

correct to replace the name *Anthea* by the older *Anemonia*, and to range the genus *Comactis* under it. On the other hand, my *Comactis flagellifera* is not identical with *Anemonia sulcata* (*Anthea cereus*), and should therefore be referred to as *Anemonia flagellifera*.

In the system of Andres the Bunodidæ bear the closest relation to my family Tealidæ. I was unacquainted with any typical *Bunodes*, and had supposed (*cf. supra*) that they possessed acontia. This supposition is, according to Andres, incorrect; and the close relationship to *Tealia* is thus anew proven. Accordingly I withdraw the name Tealidæ in favour of the older designation Bunodidæ; but, now as formerly, the endodermal sphincter must occupy the first place in the diagnosis. I relinquish, however, to future observers, as with the Paractidæ, the decision whether forms with smooth and with papillate body-wall should be separated from one another, or not.

A last point of dispute with Angelo Andres lies in the fact that I reckon the *Halcampæ* among the Ilyanthidæ, while he erects them into a separate family. I will not decide in this place either for the one opinion or the other, but will discuss merely the point of view, which, as it seems to me, must be of importance for a decision.

The more we have learnt in late years of the structure of these forms, the more has it become apparent that Actiniæ, which are rounded posteriorly and devoid of pedal disc, exhibit in most cases a sort of ancestral character; eminently primitive forms are, above all others, the Edwardsiæ. Among such forms is the genus *Halcampæ*, from which again the genus *Halcampella* is a transition to the remaining Actiniæ, in virtue of its numerous tentacles, and of its commencing to exhibit accessory mesenteries. I opine that the genus *Ilyanthus* stands in close relation to the *Halcampella*; the regular increase of the mesenterial pairs by multiples of six, which is commencing in the one case, is in the other clearly expressed, as may be inferred from the presence of the numerous longitudinal furrows of the body-wall; while the siphonoglyphes (ciliated grooves), the hinder edge of the body, and the sphincter, are obviously of weak development, as among the *Halcampæ*. Possibly a study of the mesenteries may yield further points of agreement, but, unfortunately, nothing is accurately known of these important features in the structure of *Ilyanthus*; and so long as this is the case, no conclusion can be certain. If my expectations be confirmed, a union of the *Halcampæ* with the Ilyanthidæ would be desirable; the latter would form a transitional family placed at the top of the Hexactiniæ, and bridging the gap between them and the Edwardsiæ; while, as a peculiar and aberrant branch of the Actiniæ, would be ranged near them the Siphonactidæ, the forms possessing a conchula.

All the forms of which we have as yet spoken possess the typical digitate or tubular Actinian tentacles, so arranged that one tentacle corresponds to each radial chamber; there are, however, two variations of this arrangement. In the one,