

Subgenus 2. *Heliodendrum*, Haeckel.

*Definition*.—Surface of the disk armed with simple or branched radial spines.

4. *Heliodrymus setosus*, n. sp.

Disk with spiny surface, four times as broad as the medullary shell. Pores regular, circular; twelve to thirteen on the radius. Marginal spines ten to twelve, cylindrical, irregularly branched, each with two to eight flexuose branches of different sizes; the largest as long as the diameter of the disk. Spines of the surface bristle-shaped, half as long, not branched.

*Dimensions*.—Diameter of the disk 0.2, of the medullary shell 0.05; length of the marginal spines 0.12 to 0.18, breadth 0.025.

*Habitat*.—North Pacific, Station 254, surface.

5. *Heliodrymus ramosus*, n. sp. (Pl. 35, figs. 3, 4).

Disk with spiny surface, three times as broad as the medullary shell. Pores regular, circular, hexagonally framed; eleven to twelve on the radius. Marginal spines sixteen to twenty, cylindrical, about as long as the radius, irregularly forked or branched, with unequal flexuose branches. Spines of the surface nearly as long, bristle-shaped, also irregularly branched.

*Dimensions*.—Diameter of the disk 0.15, of the medullary shell 0.05; length of the spines 0.06 to 0.08, basal breadth 0.01 to 0.015.

*Habitat*.—South Pacific, Station 288, surface.

6. *Heliodrymus viminalis*, n. sp. (Pl. 35, fig. 5).

Disk with spiny surface, two and a half times as broad as the medullary shell. Pores irregular, roundish; ten to twelve on the radius. Marginal spines fifteen to twenty, cylindro-conical, strong, partly simple, partly forked, about as long as the diameter of the disk. Spines of the surface very numerous, bristle-shaped, longer than the marginal spines, and more branched.

*Dimensions*.—Diameter of the disk 0.15, of the medullary shell 0.06; length of the marginal spines 0.11 to 0.14, basal breadth 0.01 to 0.015; length of the surface spines 0.2 to 0.03.

*Habitat*.—Central Pacific, Station 271, surface.

Genus 195. *Astrophacus*,<sup>1</sup> Haeckel, 1881, Prodröm, p. 457.

*Definition*.—Phacodiscida with double medullary shell and with numerous (ten to twenty or more) simple radial spines on the margin of the disk (commonly with a variable number and an irregular disposition of the undivided spines).

The genus *Astrophacus* differs from the similar *Heliodiscus* in the duplication of the medullary shell. The number and disposition of the radial spines of the margin

<sup>1</sup> *Astrophacus* = Star-lens; ἄστρον, φακίς.