

***Perca luth* Walbaum, 1792, A SENIOR SYNONYM OF THE MEAGRE, *Argyrosomus regius* (Asso, 1801) (PERCIFORMES: SCIAENIDAE), INVALIDATED BY "REVERSAL OF PRECEDENCE"**

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Abstract: *Perca luth* Walbaum, 1792, is shown to be a senior synonym of the meagre, *Argyrosomus regius* (Asso, 1801). Conditions exist, however, to allow "reversal of precedence" of the two names, as provided by Article 23.9.1 of the international Code of Zoological Nomenclature. Thus, *Argyrosomus regius* (Asso, 1801), is regarded as valid, qualifying as a *nomen protectum*, while the name *Perca luth* Walbaum, 1792, is recognized as invalid, qualifying as a *nomen oblitum*.

Keywords: *Perca luth*, *Argyrosomus regius*, Nomenclature

Özet: *Argyrosomus regius* (Asso, 1801) (Perciformes: Sciaenidae), 'un senior eşlanımlısı olan *Perca luth* Walbaum, 1792, isminin "öncelik iptali"

Perca luth Walbaum, 1792, ismi *Argyrosomus regius* (Asso, 1801)'ın senior eşlanımlısı olarak gösterilmektedir. Koşullar var olduğunda, Uluslararası Zoolojik Adlandırma Kanunu'nun 23.9.1 numaralı kanun maddesi tarafından iki ismin "öncelik iptali" ne izin verilmiştir. Bu nedenle, "*nomen oblitum*" olarak tanımlanan *Perca luth* Walbaum, 1792, ismi geçersiz sayılırken, "*nomen proctetum* (korunan ad)" olarak tanımlanan *Argyrosomus regius* (Asso, 1801) ismi kabul görmektedir.

Anahtar Kelimeler: *Perca luth*, *Argyrosomus regius*, Terminoloji

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In his compilation of genera and species of fishes Walbaum (1792) listed 75 specific names under the genus *Perca*, including a number of *nomina oblita* (20) whose status remained uncertain for two centuries. Quite recently, Parenti (2003) reviewed the status of this assemblage of fish names and was able to place all of them into synonymy of well-established fish names. The name *Perca luth*, which was also included by Walbaum in his account (1792:334), was overlooked because regarded as not original and thus it was not treated by Parenti (2003). However, a recent re-examination of the Walbaum's compilation led this name to be restored as available name (Eschmeyer, 2012).

The name *Perca (Luth)* appeared as such for the first time in Hasselquist (1762: 402) preceding the description of a percoid fish encountered by the author in his travel to Palestine. This name is treated as not available from this author because published in a rejected work (ICZN Opinion 57) and also regarded as vernacular, non-scientific name. However, the name is available from Walbaum (1792:334).

Walbaum listed *Perca luth* as eighteenth species of the genus *Perca* and he amassed the species together with others belonging to highly diverse percoid families. As for other species, the name is followed by a brief diagnosis and by a second paragraph which include a somewhat detailed description. The diagnosis of *P. luth* is the same as provided by Hasselquist (*dentibus longiusculis, distichis, acuminatis, inferioribus duplicatis*), whilst the description is compiled in a more schematic way according to the Walbaum's style. A translation of the description is here provided.

Perca, Luth. Br. 7. D. 3/20, 1/30. P. 17. V. 6. A... C. 20. Body compressed, elongate. Head of similar shape. Snout a little pointed. Upper jaw longer and larger than lower jaw. Tongue, interior of the mouth and palate smooth and yellow. Teeth in upper jaw considerably long, conical, bowed, separated, posterior shorter; in lower jaw similar, however twice shorter and doubled near the apex. Head and operculum scaled; upper opercular margin serrate and with a spine, lower one as in other species of the genus. Dorsal fin in two parts, anterior with 10 spines. First very short, eighth and ninth with strong spines, 2, 3, 4, 5, 6, 7 more flexible; 30 posterior rays, the first spinuous, the remnant soft. Caudal fin rounded.

Anus and lateral line as in the congeners. Habitat in Red Sea.

By comparing the description given by Walbaum with that provided by Hasselquist it can be noticed that some traits were omitted, probably regarded of lesser importance by Walbaum. Among these there are: i) the convex shape of the head below the eye (*lateribus sub oculis convexum, pone perpendiculare*); ii) a large mouth (*rictus oris magnus*); iii) the shape of the tongue (*magna, cartilaginea, apice obtusa, depressa, basi convexiuscula, subtus ad basin palato ligamento adnexa, antice libera*); iv) the description of the nostrils (*nares proxime ante oculos utrinque binae, admodum remotae; posteriores transversaliter ellipticae, ampliusculae, anteriores angustiores orbiculatae*); v) the shape of the dorsal profile (*dorsum parum a capite assurgens; ante pinna dorsi convexum; ab illo ad caudam sensim declive, acuminatum*), the flank (*latera convexa supra linea lateralis attenuata*) and the belly (*abdomen convexum*); vi) the shape of the branchiostegal rays (*I maximum arcuatum, exterius gibbus, reliqua ordine minora. Branchiae ut in reliquis*); vii) the position of pectorals (*prope abdomen acuminatae*); and viii) the size (*magnitudo Scientiae primae*).

In one aspect Walbaum was wrong: the type locality. Hasselquist reported that the fish came from Damietta (*Habitat cum prima & reliquis promiscue circa litora Damiatiae*), whereas Walbaum indicated the Red Sea (*habitat in mari rubro*). Damietta, also known as Damiat or Domyat, is a port and the capital of the Damietta Governorate in Egypt. It is located at the intersection between the Mediterranean Sea and the Nile, about 200 kilometers north of Cairo. Perhaps Walbaum was misled by reading that Arabian knew the fish as *luth*, as reported by Hasselquist (*Arabia Luth*) and believed the specimen inhabiting the Red Sea. The author is unable to find a different explanation for changing the type locality of *P. luth*.

Although Walbaum omitted a number of features reported in the original description by Hasselquist, there is no doubt that *P. luth* represents a senior synonym of the meagre *Argyrosomus regius* (Asso, 1801). Several features, including meristics, general shape of the body and caudal fin, and in particular the color of the internal of the mouth allow positive identification of the species.

The consequence of the discovery that an older name predates a long-established one necessitates nomenclatural actions. The International Code of Zoological Nomenclature (1999) states that the Principle of Priority is to be used to promote stability and not to upset long-accepted names. Therefore, in accordance with that Principle, the application of reversal of precedence of two names and the continuation of prevailing usage of a younger synonym is allowed when two conditions are met (see Article 23.9). These conditions are: (1) a name has not been used as valid since 1899 (Article 23.9.1.1) and (2) the valid name has been used as such in at least 25 works, published by at least 10 authors during the past 50 years, and encompassing a span not less than ten years (Article 23.9.1.2). Condition (1) and condition (2) exist for *Perca luth* and for *Argyrosomus regius*, respectively, to allow "reversal of precedence" of the two names. *Argyrosomus regius* (Asso, 1801), is thus regarded as valid, qualifying as a *nomen protectum*, while *Perca luth* Walbaum, 1792, is recognized as invalid, qualifying as *nomen oblitum*. As evidence that conditions of Article 23.9.1.2 have been met see Appendix 1:

Appendix 1.

Published works that cite *Argyrosomus regius* as valid, thus fulfilling the requirements of Article 23.9.1.2 of the International Code of Zoological Nomenclature (ICZN, 1999), are as follows: Arruda L.M. 1997, Checklist of the marine fishes of the Azores, *Arquivos do Museu Bocage (Nova série)* 3(2): 13-164; Bainbridge, R., 1958, The speed of swimming as related to size and to the frequency and amplitude of the tail beat, *Journal of Experimental Biology* 35(1):109-133; Bilecenoglu, M., E. Taskavak, S. Mater and M. Kaya, 2002, Checklist of the marine fishes of Turkey, *Zootaxa* 113:1-194; Caverivière, A. and G.A.R. Andriamirado, 1997, Minimal fish predation for the pink shrimp *Penaeus notalis* in Senegal (West Africa), *Bulletin of Marine Science* 61(3):685-695; Chakroun, N. and M.H. Ktari, 1981, Diet of the Sciaenidae (Fishes, Teleosteans) of the Tunis Bay, *Bulletin de l'Institut National de Science et Technique d'Océanographie et de Pêche de Salammbô* 8: 69-80; Chao, L.N. and E. Trewavas, 1990, Sciaeni-

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