SOME NEW CATFISHES FROM BRAZIL

BY N. A. BORODIN

Some years ago, as arranged by the late Dr. Charles R. Eastman, a collection of fishes was sent from the Museu Paulista at São Paulo for study at The American Museum of Natural History. Examination of a part of this collection resulted in the publication of two papers in the Revista do Museu Paulista, XI, 1919 (Nichols, ‘Brazilian Catfishes of the Genus Plecostomus from the Museu Paulista,’ pp. 1–8, and ‘A New Genus of Loricariid Catfishes,’ pp. 1–10). The genus Pseudotocinclus, and the species Plecostomus brevis, P. lacerta, P. scaphyceps, and Pseudotocinclus intermedius were there described as new.

Work on the remainder of the collection was then interrupted, until recently resumed by the present writer, who has described a new blind catfish therefrom, Caecorhamdella brasiliensis Borodin (1927, Amer. Mus. Novit., No. 263). The following fishes also appear to be new.

**Pseudopimelodus roosevelti, new species**

The type specimen, No. 8638, American Museum of Natural History, is 190 mm. in standard length.

**Specific Characters.**—Head very large, depressed, covered by thick skin; cheeks fleshy. Intermaxillary band of teeth with a short obtuse, backward projecting angle. Caudal fin forked, its lobes pointed, the upper one being the longer. Ventrals situated in the center of the body. Their tips do not reach caudal fin. Wide dark brown bands encircle the back and sides.

**Description.**—Body comparatively short (depth 5), truncate, depressed in front and somewhat compressed toward the tail. Belly up to the ventrals broad and flat. Head large, almost as broad as long—3½ in the length; low, its height 1½ in its length. It is covered with thick skin under which, in the region of the cheeks, a layer of muscles is provided. No visible fontanel. A long, narrow occipital process reaches the plate of the dorsal fin. They are both, however, hidden under the skin. Eyes minute, 3½ in the snout, 10½ in the head. Maxillary barbels short and fleshy, reaching only to base of pectoral fin. Lower jaw projecting and provided with a narrow band of slightly villiform teeth. Another wide band of teeth with a short obtuse, backward projecting angle is on the premaxilla; no teeth on the vomer. Dorsal fin with a serrated spine, its length 2 times in the head; it is shorter than the first branched ray. Pectoral long and curved; strongly dentated on the interior edge except the end which is leathery and soft. The ventrals are situated in the center of the body (exclusive of caudal); their tips do not reach anal fin. Adipose short, 7 times in the body. Caudal forked, its lobes pointed, the upper being the longer.
The coloration of this fish is very pretty and characteristic. On the light brown ground there are three wide dark brown bands, in the region of dorsal, adipose fins and peduncle. These bands are continued on the fins themselves, which, besides that, are ornamented with alternating longitudinal black and white spaces. Such black and white decoration is to be observed on the dorsal, adipose, anal, and caudal fins as well as on the upper sides of the pectoral and ventrals. A short dark brown band is on the nape. The head is densely sprinkled with small dark dots, while the dots on the belly are more dispersed, so that on the whole it looks grayish yellow.

Fig. 1. Pseudopimelodus roosevelti, type.

Dorsal I, 6; pectoral I, 8; anal, 11.

LOCALITY.—Parassununga, Province of São Paulo, Brazil. Collected by R. von Ihering, December, 1907.

Besides the type there is a smaller specimen of 145 mm. (standard) from the same locality (American Museum No. 8638a) and still another, 220 mm. long (American Museum No. 8638b) from Itaqui, Province of Rio Grande do Sul, collected by E. Garbe, in 1914. They are all of exactly the same shape and qualifications and can be considered as co-types.

The nearest fish of the same genus must be acknowledged to be Pseudopimelodus zungaro (Humboldt), which is considered by Eigenmann (1912, 'The Freshwater Fishes of British Guiana,' Mem. Carnegie Museum, V, p. 151) to be synonymous with Pimelodus bufonius Cuvier and Valenciennes and P. bufonius Steindachner (1880, 'Fischfauna des Cauca und der Flüsse bei Guayaquil,' 7, Pl. ii, fig. 1–12. Denkschrift. Wien. Akad., XLII). But the new species differs from it in having a larger head (3½ in body instead of 3¾–4¾); shorter body (5 instead of 5½–6½); pointed lobes of the caudal of which the upper is the longer (instead of being equal), and band of intermaxillary teeth with a short obtuse backwardly projecting angle (instead of a long sharp angle, as is shown in the drawing on page 113 Eigenmann and Eigenmann, 'Revision of South American Nemathognathi,' Calif. Acad. of Sciences, Occas. Papers, 1890, 1–2).
Pseudopimelodus pulcher Boulenger, from Ecuador (Proc. Zoöl. Soc. London, 1887, p. 276, fig. 1, Pl. xxi) also resembles the new species, which, however, differs from it by the following characters. P. roosevelti has an intermaxillary band of teeth with a backwardly projecting angle; its head is broader (as broad as long), not naked, but covered with thick skin. Its occipital process is much longer than the dorsal plate. The structure and serrations of dorsal and pectoral fins are also different. Another species, described in 1914 by M. Ribeiro under the name P. variolosus, from Rio Taquary, Brazil (Comissão de Linhas Telegraph Estrategicas de Matto Grosso ao Amazonas. Ann. 5. Zoologica. Pimelodidæ, etc. Rio de Janeiro, 1914. Separates, p. 4, Pl. 1, fig. 2) has also some resemblance in external characters, but differs from the new species in the number of rays in the dorsal (I, 5) and anal (7) fins, as well as in more slender body (depth 5½ in the length).

Both types of Boulenger and Ribeiro are small specimens (55 and 87 mm. only), while our new species is represented by medium-sized fishes from 145 to 220 mm.

We name the new species in honor of the late President Theodore Roosevelt, who was one of the first American explorers of the "Brazilian Wilderness," and during his travels in 1908 visited just the part of that country where this new species was collected.

Fig. 2. Trachycorystes leopardinus, type.

Trachycorystes leopardinus, new species

The type specimen, No. 8637, American Museum of Natural History, is 95 mm. in standard length.
Specific Characters.—Dorsal spine without dentation, serrated behind. Head low (1½ in its breadth). The maxillary barbels reach the middle of the pectoral fins. Upper portion of the body covered with irregular black stripes and spots on a yellow ground color. Lower side of head and belly yellowish, covered with dots, nicely arranged.

Description.—Head large, but low, 4 in the body length (standard), its height 1½ in the head's length and 1¾ in the body depth. It is as long as wide. A conspicuous fontanel between eyes which are medium-sized (4 in the head's length) and covered with skin. They are situated very near the cleft of the mouth. Maxillary barbels reach middle part of the pectoral fin. Body compressed, its depth 3⅓ in the length. Dorsal fin high, 1½ in the head; its base short, 2 in the length. Dorsal spine shorter than the first soft ray, serrated behind. Adipose very small. Pectoral well developed and supplied with a strong spine, dentated on both sides. Anal very long reaching nearly to the caudal, which is obliquely rounded. Black irregular longitudinal stripes all over the head, body and fins. Belly prettily sprinkled with gray dots.

Dorsal I, 6; anal, 17-18; ventral, 8.

Locality.—Rio S. Francisco, Minas Geraes Province, Brazil.

This species resembles Trachycorystes cerathophysus (Kner). (See Icht. Beiträge Sitzungsberichte Wiener Akad., 1858, XXVI, p. 427, fig. 23), but differs in that the dorsal spine is without marked dentation; in longer maxillary barbels; lower head, and particularly in the quite striking ornamental coloration of the whole body.

Other species of Trachycorystes occurring in Brazil, T. galeatus, T. glaber. T. obscurus, are more different than is the species described by Kner. Kner called it Auchenipterus cerathophysus, but Bleeker has introduced the genus Trachycorystes, to which belongs the new species as well as several others named above.

Imparfinis longicauda, new species

Specific Characters.—Body low, slender, ending in a very long caudal fin with pointed tip, but obliquely cut; its length 2½ in body length (standard). Adipose fin long—2½ in length. It does not reach caudal fin. Anal short with only 8 rays. Four black cross-bands on the back.

Description of Type.—The unique specimen, No. 8639, American Museum of Natural History, is 105 mm. long (standard). Franca, Rio Grande, Prov. S. Paulo, Brazil. Collected by E. Garbe, in 1910. Head short, depressed, 5½ in that measure;
its breadth 1½ in its length. It is covered with skin. Occipital process short, pointed. Eyes oval, situated on the top of, and contained 4⅔ times in head; they are covered with skin; the distance between them a little less than their long diameter. Mouth terminal, jaws equal. Maxillary barbels rather short, slender, reaching slightly past base of pectoral fins.

Body slender, low; its depth 13 times in length (without caudal). Dorsal fin spineless, rounded; pectoral with a short unserrated spine; comparatively large; rounded ventral fins originate a little forward of the vertical of the base of the dorsal fin. Anal short and low, with only 8 rays. Low adipose fin, very long—2½ in the length; it does not reach caudal fin. Caudal fin extraordinarily long—2½ in body length; it is sharply pointed but its lower rays are shorter than upper ones so that the tail has a very unusual and characteristic form (see figure).

Coloration.—On yellow ground-shade there are on the back four conspicuous black bands—one between pectorals; one in front of dorsal; one under the middle of the dorsal, and the last between dorsal and adipose fins. There is one large black spot on the nape and two black lines from eyes to tip of the snout.

Dorsal I, 6; pectoral, 7; anal, 8.

Locality.—See above.

Fishes of the genus *Imparfinis* Eigenmann and Norris resemble very much those of the genus *Heptapterus* Bleeker, but the presence of a spine in the pectoral fin is one of the generic characters of *Imparfinis*. The new species does not much resemble any of five other known species of *Imparfinis*: *I. piperatus* Eigenmann and Norris (Revista Museu Paulista, 1900, IV, p. 352); *I. microps* Eigenmann and Fisher (Eigenmann, 'Fishes of Northwestern South America,' Mem. Carnegie Museum, 1922–24, IX, pp. 221–222, Pl. iv, figs. 2 and 3); *I. hasemani* Steindachner; *I. insidiosus* Steindachner ('Flüssfische Südamerikas,' Denkschriften Akad. Wiss. Wien, 1917, XCIII, pp. 59–61, Pl. xii, fig. 7); *I. hollandi* Haseman (Haseman, 'New Fishes from the Rio Iguassu,' Ann. Carnegie Museum, 1910–11, VII, p. 383, Pl. XLVIII, fig. 2). None of these species has so long an adipose fin and so long a tail, which is duly indicated in the specific Latin name, *longicauda*.

*Chasmocranus truncatorostris*, new species

Specific Characters.—Head short, depressed; snout broad, squarely truncate; mouth large with soft thick lips. No dorsal or pectoral spine. Ventral fins under dorsal; adipose fin long; caudal deeply forked, upper lobe pointed and longer than the rounded lower lobe.

Description of Type.—The unique specimen, No. 8640, American Museum of Natural History, 110 mm. long (standard), collected by W. Ehrhardt, at Col. Hansa Joinville, St. Catharina Prov., Brazil, in 1908. Body elongate, depth 6¾, sub-triangular in the middle part and compressed thence to the tail. Head wide (1¾ in its length), depressed, short—4½ in length of body; snout broad, short (1¾ in remainder of head) and squarely truncate; mouth large with soft thick lips; upper jaw a little longer
than the lower. Eyes of medium size, 5 in head, covered with skin; orbit without free margin; distance between eyes a little less than snout's length. Maxillary barbels reach to the middle of pectoral fin. Dorsal fin with one simple soft first ray and six branched; a little higher than long; pectoral and ventrals rounded and well developed. Ventrals are situated under the middle of dorsal fin, and of medium size; caudal deeply forked, upper lobe much longer than lower one. Adipose well developed, 3/4 in body's length.

![Image of Chasmocranus truncatorostris]

**Fig. 4. Chasmocranus truncatorostris, type.**

**COLORATION.**—A two-lobed black spot on the nape, incomplete black bands under the middle of the dorsal fin in front and near the end of adipose fin. The ground shade (of an alcohol specimen) yellowish.

Dorsal I, 6; pectoral I, 8; anal, 10.

**LOCALITY.**—See above.

The genus *Chasmocranus* was introduced by Eigenmann (Rept. Princeton Univ. Exped. Patagonia, 1910, III, p. 384). Its type, *C. longior*, and another species, *C. brevior*, are described by him in 'Freshwater fishes of British Guiana,' Mem. Carnegie Museum, 1912, V, pp. 160–162, Pl. xiv, fig. 2; Pl. xv, fig. 1. The third known species of the same genus, *C. rosea*, was found in Gonsales (Eigenmann, 'Fishes of Northwestern South America,' Mem. Carnegie Museum, 1922–24, IX, p. 220, Pl. i, fig. 4). The new-species can be easily distinguished by its square-cut snout, and by the form of the caudal fin with its pointed longer upper lobe.

**Rhamdella longipinnis**, new species

**SPECIFIC CHARACTERS.**—All the fins are exceedingly long: dorsal 5/6, anal 5/6, and caudal 7/5 of the head's length. Ventrals and pectorals equal to head. Long and narrow occipital process does not reach dorsal plate by 2/5 of the length of the process itself.
DESCRIPTION OF TYPE.—The unique specimen, 88 mm. long, No. 8842, American Museum of Natural History; collected in Prov. St. Paulo, Brazil. Body elongate and compressed, depth 6½ in the length; head 5; large round eyes, ¾ in head, ¾ in the interorbital space. Snout obtuse; a narrow fontanel extends to the base of the occipital process which is long, extending ¾ of the distance between the head and the tip of the plate of the dorsal spine; a very long humeral process, ¾ the length of the pectoral fin. Six-rayed dorsal fin very high, its longest ray equals ¾ of head; it is provided with a spine a little shorter than the fin itself; pectorals equal to the head, with strong, flat spine; ventrals equal to head; eleven-rayed anal ¾ of head; adipose 3 in body; caudal forked, very long—3½ in body, its upper lobe the longer; maxillary barbel long, threadlike, reaches the middle of the adipose fin. No dark spots or lines on the body or fins.

Dorsal I, 6; anal, 11.

Locality.—See above.

This species can be easily distinguished from related R. exsudans (Jenyns) and R. ignobilis (Steindachner) by its exceptionally long fins, which in those species are always shorter than the head. Its general form of the body approaches that of Cæorhamdella brasiliensis Borodin, but besides longer fins its head is shorter, body lower, and its occipital process has a different form.

Rhinolepis paraguensis, new species

Specific Characters.—Adipose fin absent. Belly covered with minute plates which makes it granular throughout. Snout, head, back, sides, and fins are covered with short, bristly spines which are best developed on the pectoral and dorsal fins. Eye very large, lateral, deep seated. Caudal deeply forked, lower lobe being the longer.

Description of Type.—No. 8641, American Museum of Natural History, from Paraguay, 25 mm. long (standard). Head, ¾ in that measure; depth, ½ in length; eyes lateral, very large, ¾ in head, deeply seated in the orbits; large double nares close to the eyes; snout's margin granular; head, back, sides, fins and belly are covered with short, bristly spines which make the whole body granular. Sides of the body are covered with large lateral plates, supplied with the said bristly spines; plates on back and lower portion of the body are of smaller size, and on the belly they are minute, hardly distinguishable with the naked eye. The only portion of the body free of bristles is the inferior side of the head from the gills to the mouth. Mouth of rhomboid form supplied with rows of numerous fine teeth, located on four sides of the rhomb; a large posterior apron-shaped lip encircles the mouth. Anterior surface of dorsal spine very strong, flat, supplied with many bristles; caudal deeply forked with the lower lobe the longer.

Locality.—See above.

This small loricariid fish is represented in the collection by two additional specimens (20 mm. and 18 mm. long) from the same place. All three are alike. It resembles the generic type described by Spix, R. aspera (Spix and Agassiz, 1829, 'Selecta genera et species piscium Brasiliensium,' p. 2, Pl. II), but differs by having caudal fin deeply forked, and larger eyes.