

# **Annotated list of new species of cichlids from Madagascar described since 2004 and additional comments to the book ‘The Endemic Cichlids of Madagascar’ by P. de Rham and J.-C. Nourissat, 2004.**

By Patrick de Rham (2022)

## **Genus *Paratilapia*, page 16**

Unfortunately, nothing new can be said on this genus as no revision has been published yet. In 1991, Maréchal & Gosse synonymised *Paratilapia-Paracara typus* (Bleeker 1878) and *Paratilapia bleekeri* (Sauvage 1891) with *Paratilapia polleni* Bleeker 1868. So, now only *Paratilapia polleni* Bleeker 1868 is valid (Catalog of fishes William Eschmeyer). However, if one follows the modern concept of what is a species, most people familiar with *Paratilapia* agree that the genus comprises several distinct species. In our book, we have tentatively given a few populations that could correspond to distinct species. But new information seems to indicate that some of the latter correspond to more than one species. In 2011, Paul Loiselle published an article in *Buntbarsche Bulletin* (n. 267) in which, according to information received from John Sparks, *Paratilapia* could comprise up to 11 species in Madagascar.

A revision of *Paratilapia* is made difficult by the fact that museum material is scarce, and several populations have declined or even gone extinct on the island. It is therefore difficult to assert the range of the different species. To take the example of the oldest known species, *Paratilapia polleni* Bleeker 1868: Bleeker, in his description of the species, gives the precise locality in which the species was first collected by Pollen & Van Dam as the Ambassuana River (today spelled Ambazoana). We even have a lively description by Pollen of the collecting of these first specimens. He and Van Dam, coming from the sea, sailed up the estuary of this small river until they reached the place where the species were very numerous and extremely hungry. They had no difficulty in collecting several specimens using a line and hook (book pages 20/21).

We now know that *Paratilapia polleni* Bleeker 1868 lives in the Sambirano drainage, Nosy Be Island, and on the main island in a few smaller rivers (including the Ambassuana) north of Ambajoa. But we don't know the northern limit of the species, or the identities of the species of *Paratilapia* we collected further north in the crater lakes near Anivorano Nord and lakes situated at the level of Befotaka near the bridge on the Sofia on the right bank of this large river.

In November 2006, Paul Loiselle collected *Paratilapia* specimens in Mananara, on the north-east coast of Madagascar, the type locality of *Paracara typus* Bleeker 1878. It is a large-spotted species but appears to be distinct from *Paratilapia* sp. “Andapa”, which is found further north. Hopefully, *Paratilapia bleekeri* (Sauvage 1891) which lived on the island near Antanarivo is still extant. There is no doubt that *Paratilapia typus* (Bleeker 1878) and *Paratilapia bleekeri* (Sauvage 1891) should be re-established as valid species.

## Genus *Ptychochromis*, page 38

Seven new species of *Ptychochromis* were described since 2004. Six new species were described in “Phylogeny and Taxonomic Revision of the Endemic Malagasy Genus *Ptychochromis* (Teleostei: Cichlidae), with the Description of Five New Species and a Diagnosis for *Katria*, New Genus” by Stiassny & Sparks 2006.

### ***Ptychochromis onilahy* Stiassny & Sparks 2006**

This fish was collected in the Onilahy River by Kiener in 1962: “*Ptychochromis oligacanthus*, race du Sud-Ouest”. With Jean-Claude Nourissat, we did our best to collect new specimens of the Onilahy *Ptychochromis* but were unsuccessful. The species is very probably extinct.

### ***Ptychochromis makira* Stiassny & Sparks 2006**

This species was collected by purchase from local fishermen by Augustin Sarovy, J. S. Sparks, W. L. Smith, and K. L. Tang. It was captured in the Antainambalana River, north-east Madagascar. No personal experience of this species.

### ***Ptychochromis loisellei* Stiassny & Sparks 2006**

This species was collected by Paul Loiselle in 2000 and 2001 in the Mahanara River, in our book we discuss this species in pp. 50-51 of the French edition and p. 50 of the English Edition. The local name of the fish is Garaka.

### ***Ptychochromis curvidens* Stiassny & Sparks 2006**

In 1999, with Jean-Claude Nourissat, we collected the type material of this species in the rivers of the Andranofanjava-Sandriapiana river system, western slope of the Montagne d’Ambre. This is the most north-easterly *Ptychochromis* species. See page 58 in the French and English edition.

### ***Ptychochromis insolitus* Stiassny & Sparks 2006**

This species was first collected in 1996 by Sparks et al. in the Amboaboia River, a tributary of the Magharara River. It corresponds to the “*Ptychochromis* sp. Mangarahara or Mandritsara:Joba we collected in 1997 in the Mangarahara River. See book pp. 60-62.

It seems unlikely that *Ptychochromis insolitus* corresponds to the *Ptychochromis* A. Kiener described 1963 in his book ‘Poissons, pêches et pisciculture à Madagascar’, from Lake Ambalafary. This species according to Kiener was much more colourful than *P. insolitus*. We tried to collect this fish in 1992 but we were told by a local person that it is called Joba and had disappeared 20 years ago, when the African Cichlids invaded the area. But it is still possible that Kiener’s colourful *Ptychochromis* species, previously found in Lake Ambalafary, still exists in some other local lakes.

### ***Ptychochromis ernestmagnusi* Sparks & Stiassny 2010**

This species was first collected in 2006 by Paul Loiselle in the North Mananara River. No personal experience of this species.

### ***Ptychochromis mainty* Martinez, Arroyave & Sparks 2015**

Despite what is said in the description, I am convinced this species corresponds to the *Ptychochromis* species we collected in 1998 in the Tarantsy River, *Ptychochromis* sp. Tarantsy. Book pp. 47-48.

In fact, I believe that the type specimens were aquarium-bred and descendants of the fish first reproduced by British aquarist Sonia Guinane. The wild fish were given to Sonia Guinane by Jean-Claude Nourissat and their offspring reached Northern America. The pictures shown in the description of the *P. mainty* show specimens of *Ptychochromis* sp. Tarantsy. No other *Ptychochromis* species matching the description exists in south-east Madagascar.

## Genus *Katria*, page 74

### *Katria katria* (Reinthal & Stiassny 1997)

This fish was originally described as *Ptychochromoides katria* by Reinthal & Stiassny 1997. Genetics research carried out later showed that the species was more closely related to species of the genus *Ptychochromis* than to *Ptychochromoides*. However, it appeared the species was sufficiently different to be placed in a genus of its own in Sparks & Stiassny 2006. *Katria* is the local name of the fish in the area of Marolambo, Nosivolo River.

## Genus *Paretroplus*, page 80

Three new species of *Paretroplus* have been described since 2004.

### *Paretroplus gymnopreopercularis* Sparks 2008

Described in ‘Phylogeny of the Cichlid Subfamily Etroplinae and Taxonomic Revision of the Malagasy Cichlid Genus *Paretroplus* (Teleostei: Cichlidae)’. This fish corresponds to *Paretroplus kieneri* from Mangarahara and Ambombova rivers. Book pp. 111-113.

### *Paretroplus lamnabe* Sparks 2008

This fish corresponds to *Paretroplus* aff. Trsimoly Mahajamba. Book pp. 127-129.

### *Paretroplus loisellei* Sparks & Schelly 2011

This species seems close to *Paretroplus damii* but lives in the north-east of Madagascar in the Mahanara River that flows into the Indian Ocean. No personal experience with this species.

## Potential new species

In October 2001, with the help of the local authority we managed to reach the Upper Kamoro River. This river was the rockiest I have ever seen and at the time of our visit, the end of the dry season, the water flow was minor and the water clear, but during the rains it is obvious that the river must be very wild with a strong current. The upper Kamoro River is completely isolated from the lower part by many rapids and a final waterfall approximately 10 meters high. That makes it absolutely impossible for fishes of the lowland to reach the upper part of the river. The lower Kamoro River is a slow-moving, murky river with a mud bottom and joins the Betsiboka. The fish fauna was not very diverse and included only native species. A species of *Pachypanchax* was common and I found one specimen of an *Eleotris* sp. Two *Paretroplus* species lived in the river. One, locally called Tsimoly, was very similar to *Paretroplus tsimoly* but somewhat different in its coloration. Its melanic marks were darker. The lips were black, not blue. The other species was part of the *kieneri* group. It was distinguished from the other known species of this group by a somewhat rounder body and its coloration a nice chocolate-brown which made some French aquarists dub it “kieneri chocolat”. Because of the isolation of the upper Kamoro it is likely that this fish is a distinct species.

Reports that a *Paretroplus nourissati*-like fish lives in some tributaries of Lake Kinkony or close by streams were obtained by Paul Loiselle and by us. It is also not clear if the *Paretroplus* aff. *nourissati* found in Lake Tsény is a distinct species.

In the river Mahajamba, syntopic with *Paretroplus lamnabe* there is a large *Paretroplus kieneri*-type fish; adult size much larger than *P. kieneri* official species, and *P. gymnopreopercularis*. So, there is good reason for it to be a distinct species.

Some years ago, André Kiener gave me a slide I have very unfortunately lost, on which several recently caught *Paretroplus baetsileanus* were shown. The place was on the shores of the Mangoky River somewhere downriver of Fiaranantsu. The six or seven fishes in the picture, with a pronounced hump and black coloration were all alike the

specimen of *Ptychochromoides baetsileanus* in André Kiener's book ,Poissons, pêches et pisciculture à Madagascar'. In my opinion, it is identical to the *Ptychochromoides* we collected in 1994. But I now believe that the Ilanana *Ptychochromoides* male and female, plus the many young we caught in 1994 are not *P. baetsileanus* but a distinct species endemic to the Onilahy drainage.

We have good reasons to believe that a *Ptychochromoides* species lives in the Manghoro River at the level of the Tananarivo-Tamatave bridge in a place called Ankarefo. Loïselle (pers. comm.) also reported that a *Ptychochromoides* species existed in the Ikopa rapids upper stream at Mavatanana.

Namorona *Ptychochromis*: In the Namorona River on the highlands before the rapids that brings the river down to Ranomafana, there existed a cichlid which was very probably a *Ptychochromis* species. We were informed of the existence of this cichlid by a young man called Etienne who was the keeper of a small aquaculture station situated downriver from Matuafana. We spared no efforts to try to collect this fish but were unfortunately unsuccessful. It seems that some years later Etienne managed to get a specimen he tried to forward to us but it was unfortunately lost.

## How many Malagasy Cichlids?

Accepting only species of Malagasy cichlids given as valid in the 'Catalog of fishes' (W. Eschmeyer), we get a total of 28 species. Admitting with Sparks that *Paratilapia* comprises 11 distinct species gives us 38. Considering that some of the potential undescribed species I have mentioned exist (but there is high possibility that there are even more), more than 40 species of Malagasy cichlids exist.

*Ptychochromis mainty* is the last Malagasy cichlid species which has been described (2015) but it was certainly already collected by us in 1998. Unfortunately, for the past few years, foreign ichthyologists and aquarists have had difficulties collecting fishes in Madagascar. Young Malagasy specialists, with the help of Paul Loïselle, now try to fill the gaps but they lack support.

With 40-50 species of native cichlids, the diversity of these fishes is fairly high considering the area of Madagascar and is comparable to that of cichlids one could find in a similar area, West Africa for instance.

Genus	Number of species
<i>Paratilapia</i>	1
<i>Paretroplus</i>	12 (without <i>petiti</i> )
<i>Ptychochromis</i>	10
<i>Ptychochromoides</i>	3
<i>Oxylapia</i>	1
<i>Katria</i>	1
<b>Total</b>	<b>28 [38]</b>