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VERSITA

RESEARCH NOTE

New data on straggled eyeworm *Oxyspirura chabaudi* (Baruš, 1965) (Nematoda, Thelaziidae) in Europe

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Abstract

Three male specimens of the eyeworm, *Oxyspirura chabaudi*, were found during the post mortem examination of one individual of *Turdus merula* L. (Passeriformes). This is the first record of *Turdus merula* as a host for *O. chabaudi*.

Key words

Nematoda, *Oxyspirura chabaudi*, Passeriformes, *Turdus merula*, Poland

The genus *Oxyspirura* (Drasche in Stossich, 1897) includes 84 species of nematodes parasitizing the inside of the eyelid and the ocular cavity of birds (Anderson 2000). Nematodes of this genus occur mainly in the orders Passeriformes, Galliformes, Ralliformes, Falconiformes, Strigiformes, Coraciadiformes, Cuculiformes, Charadriiformes, and Piciformes. The greatest number of *Oxyspirura* species (23) has been found in the order Passeriformes (Baruš 1963). Members of the genus *Oxyspirura* have been described mainly from tropical and subtropical regions, and they do not commonly occur in birds of

Table I. Comparison of morphometric data (in mm) on male *Oxyspirura chabaudi* (Baruš, 1965)

Characteristics	Material from Poland n = 3	*O. chabaudi* (Baruš 1965) n = 2	*O. chabaudi* (Baruš 1970) n = 1
Body length	7.3–8.2	5.8–6.0	7.95
Body width	0.18–0.28	0.236–0.304	0.23
Oesophagus length	0.68–0.71	0.578–0.675	0.63
Buccal capsule length	0.022–0.024	0.019	0.022
Buccal capsule width	0.017–0.021	0.012–0.016	0.022
Distance between nerve ring and anterior part of body	0.17–0.19	0.173	–
Spicule I length	0.205–0.220	0.185–0.206	0.168
Spicule I width	0.035–0.038	–	–
Spicule II length	0.48–0.56	0.38–0.42	0.357
Spicule II width	0.017–0.019	–	–
Spicule ratio	1:2.28–1:2.73 (1:2.47)	1:1.8–1:2.3	1:2.12
Tail length	0.24–0.29	–	0.25
Cervical alae length	0.25–0.28	–	0.23
Cervical alae width	0.018–0.020	–	0.016
Distance between excretory pore and anterior part of body	0.305	0.304	–
Number of preanal papillae	3	3	3
Number of postanal papillae	3	2	3

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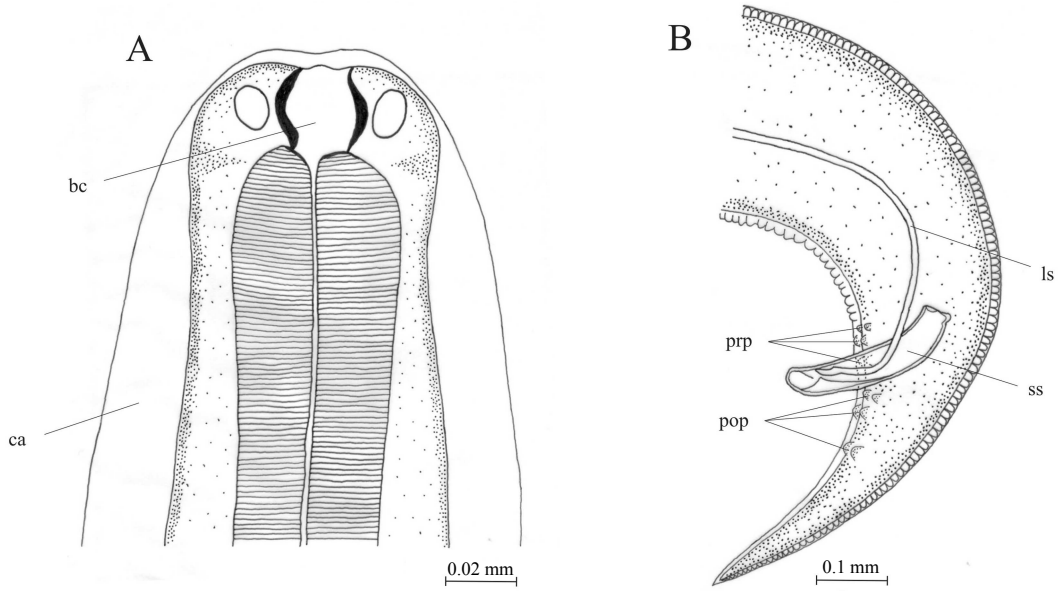

Fig. 1. *Oxyspirura chabaudi* (Baruš, 1965), male: **A** – anterior part of body, **B** – posterior part of body; bc – buccal capsule, ca – cervical alae, ls – long spicule, ss – short spicule, prp – preanal papillae, pop – postanal papillae

Central Europe. The Fauna Europaea database (2004) lists only 4 species: *O. baskakowi* Skryabin, 1929, *O. mansoni* (Cobbold, 1879), *O. petrowi* Skryabin, 1929, and *O. sygmoidea* (Molin, 1860). However, a review of the literature permits the inclusion of two additional species: *O. rysavyi* (Baruš, 1963) from *Oriolus oriolus* in Slovakia (Baruš 1963) and *O. chabaudi* from *Motacilla alba* in the Czech Republic (Baruš 1965). Two species of *Oxyspirura* have been recorded from Poland so far: *O. petrowi* from *Erithacus rubecula* and *Corvus frugilegus* (Okulewicz 1984, Okulewicz and Kozak 1987) and *O. sygmoidea* from *C. frugilegus* (Rutkowska 1973).

The prevalence and intensity of *Oxyspirura* infection is usually very low in birds. In Czechoslovakia Baruš (1965) found that only 7 out of 3207 birds examined over a ten-year period were infected with specimens of the genus *Oxyspirura*. Most of the species have been described on the basis of one or only several specimens (Skryabin *et al*. 1967). For example, Jairapuri and Siddiqi (1967) listed 14 new species of *Oxyspirura*, eight of which were described based on observation and measurements of only one male specimen each.

During the faunistic research of birds in the vicinity of Wrocław (April 2006), one dead *Turdus merula* was found. Post mortem examination revealed three male nematodes of the genus *Oxyspirura*. The material was fixed in 70% ethanol, cleared for microscopic examination with glycerol and identified as *O. chabaudi* based on morphological and morphometric characters using the criteria of Baruš (1965, 1970), Jairapuri and Siddiqi (1967) and Anderson *et al*. (1975). The nematodes exhibited cervical alae, undivided cephalic capsule, two differentiated spicules, three pairs of pre- and postanal papillae, and the lack of a gubernaculum (Fig. 1A, B). The measurements, expressed in millimetres (minimum-maximum), of the most representative structures of males are given in Table I.

Oxyspirura chabaudi was first described by Baruš (1965) based on three nematodes (2 males and 1 female) found in one specimen of *Motacilla alba* from the Czech Republic. Subsequently, the description of this species in *M. alba* (Baruš 1970) was completed with data on the variation of *O. chabaudi* concerning the number of postanal papillae. According to Skryabin *et al*. (1967) the number of caudal papillae in the genus *Oxyspirura* is variable.

This is the first record of *O. chabaudi* from Poland and thus confirms the occurrence of this nematode in Europe. *Turdus merula* is a new host for this parasite.

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