

## Suborder II. HEMIMYARIA.

Free-swimming pelagic forms which exhibit alternation of generations in their life-history and in the sexual condition form temporary colonies.

The body is more or less fusiform, with the longer axis antero-posterior, and the branchial and atrial apertures nearly terminal.

The test is well developed.

The musculature of the mantle is in the form of a series of transversely running bands, which do not form complete and independent rings as in the *Cyclomyaria*.

The branchial and peribranchial cavities form a continuous space in the interior of the body opening externally by the branchial and atrial apertures, and traversed obliquely from the dorsal and anterior end to the ventral and posterior by a long narrow vascular band, which represents the dorsal lamina, the dorsal blood-vessel, and the neighbouring part of the dorsal edge of the branchial sac of an ordinary Ascidian.

The alimentary canal is placed ventrally. It may be either stretched out, so as to extend for some distance anteriorly, or, as is more usual, be concentrated to form along with the reproductive organs a rounded opaque mass near the posterior end of the body, known as the visceral mass or "nucleus."

The embryonic development is direct, no tailed larva being formed.

I have formed this suborder to correspond with Uljanin's group *Cyclomyaria*. The name *Hemimyaria* refers to the incomplete condition of the muscular rings. The suborder includes two very distinct families, the *SALPIDÆ*, which contains the typical members of the group, and the *OCTACNEMIDÆ*, including a single very remarkable form (*Octacnemus bythius*, Moseley), which in some respects does not conform with the characters given above.<sup>1</sup>

Family I. *SALPIDÆ*.

*Body* not attached, elongated; branchial and atrial apertures at the opposite ends.

*Test* well developed, gelatinous or cartilaginous.

*Mantle* with well-marked muscle bands, which, however, do not form complete rings, but are wanting ventrally.

*Branchial and Peribranchial Cavities* forming a large central space opening to the exterior at both ends; side walls of branchial sac not developed.

*Dorsal Lamina* in the form of a vascular band traversing the central cavity.

*Alimentary Canal* usually forming a small coiled mass placed posteriorly and ventrally.

<sup>1</sup> See below, p. 88.