

Quoy and Gaimard, which Müller had identified with *Asterias* (*Actinometra*) *multi-radiata* owing to their having not three but two palmars with the axillary a syzygy; though he called them *Alecto* on account of the symmetrical distribution of the ambulacra on the disk of one specimen.<sup>1</sup>

In fact, the French authors seem as a rule to have only quoted Müller's complete Memoir "Ueber die Gattung *Comatula*, Lam., und ihre Arten" when dealing with species which were not described by him in either of his two preliminary communications of 1841 and 1843 respectively. They recognised that the *Alecto wahlbergi* of 1843 was in 1849 transferred by Müller to *Actinometra*; but they quite ignored the fact that he also transferred *Comatula rotalaria*, Lam., to the same generic type, although it was described as an *Actinometra* on the very same page (256) of the final memoir as *Comatula* (*Actinometra*) *wahlbergi*, and they simply refer to it as *Alecto rotalaria*, Müller, 1843. The French authors then recognised four species of *Actinometra*; but only one of these (*Actinometra wahlbergi*) was understood by them in the same sense as it had been by Müller. One of his species was restored by them to *Comatula*; while, on the other hand, they retained in *Actinometra* a type which he had erroneously transferred back again to *Alecto*. They also regarded the *Asterias pectinata* as a distinct species, instead of classifying it with *Comatula solaris*, Lamarck. This course is likewise adopted in the following pages, though the two forms are not placed in different genera, as was done by Dujardin and Hupé, but in one only, viz., *Actinometra*, just as they appear in Müller's memoir.

Nearly twenty years elapsed after Dujardin and Hupé wrote before the genus received much further notice. Isolated species were described by Böhlische and Grube respectively, but no formal definition of its characters was ever published. Dr. Lütken, however, had the opportunity of examining a large number of *Comatulæ* which were collected in the Eastern Archipelago for the Godeffroy Museum; and he was led to the conclusion that the essential character of *Actinometra*, as distinguished from *Antedon*, is the excentric position of the mouth,<sup>2</sup> and that the number of ambulacra reaching the peristome is a character of no importance whatever, instead of being one of generic value, as Müller had supposed. Lütken further discovered that the proximal pinnules of all the exocyclic *Comatulæ* are provided with a terminal comb (Pl. LIII. figs. 3-6; Pl. LVI. figs. 2, 4; Pl. LXIII. figs. 5, 7; Pl. LXV. fig. 7; Pl. LXVII. figs. 2, 4; Pl. LXVIII. fig. 3), but that this is absent in the endocyclic species. The constant association of these two characters enabled him to recognise *Actinometra* as a good generic type; and various species of the genus were distributed from the Godeffroy Museum bearing Lütken's MS. names. Unfortunately, however, he was prevented by other engagements from ever publishing his descriptions of these species, or even a precise diagnosis of the genus.

<sup>1</sup> *Abhandl. d. k. Akad. d. Wiss. Berlin*, 1847 [1849], p. 261.

<sup>2</sup> See his Note in *Trans. Linn. Soc. Lond. (Zool.)*, ser. 2, 1879, vol. ii, p. 18.