Zootaxa 3686 (5): 565–577
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3686.5.5
http://zoobank.org/urn:lsid:zoobank.org:pub:D0045102-B8FA-4409-97C1-59BB391F06E8

A new redfin species, *Pseudobarbus skeltoni* (Cyprinidae, Teleostei), from the Cape Floristic Region, South Africa

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Abstract

A new cyprinid species, *Pseudobarbus skeltoni* sp. nov, is described from material recently collected in the upper Riviersonderend River (a major tributary of the Breede River system) and the Krom River (a tributary of the Molenaars River in the upper Breede River) in the Cape Floristic Region of South Africa. The new species is readily distinguished from congeners, except *P. burgi* and *P. burchelli*, by having two pairs of prominent oral barbels. *Pseudobarbus skeltoni* can be distinguished from *P. burgi* and *P. burchelli* by the following combination of characters: distinctive terminal (*vs*. subterminal) mouth in adults; mouth inferior in sub-adults and young adults of *P. skeltoni* but lower lips are unretracted (*vs*. retracted) and lack a distinct cartilaginous plate; snout prominent; more slender head (head depth 64.2% of HL, *vs*. 70.1% of HL in *P. burchelli* and 74.1% of HL in *P. burgi*); and a longer head relative to standard length (30.5 % *vs*. 26.8% in *P. burchelli* and 25.8% in *P. burgi*). The new species attains the largest size of any *Pseudobarbus*. The restricted distribution and the small remaining population sizes of *P. skeltoni* indicate that this species is highly threatened and requires immediate conservation attention.

Key words: Breede River system, endemic, cytochrome *b*, morphology

Introduction

There are a number of cyprinid minnows belonging to the genera *Barbus* and *Pseudobarbus* in southern Africa that have bright red fins. Fishes of the genus *Pseudobarbus*, currently represented by seven species (reviewed by Skelton, 1988), all have redfins and a soft or flexible primary dorsal spine. They occur in rivers associated with the Cape Floristic Region (CFR) of South Africa, with one species endemic to the highlands of Lesotho.Two of the species have two pairs of barbels, whilst the other five species have a single pair of barbels, apart from occasional rudimentary secondary barbs in *P. tenuis* (Skelton 1988).

The double barbed redfins occur in the Verlorenvlei, Berg, Heuningnes, Breede, Duiwenhoks and Goukou river systems in the western and south-western CFR. The first species of *Pseudobarbus* was described by Smith (1841) as *Barbus burchelli*, but the origin of the specimens used for this description is unknown, and there is no known type material (Barnard 1943). The illustration that accompanied the species description, however, clearly shows that the species had red fins and two pairs of barbels. Castelnau described *Gnathendalia vulnerata* in 1861 and Steindachner (1870) described *Barbus multimaculatus* from the Breede River system. Both descriptions were of species with two pairs of barbels. Valenciennes in Cuvier and Valenciennes (1842) described *Barbus gobionides* that was placed in synonymy with *Gnathendalia vulnerata* by Günther in 1868. However, Barnard (1943) declared that *Barbus gobionides* was a *nomen dubium*. Boulenger (1911) placed *Barbus multimaculatus* in synonymy with *Gnathendalia vulnerata* in 1905, a decision that was accepted by Barnard (1943), Jubb (1965) and Skelton (1988).

Boulenger (1911) also described a redfin species with two pairs of barbels from the Berg River system and called it *Barbus burgi*. Barnard (1943), working with a better understanding of the distribution of the species, had to decide whether the Breede or Berg species should be placed in synonymy with Smith's *Barbus* (*Pseudobarbus*)

Accepted by J. Friel: 27 Jun. 2013; published: 16 Jul. 2013