

ON A COLLECTION OF FISHES
FROM THE CONGO; WITH DESCRIPTION OF
SOME NEW SPECIES.

BY

L. SCHILTHUIS,

Conservatrix to the Museum of Zoology of the University of Utrecht.

With Pl. VI.

In the course of the years 1886—1890 the Zoological Museum of the Utrecht University received a considerable number of fishes from the Congo, which were kindly presented by Mr. A. Greshoff, and sent by him from Boma, lower Congo, and for the greater part from Kinshassa, Stanley Pool, upper Congo, near Brazzaville.

After careful examination of the collection a number of specimens could be referred to about two dozen species already described.

Among the remainder there are several, which are too young to allow of an accurate identification but also a number which I must regard as representatives of species as yet undescribed.

I have not ventured to publish my description of them before having sent both the specimens and my notes to Dr. A. Günther, who in the kindest way gave his attention to the matter and writes to tell me that he thinks I am justified in regarding ten species and one genus as new to science.

I may here express my sincere thanks for this kindness.

The following list contains the specimens, belonging to well-known species:

Ctenopoma Petherici Gthr; Bayari-sea, vernacular name Iabakali.

Ophiocephalus obscurus Gthr.

Mastacembelus cryptacanthus Gthr. D 31 / ca. 120; A 2 / ca. 128.

Mastacembelus marcheii Svge. D 28 / ca. 85; A 2 / ca. 85.

Hemichromis bimaculatus Gill. D 15 / 10; A 3 / 9.

Clarias xenodon Gthr.

Clarias gabonensis Gthr.

Schilbe mystus C. et V.

Chrysichthys cranchii Leach. D 1 / 6; A 12; P 1 / 9, differs from Steindachner's description (S. B. Ak. Wien 1869, LX, 1, Abth. S. 987) by the situation of the eye, the distance between the hind margin of the eye and the gill-opening being greater than that between its front margin and the end of the snout; by the shorter barbels: maxillary barbels extending a little beyond the base of the pectorals; and by the dorsal spine being serrated at the top anteriorly. Total length 13 cm.

Auchenaspis biscutatus Geoffr.

Malapterurus electricus Gm.

Alestes macrolepidotus C. et V.

Alestes leuciscus Gthr. Height of the body a little more than one-third of the total length without caudal; length of the head a little more than one-third. Total length 13 cm.

Distichodus murtini Stdehr. D 26; A 16; Ll. 75 until the base of the middle caudal finrays, 81 until half their length; Lt. $\frac{15}{15}$, until the ventral line, 11 until the outer ray of the ventral fin. Total length 8,4 cm.

Mormyrus oxyrhynchus Geoff. D 78; A 18, Ll. ca. 105; total length 17 cm.

Mormyrus tamandua Gthr. Bayari-sea; vernacular name Lukunku.

Mormyrus Petersii Gthr. vernacular name Lufula.

Mormyrus grandisquamis Ptrs, D 28; A 33; Ll. ca. 54, total length 11 cm.

Mormyrus discorhynchus Ptrs, D 33; A 22; Ll. ca. 65; teeth

few, three in the upper jaw, six in the lower. The pectoral does not quite reach the middle of the ventral. Total length 13,3 cm.

Mormyrus adpersus Gthr, D 20; A 25; Ll. ca. 50; snout a little shorter than the eye; pectoral not yet reaching the extremity of the ventral; total length 6,3 cm.

Mormyrus simus Svge. D 26; A 37; Ll. 41. Height of the body one-third of the total length, snout as long as the diameter of the eye, interorbital space nearly twice the latter. Pectoral three-fourths of the length of the head; extending a little more than halfway the ventral. Total length 9.5 c.m.

Notopterus nigri Gthr.

Tetrodon fahaka Hass.

The species novae of the collection are the following:

Fam. CHROMIDES.

Lamprologus g. n.

This genus may be ranged among those of the first group of Chromides in A. Günther's Catalogue (Vol. IV), being characterised by a dorsal fin, with the spinous portion more developed than the soft, and by the outer branchial arch bearing short and widely set anterior prominences, an additional lobe being absent.

Each jaw with a front series of awl-shaped teeth, behind which is a rather broad band of very small teeth. Anal spines 6—7. Body compressed, oblong. Scales ctenoid; cheeks as well as the other parts of the head scaleless. Base of caudal fin scaly. Dorsal spines numerous, spinous and soft portions of the dorsal continuous.

Lamprologus congoensis (fig. 1.)

D 18—19/8—10; A 6—7/5—6; Ll. 25—26+8—11; Lt. 3/8.

Height of the body circa one-fifth of the total length (caudal included), length of the head circa one-fourth. Length of the snout three-sevenths of the length of the head, diameter of the eye two-sevenths, interorbital space one-fifth. Lower jaw slightly prominent; maxillary extending to below the front margin of the

eye. The origin of the ventral a little behind that of the dorsal. Ventrals a little longer than the pectorals. Distance between dorsal and caudal two-sevenths of the length of the latter. The longest dorsal finrays extending over the first third of the caudal. Caudal rounded. Body (in spirits!) brownish with dark blotches between the eye and the gill-opening. Sides of the body with four or five dark, broad, vertical bands, which continue on the base of the dorsal. Vertical fins more or less irregularly striated with black. Three specimens with a total length of 7 cm, 8,5 cm. and 9 cm.

Atopochilus güntheri (Fig. 2 A and B)

D 1/6; A 10; P 1/9.

This species agrees in several respects with *A. Savorgnani* Svge (N. Arch Mus. (2) 1880, Pl. III fig. 3, p. 42 and Bull. Soc. Philom (7) III p. 97), but differs from it in the number of anal and pectoral finrays and moreover in the following points:

Height of the body one-thirteenth of the total length (caudal included). Length of the head a little less than one-fifth. The greatest width of the head nearly equals its length. Maxillary barbel more than twice as long as the diameter of the eye, a very small mandibular barbel: half the length of the diameter of the eye. The arrangement of the maxillary teeth agrees with H. E. Sauvage's description of *A. Savorgnani*. Mandibular teeth notched, placed in a great number (circa 22) of transverse series, consisting of circa 6 teeth each, and those of one half of the mandible converging with those of the other half from before backwards. Vomerine teeth conical, in a rather broad band. Eye very small, placed between the second and last third of the length of the head. Interorbital space nearly half the length of the head. The humeral process does not reach the base of the dorsal spine. The latter is not serrated, very short, shorter than the following finrays and one-half of the length of the pectoral spine. Both, dorsal and pectoral spine are fringed. The ventrals laid backwards, the distance between them and the anal remains still more than half their length. Caudal deeply forked.

One specimen, total length 22 cm, length without caudal 17,5 cm.

Synodontis greshoffii

D 1/7; A 14; P 1/8.

The gill-opening does not extend downwards beyond the root of the pectorals. Mandibular teeth much shorter than the eye.

Height of the body one-fifth of the total length, length of the head the same. The superior processes of the nuchal carapace rounded at their extremity, not yet reaching the second soft dorsal finray; humeral process with sharp inferior edge, pointed, extending backwards a little beyond the second soft ray of the dorsal. Length of the snout a little less than half the length of the head, diameter of the eye one-fourth of the length of the head and two-thirds of the interorbital space, which is a little concave. Maxillary barbels not fringed, extending beyond the extremity of the pectoral spine, a little more than half the length of the body. Mandibular barbels with rather slender fringes. Mandibular teeth more than 45. Pectoral spine very strong, serrated along both edges, a little longer than the head, and as long as the dorsal spine; the latter feebly serrated behind, nearly smooth in front, with only a few obsolete denticulations towards its point. Ventrals reaching the third anal ray. Distance between base of inner ventral ray and anal a little more than half the distance between base of inner pectoral and outer ventral ray. Adipose fin as long as the head, distance between adipose and dorsal a little less than the base of the latter. Caudal deeply forked. Brownish (in spirits), marbled with black.

One specimen, total length (with caudal) 16 cm. Length of the body until the base of the outer caudal finrays 12 cm.

Synodontis angelica

D 1/7; A 12; P 1/8.

The gill-opening does not extend downwards beyond the root of the pectorals. Mandibular teeth much shorter than the eye.

Height of the body one-fifth of the total length, length of the

head the same. Superior processes of the nuchal carapace pointed, not yet reaching as far backwards as the humeral process, which extends a little beyond the first soft dorsal ray and is pointed behind. Length of the snout half the length of the head; diameter of the eye nearly one-fourth of the length of the head and nearly half the interorbital space, which is flat. Maxillary barbels not fringed, not yet reaching the gill-slit; mandibular barbels, specially the inner, thickly fringed with short filaments. Mandibular teeth circa 30. Pectoral spine very strong, strongly serrated along both edges, nearly as long as the head and as long as the dorsal spine; the latter serrated anteriorly towards its point, and posteriorly along its whole margin. Ventrals just reaching the base of the anal; distance between the base of inner ventral ray and anal nearly two-thirds of the distance between the base of inner pectoral and outer ventral ray. Adipose fin a little more than two-thirds of the length of the head; the distance between dorsal and adipose fins nearly equals the base of the former. Caudal deeply forked.

Dark brown (in spirits) with round yellowish spots over the whole body; fins transversely banded with yellowish.

One specimen, total length 12,5 cm. Length of the body until the base of the outer caudal finrays 9,5 cm.

Synodontis alberti.

D 1 / 7; A (12) 13; P. 1 / 8.

The gill-opening does not extend downwards beyond the root of the pectorals. Mandibular teeth much shorter than the eye.

Height of the body one-fifth of the total length, length of the head the same. The superior processes of the nuchal carapace surround the base of the dorsal spine and extend as far backwards as the humeral processes. The latter are provided with a short series of minute denticulations towards the extremity of their inferior edge. Length of the snout a little less than half the length of the head; diameter of the eye three-eighths, equaling the interorbital space, which is a little concave. Maxillary barbels with

black inferior margin, nearly as long as the whole body (caudal finrays included). Mandibular barbels with very slender filaments. Mandibular teeth circa 22. Pectoral spine strongly serrated along both edges, a little longer than the head and a little shorter than the dorsal spine; the latter not serrated anteriorly, or (in a small specimen of 8,5 cm. and with A 12) with a few obsolete denticulations towards its point. The ventral does not yet reach the anal. Distance between anal and base of inner ray of ventral three-fourths of that between base of outer ventral ray and inner pectoral. Adipose fin one and a third of the length of the head; distance between dorsal and adipose fin a little less than one-third of the base of the former. Caudal deeply forked.

Two specimens, the larger with a total length of 10,5 cm.
Length of the body without caudal finrays 8,2 cm.

Distichodus antonii.

D 24; A 15; Ll. circa 65; Ltr. 10/13.

Each jaw with two series of teeth.

Height of the body a little more than one-third of the total length (caudal included); length of the head (without the opercular flap of skin) two-ninths. Snout a little more than one-third of the length of the head. Eye situated in the middle of the length of the head, its diameter three-tenths of the latter. Interorbital space convex, its width being half the length of the head. Upper jaw a little projecting beyond the lower; the latter with eighteen teeth in the outer row. Distance between dorsal and adipose fin more than twice the base of the latter. Distance between the vent and the end of the ventrals four-ninths of the length of the latter.

Silvery brownish (in spirits) with several darker vertical bands.

One specimen, total length 12,8 cm; Bayari-sea, vernacular name Mbutu.

*Distichodus lusosso.*D 26; A 16; L.l. ca. 85; Ltr. $\frac{1}{8}$

(A very small specimen: D 23; A 14; L.l. more than 70).

Only one series of teeth in the jaws.

Height of the body a little more than one-third of its length (without caudal); length of the head two-sevenths. Snout one-third of the length of the head. Centre of the eye a little before the middle of the head; its diameter a little less than one-fourth of the length of the head. Interorbital space flat; its width one-fourth of the length of the head. The upper jaw projects distinctly beyond the lower; the latter with fourteen teeth. Distance between dorsal and adipose fin twice the base of the latter. The ventrals nearly reach the vent.

Light brown (in spirits) with eight broad dark bands. Adipose fin dark.

Two specimens, the greater with a total length of 16,8 cm. Bayari-sea; vernacular name Lusosso.

*Phago boulengeri*D 12; A 11; P 13; V 9; L. lat. 45; Ltr. $2\frac{1}{2} / 3\frac{1}{2}$.

Besides in the deviations indicated by the ciphers above, this species differs from *Ph. loricatus* Gthr. (Ann. and Mag. Nat. Hist. 1865. XV. Pl. V) in the following points: Depth of the body nearly two-thirds of the length of the head, which is one-fourth of the total length without caudal. Diameter of the eye half the length of the snout. Intermaxillary and mandible with seventeen teeth on each side, in the outer series. The dorsal fin is just in the middle between the end of the snout and the root of the caudal fin. Caudal two-thirds of the length of the head. Pectorals a little shorter than the ventrals.

One specimen, total length 14 cm.

Mormyrus greshoffii (Fig. 3)

D 35, A 31, L.l. more than 80.

Lower jaw projected into a skinny flap. The corner of the mouth separated from the front margin of the eye by a considerable space.

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Height of the body a little more than one-fourth of the total length (caudal included). Length of the head one-fifth. The eye lies in the anterior half of the head, its posterior margin just forming the middle of the length of the head; its diameter is a little more than the length of the snout and the interorbital space; the latter is very convex. The skinny flap of the lower jaw is half the length of the snout. Width of the mouth half the diameter of the eye. Very weak and few teeth, three in the upper jaw, two? in the lower. Profile of the head very convex. Pectoral twice as long as the ventral and extending beyond the anterior half of the latter. Distance between the end of the ventral and the anal agreeing with the length of the former. The length of the caudal peduncle agrees with that of the head.

Shining silvery over the whole body, especially on the lower part of the head.

One specimen, total length, caudal included, 10,8 cm.

Mormyrus (Mormyrops) swanenburgi

D 27, A 50; L.l. ca. 96

Closely allied to *M. Zambanenje* Ptrs.

Teeth on the palate and on the tongue. Body elongate. Snout rather long, straight.

Height of the body contained six times in the total length, length of the head (without the opercular flap of skin) four times. Length of the snout one-fourth of the length of the head. Upper and lower jaw subequal in length; teeth notched $\frac{3}{8}$ in number. Eye small, situated for its greater part in the anterior third of the head. Interorbital space convex, twice the diameter of the eye and three-fourths of the length of the snout. Pectoral half the length of the head. Ventral fin two-thirds of the pectoral, distance between its base and the end of the pectoral half the length of the ventral. Distance between beginning of the dorsal and tip of the snout two-thirds of the total length. Length of the caudal peduncle with caudal two-thirds of the length of the head.

Brown (in spirits), dotted all over with dark, minute points.

One specimen, total length 11,7 c.m.

Mormyrus (Mormyrops) mariae.

D 37; A 59; L.l. ca. 100.

Body elongate. Height of the body contained seven times in the total length, length of the head five and a half. Height of the head three-fifths of its length. Profile of snout and head convex; upper jaw somewhat longer than the lower. Snout one-fourth of the length of the head (the opercular flap of skin not included). Teeth truncate $\frac{1}{8}$ in number. Eye small, half the length of the snout, and situated in the anterior third of the head. Interorbital space convex, twice the diameter of the eye. Ventral fin two-thirds of the length of the pectoral; distance between extremity of pectoral and base of ventral half the length of the pectoral. Distance between ventrals laid backwards and anal twice the length of the former. Space between ventrals and anal trenchant. The end of the base of the anal a little behind that of the dorsal. Length of the caudal peduncle, measured from the end of the base of the dorsal one-third of the length of the head. Beginning of the dorsal twice as far from the tip of the snout as from the base of the middle caudal finrays.

Dark brown (in spirits) above the lateral line, somewhat lighter beneath.

One specimen, total length 17 cm.

EXPLANATION OF PLATE VI.

- Fig. 1. *Lamprologus congoensis.*
 Fig. 2 A. *Atopochilus güntheri*, dorsal view of front part.
 Fig. 2 B. *Atopochilus güntheri*, ventral view of the same.
 Fig. 3. *Mormyrus greshoffii.*

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Fig. 1.

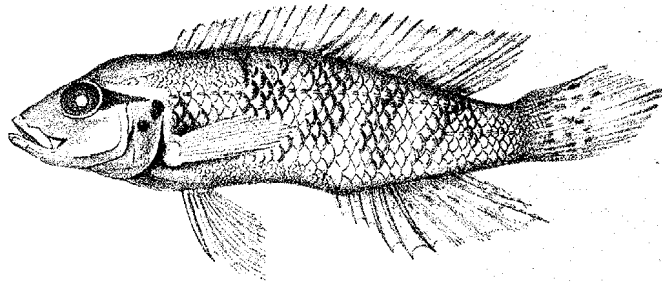


Fig. 3.

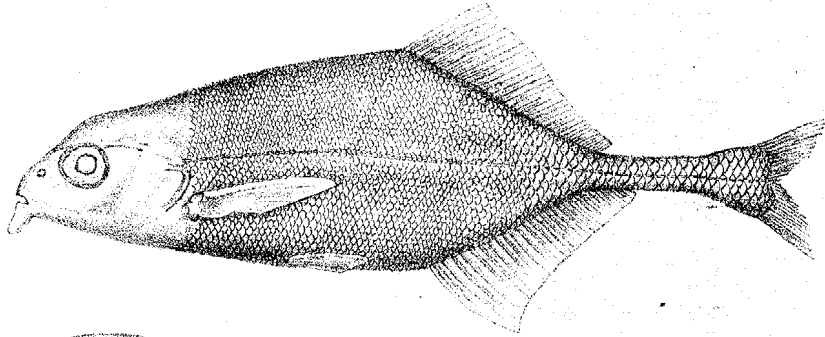


Fig. 2A.

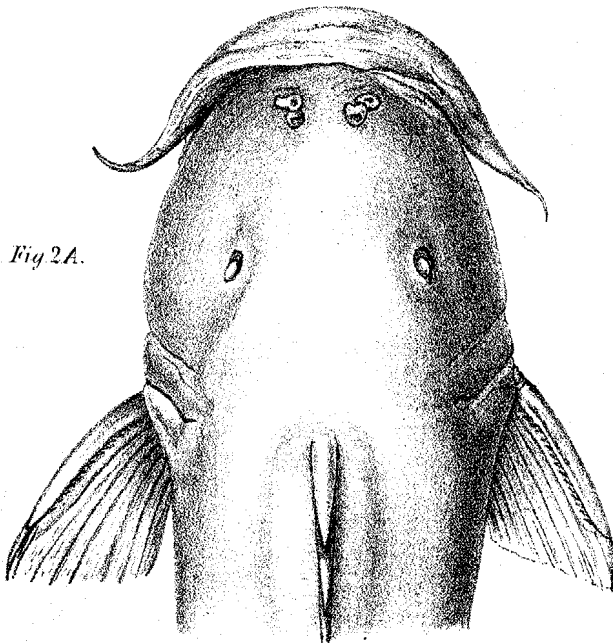
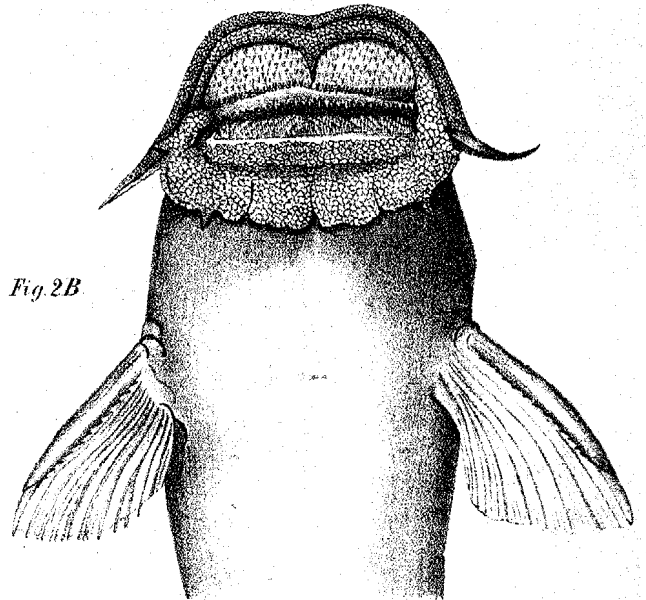


Fig. 2B.



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