In all they are in the form of hermaphrodite masses projecting from the inner surface of the wall of the peribranchial cavity, and developed on both sides. They are near the posterior end and rather nearer the ventral than the dorsal edge, those on the left side being in close relation to the rectum.

In Culeolus murrayi there are several quadrate genital masses on each side, more on the right side than on the left. Each mass consists of a spherical spermarium surrounded by masses of ova. The different spermaria are connected by a delicate vas deferens, so that all on the one side of the branchial sac have a common opening.

In Culcolus perlucidus there is a single genital mass on each side, lying parallel with the stomach, and having the excretory ducts directed posteriorly. In Culcolus recumbens there are three genital masses on each side of the body, and each opens by a distinct oviduct and vas deferens. In this species the rectum is distant from the stomach, and the genital glands on the left side lie in the wide intestinal loop, while in Culcolus perlucidus the rectum is in close contact with the stomach, the intestinal loop is narrow, and consequently the genital mass lies outside on the dorsal edge of the rectum.

The species of Culcolus may be distinguished by characters taken from the condition of the branchial sac and tentacles alone, as shown in the following table:—

