

## On the Etymology of the Genus *Metynniss* Cope, 1878 (Characiformes, Serrasalminidae)

Zur Etymologie des Genus *Metynniss* Cope, 1878 (Characiformes, Serrasalminidae)

Axel Zarske

Paracelsusstr. 2, 01237 Dresden, Trochilocharax@t-online.de

**Zusammenfassung:** Anhand der Literatur wird belegt, dass COPE (1878) das Vorhandensein eines Prädorsalstachels und nicht die Serrae am Bauchkiel als Grundlage für die Benennung seines neuen Genus *Metynniss* benutzt hat.

There are currently two different views on the etymological composition of the genus name of the silver dollars of the genus *Metynniss* (meta Gr. with; hynniss, Gr. = ploughshare) Cope, 1878 (Characiformes, Serrasalminidae). While TAPHORN (1992) and SCHARPF & LAZARA (2020) assume that the name was formed by COPE due to the presence of saw teeth on the abdominal keel (serrae), other authors consider the presence of the predorsal spine in this genus to be eponymous. This opinion is particularly held in the European literature for amateurs (RACHOW 1921, 1939; STERBA 1956; FREY 1957; ZARSKÉ 2004, 2011, 2018). Since COPE (1878) has not explained the derivation of the generic name, the interpretations given above seem to be purely speculative. A closer look at the situation, however, reveals understandable arguments for COPE's actions.

He characterized his new genus *Metynniss* as follows: „This is *Myletes* with an external horizontal cultriform spine at the base of the dorsal fin as in *Serrasalmo* and *Stethaprion*. The premaxillary teeth are in two series, and have an oblique, more or less in conspicuous cutting edge, as in *Myletes*. Two conical teeth behind the mandibular series. The belly is armed with spiniferous? interhaemal bones. This form is related to *Myletes* precisely as *Stethaprion* is to *Tetragonopterus*. But one species is known to me.“ (COPE 1878, p. 692-693).

From this it can be seen that COPE distinguished the genus *Metynniss* from the genus

*Myletes* mainly by the presence or absence of a predorsal spine. In the same article he also treats the following species of the genus *Myletes*: (1) *Myletes herniarius* Cope, 1872 (today a junior synonym of *Mylossoma aureum* (Spix & Agassiz, 1829)), (2) *Myletes nigripinnis* Cope, 1878 (today a junior synonym of *Colossoma macropomum* (Cuvier, 1816)) and (3) *Myletes bidens* Spix & Agassiz, 1829 (today a junior synonym of *Piaractus brachypomus* (Cuvier, 1818)). However, these three species belong to the only three genera of the Serrasalminidae, which do not have a predorsal spine.

Formally, COPE separates his new genus *Metynniss* from the genus *Myletes* by the presence of a predorsal spine in *Metynniss*. This opinion was also shared by other ichthyologists at that time. BERG, who transferred *Myletes maculatus* Kner, 1858 into the genus *Metynniss*, noted in a footnote: „En vista del *spiritus asper* que lleva la palabra δους (reja de arado ó vómer), este nombre genérico debe escribirse *Methynniss* y no *Metynniss*, como lo escribió COPE. El género *Methynniss* se distingue del *Myletes*, al parecer, únicamente por la espina predorsal dirigida hacia adelante, con tal que no hyada diferencia en cuanto á la estructura y disposición de los dientes intermaxilares. Éstos, á lo menos en la *M. maculata*, tienen ciertas particularidades: los de la primera serie son pequeños, sobre todo los del medio, y los de la segunda, bastante grandes y más obtusos ó bidentados.“ [In view of the *spiritus*

asper which bears the word  $\delta\upsilon\omega\iota\varsigma$  (plowshare or vomer), this generic name should be written *Methynnīs* and not *Metynnīs*, as COPE wrote it. The genus *Methynnīs* is distinguished from the *Myletes*, apparently only by the predorsal spine directed forward, provided there is no difference in the structure and arrangement of the intermaxillary teeth. These, at least in *M. maculata*, have certain peculiarities: those of the first series are small, especially those in the middle, and those of the second series are rather large and more obtuse or bidentate] (see BERG 1897, pp. 286–287).

Apart from the correction of the spelling of the genus name *Metynnīs*, which is no longer valid today, BERG (1897) also describes only taxa of the genus *Myletes* without a predorsal spine: *Myletes duriventris* Cuvier, 1818 (today *Mylossoma duriventre* (Cuvier, 1818) and *Myletes orbignyannus* Valenciennes in Cuvier & Valenciennes, 1850, which today is considered a junior synonym of *Mylossoma duriventre* (Cuvier, 1818).

It remains to be mentioned that the genus name *Myletes* Cuvier, 1814 (type species: *Salmo dentex* Hasselquist, 1762 (= *Cyprinus dentex* Linnaeus, 1758)) is not available and was put on the official index of unavailable names by GÉRY & MAHNERT (1994) (Opinion 1813). The type species of this genus would thus be the African species *Alestes niloticus* (Linnaeus, 1758) in the genus *Alestes* Müller & Troschel, 1844, which has nothing to do with the South American species of the genus *Myletes* Müller & Troschel, 1844, which have a predorsal spine (MONOD 1950; PAUGY 1984).

From all this it can be concluded that COPE used the predorsal spine present in his new genus *Metynnīs* as a basis for the name (in contrast to the representatives of the imaginary genus *Myletes* Cuvier, 1814, known to him, which do not have such a spine) and not the saw teeth (serrae) present in all genera of the Serrasalminidae.

## References

- BERG, C. 1897. Contribuciones al conocimiento de los peces Sudamericanos, especialmente de los de la República Argentina. Anales del Museo Nacional de Historia Natural de Buenos Aires 5, 263-302.
- COPE, E.D. 1878. Synopsis of the fishes of the Peruvian Amazon, obtained by Professor Orton during his expeditions of 1873 and 1877. Proceedings of the American Philosophical Society 17(101), 673-701.
- CUVIER, G. 1814. Mémoire sur la composition de la mâchoire supérieure des poissons, et sur le parti qu'on peut en tirer pour la distribution méthodique de ces animaux. Bulletin des Sciences, par la Société Philomathique de Paris, Sér. 3, 1, 73-78.
- DAGET, J., GOSSE, J.-P., & THYS VAN DEN AUDENAERDE, D.F.E. (eds). 1984. Check-list of the freshwater fishes of Africa. CLOFFA I 1. Orstom; Paris.
- FREY, H. 1957. Das Aquarium von A bis Z. Neumann Verlag; Radebeul.
- GÉRY, J. 1976. Les genres de Serrasalminidae (Pisces, Characoidae). Bulletin Zoölogisch Museum, Universiteit van Amsterdam 5(6), 47-54.
- GÉRY, J., & MAHNERT, V. 1994. *Alestes* Müller & Troschel, 1844 (Osteichthyes, Characiformes): conservation proposée. Bulletin of Zoological Nomenclature 51(1), 35-40.
- MONOD, T. 1950. Notes d'ichtologie ouest-africaine. Bulletin de l'Institut Français d'Afrique Noire 12(1), 1-71.
- Opinion 1813. 1995. *Alestes* Müller & Troschel, 1844 (Osteichthyes, Characiformes): conserved. Bulletin of Zoological Nomenclature 52(2), 219-221.
- PAUGY, D. 1984. Characidae, pp. 140-183. In: DAGET, J., GOSSE, J.-P., & THYS VAN DEN AUDENAERDE, D.F.E. (eds): Check-list of the freshwater fishes of Africa. CLOFFA I 1. Orstom; Paris.
- RACHOW, A. 1921. Die Characinen, Teil 1. Bibliothek für Aquarien- und Terrarienkunde 21. Verlag Gustav Wenzel; Braunschweig.
- RACHOW, A. 1939. *Metynnīs maculatus* (Kner, 1858). Tafeln 327-328; LNr. 7D/II, 8. In: Die Aquarienfische in Wort und Bild (HOLLY, M., H. MEINKEN, & A. RACHOW, eds). Alfred Kernen Verlag; Stuttgart.
- SCHARPF, C., & K.J. LAZARA. 2020. The ETYfish projekt. <http://www.etyfish.org>
- STERBA, G. 1956. Aquarienkunde. Band 2. Urania Verlag; Leipzig, Jena, Berlin.
- TAPHORN, D.C. 1992. The characiform fishes of the Apure River drainage, Venezuela. Biollania Edición Especial, 4. Monografías Científicas del Museo de Ciencias Naturales, UNELLEZ 1-537.
- ZARSKÉ, A. 2004. Characiformes, pp. 642-643. In: Das große Lexikon der Aquaristik (SCHÄFER, C., & T. SCHRÖER, eds). Ulmer Verlag; Stuttgart.
- ZARSKÉ, A. 2011. Erstmals importiert: *Metynnīs luna* Cope, 1878 – der Hohe Scheibensalmler. Aquaristik Fachmagazin 44(3), 94-95.

ZARSKE, A. 2012. Das Typusmaterial der Characiformes des Museums für Naturkunde zu Berlin. Teil 2b (3): Südamerikanische Characiformes im weiteren Sinne (Teleostei: Ostariophysi: Characiformes: Serrasalminidae, Acestrorhynchidae, Erythrinidae, Lebiasinidae). *Vertebrate Zoology* 62, 297-356.

ZARSKE, A. 2018. Die Scheibensalmler der Gattung *Metynnis*. Eleganz im Schwarm. *Aquaristik Fachmagazin* 50(1), 6-25.

ZARSKE, A., & H.O. BERKENKAMP. 2015. Das Standardwerk „Holly, Meinken & Rachow: Die Aquarienfische in Wort und Bild“ und seine Bedeutung für die Ichthyologie. *Bulletin of Fish Biology* 15, 53-119.

Received: 25.03.2020

Accepted: 05.05.2020

Published: 02.06.2020

