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Case 3051

Scarus chrysopterus Bloch & Schneider, 1801 (currently *Sparisoma chrysopterum*; Osteichthyes, Perciformes): proposed conservation of the specific name and designation as the type species of *Sparisoma* Swainson, 1839

Rodrigo L. Moura
Seçao de Peixes, Museu de Zoologia da Universidade de São Paulo, C.P. 7172, 01064–970 São Paulo, Brazil

John E. Randall
Bernice P. Bishop Museum, 1525 Bernice Street, Honolulu, Hawaii 96817–0916, U.S.A. (e-mail: jackr@vision1.net)

Abstract. The main purpose of this application is to conserve the specific name of *Sparisoma chrysopterum* (Bloch & Schneider, 1801) for the Redtail Parrotfish of the Caribbean and tropical Western Atlantic. An earlier specific name, that of *Sparus abildgaardi* Bloch, 1791, has been treated as a junior synonym of *Sparisoma viride* (Bonnaterre, 1788), the Stoplight Parrotfish, but it is now known to refer to the initial phase (male or female) of *S. chrysopterum*. It is also proposed that *S. chrysopterum* be designated as the type species of *Sparisoma* Swainson, 1839 in place of the nominal species *Sparus abildgaardi*.

Keywords. Nomenclature; taxonomy; Osteichthyes; Perciformes; SCARIDAE; parrotfishes; *Sparisoma*; *Sparisoma abildgaardi*; *Sparisoma chrysopterum*; *Sparisoma viride*; Caribbean; Western Atlantic.

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1. Bloch (1791, p. 22, pl. 259) described and illustrated in color a specimen of a scarid fish from St Croix, Virgin Islands, and named it *Sparus abildgaardi*. The description and figure are of a moderately elongate, yellowish parrotfish with a lunate caudal fin; the dried skin (337mm SL) is preserved as specimen ZMU 8584 in the Museum für Naturkunde der Humboldt Universität in Berlin.

2. Bloch & Schneider (1801, p. 286, pl. 57) described and illustrated *Scarus chrysopterus* from 'mare Americanum'. The illustration shows a moderately elongate body and lunate caudal fin; this and the color description (body green, fins orange, the caudal orange in the middle and laterally green) refer to a terminal male of the species which has long been known as *Sparisoma chrysopterum* (Bloch & Schneider, 1801) and, in English, the Redtail Parrotfish.

3. Swainson (1839, p. 227) briefly described the new nominal genus *Sparisoma* and cited '*Sparus Abildgardii* [sic] Bloch, pl. 259' as the only species. He noted that 'Cuvier terms this singular fish a *Scarus* and Bloch a *Sparus*', but in the absence of any other statements one has to assume that the specific name was used in Bloch's original sense.

4. Valenciennes (in Cuvier & Valenciennes, [1840], p. 175) applied the name *Scarus abildgaardii* to a scarid from St Thomas, Virgin Islands, where it was known as 'red-fish'; he said that this common name was well justified by the description of the color (when fresh) that accompanied the specimen, and that Bloch (1791) must have had 'un individu décoloré'. Although the description by Valenciennes did not match the original one by Bloch, later authors (such as Jordan & Evermann, 1898, p. 1635; Evermann & Marsh, 1900, p. 239, pl. 30; Meek & Hildebrand, 1925, p. 748; Townsend, 1929, pl. 19; Longley & Hildebrand, 1940, p. 207, pls. 17, 28) used the name *Sparisoma abildgaardi* (Bloch, 1791) for the red parrotfish described by Valenciennes under the name *Scarus abildgaardii*.

5. Schultz (1958) reviewed the family SCARIDAE. Like Valenciennes and the other authors listed in para. 4 above, he regarded *Sparisoma abildgaardi* as a valid species; he did not examine Bloch's specimen (para. 1 above), and diagnosed *S. abildgaardi* principally on color (pectoral base same color as remainder of fin; six vertical rows of white spots on body; belly blood red; posterior margin of gill cover black (reddish brown when alive); caudal fin red except basally). Schultz was aware of sexual dimorphism in the SCARIDAE from the paper by Brock & Yamaguchi (1954) on the Hawaiian *Chlorurus perspicillatus* (Steindachner, 1839), but he did not realize how extensive this is in the family; nor did he know of the protogynous hermaphroditism of scarids which was first shown by Randall & Randall (1963) for *Sparisoma rubripinne* (Valenciennes, [1840]).

6. Winn & Bardach (1960) concluded that *S. abildgaardi*, as used by authors, did not refer to a valid species, and wrote '*Sparisoma abildgaairdi* [sic] (Bloch) (female and immature) appears to be a synonym of *Sparisoma viride* (Bonnaterre) (male).' Others have agreed with Winn & Bardach, such as Böhlke & Chaplin (1968), Randall (1968) and Schultz (1969, in his second major paper on scarids) and numerous more recent workers. It is now clear that the red parrotfish called *Scarus* or *Sparisoma abildgaardi* by Valenciennes and the other authors listed in para. 4 above, together with Schultz (1958), is the initial phase (which may be male or female) of *Sparisoma viride* (Bonnaterre, 1788, p. 96), known in English as the Stoplight Parrotfish.

7. While studying the parrotfishes of Brazil, the first author (R.L.M.) of the present application examined the original descriptions of western Atlantic species. Bloch's (1791) original description and illustration of *Sparus abildgaardi* seemed much more like *Sparisoma chrysopterum* (see para. 2 above) than the deeper-bodied '*abildgaardi*' initial phase of *S. viride*. The second author (J.E.R.) agreed, and at our request H.-J. Paepke examined the skin of Bloch's specimen in Berlin (see para. 1 above) and supplied a photograph. We now conclude that *Sparus abildgaardi* Bloch, 1791 (as originally published and represented by the holotype) is an earlier synonym of *Sparisoma chrysopterum* (Bloch & Schneider, 1801), and not a later synonym of *S. viride* (Bonaterre, 1788) as has been supposed by many authors since Winn & Bardach (1960).

8. The specific name *abildgaardi* Bloch, 1791 has apparently not been used in its original taxonomic sense (i.e. that of *S. chrysopterum*) since Swainson (1839) established *Sparisoma*. After Valenciennes ([1840]), *abildgaardi* was applied to what is now known to be the initial phase of *Sparisoma viride*, and following the recognition of this fact by Winn & Bardach (1960; see para. 6 above) the name has dropped out of use. In contrast, the name *Sparisoma chrysopterum* (Bloch & Schneider, 1801) has

always been correctly used. It would be very confusing to now replace *S. chrysopterum* by *S. abildgaardi*, and there is a prima facie case for the suppression of *abildgaardi*.

9. As noted in para. 3 above, the type species of *Sparisoma* Swainson, 1839 is, by monotypy, *Sparus abildgaardi* Bloch, 1791. Since this name was consistently misapplied and has now dropped out of use, and its suppression is therefore now proposed, we suggest that the type species should be denoted by the valid name of the taxon on which Swainson must be assumed to have based the genus. An alternative course would be to designate the congeneric *Scarus viridis* Bonnaterre, 1788 as the type species, but we see no reason for preferring this.

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

(1) to use its plenary powers:
  (a) to suppress the specific name *abildgaardi* Bloch, 1791, as published in the binomen *Sparus abildgaardi*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  (b) to set aside all previous fixations of type species for the nominal genus *Sparisoma* Swainson, 1791, and to designate *Scarus chrysopterus* Bloch & Schneider, 1801 as the type species;
(2) to place on the Official List of Generic Names in Zoology the name *Sparisoma* Swainson, 1839 (gender: neuter), type species by designation in (1)(b) above *Scarus chrysopterus* Bloch & Schneider, 1801;
(3) to place on the Official List of Specific Names in Zoology the name *chrysopterus* Bloch & Schneider, 1801, as published in the binomen *Scarus chrysopterus* (specific name of the type species of *Sparisoma* Swainson, 1839);
(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *abildgaardi* Bloch, 1791, as published in the binomen *Sparus abildgaardi* and as suppressed in (1)(a) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

Case 3071

Osphronemus deissneri Bleeker, 1859 (currently *Parosphromenus deissneri*; Osteichthyes, Perciformes): proposed replacement of holotype by a neotype

P.K.L. Ng
School of Biological Sciences, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Republic of Singapore
(e-mail: dbsngkl@leonis.nus.edu.sg)

Maurice Kottelat
Case postale 57, 2952 Cornol, Switzerland (e-mail: mkottelat@vtx.ch)

Abstract. The purpose of this application is to clarify the identity of *Osphronemus deissneri* Bleeker, 1859, the type species of *Parosphromenus* Bleeker, 1877, a genus of licorice gouramies from the freshwater and peat swamps of Southeast Asia important both in the aquarium trade and as environmental bioindicators. The holotype of *O. deissneri* is badly damaged and lacks the characters necessary for identification. It is proposed that it be replaced with a neotype in order to stabilise the taxonomy of *Parosphromenus*.

Keywords. Nomenclature; taxonomy; Osteichthyes; Perciformes; licorice gouramies; BELONTIIDAE; *Parosphromenus*; *Parosphromenus deissneri*.

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1. In 1801 (p. 116), the nominal genus *Osphronemus* was established by Lacepède (spelt La Cepède in the publication) with two species, *O. goramy* (p. 116, pl. 8, fig. 2) and *O. gallus* (p. 116). *O. goramy* was subsequently designated as the type species by Bleeker (1879, pp. 16–17 — for date of publication see Lamme, 1975). Cuvier (1829, p. 228) referred to '*Osphromenus gourami* [sic]' Lacepède but he did not mention the original spelling *Osphronemus*, although two years later (Cuvier in Cuvier & Valenciennes, 1831, p. 377) he explained that the name 'osphromène' had been used by Commerson in an unpublished manuscript, and that Lacepède had published this name as 'osphronème'.

2. Bleeker (1859, p. 376) established the species *Osphromenus* [sic] *deissneri*, and in 1877 (pl. 395, caption of fig. 1) established the nominal genus *Parosphromenus*, with *Osphromenus deissneri* as type species by monotypy. This plate appeared in 1877 and predates the earliest description of *Parosphromenus* generally quoted in the literature, i.e. Bleeker, 1879, p. 19 (see Boeseman, 1983, p. 4).

3. The licorice gouramies of *Parosphromenus* are widely distributed in the freshwater and peat swamps of Southeast Asia, and 11 nominal species are now recognised (Kottelat, 1991; Kottelat et al., 1993). These fishes are important not only in the aquarium trade but also as environmental bioindicators (Ng, Tay & Lim, 1994). The taxonomy of species of *Parosphromenus* is difficult as there are very few