

STATUS OF THE NAMES *CALLIONYMUS SAGITTA* PALLAS, 1770 AND *CALLIONYMUS FILAMENTOSUS* VALENCIENNES, 1837 (TELEOSTEI, CALLIONYMIDAE), AND REQUEST TO MAKE AN EXCEPTION FROM ARTICLE 75c (4) and (5) FOR DESIGNATING A NEOTYPE FOR *CALLIONYMUS SAGITTA* PALLAS, 1770. Z.N.(S.)2435

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*Callionymus sagitta* Pallas, 1770 was originally described from a specimen from Amboina (E. Indonesia). The species was inadequately described, but an illustration was given by Pallas, from which we can see most of the important characters.

2. The holotype and only specimen of *Callionymus sagitta* (sensu Pallas) seems to be lost. Dr A. P. Andriashev (Acad. Sci. U.S.S.R., Leningrad, personal communication) and Dr N. V. Parin (Oceanogr. Inst., Moscow, personal communication) informed me that the type material of Pallas was transferred to Germany at the end of the 18th century by Pallas himself, and that the holotype of *C. sagitta* is not available in the Soviet fish collections. The large German museums were checked (e.g. ZMB, East Berlin; ZIM, Hamburg; SMF, Frankfurt/Main), as were other European and non-European museum and university collections, but it was not possible to locate the specimen. Dr H.-J. Paepke (ZMB, East Berlin) informed me that the material was probably in his institution but may have been lost during the Napoleonic occupation in the early 19th century, or during World War II when parts of the collection were destroyed. Therefore it is most probable that the holotype of *C. sagitta* is lost.

3. Subsequently, many authors have used the name *Callionymus sagitta* for specimens distributed in areas between India and Java (W. Indonesia), the Gulf of Thailand, and China. At least 50 authors have used the name *C. sagitta*, as it is a common species (e.g. Valenciennes, 1837; Günther, 1861; Day, 1875–1878; Weber, 1913; Beaufort & Chapman, 1951; Smith, 1963; Nakabo, 1982; Fricke, 1982; Fricke, 1983).

4. One junior synonym is available for *C. sagitta*: *Calionymus serratospinosus* Gray, 1835, which has never been used again in the literature. *Callionymus serratospinosus* was originally not described, but only illustrated with a colour drawing, from which we can see that it mostly agrees in its characters with other Indian material known under the name *C. sagitta*. There is no type available for *C. serratospinosus*, and according to information of Dr P. J. P. Whitehead and Mr A. C. Wheeler (BM(NH) London, personal communication), a type specimen was never deposited in any museum, and Gray knew the fish only from the drawing which was sent by General Hardwicke from India.



5. No other junior synonyms are available for *Callionymus sagitta* (sensu Valenciennes, 1837; populations distributed between India and China).

6. *Callionymus filamentosus* Valenciennes, 1837 was originally described from two specimens from Manado, N. Celebes. These syntypes are still available (MNHN Paris A1556), and in good condition. The name *C. filamentosus* (a common and widely distributed species) has been used by at least 60 authors (e.g. Valenciennes, 1837; Günther, 1861; Bleeker, 1879; Norman, 1929; Ninni, 1934; Beaufort & Chapman, 1951; Smith, 1963; Wheeler, 1973; Nakabo, 1982; Fricke, 1982; Fricke, 1983).

7. Examining the drawing of *Callionymus sagitta* published by Pallas, 1770, it can be considered evident that the specimen illustrated (the holotype) is not conspecific with other material sensu Valenciennes *et al.* from India and China. The specimen in the drawing differs in:

- the shape of the preopercular spine;
- the medial caudal fin filament;
- the structure of the occipital region;
- the preorbital length;
- the colour pattern of the first dorsal fin, the second dorsal fin, and the body.

The holotype of *C. sagitta* agrees, however, in all these features with male specimens of *Callionymus filamentosus* and should be treated as conspecific with that species.

8. According to Art. 23e (ii) of the International Code, *Callionymus sagitta* Pallas, 1770 would therefore be a senior synonym of *Callionymus filamentosus* Valenciennes, 1837. Furthermore, *Callionymus sagitta* from India to China (sensu Valenciennes *et al.*) would need a new name (since the only junior synonym, *C. serratospinosus* Gray, 1835 is not useful and perhaps not even identical with *C. sagitta* sensu Valenciennes. *C. sagitta* sensu Valenciennes would also need a type specimen.

9. If we treated *Callionymus sagitta* as a senior synonym of *Callionymus filamentosus*, this would be very bad for the stability of nomenclature in the Callionymidae:

- the well-adapted name *Callionymus filamentosus* would have to be changed into *Callionymus sagitta*;
- the well-adapted name *Callionymus sagitta* sensu Valenciennes would have to be changed into a new name;
- a neotype for *Callionymus sagitta* (syn.: *C. filamentosus*) would be necessary.
- a new type for the newly named species cited as *C. sagitta* sensu Valenciennes would be necessary.

10. I suggest an easier way which is much better for the stability of nomenclature: to continue to use the name *Callionymus sagitta* Pallas, 1770 for populations of *C. sagitta* sensu Valenciennes distri-



buted from India to China, but not for the species described in the original description (*C. filamentosus*), and to use the name *Callionymus filamentosus* Valenciennes, 1837 as valid as usual (as an exception from the rule of priority, according to Art. 23a of the International Code). I request a statement of the International Commission regarding the use of these two names.

11. If the International Commission follows my suggestion, we only need a neotype for *Callionymus sagitta* to clarify the identity of this name. I hereby propose the specimen of *C. sagitta* whose data follow, deposited in the California Academy of Sciences, Stanford University Collection, San Francisco, No. CAS-SU 41392, as neotype. (*Callionymus sagitta* Pallas, 1770, female, 86.1 mm SL, INDIA: mouth of River Hooghli, Sundarbans, Bengal Province, ca 21°50'N 88°00'E, S.W. Kemp, 1911.).

12. For designating this neotype, a decision of the International Commission would be necessary to make an exception from Art. 75c of the International Code ("Qualifying conditions for the designation of neotypes"). An exception would be necessary for the following two reasons:

- (a) There can be no evidence that the neotype is consistent with what is known from the original type material, since this type material most probably had belonged to a different species (*Callionymus filamentosus*).
- (b) The neotype cannot come from the original type locality, since the species apparently does not occur there.

In the case of rediscovery of the original Pallas holotype, it will become necessary to refer back to the Commission.

13. The Commission is accordingly requested:

- (1) to use its plenary powers to rule that the nominal species *C. sagitta* is to be interpreted by reference to the neotype designated in paragraph 11;
- (2) to place the specific name *sagitta* Pallas, 1770, as published in the binomen *Callionymus sagitta* (as interpreted by reference to the neotype proposed in paragraph 11) on the Official List of Specific Names in Zoology;
- (3) to place the specific name *filamentosus* Valenciennes, 1837, as published in the binomen *Callionymus filamentosus* Valenciennes, 1837, on the Official List of Specific Names in Zoology.

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