

COMMENT ON THE PROPOSED VALIDATION OF *SIGANUS* FORSKÅL, 1775, AND REQUEST THAT THE NAME *TEUTHIS* LINNAEUS (PISCES) BE PLACED ON THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY
Z.N.(S.) 1721

(see volume 25, pp. 26-28)

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I wish to point out that the application to validate the genus name *Siganus* is incomplete in certain aspects and that this name, once it is placed on the Official List of Generic Names, will be in direct competition with the senior synonym *Teuthis* Linnaeus, 1766.

The name *Siganus* Forskål (spelled as published in *Descriptiones Animalium*; but Forsskål, according to Nielsen and Klauswitz, *Bull. zool. Nomencl.* 25 : 26; also spelled Forsskåhl according to Stafileu, 1967, *Regnum Vegetabile* 52 : 155) is clearly a genus name. Nielsen and Klauswitz overlooked page ii, an unnumbered page, which lists eight new genera, including *Scarus* and *Siganus*, that Forskål (*Descriptiones Animalium* . . . 1775) describes in later sections. The species included in *Siganus* are *Scarus* species 9 and 10. On page x these are listed as *Scarus rivulatus* and *Scarus stellatus*, with further indication of the new generic name *Siganus*. The two species are described on pages 25 and 26, in the genus *Scarus*, but the first is written "SCARUS SIGANUS; RIVULATUS; . . ." The significance of SIGANUS in this case is not clear; it may be an alternate species name or a repeat of the genus name as a subcategory of *Scarus*. Several authors have maintained that it is an alternate species name, and if so the type-species of *Siganus* Forskål can be decided by tautonymy. If not, the first subsequent designation may be that of Gill (1864, *Proc. U.S. Nat. Mus.* 7 : 280) who designated "*S. rivulatus*, Forsk." as type.

Acception or rejection of the name *Siganus* Forskål in no way endangers the genus name *Scarus* Forskål (pages [ii], x and 25-30) which includes Forskål's species 11-18.

In Opinion 93, the International Commission on Zoological Nomenclature placed *Teuthis* Linnaeus, 1766, on the Official List of Generic Names and designated *Teuthis javus* Linnaeus as type-species. *Teuthis javus* Linnaeus is a member of the genus *Siganus* Forskål, 1775.

Certain deficiencies in the original application, made by Dr. David Starr Jordan, appear to have necessitated withholding the name *Teuthis* from subsequent Official Lists of Generic Names in Zoology. I feel they are relatively unimportant in view of the 42 years since Opinion 93 was published in 1926, and in the interest of stability of nomenclature I object to unnecessary reversal of opinions by the Commission.

Primarily among the omissions by Jordan (Opinion 93) was the fact that Gill (1884, *Proc. U.S. Nat. Mus.* 7 : 278) first designated *Teuthis hepatus* Linnaeus as type-species of *Teuthis* Linnaeus. This designation was unsatisfactory as *hepatus* is complex and the predominant usage of *Teuthis* Linnaeus had been for species of *Siganus*. Linnaeus, 1766, included only *hepatus* and *javus* in *Teuthis*. According to Randall (1955, *Pacific Science* 9 : 363) "Linnaeus included in *Teuthis* several acanthurids and a siganid under one name *hepatus*." *Teuthis hepatus* Linnaeus, 1766, thus apparently included several species of surgeonfishes, family Acanthuridae, and a spinefoot, family Teuthididae or Siganidae—depending upon which name is to be used. Randall did not use the name *Teuthis* Linnaeus for any group in his revisions of the Acanthuridae, and cites it only in the synonymy of *Acanthurus* Forskål in his revisions of the genera and species (Randall, 1955, *Pacific Science* 9 : 363; 1956, *Pacific Science* 10 : 159-235).

Aside from the junior homonym *Teuthis* in Mollusca, the predominate usage of *Teuthis* has been for species of spinefeet, i.e. *Siganus*. As an indication of this usage for surgeonfishes and spinefeet to about 1929, I have consulted Fowler (*U.S. Nat. Mus. Bull.* 100, vol. 8) who has compiled an extensive bibliographic synonymy of Indo-Pacific fishes. There, it was found that *Teuthis* has been used in about 5.5 percent of

the references to species of the genus *Acanthurus* (= *Hepatus* in Fowler) and *Acanthurus* was used in nearly 72 percent of the references for this genus, in a total of 438 citations. In Herre (*Check List of Philippine Fishes*, 1953) the percentages are 9.2 (*Teuthis*) and 53.6 (*Acanthurus*) out of 282 citations for the same genus group. On the other hand *Teuthis* has been used in 32.9 per cent (Fowler) and 42.1 percent (Herre) of the references, for spinefeet, while *Siganus* was used in 16.0 per cent (Fowler) and 33.7 per cent (Herre) of the references, in 511 and 261 citations respectively. *Teuthis* has also been used infrequently as the name for the genus *Paracanthurus* in the family Acanthuridae.

Teuthis hepatus Linnaeus is complex, containing members of two genera of Acanthuridae as recognized by Randall. Wheeler (1958, *Bull. British Museum, Nat. Hist., Historical Series* 1 : 231) suggested a Gronovius specimen as type. I believe this is unsatisfactory, and feel that the problem should receive careful study before selection of a lectotype. To select the Gronovius specimen as lectotype would endanger the currently used name of a well-known American species of *Acanthurus* and void the interpretation of *Paracanthurus hepatus* (Linnaeus) as described by Randall (1955, *Pacific Science* 9 : 408-409).

Another Gronovius specimen was described by Wheeler (*loc. cit.*: 231, pl. 30) and indicated as the type of *Teuthis javus* Linnaeus. This skin, British Museum No. 1853.11.12.30, is herein designated lectotype of *Teuthis javus* Linnaeus.

The family name Teuthididae as proposed by Bonaparte (1831, *Giorn. Arcad. Scienze* 53 (154) : 175) predates Siganoideae (=Siganidae) proposed by Richardson (1836, *Fauna Boreali-Americana* (3) : 86). Both names have been used as the family name of the spinefeet.

In summary, placing the name *Siganus* Forskål on the Official List of Generic Names in Zoology would create a junior synonym of a name already included. I see no advantage in reversing Opinion 93 regarding the name *Teuthis* Linnaeus, as the alternate type-species is complex. To do so would endanger either the well-known name *Acanthurus* Forskål (1775) or *Paracanthurus* Bleeker (1863). Although the name *Siganus* has received considerable usage in recent years, the most frequently used name for the genus has been *Teuthis* Linnaeus.

I therefore request the International Commission on Zoological Nomenclature to reconfirm *Teuthis javus* Linnaeus as the type-species of *Teuthis* Linnaeus and to place the genus and species names and the family name Teuthididae on the appropriate official lists. I further request the Commission to omit any action regarding the name *Siganus* Forskål.



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