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***Chalinochromis cyanophleps*, a new species of cichlid fish (Teleostei: Cichlidae) from Lake Tanganyika**

SVEN O. KULLANDER¹, MIKAEL KARLSSON², MAGNUS KARLSSON² & MICHAEL NORÉN¹

¹Department of Zoology, Swedish Museum of Natural History, P.O. Box 50007, SE-104 05 Stockholm, Sweden.

E-mail: sven.kullander@nrm.se, michael.noren@nrm.se

²African Diving Ltd, P. O. Box 7095, Dar es Salaam, Tanzania. E-mail: info@africandivingltd.com

Abstract

Chalinochromis cyanophleps is described from nine specimens, the largest 129 mm SL, from Namansi. It differs from other species of *Chalinochromis* in plain trunk colouration, absence of black stripes on the head, relatively narrow lips, presence of tricuspid jaw teeth, and presence of five rather than four dentary lateralis foramina. The blue iridescent stripe below the eye is shared with other lamprologin cichlids, but is broader and more conspicuous in *C. cyanophleps*. *Chalinochromis cyanophleps* occurs at depths between 6 and 45 m in rocky habitats along the Tanzanian coast of Lake Tanganyika, from Mvuna Island south to Kalala Island, a stretch of about 90 km. Field observations were made of specimens up to 18 cm total length. The COI DNA barcode sequence differs by 1.8% from that of *C. popelini*.

Key words: DNA Barcode, endemism, meristics, morphometry, taxonomy

Introduction

The endemic Lake Tanganyika cichlid genus *Chalinochromis* Poll (1974) presently includes two species characterized by steep head profile and thick papillose lips. *Chalinochromis brichardi* Poll (1974) was described from near Magara in Burundi and is uniformly beige with black stripes on the head and has an approximately rounded caudal fin. *Chalinochromis popelini* Brichard (1989) from Moba on the Congo coast is beige with black horizontal stripes and has a more or less emarginate caudal fin (Brichard 1989; Konings 1998). Two additional forms have been recognized in aquarium literature, and are considered as either distinct species or colour variation in *C. brichardi* or *C. popelini*, viz. *C.* “bifrenatus” with horizontal stripes along the side, and *C.* “ndobhoi” with series of blotches along the side (Konings 1998).

In 1991 one of us discovered a rock-dwelling lamprologin cichlid at Ulwile Island on the Tanzanian coast of Lake Tanganyika, similar in shape to known species of *Chalinochromis*. It was distinguished by its larger size and colour pattern, which is almost uniformly dark, with a blue stripe below the eye and shimmering blue fins (Karlsson & Karlsson 2012). A longer, illustrated description of the species was given by Karlsson & Karlsson (2012), in which article it was referred to as *Chalinochromis* sp. “blue vein”. Morphological analysis shows that the dark species from Ulwile Island departs significantly from both *C. brichardi* and *C. popelini* not only in colour but also in the shape of the mouth and dentition. The objective of this paper is to provide a formal description of the new species.

Material and methods

Specimens were collected by scuba diving, using a net of 1x5 m, mesh size 10 mm, with float and bottom lead, and also small hand net. Specimens were fixed in formalin and preserved in 70% ethanol. Prior to fixation the right pelvic fin was removed from one specimen and placed in 95% ethanol for DNA analysis.

Comparative material

Chalinochromis “bifrenatus”. NRM 11896. 11, 62.1–92.8 mm SL. Tanzania, Lake Tanganyika, Lyamembe. 6°27'27"S, 29°55'7"E. 15 Nov. 2012.—NRM 59567. 12, 84.7–107.4 mm SL. Tanzania, Lake Tanganyika, Udachi. 7°3'30"S, 30°33'10"E. 29 May 2008.—NRM 61032. 1, 84.5 mm SL. Tanzania, Lake Tanganyika, Ikola, Kekese 6°36'53"S, 30°17'31"E. 6 Dec. 2008.

Chalinochromis brichardi. NRM 59629. 12, 62.3–94.2 mm SL; NRM 61562. 1, 81.4 mm SL. Tanzania, Lake Tanganyika, Cape Kabogo. 5°27'34"S, 29°45'2"E. 2 Jan. 2008.—NRM 61034. 1, 64.0 mm SL. Zambia, Lake Tanganyika, Cape Chaitika. 8°33'55"S, 30°47'18"E. 15 Nov. 2008.

Chalinochromis “ndobhoi”. NRM 59635. 12, 63.8–86.5 mm SL. Tanzania, Lake Tanganyika, Karilani Island. 6°1'14"S, 29°44'34"E. 13 Jan. 2008.

Additional comparative material as listed in Kullander *et al.* (2012, 2014).

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