

First record of the genus *Lamprochernes* (Pseudoscorpiones: Chernetidae) in the Republic of Macedonia

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Abstract. The chernetid pseudoscorpion *Lamprochernes chyzeri* (Tömösváry, 1882) is recorded for the first time from the Republic of Macedonia. Simultaneously it represents the first record of the genus *Lamprochernes* for Macedonia. The description of the collected male from compost heap is provided.

Key words: Balkans, compost, FYROM, *Lamprochernes chyzeri*, new record, false scorpions, taxonomy.

Up to present, 45 pseudoscorpion species are known from the Republic of Macedonia (Harvey 2013). The interest of the specialists studying Balkan fauna is focused mainly on epigeic and cave-dwelling pseudoscorpions. That is the reason why pseudoscorpion fauna of Macedonia is represented mainly by chthoniid and neobisiid species, including several endemic ones (Čurčić et al. 2011, Harvey 2013). Pseudoscorpions from the family Chernetidae were studied only marginally (Čurčić 1974), there are known only two species records – *Allochernes balcanicus* Hadži, 1938 (distributed only in Macedonia and Serbia) and *Chernes similis* (Beier, 1932) (distributed in Central Europe, Balkans and Turkey). The genus *Lamprochernes* Tömösváry, 1882 is recorded for the first time in Macedonia. Hence, the aim of the study is to present and describe the species *Lamprochernes chyzeri* (Tömösváry, 1882).

Lamprochernes chyzeri (Tömösváry, 1882)

One male of *L. chyzeri* was extracted from the compost sample collected in the village Pokrvenik situated northwest of Lake Prespa in the Resen Municipality in the Republic of Macedonia (41.01465 N, 20.96109 E; 858 m a.s.l.; October 04, 2017; Fig. 1). The compost was composed of rotten hay and loam and only one pseudoscorpion specimen was present there. The body and dissected appendages were studied as a temporary slide mount using lactic acid, and then returned to 70% ethanol. Measurements were taken from photographs (Leica DM1000 compound microscope with ICC50 Camera Module, LAS EZ application, 1.8.0) using the Zeiss AxioVision 40LE application (v. 4.6). The male was identified using the key in Christophoryová et al. (2011b). For measurement protocol please see Beier (1963). Nomenclature follows the world pseudoscorpion catalogue (Harvey 2013). The material is deposited in the zoological collection of the first author on the Department of Zoology, Comenius University, Bratislava.

Description of the male (Fig. 2): Setae on body long, pointed and finely toothed; carapace only faintly granulate, epistome absent, anterior margin of carapace straight, carapace scarcely longer than broad; eyes or eyespot absent; anterior transverse furrow distinct, posterior furrow indistinct. Chaetotaxy of carapace: 100 setae, 48 of them situated in front of anterior transverse furrow, 39 on medial disk, posterior margin with 13 setae; four slitlike lyrifissures present in anterior part of carapace, eight lyrifissures behind anterior furrow. Chelicerae: small, slightly sclerotized, five setae on hand, one on movable finger; movable finger with slender well-developed galea, main stalk with five short terminal rami; rallum of three blades, anterior one finely dentate; ser-

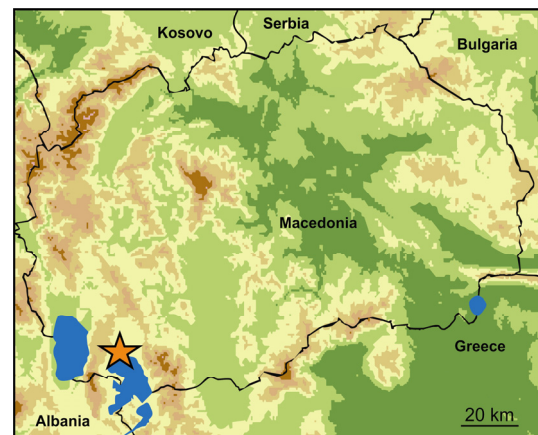


Figure 1. Map of the Republic of Macedonia showing the first record of *Lamprochernes chyzeri*.



Figure 2. *Lamprochernes chyzeri* male recorded from Macedonia. Scale: 1 mm.

rula exterior with 15 blades; small, largely unsclerotized teeth situated on both movable and fixed fingers. Palps: slender, finely granulate; protuberance on palpal trochanter conical and pointed; chelal fingers with 12 trichobothria (eight on fixed and four on movable chelal finger), subterminal trichobothrium on movable chelal finger situated

Table 1. Morphometric data for *Lamprochernes chyzeri* male (in mm).

Characteristics	
Body length	2.41
Carapace length	0.68
Carapace posterior width	0.52
Carapace length/posterior width ratio	1.31
Chelicera length	0.17
Chelicera width	0.09
Chelicera length/width ratio	1.89
Cheliceral movable finger length	0.17
Palpal trochanter length	0.35
Palpal trochanter width	0.19
Palpal trochanter length/width ratio	1.84
Palpal femur length	0.55
Palpal femur width	0.22
Palpal femur length/width ratio	2.50
Palpal patella length	0.54
Palpal patella width	0.25
Palpal patella length/width ratio	2.16
Palpal hand with pedicel length	0.52
Palpal hand without pedicel length	0.47
Palpal hand width	0.28
Palpal hand with pedicel length/width ratio	1.86
Palpal finger length	0.45
Palpal chela length	0.94
Palpal chela length/palpal hand width	3.36
Leg I trochanter length	0.11
Leg I trochanter width	0.10
Leg I trochanter length/width ratio	1.10
Leg I femur length	0.14
Leg I femur width	0.10
Leg I femur length/width ratio	1.40
Leg I patella length	0.21
Leg I patella width	0.10
Leg I patella length/width ratio	2.10
Leg I tibia length	0.24
Leg I tibia width	0.07
Leg I tibia length/width ratio	3.43
Leg I tarsus length	0.23
Leg I tarsus width	0.05
Leg I tarsus length/width ratio	4.60
Leg IV trochanter length	0.18
Leg IV trochanter width	0.11
Leg IV trochanter length/width ratio	1.64
Leg IV femoropatella length	0.45
Leg IV femoropatella width	0.15
Leg IV femoropatella length/width ratio	3.00
Leg IV tibia length	0.38
Leg IV tibia width	0.10
Leg IV tibia length/width ratio	3.80
Leg IV tarsus length	0.28
Leg IV tarsus width	0.07
Leg IV tarsus length/width ratio	4.00

approximately in the middle between terminal and subbasal trichobothria; venom apparatus developed only in movable chelal finger, nodus ramosus situated slightly proximal of terminal trichobothrium; fixed chelal finger with 33 and movable chelal finger with 35 equally long marginal teeth; fixed finger with five antiaxial accessory teeth and one paraxial accessory tooth, movable finger with four antiaxial accessory teeth and one paraxial accessory tooth. Legs: each of pedal tibia and tarsus IV with long tactile seta, tactile setae on tarsus situated approximately one third from the joint with the tibia. Abdominal tergites I–X divided, tergite XI undivided. Chaetotaxy of tergites I–X: 17 (left hemitergite 9

+ right hemitergite 8); 18 (9 + 9); 16 (9 + 7); 20 (10 + 10); 20 (9 + 11); 19 (9 + 10); 22 (10 + 12); 19 (9 + 10); 21 (10 + 11); 20 (10 + 10); tergite XI with 10 setae plus a pair of long tactile setae. Chaetotaxy of sternites IV–X: 17 (left hemisternite 8 + right hemisternite 9); 28 (14 + 14); 28 (15 + 13); 27 (14 + 13); 28 (14 + 14); 26 (13 + 13); 20 (10 + 10); sternite XI with 10 setae plus a pair of long tactile setae. Anterior genital operculum with 31 setae and three lyrifissures, posterior operculum with 14 setae and two lyrifissures. Body measurements of the male are given in Table 1.

The genus *Lamprochernes* is distributed in the majority of countries in the Balkans, with the exception of Bosnia and Herzegovina and Slovenia (Christophoryová & Jablonski 2017; present paper). Three *Lamprochernes* species are distributed in the Balkans and neighbouring countries (Harvey 2013). The differences and distribution of the species are discussed in Christophoryová et al. (2017). The main taxonomic characters of the *L. chyzeri* male correspond with known ones mentioned in the identification keys (Beier 1963, Christophoryová et al. 2011b). Thus, provided description updates known character variability. The species was described by Tömösváry (1882) from several localities situated in Slovakia and is distributed mainly in Europe, but also in Georgia, Kazakhstan and Turkey (Harvey 2013). It was collected from natural habitats, particularly from bird nests, under tree bark, rotten wood, but also from compost heaps or was phoretic (Beier 1963, Legg & Jones 1988, Droglá & Lippold 2004, Christophoryová 2010, Christophoryová et al. 2011a, Kaňuchová et al. 2015). The number of known chernetid pseudoscorpions from Macedonia is far from being definitive. Further research, mainly from less studied microhabitats such as compost heaps, under tree bark or nests could reveal many important records of the chernetids from the Balkans.

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