

Distaplia magnilarva. In some specimens of *Distaplia rosea* from the Bay of Naples, which I have examined, the musculature is less marked and less regular than in the new species.

The branchial sac is remarkable on account of the large size of the stigmata (Pl. XVIII. fig. 6, *sg.*). They are long and narrow like those of *Colella pedunculata*, and are arranged with great regularity. Each row is crossed about the middle by a narrow transverse vessel or horizontal membrane (Pl. XVIII. fig. 6, *tr'*) which does not interrupt the stigmata, and is considerably thinner than the regular transverse vessel between the rows. In a specimen of *Distaplia rosea* from Naples,¹ which I have examined, the branchial sac shows precisely the structure which I find in the Challenger species (compare Pl. XVIII. figs. 3 and 6), and differs considerably from the figure given by Della Valle.² The latter shows, in the branchial sac, each row consisting of five short stigmata, all of the same size, and not crossed by any horizontal membrane; while I find in all the Ascidiozooids which I have examined of the Naples specimen of *Distaplia rosea*, that there are from twenty to thirty long stigmata in each of the four rows, that those in the middle of the row are the longest, the size decreasing towards each end, and especially towards the ventral end (see Pl. XVIII. fig. 3), and that each row is crossed by a distinct horizontal membrane. The rapid decrease in size of the stigmata as they approach the ventral end of the row allows the transverse vessels to enlarge rapidly into triangular areas which abut against the sides of the endostyle (Pl. XVIII. fig. 3, *tr.*). In other respects the Naples specimen of *Distaplia rosea* agrees well with Della Valle's description and figures of that species.

The dorsal languets are short, triangular, and pointed, and, like those of *Distaplia rosea*, they are not quite in the median dorsal line but slightly to one side. Della Valle states that there are no languets in *Distaplia magnilarva*.

The tentacles of *Distaplia vallii* are rather irregular in size. There are eight rather larger and some intermediate smaller and more irregularly placed ones. The larger tentacles are pigmented.

The alimentary canal is like that of *Distaplia magnilarva* in all essential characters. It is pigmented with opaque white, red, and black patches. The vascular ectodermal appendages are long.

The reproductive organs are hermaphrodite and of large size. They usually consist of one or two large opaque yellow ova and a number of ovate or sausage-shaped testes of a dull brick-red colour. The vas deferens is conspicuous, and is also coloured red.

The tailed larvæ are about 1 mm. in greatest length. They are thus about half the size of those of *Distaplia magnilarva* according to Della Valle. The body is ovate, with the usual three adhering processes in front. The larval tail is short.

On the whole *Distaplia vallii* is closely related to *Distaplia magnilarva* and to

¹ Obtained named from the Zoological Station, Naples.

² Nuove Contribuzioni, &c., Tav. i. fig. 9.