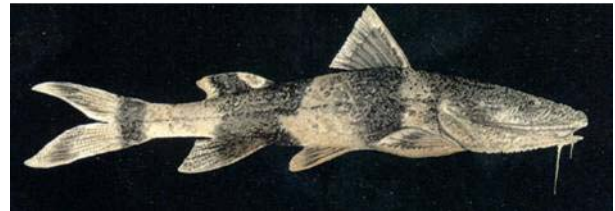


Wasp Cats – What’s in a Name ?

By
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This article has been written to put forward to fellow aquarists my personal views on the nomenclature (scientific names) and identity of the large South American ‘bumble bee’ catfish. I know that some (most ?) members are not interested in keeping up with the correct scientific names for the fish we keep, but I for one am interested in this and feel that if we are to use the scientific names they should be the ‘correct’ ones. I say ‘correct’ in that nomenclature is sometimes subjective and as such the usage of names vary from person to person.

Since the work of Mees (1974) most shops, aquarium books and fish show exhibitors have used the name ‘*Pseudopimelodus zungaro bufonius*’ for the large South American ‘bumble bee’ catfish. Below is a table of the genera and species names caught up in the ‘bufonius’ and ‘zungaro’ muddle, which Mees reviewed, and his thoughts on the valid (correct) scientific names:



The main problem with Mees’ synonymy was his inability to identify the type species of *Zungaro* with any living or preserved specimen of fish at his disposal. He admitted that his synonymy were only tentative and unsatisfactory, but faced with the problem of the identity and subsequent generic placement of *Pimelodus zungaro*, he placed it in *Pseudopimelodus*, and with three subspecies. Thanks to Silfvergrip (1992) the identity of *Pimelodus zungaro* and subsequently the genus *Zungaro* (as *Pimelodus zungaro* is the type species of *Zungaro*) was solved. *Pimelodus zungaro* is in fact the fish aquarists new as *Paulicea luetkeni*, and because *Pimelodus zungaro* was described prior to *Paulicea luetkeni*, the species name *zungaro* takes precedence. Due to the same Principle of Priority, the genus *Paulicea* became a junior synonym of *Zungaro*. As a result of Silfvergrip’s work, below is a list of the old names, and the current correct ones:

I (Grant 1999) hinted that *Zungaropsis multimaculatus*, Steindachner 1908 was possibly a synonym of *Zungaro zungaro* (therefore making the genus *Zungaropsis* a possible synonym of *Zungaro*); and I also moved *Pimelodus mangurus* (referred to as *Pseudopimelodus zungaro mangurus* by Mees) to the genus *Zungaro*, making its name *Zungaro mangurus*! I moved *Zungaro mathisoni*, Fernández-Yépez 1972 into *Pseudopimelodus* but as a doubtfully valid species.

Although *Zungaro zungaro* appears in several catfish books, it is not an aquarium fish as it can reach up-to 6 feet in length. Because of these nomenclatural changes we need to finally disassociate the word ‘zungaro’ with the South American ‘bumble bee’ cats, as it is only leading to further confusion. The genus *Zungaro* is not a member of the subfamily(* see further on) Pseudopimelodinae to which the South American ‘bumble bee’ cats belong; in my opinion it is related to the red tailed catfish genus *Phractocephalus*.

<u>Original name</u>	<u>After Mees (1974)</u>
Genera	
<i>Pseudopimelodus</i> , Bleeker 1858	valid
<i>Cephalosilurus</i> , Haseman 1911	synonym of <i>Pseudopimelodus</i>
<i>Zungaro</i> , Bleeker 1858	synonym of <i>Pseudopimelodus</i>
<i>Batrochoglanis</i> , Gill 1858	synonym of <i>Pseudopimelodus</i>
Species	
<i>Pimelodus zungaro</i>	<i>Pseudopimelodus zungaro zungaro</i>
<i>Zungaro humboldtii</i>	<i>Pseudopimelodus zungaro zungaro</i>
<i>Pimelodus mangurus</i>	<i>Pseudopimelodus zungaro mangurus</i>
<i>Pimelodus bufonius</i>	<i>Pseudopimelodus zungaro bufonius</i>
<i>Pimelodus charus</i>	<i>Pseudopimelodus zungaro bufonius</i>
<i>Pseudopimelodus roosevelti</i>	<i>Pseudopimelodus zungaro mangurus</i>
<i>Pimelodus pulcher</i>	<i>Pseudopimelodus zungaro zungaro</i>
<i>Pseudopimelodus variolosus</i>	<i>Pseudopimelodus zungaro zungaro</i>
<i>Zungaro zungaro schultzi</i>	<i>Pseudopimelodus zungaro</i> subsp 1?

Genera	
<i>Zungaro</i>	valid as <i>Zungaro</i>
<i>Paulicea</i>	synonym of <i>Zungaro</i>
Species names and combinations	
<i>Pimelodus zungaro</i>	<i>Zungaro zungaro</i>
<i>Pseudopimelodus zungaro zungaro</i>	<i>Zungaro zungaro</i>
<i>Paulicea luetcheni</i>	<i>Zungaro zungaro</i>
<i>Paulicea jahu</i>	<i>Zungaro zungaro</i>
<i>Zungaro humboldtii</i>	<i>Zungaro zungaro</i>

Once the species *zungaro* and *mangurus* are removed from the genus *Pseudopimelodus*, we come across other problems. The first one is with regard to the validity or correct usage of the generic names.

Pseudopimelodus was described in 1858 by Bleeker. He did not originally fix a type species for the genus, but did so in 1862 by fixing *Pimelodus raninus*. Also in 1858, Gill described the genus *Batrochoglanis*, but he did fix a type species at the same time; he chose *Pimelodus raninus* as well. To my knowledge it has not yet been possible to put an exact date of publication to the two works in which the two generic names were described, and if this is the case I do not think that any of the subsequent works I have seen can have given *Pseudopimelodus* precedence by way of the Principle of the First Reviser. Historically *Pseudopimelodus* has been used, but if it was shown that *Batrochoglanis* was published earlier in 1858 than *Pseudopimelodus* it could be argued that due to the Principle of Priority *Batrochoglanis* was the valid name, although the Fourth Edition of the ICZN allows a later name to become the valid one if used by at least twenty different authors and if it is in the interest of nomenclatural stability to continue to use the later name, and in this case in view of the fact that *Pseudopimelodus* has been in use for so long, and is the basis/stem for a subfamily (soon to be a family) name, *Pseudopimelodus* should be used instead of *Batrochoglanis*.

In my 1999 work I ended up splitting *Pseudopimelodus* into three subgenera to attempt to show the relationships of the three basic morphological forms which exist (subgeneric names still start with a capital letter but when used in conjunction with the generic name they should be placed in brackets). The *raninus* species complex belong in the nominotypical subgenus *Pseudopimelodus*; I then used *Cephalosilurus* as a subgenus and placed four species in it, and at least two others in a subgenus I described as new, *Vespaglanis*. I commented at the time that *Cephalosilurus* and *Vespaglanis* could be elevated to full genus level in the future. Unbeknown to me at the time of my 1999 work, de Pinna (1998) also hinted that *Cephalosilurus* may be deemed a valid full genus in future works.

I am now convinced that *Vespaglanis* should be deemed as a full valid genus, and that it is more easily justified as a genus than is *Cephalosilurus*. *Cephalosilurus* probably is a valid genus but apart from body and head morphology there does not yet appear to be any other defining character, whereas in *Vespaglanis*, (amongst other things) not only is the head and body morphology different to *Pseudopimelodus*, and the caudal fin is forked but more importantly the gill raker morphology differs to both *Pseudopimelodus* and *Cephalosilurus*. In *Vespaglanis* the outer branchial/gill arch has five rakers confined to the top (Mees 1974 and Galvis, Mojica & Camargo 1997), whereas in *Pseudopimelodus* and *Cephalosilurus* the rakers appear to be evenly spread across the arch, although differing in length. Comparative work needs to be done on the external and internal structures/morphology of *Cephalosilurus* and *Vespaglanis* species.

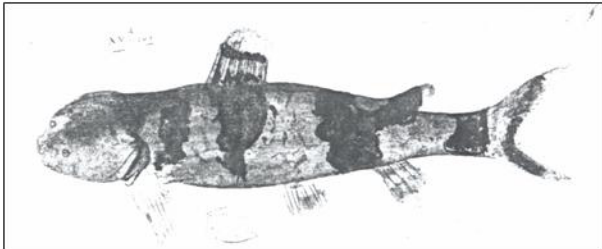
This gives us the following genera which currently belong to the family Pimelodidae, subfamily Pseudopimelodinae: *Pseudopimelodus*, *Cephalosilurus*, *Vespaglanis*, *Microglanis*, Eigenmann 1912, and *Lophosilurus*, Steindachner 1876 (although de Pinna (1998) hints that the family Pimelodidae will be split into three separate families, with the Pseudopimelodines having their own).

The next problem is which of the *Vespaglanis* species are valid.

The type species of *Vespaglanis* is *Pimelodus charus*. *P. charus* was described by Valenciennes in the same paper as was *Pimelodus bufonius*, however most subsequent workers have classed



charus as a synonym of *bufonius* and the First Reviser chose the name *bufonius* as having priority of usage over *charus* if the two are the same species. Mees stated that *charus* could end up being revalidated and in his references he listed three famous ichthyologists who considered it valid; Gomes (1946) listed it as tentatively valid, and in my 1999 work I gave my reasons for considering it as not being conspecific with *bufonius*. The major problem is that the type specimen of *bufonius* appears to have been lost shortly after it was described, and the species was not illustrated by Valenciennes so direct and detailed comparisons with *charus* is impossible. No type specimen of *charus* was preserved but Valenciennes made his description from a drawing which Mees published, and we can readily identify the fish pictured with species described since or specimens alive or preserved; thus making the name *charus* a more useful and safer option to use than *bufonius*.



Another point which needs clarifying is the type localities of *bufonius* and *charus*. Valenciennes gave the type locality of *bufonius* as Cayenne (French Guiana?) but Boeseman (1972) stated that judging by similar cases (of type specimens used by Valenciennes) this should be changed to Surinam, environs of Paramaribo. I am unsure whether or not Boeseman is correct in this assumption. The type locality of *charus* is Rio Sabará (Minas Gerais, Brazil), but it does appear to extend into Surinam.

In my opinion it is a strong possibility that members of *Vespaglanis* are sexually dichromatic, males having lighter and plain base colour, females having a darker and speckled base colour. This **may** account for the differences mentioned by Valenciennes between *charus* and *bufonius* but this is just speculation on my part.

There are at least three, possibly four other taxa that should be placed in *Vespaglanis* but their validity as species or subspecies has still not been resolved; they are:

***Pseudopimelodus roosevelti*, Borodin 1927**

Quite possibly a junior synonym of *V. charus*. This species was described from three specimens measuring between 14.5 and 22 cm SL. Two from Parassununga, Province of Sao Paulo, and one from Itaquí, Province of Rio Grande do Sul, Brazil.

***Pimelodus (Pseudopimelodus) pulcher*, Boulenger 1887**

Based on three specimens measuring between 5.78 and 6.84 cm SL from Canelos, Ecuador. This species, and the following one may be based on juvenile specimens of *V. charus*, but either species may represent the dwarf versions of *charus* that turn up in the hobby now and again (Sands 1984 page 65, and Grant 1999) and as such they may represent valid species or subspecies. I have feeling that *pulcher* will be deemed as a valid species in the future.

Pseudopimelodus variolosus, Miranda-Ribeiro 1914

Based on seven specimens, the largest of which is only 5.5 cm SL, from Coxim, Rio Taquary, Mato Grosso, Brazil. The fish in Sands 1984 is probably this species as it ties in with the pattern and locality (see notes above). The specimens pictured here could also be this species. I have one specimen which originally had two black spots on its nape (see image in Grant 1999) but its head is now almost completely black.

Zungaro zungaro schultzi, Dahl 1955

Based on specimens from Cereté, Tierra Alta, and Playa Pineda, Colombia. The holotype measured 16 cm SL. So far the type specimens have not been found or identified in any Museum collection and this is a major headache because the description is not very good, and it leaves the identity of this species in question, never mind the generic placement of it. When I first read the description, the colour (black and white) and pattern reminded me of *Merodontotus tigrinus*, Britski 1981, but the details given by Dahl on the maxillary barbel length, and head proportions do not tie in with this genus. I also considered *Brachyplatystoma juruense* (Boulenger, 1898) but again the maxillary barbel length may rule out this species, assuming the barbels on Dahl's types were not damaged.



The title of this article refers to the common name Wasp Cats. I have coined this name from the etymology of the genus name *Vespaglanis* which means 'Wasp Catfish'. With regards to the "what's in a name" comment, I'm sure you will agree that there is a lot of history surrounding the names of the Wasp Cats and their relatives, and I am sure that it won't end here.



Glossary

type species—The species that is chosen as the name-bearing species for a genus or subgenus.

name-bearing type (of a genus or subgenus)—the species which provides the objective standard of reference whereby the application of a generic or subgeneric name can be determined.

Principle of Priority—The principle that the valid name of a taxon is the oldest available name applied to it, provided that the name is not invalidated by any provision of the Code or by any ruling by the Commission.

Taxon (plural is taxa)—any taxonomic unit e.g. genus, subgenus, species

Principle of the First Reviser—The principle that the

relative precedence of two or more names or **nomenclatural** acts published on the same date, or of different original spellings of the same name, is determined by the first revisor.

nominotypical—the taxon that shares the name of the type within a subgenus, subfamily or subspecies.

conspecific—the same as another species.

type locality—The geographical place of capture or collection of the name bearing type specimen of a species or subspecies.

branchial/gill arch—small curved bones or cartilages behind the gill cover. On the inner edge are the gill rakers, on the outer edge are the soft red lamellae.

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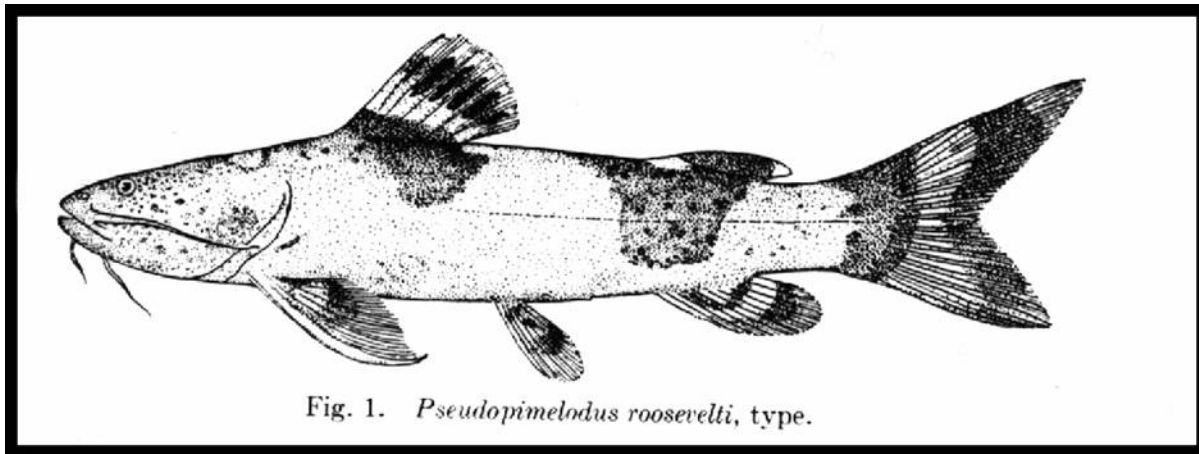


Fig. 1. *Pseudopimelodus roosevelti*, type.