

HOLOTHURIA HOMOEAE<sup>1</sup> sp. nov.

Length 46 mm., diameter 8 mm.; body nearly cylindrical but tapering a little towards each end; the ventral surface is a little more flattened than the dorsal and its lateral pedicels tend to form an indefinite margin between the two; body wall thin and delicate. Pedicels very few, perhaps 200 altogether; those of the dorsal surface are fewer and most of them smaller than the ventral ones, irregularly scattered, often papilliform with tapering tips; on the ventral surface, the pedicels are arranged in three ill-defined double series; as already stated, the lateral series form, at least near the middle of body a slight margin to the ventral surface; there are no noticeable papillae around the anus. Tentacles 20, of moderate size. Calcareous ring not peculiar, the radial pieces larger than the interradial, with wider, blunter anterior projections. Alimentary canal so filled with coral and, chiefly in coarse fragments, that the body is quite rigid and it is not prac-

<sup>1</sup> ὁμοιος = *like, similar to*, in reference to the similarity of the calcareous particles to those of several other species.

licable without needless damage to the specimen to study the internal anatomy. Cuvier's organs seem to be present but rather scanty.

Calcareous particles, numerous, but not at all crowded, tables and rather few, irregularly distributed, buttons. Tables (fig. 56a) with disks nearly circular, about 50–70  $\mu$  in diameter, with 4 central holes and 8–12 in a peripheral series;

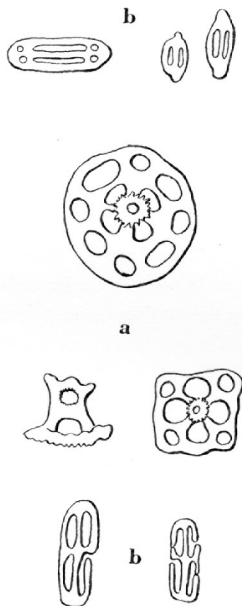


Fig. 56. *Holothuria homoea*. Calcareous particles. x 425. a. Tables. b. Buttons.

spire rather low, seldom exceeding the disk diameter and very rarely with more than one cross-bar; apex truncate, almost square, with a small but distinct circular central opening, and 8–10 teeth on the margin. Many tables have the disk less complete and what are apparently young tables, having a squarish disk with a perforation at each corner, are not rare. Buttons (fig. 56b) as irregular in form as in distribution; the commonest form has two long, narrow, parallel slits and these buttons are often only 20  $\mu$  long and 10 wide, but many are 30–40  $\mu$  long by about 15  $\mu$  wide; these larger buttons usually have 2 pairs of elongated

perforations or a single pair of long ones and a pair of small circular ones at each end; all sorts of incomplete and malformed buttons occur. Supporting rods and end plates occur in the pedicels but the rods are more or less button-like with perforations of various size and arrangement.

Color in life is recorded as "uniformly red brown" but the preserved specimen is a peculiar light purplish-gray; on one side the margin of the dorsal surface is quite evidently purplish-red but this is not marked on the other side; tips of pedicels brown or deep purple in more or less marked contrast to the pedicel itself and the body wall; tentacles a rather dark brown.

Holotype and only known specimen, M. C. Z. no. 1549, from "under a rock, far out at Neds Beach, Lord Howe Island, April 21, 1932."

My field notes say of this puzzling holothurian — "1 small specimen, uniformly red-brown; few pedicels; no Cuvier's organs; tentacles dark brown; nearly cylindrical; 50 mm. long  $\pm$ . At first confused with *difficilis* but really very different." Of course the statement about Cuvier's organs merely indicates that the living animal did not discharge any, as *difficilis* and others do.

Owing to the small number of pedicels and their arrangement in series (even though so indefinite) I was inclined to consider this specimen a young *Labidodemas* but I was soon convinced its affinities are not with that group at all. In looking for a species of *Holothuria* to which it could be assigned, particular attention has been given to Heding's (1934, p. 24) recently described *dicorona*, but that species has normally numerous pedicels and its calcareous tables and buttons while suggestive of those found in *homoea* show certain apparently uniform differences.

Another possibility that occurs to me is that this peculiar holothurian is a young and pathological specimen of *leucospilota*, but I cannot believe this is the case, and hence I am giving it a name and place among the Australian members of the already overcrowded genus *Holothuria*.