

the following pages, that in certain Sphæromids the males only are furnished with uropoda, in which the exopodite is long and curved, the endopodite being fixed, and rudimentary, while in the females both endopodite and exopodite are subequal; the genus *Cilicæa* is distinguished from *Nesæa*, or at least is supposed to be distinguished, by the long spine into which the median dorsal region of the anterior abdominal segments is prolonged. This, however, has been shown by Mr. Haswell to be, at least in one species,<sup>1</sup> a sexual character, the spine being entirely absent in the female; some species of *Cilicæa* have uropoda like those of *Cymodocea*, while in others the exopodite of the uropoda is alone fully developed. But a more striking argument, perhaps, as to the impossibility of making the form of the uropoda a basis of generic distinction, is to be derived from the study of a new deep-sea species described in the present Report (p. 150); of this species, which I have named *Cymodocea abyssorum*, there are two specimens, one a male and the other a female; they were obtained at the same Station, and agree so exactly in every detail of their structure, except in the form of the uropoda, that I cannot but regard them as belonging to the same species; in the male the uropoda are like those of the typical *Nesæa*, while in the female the two rami are equally developed, as in *Cymodocea*. M. Hesse<sup>2</sup> has also brought forward very strong arguments in favour of regarding many supposed generic distinctions as being merely sexual differences.

Mr. E. J. Miers, in his account of the Crustacea dredged by the "Alert," has referred to the probability that *Nesæa latreillei* is probably only the male of *Cymodocea*.

I am able to confirm this supposition by the examination of a series of this species in the Challenger collection. The specimens were obtained at Station 190, and consist of one fully developed male, several females, and one young male, in which the dorsal spine is just beginning to make its appearance, though the uropoda have equal rami like the female; in the fully developed male the fixed endopodite is rudimentary, while the exopodite is a long, stout, curved joint.

All the specimens were obtained at the same haul of the dredge, and are so alike in other respects that I cannot but regard them as belonging to one and the same species.

The genera *Isocladus* of Miers, and *Zuzara* of Milne-Edwards, have been distinguished from *Sphæroma* by the presence of a long spiny out-growth of the last segment of the thorax; I have lately received, through the kindness of Mr. G. M. Thomson, specimens of *Isocladus armatus* from New Zealand, in some of which this spine was present and in others absent. Mr. Thomson expressed to me in a letter his suspicions that this difference might in reality prove to be sexual, in which case there would be no necessity to remove the species from the genus *Sphæroma*; a careful examination of the specimens forwarded has convinced me that Mr. Thomson's suspicions are correct, and that it is only the male which has a dorsal spine, the female being a

<sup>1</sup> *Cilicæa hystrix*, *Proc. Linn. Soc. N.S.W.*, vol. vi. p. 185.

<sup>2</sup> *Ann. d. Sci. Nat.*, ser. 5, t. xvii.