

the majority, however, of *Cyrtoidea*, the capsule develops on its basal face a number of depending lobes, as were also found in some *Spyroidea* (and probably also *Botryodea*). In this respect we may distinguish two main forms of the capsule in the *Cyrtellaria*, viz., the primary simple, not lobate form, and the secondary lobate form. The central capsule is originally always enclosed in the cephalis, and has there a simple, subspherical, ellipsoidal or ovate form. As soon as their growth increases, and the enclosing cephalis becomes too narrow, it sends out prolongations in the form of basal lobes, which depend from its base, and proceed through the pores of the basal lattice of the cephalis, or the cortinar pores. In the great majority of *Cyrtoidea* in which the capsule was observed, either three or four such lobes were seen (already described by J. Müller). Of course this number depends upon the number of cortinar pores, which is either three or four; therefore in the *Cyrtoidea* with three pores in the cortinar plate, we find three lobes of the central capsule (an odd posterior and two paired anterior); in the *Cyrtoidea*, however, with four pores in the cortinar plate (the majority) we find four lobes of the central capsule (two smaller anterior jugular and two larger posterior cardinal lobes). Usually each lobe is ovate or pear-shaped and encloses a large oil-globule, and often also an apophysis of the cell-nucleus.

Section I. MONOCYRTIDA, Haeckel, 1862, Monogr. d. Radiol, pp. 280, 281.

Definition.—*Cyrtoidea* monothalamia, with simple, not jointed shell (or cephalis), without transverse constrictions.

Synopsis of the three Families and six Subfamilies of Monocyrtida.

Family LIX.	}	Mouth open,	1. Archipilida.
Tripocalpida.			
Three radial apophyses.	}	Mouth closed,	2. Archiperida.
Family LX.	}	Mouth open,	3. Archiphormida.
Phænocalpida.			
Numerous radial apophyses.	}	Mouth closed,	4. Archiphænida.
Family LXI.	}	Mouth open,	5. Archicorida.
Cyrtocalpida.			
No radial apophyses.	}	Mouth closed,	6. Archicapsida.

Family LIX. TRIPOCALPIDA, n. fam.

Archipilida et Archiperida, Haeckel, 1881, Prodrömus, pp. 427, 429.

Definition.—*Monocyrtida* triradiata. (*Cyrtoidea* with a simple, not jointed shell, representing a simple cephalis, with three radial apophyses.)