Comment on the article Problems in the Nomenclature of Higher Taxonomic Categories by Ya.I. Starobogatov
(See BZN 48: 6–18)

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I consider the proposals by Starobogatov (1991) to be important and timely, and I agree with them with a single though important reservation. I feel a mistake the proposition (BZN 48: 13) to allow formal availability of a descriptive (non-typified) name with its author and date, for this will prevent its replacement by the typified name. Indeed, under this proposal the typified name will be a junior synonym of the descriptive name. Until the names of higher taxa are entirely regulated by the Code the current practice is better, that is the use of descriptive names despite their having no formal availability.

Additionally, I think that hemihomonymy (see pp. 8–9) would be more securely avoided if suprageneric names ended in -i and -ae, not -es.

Comments on the proposed conservation in their accepted usage of the nominal taxa Bucephalus Baer, 1827 and B. polymorphus Baer, 1827 (Trematoda)
(Case 2251; see BZN 36: 30–36, 49: 6–11)

Editorial Note: A detailed comment opposing Dr Baturo’s application was received from Dr Srivastava (Zoological Survey of India) on 5 January 1981. Extensive correspondence took place between Dr Srivastava, Mr R.V. Melville (then Secretary of the Commission) and Dr Baturo between January 1981 and April 1985. A condensed version of Dr Srivastava’s comments is now published for the first time. Comments in support of Dr Baturo’s application from Dr D.I. Gibson (Head of the Parasitic Worms Division, The Natural History Museum, London), from Dr O.N. Pugachev (Head of the Parasitic Worms Department, Zoological Institute, Academy of Sciences, St Petersburg) and from Professor J.C. Pearson (Professor of Helminthology, Department of Parasitology, University of Queensland) are also published. Dr Gibson’s comment takes recent usage into account.

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This comment opposes Dr Baturo’s application to conserve the generic name Bucephalus Baer, 1827, with type species B. polymorphus Baer, 1827 in place of Gasterostomum Siebold, 1848, with type species G. fimbriatum Siebold, 1848, and to use Rhipidocotyle Diesing, 1858, with type species R. galeatum (Rudolphi, 1819) in place of Bucephalus Baer, 1827, with type species B. polymorphus Baer, 1827. The history of the confused classification of bucephalid trematodes shows that application of the normal rules of zoological nomenclature is more desirable than invoking the plenary powers of the Commission to stabilise the systematics of this group.
Stunkard (1976, p. 309), while discussing the systematics of these trematodes, remarked: ‘The taxonomy of the bucephalid trematodes is complicated because of unsupported and unwarranted presumptions between larval and adult stages’. He further stated (p. 313): ‘The status of Bucephalus polymorphus von Baer, 1827 and Gasterostomum fimbriatum von Siebold, 1848, long regarded as specifically identical and the only bucephalid species in freshwater hosts in Europe, is equivocal. Bucephalus polymorphus is the name of a cercaria whose adult stage is yet to be disclosed and the larval stages of G. fimbriatum are unknown’.

Baturo (1977), while working on freshwater fish parasites of Gosławickie and Slesinske Lakes (Central Poland), collected bucephalid sporocysts and cercariae from the bivalve Dreissena polymorpha, completed their development and found that they developed into adults resembling Gasterostomum fimbriatum Siebold, 1848 which, on account of misconceptions by earlier workers, is known as Bucephalus polymorphus Baer, 1827. These larval stages, though, did not correspond to the cercaria described by Baer (1827) under the name Bucephalus polymorphus, yet Baturo (1977) put them under this name. She found sporocysts and cercariae of another bucephalid parasitising the bivalve Unio pictorum in Lake Slesinske, which were identical with those described by Baer (1827) as Bucephalus polymorphus from Unio pictorum and Anodonta mutabilis in European freshwaters. She completed the life history of these larval stages and found that they developed into adult Rhipidocotyle illensis (Ziegler, 1883), a fact already suspected by Ziegler (1883). Baturo wrongly named this cercaria as Rhipidocotyle illensis instead of Bucephalus polymorphus, thus further complicating the confused status of bucephalid worms. In following the rules of zoological nomenclature, Baturo (1977) should have adopted the genus Gasterostomum Siebold, 1848, with its type species fimbriatum and relegated the genus Rhipidocotyle Diesing, 1858 and the species Rhipidocotyle illensis (Ziegler, 1883) (= Distoma campanula Dujardin, 1845) to the synonymy of the genus Bucephalus Baer, 1827 and the species B. polymorphus Baer, 1827. Instead of following this normal procedure she appealed to the International Commission on Zoological Nomenclature, in the name of stability, to disregard the ‘forgotten’ name Gasterostomum with its type species fimbriatum.

The generic name Bucephalus with its type species polymorphus was based on the larval form, whereas the genus Gasterostomum with its type species fimbriatum was described on adult worms. Synonymy was based on the erroneous assumption that the larva Bucephalus polymorphus develops into the adult Gasterostomum fimbriatum. Under Article 23f(ii) of the [1985] Code the Principle of Priority applies ‘even if two or more generations, forms, stages or sexes of a species are named as different taxa’.

That the generic name Gasterostomum Siebold is not a forgotten name is evident from the fact that the question of its validity has been repeatedly raised.

A parallel case occurs in this family where the cercaria Bucephalopsis haimeanus Lacaze-Duthiers, 1854 was supposed to have developed into the adult Bucephalopsis gracilescens Rudolphi, 1819, but the life history was never proved. In this case Hopkins (1954) restricted the generic name Bucephalopsis to the cercaria haimeanus and proposed a new generic name Bucephaloides for the adult gracilescens. Srivastava & Chauhan (1973), while agreeing with the restriction of the generic name Bucephalopsis to the cercaria haimeanus, refuted the proposal of a new name Bucephaloides for the adult species since a senior synonym Prosorhynchoides Dollfus, 1929, with type species ovatus by original designation, based on the adult characters, was available. They
resurrected the genus *Prosorhynchoides* Dollfus, 1929, for all the adult species included under the genus *Bucephalopsis*, relegating *Bucephaloides* Hopkins, 1954, to its synonymy. This contention has been accepted by Stunkard (1974).

In the case of parasites where larval stages are different from adults and both are described as separate species, such complications are bound to arise when the life histories are worked out. It is advisable to apply the Principle of Priority to such cases.

In view of the foregoing comments it would be desirable for the Commission to reject Dr Baturo’s application, and to declare valid the name *Gasterostomum* Siebold, 1848 (type species *Gasterostomum fimbriatum* Siebold, 1848) and the name *Bucephalus* Baer, 1827, rejecting the name *Rhipidocotyle* Diesing, 1858 as its synonym.

**Additional references**


(2) David I. Gibson

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I fully support Dr Baturo’s application for the following reasons:

(i) The work of Wallet & Lambert (1984) has confirmed Baturo’s (1977) results concerning the identity of the cercaria which develops into adults currently recognised as *Bucephalus polymorphus*.

(ii) The only major compendia of European freshwater fish parasites currently in use as identification manuals, those of Bykhovskaya-Pavlovskaya et al. (1962; translated into English, 1964) and Bauer (1987; translation now in preparation); both use the current conceptions of the adult forms of *Bucephalus polymorphus* and *Rhipidocotyle campanula* (= *illisensis*). The former has been widely used and cited in the past, and the latter is being and will be widely used in the future.

(iii) The names currently in use are now well accepted and regularly used in surveys, checklists and other studies of the parasites of freshwater fish parasites in Europe and the former Soviet Union (e.g. Osmanov, 1971; Kennedy, 1974; Ergens et al., 1975; Tell, 1980; Ivantsiv & Chernogorenko, 1984; Pojmanska, 1985; Walter, 1988). Between 1988 and 1990 I have found eight references referring to *Bucephalus polymorphus* and nine to *Rhipidocotyle campanula* or its synonym in European fishes.

(iv) In relation to one of Dr Srivastava’s comments, although *Gasterostomum* is not exactly a ‘forgotten’ name because its archaic vernacular ‘gasterostome’ is still in occasional usage, it is an ‘unused’ name, only rarely being referred to except in synonymy for at least the past 60 years.

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