



## ***Krobia xinguensis*, a new species of cichlid fish from the Xingu River drainage in Brazil (Teleostei: Cichlidae)**

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### **Abstract**

*Krobia xinguensis* is described from localities in the headwaters and in the lower part of the rio Xingu. It is distinguished from the other two species in the genus, *K. guianensis* and *K. itanyi*, primarily by deeper caudal peduncle, and details of the colour pattern, including contrasting interorbital stripes and a small dark spot anteriorly on each side of the lower jaw. *Krobia xinguensis* represents a considerable range extension of the genus from the Guianas and northern tributaries of the lower Amazon, into a major south bank Amazon tributary.

**Key words:** *Aequidens*, Amazon basin, endemism, taxonomy, Guiana shield, Brazilian shield

### **Introduction**

*Krobia* was erected by Kullander & Nijssen (1989) to contain two species from the Atlantic drainages of the Guianas, previously classified in *Aequidens* Eigenmann & Bray, viz. *K. guianensis* (Regan) from the Essequibo drainage in Guyana, and *K. itanyi* (Puyo) from the Maroni drainage in Suriname and French Guiana. Kullander & Nijssen (1989) also signalled two undescribed species from French Guiana, and over time additional species have been reported also from the lower Amazon drainage. The presence of an undescribed species of *Krobia* in the Xingu river basin has already been published (Stawikowski & Werner, 1998). It was discovered in 1964 by Harald Schultz who sampled three specimens in the rio Batovi, a headwater of the rio Xingu in Mato Grosso. Later collections have accumulated coming from the same region and from the lower rio Xingu. The species is now also available in the ornamental fish trade (Stawikowski, 2007). The objective of this paper is to provide the long overdue formal description of this taxon.

### **Material and methods**

Measurements and counts were taken as described by Kullander (1986). Specimen lengths are given as standard length (SL), measured from the tip of the upper jaw to the middle of the base of the caudal fin. Scales in a longitudinal row (E1 row scales) are counted in the row immediately dorsal to that containing the lower lateral line. Tooth shape terminology follows Barel *et al.* (1977). Colour marking terminology follows Kullander (1986); bar numbering follows Kullander (1983: fig. 4). Vertebral counts include the last half-centrum and were taken from X-radiographs made on Kodak X-omat V film using a Philips MG-105 low voltage X-ray unit. Morphometric data were managed and analysed using PASW Statistics 18 (SPSS, 2009), except that the principal component analysis (PCA) of measurements was made using a separate procedure for component shearing, partialling out multivariate size residues from the second and further components as described by Humphries *et al.* (1981). The PCA analysis was made with log-transformed measurement data to tenth of a millimetre in a covariance matrix, and without rotation. Pelvic-fin length was excluded from the PCA because of the sexual dimorphism in the relative length of the pelvic fin.

Specimens studied are deposited in the following institutions: BMNH, The Natural History Museum, London;