

**PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE GENERIC NAME "CRANGON" FABRICIUS, 1798, FOR THE COMMON SHRIMP AND THE GENERIC NAME "ALPHEUS" FABRICIUS, 1798, FOR THE SNAPPING SHRIMPS (CLASS CRUSTACEA, ORDER DECAPODA)**

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The present application relates to two generic names in the Crustacea Decapoda, each of which is commonly used by the majority of carcinologists, but each of which, under a strict application of the *Règles*, is inapplicable in the sense in which it is employed. For each of these names (*Alpheus* Fabricius, 1798, and *Crangon* Fabricius, 1798) is an invalid junior homonym of an identical generic name published in a different sense by Weber in 1795. The strict application of the *Règles* to these names would involve the transfer of the generic name *Crangon* (as from Weber, 1795) from the Common Shrimp to a genus of Snapping Shrimps. The ruthless application of the *Règles* in this way would lead to enormous confusion, not only in systematic literature but also in economic fisheries literature. It would also cause the most serious confusion in the teaching of zoology.

The following are the original references to the generic names dealt with in the present application:—

*Alpheus* Weber, 1795, *Nomencl. ent.* : 91.

*Alpheus* Fabricius, 1798, *Suppl. Ent. syst.* : 380, 404 (type species, by subsequent selection by Latreille, 1810 (*Consid. gén. Crust. Arach. Ins.* : 422) : *Alpheus avarus* Fabricius, 1798, *Suppl. Ent. syst.* : 404).

*Crangon* Weber, 1795, *Nomencl. ent.* : 94 (type species, by monotypy : *Astacus malabaricus* Fabricius, 1775, *Syst. Ent.* : 415).

*Crangon* Fabricius, 1798, *Suppl. Ent. syst.* : 387, 409 (type species, by absolute tautonymy : *Cancer crangon* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 632).

*Crago* Lamarck, 1801, *Syst. Anim. sans Vertèbr.* : 159 (type species, by monotypy : *Cancer crangon*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 632).

Prior to the year 1904, Weber's generic names had been ignored and the Common Shrimp had been placed in the genus *Crangon* Fabricius, 1798, while the generic name *Alpheus* Fabricius, 1798, had been used for Snapping Shrimps. In the year 1904, however, Rathbun revived the names in Weber's *Nomenclator entomologicus* of 1795 and accordingly pointed out (*Proc. biol. Soc. Wash.* **17** : 170) that under the Law of Priority the name *Alpheus* was not available for the Snapping Shrimps, the name *Alpheus* Fabricius, 1798, having, as its

type species, a species (*Alpheus avarus* Fabricius, 1798) that was congeneric with the species (*Astacus malabaricus* Fabricius, 1775) which was the type species of the earlier generic name *Crangon* Weber, 1795. Under the *Règles*, Rathbun was entirely correct in the contention which she so advanced. The generic name *Crangon* Weber, 1795, though published without any description, contained four nominal species of which one (*Astacus malabaricus* Fabricius) was the name of a previously published nominal species; the generic name *Crangon* Weber, 1795, thus satisfies the requirements of Proviso (a) to Article 25, even under the narrow definition laid down in the Commission's *Opinion* 1, for, being a monotypical genus, it had an indicated type species. Rathbun further argued that the name *Alpheus* Fabricius, 1798, was invalid as a junior homonym of the generic name *Alpheus* Weber, 1795, a genus established without a description or definition, with no designated or indicated type species and with more than one previously published nominal species referred to it. At that time generic names published in this manner were commonly treated as satisfying the requirements of Proviso (a) to Article 25 (notwithstanding the explicit provisions in *Opinion* 1). It was not until 1948 that all doubt on this subject was removed by the Thirteenth International Congress of Zoology, when it inserted words in the *Règles* to secure "that a generic or subgeneric name published before 1st January, 1931, shall be available under Article 25 as from the date of its original publication not only when (as at present) it was then accompanied by a definition or description or when the genus was monotypical or when a type species was designated or indicated by the original author when publishing the name but also when the name, on being first published, was accompanied by no verbal definition or description, the only indication given being that provided by the citation under the generic or subgeneric name concerned of the names of one or more previously published nominal species ("Official Record of Proceedings of the International Commission on Zoological Nomenclature at its Session held in Paris in July, 1948", in 1950, *Bull. zool. Nomencl.* 4: 78-80). Thus, under the Paris amendment of Article 25 Rathbun's rejection of the name *Alpheus* Fabricius, 1798, as a junior homonym of the name *Alpheus* Weber, 1795, is retrospectively rendered quite correct.

Rathbun pointed out also that the name *Crangon* Fabricius, 1798, was a junior homonym of the name *Crangon* Weber, 1795 (which, as explained above, she applied to the Snapping Shrimps) and therefore that for this reason also the Common Shrimp could no longer be known by the name *Crangon*. She accordingly adopted for the Common Shrimp the name *Crago* Lamarck, 1801, the next oldest published generic name for that species.

Rathbun thus used the generic name *Crangon* Weber, 1795, for the genus of Snapping Shrimps hitherto called by the name *Alpheus* Fabricius, 1798, and the name *Crago* Lamarck, 1801, for the Common Shrimp hitherto called by the name *Crangon* Fabricius, 1798. Prior to the publication of her paper, all authors used the name *Crangon* Fabricius, 1798, for the Common Shrimp and the name *Alpheus* Fabricius, 1798, for the genus of Snapping Shrimps; since the publication of her paper, the majority of workers have continued to use these names in this way, Rathbun being followed almost exclusively by American authors only. Thus, in the literature which I have myself

examined, more than 340 authors (of whom 170 published their papers after 1904) have used the name *Crangon* Fabricius, 1798, for the Common Shrimp, while only about 40 have used the name *Crago* Lamarck, 1801, for that species. The name *Alpheus* Fabricius, 1798, has, to my knowledge, been used for the Snapping Shrimp by more than 220 authors (of whom 110 published their papers after 1904), while only about 50 authors have used the name *Crangon* Weber, 1795, in this sense.

The genus *Crangon* Fabricius (= *Crago* Lamarck) is the commonest genus of shrimps on the coasts of the northern parts of the Atlantic and Pacific Oceans and is of great economic importance; the genus *Alpheus* Fabricius (= *Crangon* Weber) is the largest genus of Snapping Shrimps, containing over 180 species, and is widely distributed throughout the tropical and sub-tropical regions of the globe. It is therefore of the highest importance to put an end to the present state of confusion and to secure that for the future there shall be uniformity in the names applied to these genera. Further, both *Crangon* Fabricius and *Alpheus* Fabricius are the type genera of families; these families are known by European workers as CRANGONIDAE and ALPHEIDAE respectively, but by American authors as CRAGONIDAE and CRANGONIDAE; this difference in the names used for these well-known families is extremely confusing, more especially as it involves the transfer of the name CRANGONIDAE from one family to another and the use for the two families of names CRANGONIDAE and CRAGONIDAE which, being derived from the same word, are undesirably similar to one another. The transfer, as between these two families, of the name CRANGONIDAE would give rise to a further confusion through the fact that the family known by this name by European workers contains a number of genera, the names of which are based upon the word *Crangon*, e.g., *Notocrangon* Coutière, 1900; *Sclerocrangon* Sars, 1882; *Prionocrangon* Wood-Mason, 1891; *Paracrangon* Dana, 1852. The existence of these names would be extremely anomalous if the generic name *Crangon* were to be removed to a different family and would be a permanent cause of confusion and misunderstanding. Similarly, the family known as ALPHEIDAE by European workers contains genera, the names of which are based on the word *Alpheus*, e.g., *Synalpheus* Bate, 1888; *Alpheopsis* Coutière, 1897; *Alpheinus* Borradaile, 1899. The existence of genera with such names in a family called CRANGONIDAE would be further source of confusion.

Accordingly, I ask the International Commission on Zoological Nomenclature to use their plenary powers to prevent the permanent confusion that is otherwise unavoidable. The concrete proposals which I therefore submit for consideration are that the Commission should:—

(1) use their plenary powers:—

(a) to suppress the under-mentioned generic names:—

(i) *Alpheus* Weber, 1795;

(ii) *Crangon* Weber, 1795;

(b) to validate the under-mentioned generic names:—

(i) *Alpheus* Fabricius, 1798;

(ii) *Crangon* Fabricius, 1798;

- (2) place the under-mentioned generic names on the *Official List of Generic Names in Zoology*, with the type species severally specified below :—
- (a) *Alpheus* Fabricius, 1798 (type species, by subsequent selection by Latreille (1810) : *Alpheus avarus* Fabricius, 1798) ;
  - (b) *Crangon* Fabricius, 1798 (type species, by absolute tautonymy : *Cancer crangon* Linnaeus, 1758) ;
- (3) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) *Alpheus* Weber, 1795, as suppressed under (1) (a) (i) above ;
  - (b) *Crangon* Weber, 1795, as suppressed under (1) (a) (ii) above ;
  - (c) *Crago* Lamarck, 1801 (an objective synonym of *Crangon* Fabricius, 1798, as validated under (1) (b) (ii) above ;
- (4) place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—
- (a) *avarus* Fabricius, 1798 (as published in the binominal combination *Alpheus avarus*) ;
  - (b) *crangon* Linnaeus, 1758 (as published in the binominal combination *Cancer crangon*).

I should add, with reference to the decision by the Thirteenth International Congress of Zoology, that in future the gender of every generic name added to the *Official List* is to be specified therein (1950, *Bull. zool. Nomencl.* **4** : 341), that the gender of the generic name *Alpheus* is masculine and that of the generic name *Crangon* is feminine.



Holthuis, L. B. 1951. "Proposed use of the plenary powers to validate the generic name " Crangon " Fabricius, 1798, for the common shrimp and the generic name " Alpheus " Fabricius, 1798, for the snapping shrimps (Class Crustacea, order Decapoda) nomen-clature." *The Bulletin of zoological nomenclature* 2, 69–72.

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