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A key to the genus *Lutrilichus* Fain and description of a new species from the ermine, *Mustela erminea*, in Canada (Acarina: Sarcoptiformes)

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**A key to the genus *Lutrilichus* Fain and description of a new species from the ermine, *Mustela erminea*, in Canada (Acarina: Sarcoptiformes)**

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*Lutrilichus canadensis* sp. nov., parasitic on the ermine, *Mustela erminea*, in Canada, is described and figured in detail. A key to species of the genus *Lutrilichus* Fain, 1970 is presented.

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On trouvera ici la description, illustrée en détail, d'une nouvelle espèce, *Lutrilichus canadensis*, parasite de l'hermine *Mustela erminea* au Canada, ainsi qu'une clé d'identification des espèces du genre *Lutrilichus* Fain, 1970. [Traduit par le journal]

The genus *Lutrilichus* Fain, 1970 to date consists of four species, all parasitic on small carnivores.

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The new species, described here, resembles *L. nivalis* Beron, 1973 described from *Mustela nivalis*, in Bulgaria. It is distinguished from *L. nivalis* mainly by its greater body size and the different form of its chaetotaxy.



FIGS. 1-3. *Lutrulichus canadensis* sp. nov. Female holotype in lateral view (Fig. 1); tibiae and tarsi III (Fig. 2) and IV (Fig. 3).

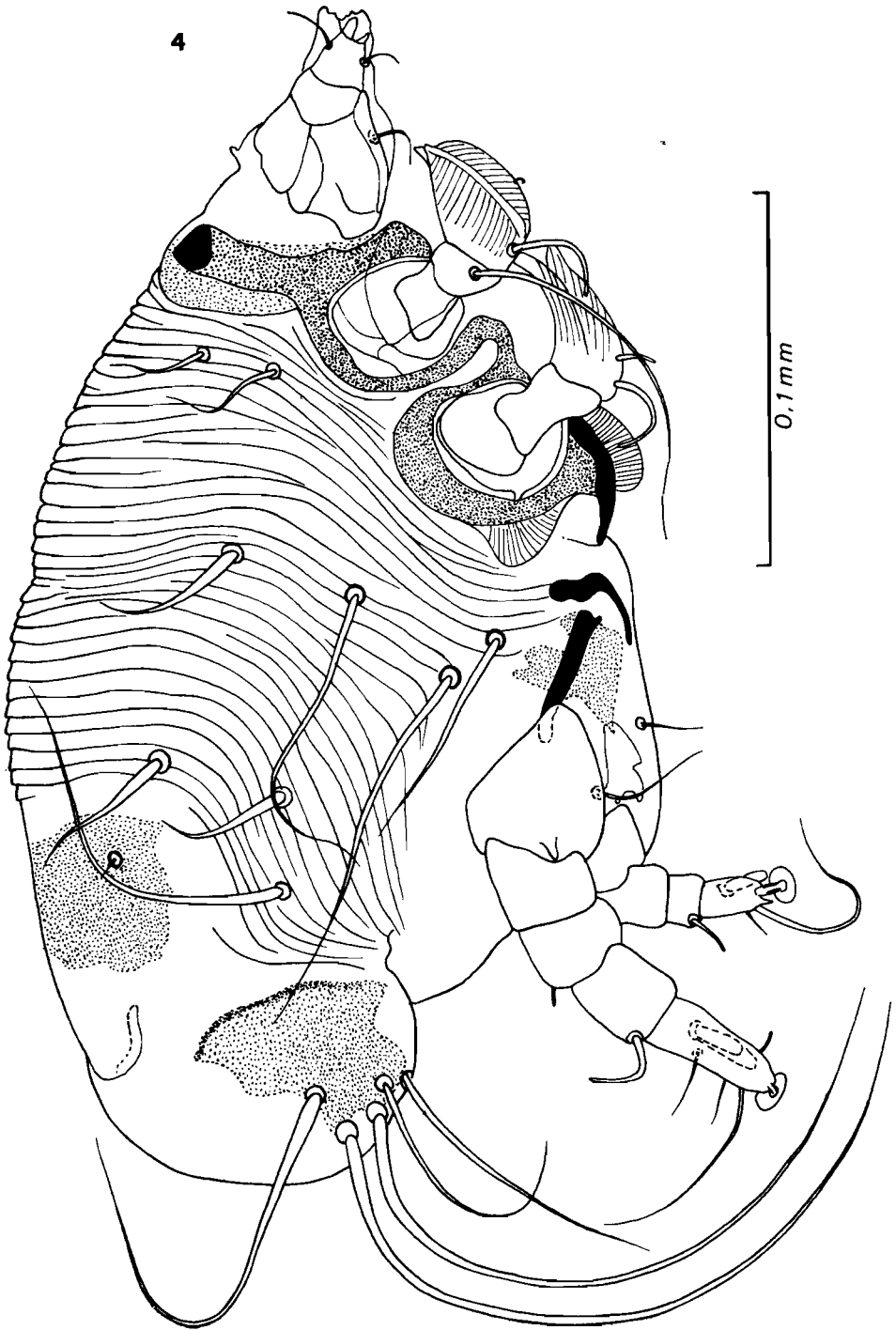


FIG. 4. *Lutrilichus canadensis* sp. nov. Male allotype.

FAMILY Chirodiscidae Trouessart, 1892  
 SUBFAMILY Labidocarpinae Gunther, 1942  
 TRIBE Schizocarpini Fain, 1971  
 GENUS *Lutrilichus*, Fain, 1970  
*Lutrilichus canadensis* sp. nov.

FEMALE (HOLOTYPE) Figs. 1-3: Total length of the body 345 microns ( $\mu$ ), maximum width in lateral view 180  $\mu$ . Prescapular shield very short. Cuticle finely striate. Anus terminal. Vulva situated 30  $\mu$  behind the anus. Posterior legs rather short. Tarsi III 27-30  $\mu$  long, with two strong, flattened and striated spines. Tarsi IV a little shorter with only one flattened spine.

*Chaetotaxy*—*sc i* and *sc e* are short hairs. The *d 1* and *d 2* are spines 34-36  $\mu$  long; *d 3* much longer (95  $\mu$ ) but strongly attenuate apically. The *l 1*, *h*, and *sh* are long and very progressively tapered apically. The *l 2* is a spine 33  $\mu$  long. The *l 5* is very long (180-200  $\mu$ ). The *d 5* is much longer (120  $\mu$ ) than the anal or the *d 4* and *l 4* setae.

MALE (ALLOTYPE) Fig. 4: Length 305  $\mu$ , maximum width in lateral view, 165  $\mu$ . Prescapular shield as in the female. Hysterosoma with an irregular and poorly sclerotized median shield

behind the *d 3* setae. Posterior extremity forming two wide membranous lobes partly sclerotized. Posterior legs longer than in the female.

*Chaetotaxy*—Anterior dorsal setae as in the female. The *d 3* is very short and thin. The posterior extremity bears five pairs of long unequal hairs.

TYPE HOST: *Mustela erminea* Linnaeus.

TYPE LOCALITY: Hart Township, Ontario, Canada. 9.IX.1970.

DEPOSITION OF TYPES: Holotype and 12 paratypes female, allotype and 13 paratypes male, six nymphs in the Canadian National Collection (C.N.C.), Canada Department of Agriculture, Ottawa, Canada. C.N.C., Type No. 13291. Paratypes: British Museum (Natural History) London (1973. 578-9); Zoologisches Institut und Zoologisches Museum, Hamburg (A 50-73); Rijksmuseum van Natuurlijke Historie, Leiden; U.S. National Museum, Washington (3584); Institut de Médecine tropicale Prince Léopold, Antwerpen; Zoological Institute, Academy of Sciences, Sofia; Department of Biology, Laurentian University, Sudbury; Zoologisch Laboratorium, Catholic University, Nijmegen.

KEY TO THE GENUS *Lutrilichus* Fain, 1970  
 (Females)

1. Setae *d 1* and *d 2* in the shape of conical spines abruptly attenuated apically. Ventral modified setae of tarsi III and IV as long or longer than half of the length of these tarsi.....2
1. Setae *d 1* and *d 2* are simple, not or only slightly thickened at their base. Ventral modified setae of tarsi III and IV measuring less than half of the length of these tarsi.....4
2. Body from 288 to 345  $\mu$  long. Setae *sc i* and *sc e* equal or subequal, distinctly narrower than the *d 1*.....3
2. Body 429  $\mu$  long. Setae *sc i* and *d 1* subequal and much thicker than the *sc e*.  
 On *Hydrictis maculicollis kivuana*, Zaïre.....*L. schoutedeni* Fain, 1970
3. Setae *d 3* and *l 3* (the *e 3* of Beron) shorter and unequal (25-30  $\mu$  and 40-45  $\mu$ ). The *a e* and *l 4* (the *e 4* of Beron) equal, thin and short (12  $\mu$ ). Body 288  $\mu$  long.  
 On *Mustela nivalis*, Bulgaria.....*L. nivalis* Beron, 1973
3. Setae *d 3* and *l 3* much longer (95  $\mu$  to 105  $\mu$ ) and tapering very progressively toward the apex. The *a e* about twice as long (50  $\mu$ ) as the *l 4*. Body 345  $\mu$  long.  
 On *Mustela erminea*, Canada.....*L. canadensis* sp. nov.
4. Most of the dorsal setae more than 100  $\mu$  long. The *sc i* and *sc e* are 110 to 120  $\mu$  long.  
 On *Melogale orientalis*, Java.....*L. javanicus* Fain, 1970
4. Most of the dorsal setae less than 30  $\mu$  long. The *sc i* and *sc e* are 30 to 40  $\mu$  long. The *d 1* to *d 3* and *l 1* to *l 3* are 25  $\mu$  long.  
 On *Prionodon linsang*, Sumatra.....*L. linsang* Fain, 1970

**Acknowledgment**

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