

Boltenia, Savigny.

Vorticella, Linnæus, Mant. Plant., p. 552. 1771. In part.

Ascidia, Müller, Prod. Zool. Dan. 1776. In part.

Boltenia, Savigny, Mém. sur les Anim. sans Vert., pt. ii. fasc. 1. 1816.

Body more or less globular, fixed on a long peduncle; apertures lateral, four-lobed.

Test coriaceous or cartilaginous.

Branchial Sac longitudinally folded, with six or more folds on each side. Fine longitudinal vessels present, forming straight stigmata.

Tentacles compound.

This genus was founded by Savigny,¹ in 1816, for the reception of pedunculated Simple Ascidiæ with a coriaceous test. At that time it contained the species described long before by Bolten (1770), but not named till the following year by Linnæus, and a new species *Boltenia ovifera*, Savigny.

Other species have been added to the genus since by Agassiz, Stimpson, Heller, and others, and finally two new species have been discovered by the Challenger expedition.

Boltenia elegans, Herdman (Pl. VII. figs. 1-5).

Boltenia elegans, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 80.

External Appearance.—The body has a quadrangular ovate shape, and is not flattened laterally; the anterior and posterior ends are bluntly rounded, and the dorsal and ventral edges are nearly straight; behind the atrial aperture the dorsal edge sinks in somewhat towards the posterior end. The peduncle is long and thin, wiry, attached to the ventral edge of the anterior end, and turned slightly ventrally. The apertures are conspicuous; the branchial is at the dorsal edge of the anterior end, directed anteriorly and dorsally; the atrial is on the dorsal edge, two-thirds of the way down, and directed dorsally and posteriorly.

The surface is smooth and glistening, but marked by a few creases. The colour of the body is white, with a satiny lustre; of the stalk light yellowish brown.

Length of body, 5.5 cm.; breadth of body, 4 cm. Length of stalk, 36 cm.; thickness of stalk, 2 mm.

The Test is thin but tough.

The Mantle is strong, and the musculature regular.

The Branchial Sac has nine folds on each side, those next the endostyle being closer than the dorsal ones. The transverse vessels are wide and distant. The internal longitudinal bars are narrow but well marked, and run at right angles to the stigmata, which are transverse, lying between narrow longitudinal bars which connect the transverse vessels. The stigmata are rather long and narrow, there are about fifteen in each mesh.

¹ Mém. sur les Anim. sans Vert., 2° pt. 1° fasc. p. 87.