

should have chosen as the type of the family. From the fact, however, that the name has already passed into general use, and that a number of the deep-sea forms have been understood, at least conventionally, as belonging to that family, the designation has had a significance given to it beyond the scope of special students of the Asteroidea. Under these circumstances it seems to me better to avoid confusion by retaining the name of Archasteridæ, than to give a new family name based on a genus that would be more generally typical of the group as a whole; though the latter course would have been undoubtedly preferable if the considerations I have mentioned above had not stood in the way.

The following tabular arrangement will show the relations of the genera herein described, which are now classed in the family Archasteridæ; and also the four sub-families into which they are naturally divisible.

Synopsis of Genera included in the Family ARCHASTERIDÆ.

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| A. No definite medio-radial line of abactinal plates. | | |
| a. | Papulæ confined to a limited area at the base of the ray. Marginal plates more or less alternate. Actinal intermediate plates absent or very few in number | PARARCHASTERINÆ. |
| a. | With large odd interradial marginal plate and spine. No true paxillæ. Spicule bearing plates only. No special papular organ | <i>Pararchaster.</i> |
| b. | No odd interradial plate. True paxillæ. Special papular organ | <i>Pontaster.</i> |
| b. | Papulæ distributed over the whole abactinal area. Marginal plates opposite. Actinal intermediate plates well developed | PLUTONASTERINÆ. |
| a. | Marginal plates more or less equally developed in each series. | |
| α. | Supero-marginal plates thin and plate-formed; confined to the lateral wall; armed with a spine. No order of abactinal plates. Pedicellariæ present | <i>Dytaster.</i> |
| β. | Supero-marginal plates thick and massive, extending more or less on abactinal surface; usually unarmed. Abactinal plates along the margin of the ray in more or less definite transverse series. No pedicellariæ | <i>Plutonaster.</i> |
| b. | Supero-marginal plates almost aborted | <i>Lonchotaster.</i> |
| B. With a definite medio-radial line of abactinal plates. | | |
| a. | Abactinal plates arranged in longitudinal series parallel to the median series. No internal imbricating ridges. Actinal intermediate plates well developed. No pedicellariæ | PSEUDARCHASTERINÆ |
| a. | Adambulacral armature: furrow series radiating, subpalmate; actinal spines in a co-ordinated group | <i>Pseudarchaster.</i> |
| b. | Adambulacral armature in longitudinal series parallel to the furrow. Post-adambulacral plates with fascioles | <i>Aphroditaster.</i> |
| b. | Abactinal plates in oblique transverse rows on each side of the median series. With special internal imbricating ridges. Actinal intermediate plates aborted or very few in number. Pedicellariæ present | ARCHASTERINÆ. |
| a. | Adambulacral armature Astropectinoid, with oblique median series. Flattened squamiform spinelets on infero-marginal plates | <i>Archaster.</i> |