

## ***Crenicichla hu*, a new species of cichlid fish (Teleostei: Cichlidae) from the Paraná basin in Misiones, Argentina**

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### **Abstract**

A new species of *Crenicichla* Heckel, *C. hu*, is described from the arroyo Piray–Miní, a left-hand tributary of the río Paraná, Misiones province, Argentina. This new species is easily distinguished from its congeners in the La Plata basin and adjacent coastal rivers by the dark coloration (dark grey or dark brown to black), a color pattern consisting of 7 to 9 black irregular blotches on the flank, and 47–54 scales in the E1 row. Adult females have dorsal fin with an irregular color pattern formed by wide black and white longitudinal stripes and blotches. In addition to standard morphological comparisons, a brief molecular phylogenetic analysis of *Crenicichla* species from the province of Misiones is also introduced.

**Key words:** molecular phylogeny, systematics, taxonomy, Piray–Miní, ND2, NADH dehydrogenase

### **Resumen**

Una nueva especie de *Crenicichla* Heckel, *C. hu*, es descripta del arroyo Piray–Miní, un afluente de la margen izquierda del río Paraná, provincia de Misiones, Argentina. Esta especie es fácilmente reconocida entre las especies del género en la Cuenca del Plata y ríos costeros adyacentes por su coloración oscura (gris oscuro o castaño oscuro-negro), un patrón de coloración del flanco con 7 a 9 manchas irregulares negras, 47-54 escamas en la serie E1. Las hembras adultas poseen una aleta dorsal con un patrón de coloración irregular formado por bandas longitudinales y manchas, negras y blancas. Además de una comparación morfológica se presenta un breve análisis filogenético molecular de las especies del género presentes en la provincia de Misiones.

### **Introduction**

The genus *Crenicichla* Heckel is the most speciose lineage of Neotropical cichlids. In the present conception the genus includes about 80 valid species (Casciotta *et al.* 2006; Kullander & Lucena 2006; Kullander *et al.* in press) and this number is rapidly increasing (*e.g.*, Casciotta *et al.* 2006; Kullander & Lucena 2006; Lucena 2007; Casciotta & Almirón 2008; Montaña *et al.* 2008; Kullander 2009). Stawikowski & Werner (2004) listed more than 120 known species including those yet undescribed. *Crenicichla* has a widespread distribution, ranging from northern South America to the río Negro in Patagonia, Argentina (Casciotta 1987).

Phylogenetic relationships within *Crenicichla* are almost unknown and the genus is traditionally divided into several species groups: the *C. lugubris* group, *C. reticulata* group, *C. saxatilis* group, *C. wallacii* group, and *C. lacustris* group s.l. (*see below*); according to some authors, *Teleocichla* Kullander, is a ingroup of *Crenicichla* (Kullander 1981, 1982, 1986; Ploeg 1991; Lucena & Kullander 1992; Kutty 2000; Stawikowski & Werner 2004; Kullander *et al.* in press). These species groups are mostly defined by coloration characters, as well as by biogeography as they basically correspond to major river drainages.