

possession of characters which fully warrant their separation. As now classified, the species present a remarkable similarity of general facies, and the comparatively small amount of morphological plasticity exhibited by the genus is extraordinary, considering the wide geographical area over which it is distributed. The bathymetrical range is also remarkable, extending from the commencement of the continental zone to the greatest depth at which starfishes have been found.

The genus *Freyella* is distinguished from the other members of the Brisingidæ by having the disk and the basal portion of the rays covered with scale-like, calcareous plates, frequently imbricating, and forming a more or less compact calcareous caseament. The plates bear one or more spinelets. No papulæ are present.

*Synopsis of the Species included in the Genus Freyella, herein described.*

- A. Rays ten or more in number.
- a. Mouth-spines free and spiniform. Abactinal plating well-developed and imbricating.
    - a. Mouth-spines proper three or four on each plate.
      - α. Adambulacral armature with the inner spine doubled. Rays ten in number, broad and robust . . . . . *pennata.*
      - β. Adambulacral armature with the inner spine single. Rays seventeen in number, very delicate . . . . . *polycnema.*
    - b. Mouth-spines proper one or two on each plate. Adambulacral armature with one inner spine. Rays usually more than ten in number (10 to 12).
      - α. Abactinal plates bearing large spinelets with membranous sheaths crowded with pedicellariæ. Rays eleven or twelve in number . . . . . *echinata.*
      - β. Abactinal plates bearing small spinelets with simple membrane devoid of pedicellariæ.
        - i. Buccal membrane with largely developed papilliform villous appendages. Rays ten or eleven in number . . . . . *fragilissima.*
        - ii. Buccal membrane with no specially developed villous appendages.
          1. Rays constantly twelve in number. Spinelets on the abactinal plates few, one to three on each. Lateral spines rather short and not very delicate. Outer mouth-spines forming a bar across the ambulacral furrow . . . . . *bracteata.*
          2. Rays ten to twelve in number. Spinelets on the abactinal plates more numerous, five to ten on each. Lateral spines long and very delicate. Outer mouth-spines not forming a bar across the ambulacral furrow . . . . . *dimorpha.*