

The cœnenchyma contains a superficial layer of scale-like calcareous bodies, which are continued upwards over the calyx, where they are arranged in regular sequence, usually bilaterally symmetrical, they overlap each other around the margin of the calyx; eight of the scales form an operculum, and they may be brought together so as to close the opening. The calyces are movable; they are thrust outwards when erect, or are when retracted turned towards the stem, so as to lay their oral apertures against the stem. In some species this retraction is also accompanied by a twisting of the base of the calyx, which turns the oral aperture downwards.

The Primnoidæ are a well-marked family, without any close relationship with the Muriceidæ with which they have been usually united. The opercula which close the calyces of the Muriceidæ are formed of the spicular bases of the tentacles, while in the Primnoidæ they are portions of the calyx. The nearest relationship of the Primnoidæ seems to be with certain forms of Chrysorgoginæ.

The Primnoidæ may be divided into the following four subfamilies and genera:—

Subfamily 1. CALLOZOSTRINÆ.

1. *Callozostron*, Perceval Wright.

Subfamily 2. CALYPTROPHORINÆ.

2. *Calyptrophora*, Gray, *emend.*

Subfamily 3. PRIMNOINÆ.

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| 3. <i>Primnoa</i> , Lamouroux. | | 7. <i>Thouarella</i> , Gray, <i>emend.</i> |
| 4. <i>Stachyodes</i> , Wright and Studer. | | 8. <i>Amphilaphis</i> , Wright and Studer. |
| 5. <i>Calypterinus</i> , Wright and Studer. | | 9. <i>Plumarella</i> , Gray, <i>emend.</i> |
| 6. <i>Stenella</i> , Gray. | | 10. <i>Primnoella</i> , Gray, <i>emend.</i> Studer. |
| 11. <i>Caligorgia</i> , Gray, <i>emend.</i> Studer. | | |

Subfamily 4. PRIMNOIDINÆ.

12. *Primnoides*, Wright and Studer.

Subfamily 1. CALLOZOSTRINÆ.

The colony consists of a probably creeping stem, which is either attached or free, a point which cannot be decided on the single specimen which is the representative of this subfamily. The axis is feebly calcareous and flexible. The elongated polyps are cylindrical, and arranged in rows; they arise thickly on the entire stem, except along one longitudinal surface which may be described as the ventral colonial groove, and