

# CERCARIA RUDENSIS SP. N. FROM A FRESHWATER SNAIL, BIOMPHALARIA HELOPHILA, IN THE VICINITY OF HAVANA

Echinostome cercariae with a special statocyst-like organ in the anterior part of body were recovered from freshwater snails, *Biomphalaria helophila* (Orbiguy, 1836), examined for the presence of trematode larvae. The snails were collected in a locality near Ruda settlement in the vicinity of Havana. In cooperation with the Biological Institute of the Cuban Academy of Sciences in Havana, 2,286 snails were examined and 18 of them (0.78 %) were positive. The cercariae differed in the morpho-

logy from all hitherto described cercaria species.

The body of cercaria (Fig. 1) is 0.385 mm long and 0.175 mm wide. It is provided with 0.560 mm long and 0.050 mm wide, smooth tail. The collar bears 19 spines measuring 15  $\mu\text{m}$  in length. Eleven of them are arranged in two rows on the dorsal side, whereas on the ventral side, there are two groups of four spines on each side. On the dorsal side at level of posterior part of oral sucker is a hollow structure of rhomboid shape ( $0.030 \times 0.030$  mm) filled with liquid and containing two refractive granules measuring  $0.010 \times 0.008$  mm (Fig. 1). The terminal oral sucker measures  $0.049 \times 0.049$  mm. The ventral sucker measures  $0.063 \times 0.063$  mm and lies 0.230 mm from anterior extremity. The short prepharynx is followed by pharynx ( $0.028 \times 0.021$  mm) and then by a thin, long eosophagus divided into two thin intestinal branches in front of the ventral sucker. Two wide collecting excretory canals filled from the level of ventral sucker up to the level of posterior margin of pharynx with large excretory granules open into the excretory bladder.

The redia with yellow wall measures 0.850 mm in length and 0.175 mm in width. Its pharynx measures  $0.070 \times 0.056$  mm and passes to a dark intestine occupying a half of the body length. The redia contains one or at most two fully developed cercariae.

Seven cercaria species possessing statocyst-like structures have hitherto been recorded. In five of them, *Paryphostomum segregatum* (Lutz A., Mem. Inst. Osw. Cruz 17: 55—93, 1924), *Cercaria mehrai* (Faragui A. J., Indian J. Med. Res. 17: 1205—1214, 1930), cercaria of *Echinostoma malayanum* (Lie K. J., Trop. geogr. Med. 15: 17—24, 1963), cercaria of *Echinostoma hystricosum* (Lie K. J., Umathevy T., J. Parasitol. 52: 449—453, 1966) and *Cercaria ognis* (Dönges J., Z. Parasitenk. 52: 297 to 309, 1977), this cyst contains a larger number of minute concrements. Two species, *Cercaria bruynoghei* and *C. decora* (Fain A., Mém. Inst. Royal Colon Belge: 1—312, 1952), possess only two concrements in the "statocyst", like *C. rudensis* sp. n. *C. rudensis* is most closely related to *C. bruynoghei* in its morphology, but it differs from this species in the number of spines in the collar, size of pharynx and shape of excretory bladder.

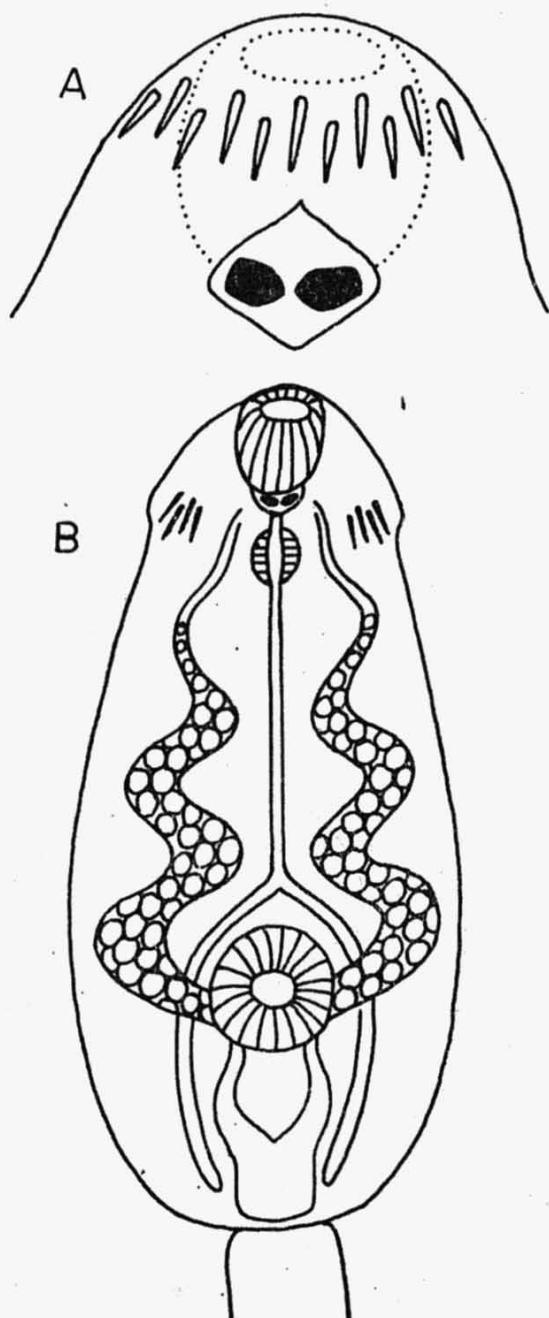


Fig. 1. *Cercaria rudensis* sp.n. A — dorsal view, B — ventral view

Z. ŽDÁRSKÁ,

Institute of Parasitology,  
Czechoslovak Academy of Sciences, Prague