

**RHABDOCHONA CAVASIUS sp. n. (NEMATODA: RHABDOCHONIDAE) FROM A FISH  
MYSTUS CAVASIUS (HAM) FROM KALRI LAKE, SIND**

RAFIA REHANA and FATIMA MUJIB BILQUEES

Department of Zoology, University of Karachi, Karachi 32

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**Abstract.** A new species of the genus *Rhabdochona* Railliet, 1916, is described from a fish *Mystus cavasius* (Ham) of Kalri Lake, Sind, West Pakistan. The new species is characterised by possessing a pair of glandular structures on either side of the buccal cavity, well-developed cervical alae; relatively small body; spicules 0.12 mm and 0.042 mm long respectively; 14 pairs of caudal papillae; 9 pairs preanal and 5 pairs postanal.

The genus *Rhabdochona* Railliet, 1916, comprises a great number of species parasitic in fresh water fishes. One of the species has been, however, recorded from an Indian crab. Relatively few species of the genus are known from the fishes of Japan and India.<sup>1,2,4,5,9,10,12-14</sup> Two species have been reported from Russia. Recently a single species of the genus has been reported from Madagascar.<sup>3</sup> *Rhabdochona magna* is the only species described from a fresh water fish of East Pakistan.<sup>8</sup> Present paper reports a new species of *Rhabdochona* from the fish *Mystus cavasius* (Ham) of West Pakistan. Species name *R. cavasius* refers to the host's specific name.

**Materials and Methods**

Twenty three fish *Mystus cavasius* (Ham) collected from Kalri lake (Sind) were examined for helminth parasites. 1 male and 5 females were recovered from the intestine of 2 cat fish. The worms were fixed and cleared in lactophenol. All the measurements are given length by width in millimeters. Diagrams were made with the aid of a camera lucida. Holotypes and paratypes in the Department of Zoology (School of Parasitology), University of Karachi, Karachi.

*Rhabdochona cavasius* sp. n.

Family, Rhabdochonidae skrjabin, 1946. Subfamily, Rhabdochoninae Travassos, Artigas et Pereira, 1928. Genus, *Rhabdochona* Railliet, 1916. Syn, *Ichthyospirura* skrjabin, 1917. *Pseudancyracanthus* skrjabin, 1923, Partim *Pseudorhabdochona* Liu et wu, 1941. Host, *Mystus cavasius* (Ham). Location, Intestine. Locality, Kalri lake, Sind. Number, 1 male, 5 female from 2 hosts, 23 hosts examined.

These are moderately large worms, yellowish when alive. The cuticle of the body is transversely striated, striations are more prominent in the female specimens than in male.

**Male.** Body length 8.74, maximum width 0.06 at the middle region of the body, whereas tapers gradually towards the anterior and posterior extremities. Head dia 0.04. Mouth with inconspicuous lips, armed inside with three teeth. Buccal cavity cup-shaped, 0.034×0.04. Anterior muscular portion of esophagus 0.071 long, 0.014 broad. Posterior glandu-

lar portion of esophagus 0.42 long, 0.02 broad. Cervical papillae absent. Cervical alae well developed, 0.06 long. Excretory pore 0.07 from the head end. Tail rolled up ventrally, 0.15 long. Spicules unequal, 0.12 and 0.042 in length respectively, the ratio being

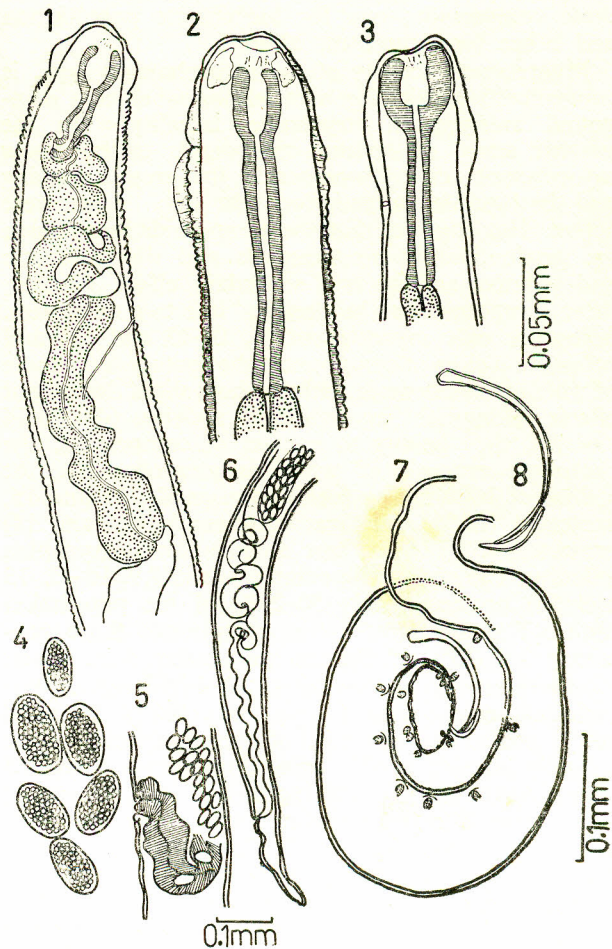


Fig. 1. *Rhabdochona cavasius* n.sp. Holotype. Anterior portion of female. 2. Anterior region of female paratype, enlarged. 3. Anterior end of male, Holotype. 4. Ova. 5. Vulva and vagina, lateral view. 6. Posterior region of female. 7. Posterior portion of male, lateral view. 8. Spicules enlarged. The scale is same for 1,7;2,3,4,8 are drawn to the same scale and 5,6 are drawn to the same scale.

1:3, caudal papillae 14 pairs, 9 pairs preanal and 5 pairs postanal.

*Female.* Body length 16.33–18.28, width 0.049–0.16 at the region of uterus. Head diameter 0.048–0.055. Buccal capsule 0.028–0.033 × 0.021–0.026. Anterior portion of esophagus 0.06–0.12 × 0.015–0.017. Posterior portion 0.47–0.49 × 0.029–0.03. Cervical papillae absent. Cervical alae small 0.02–0.042 long. At the anterior lateral portion there is a pair of glandular structure situated on either side of the buccal cavity. Buccal cavity funnel to cup-shaped. Excretory pore 0.14–0.19 from the head end. Tail 0.16–0.27. Vagina short, muscular, 0.24–0.28 × 0.09–0.1. Vulva postequatorial 8.72–10.59 from the anterior region of the body. Eggs thick-shelled, embryonated, unfilamented, 0.025–0.034 × 0.02–0.025.

### Discussion

*Rhabdochona cavasius* sp. n. is differentiated from most of the species of the genus, in possessing un-filamented ova namely from *R. fortunatowi* Dinnik, 1933; *R. acuminata* Molin, 1860; *R. milleri* Choquette, 1951; *R. amago* Yamaguti, 1935; *R. gambiana* Gendre, 1922; *R. macrolaima* Gendre, 1922; *R. sulaki* Saidov, 1935; *R. kashmirensis* Thapar, 1950; and *R. longicauda* Djalilov, 1964. *Rhabdochona singhi* Ali, 1957, have ova with three cuticular projections, instead of polar filaments, *R. longispicula* Belouss, 1952, has eggs bearing lateral floats. *R. fortunatowi* Dinnik, 1933; *R. gnedini* Skrjabin, 1946; *R. singhi* Ali, 1957; *R. amago* Yamaguti, 1935; *R. tridentigeris* Yamaguti, 1941, have two prominent cervical papillae, *R. srivastavi* Chabaud, 1970, has cephalic papillae and amphids close to the buccal edge, while cervical papillae and cephalic papillae are absent in the new species. The present species also differs from *R. gnedini* Skrjabin, 1946, in the position of vulva which is located a little behind the equatorial region, while in later species it is situated quite posteriorly. *Rhabdochona decaturensis* Gustafson, 1949; *R. garuai* Agrawal, 1965; have short tails in both sexes. The new species resembles with *R. kidderi* Pearse, 1936, in having a very short right spicule but differs from it in having a simple left

spicule. *Rhabdochona cavasius* sp. n. also differs from *R. laurentiana* Lyster, 1940; *R. acuminata* Molin, 1860; *R. kidderi* Pearse, 1936; in which the buccal capsule is provided with fourteen teeth, from *R. amago* Yamaguti, 1935; *R. tridentigeris* Yamaguti, 1941, in which there are twelve teeth arranged in three quadrants, from *R. srivastavi* Chabaud, 1970, in which the buccal capsule bears twelve teeth, eight being lateral and four median in position, from *R. singhi* Ali, 1957, in which there are five pairs of large teeth and two pairs of smaller teeth in the buccal capsule. The present species resembles with *R. schordukini* Osmanov, 1957, and *R. magna* Khan and Yaseen, 1969, in lacking cervical papillae and having three teeth arranged in a row. But the presence of a glandular structure on either side of the buccal capsule, well developed cervical alae, smaller body size, relatively smaller spicules, different number and arrangement of the caudal papillae and a different fish host *Myxus cavasius* (Ham) serve to distinguish *R. cavasius* from *R. schordukini* and *R. magna*.

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