

Greatest diam. of tube: 8.5mm (holotype); 10mm (paratype).

Animal (Text-figs. 4, 5, 6): Formalin preserved paratype and two juveniles examined. Head (Text-fig. 4) large, upper margin of mouth capable of projecting as a wide, thin lip (L.). Pedal tentacles (Pt.) long, not much tapering; cephalic tentacles shorter, with small eyes on outer bases. Pigmentation absent except for a dark brown patch at base of cephalic tentacles, a little on the sides of the wide, thin sole, and on the sides of the rather small foot. Pedal tentacles mottled with dark brown. Mantle edge serrated at position of shell ribs in juvenile male, and not indented (Text-fig. 4); smooth and deeply indented on left (M.S.) in adult female (Text-fig. 5). Adult male not seen. Columella muscle (Col. M.) as in most species of *Dendropoma*, shorter than in other vermetids (Morton, 1965). Pedal gland (Ped. G.) large, typical of family. Ctenidium (Ct.) extends almost full length of long mantle cavity; filaments relatively small, triangular, very slightly elongated, lower edge well strengthened. Osphradium (Os.) about half length of ctenidium, black, narrow, appears to be glandular in juvenile but not in adult. Hypobranchial gland (Hyp.) extends from dorsal edge of ctenidium to lower edge of rectum. Capsule gland (Cap. G.) open, typical of family. Rectum (R.) filled with a mass of elongate faecal pellets, which lie packed more or less at right angles to the axis of the rectum, and are made up of fine mud, occasional sand grains and other fragments such as foraminiferan shells and sponge spicules, bound with mucus. The juveniles had a higher proportion of larger fragments and fewer pellets. No incubation of larvae was observed, and there was no visible pallial food groove.

Operculum (Text-fig. 2): Large, horny, outwardly concave, of same diameter as tube, wider and overlapping margin of foot, thin, edge finely serrated, of about 8 whorls, each slightly overlapping. About first four whorls slightly thickened, centre protruding a little on convex (inner) side, but indented on concave (outer) side.

Radula (Text-fig. 3): From largest of the juvenile specimens. Similar to other species of genus (Morton, 1965) though the inner marginal has a variable number of cusps (2 on one side of radula and 3–4 on other) together with a long "spine". Morton suggests three serrations on this tooth are typical of *Dendropoma*. In this species the "serrations" are of the same structure as the spine, i.e., a sharp projection from a distinct basal portion. Outer marginal with one small spine. Central and lateral as in other species of genus.

Material examined: Holotype and paratype; 49 fathoms, just north of Cape Karikari, M.V. "Ikateri", attached to hard substratum (presumably rocky, as rest of sample and echo sounding indicated this type of bottom, though only pieces of a sheet-like bryozoan adhere to base). N.Z. Oceanographic Station E367, 34° 25' S, 173° 05' E, off North Cape, 14 fathoms, freshly broken rock and sponges (several juveniles).

Holotype and paratype in the Dominion Museum, Wellington.

DISCUSSION

The characters of the radula, operculum, adult and embryo shell and the radula agree with the diagnostic characters of the genus *Dendropoma* as set out by Keen (1961) and Morton (1965). The distinctive sculpture and operculum set this species apart, though *D. leucozonias* (Mörch, 1861) from West Africa, and *D. maximum* (Sowerby, 1825) from Queensland have similar opercular features (Morton, 1965: 588), most other species having a well developed mamilla on the inner side of the operculum.