

KEYS TO THE TREMATODA

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15 Family Cortrematidae Yamaguti, 1958

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Introduction

The family Cortrematidae Yamaguti, 1958 contains only a single genus, *Cortrema* Tang, 1951, from the digestive tract of passerine birds in the Palaearctic region and Africa. In *Cortrema*, a ventral sucker is present but a cirrus-sac is not. The genital pore is close to the posterior end of the body near the excretory pore. Laurer's canal is extremely long, extending to at least midway between the ventral sucker and the posterior end of the body. This suite of characters separates the family from other members of the Gorgoderoidea Looss, 1899.

Tang (1951) proposed the genus and species *Cortrema corti* Tang, 1951 for worms from the bursa Fabricii of passerine birds in China. Worms were apparently not encysted or encapsulated in the wall of this organ, but free in the lumen. Tang placed his new genus in the Troglotrematidae Odhner, 1914 and regarded it as close to *Collyriclum* Ward, 1917 because of the general similarity of some organs, especially the ovary and testes. Yamaguti (1958b) erected the Cortrematidae Yamaguti, 1958 for *Cortrema*. Khotenovskii (1961) transferred to *Cortrema* two species described by Bykhovskaya-Pavlovskaya (1950, 1953), *Renicola magnicaudata* Bykhovskaya-Pavlovskaya, 1950 (original record from the kidney of a swallow, but Khotenovskii questioned this site) and *Leyogonimus testilobatus* Bykhovskaya-Pavlovskaya, 1953 (from the posterior intestine of jays). Although very similar to *C. corti* in most respects, they have a shorter Laurer's canal that does not reach the posterior end of the body. His reasons for this transfer are convincing. Khotenovskii (1961) reduced the Cortrematidae to subfamily status within the Lecithodendriidae Lühe, 1901.

Tang & Tang (1981) experimentally infected freshwater pulmonate snails using embryonated eggs from *Cortrema corti*. They compared cercarial and adult morphology with those of lecithodendriids and concluded that *Cortrema* should not be placed in the Lecithodendriidae and that the Cortrematidae was a suitable receptacle for it. We have accepted this view.

Cortrematidae Yamaguti, 1958

Diagnosis: Body small to medium in size, typically pyriform, somewhat attenuated posteriorly, flat or concave ventrally and convex dorsally. Tegument bears spines. Oral sucker terminal or

subterminal, ventral. Ventral sucker close to equator or somewhat anterior to this, similar in size to oral sucker. Prepharynx absent. Pharynx small. Oesophagus short. Intestinal bifurcation in anterior forebody. Caeca simple, blind, not extending far into last quarter of body. Testes two, symmetrical, large, irregular in shape or deeply lobed, lateral and dorsal to caeca in middle third of body but may extend posterior to this. Seminal vesicle very long, follows somewhat irregular course alongside uterus to small genital atrium, which opens at submedian to sublateral pore at posterior end of body. Cirrus-sac absent; pars prostatica and ejaculatory duct not reported. Ovary large, median, in forebody, deeply lobed. Laurer's canal very long, extending to at least midway between ventral sucker and posterior end of body, contains sperm and gives off dilated seminal receptacle near its base. Uterus extensively looped from level of pharynx to beyond caecal extremities; terminal portion a muscular metraterm running alongside seminal vesicle. Eggs small, operculate, numerous. Vitelline follicles lateral at level of ovary and extending to level of posterior edge of ventral sucker. Excretory vesicle broad, tubular, extending anteriorly between caecal ends sometimes almost as far as ventral sucker; pore sublateral at posterior extremity on side opposite genital opening. In bursa Fabricii, caeca and other parts of intestine of passeriform birds; China, Russia, Africa, Europe. Type-genus *Cortrema* Tang, 1951.

***Cortrema* Tang, 1951 (Fig. 15.1)**

Diagnosis: With characters of family. Type-species *C. corti* Tang, 1951.

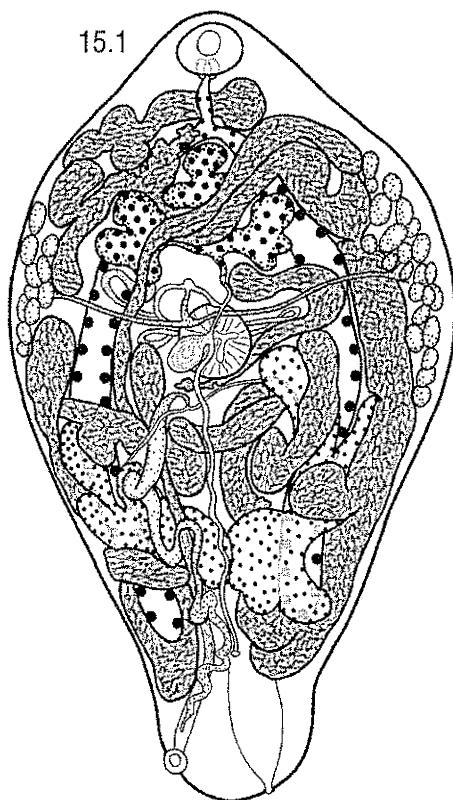


Fig. 15.1. *Cortrema corti* Tang, 1951. Dorsal view. Redrawn after Tang & Tang (1981).