

Otho Fabricius (1780)<sup>1</sup> assigns to them the name *Pycnogonum* proposed by Brünnich, and places the *Cyamus ceti* with them in the same genus. He believes them to be most closely allied to Crustaceans.

J. C. Fabricius (1794)<sup>2</sup> places the two genera *Pycnogonum* and *Nymphon* along with *Pediculus*, *Acarus*, &c., in the eleventh class (the Antliata) of his entomological system.

Lamarck (1801)<sup>3</sup> gives the same genera (*Pycnogonum* and *Nymphon*) a place in the class of the Arachnida, order of the Palpistes, together with *Bdella*, *Acarus*, and *Hydrachna*.

Savigny (1816)<sup>4</sup> proposes to place the Pycnogonida among the Crustacea, an opinion afterwards embraced by Milne-Edwards (1834)<sup>5</sup> and Johnston (1837). According to Johnston, Savigny arrived at this conclusion by a very ingenious analysis of their organs. He pointed out that the proboscis of the *Pycnogonum* is a head, whereas the mandibles, palpi, and ovigerous organs are merely modifications of the legs, so that the Pycnogonida, like the Crustaceans, really have seven pair of legs, &c.

Johnston<sup>6</sup> himself, taking the assertions of Savigny as decisive, disagrees with those naturalists who object to the Pycnogonids being placed among the Crustaceans on account of the great simplicity of their anatomy. With Milne-Edwards he considers the Pycnogonids, although imperfect and even degraded, as formed on the same general plan as that of all the numerous other animals rightly placed in the class Crustacea.

There can be no doubt that Johnston's publication is one of the most important in the history of the knowledge of the group. Johnston gives a very clear description of the body of a Pycnogonid, fully discusses the systematic position of the order, proposes good characteristic marks for the genera, and enters into detailed descriptions of the species. The number of genera in his paper amounts to five (*Nymphon*, *Pallene*, *Orithyia*, *Phoxichilus*, *Pycnogonum*), each with one species, with the exception of the genus *Nymphon*, to which two species are assigned.

Of the authors who come after Johnston, Milne-Edwards is the first to be mentioned. In the third volume of his *Histoire naturelle des crustacés* (1840), he gives a very short description of the body of a Pycnogonid, and enumerates, but without paying special attention to the group, the species and genera known to him. Following Johnston as nearly as possible, he has the same five genera<sup>7</sup> and almost the same species. His descriptions are very insufficient; his work derives importance only from the circumstance that he places—as I have already mentioned above—the Pycnogonids among the Crustaceans as a distinct order, viz., that of the Araneiformes.

<sup>1</sup> Othonis Fabricii Fauna Groenlandica, Hafniæ et Lipsiæ, 1780.

<sup>2</sup> Joh. Christ. Fabricii Entomologia Systematica emendata et aucta, tom. iv., 1794.

<sup>3</sup> J. B. Lamarck.—Système des animaux sans vertèbres, à Paris, an. ix., 1801.

<sup>4</sup> J. C. Savigny.—Mémoires sur les animaux sans vertèbres, première partie, 1816.

<sup>5</sup> H. Milne-Edwards.—Histoire naturelle des Crustacés, tom. i.-iii., 1834-40.

<sup>6</sup> In this introduction only the most important authors are mentioned; a much fuller list is given by Johnston in his *An Attempt*, &c., and by Milne-Edwards, *loc. cit.*

<sup>7</sup> The name *Orithyia* of Johnston "étant déjà employé pour un autre genre de Crustacé," is changed by Milne-Edwards into *Phoxichilidium* (*l.c.*, p. 535).