

I. *Appendicularia*, Chamisso (1821), emend. Fol (1874).

*Body* contracted, depressed anteriorly, swollen posteriorly. No hood present.

*Tail* measuring twice to thrice the length of the body.

*Endostyle* slightly curved.

*Rectum* enormous, larger than stomach and intestine together.

Of this genus in the restricted form only two or three species have been described.

II. *Oikopleura*, Mertens (1831).

*Body* ovoid, concentrated. No hood present.

*Tail* measuring thrice to four and a half times the length of the body. It is about four to six times as long as it is broad.

*Endostyle* straight.

This genus contains about a dozen species.

III. *Fritillaria*, Quoy and Gaimard (1833), emend. Fol (1872).

*Body* elongated, more or less narrowed in the middle where the tail is attached. Hood present.

*Tail* short and wide, about once and a half as long as the body.

*Endostyle* curved.

This genus contains about half a dozen species.

IV. *Kowalevskia*, Fol (1872).

*Body* ovoid, truncated anteriorly.

*Tail* large, lanceolate and pointed.

*Endostyle* and heart absent.

*Pharynx* with four rows of ciliated processes.

This genus contains one species, *Kowalevskia tenuis*, Fol.

The genus *Vexillaria*, J. Müller, is a synonym of *Oikopleura*; and *Eurycercus*, Busch, is a synonym of *Fritillaria*.

As Appendiculariidae were not specially looked for or preserved during the expedition, the Challenger collection contains only a few specimens, and these were all