

Synopsis of the Genera included in the Family ECHINASTERIDÆ.

- A. Disk large. Rays numerous. Armed with large isolated spines covered with membrane beset with calcareous granules. Numerous madreporiform bodies. Forficiform pedicellariæ present ACANTHASTERINÆ.
- a. A single genus *Acanthaster*.
- B. Disk small. Rays usually five. Armed with large spines beset with scales or asperities. One madreporiform body. No pedicellariæ present. No interbranchial partitions MITHRODIINÆ.
- a. A single genus *Mithrodia*.
- C. Disk small or medium-sized. Rays five or six. Spinulation small: spinelets isolate or grouped. No pedicellariæ present ECHINASTERINÆ.
- a. Armature of the adambulacral plates simple or disposed in transverse series.
- a. Abactinal plates bearing small spinelets, in more or less compact groups.
- a. Disk small. Marginal plates usually distinguishable. Adambulacral plates with a small inner spinelet placed high in the furrow *Cribrella*.
- β. Disk comparatively large. Marginal plates superficially undistinguishable. No small inner spinelet on the adambulacral plates *Perknaster*.
- b. Abactinal plates bearing simple isolated spines *Echinaster*.
- b. Armature of the adambulacral plates disposed in a double longitudinal series. Abactinal plates forming a wide-meshed network and bearing compact groups of spinelets *Plectaster*.
- D. Disk moderately developed. Rays five. Abactinal plates regularly disposed, bearing small isolated spinelets. Marginal plates with large valvate pedicellariæ. Actinal intermediate plates bearing one or more large flattened spinelets VALVASTERINÆ.
- a. A single genus *Valvaster*.

Subfamily ACANTHASTERINÆ, Sladen, 1888.

Genus *Acanthaster*, Gervais.

Stellonia (pars), Agassiz, Mém. Soc. Sci. Nat. Neuchâtel, 1835, t. i. p. 191.

Echinaster, Gray, Ann. and Mag. Nat. Hist., 1840, vol. vi. p. 281.

Acanthaster, Gervais, Dict. Sci. Nat., suppl., 1841, t. i. p. 474.

Echinites, Müller and Troschel, Archiv f. Naturgesch., 1844, Jahrg. x., Bd. i. p. 180.

Acanthaster is a very isolated type, having a facies altogether unlike that of any other form. The genus is confined to tropical waters, and, though ranging over a wide area of distribution, the amount of morphological plasticity exhibited is very slight. I feel some uncertainty as to whether the form from Mauritius, so carefully described by de Loriol,¹ can really be recognised as a species independent from *Acanthaster echinites*; and I am equally doubtful as to the validity of the claims of *Acanthaster ellisii*.

¹ Mém. Soc. Phys. et Hist. Nat. Genève, 1885, t. xxix., No. 4, p. 6.