

on the *Comatulæ* before the characters of *Actinometra* again came under discussion. Messrs. Dujardin and Hupé followed the general lines of Müller's classification, but made some important alterations in it. Leach's name *Alecto* was abandoned altogether in favour of the later name *Comatula*, Lamarck; and *Actinometra* was restored to the generic rank which Müller had first proposed for it. But the French authors<sup>1</sup> found some difficulty in defining it properly, remarking that "ce genre ne diffère guère des vraies Comatules que par la position de l'anus au centre et de la bouche au bord du disque. Il en résulte que les gouttières ambulacraires, au lieu de se rendre à la bouche en suivant la direction des bras comme chez les Comatules, s'infléchissent et suivent le contour du disque." Dujardin and Hupé stated, however, that the mouth of *Comatula* was only "ordinairement au centre,"<sup>2</sup> so that its excentric position could not be regarded as especially distinctive of *Actinometra*, though this has since proved to be the case. The restoration of the latter type to a distinct generic position was nevertheless a considerable step in advance; but the mode in which the French authors disposed of some of Müller's species was very singular.

The type species of the genus, *Actinometra imperialis* of Müller, was subsequently discovered by him to be identical with *Comatula solaris*, Lamarck, or *Alecto solaris* as he called it at first. But in his concluding memoir<sup>3</sup> it appeared as *Comatula (Actinometra) solaris*, and Müller further expressed the opinion that *Asterias pectinata*, Retzius, which he had also found to be an *Actinometra*, is merely a varietal form of the same type. Dujardin and Hupé, however, regarded these three forms at Vienna, Paris, and Lund as respectively representing three different species. They referred the Lamarckian type at Paris to *Comatula*, but the other two forms to *Actinometra*; although Müller had expressly pointed out both in the *Monatsbericht*<sup>4</sup> (1846) and in the *Abhandlungen*<sup>5</sup> (1849) that Lamarck's originals were specifically identical with the type of his *Actinometra*.

Dujardin and Hupé gave no reason for their restoration of a specific name which Müller had withdrawn in favour of that established at an earlier date by Lamarck; and one can only conclude, therefore, that they had overlooked Müller's final references to the type, confining themselves to quoting those of 1841 and 1843, which were made before his visit to Paris.

On the other hand the French authors left *Asterias multiradiata*, Retzius, in the genus *Actinometra*, to which it had been originally assigned by Müller, though he subsequently withdrew it. But it would almost seem as if this were due to their not having consulted Müller's later writings, to which they made no reference. For no place was assigned in their classification to the individuals in the collections of Peron and of

<sup>1</sup> *Op. cit.*, p. 208.

<sup>2</sup> *Abhandl. d. k. Akad. d. Wiss. Berlin*, 1847 [1849], p. 248.

<sup>5</sup> *Loc. cit.*, p. 248.

<sup>3</sup> *Ibid.*, p. 194.

<sup>4</sup> *Loc. cit.*, p. 178.