

## Case 3113

***Betta* Bleeker, 1850 (Osteichthyes, Perciformes): proposed conservation of specific names by the suppression of *Micracanthus marchei* Sauvage, 1879**

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**Abstract.** The purpose of this application is to conserve the specific names of 'fighting fishes' which belong to the Southeast Asian genus *Betta* Bleeker, 1850 (family OSPHRONEMIDAE (or BELONTIIDAE or ANABANTIDAE)). The name *Micracanthus marchei* Sauvage, 1879 was given to a taxon supposedly from West Africa, but the poorly preserved holotype (and only specimen) clearly belongs to *Betta*. *M. marchei* has been suggested to be a senior synonym of *B. splendens* Regan, 1910, but the holotype more closely resembles *B. smaragdina* Ladiges, 1972, *B. imbellis* Ladiges, 1975 or a newly discovered species from Cambodia. It is proposed that the unused name *M. marchei* should be suppressed to conserve the specific names of the *Betta* species.

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Perciformes; OSPHRONEMIDAE; *Betta*; *Betta splendens*; *Betta smaragdina*; *Betta imbellis*; *Micracanthus marchei*; fighting fishes; Southeast Asia.

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1. Sauvage (1879) described a new genus and species, *Micracanthus marchei*, on the basis of a single specimen said to be from Doumé, in the 'pays des Okandas, haut Ogôoué' in Gabon, West Africa; the species was named after the explorer Alfred Marche who had supposedly collected it in that area. Roberts (1981, p. 91) examined the holotype of *M. marchei*; he concluded that it is a specimen of the extremely well-known Southeast Asian 'fighting fish' *Betta splendens* Regan, 1910 (p. 782), and that Sauvage had wrongly attributed it to Africa (as he also did when establishing the name of a tetraodontid species *Chonerhinos africanus* in the same paper). Roberts mentioned Article 23 of the then current Code, and pointed out that because of its very wide usage the specific name of *B. splendens* should not be displaced by *marchei*. The synonymy of *M. marchei* and *B. splendens* was recorded by Eschmeyer (1998, p. 1015). There is indeed no doubt (see Tan & Ng, in press) that *Micracanthus* Sauvage, 1879 (p. 95) is a junior subjective synonym of *Betta* Bleeker, 1850 (p. 12, type species by monotypy *B. trifasciata* Bleeker, 1850), a genus confined to Southeast Asia. Jordan (1919, p. 342) provided the replacement name *Oshimia* for *Micracanthus* because of its supposed homonymy with *Microcanthus* Swainson, 1839 (KYPHOSIDAE), but he did not comment on its taxonomic identity. Neither *Micracanthus* nor *Oshimia* have ever been used as valid names and both are later than *Betta*.

2. Roberts (1981) commented that since the type specimen of *Micracanthus marchei* was [in his opinion] conspecific with *Betta splendens*, it was originally



collected from Thailand or Peninsular Malaysia and not by Marche in Africa. Although it was not discussed by Roberts, the problem with *Micrakanthus marcheii* is actually more complex at the species level, since *B. splendens* belongs to a species-group which also includes *B. smaragdina* Ladiges, 1972 (p. 190) and *B. imbellis* Ladiges, 1975 (p. 262) (see Schaller & Kottelat, 1990; Witte & Schmidt, 1992; Tan & Ng, in press). In addition, we (Tan & Ng, in press) have recently obtained specimens of a fish belonging to this species-group from the Mekong basin in Cambodia; these represent a taxon which can be distinguished from congeners by meristic counts and the distinctive colour pattern of its fins. All these species fit Sauvage's (1879, p. 96) description of *M. marcheii*.

3. The *Betta splendens* species-group is widely distributed in Southeast Asia (see Tan & Ng, in press). These fishes are not only commercially important in the aquarium trade, but have also been used as environmental bioindicators. *Betta splendens*, especially, has had a very long history in the ornamental fish trade, and for several hundred years has been domesticated and specially bred in Southeast Asia for use in fighting tournaments (see Smith, 1945). There are currently numerous breeds available, not only for combat but for the general ornamental fish trade. *B. smaragdina* and *B. imbellis* are also widely utilised for this trade.

4. A re-examination of the holotype of *Micrakanthus marcheii* Sauvage, 1879, a somewhat shrivelled specimen 34.7 mm in standard length (Muséum National d'Histoire Naturelle, Paris, catalogue number MNHN A.964), shows that it is morphologically closer to *B. smaragdina* and *B. imbellis* than to *B. splendens*; it is also very similar to specimens of the new species from Cambodia mentioned above. *M. marcheii* may be conspecific with any of these species of *Betta*, but because of the poor condition of the holotype and its lack of true locality data its specific identity cannot be ascertained.

5. We propose that the name *Micrakanthus marcheii* be suppressed due to the totally misleading 'African' locality data, the lack of use of the name, and because of the potential threat to the specific names of species of *Betta*, of which several are well-known outside specialist literature. The name of *B. splendens* could be given precedence over *M. marcheii* by invoking Article 23.9 of the new Code, without seeking a Commission ruling, but this would not apply to all the *Betta* species whose names might be synonyms of *M. marcheii*. Although *Micrakanthus* is junior to *Betta* and has never been used, we suggest that it would be in the interest of nomenclatural stability if it were suppressed at the same time as the name of the only included species, particularly since no such taxonomic genus occurs in Africa.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic and specific names of *Micrakanthus marcheii* Sauvage, 1879 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Micrakanthus* Sauvage, 1879, as suppressed in (1) above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *marcheii* Sauvage, 1879, as published in the binomen *Micrakanthus marcheii* and as suppressed in (1) above.



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