

colour from the dark violet subumbrella. In transverse section (fig. 12, *ce*) the circular canal shows a high circular fold projecting nearly half-way into the lumen at its lower marginal edge, which touches the basis of the velum (*yc*); the high cylindrical partly-pigmented epithelium of this fold has probably a glandular nature like the similar folds and tufts in the annular canal of *Pectyllis*.

Pectis is specially distinguished by the blind centripetal canals proceeding from the annular canal, as these are wanting in the closely-related genera *Pectyllis* and *Pectanthis*, although they are indicated in the latter by the eight adradial projections of the circular canal, which alternate with the eight radial canals (Pl. VII. figs. 11, 20, *ce*). On the whole, the centripetal canals of *Pectis* comport themselves like those of *Olindias* among the Petasidæ, and of *Glossocoonus* and *Carmarina* among the Geryonidæ, but they are shorter and broader, and have the form of a pointed equilateral triangle (fig. 20, *ce*). Their aggregate number amounts to 80 to 100, as 11 to 13 centripetal canals lie between each two radial canals, with the starting-point of their broad basis touching the circular canal. Although their number and arrangement is not perfectly regular, the (primary) adradial centripetal canal (in the middle between each two traversing radial canals) is always the largest. Then follow the (secondary) centripetal canals, which lie in the middle between the former and the latter, whilst the remaining canals are considerably smaller and irregularly distributed (comp. Pl. VI. figs. 11 and 20; Pl. V. fig. 2).

The eight genitalia (Pl. V. fig. 2, *bs*; Pl. VI. fig. 11) in *Pectis* as in *Pectyllis* (Pl. IV. fig. 3) are wide, folded, thick-walled pouches, which occupy the proximal half of the radial canals and communicate with the lumen of the eight radial canals by a wide fissure. The eight mesogonia or "genital mesenteries," which connect the genitalia with the aboral half of the œsophagus, as broad radial lamellæ in *Pectyllis* and *Pectanthis*, are rudimentary in *Pectis* (fig. 2, *wr*). In the only specimen examined (a female) the wide cavity of the reproductive pouch was empty for the most part, and only contained a few ova.

Pectanthis,¹ Hæckel, 1879.

Trachynemidæ with eight genitalia in the course of the eight radial canals, without centripetal canals. Genitalia halved by eight radial mesogonia or leaf-shaped mesenterial bands, and connected with the base of the stomach. Oral cavity without oral funnels and without side pouches. Tentacles with sucking-cups very numerous, divided into sixteen separate bunches, each two bunches between two radial canals; sixteen subradial auditory clubs, one in the middle of each bunch of tentacles.

The genus *Pectanthis* is distinguished from the two other known Pectyllidæ from

¹ Πικρῆς, firm, compact; ἄνθος, a flower.