

B. The radial structure, indicated by radial apophyses arising from the shell, offers three principal differences, according to which the whole group of *Cyrtoidaea* may be divided into three large groups or sections, viz., (1) *Pilocyrtida*, or *Cyrtoidaea triradiata*, with three radial apophyses; (2) *Astrocyrtida*, or *Cyrtoidaea multiradiata*, with numerous radial apophyses (four to nine or more); and (3) *Corocyrtida*, or *Cyrtoidaea eradiata*, without external radial apophyses. The majority of *Cyrtoidaea* are *Pilocyrtida*, with three radial apophyses, which are probably homologous to the three primary feet of the *Plectoidea* and of *Cortina* (therefore "cortinar feet"). The *Astrocyrtida*, or the *Cyrtoidaea* with a variable number of radial apophyses (at least four to six) may be derived from the *Pilocyrtida* by interpolation of secondary or interradial apophyses between the three primary or perradial apophyses. The *Corocyrtida*, however, or the *Cyrtoidaea* without external radial apophyses, may have originated by reduction and loss of the latter, either from the *Pilocyrtida* or from the *Astrocyrtida*.

C. The shape of the basal mouth in the *Cyrtoidaea* exhibits two essential differences only, viz., (1) the terminal mouth of the shell is a simple wide opening in the *Stomocyrtida*, or (2) the terminal mouth is closed by a lattice-plate, in the *Clistocyrtida*. As these two different cases occur in all the twelve families, which we have distinguished according to the differences in the number of joints and in the radial structure, we get altogether twenty-four subfamilies which are synoptically arranged in the following table:—

Synopsis of the four sections, twelve families and twenty-four subfamilies of CYRTOIDEA.	PILOCYRTIDA. <i>Cyrtoidaea triradiata.</i> (Three radial apophyses.)		ASTROCYRTIDA. <i>Cyrtoidaea multiradiata.</i> (Four to nine or more apophyses.)		COROCYRTIDA. <i>Cyrtoidaea eradiata.</i> (No radial apophyses.)	
Mouth of the shell.	<i>Aperta.</i>	<i>Clausa.</i>	<i>Aperta.</i>	<i>Clausa.</i>	<i>Aperta.</i>	<i>Clausa.</i>
MONOCYRTIDA. (<i>Cyrtoidaea monothalamia</i>).	TRIPOCALPIDA.		PHÆNOCALPIDA.		CYRETOCALPIDA.	
	Archipilida.	Archiperida.	Archiphormida.	Archiphænida.	Archicorida.	Archicapsida.
DICYRTIDA. (<i>Cyrtoidaea dithalamia</i>).	TRIPOCYRTIDA.		ANTHOCYRTIDA.		SETHOCYRTIDA.	
	Sethopilida.	Sethoperida.	Sethophormida.	Sethophænida.	Sethocorida.	Sethocapsida.
TRICYRTIDA. (<i>Cyrtoidaea trithalamia</i>).	PODOCYRTIDA.		PHORMOCYRTIDA.		THEOCYRTIDA.	
	Theopilida.	Theoperida.	Theophormida.	Theophænida.	Theocorida.	Theocapsida.
STICHOCYRTIDA. (<i>Cyrtoidaea polythalamia</i>).	PODOCAMPIDA.		PHORMOCAMPIDA.		LITHOCAMPIDA.	
	Stichopilida.	Stichoperida.	Stichophormida.	Stichophænida.	Stichocorida.	Stichocapsida.