

with a narrow opening. In this state the regular pattern of muscular ridges is completely obscured, and any structures resembling septa would be interpreted merely as folds in the bothridial musculature resulting from contraction.

Like the bothridia, the myzorhynchus in life is highly active and mobile; the tip usually waves about slowly, the myzorhynchal sucker repeatedly being retracted and extended inside the tube of the myzorhynchus, but never extending completely to the tip of that organ.

Bothridial Musculature. The histology of intrinsic and extrinsic musculature of the scolex corresponds with the description of Rees. In transverse sections passing through the posterior end of a bothridium, three completely separate loculi are seen (Fig. 7c), formed by the four longitudinal ridges passing from the low, front wall of the bothridium to the axial wall. In more anterior sections the separate loculi open out together on to the back wall, and the ridges disappear soon thereafter.

Male and Female Genitalia. In internal anatomy the present specimens agree with the descriptions of Olsson (1867), Rees (1953) and Williams (1958). In 49 proglottids the testes varied from 16 to 25 in number (ave. 21). Williams gave the number of testes in his specimens as 20.

Egg Capsules. Unembryonated egg capsules extruded singly from free proglottids in sea water are spherical and measure 0.018–0.021mm in diameter.

CLYDONOBOTHRIMUM Euzet, 1959

This genus was erected to accommodate *Anthobothrium elegantissimum* Lönnberg, 1889, from *Raja batis*. It is distinct from *Anthobothrium* chiefly in possessing a slender, retractile myzorhynchus with a sub-apical, musculo-glandular organ, which *Anthobothrium* lacks. It differs from other echeneibothriin genera of Rajidae in that the bothridial surfaces do not have complete or partial muscular ridges or septa.

The species described as *Anthobothrium rajae* by Yamaguti (1952), and *Clydonobothrium leioformum* n. sp. (see below) should be included in the genus. From his description it is difficult to determine the relationships of Yamaguti's species to the other two. It possesses approximately the same number of testes as *Clydonobothrium elegantissimum*, but it is much smaller and lacks the apron-like posterior extension of the proglottid characteristic of the latter species.

Clydonobothrium elegantissimum (Lönnberg, 1889).

HOST: *Raja nasuta* Muller et Henle.

LOCALITY: Cook Strait; Oamaru Harbour.

HABITAT: Spiral valve.

The synonymy of this species is reviewed by Euzet (1959). From one to a few specimens were found in six host specimens examined out of a total of 24. The maximum length is 64mm. In specimens which were fixed *in situ* each bothridium is expanded and smooth surfaced with the posterior border bearing a regular indentation, or notch, giving the bothridium a heart-shaped appearance as described by Lönnberg.

Clydonobothrium leioformum n. sp. (Figs. 8, 9)

HOST: *Raja nasuta* Muller et Henle.

LOCALITY: Palliser Bay (type); Cook Strait.

HABITAT: Spiral valve.

DIAGNOSIS. Small, slightly craspedote, euapolytic worms up to 27mm in length with up to 229 proglottids. Immature proglottids broader than long, mature proglottids longer than broad, 0.312–0.810mm long by 0.274–0.416mm wide. Bothridia thin, pedunculate, highly crumpled, 0.520–0.845mm wide, borders moderately thickened. Myzorhynchus slender, 0.195–0.315mm long by 0.093–0.150mm wide, with sub-apical muscular organ 0.060–0.087mm in diameter. Cephalic peduncle absent. Testes 11–19 in number (ave. 15), spherical, 0.051–0.105mm in diameter, restricted to two rows anterior to cirrus pouch.