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CURIMATA PUNCTATA, A NEW UNIQUELY PIGMENTED SPECIES OF CURIMATID FROM THE MAROWIJNE RIVER BASIN OF SURINAM AND FRENCH GUIANA (PISCES, CHARACIFORMES).

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ABSTRACT

A new species of curimatid characiform, *Curimata punctata*, from the Marowijne River basin of Surinam and French Guiana is described and illustrated. The distinctive pattern of three to six dark midlateral spots on the body distinguishes the species from all other members of the family.

INTRODUCTION

Numerous nominal species of the family Curimatidae (*sensu* Greenwood *et al.*, 1966) have been described from Surinam over the last one hundred years (Eigenmann & Eigenmann, 1889; Steindachner, 1910; Fowler, 1906; Géry, 1965) or have been cited as components of the Surinamese freshwater ichthyofauna (Eigenmann, 1912; Boeseman, 1952, 1953, 1954). Despite those efforts and the extensive surveys in various regions of Surinam associated with the Brokopondo project, the ichthyofauna of many regions of the country has been poorly sampled and remains effectively unknown. This situation is reflected in the fact that the very distinctive species described in this paper has only relatively recently been collected and recognized as distinct. The species was independently discovered in the course of a revisionary study of the Curimatidae by the first author and during an analysis of the fishes of Surinam undertaken by the second author. Although only known from three localities in the Marowijne River basin of Surinam and French Guiana, the species presumably is widely distributed through that drainage system.

Counts and measurements in the description follow the methods outlined in Vari (1982). All measurements are given as proportions of standard length (SL) other than for subunits of the head which are presented as proportions of head length. Values in square brackets are those of the holotype.

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Curimata punctata n. sp.
(Pl. I, Figs. 1-4)

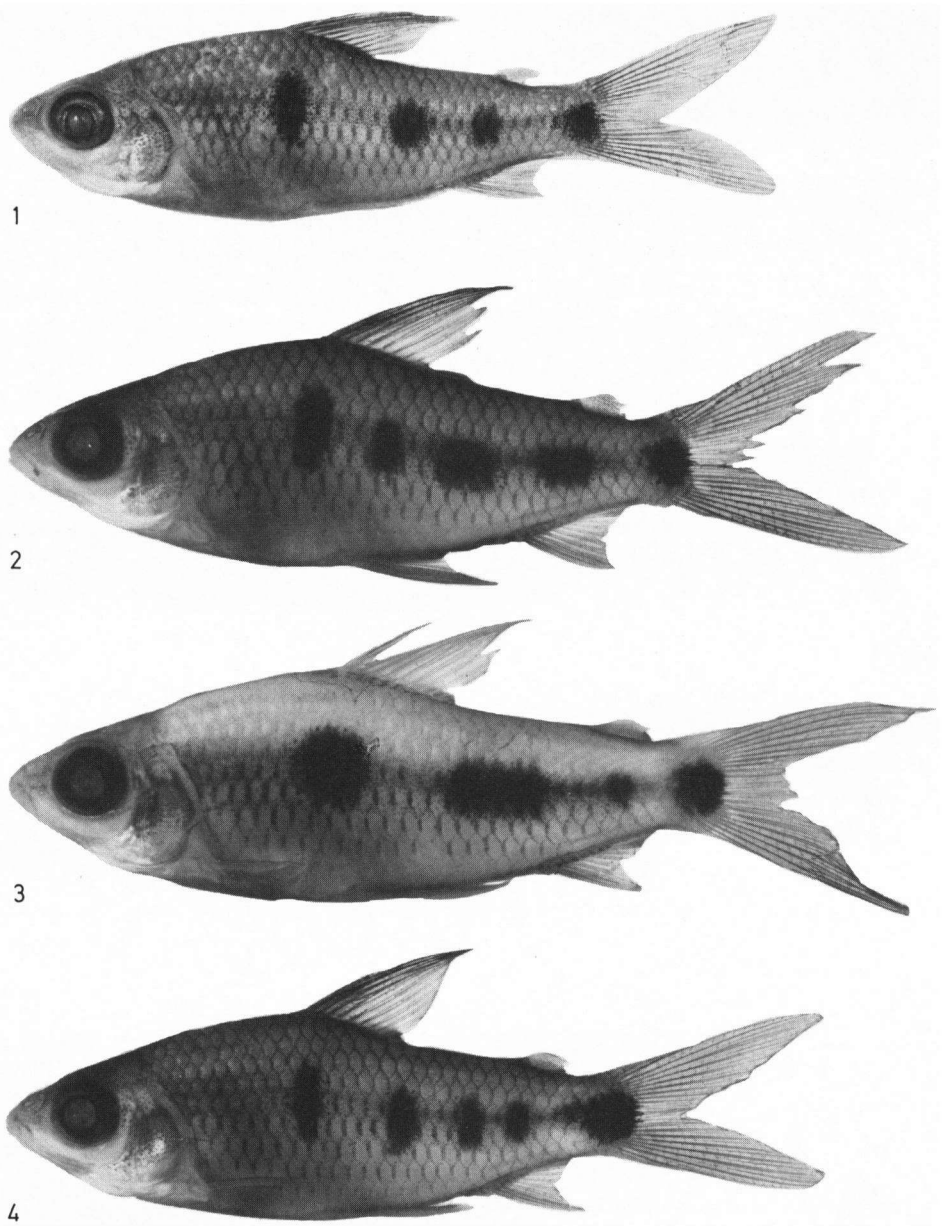
Material examined.—USNM 275000 (holotype), SL 25.9 mm; USNM 278053 (6 paratypes, three cleared and counterstained for cartilage and bone), SL 25.3-27.3 mm; ZMA 119.458 (3 paratypes), SL 23.5-26.5 mm; Surinam, Marowijne District, upper Marowijne River system, Litani River near Kawatop Village (03°11′N, 54°12′W), coll. R. J. Philips, 25-IX-1978.—ANSP 158202 (3 paratypes), SL 19.4-24.4 mm; BMNH 1986.3.26:1-3 (3 paratypes), SL 19.1-25.1 mm; CAS 58151 (3 paratypes), SL 20.8-23.0 mm; FMNH 96906 (3 paratypes), SL 21.1-23.7 mm; ISNB 651 (76 paratypes), SL 16.2-24.8 mm; MHNG 2251.05 (3 paratypes), SL 20.4-23.8 mm; MNHN 1986-395 (3 paratypes), SL 18.6-19.9 mm; NMW 82174 (3 paratypes), SL 21.8-26.0 mm; USNM 278054 (5 paratypes), SL 19.2-25.1 mm; ZMA 119.424 (4 paratypes), SL 26.8-31.3 mm; ZMA 119.425 (3 paratypes), SL 25.8-26.4 mm; Surinam, Marowijne District, small tributary to Oelemari River, coll. J. P. Gosse, 13-XI-1966.—ISNB 652 (3 paratypes), SL 39.7-42.5 mm, French Guiana, tributary on right bank of Inini River at Saut Sonnelle, coll. J. P. Gosse, 16-XI-1969.

Specimens reported on in this paper are deposited in the Academy of Natural Sciences of Philadelphia (ANSP); British Museum (Natural History), London (BMNH); California Academy of Sciences, San Francisco (CAS); Field Museum of Natural History (FMNH); Institut Royal des Sciences Naturelles de Belgique, Brussels (ISNB); Muséum d'Histoire Naturelle, Geneva (MHNG); Muséum National d'Histoire Naturelle, Paris (MNHN); Naturhistorisches Museum Wien, Vienna (NMW); National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM); and Institute of Taxonomic Zoology (Zoölogisch Museum), Amsterdam (ZMA).

Diagnosis. The distinctive pigmentation pattern of three to six (most often four or five) variably sized and shaped, dark midlateral spots on the body readily distinguishes *Curimata punctata* from all other curimatids.

Description. Body moderately robust. Dorsal profile of head very slightly convex. Dorsal profile of body slightly convex from rear of head to origin of rayed dorsal fin; straight and posteroventrally slanted at base of dorsal fin, straight from base of last dorsal ray to caudal peduncle. Dorsal body surface rounded or somewhat flattened transversely anteriorly, with an indistinct median keel immediately anterior to rayed dorsal fin, smoothly rounded transversely posterior to fin. Ventral body profile gently curved from tip of lower jaw to caudal peduncle. Prepelvic region obtusely flattened transversely, with a median series of scales. An obtuse median keel posterior to pelvic fin insertion. A secondary obtuse keel on each side of postventral portion of body one scale dorsal of ventral midline.

Greatest body depth at origin of rayed dorsal fin, depth 0.35-0.37 [0.35]; snout tip to origin of rayed dorsal fin 0.51-0.55 [0.51]; snout tip to origin of anal fin 0.82-0.86 [0.82]; snout tip to insertion of pelvic fin 0.55-0.59 [0.56]; snout tip to anus 0.76-0.81 [0.80]; origin of rayed dorsal fin to hypural joint 0.53-0.58 [0.53]. Rayed dorsal fin pointed; anteriormost rays two and one-half to three times length of ultimate ray. Pectoral fin pointed; length of pectoral fin 0.19-0.25 [0.19], extends about three-quarters of distance to vertical through insertion of pelvic fin. Pelvic fin pointed, length of pelvic fin 0.24-0.27 [0.25], reaches about three-quarters of distance to origin of anal fin. Caudal fin forked; unscaled. Adipose dorsal fin well developed. Anal fin emarginate, anteriormost branched rays about



Pl. I. *Curimata punctata* n. sp. Fig. 1. Holotype, USNM 275000, 25.9 mm SL.- Fig. 2. Paratype, ZMA 119.424, 29.8 mm SL.- Fig. 3. Paratype, ZMA 119.424, 27.7 mm SL.- Fig. 4. Paratype, ZMA 119.424, 27.5 mm SL.

three times length of ultimate ray. Caudal peduncle depth 0.13-0.15 [0.14].

Head obtusely pointed, head length 0.30-0.32 [0.32]; upper jaw slightly longer, mouth barely subterminal; snout length 0.28-0.33 [0.28]; nostrils very close, anterior circular or somewhat elongate longitudinally, posterior cresent shaped with aperture closed by thin flap of skin separating nares; orbital diameter 0.32-0.36 [0.34]; adipose eyelid poorly developed, limited

to region anterior of eye; length of postorbital portion of head 0.37-0.41 [0.41]; gape width 0.21-0.26 [0.24]; interorbital width 0.41-0.45 [0.41].

Pored lateral line scales from supracleithrum to hypural joint 27 to 30 [28]; 8 to 20 anterior scales of midlateral scale series pored, number of pored scales increases with standard length; canals in pored scales straight, non-pored scales with groove midlaterally; 3 or 4 series of scales extend beyond hypural joint onto caudal fin base; 4 1/2 to 5 1/2 (usually 5 1/2 [5 1/2] scales in a transverse series from origin of rayed dorsal fin to lateral line; 4 1/2 [4 1/2] scales in a transverse series from the horizontal midlateral series continuous with pored scales to origin of anal fin.

Rayed dorsal-fin rays ii,9 or iii,9 (when three unbranched rays present, first very short) [iii,9]; anal-fin rays ii,7 or iii,7 (when three unbranched rays present, first very short) [iii,7]; pectoral-fin rays 13 to15 [14]; pelvic-fin rays i,8 or 9 [i,8].

Total vertebrae 30 (20).

Color in alcohol. Scales lacking guanine in all available specimens. Ground coloration yellowish-tan, darker on dorsal portions of head and body. Head without any pronounced pigmentation pattern. Scales of dorsal portion of body with margins outlined by series of small chromatophores. Chromatophores denser and darker dorsally and in a midlateral band along body. Body with a series of variably shaped patches of dark pigmentation with irregular marging. Spots arranged in a midlateral series extending from vertical through origin of dorsal fin backward to posterior of caudal peduncle and base of caudal-fin rays (Figures 1 to 4). Number of spots, their size and shape variable both between specimens and on two sides of many individuals. Anterior and posterior spots always present; one to four spots extend between those. Total of four or five spots most common; reduced number of spots a consequence of absence of a spot or coalescence of two spots. Pigmentation patch at base of caudal fin more diffuse in larger specimens. Dorsal fin with anterior rays dusky in some individuals. Caudal and anal fins dusky, paired fins typically hyaline.

Etymology. The specific name, *punctata*, from the Latin for spotted refers to the pattern of three to six spots on the body.

Distribution. Marowijne River system of Surinam and French Guyana.

Remarks. There is an increase in the number of pored lateral line scales in this species with increasing size. If the species attains a larger maximum size than indicated by the present sample, then it is possible that larger individuals would have a completely pored laterosensory canal system on the body.

Previous classificatory schemes in the Curimatidae have recognized a broad range of genera, and the most recent comprehensive treatment (Fernández-Yépez, 1948) has proved to be difficult to apply non-arbitrarily. Research completed (Vari, 1982, 1984) or in progress attempts to redefine the subunits of the family along natural lines, and has or will result in the synonymization of numerous genera and the redefinition of the recognized taxa. Pending the completion of those studies, the species described herein is retained in the broadly encompassing genus *Curimata* which has included the bulk of the species in the family in the more widely utilized classificatory schemes.

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