

Head nearly black, a broad metallic-silver collar on upper surface of neck. Body minutely variegated with dark grey on silver, equally variegated beneath, but brighter and more yellowish in tone; end of tail silver, terminal spine darker. The whole body has a metallic lustre, and the under surface somewhat resembles certain biotite or hornblende granites when polished.

Total length 395 mm.

This species is described from a single adult, collected by Mr. Loveridge near Kilosa, Tanganyika Territory. The specimen was dispatched to Mr. Crowther, of Dulwich College, alive, but died upon the way after having shed its skin. It is now preserved in the collection of the British Museum.

Its name—*excentricus*—refers to its general appearance, which is odd in the extreme.

#### LXXXIX.—*Four new Fishes from Tanganyika Territory.*

By J. R. NORMAN.

(Published by permission of the Trustees of the British Museum.)

THE fishes described below form part of a collection from Mpanganye, Rufigi River, Tanganyika Territory, received from Mr. A. Loveridge.

#### *Distichodus rufigiensis*, sp. n.

Depth of body  $2\frac{1}{4}$  to  $2\frac{1}{2}$  in length, length of head  $4\frac{1}{4}$  to  $4\frac{1}{2}$ . Head as long as deep, about twice as long as broad. Snout not compressed, projecting beyond mouth, its length 1 to  $1\frac{1}{3}$  times diameter of eye, which is  $3\frac{1}{4}$  to 4 in length of head and  $1\frac{1}{2}$  to 2 in interorbital width. Maxillary extending to below nostril; teeth in 2 series in both jaws, 20–25 in outer series of upper jaw. 15 gill-rakers on lower part of anterior arch. Dorsal 19–20 (4 unbranched), equally distant from occiput and caudal, or a little nearer latter; longest rays distinctly longer than head. Adipose fin moderately large, separated from rayed dorsal by a space equal to  $\frac{2}{3}$  the base of the latter. Anal 14–15 (3 unbranched); base  $\frac{2}{3}$  base of dorsal. Pectoral  $\frac{3}{4}$  to  $\frac{4}{5}$  length of head, shorter than pelvics. Caudal forked, upper lobe pointed and slightly longer than lower, which is

rounded. Caudal peduncle much deeper than long. 62-65 scales in a longitudinal series, 11-12 from origin of dorsal to lateral line. About twelve more or less distinct but broken vertical bars on sides of body, ending below lateral line; a black spot on caudal peduncle; caudal fin with a somewhat broad pale margin; dorsal with numerous black dots.

Three specimens, 90 to 170 mm. in total length.

This species is near *D. antonii*, differing chiefly in the characters of the fins.

*Barilius loveridgii*, sp. n.

Depth of body  $4\frac{1}{2}$  in length, length of head  $4\frac{1}{2}$ . Head more than twice as long as broad. Snout pointed, longer than eye, which is 4 in length of head and slightly less than interorbital width. Jaws equal anteriorly; maxillary reaching posterior third of eye. No barbels. Gill-rakers rudimentary. Dorsal II 8; origin equidistant from centre of eye and root of caudal; last four rays above anal; anterior rays longest,  $\frac{3}{4}$  length of head. Anal III 12; anterior rays much longer than posterior, but not longer than dorsal rays. Pectoral  $\frac{3}{4}$  length of head, slightly falcate, just reaching pelvics. Pelvics reaching anal. Caudal forked. Caudal peduncle longer than deep. Scales with numerous radiating striæ, 40 in a longitudinal series,  $7\frac{1}{2}$  between origin of dorsal and lateral line. Brownish; 8 or 9 short, dark vertical bars on sides of body above lateral line; margin of dorsal and caudal darker.

A single specimen, 98 mm. in total length.

Near *B. ubangensis* and *B. peringueyi*.

*Synodontis maculipinna*, sp. n.

Depth of body  $3\frac{1}{2}$  to  $4\frac{1}{5}$  in length, length of head  $3\frac{2}{5}$  to 4. Head slightly longer than broad, more or less rugose above, except snout, which is rounded or obtusely pointed, and equal to or longer than postocular part of head. Eye supero-lateral, 5 to  $6\frac{1}{2}$  in length of head, 2 to  $2\frac{1}{2}$  in interorbital width. Lips moderately developed. Premaxillary teeth in a broad band, nearly extending across whole width of mouth; 30-40 movable mandibular teeth, almost in a single series, the length of which is from  $\frac{3}{4}$  to  $\frac{7}{8}$  diameter of eye; height of teeth less than  $\frac{1}{2}$  diameter of eye. Maxillary barbel unbranched, without or with a very narrow marginal membrane at base, equal to or slightly longer than length of head; outer mandibular barbel with long slender branches, nearly twice as long as inner, which has stouter and shorter branches. Gill-opening

not extending downwards beyond base of pectoral. Occipito-nuchal shield rough like the occiput, obtusely tectiform, longer than broad, with pointed posterior process. Humeral process much longer than broad, more or less distinctly keeled, sharply pointed, extending as far back as occipito-nuchal process. Dorsal I 6-7; spine equal to or slightly shorter than head, feebly curved, anterior edge smooth except for two or three serrations at the tip, posterior edge feebly serrated. Adipose fin 3 to 4 times as long as deep,  $1\frac{1}{4}$  to a little more than twice its distance from rayed dorsal. Anal IV 7; rounded. Pectoral spine shorter than head, strongly serrated on both sides, not reaching pelvics. Pelvics not reaching anal. Caudal forked, upper lobe the longer. Caudal peduncle as long as deep, or slightly deeper than long. Coloration generally uniform, young sometimes with darker spots separated by a pale network; a black blotch at base of dorsal fin; dorsal and caudal sometimes with series of dark spots.

Nine specimens, 70 to 180 mm. in total length.

Near *S. zambesensis* and *S. depauwi*.

*Tilapia urolepis*, sp. n.

Depth of body  $2\frac{1}{3}$  in the length, length of head nearly 3. Head twice as long as broad. Snout rounded, with straight upper profile, slightly broader than long, as long as postocular part of head. Eye  $4\frac{1}{2}$  in length of head, equal to depth of præorbital; interorbital width  $2\frac{3}{4}$  in length of head. Mouth rather more than  $\frac{2}{3}$  width of head; jaws equal anteriorly; maxillary extending to between nostril and eye; teeth moderately slender, in 5 series, about 70 bicuspid teeth in outer series of upper jaw. 3 series of scales on cheek, width of scaly part nearly equal to diameter of eye. Gill-rakers short, 20 on lower part of anterior arch. Dorsal XVII 13; last spine longest,  $\frac{1}{2}$  length of head; longest soft rays about  $\frac{3}{4}$  length of head. Anal III 10; third spine shorter than longest dorsal. Pectoral as long as head, nearly reaching vertical from origin of anal. Pelvics almost reaching anal. Caudal rounded (?), densely scaled. Caudal peduncle twice as deep as long. Scales cycloid, 32 in a longitudinal series,  $4\frac{1}{2}$  from origin of dorsal to lateral line. Reddish brown, with irregular dark blotches on body; a dark opercular spot, and a dark spot on each side of the nape.

A single specimen, 190 mm. in total length.

Differs from *T. nilotica* in having the caudal densely scaled, and in the longer snout; and from *T. lepidura* chiefly in the character of the dentition.