

We can distinguish two subgenera: in *Heliocladus* the surface of the disk is smooth, in *Heliodendrum* covered with bristle-shaped radial spines, which are either simple or also branched, sometimes longer than the thick marginal spines.

Subgenus 1. *Heliocladus*, Haeckel, 1881, Prodrömus, p. 457.

*Definition.*—Surface of the disk smooth, without radial spines.

1. *Heliodymus dendrocyclus*, n. sp. (Pl. 33, fig. 9).

*Heliocladus dendrocyclus*, Haeckel, 1881, Prodrömus et Atlas (pl. xxxiii. fig. 9).

Disk with smooth surface, three times as broad as the medullary shell. Pores regular, circular, hexagonally framed; eight to nine on the radius. Marginal spines sixteen to twenty, cylindrical, very strong, flexuose, irregularly branched, nearly as long as the diameter of the disk. Between these main spines, each of which bears two to six irregular branches, are scattered on the margin numerous smaller simple spines.

*Dimensions.*—Diameter of the disk 0.16, of the medullary shell 0.05; length of the main spines 0.1 to 0.14, breadth 0.01 to 0.02.

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

2. *Heliodymus furcatus*, n. sp.

Disk with smooth surface, four times as broad as the medullary shell. Pores irregular, roundish; ten to twelve on the radius. Marginal spines twenty to twenty-five, cylindrical, flexuose, forked, about as long as the radius of the disk; fork-branches irregular, of unequal size. Some smaller simple spines are scattered between the forked ones.

*Dimensions.*—Diameter of the disk 0.15, of the medullary shell 0.04; length of the radial spines 0.07 to 0.09, breadth 0.01.

*Habitat.*—Central Pacific, Station 265, surface.

3. *Heliodymus grottensis*, Haeckel.

*Heliodymus grottensis*, Stöhr, 1880, Paläontogr., vol. xxvi. p. 89, Taf. i. fig. 13.

Disk with smooth surface, two and a half times as broad as the medullary shell. Pores irregular, roundish; eight to nine on the radius. Marginal spines twenty to thirty, conical, very irregular in form, size, and disposition; the smaller simple, the larger irregularly branched and half as long as the radius of the disk.

*Dimensions.*—Diameter of the disk 0.17, of the medullary shell 0.07; length of the marginal spines 0.02 to 0.04, basal breadth 0.01 to 0.02.

*Habitat.*—Fossil in Tertiary rocks of Sicily, Grotte, Stöhr.