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Description of male of *Leioseius salinus* (HALBERT, 1920) (Acari: Gamasida)

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ABSTRACT. This work presents the description and figures of male individual of *Leioseius salinus* from the collection of the Natural History Museum in London. The species was also compared with other males of the genus *Leioseius* in order to facilitate its description in the future.

Key words: acarology, morphology, Acari, Gamasida, Ascidae, *Leioseius*, Europe.

INTRODUCTION

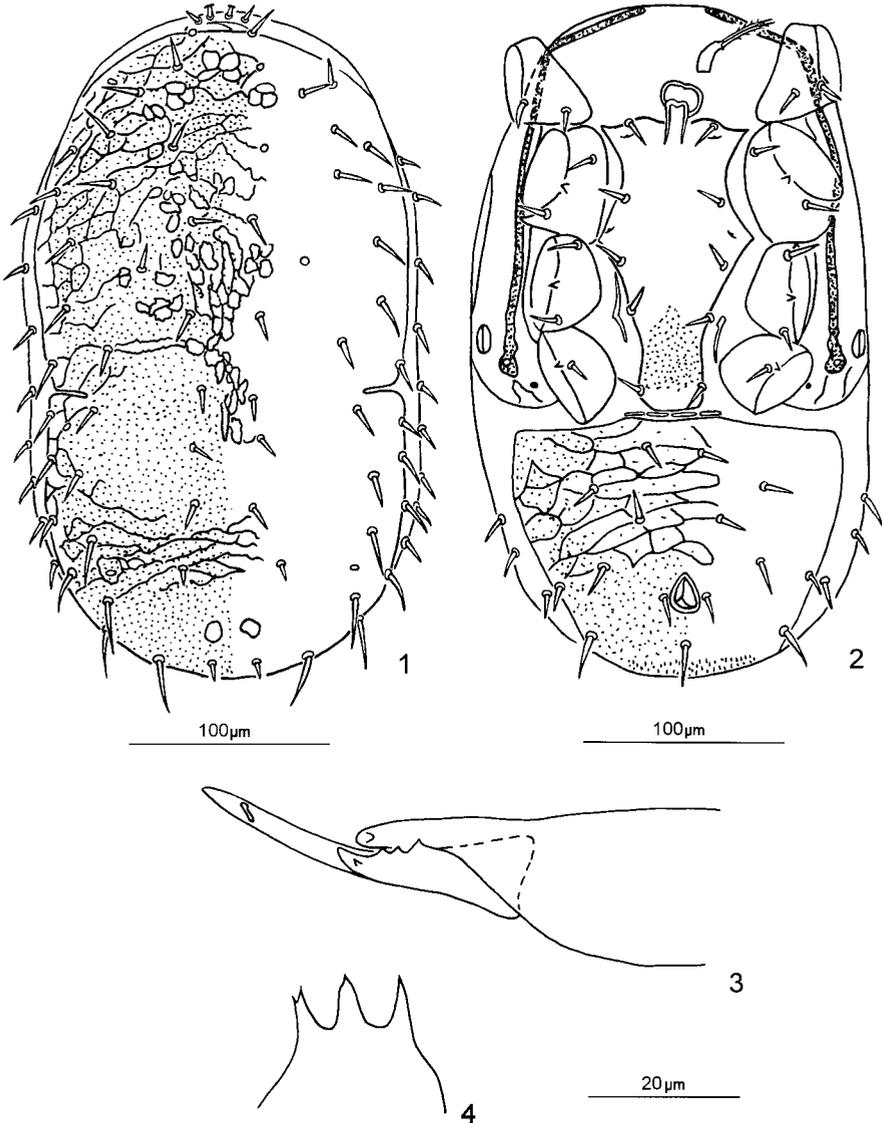
Leioseius salinus was described by HALBERT (1920) as *Lasioseius salinus*, using female individuals. Individuals of this species were found in 1915 under dead shells in a salt marsh on Malahide Island. WILMANN (1952) recorded it from the island of Wangerooge. A partial description (without figures) of a male of this species was made by EVANS (1958), who used samples collected in 1952 by R. HOWELLS from a salt-marsh in Carmarthenshire, South Wales, presently deposited in the Natural History Museum. However, this description was incomplete and for that reason *Leioseius salinus* was not included in the key for identification of males of the genus *Leioseius* inhabiting Europe (GWIAZDOWICZ 2002).

By courtesy of the Natural History Museum in London, who gave permission to borrow a slide with a male of *Leioseius salinus*, the male was re-examined, and figures and detailed description were made. The individual was also compared with other species of the genus *Leioseius*. The present work is, therefore, a contribution to the knowledge of males of this genus. The description is based on the chaetotaxy and number of setae as introduced by EVANS (1958).

Male of *Leioseius salinus* (HALBERT, 1920)

DESCRIPTION

Dorsal shield (Fig. 1) is 340 μm long and 200 μm wide, with marked incisions characteristic of the genus *Leioseius* in the median part. The whole shield is



1-4. Male of *Leioseius salinus*: 1 – dorsal, 2 – ventral, 3 – chelicera, 4 – tectum

covered with a dotted sculpture, while in places a cancellated sculpture is clearly seen. Dorsal shield bears 32 pairs of simple setae of which fifteen pairs occur in the region posterior to the incisions. Majority of dorsal shield setae are of equal length (12 μm), only J4 (10 μm) and J5 (8 μm) being shorter, while Z3 (18 μm), Z4, S5 (23 μm) and Z5 (25 μm) are longer. Pores between setae Z3 and Z4 are clearly visible.

Ventral side is presented in Fig. 2. Genital orifice is situated anterior to sternal shield, between coxae I. Sternal shield bears five pairs of equal length setae St1-St5 (12 μm). Between setae St1 and St2, as well as St2 and St3, porae are located, while between setae St4 and St5, a dotted sculpture can be seen. On broad peritrematic shields there are long peritrema. Stigma are situated alongside IV coxae. Between the sternal and ventrianal shield there are four post-sternal platelets. Ventrianal shield is 130 μm long and 165 μm wide and bears 15 setae of various length. The shortest among them are the perianal setae (10 μm), while the unpaired postanal setae is the longest (22 μm). The length of the other setae is: JV1, JV2, ZV2 (12 μm), JV3 (18 μm), JV5 (20). Ventrianal shield bears a dotted sculpture, cancellated in places.

Legs of varied length: I (290 μm), II (230 μm), III (210 μm), IV (250 μm). Hypostom with corniculus horn-like. Hypostomal setae of various length, the shortest being C3 (10 μm), C4 (12 μm), and the longest C1 and C2 (20 μm). Chelicerae with a movable digit with three denticles and a long, straight spermatodactyl (Fig. 3). Tectum of the described individual terminates in three apices, of which one is bifurcate (Fig. 4).

DIFFERENTIAL DIAGNOSIS

One of the key features distinguishing males of individual species of the genus *Leioseius* is the number of setae on the ventri-anal shield. (GWIAZDOWICZ 2002). *L. salinus*, like *L. magnanalis*, has 15 setae on this shield. The difference, however, consists in the setae being present on or behind the shield. For example one of the longest setae JV5 on the ventral side in *L. salinus* is located on the ventri-anal shield, while in *L. magnanalis* – behind the shield. On the other hand, seta ZV1 is present on the shield in *L. magnanalis*. Besides, *L. salinus* has four poststernal platelets, while in *L. magnanalis* they are absent. Post-sternal platelets occur only in *L. naglitschi* and *L. ibericus*; however, these have 17 pairs on the ventro-anal shield (EVANS 1958, GWIAZDOWICZ 2001).

MATERIAL

The male of *Leioseius salinus* was collected by R. HOWELLS from a salt-marsh in Carmarthenshire in South Wales, in 1952. At present, a slide with this individual is deposited at the Natural History Museum in London.

ACKNOWLEDGEMENTS

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