

Family, ILYANTHIDÆ, Gosse, *pro parte*.

Hexactiniæ, having the aboral end of the body rounded ; without pedal disk.

As I include in the family of the Ilyanthidæ only those forms which have the septal arrangement of the Hexactiniæ, I define it in a much more limited sense than Gosse (*Actinologia Britannica*, p. 227) or even Verrill (*Memoirs Boston Soc.*, vol. i. p. 26). Verrill has detached the Cerianthidæ only, but left the Edwardsiæ in the family, while Allmann (*Quart. Jour. Micr. Sci.*, new ser., vol. xii. p. 394), my brother and myself (*Actinien*, p. 124), and Angelo Andres (*Mittheilungen der Zool. Stat. zu Neapel*, Bd. ii. p. 123) have most clearly pointed out that the latter also ought to be separated. I am of the opinion that even excluding the Edwardsiæ does not free the family from foreign elements, for it is not at all likely that *Halcampa albida* and *Halcampa producta* with twenty tentacles, *Halcampa microps* with sixteen tentacles, &c., conform to the hexamerous type of arrangement of the tentacles.

By the absence of the pedal disk the Ilyanthidæ form a transition to the tribe Edwardsiæ, on account of which I have placed them at the end of the Hexactiniæ ; in their internal anatomy they are also allied to the Edwardsiæ. *Halcampa clavus*, especially, which I am now about to describe, is so clearly an intermediate form that I was for long dubious whether I should treat of it under the Edwardsiæ or the Hexactiniæ.

Halcampa, Gosse.

Ilyanthidæ with elongated, vermiform body ; without sharply defined circular muscle ; the posterior end may be distended into a vesicle ; œsophageal grooves indistinct or wanting.

In all systematic descriptions of the Ilyanthidæ published by former authors, the genera *Edwardsia* and *Halcampa* are placed very close together ; according to Gosse, they are only distinguished from one another by the facts, that the middle part of the body in *Edwardsia* is surrounded by a sheath, an "epidermis," which is wanting in *Halcampa*, and that the body is divided into three sections, the "capitulum," the "scapus," and the "physa." Angelo Andres (*l. c.*, p. 137) has recently made use of a much more important anatomical character, viz., the presence of only eight septa ("octoseptazione") in *Edwardsia*, while there are always at least twelve septa in *Halcampa*. I only attach importance to the different arrangement of the septa, and therefore will place forms with tripartite wall in the genus *Halcampa*, provided only that they be true Hexactiniæ.

Halcampa clavus (Pl. III. figs. 1, 4, 10 ; Pl. XII. figs. 8, 9, 11 ; Pl. XIII. figs. 2, 4-7).

Actinia clavus, Quoy et Gaymard, *Voyage de l' Astrolabe*, Zoologie, iv. p. 150, pl. x. figs. 6-11, 1833.
Ilyanthus clavus, Milne-Edwards, *Histoire des Corall.*, tom. i. p. 284.