



## A new species of *Paretroplus* (Teleostei: Cichlidae: Etroplinae) from northeastern Madagascar, with a phylogeny and revised diagnosis for the *P. damii* clade

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### Abstract

*Paretroplus loisellei*, a new species of etropline cichlid from Madagascar, is described from the middle to lower reaches of the Mahanara River, located to the north of the Masoala Peninsula in northeastern Madagascar. The new species is recovered within the “*Paretroplus damii* clade” on the basis of several apomorphic anatomical features, including the presence of a triangular, black or dark gray, pectoral-axil patch, chest scales that are greatly reduced in size and highly embedded, and flank scales in which the posterior field is thin and unossified. The new species is distinguished from its sister taxon, *P. damii*, by a more or less horizontal profile extending from the anterior margin of the lower jaw to the ventroposterior margin of the suspensorium (vs. strongly rounded and convex), horizontally oriented oral jaws with fleshy lips (vs. oblique and thin), tricuspid symphyseal teeth in the upper jaw with distinct and sharp lateral cusps, a much darker overall pigmentation pattern, and distinctive bright golden breeding coloration (vs. brick red).

**Key words:** gas bladder, Mahanara, *Paretroplus loisellei* sp. nov., “*Paretroplus damii* clade”, phylogeny, ventitry

### Introduction

*Paretroplus* is endemic to Madagascar and comprises 12 valid species (Sparks 2008), not including the new taxon described herein. *Paretroplus* is the sister taxon to *Etroplus*, which is endemic to southern India and Sri Lanka (Sparks 2004; Sparks & Smith 2004). All but a single described species, *P. polyactis*, which is widespread in fresh- and brackish-water habitats along the eastern coast, are restricted to freshwater basins in the northwestern and northern regions of the island. Apart from *P. damii* and *P. kieneri*, which exhibit comparatively widespread distributions and occur across multiple drainage basins, the remaining northwestern species are narrowly endemic and restricted to single basins, or to only portions of a single drainage basin. Members of *Paretroplus* are absent from central highland, central western, and extreme southern and southwestern drainages.

In the phylogenetic study of Sparks (2008), two major clades within *Paretroplus* were recovered with strong support, one comprising deep-bodied lacustrine forms and the other more elongate and shallow-bodied, primarily lotic species. The latter clade, referred to as the “*P. damii* clade” by Sparks (2008), until recently included only a single described species, *P. damii* Bleeker 1868. Due to a resurgence of fieldwork in Madagascar over the past two decades, this clade now comprises five species: *P. damii* Bleeker 1868, *P. nourissati* (Allgayer 1998), *P. tsimoly* Stiassny *et al.* 2001, *P. lamnabe* Sparks 2008, and the new taxon, which is the only member of the clade to occur in an eastern drainage. Interestingly, three of these recently described species occur in relatively accessible localities (e.g., *P. tsimoly*, which was collected just off the main N-S highway, Route 4) and are well known by the local inhabitants. That they eluded scientific discovery until the past decade and a half is rather surprising.

Prior to the current study, *Paretroplus damii* was considered to be the only member of the genus with a distribution encompassing both eastern and western basins (de Rham & Nourissat 2004; Sparks 2008). At the time of completion of the phylogenetic study and taxonomic revision of Sparks (2008), material from a putative eastern population of *P. damii*, known locally as “ventitry”, became available for study. Sparks (2008) enumerated differences between members of this eastern “population” and populations of *P. damii* inhabiting western drainages,