



The valid generic names for the fish species usually placed in *Cyclocheilichthys* (Pisces: Cyprinidae)

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Abstract

Cyclocheilichthys is the valid name for the genus that includes *Barbus apogon* Valenciennes. *Cyclocheilichthys* has precedence over *Anematichthys*, which is a simultaneous objective synonym. If *C. enoplos* is considered not to be congeneric with *C. apogon*, the valid name for a genus that includes it is *Cyclocheilos*.

Key words: *Cyclocheilichthys*, *Cyclocheilos*, *Anematichthys*, taxonomy, nomenclature, Pieter Bleeker

Pasco-Viel *et al.* (2012) recently published in this journal an article entitled 'Bleeker was right: revision of the genus *Cyclocheilichthys* and resurrection of the genus *Anematichthys*...'. Despite its title, this article is not a revision, does not say on which topic Bleeker was 'right', and introduces a nomenclature that does not respect the prescriptions of the *International Code of Zoological Nomenclature* (hereunder *Code*). The present note intends to correct the nomenclatural errors before invalids names become established. Soon or late the nomenclature has to be corrected to respect the *Code*. The sooner the correct names are re-instated, the lesser the problems resulting from the confusion.

Owing to the word 'name' having various meanings depending on context, in order to avoid confusion and simplify reading I here use the word *nomina* (singular *nomen*) to denote 'scientific names'.

The genus *Cyclocheilichthys* presently includes nine species of cyprinid fishes known from Southeast Asia. The genus was last revised by Sontirat (1976), a classical taxonomic revision; there has not been substantial change in the species-level taxonomy since. Unfortunately this revision is an unpublished thesis. It has been cited several times in the literature on the taxonomy of the genus. The two new species recognised in the thesis (*C. lagleri*, *C. furcatus*) were later described by Sontirat (1985). Roberts (1989), Kottelat *et al.* (1993) and Kottelat (2001) based their keys and diagnoses in part on Sontirat (1976). Roberts (1989) placed *Neobarynotus microlepis* (Bleeker) in *Cyclocheilichthys*, a move not followed by later authors. Cervancia and Kottelat (2007) described an additional species, *C. schoppeae*, from Palawan (Philippines).

Pasco-Viel *et al.*'s (2012) 'revision' in fact is a valuable morphological and molecular study even though only four of the nine species in the genus (*C. enoplos* Bleeker, *C. apogon* Valenciennes, *C. armatus* Valenciennes, and *C. repasson* Bleeker) were included. They concluded (apparently correctly) that *Cyclocheilichthys* is not monophyletic and accordingly placed the four species in two genera, for which they used the names *Cyclocheilichthys* and *Anematichthys*. They did not place the remaining five species in one or the other of these genera. It appears they were unaware of Sontirat's (1976) thesis; and they could not examine material of the remaining species.

With regard to the names of the two genera, they commented "The genus *Cyclocheilichthys* is formally cited first by Bleeker (1859) with the type species being *C. enoplos*. [...] Kottelat (1999) investigated the origin of the genus *Cyclocheilichthys* and found a first citation by Bleeker (1859). Interestingly, Bleeker (1859) created two genera in the same publications: *Cyclocheilichthys*, with the type species *C. enoplos* and *Anematichthys* with the type species being *A. apogon*. These two names were considered to be objective synonyms by Kottelat (1999)". Obviously, it escaped the authors' notice that there is a contradiction in having two genera with different type species being objective synonyms.

Bleeker worked in Batavia in the East Indies (now Jakarta in Indonesia). He was an extremely productive author and published mainly in two journals, for both of which he served as editor (for historical details see Kottelat, 2011). He mainly wrote two types of papers: reports of new collections from specific geographic areas, and monographic