

The aperture of the mesal lobe is very wide and reflected inside it is the investing membrane, which is much folded and bears numerous small spines and three sclerotised areas, one in the form of a narrow crescent and the others roughly triangular. These areas (Fig. 3) have very irregular surfaces. They occur throughout the group and may be of systematic significance. This membrane is everted on erection of the genital organ and is known as the eversible sac (the praeputial sac of some authors).

The two ejaculatory ducts enter the genital organ at the apex of the basal portion and are notably asymmetrical within the organ. The duct leading to the reflected mesal lobe has the same structure after entering the genital organ as before (Figs. 1, 16, 17)—i.e., a duct consisting of a lining intima surrounded by epithelium lying free within a muscular tube. The intima continues on to the virga, an elongate, heavily sclerotised tube which varies somewhat in diameter and for its entire length hangs free in the lumen of the eversible sac (Figs. 1, 18). Proximally it is rather narrow and slightly sinuate for a short distance and then a small ovoid basal vesicle is interposed. From here the virga runs backwards as a strong tube which widens just before the extremity and then narrows again to a point. The outer muscular tube of the ejaculatory duct narrows to the basal vesicle and the eversible sac is also reflected back to and joins the basal vesicle (Fig. 1). In the ejaculatory duct corresponding with the straight mesal lobe the virga commences at the point of entry of the duct upon the genital organ. However, the structural relations are as just described.

The behaviour of individuals *in copula* (Giles, 1953) seems to be correlated with the absence of devices for gripping each other. Burr (1915) says that the parameres (lateral lobes of the present study) "act as grips for locking the organs of the female". However, in *Anisolabis littorea* these lobes are not supplied with muscles and are in fact virtually immovable on the bases of the penes.

The protractor muscles of the genitalia (Fig. 1) have their origin on the subgenital plate, one on each side of and slightly behind the base of the manubrium. Each divides to two branches, one of which is inserted distally on the side of the basal portion of the organ, and the other proximally just laterad of the point of entry of the ejaculatory ducts. Each of the paired retractors has its origin near the mid-point of the side of the manubrium and runs backwards to its insertion on the basal portion of the genital organ just in front of the posterior attachment of the protractor. The manubrium thus functions as an origin for the retractors of the genital organ as well as a basis for the muscle loops encircling the ejaculatory duct.

In erection of the genitalia the genital chamber is everted and the whole organ lies free in the groove above the subgenital plate with the apical portion projecting between the forceps (Fig. 3). Erection would be effected by contraction of the protractors; contraction of the muscle loops would carry the ejaculatory ducts and vesicula seminalis backwards along with the genitalia. The long sinuous vasa deferentia would allow of this movement without affecting the testes. Retraction of the genital organ would be brought about by relaxation of the protractors and the muscle loops and the contraction of the retractors. Hydrostatic pressure set up in the fluid within the spaces of the genital organ during muscular contraction might play some part in erection, but is probably more important in the extrusion of the virga. This pressure would be reduced on muscular relaxation during retraction of the genitalia.

In those individuals where erection of the genitalia takes place at death (Fig. 3), only the virga of the straight mesal lobe is extruded, for about half its length. This is probably much less than during copulation. The writer has never seen the other virga everted and considers that only that of the straight mesal lobe is ever