

*Siphon*.—The single polypite of *Eudoxia*, or the manubrium of the sterile medusome, always exhibits the same structure as in other Calyconectæ. It is composed of four constant parts:—(1) A short pedicle (*sp*); (2) a thick-walled, usually hemispherical, basigaster, with masses of cnidoblasts (*sb*); (3) a dilated stomach, separated from the latter by a pyloric valve, and usually provided with liver-stripes (*sm*); and (4) a very extensile and contractile proboscis; the latter opens through the mouth, which often exhibits four or eight lobes. (Compare Pl. XXXII. fig. 8; Pl. XXXIV. figs. 9–11; Pl. XXXVIII. fig. 12; Pl. XL. figs. 13, 14, &c.)

*Tentacles*.—The single tentacle, which arises in each *Eudoxia* from the pedicle of the siphon, has usually the structure which is characteristic of the Calyconectæ. The long cylindrical and very contractile tubule is beset with numerous lateral branches or tentilla, separated by equal intervals. Each tentillum is composed of three parts, a slender pedicle, a reniform or ovate cnidosac, and a slender terminal filament. On the structure of the cnidosac compare above, p. 97.

*Gonophores*.—Each *Eudoxia* produces originally only a single gonophore, and this fertile medusome is placed in the ventral part of the bracteal cavity of the sterile medusome, before its siphon. In many species there is constantly found only a single gonophore, and when this becomes detached, it is usually soon replaced by a secondary or vicarious gonophore (“Ersatz-Geschlechts-Glocke”). But in some species usually two, or even three, gonophores are found at the same time developing in one bracteal cavity; they are usually of different sizes and ages, one placed at the right of the siphon, the other at its left (Pls. XXXIV., XLII.).

*Eudoxiæ* with a single gonophore are always gonochoristic, either male or female. When, however, two or three gonophores are developed simultaneously, then they are either of the same sex (*Eudoxiæ dichlinicæ*, Pl. XLII. figs. 10, 14) or of different sexes (*Eudoxiæ monoclinicæ*, Pl. XL. fig. 14).

Each single mature gonophore of the *Eudoxidæ* is a well-developed quadriradiate Medusa, without mouth and tentacles, with sexual cells in the wall of the manubrium (spadix). The umbrella is rarely rounded, and without sharp edges, as in the gonophores of *Diplophysa* and *Eudoxella*; usually it is four-edged, prismatic or pyramidal; commonly two dorsal edges are more strongly developed, and more prominent over the basal ostium, than the two ventral edges. The apex of the umbrella is always prolonged into a beak-shaped apophysis or apical horn, the pedicle by which the gonophore is attached to the bracteal cavity. The quadriradial form of the umbrella in the single gonophore is usually symmetrical (with equal right and left halves); but when two gonophores are placed symmetrically on the two sides of one siphon, they are often modified by mutual pressure, and the single umbrella assumes an asymmetrical (sometimes pentagonal) form. (Compare p. 115, and Pl. XXXVI. figs. 12–25.)

Compare on the development of the *Eudoxidæ* above, pp. 100–102.