duct on each side of the polycarp (Pl. XLIV. figs. 8, 9). The two ducts eventually unite into a single vas deferens which terminates on a prominent papilla projecting from the surface of the polycarp into the peribranchial cavity (Pl. XLIV. fig. 4, *v.d.*). The walls of the spermatic vesicles and their ducts are formed of distinct cubical epithelium, while the interior is occupied by small rounded cells and spermatozoa (Pl. XLIV. fig. 10, *t.v.*).

Figure 8 on Plate XLIV. represents a transverse section through a polycarp, showing the spermatic vesicles arranged symmetrically on the two sides of the ova and oviduct, while figure 4 represents a longitudinal section on one side of the middle line, showing the male system only. Figure 9 is an oblique section, and exhibits spermatic vesicles and their ducts cut at all angles. This last figure shows the position of the polycarp relatively to the superjacent mantle (*m.*) and test (*t.*).

A large number of tailed larvæ and some embryos were found in the peribranchial cavities of the Ascidiozooids. They lie mainly on the right side of the peribranchial cavity, and near the ventral edge. The fully formed tailed larva has an arrow-shaped body with a blunt anterior end (Pl. XLIII. fig. 9), and measures about 1 mm. in length, The tail is about 2·5 mm. in length and has a wide membranous fringe.

Goodsiria placenta, var. *fusca*, nov. (Pl. XLIV. figs. 5–7).

Two large colonies, dredged in Simon's Bay, Cape of Good Hope, from a depth of 10 to 20 fathoms, resemble *Goodsiria placenta* in general appearance, but differ in a number of details. Consequently I have thought it best to regard them as forming a variety of that species until further observations have been made upon the range of variability in the group, and upon the colours of the colonies in the living condition.

Both specimens are larger than the colonies of *Goodsiria placenta*, and although of the same general shape as that species, differ slightly in their proportions, being elongated transversely, so as to be more ovate than discoid (Pl. XLIV. fig. 5). They are also rather thinner, and their surfaces are flatter. The dimensions of the colonies are as follows:—

	A.	B.
Length,	9·0 cm.	8·0 cm.
Breadth,	12·0 „	11·5 „
Length of peduncle,	...	2·5 „

The colour of these specimens is very decidedly darker than in *Goodsiria placenta*, and the Ascidiozooids seen externally seem to be rather smaller and more numerous (see Pl. XLIV. fig. 5, and Pl. XLIII. fig. 1). The peduncle is relatively rather shorter; in one of the colonies it is absent.

The test is very much the same as that of *Goodsiria placenta*, but the mantle differs considerably in appearance and structure. It is thicker and more opaque than the