

and probably also for their employment as crushing surfaces in the passage of the food inwards in the ordinary state of the parts. The arrangement of the fibres in the thickened retractor would further assist in the expulsion of the organ, as in *Magelona*.

In extrusion the basal or membranous portion of the organ is formed by a plait continuous with the lips, which passes inward to the posterior retractor muscles, so as to join the denser inner fold of the proboscis; the middle region is formed by the latter, and the distal by the denser yellowish part, the two divisions of which, by the nature of their connections, are directed vertically in the extruded condition.

The food of this species probably consists of the same nature as that of *Euphrosyne*. The cardiac opening of the stomach, in the retracted condition of the proboscis, projects into the organ on a similar long rugose eminence. The inner surface of the stomach is remarkably ridged and glandular, while in transverse section the intestine presents a closely arranged series of glandular lamellæ.

In vertical section the caruncle is found to be composed chiefly of hypodermic tissue enveloped in cuticle. In the centre a strong vertical muscular band proceeds from the body-wall to the crest, and numerous longitudinal fibres appear at the base (in the peduncle). In front a deep indentation exists on each side a little above the base, surmounted by numerous narrow folds. The latter occur from base to summit posteriorly, and have the aspect of a single series of zig-zag folds on each side. The madder-brown pigment is deeply imbedded, and close to the central vertical muscular septum. In front a series of fibres proceed from the latter along the median tentacle, and similar bands occur in the other cirri. The anterior part of the caruncle lies over the cephalic ganglion, but the function of the organ is doubtful.

In regard to the structure of the body-wall, the cuticle is comparatively dense, the hypoderm somewhat less developed, while the circular, longitudinal, and other muscles are strong. The nerve-cords are somewhat small and flattened, being placed in an area bounded internally by a transverse band of fibres, and externally by the circular muscular layer and hypoderm. The oblique muscles are attached at the outer border of each trunk.

Dr. Baird's *Chloeia tumida* seems to be rather like this form, but devoid of spots on the dorsum. One collected by H.M.S. "Alert" off Torres Straits Islands had taken a hook, which is now firmly grasped by the proboscis of the blackened preparation.

A small specimen measuring about an inch in length is marked with doubt as a native of the Arafura Sea. The segments amount to about thirty, exclusive of head and tail. The bristles agree in structure with the foregoing, allowing for the difference in size. The branchiæ are less branched, a condition probably due to the latter. The coloration and other features correspond.