small scutes on the belly. The three remaining nominal species of this genus, *P. lamina*, *P. laticeps*, and *P. amazonum* have the abdomen completely covered by small scutelets; *P. amazonum*, however, is based on a quite young specimen in which the abdominal scutes are not fully developed.

Unfortunately, there are no specimens of *Pseudohemiodon platycephalus* available for direct comparison with *P. thorectes*.

The key to the species and subspecies of *Pseudohemiodon* above, has been made after examination of a very limited number of specimens, viz. none of *P. platycephalus*, one of *P. thorectes*, one of *P. amazonum* (holotype, IRScNB 294, sl 91.5 mm), five of *P. laticeps* (lectotype, BMNH 1895.5.17 : 113, sl 189.7 mm; one paralectotype, BMNH 1895.5.17 : 114, sl 185 mm; three, NMW 44950, NMW 44955, and NMW 44956, sl 184 to 198 mm — there is a fourth specimen in NMW 44950 which was not measured), four of *P. lamina* (lectotype, BMNH 1867.6.13 : 33, sl 158.8 mm; two paralectotypes, BMNH 1867.6.13 : 33—34, sl 143.6 to approximately 146 mm; one, MCZ 33511, sl 138.5 mm), one of *P. variegatus variegatus* sensu stricto (holotype, NMW 45138, sl 218.5 mm), several of *P. variegatus* sensu lato (still somewhat problematical specimens, on which will be reported later on), and four of *P. variegatus venezuelae* (holotype, USNM 121108, sl 161 mm; three paratypes, ZMA 102.134, sl 75.4 to 146 mm).

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I. J. H. ISBRÜCKER

Instituut voor Taxonomische Zoölogie (Zoölogisch Museum)

Universiteit van Amsterdam

Plantage Middenlaan 53

Amsterdam 1004 — The Netherlands

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