

A large number of recently discovered species are associated together by community of character in the genus *Pontaster*.

The following scheme will serve as an index of reference to their "special marks":—

Synopsis of the Species included in the Genus Pontaster herein described.

- A. Adambulacral plates with a secondary series of two or more spines.
- a. Secondary spines on adambulacral plates large and robust; in oblique transverse series. With more or less well-developed dorsal spines on the supero-marginal plates:
- a. One infero-marginal spine and sometimes a small companion. With no large spines on the disk. No comb-formed pedicellariæ.
- α. With narrow marginal plates confined entirely to the lateral wall.
- i. With pedicellariæ. Disk large, rays much expanded at the base *tenuispinus.*
- ii. With no pedicellariæ. Disk small, rays not much expanded at the base.
1. With very fine needle-like spinulation *planeta.*
2. With robust truncate spines *hebitus.*
- β. With broad marginal plates forming a well-defined border on the abactinal surface. No pedicellariæ *limbatus.*
- b. Three infero-marginal spines. With large spines on the disk. With comb-formed pedicellariæ *oryzanthus.*
- b. Secondary spines on the adambulacral plates small, and equal to the furrow series; in two converging series. With no dorsal spines on the supero-marginal plates, or only small ones here and there *teres.*
- B. Adambulacral plates with a secondary series consisting of only one large conical spine.
- a. With narrow supero-marginal plates.
- a. With quadrivalvate pedicellariæ. Paxillæ well-developed, with several spinelets.
- α. Pedicellariæ numerous on the abactinal surface, and on the actinal surface extending along the ray on the infero-marginal plates. Infero-marginal plates with close conical granulation. No secondary lateral spinelet *forcipatus.*
- β. Pedicellariæ few, only present on the actinal interradial area. Infero-marginal plates almost naked. A well-developed secondary lateral spine present *mimicus.*
- b. No pedicellariæ. Paxillæ on the outer part of the ray represented only by a squamous plate with a single central spinelet *pristinus.*
- b. With broad supero-marginal plates. No quadrivalvate pedicellariæ.
- a. Dorsal spines on the supero-marginal plates long, tapering and robust.
- α. Paxillæ with a central spine, often long and conical. No pedicellariæ. Actinal intermediate plates present *venustus.*
- β. Paxillæ with no central spine, simple. Comb-formed pedicellariæ. No actinal intermediate plates *trullipes.*
- b. No dorsal spines, only tubercles. No pedicellariæ present *subtuberculatus.*