

colony appears to be irregularly covered with knobs. These knobs exhibit radial furrows which run outwards from the indistinct opening.

Habitat.—Simon's Bay, Cape of Good Hope; 10–20 fathoms.

Dimensions.—0·6–0·8 cm. in height; diameter, 0·2–0·5 cm.

Colour.—Brownish.

The small colony of about forty individuals differs essentially from the above described *Corticifera lutea* in its external appearance. From the small development of cœnenchyme, it results that the individual polyps press closely on one another, and frequently become polyhedrally, generally hexagonally, flattened. They are separated by deep grooves on the surface, which, at few points only, become shallower or disappear altogether. The absence of the groove between two polyps possibly signifies a genetic dependence, the one having arisen by gemmation from the other; and smaller individuals are frequently adjunct to the larger polyps in this fashion.

The individuals of the colony are of most varying size; from the large dome-shaped convex animals with a diameter of 0·6 mm. those of intermediate size lead to the smaller, which measure only 0·1 mm. in the one direction and 0·2 mm. in the other. Since the surface therefore exhibits smaller and larger knobs, I refer the species to the *Palythoa tuberculosa* of Klunzinger, and have therefore retained the well-chosen specific name.

In length there is but little difference between the larger and smaller animals, the former measuring 0·6 cm., the latter 0·4 cm. As they all diminish downwards in a wedge-shape, the lower side of the colony is so much narrower that the polyps on the edge are nearly horizontal.

All the polyps are so strongly contracted that the entrance to the interior is recognisable only as an indistinct indentation, from which radiate outwards numerous shallow furrows.

With reference to the finer anatomy, what has been said for *Corticifera lutea* holds good in this species. In the two specimens investigated there were respectively thirty-four and thirty-six mesenteries, which followed the microtype.

Genus *Palythoa*, Lamouroux.

Integument strongly incrustated; cœnenchyme little developed, ribbon- or tongue-like; mesenterial arrangement on the macrotype; sphincter endodermal.

Palythoa anguicomma,* Norman (Pl. I. fig. 7).

Incrustation superficial, so that a thick layer of mesogloea remains free of deposit; cœnenchyme tongue-shaped; individuals, when in a contracted condition, long, with a terminal capitular enlargement, on which run 15–20 radial furrows.