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## *CORYDORAS ORNATUS*, A NEW SPECIES OF CALLICHTHYID

CATFISH FROM THE RIO TAPAJÓS DRAINAGE, BRAZIL

(PISCES, SILURIFORMES, CALLICHTHYIDAE)

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### ABSTRACT

A new species of the neotropical callichthyid catfish genus *Corydoras* Lacépède, 1803, *C. ornatus*, is described and figured. It is compared with *Corydoras pulcher* Isbrücker & Nijssen, 1973, a closely related species.

### INTRODUCTION

Through the kindness of Prof. Dr. W. Ladiges, retired ichthyologist of the Zoologisches Staatsinstitut und Zoologisches Museum, Hamburg (ZMH), we received a small but interesting collection of various species of *Corydoras* assembled by Mr. H. Baensch. Two species among this material are undescribed. One of these is described below and the other is the subject of another paper. For several years the authors have been attempting to complete

a review of the South American callichthyid catfish genus *Corydoras*. We think it desirable to publish a description of this new species separately and in advance of the review, because it has a most attractive colour pattern and therefore would make a very suitable fish for aquarists.

In the description, proportions are expressed as ratios of standard length (sl), and as ratios of head length (hl). Measurements are taken to one-tenth of a millimeter (cf. Nijssen, 1970: 10-11, fig. 3 for points at which measurements are taken).

We are most grateful to Prof. Dr. W. Ladiges for the gift of the material upon which the description of *Corydoras ornatus* is based. A paratype of this species is deposited in the collections of

ZMH, of the British Museum (Natural History), London (BMNH), and of the National Museum of Natural History, Washington, D.C. (USNM). The photographic illustrations were made by Mr. L.A. van der Laan of the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam (ZMA). Dr. S.H. Weitzman (USNM) kindly read the manuscript.

*Corydoras ornatus* n. sp. (figs. 1-3)

Holotype, ZMA 114.690, sl 54.2 mm, Brazil, Est. Pará, Rio Tapajós, 80 km E of Jacareacanga, 06°09'S 58°15' W, coll. H. Baensch, IX-1974; 6 paratypes, viz. ZMA 114.691 (3), ZMH 5689 (1), BMNH 1976.4. 27:144 (1), USNM (1) sl 35.7 to 52.8 mm, same data as holotype.

Description.- Holotype: sl (standard length) 54.2 mm; bd (body depth at origin of dorsal fin spine) 23.4 mm (2.3 in sl); bw (body width at origin of pectoral fin spines) 14.7 mm (3.7 in sl); lds (length dorsal fin spine) 14.7 mm (3.7 in sl); lps (length pectoral fin spine) 16.5 mm (3.3 in sl); hl (head length) 18.8 mm (2.9 in sl); sn (snout length) 11.2 mm (1.7 in hl); lbo (length bony orbit) 5.0 mm (3.8 in hl); wi (least interorbital width) 8.6 mm (2.2 in hl); ca (width coracoid area between anteriormost ventrolateral body scutes) 5.7 mm (3.3 in hl); dep (least depth caudal peduncle) 7.5 mm (2.5 in hl); D (dorsal fin) I,7, last ray split to its base; P<sub>1</sub> (pelvic fin) i,5; A (anal fin) ii,5, last ray split to its base; P<sub>2</sub> (pectoral fin) I,9-10; C (principal caudal fin rays) 7/7; dbs (dorsolateral body scutes) 24; vbs (ventrolateral body scutes) 21; pas (preadipose scutes) 3. Two pairs of rictal barbels and one pair of mental barbels present. Inner edge of pectoral fin spine weakly serrated (fig. 3). Fontanel length 6.0 mm. Skin of intercoracoid area almost completely naked.

Data from the paratypes: sl 35.7 to 52.8 mm; bd 2.3 to 2.5 in sl; bw 3.8 to 4.0 in sl; lds 3.6 to 4.0 in sl; lps 3.4 to 3.8 in sl; hl 2.7 to 2.9 in sl; sn 1.7 to 1.8 in hl; lbo 3.4 to 3.8 in hl; wi 2.3 to 2.5 in hl; ca 3.0 to 3.7 in hl; dep 2.3 to 2.5 in hl; P<sub>1</sub> i,6 in one specimen, i,5 in all other specimens; P<sub>2</sub> I,9 in two specimens, I,10 in all other specimens; other fin counts as for holotype; dbs 23 to 24; vbs 20 to 22; pas 2 to 4.

Colour in alcohol (figs. 1-2).- Holotype: Ground colour pale tan. Dorsum of snout and head grey

with some darker marks on approximately anterior half of interorbital space. Posterior half of interorbital space black to tip of supra-occipital process. This black area includes skin over fontanel but excludes a rim around fontanel. Greyish pigmentation ventral to eye and through ventral portion of opercle forming a broad, but very faint mask. Circumorbital bones and preopercle yellowish with some ill-defined grey spots. Upper lip and upper rictal barbels grey.

Body with 3 conspicuous black longitudinal stripes: a dorsal black stripe commences on 7th dorsolateral body scute and ends on 23rd dorsolateral body scute; it is preceded by two irregular longitudinal series of dark spots beginning on humeral scute. Ventral to this stripe is a tan, unpigmented area. Middle black stripe commences on 5th dorsolateral body scute, just dorsal to junction of dorso- and ventrolateral body scutes; it is also preceded by some irregular spots and extends through the middle of caudal peduncle to just anterior to caudal fin base. Ventral black stripe commences on 1st ventrolateral body scute and extends along dorsal 3rd of these scutes to approximately caudal fin base. Except for a series of less prominent and fainter dark spots, the area between middle and ventral black stripe is pale tan, like the area between dorsal and middle black stripe.

Dorsum of body, dorsal to dorsal stripe and beginning on humeral scute, pigmented evenly with brownish grey and some darker concentrations of pigment, identical to those on the lateral side of the cleithrum. Right side of the holotype shows some heavier pigmentation dorsal to dorsal longitudinal stripe, especially in area of dorsal fin base. Holotype also with a yellowish-grey hiatus without very dark pigment between ventrum of these spots and black dorsal stripe.

Predorsal scute black. Dorsal fin spine and membrane between this spine and 1st dorsal fin ray dark grey. Other fin rays bear spots forming a horizontal dotted line near base and near distal tip of fin. Adipose fin spine grey, its membrane with some very faint brownish pigmentation.

Caudal fin base with a vertical black line along outer border of small caudal scutelets; the caudal fin lobes with about 4 series of small black spots forming vertical lines. Pectoral fin spines and dorsum of pectoral fin rays have faint

grey pigment. Pelvic and anal fins unpigmented. Belly ventral to ventral longitudinal stripe almost completely unpigmented. Unossified parts of abdomen whitish.

Variability in paratypes.- A paratype of 52.8 mm sl has a more pronounced marbling of snout and lateral sides of head, 3 rather than 2 rows of spots in dorsal fin. It has a larger and darker spot in adipose fin membrane, some dark grey spots on and near 1st pectoral fin rays, and shows some differences in pattern of body pigmentation, viz. in position and size of dark spots, and in width of unpigmented areas between longitudinal stripes. In the 5 smaller paratypes pigmentation on dorsum and sides of snout and head is even, i.e. without marbling. In 2 smallest paratypes, 37.7 and 35.7 mm sl, the dorsal longitudinal stripe is narrower and less dark than in other specimens. Largest paratype differs from others in having some small, mosaic-like platelets on abdomen, especially near a vertical from pectoral fin base; belly naked in other paratypes.

Etymology: the specific name is derived from the Latin *ornatus* meaning handsome, splendid, as allusion to the beautiful appearance of this species.

Discussion.- *Corydoras ornatus* appears most closely related to *Corydoras pulcher* Isbrücker & Nijssen, 1973. The latter species is hitherto known from its holotype and a single paratype, sl 40.3 and 41.2 mm, respectively, which were collected in Rio Purus, north of Lábrea, 07°20' S 64°46' W, Rio Amazonas system, Brazil, Est. Amazonas. Besides differences in colour pattern, *Corydoras ornatus* has a wider body than *C. pulcher* (bw 3.7 to 4.0 against 4.2 to 4.3), a shorter dorsal fin spine (lds 3.6 to 4.0 against 3.4), a broader interorbital (wi 2.2 to 2.5 against 2.6), and a deeper caudal peduncle (dcp 2.3 to 2.5 against 2.6). Moreover, *Corydoras ornatus* tends to have a deeper body than *C. pulcher* (bd 2.3 to 2.5 against 2.5 to 2.6), and a broader naked area between the coracoid processes (3.0 to 3.7 against 3.7 to 4.2).

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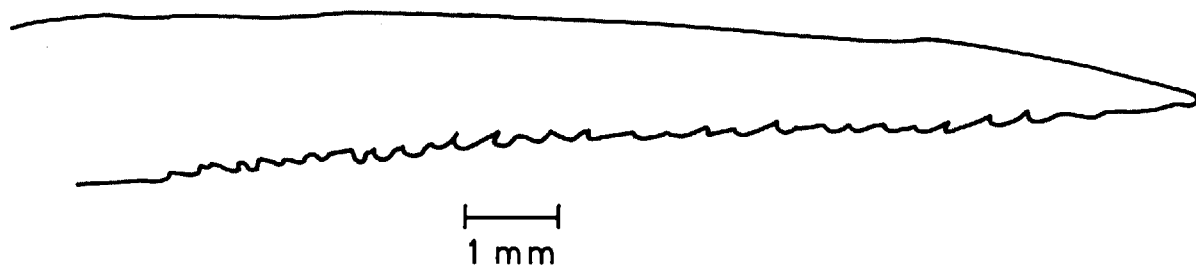


Fig. 3. *Corydoras ornatus* n. sp., left pectoral fin spine of holotype.

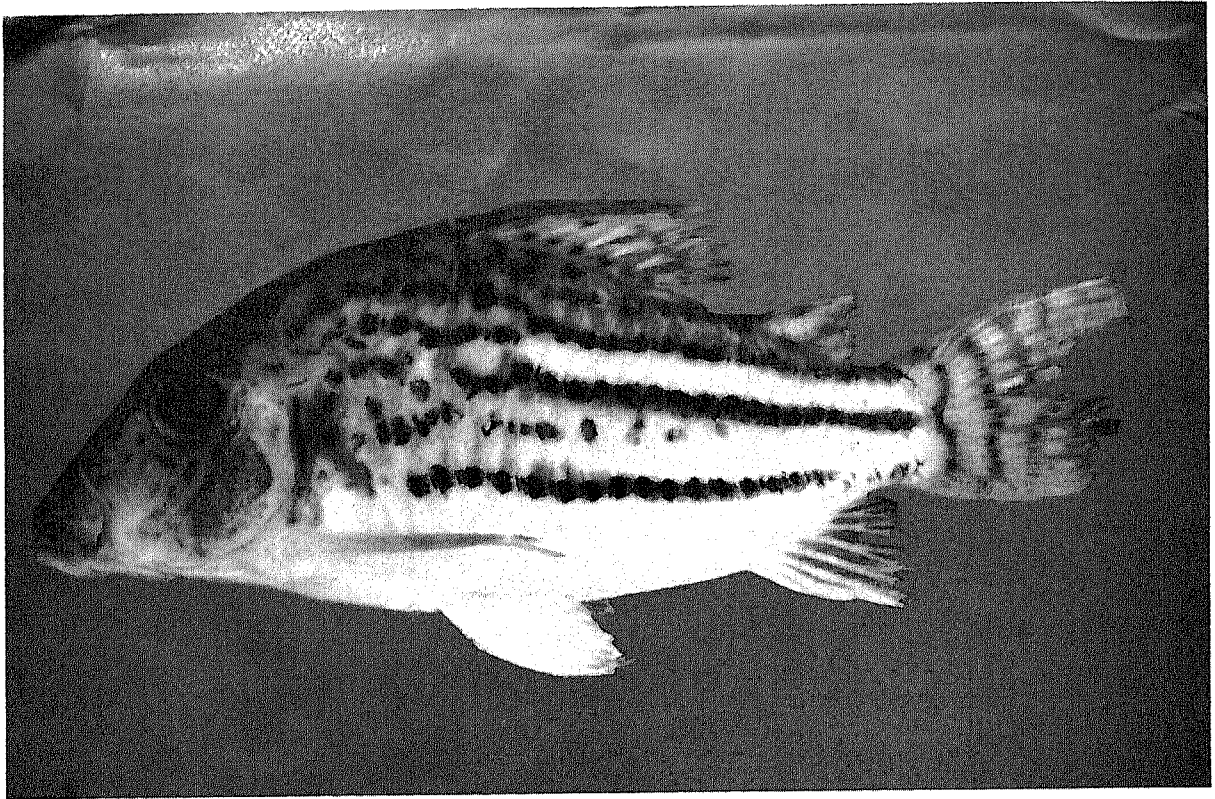


Fig. 1. *Corydoras ornatus* n. sp., holotype, sl 54.2 mm, ZMA 114.690.

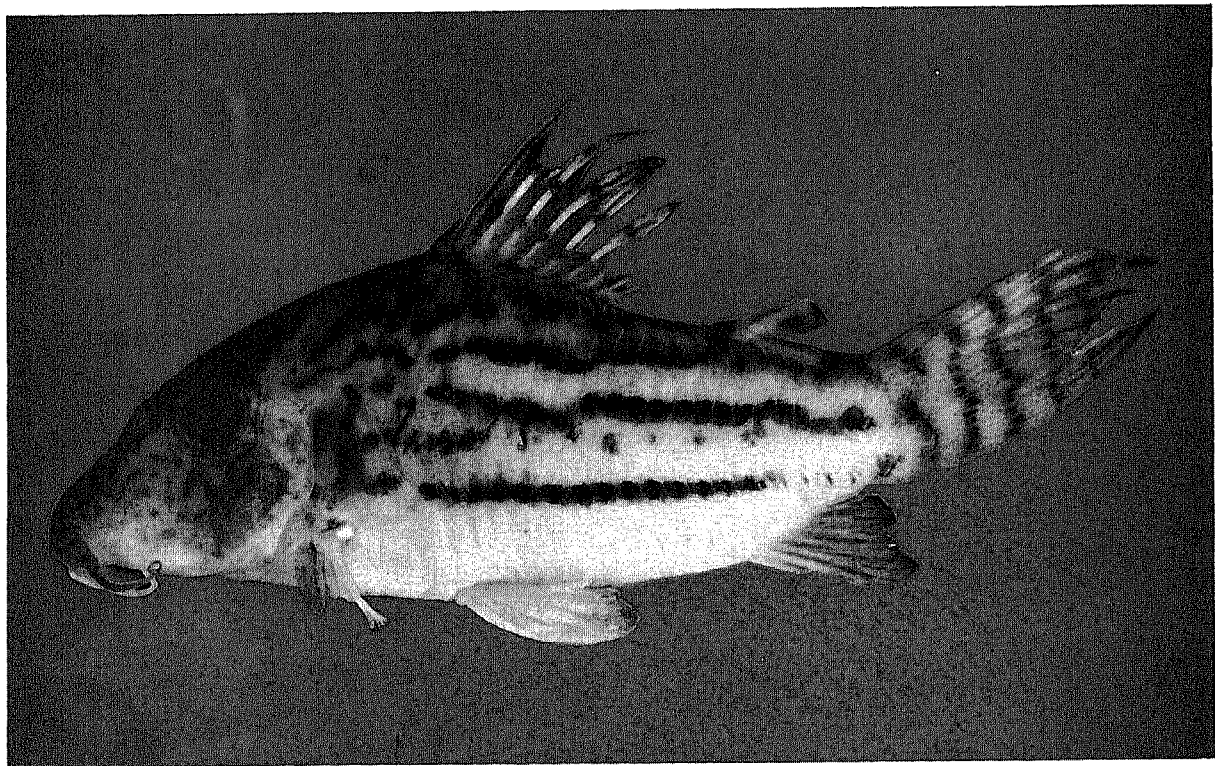


Fig. 2. *Corydoras ornatus* n. sp., largest paratype, sl 52.8 mm, ZMA 114.691, showing differences in colour pattern.