

The long, thin-walled stomach tapers slightly towards its posterior end where the very narrow intestine emerges. The stomach walls are not conspicuously ridged internally, though an ill-defined groove emerges from the oesophagus. Opposite the oesophageal opening, also at the anterior end of the stomach, is the tiny anterior digestive gland opening (a.d.), while the posterior opening (p.d.) lies just in front of the intestinal sphincter. The rest of the stomach is simple in structure, though around the intestinal aperture the walls thicken and presumably form a sphincter. The very narrow intestine (i.) runs beneath the upper edge of the stomach and then below the kidney to the right mantle wall. There is no anal gland. Lying beneath the stomach are the two lobes of the digestive gland. The anterior lobe lies beneath the majority of the stomach while the posterior lobe is below the gonad on the rest of the visceral coil and the posterior end of the stomach. They are connected to the stomach by small, simple apertures, there being no indication of the tubular ducts usually found in the *Rachiglossa*.

#### REPRODUCTIVE ORGANS

The female has a short ovary containing large, yolky eggs and the oviduct is a delicate, straight tube which runs down the columellar side of the visceral coil. This joins with the pallial oviduct on which no posterior accessory structures could be determined. The glandular pallial duct is long and uniform, but rather narrow for most of its length. At its distal end a bulb-like bursa-copulatrix with a vagina passing beneath it can be discerned. The oviduct opens beneath a flap of tissue and encloses a groove between itself and the pallial wall, which runs to the mantle edge.

The testis (Fig. 1, t.) lies above the digestive gland and commences just behind the stomach. A convoluted, swollen, white tube, the vas deferens (v.d.) which functions as a seminal receptacle, lies on the columellar side of the visceral mass. The renal portion of the vas deferens is a muscular tube which separates the upper and pallial portions of the male duct. There is no prostate gland, only a narrow duct (pr.). The large penis (pen.) is attached behind the right eye; it is flattened, parallel-sided and has a terminal filamentous portion.

#### *Iredalula striata* (Hutton)

1873. *Bela striata* Hutton; Cat. Tert. Moll.: 5.

1913. *Mitromorpha striata* (Hutton); Suter; Man. N.Z. Moll.: 488, Pl. 46, fig. 27.

1926. *Iredalula striata* (Hutton), Finlay; Trans. N.Z. Inst., 56: 231.

The general appearance and anatomy of the alimentary canal are essentially like that of *Ratifusus*. The proboscis sac is a little more elongate and narrower with the mid-oesophagus visible alongside it on the left for most of its length. The protractor muscles occur about halfway along, the posterior half of the sac being more muscular and presumably forming part of the introvert. The radula (Fig. 9) resembles closely that of *Ratifusus*, the lateral has three cusps and the broad central has five. Unlike *Ratifusus* the stomach wall is thickened, with internal, transverse ridges above and below. However, the other features of the stomach are nearly identical to those of *Ratifusus*.

The stomach lumen contained a dark greenish-brown mass of amorphous material which possibly represented coagulated liquid food. There was little faecal material and this was not compacted into firm pellets. A white hypobranchial gland covered the pallial cavity roof. The operculum (Fig. 10) is relatively broader than that of *Ratifusus* but otherwise is similar.