Morphological studies of two lecithodendriid species (Trematoda: Lecithodendriidae) from *Eptesicus serotinus* (Schreber, 1774) (Chiroptera: Vespertilionidae) in Western Stara Planina Mts.

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Introduction

Until now, six trematode species of the family Lecithodendriidae have been recorded for the Bulgarian fauna. Four of them belong to the genus *Paralecithodenrium* Odner, 1911 [*P. chilostomum* (Mehlis, 1831) Lotz & Font, 1983, *P. ascidia* (van Beneden, 1873) Lotz & Font, 1983; *P. longiforme* (Bhalerao, 1926) Lotz & Font, 1983 and *P. hurkovae* (Dubois, 1960) Lotz & Font, 1930] (Bachvarov, 1963; Yanchev & Stoykova, 1973).

The studies cited have faunistic character, with no morphological data of these species in the Bulgarian helminthological literature.

Materials and methods

The present study was based on trematodes isolated from small intestine of road-killed *Eptesicus serotinus* from the region of Lakatnik Railway Station in September 2019.

The specimens were fixed and preserved in 70% ethanol and mounted in Canada balsams (Georgiev et al. 1986).

The measurements are presented in micrometres.

Results

In the course of the present study, two trematode species were recorded from Eptesicus serotinus in the region of Lakatnik Railway Station.

Paralecithodenrium chilostomum (Mehlis, 1831)

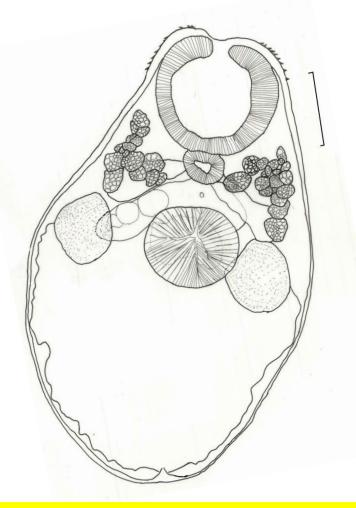


Figure 1. *Paralecithodenrium chilostomum* (Mehlis, 1831). General view. Scale-bar: 100 µm

- morphologically most similar to the descriptions given by Dubois (1960), Matskasi (1967), Matsaberidze & Khotentovski (1969), Skvortsov (1969) Kirilov et al. (2012) and Sharpilo & Iskova (1989): measurements of trunk 500-600 x 325-410; oral sucker 155-175 x 128-165; ventral sucker 90-125 x 110-125; position of the oral sucker as well as ratio length of oral and ventral sucker; measurements and position of testes.
- There are not data about anterior spinous zone of body in records of Dubois (1960); Matskasi (1967) and Skvortsov (1969).
- Eptesicus serotinus is a new host record of P. chilostomum in Bulgaria.

Paralecithodenrium longiforme (Bhalerao, 1926)

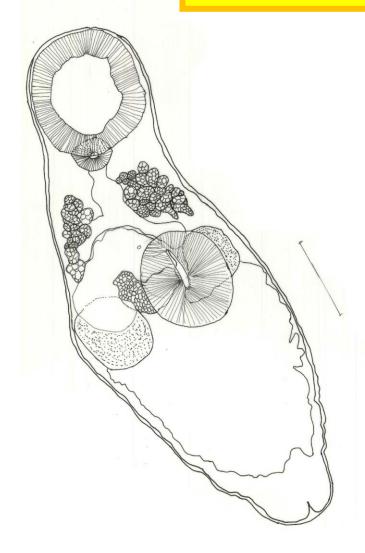


Figure 2. *Paralecithodenrium longiforme* (Bhalerao, 1926). General view. Scale-bar: 100 µm

- Following the key of Sharpilo & Iskova (1989) and based on the shape of body as well as the shape and number of vitelline follicles, we consider the present materials to be close to *P. longiforme*; however, the length of body trunk (570-940 versus 1500-2000) and the length of ventral sucker (100-135 versus 190-220) are smaller.
- The studied materials are morphologically the most similar to the those from the Middle Volga Region recorded by Kirilov et al. (2012).
- Eptesicus serotinus is a new host record of P. longiforme in Bulgaria.