

*Locality.*—Station 186, Flinder's Passage, September 8, 1874; lat. 10° 30' S., long. 142° 18' E.; depth, 8 fathoms; bottom, coral mud.

Half a dozen specimens of this small species of *Psammaphidium* were dredged between the north end of Australia and New Guinea, from a depth of 8 fathoms. They are sandy masses of a yellowish-grey colour (the colour of the sand grains), and having a more or less pyriform shape. The upper end is always the wider, and the area of attachment is small. In some cases a short stout peduncle is present. In form this species resembles many of the specimens of *Amaroucium variabile* (see fig. 9, c., on p. 217), but differs in its colour and sandy condition. The dimensions given above are those of one of the largest colonies. The smallest ones are about one-fourth of that size.

The upper end of the colony is usually flat, and is irregularly divided into areas by stiff sandy ridges. This may possibly be an indication of systems, but no common cloacal apertures were observed.

The Ascidiozooids are opaque and of a yellowish-brown colour, which is due to the mantle. They are usually 3 or 4 mm. in antero-posterior length, and from 0.5 to nearly 1 mm. in greatest breadth.

The test owes its stiffness and opacity entirely to the very large amount of imbedded sand. The matrix when seen by itself is transparent, and the test cells are not pigmented. There is fully as much sand in this test as in the case of any of the previously described species of the genus (see p. 237).

The muscle bands of the mantle are strong and closely placed. They form almost a continuous muscular investment over the whole body. Although the chief bands are longitudinal, transverse muscle fibres are present in abundance, and are placed with great regularity. The branchial and atrial siphons are well developed but not long. They are both six-lobed, and the lobes are distinct but short and rounded.

The branchial sac is rather opaque, but is well developed. The ciliated cells bounding the stigmata are distinct. The tentacles are stout and closely placed.

The long slender post-abdomen usually has its edges somewhat corrugated. Its musculature is strong, and is entirely longitudinal in direction.

The reproductive organs were not developed in any of the Ascidiozooids examined, and no larvæ were found in the colony.

This species resembles *Psammaphidium subviride* (see p. 244), from Station 142, more than it does any of the other known species of the genus. It is, however, distinctly characterised by its pyriform shape, its colour, which is not at all green, the very strong musculature of the mantle, and the comparatively short stigmata in its branchial sac. The stigmata of *Psammaphidium subviride*, on the other hand, are very long and narrow (see Pl. XXXI. fig. 6, *sg.*).