two overlapping ventral wings, in *Monophyes* and *Cymbonectes* (Pl. XXVII.); it is a conical or campanulate hydroccial cavity in *Muggiæa* and *Cymba* (Pl. XLI.), a cylindrical canal in *Sphæronectes*. These closed hydroccia are secondary cavities, produced by concrescence of the two parallel ventral wings, which overlap the hydroccial groove of the former.

The singular genus *Mitrophyes* (Pl. XXVIII.) is distinguished by the lack of a hydrocium. It is replaced by an apical scutiform bract, which covers the nectophore and protects the siphosome hidden between them both. The apical bract is probably the remnant of the original primary nectophore.

Nectosac.—The subumbrella in most Monophyidæ occupies the dorsal part of the nectophore, whilst the hydrœcium is placed in its ventral part. The nectosac of Sphæronectes and Mitrophyes is placed rather basally (as in the ancestral Medusæ), in the other genera rather dorsally. The four radial canals are in the former genera rather regularly disposed, but usually more bilaterally, the ventral canal being shorter, and the dorsal longer than the two paired lateral canals. The ring-canal of the margin, which unites them, is placed above the velum.

Somatocyst.—The acrocyst or somatocyst ("Saftbehälter") in most Monophyidæ is of moderate size, placed in the apical prolongation of the stem; its cavity is narrow, usually filled by large vacuolate entoderm-cells, and its apex mostly contains an oleocyst. It is directed sometimes vertically upwards, at other times more obliquely. Its structure is the same as in the other Calyconectæ (compare above, p. 93).

Siphosome.—The long tubular stem exhibits in the Monophyidæ the same structure as in the Diphyidæ. The median ventral line of the common stem is beset at regular intervals by the cormidia, whose number is very variable. The contracted siphosome may be retracted into the hydrocium more or less completely.

Cormidia.—Each cormidium (Diphyozooid or Eudoxia) is composed in the Monophyidæ (as in the most Diphyidæ) of two medusomes; the sterile medusome has a bract, a siphon, and a tentacle; the fertile medusome is a gonophore, the umbrella of which has the usual medusoid structure, whilst the manubrium produces the sexual cells (compare above, p. 94).

Siphon and Tentacle exhibit no important differences in the cormidia of the various Monophyidæ, whilst the bracts or hydrophyllia are of very different form and structure, characteristic of the genera (compare above, pp. 95, 96).

Eudoxiæ.—The cormidia of some Monophyidæ arrive at sexual maturity whilst attached to the stem; they remain sessile eudoxomes. This is the case in Mitrophyes and Cymbonectes, and probably also in Monophyes. The cormidia of the three other genera are detached from the stem, and become mature as free-swimming Eudoxiæ; those of Sphæronectes are described as Diplophysa; those of Muggiæa as Cucubalus, whilst the free Eudoxiæ of Cymba belong to Cuboides.

Ontogeny.—On the development of the Monophyidæ, compare above, pp. 100-102.