A NEW SPECIES OF THE GENUS *EPIMYODEX* FAIN AND ORTS, 1969 (ACARI: CLOACARIDAE: EPIMYODICINAE) PARASITIZING *SOREX TROWBRIDGII* (SORICIDAE) FROM THE U.S.A.

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ABSTRACT - A new species *Epimyodex soricis* **n. sp.** (Acari: Cloacaridae: Epimyodicinae) is described from *Sorex trowbridgii* (Soricidae) in the USA.

Key words - Mites, parasites, systematics, *Epimyodex, Sorex trowbridgii,* USA.

INTRODUCTION

Up to now the genus *Epimyodex* Fain and Orts, 1969 included three species: *E. talpae* Fain and Orts, 1969 from *Talpa europaea*; *E. crocidurae* Fain, Lukoschus & Rosmalen, 1982 from *Crocidura russula* and *E. microti* Fain, Lukoschus & Rosmalen, 1982 from *Microtus arvalis* and *Apodemus sylvaticus* (Fain and Orts, 1969; Fain *et al.*, 1982).

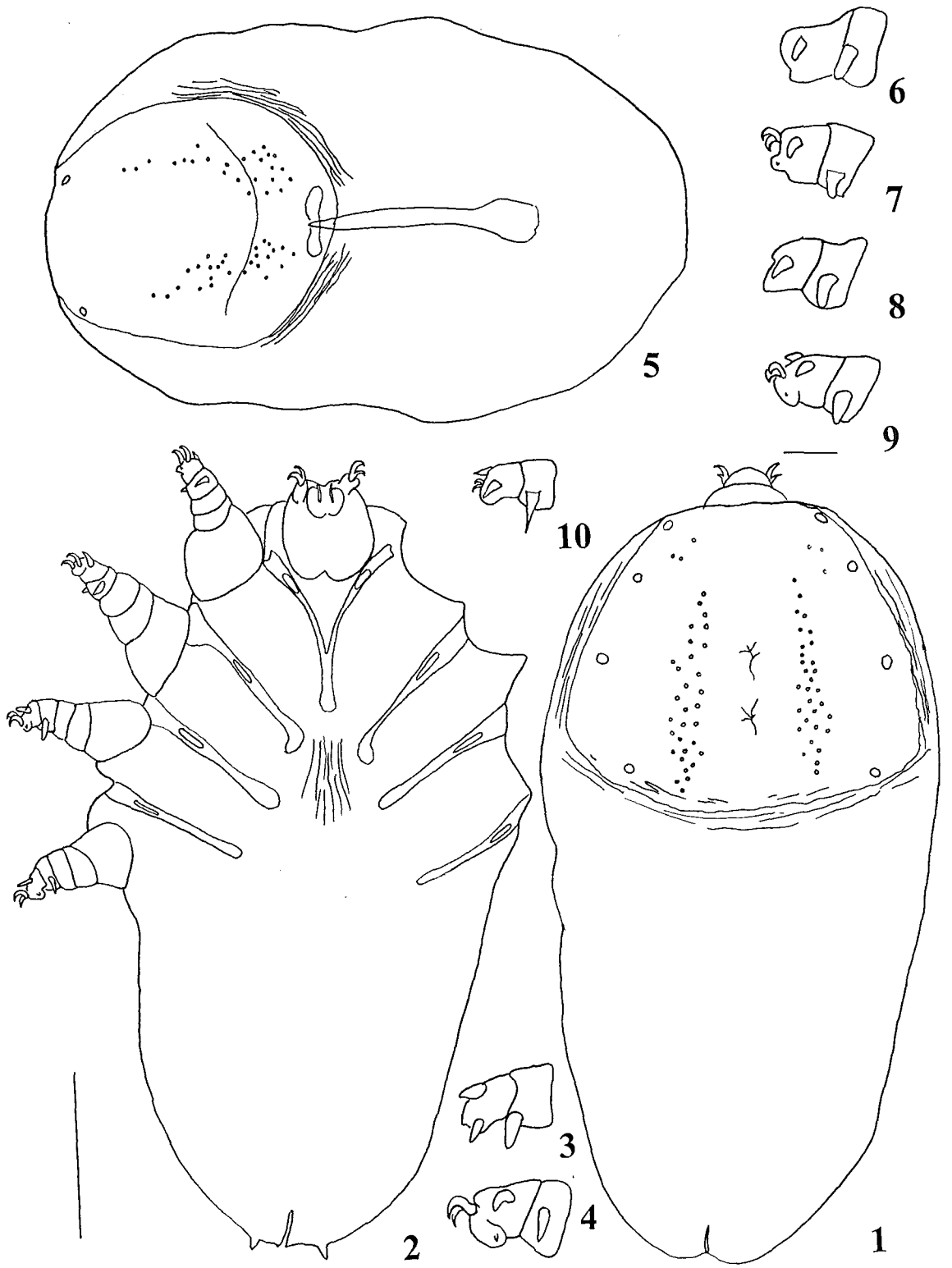
We describe here a new species of *Epimyodex*. It was found in the deep loose connective subcutaneous tissues on the dorsal trunk of *Sorex trowbridgii* in Oregon, USA. All measurements are given in micrometers (μm).

Genus *Epimyodex* Fain and Orts, 1969
Epimyodex soricis n. sp.
(Figs. 1 - 9)

Female (Figs. 1 - 4) - Holotype 250 long, 120 wide (265-245 long, 140-115 wide in 10 paratypes). Cuticle very poorly sclerotized. Dorsum: Propodosomal shield about 100 long, with indistinct margins, bearing 4 pairs of lateral ringlets and 25-30 pairs of very small paramedian dark ringlets. Hysterosoma with indistinct striations. Venter: Epimeres I Y-shaped, other epimeres free, directed posterointernally. All epimeres with an elongated spot in basal half. Vulva terminally flanked with 2 well developed papillae about 5 long. Legs: All tarsi with 2 well-developed, simple claws, 3 short, blunt spines and a rudimentary pretarsus ending in a small tooth. All tibiae with 2 blunt spines, about 6 long. Gnathosoma: About 35 long, 33 wide. Sclerites of palps recurved and bifid.

Male (Figs. 5 - 9) - Idiosoma 220 long, 130 wide (215 long, 130 wide in a paratype). Dorsum: Propodosomal shield 90 long, with numerous very small, dark ringlets arranged in 2 irregular files and 1 pair of more anterior larger ringlets. Soft cuticle striated along posterior margin of shield. Male orifice situated in posterior part of propodosomal shield. Penis 75 long. Venter as in female. Legs as in female but tarsal claws smaller.

Differential diagnosis - The new species is closest to *E. microti* but distinguished from the latter by the following characters: The leg setae in both sexes in *E. soricis* n. sp. are blunt spines; the terminal papillae in the female are well developed, about 5 long and the propo-dosomal shield bears 25-30 pairs of dark ringlets. The leg setae in *E. microti* are acute apically (Fig. 10); the terminal papillae in the female are very small, about 2 long and the propodosomal shield bears 10-17 pairs of dark ringlets. This new species differs from *E. crocidurae*, in both sexes, by the presence of numerous dark ringlets on the propodosomal shield and of blunt spines on the legs. The female differs by the presence of well developed terminal papillae and the male by the normally developed tarsal claws. The dark ringlets in *E. crocidurae* are absent on the propodosomal shield and the leg setae are acute apically in both sexes. The terminal papillae are small in the



Figs. 1 - 4. *Epimyodex soricis* n. sp. (female) - 1. dorsal view; 2. ventral view; 3. tibia and tarsus I, dorsal view; 4. the same, ventral view. Figs. 5 - 9. *E. soricis* n. sp. (male) - 5. dorsal view; 6. tibia and tarsus I, dorsal view; 7. the same, ventral view; 8. tibia and tarsus II, dorsal view; 9. the same, ventral view. Fig. 10. *E. microti* (male) - tibia and tarsus I, dorsal view. Scale lines 50 μm (Figs. 1, 2, 5), 10 μm (Figs. 3, 4, 6-10).

female and the tarsal claws are vestigial in the male. *Epimyodex soricis* n. sp. is distinct from *E. talpae* by the bifid sclerites of palps and other characters.

Host and locality - Female holotype, 12 female paratypes and 2 male paratypes from the connective subcutaneous tissues of *Sorex trowbridgii*, Lincoln Co., Oregon, USA, 16. VII. 1981. Coll. D. Gettinger. Holotype and 10 paratypes are deposited in the Institut royal des Sciences naturelles de Belgique, Bruxelles, Belgium. Two female paratypes are deposited in the Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

Additional material - 1 female from the connective subcutaneous tissues of *Sorex vagrans,* Lincoln Co. Oregon, USA, 15. VII. 1981. Coll. D. Gettinger. This specimen differs from the type specimens by the shorter terminal papillae, 3 μm long.

Remarks - 1) *Epimyodex talpae* was found also on *Talpa romana* in Italy and was reported from *Peromyscus leucopus* in USA (Fain *et al.*, 1982). The record of this species from *P. leucopus* was a misidentification. Actually, these mites are *E. microti*. 2) We have found 5 females and 4 males of *E. microti* from *Peromyscus maniculatus* (new host species) from Corvallis, Oregon, USA (Coll. D. Gettinger, 12. VI. 1981). These specimens are not separable from those collected from *M. arvalis* in Nijmegen, the Netherlands (Fain *et al.*, 1982).

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