LUTRACARUS CANADENSIS, N. G., N. SP. (ACARI: LISTROPHORIDAE) FROM THE RIVER OTTER, LUTRA CANADENSIS

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²U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Institute of Allergy and Infectious Diseases, Epidemiology Branch, Rocky Mountain Laboratories, Hamilton, Montana 59840, USA. Abstract. Lutracarus canadensis, n. g., n. sp., is described from the River Otter, Lutra canadensis. The same host also yielded specimens of Lynxacarus mustelae (Mégnin, 1885) (new host record). The new genus is clearly distinguished from Lynxacarus by the absence or vestigial state of the adanal suckers in the male and the presence of a ventral spine on tarsi III and IV of the female.

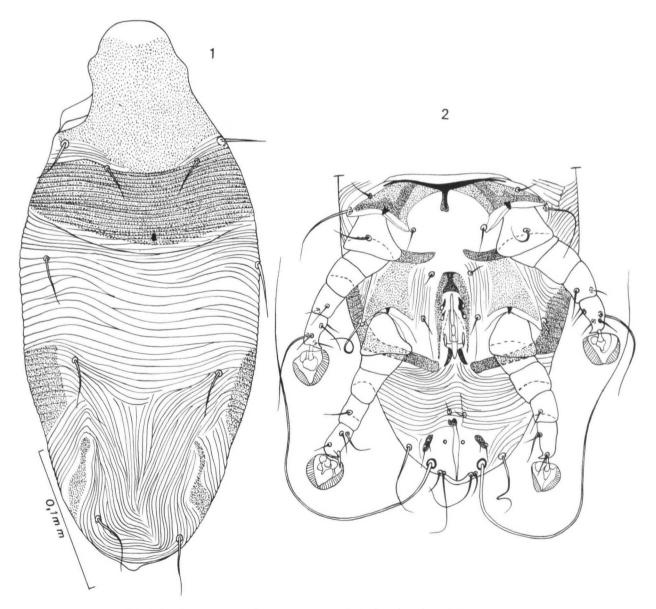


FIG. 1-2. Lutracarus canadensis, n. g., n. sp. 3: 1, dorsal surface; 2, hysterogaster.

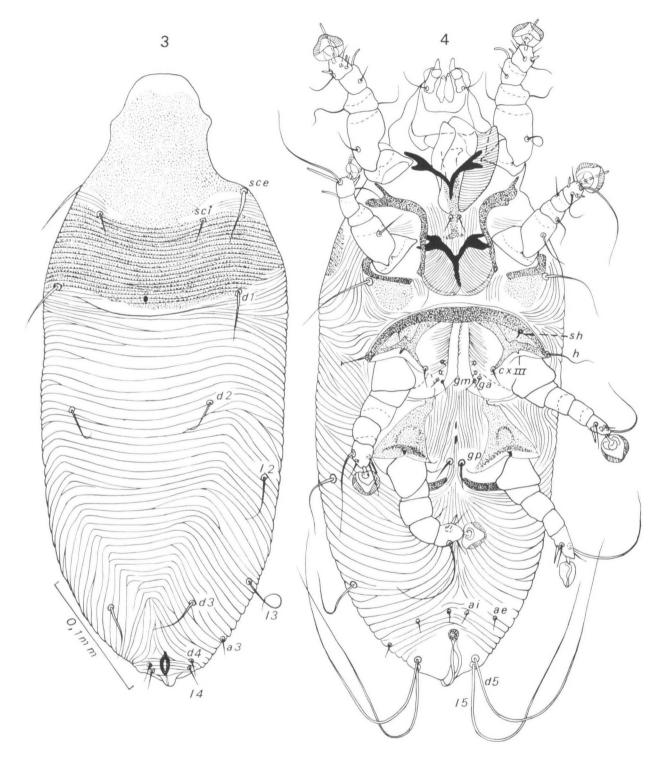


FIG. 3-4. Lutracarus canadensis, n. g., n. sp. 9: 3, dorsum; 4, venter.

The new genus and species, Lutracarus canadensis, that we describe here was found by Mr R. Wood, Biologist, State of Alaska Department of Fish and Game, on the River Otter, Lutra canadensis (Schreber), in southeastern Alaska. The new species was mixed with *Lynxacarus mustelae* (Mégnin, 1885), a well-known listrophorid commonly found on various Mustelidae in Europe and also

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recorded from North America (Fain & Hyland 1974, Fain 1978). The River Otter is a new host for *L. mustelae*.

Family LISTROPHORIDAE

Lutracarus Fain & Yunker, new genus

Definition. Distinguished from Lynxacarus Radford, 1951 in the \mathcal{S} mainly by absence or vestigial state of adanal suckers and by reduction of sclerite in front of penis, and in the \mathcal{P} by presence of a medium-sized ventral spine on tarsi III and IV. Chitinous, U-shaped, postanal frame of \mathcal{S} very poorly developed and incomplete. In both sexes postscapular shield entire and with numerous transverse striations. Other characters as in Lynxacarus.

Type species. Lutracarus canadensis, n. sp.

Lutracarus canadensis Fain & Yunker, new species FIG. 1-4

δ (Fig. 1-2). Idiosoma of holotype 376 µm long by 163 µm wide; of 4 paratypes: 349 μ m by 157 μ m, 375 μ m by 160 μ m, 380 μ m by 159 μ m and 390 μ m by 162 μ m. Posterior extremity rounded, without median incision. Opisthosoma short (90 µm long). Body setae rather short. Dorsum. Postscapular shield fused in its median part with prescapular shield, 60 μ m long at midline, bearing 30-40 striations at midline and about 30-35 striations laterally along a longitudinal line behind setae sc i. These striations formed from very small, pale punctations. Hysterosoma with 1 pair of small, lateral opisthosomal shields, which are not fused with paracoxal shields of coxae IV. Bases of setae sc e thick. Venter. Propodosoma as in Lynxacarus: a large, strongly sclerotized curved band connecting the posterior area of coxa I with the lateral prolongation of prescapular shield. Epimera III fused at midline. Adanal suckers either absent or very small and vestigial. The U-shaped postanal frame present in Lynxacarus (Lynxacarus) incomplete and represented only by 2 pairs of small, lateral punctate areas. Penis short and narrow, with a short anterior sclerite bearing only narrow and poorly sclerotized lateral arms. Legs. All ending in a large sucker. Posterior legs (III and IV) compressed laterally, rather large. Tarsi III and IV with a small, ventrally curved, apical process.

 (Fig. 3-4). Idiosoma of allotype 471 μm long by 189 μm wide; of 3 paratypes: 435 μm by 180 μm, 465 μm by 182 μm and 473 μm by 195 μm. Body setae rather short except *l* 1, *l* 2 and *l* 3 (50-60 μm) and *d* 5 and *l* 5 (about 150 μm). Dorsum. Postscapular shield 63 μm long in midline, fused in its median part with prescapular shield, bearing approximately 35-40 punctate striations at midline. Hysterosoma striated, without shields. Venter. Propodosoma as in \mathcal{J} . Epimera III fused at midline. Opisthosoma striated, without shields or scales. Anus ventro-terminal. Bursa not observed. Legs. Posterior legs smaller than in \mathcal{J} . Tarsi III and IV without apical curved process but bearing a ventral spine and several simple setae.

Holotype \mathcal{J} and 10 paratype \mathcal{J} , allotype and 25 paratype \mathcal{P} , on River Otter, Lutra canadensis (Schreber), ALASKA: George's Inlet, near Ketchikan, I.78, R. Wood, No. 5080. These specimens were mixed with a few specimens of Lynxacarus mustelae (Mégnin). Holotype, allotype and some paratypes in the U.S. National Museum of Natural History, Washington, D.C.; other paratypes in the Institut de Médecine Tropicale Prince Léopold, Antwerpen; Bernice P. Bishop Museum, Honolulu; and British Museum (Natural History), London.

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