

A NEW SPECIES OF *NANOCHROMIS* (PISCES, CICHLIDAE) FROM THE OGOWE SYSTEM, GABON

By ETHELWYNN TREWAVAS

AMONG the fishes collected by the Cambridge Expedition of 1957 to Gabon is a single specimen of a cichlid of an undescribed species. Unwilling to describe it from a single specimen, I had put it aside, but recent renewed interest in the ichthyology of Gabon persuades me to call attention to it and name it. Recently Thys van den Audenaerde & Loïselle (1971) have described two species of *Nanochromis* from Ghana and Ivory Coast, one of which is so similar to the Gabonese fish as to require close comparison with it.

Nanochromis gabonicus sp. nov.

HOLOTYPE: ♀, 47 + 13 mm, from a pool by the road from Mitzié to Medouneu, probably in the drainage basin of R. Okano, tributary of the Ogowe. BMNH 1967.10.12.57.

CHARACTERS OF GENERIC IMPORTANCE. Pad on roof of pharynx with a groove around its antero-lateral edge and covered with tubercles resembling, under low magnification, the batteries of taste-buds of the pad of *Chromidotilapia* (see Trewavas, 1974, pl. 4). Microbranchiospines absent. Outer ceratobranchial gill-rakers with two subequal tubercles. At least in female, first and second soft pelvic rays approximately equal, not produced, but coming to a blunt point. Last scale of upper lateral line separated from dorsal fin by only a half-scale. Scales cycloid, the circuli parallel to the edge of the scale (roman), except a few with a gothic arrangement.

Although the base of the skull was not examined in this unique specimen, the other characters indicate that it belongs to the group in which the apophysis for the pharyngeals is formed by the parasphenoid alone.

DISTINGUISHING SPECIFIC CHARACTERS. A black spot at the tip of each pelvic fin (♀). Chest completely covered with imbricating scales.

DESCRIPTION. Proportions as % SL: length of head 35, of pectoral fin 20.5, length and depth of caudal peduncle 13.8.

Proportions as % length of head: snout 39.4, diameter of eye 27, depth of pre-orbital 21, interorbital width 21, length of lower jaw 36.5.

Two series of small scales on the left cheek, two and a short third series on right; a naked patch below them.

Teeth all unicuspid, in two series in upper jaw, 2-3 in lower; 52 in outer series of upper jaw.

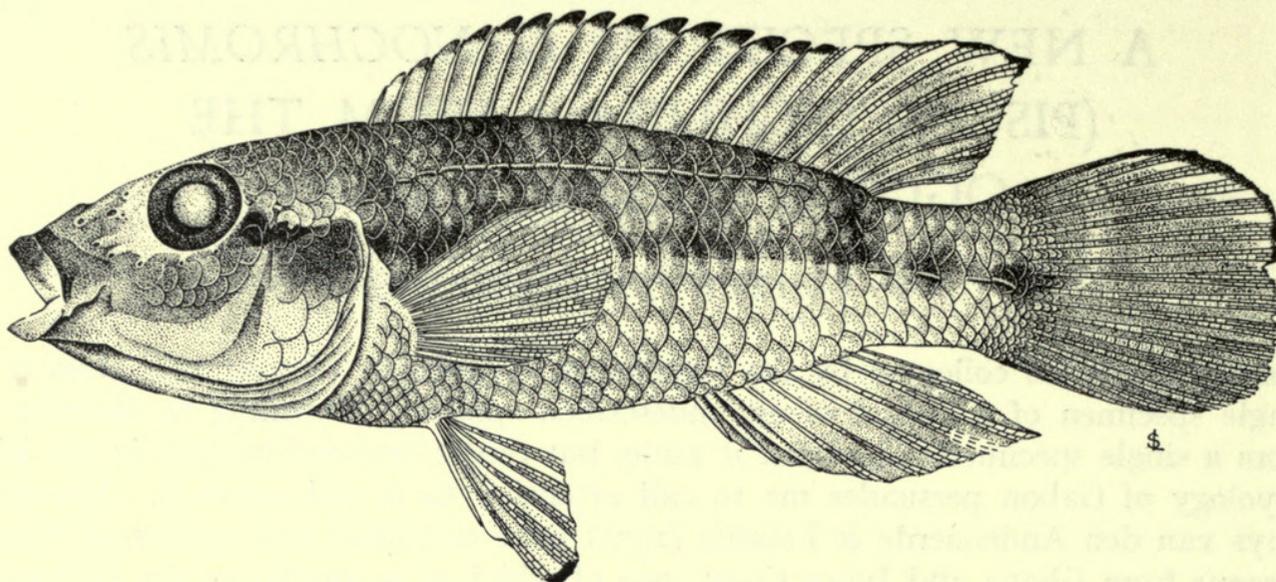


FIG. 1. *Nanochromis gabonicus*, holotype.

Lower pharyngeal bone deeply indented posteriorly, with short blade and rather few, pointed, bicuspid teeth.

Gill-rakers 5 + 1 + 8 on first arch.

Scales 28 in the lateral line series, the upper lateral line piercing 19 scales, the lower 4 on the left side, 8 on the right, the last of which is on the caudal fin; 3 between origin of dorsal and lateral line; 3 between bases of pectoral and pelvic fins; immediately in front of this row the scales are smaller, but the chest is completely covered with imbricating scales; 12 around the caudal peduncle.

Vertebrae 27 (12 + 15).

Dorsal XV 9; last spine 12% SL. Anal III 7; third spine 13.8% SL.

Pectoral fin rounded. Pelvic with first two soft rays approximately equal, not produced, just reaching vent when laid back. Caudal rounded at the corners, the straight edge in the middle involving $3\frac{1}{2}$ upper and $3\frac{1}{2}$ lower rays.

Colour in general pale, top of head darker. A dark bar from eye to top of operculum and a dark band along middle of side to base of caudal, emphasized in five or six places; traces of three broad blotches from dorsum, tapering towards lateral band. Dorsal lappets and upper edge of soft dorsal black. Postero-dorsal edge of caudal black with a white submarginal band; a black spot at the tip of each pelvic fin.

The ovaries of this small fish are partly discharged, still containing a few eggs of about 1.3 mm diameter as well as some smaller oocytes.

This specimen (and probably the species to which it belongs) differs from *N. cavalliensis* Thys & Loiseau in the blunt pelvic fin and the absence of any prolongations of caudal rays, but it is smaller than the holotype (also a ♀) of that species. It also has a wider interorbital region, more teeth in the upper jaw (cf. 42 in *N. cavalliensis*) and a slightly shorter pectoral fin. No black marginal and white submarginal bands were described on the caudal of *N. cavalliensis* and in that species ripe eggs were 2.0 × 1.5 mm. Those in the type of *N. gabonicus* may of course be unripe, of a batch to follow those recently shed.

DISCUSSION. The type species of *Nanochromis* Pellegrin, *N. nudiceps* (Boulenger), inhabits swiftly running water and has characters associated with this habit, namely scaleless chest, middle soft rays of pelvic fin longer than the others. In it scales are also absent from the cheek, top of head and a narrow strip along the back on each side of the base of the dorsal fin; both lateral lines are interrupted.

Matthes (1964: 134) has re-examined the types of the other two nominal species, *N. dimidiatus* Pellegrin, 1900 (from Banghi) and *N. squamiceps* (Boulenger) from R. Lindi, Congo system, and finds that both fall within the range of variation of specimens from Lake Tumba basin regarded by him as a single species. In the British Museum four specimens of *N. dimidiatus* collected at Banghi on two separate occasions show that the incomplete squamation is maintained, at least in that population. Thys, in an addendum to his paper of 1968, claims to have evidence from living specimens that they are distinct.

Thys also refers to an unnamed (new) species from R. Ivindo, tributary of the Ogowe, which he relates to *N. squamiceps*. From his brief characterization of this I believe it must be a species of which Dr Géry has sent me a few specimens. I mention it here to state that it differs from *N. gabonicus* in having the pelvic fin a little more acute in the female (much more in the male), with a black streak along the first soft rays but no black spot at its tip, a broad naked area on the chest on either side of a median row of scales and very small scales on the nape and occiput. As in *N. gabonicus*, the vertical fins of the female are clear or lightly peppered except at the edges; in the male they bear conspicuous series of spots.

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