

25. On some new Fishes from near the West Coast of Lake Tanganyika. By G. A. BOULENGER, F.R.S., F.Z.S.

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(Text-figures 6-10.)

A few months ago I reported in these Proceedings* on a collection of Fishes made at Albertville by M. Dhont-De Bie, of the Belgian East African Expeditionary Force. On returning home in May last, the same gentleman has brought me further specimens from localities near but outside the great lake, among which were representatives of six undescribed species.

These Fishes are from three localities:—

(1) A ditch (marigot) along the Lukuga River: *Protopterus athiopicus* Heck., *Clarias hilgendorfi* Blgr. (previously known from Lake Rukwa), *Auchenoglanis occidentalis* C. & V., *Anabas ctenotis*, sp. n., and *Mastacembelus tenuatus* Blgr.

(2) Tumbwe, a village S.W. of the Kalemie River, on a small stream flowing into the Niamba River, a tributary of the Lukuga: *Labeo dhonti*, sp. n., *Barbus euchilus*, sp. n., *B. miochilus*, sp. n., *B. holotenia* Blgr.

(3) Kabeke, a village 30 miles south of Tumbwe, on the Niamba River: *Allabenchelys dhonti*, sp. n., *Amphilius platycheir* Gthr., *Phractura lukuga*, sp. n., an association very suggestive, so far as genera are concerned, of the rivers of South Cameroon, whence the two first known representatives of the genus *Allabenchelys* Blgr. were described, and where several *Amphilius* Gthr., and *Phractura* Blgr., are at home.

It is remarkable that no members of the family *Cichlidae*, which form the great majority in the Tanganyika Fish-fauna, should have been collected in these three localities. *Characinidae* are also absent.

Descriptions of the new Species.

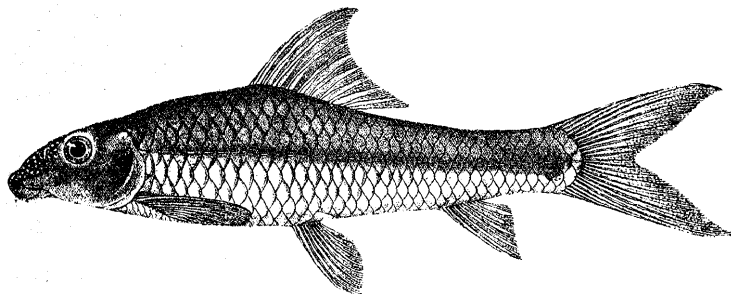
LABEO DHONTI.

Body feebly compressed, its depth 5 to $5\frac{2}{3}$ times in total length. Head 4 to $4\frac{1}{3}$ times in total length, its width $\frac{2}{3}$ its length; snout rounded or very obtusely pointed, strongly projecting, with a curved transverse groove above, its length less than half that of head; eye small, supero-lateral, 5 to $5\frac{1}{2}$ times in length of head; interorbital width $\frac{2}{3}$ length of head; width of mouth (with lips) $\frac{2}{3}$ to $\frac{1}{2}$ length of head; lips strongly developed, upper straight-edged, lower more or less expanded and bordered in front by a fringe of papillæ, the posterior border strongly festooned; inner surface of lips with small papillæ forming numerous transverse

* Cf. P. Z. S. 1919, p. 17.

plicæ; rostral flap large, completely detached on the sides, its edge feebly festooned; nuptial tubercles or their scars on the upper surface of the snout. Dorsal III 10-11, equally distant from nostrils and from root of caudal, upper edge concave, last simple ray as long or a little longer than head. Anal III 5, reaching root of caudal or not. Pectoral as long as or a little shorter than head, not reaching ventral, the first ray of which

Text-figure 6.

*Labeo dhonti.*

falls below fourth branched ray of dorsal. Caudal deeply emarginate, crescentic when fully spread out. Caudal peduncle $1\frac{1}{2}$ times as long as deep. Scales $35-36\frac{5\frac{1}{2}}{6\frac{1}{2}-7\frac{1}{2}}$, $3\frac{1}{2}$ between lateral line and ventral, 12 (exceptionally 14) round caudal peduncle. Dark olive above, white beneath; a more or less distinct dark lateral band; sometimes ending in a black spot.

Total length 115 mm.

Six specimens from Tumbwe.

Distinguished from *L. cylindricus* Peters by a more elongate body and a lower number of scales round the caudal peduncle.

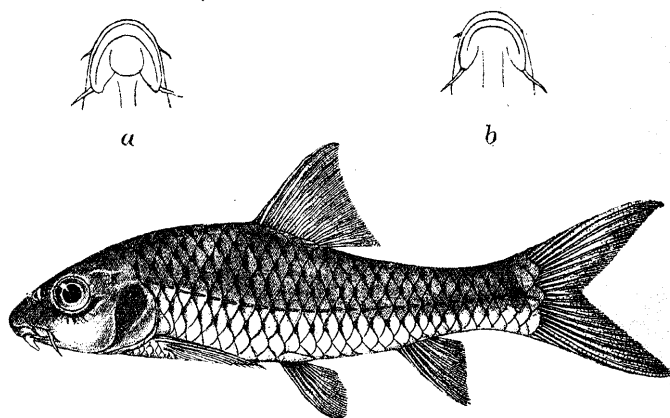
BARBUS EUCHILUS.

Depth of body 4 times in total length, length of head $3\frac{1}{2}$ times. Snout rounded, $\frac{1}{3}$ length of head; eye 4 times in length of head, interorbital width $3\frac{1}{3}$ times; mouth inferior, its width $3\frac{1}{2}$ times in length of head; both lips much developed, the lower with a rounded median lobe; two barbels on each side, anterior $\frac{2}{3}$ diameter of eye, posterior $\frac{2}{3}$. Dorsal IV 10, equally distant from eye and from root of caudal; border concave; last simple ray not enlarged, articulate in its distal half, smooth, $\frac{1}{3}$ length of head. Anal III 5, not reaching caudal. Pectoral $\frac{2}{3}$ length of head, not reaching ventral; base of latter below middle of dorsal. Caudal peduncle $1\frac{1}{2}$ times as long as deep. Scales longitudinally striated, $26\frac{4\frac{1}{2}}{5}$, 2 between lateral line and ventral, 12 round caudal

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peduncle. Brown above, whitish beneath; a large dark brown spot on the gill-cover.

Text-figure 7.



Barbus euchilus, with lower view of anterior part of head in same (a) and in *B. miochilus* (b).

Total length 80 mm.

A single specimen from Tumbwe.

Very closely allied to *B. caudovittatus* Blgr., from the Ubanghi, but eye smaller and lips more developed.

BARBUS MIOCHILUS.

Depth of body equal to length of head, 4 times in total length. Snout rounded, $\frac{1}{3}$ length of head; eye 4 times in length of head, interorbital width 3 times; mouth inferior, with sharpish edge, its width $3\frac{1}{2}$ times in length of head; lips moderate, lower restricted to the sides; two barbels on each side, anterior $\frac{1}{3}$ diameter of eye, posterior $\frac{1}{2}$ to $\frac{2}{5}$. Dorsal IV 10, equally distant from centre of eye and from root of caudal; border concave; last simple ray not enlarged, articulated nearly to the base, smooth, a little shorter than head. Anal III 5, not reaching caudal. Pectoral $\frac{3}{4}$ length of head, not reaching ventral; base of latter below middle of dorsal. Caudal peduncle $1\frac{1}{3}$ to $1\frac{1}{2}$ times as long as deep. Scales longitudinally striated, 25-26 $\frac{4\frac{1}{2}}{4\frac{1}{2}}$, 2 between lateral line and ventral, 12 round caudal peduncle. Brown above, whitish beneath; a large dark-brown spot on the gill-cover. Male with very small round nuptial tubercles on the snout and larger ones on the lower surface of the head.

Total length 85 mm.

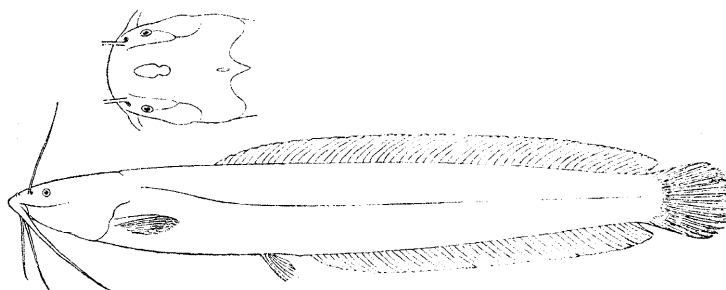
Four specimens from Tumbwe.

Closely resembles the preceding, but distinguished by the character of the lips and the shape of the mouth.

ALLABENCHELYS DHONTI.

Depth of body 7 to 8 times in total length, length of head $4\frac{1}{2}$ to 5 times. Head $1\frac{1}{4}$ to $1\frac{1}{3}$ times as long as broad, smooth above, the bony casque, in the middle of the head, $\frac{2}{3}$ to $\frac{1}{2}$ width of head; occipital process acutely pointed; a rather large frontal fontanelle; occipital fontanelle small, in advance of occipital process; eye very small, 3 times in length of snout, 6 to 7 times in interorbital width, which is $1\frac{3}{4}$ to $2\frac{1}{4}$ times in length of head: band of premaxillary teeth 4 to 5 times as long as broad: vomerine teeth

Text-figure 8.

*Allabenchelys dhonti.*

granular, forming a crescentic band which is a little narrower than the premaxillary band: nasal barbel $\frac{2}{3}$ to $\frac{2}{3}$ length of head; maxillary barbel as long as or a little shorter than head, not reaching middle of pectoral fin; outer mandibular barbel $\frac{2}{3}$ to $\frac{3}{4}$ length of head, inner $\frac{1}{2}$ to $\frac{2}{3}$. Gill-rakers moderately long, 10 to 12 on anterior arch. Clavicles hidden under the skin. Dorsal 55-60, its distance from occipital process $\frac{1}{2}$ to $\frac{2}{3}$ length of head. Anal 50-53. Both dorsal and anal narrowly separated from caudal. Pectoral $\frac{2}{3}$ to $\frac{1}{2}$ length of head, its spine strongly serrated on outer side and smooth on inner, and $\frac{1}{2}$ to $\frac{2}{3}$ the length of the fin. Ventral $1\frac{1}{3}$ to $1\frac{1}{2}$ times as distant from root of caudal as from end of snout. Caudal $\frac{1}{2}$ to $\frac{2}{3}$ length of head. Dark brown above, whitish beneath.

Total length 165 mm.

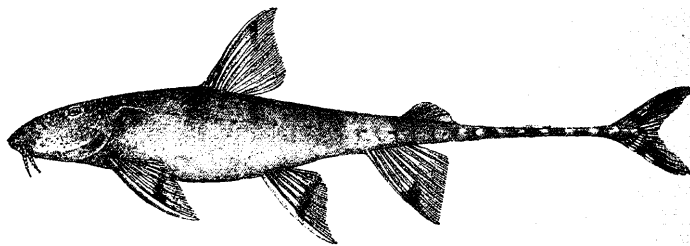
10 specimens from Kabeke.

PHRACTURA LUKUGÆ.

Depth of body $6\frac{1}{2}$ times in total length, length of head $5\frac{2}{3}$ times. Head $1\frac{1}{3}$ times as long as broad, feebly rugose above: snout half length of head, obtusely pointed, projecting beyond mouth; space between nostrils a little nearer eye than end of snout; eye very small, on upper surface of head, 8 diameters in length of head, 2 in interorbital width; lips and barbels covered with large round papillæ beneath; maxillary barbel $\frac{1}{3}$ length of head, outer mandibular a little shorter, inner mandibular $\frac{1}{5}$.

Occipital process long and very narrow, not reaching interneural shield. Dorsal I 6, twice as distant from base of caudal as from end of snout; second dorsal a little nearer first than root of caudal. Anal II 7. Pectoral as long as head, longer than ventral; latter not reaching anal. Caudal with crescentic notch. 24 dorsal and 19 ventral scutes, the last 5 united on caudal peduncle, which is $\frac{1}{3}$ of the total length. Pale yellowish above, white beneath; three ill-defined darker bars across the body and dark

Text-figure 9.

*Phractura lukugæ.*

annuli on the caudal peduncle; pectorals, ventrals, and anal with rather indistinct dusky cross-bars; black variegations on each lobe of the caudal.

Total length 90 mm.

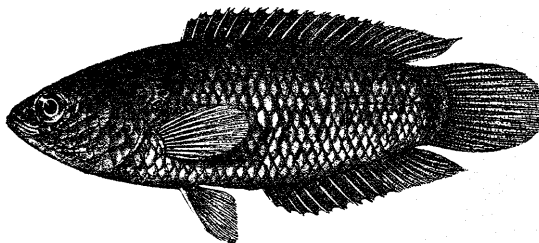
A single specimen from Kabeke.

This species is intermediate between *P. bovii* Perugia and *P. lindica* Blgr., from the Congo.

ANABAS CTENOTIS.

Depth of body equal to length of head, 3 times in total length. Snout rounded, a little shorter than eye, which is 4 times in

Text-figure 10.

*Anabas ctenotis.*

length of head and $1\frac{1}{3}$ times in interorbital width; maxillary extending to below anterior fourth of eye; no palatine teeth; præ-orbital, præoperculum, and interoperculum entire; suboperculum

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strongly denticulate; 8 to 10 strong, subequal serræ above and 5 or 6 below opercular notch. Dorsal XV-XVI 8; last spine longest, $\frac{1}{3}$ length of head; longest soft rays $\frac{1}{2}$ length of head. Anal X 7-8. Pectoral $\frac{2}{3}$ length of head. Ventral reaching or nearly reaching anal. Caudal peduncle very short, nearly as long as eye. Scales rugose, strongly ctenoid, 27_{8-9}^3 ; lateral lines $^{13-14}_{7-8}$. Brown, with small darker spots; fins dark brown, caudal blackish at the base.

Total length 70 mm.

Two specimens from a ditch near the Lukuga River.

This species is very near *A. nanus* Gthr., from which it is distinguished by the denticulation of the gill-cover, the different anal fin-formula, and the shorter ventral fins.