

expressed in the diagnosis given above, and call the former state (the Coccodiscid) *Hymenactura* (compare above, p. 473). One practical advantage, obtained in this way, is that all genera of Discoidia ending with “-astrum” belong to the Porodiscida. *Hymeniastrum* differs from *Dictyastrum* by the possession of a patagium, and from *Euchitonia* by the equal size of the angles and the arms.

Subgenus 1. *Hymenastrella*, Haeckel.

*Definition*.—Arms with blunt ends, without terminal spines.

1. *Hymeniastrum leydigii*, Haeckel.

*Euchitonia leydigii*, Haeckel, 1862, Monogr. d. Radiol., p. 510, Taf. xxxi. figs. 4, 5.

*Hymeniastrum leydigii*, Haeckel, 1881, Prodrömus, p. 460.

*Histiastrium trinacrium*, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 843.

Arms twice as long as broad, two-thirds as broad at the base as at the blunt, nearly truncated distal end. Patagium nearly complete, perfectly filling out the interbrachial spaces, with six to seven regular, concave chamber-rows; only the truncate terminal faces of the arms free.

*Dimensions*.—Radius of the arms 0.15 to 0.18, breadth on their base 0.04 to 0.05, on their broadest distal end 0.06 to 0.07.

*Habitat*.—Cosmopolitan; Mediterranean, Atlantic, Pacific, surface. Very common and variable.

2. *Hymeniastrum köllikeri*, Haeckel.

*Euchitonia köllikeri*, Haeckel, 1862, Monogr. d. Radiol., p. 511, Taf. xxxi. figs. 6, 7.

*Hymeniastrum köllikeri*, Haeckel, 1881, Prodrömus, p. 460.

Arms nearly lanceolate, twice as long as broad, half as broad at the base as at the broadest middle part, pointed at the distal end. Patagium complete, enveloping the whole triangular disk, with irregular chamber-rows.

*Dimensions*.—Radius of the arms 0.2, breadth on their base 0.04, on the broadest part 0.08.

*Habitat*.—Mediterranean (Messina), surface.

3. *Hymeniastrum gümbelii*, Haeckel.

*Stylactis gümbelii*, Stöhr, 1880, Paläontogr., vol. xxvi. p. 112, Taf. vi. fig. 1.

Arms twice as long as broad, nearly twice as broad in the circular distal half as in the square proximal half. Patagium incomplete, circular, with eight to nine convex chamber-rows, enveloping only the proximal square halves of the arms; the lenticular distal halves remain free.

*Dimensions*.—Radius of the arms 0.14; breadth at the base 0.04, at the distal lenticular part 0.07.

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