

Review of species of the phylum Acanthocephala recorded from Vrachanska Planina Mountains

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Abstract. A review of acanthocephalan species recorded from the Vrachanska Planina Mountains is presented. A total of 4 species were reported: 3 from birds and 1 from mammals and 1 species has been identified at the generic level only. As hosts, 4 vertebrate species were recorded: 3 avian and 1 mammalian species. A host-parasite list is presented. The acanthocephalan species recorded in the Vrachanska Planina Mts. represent 7.5% from the species recorded in Bulgaria.

Key words: Acanthocephala, birds, mammals, review, Bulgaria.

Introduction

Most of the studies summarised in the present review aimed revealing the helminth parasites of birds (Paspalev *et al.* 1969; Kamburov 1966; Tsacheva-Petrova 1971; Dimitrova 1998; 1999). There is only one study on the acanthocephalans of mammals in the studied region (Popov *et al.* 1960). There are no investigations of the remaining host groups (fishes, amphibians and reptiles) in the Vrachanska Planina Mts.

In addition, the primary data obtained by the above-mentioned studies have also been presented in review publications on the helminth parasites from the fauna of Bulgaria. These are the survey of avian acanthocephalans (Dimitrova *et al.* 2000), the monograph on the helminth parasites of insectivores and rodents (Genov 1984) and Catalogus Faunae Bulgaricae (Acanthocephala) (Dimitrova & Georgiev in press).

The present review includes the acanthocephalan species recorded from the Vrachanska Planina Mts. and some adjacent areas until 2015. The species list is arranged according to the classification proposed by Amin (2013). In addition, data of general distribution of the reported species were presented. The nomenclature of the hosts follows Fauna Europaea: (Roselaar 2004) (birds); Bogdanowicz & Zagorodniuk (2004) (mammals).

List of acanthocephalan species

Class Archiacanthocephala Meyer, 1931

Order Gigantorhynchida Southwell & MacFie, 1925

Family Gigantorhynchidae Hamann, 1892

Genus *Mediorhynchus* Van Cleave, 1916

***Mediorhynchus rodensis* Cosin, 1971**

Recorded from small intestine of *Garrulus glandarius* (Linnaeus, 1758) at Lakatnik

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(Dimitrova 1998; Dimitrova 1999; Dimitrova *et al.* 2000).

General distribution: Palaearctic: Europe (Cosin 1971; Dimitrova *et al.* 2000; Gibson 2004).

***Mediorhynchus tenuis* Meyer, 1931**

Recorded from small intestine of *Monticola saxatilis* (Linnaeus, 1758) at Iskarskoto Defile (Kamburov 1966; Dimitrova *et al.* 2000).

General distribution: Palaearctic: European-Mediterranean (Khokhlova 1986; Dimitrova *et al.* 2000).

***Mediorhynchus zosteropis* (Porta, 1913)**

Recorded from small intestine of *Corvus cornix* Linnaeus, 1758 at Vratsa (Tsacheva-Petrova 1971; Dimitrova *et al.* 2000).

General distribution: Australian (New Caledonia) and Palaearctic (Khokhlova 1986; Golvan 1994; Dimitrova *et al.* 2000).

***Mediorhynchus* sp.**

Recorded from small intestine of *Corvus cornix* at Varshets (Paspalev *et al.* 1969).

Order Oligacanthorhynchida Petrochenko, 1956

Family Oligacanthorhynchidae Southwell and MacFie, 1925

Genus *Macracanthorhynchus* Travassos, 1917

***Macracanthorhynchus hirudinaceus* (Pallas, 1781)**

Recorded from small intestine of *Sus scrofa* f. *domestica* Linnaeus, 1758 at Vratsa (Popov *et al.* 1960).

General distribution: Holarctic, Palaetropical (Genov 1984, Khokhlova 1986; Araki 2003), Neotropical (Mexico) (Salgado-Maldonado 2005) and Australian (Smales 2003).

Host-parasite checklist

Class Aves

Order Passeriformes

Family Saxicolidae

Monticola saxatilis (Linnaeus, 1758)

Mediorhynchus tenuis

Family Corvidae

Corvus cornix Linnaeus, 1758

Mediorhynchus zosteropis

Mediorhynchus sp.

Garrulus glandarius (Linnaeus, 1758)

Mediorhynchus rodensis

Class Mammalia

Order Artiodactyla

Family Suidae

Sus scrofa f. *domestica* Linnaeus, 1758

Macracanthorhynchus hirudinaceus

Discussion

As seen from the above survey, 4 acanthocephalan species were recorded from the Vrachanska Mts and some adjacent areas. In addition, 1 species has been identified at the generic level only. Three of the acanthocephalan species are from avian hosts and 1 from mammals. The acanthocephalans recorded belong to 2 genera, 2 families, 2 orders and 1 class. As definitive hosts, 4 vertebrate species have been recorded. These are 3 avian and 1 mammalian species.

According to Dimitrova & Georgiev (in press) 53 acanthocephalan species were recorded for the fauna of Bulgaria. The acanthocephalan species recorded in the Vrachanska Planina represent 7.5% from the species recorded in Bulgaria. The expected number of species of this group is probably about 18-20. Further studies are needed on new vertebrate hosts (birds, fish, mammals, amphibians, reptiles) of acanthocephalans in the Vrachanska Planina Mts.

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Преглед на видовете от тип *Acanthocephala*, съобщени от Врачанска планина

ЗЛАТКА ДИМИТРОВА

(Резюме)

Представен е преглед на видовете акантоцефали, съобщени от Врачанска планина и някои прилежащи територии. Съобщени са 4 вида акантоцефали: 3 от птици и 1 от бозайници. Четири вида гръбначни животни са съобщени като гостоприемници на установените видове акантоцефали: 3 вида птици и 1 вид бозайници. Представени са също и данни за общото разпространение на установените видове. Включен е списък на гостоприемниците на акантоцефалите, установени във Врачанска планина. Установените видове акантоцефали представляват 7.5% от общия брой видове, съобщени за България.