

ECHINONYSSUS GALICIAE N. SP. (ACARI: LAELAPIDAE) FROM TALPA CAECA SAVI IN SPAIN

A. Fain¹ and A. Pereira-Lorenzo²

1. Institut royal des Sciences naturelles de Belgique, 29 Rue Vautier, B-1040 Bruxelles. 2. Departamento de Microbiología y Parasitología, Catedra de Parasitología, Facultad de Farmacia, Universidad de Santiago de Compostela, España

ABSTRACT -A new species of laelapid mite, *Echinonyssus galiciae* n.sp. (Acari: Laelapidae), is described from *Talpa caeca* (Insectivora: Talpidae) collected in Galicia region of Spain.

INTRODUCTION

Recently, Pereira-Lorenzo and Quintero-Alonzo (1988) studied the mesostigmatic mite fauna from Insectivora in the region of Galicia, Spain. Among other genera present in this collection they found 4 species of the genus *Echinonyssus* Hirst, 1925. One of these, *E. lukoschusi* Tenorio and Radovsky (1979), was recorded for the first time from Spain. These authors also mentioned the presence on the mole *Talpa caeca* of an unnamed variation or subspecies of *E. lukoschusi* characterized by the modification of the anteroventral seta of coxa II into a bifid spine. All the specimens with this modification originated from the Province of La Coruña. A careful study of these specimens has revealed that they represent a new species, *Echinonyssus galiciae*. All measurements are given in μm .

Echinonyssus galiciae n.sp.

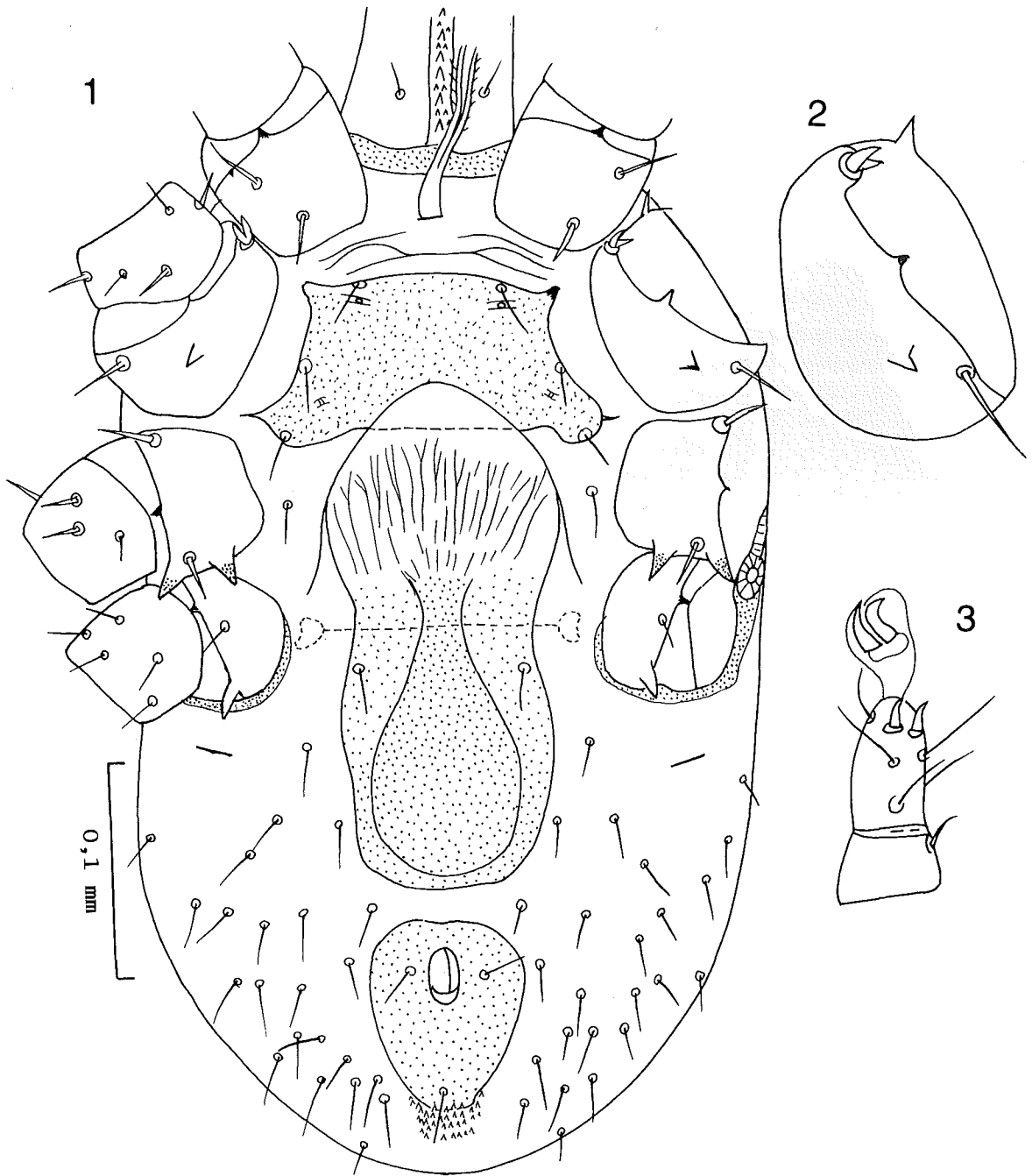
(Figs. 1-4)

Female (holotype) (Figs 1-4): Idiosoma 490 long and 300 wide (maximum width). Length and width in 3 paratypes: 510x307, 504x305, and 480x310. *Dorsum*: Dorsal shield 490 long, maximum width 243; bearing 25-26 setae of which 16 pairs located on podosomal portion of shield. Lengths of the setae: *j1* 10, *j2* 15, *j3* 12, *j4* to *j6* 5-6, *z2* 17, *z4* 12, *z5* 6, *s1* 14, *s3* 13, *s4* 12, *J1* and *J2* 4-5, *Z1* 7, *Z5* 10, *S1* to *S5* 9-10. *Venter*: Sternal shield wider (125 at the level of 2d pair of sternal setae) than its median length (72). Sternal setae 25 long. Metasternal setae situated on soft cuticle. Maxi-

imum width in posterior half of genital shield 96, maximum length (including the membranous posterior lip of vulva) 234 (ratio length width = 2.43). Genital setae, located on shield, 21 long. Anal shield oval, 75 long (to base of postanal seta) and 69 wide; adanal setae 20, postanal seta 22. Soft cuticle of opisthogaster with 24 pairs of setae 13 to 27 long. Peritreme starting at level of posterior margin of coxa III and reaching anterior half of coxa I.

Peritrematal shield fused posteriorly with exopodal shield of coxa IV. Coxal spurs 0-1-2-1. Coxa II with the anteroventral seta modified into a short, thick bifid spine; posteroventral seta setiform. Tarsus II with a pair of ventroapical spines. Length/width of leg segments: genu 45/54 - 49/51 - 30/44 - 45/42; tibia 48/45 - 39/45 - 30/39 - 42/39; tarsus 72/33 - 57/33 - 53/30 - 69/31. Gnathosoma, including the palps, 160 long, base 79 wide. Deutosternum with a single file of 7 (6 in paratypes) teeth and about 15 to 20 very small denticles irregularly arranged. Chelicerae: movable digit 37 long, total length of chelicerae (fixed digit included) 165, basal part 54.

Male: Length and maximum width of idiosoma in 3 paratypes: 375x228, 378x220 and 390x218. L x W of dorsal shield: 375x204, 370x220 and 373x210 bearing 28 to 29 pairs of setae 6 to 19 long. *Venter*: Holoventral shield with 8 pairs of setae 15 to 18 long. Coxae as in female with anteroventral seta of coxae II modified in a small deeply forked spine. Chelicerae (in one paratype) 102 long (fixed digit included), basal part 36 long, movable digit 34 long. Free part of spermadactyl 15, total length 26.



Figs 1-3. *Echinonyssus galiciae* n.sp. (female) - 1. ventral idiosoma; 2. coxa II - enlarged; 3. tarsus II in ventrolateral view

Remarks: This species is closest to *E. lukoschusi* Tenorio and Radovsky (1979). It differs from that species in both sexes by smaller size of the body, the scutum and the chaetotaxy. In the female the longest seta of the scutum is 17 long (in *E. lukoschusi* 29 long). In the male the scutal setae do not exceed 15 while in

E. lukoschusi some scutal setae, e.g. z2, are 25 long. Other characters are as follows: In both sexes and in all the specimens, the modification of the anteroventral spine of coxa II which is deeply bifid, while in *E. lukoschusi* this spine is thicker, slightly curved and not forked. The sternal shield in the female is much nar-

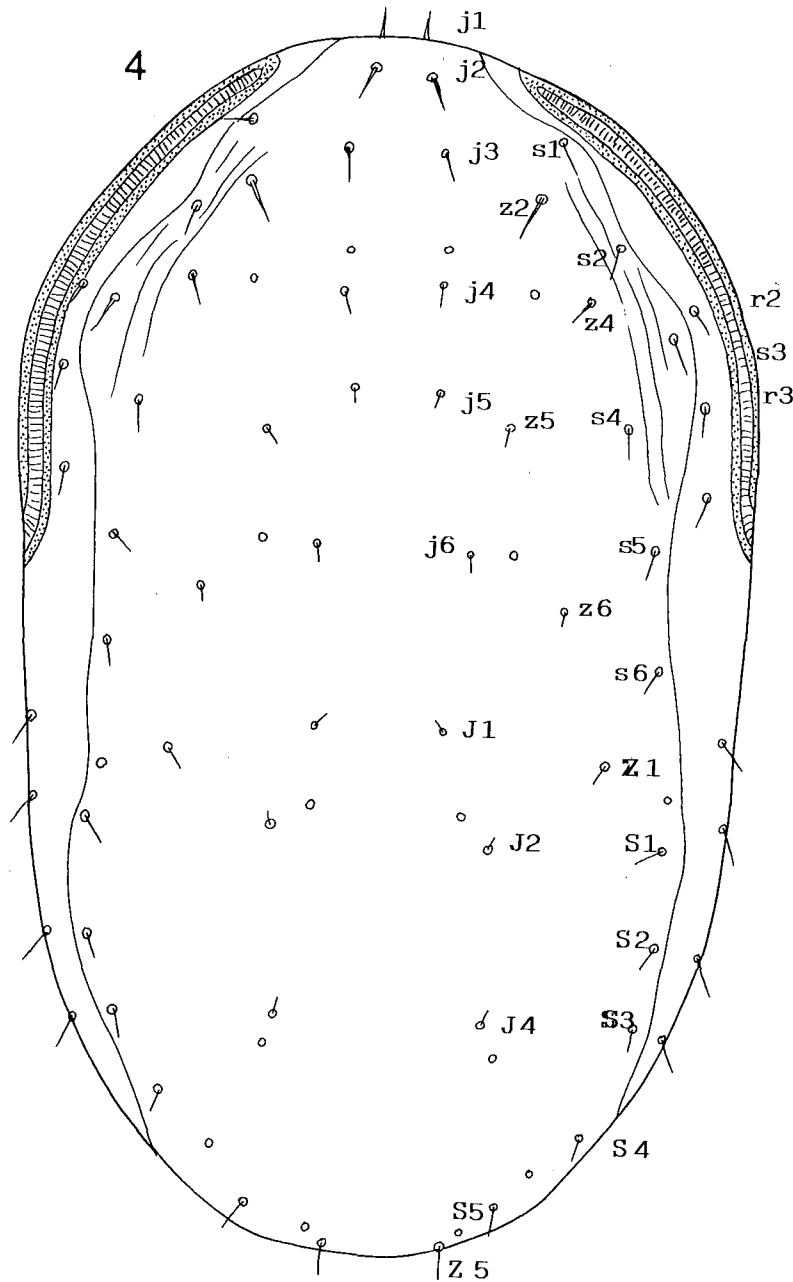


Fig. 4. *Echinonyssus galiciae* n.sp. (female) - dorsal view

rower (ratio width/length 1.73 in the new species instead of 2.37 in *E. lukoschusi*) and the anal shield is oval (pear-shaped in *E. lukoschusi*).

Host and localities: All mites were collected from *Talpa caeca*, in the Province of La Coruña, region of Galicia, Spain (Collector: A. Pereira-Lorenzo). *Holotype*: female, from Coristanco (host n° 496, 11.V.1985). *Paratypes*: 72 females and 2 males from La Coruna (host n° 208, 21.X.1984); 5 females and 1 male from Coristanco (hosts n° 496 and 498, 11.V.1985); 6 females from Cerceda (hosts n° 634, 22.XI.1987,

14.I.1989 and hosts n° 638 and 639, 28.II. and 4.III.1989); 3 females from Dodro (host n° 476, 27.VII.1985); 2 females from Santiago de Compostela (host n° 406, 22.II.1985 and host n° 13, 11.III.1983).

Holotype, 10 paratypes female and 1 paratype male in the collections of the Institut royal des Sciences naturelles de Belgique, 1 paratype female in the British Museum (Natural History). All other paratypes in the collection of the Facultad de Farmacia, University of Santiago de Compostela.

REFERENCES

- Pereira-Lorenzo, A. and M.P. Quinterio-Alonso. 1988. Contribucion al estudio de los acaros del suborden Mesostigmata ectoparasitos de insectivoros en Galicia (España). Rev. Ibér. Parasitol. 48: 189-193.
- Tenorio, J.M. and F.J. Radovsky. 1979. Review of the subfamily Hirstionyssinae, synonymy of *Echinonyssus* Hirst and *Hirstionyssus* Fonseca, and descriptions of four new species of *Echinonyssus* (Acari: Laelapidae). J. Med. Entomol., 16: 370-412.
