TWO NEW MYOBIID MITES FROM WESTERN NORTH AMERICA (ACARI: MYOBIIDAE)

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ABSTRACT: Two new mites of the family Myobiidae are described from North America: Amorphacarus soricis sp. n. from Sorex bendirii and Acanthophthirius (Myotimyobia) oregonensis sp. n. from Pipistrellus hesperus.

There are presently four species of Acanthophthirius and two species of Amorphacarus (Myobiidae) known from North America (Fain and Whitaker, 1976; Whitaker and Wilson, 1974).

The purpose of this paper is to describe two new species of parasitic mites in this family, one from a bat and one from a shrew, from Oregon.

The types of these new species are deposited in the U.S. National Museum, Washington (Nos. 3838 and 3839, respectively).

Measurements are in micrometers unless otherwise indicated.

Amorphacarus soricis sp. n.

(Figs. 1-3)

To date, 6 species are known in the genus Amorphacarus Ewing 1938 (see Fain and Lukoschus, 1976). This new species is closest to A. alpinus Ono and Uchikawa 1975, described from Sorex shinto, Japan. It differs from the latter in both sexes by the smaller size and the much more lateral ic 4 setae. In the female, the gnathosoma is longer, the d 1 to d 4 setae are smaller, and the l 3 setae are absent. The male is distinguished by the much greater length of the v i and sc e and the shorter d 1 setae.

Coxae I-IV with 2-1(2)-0-0 setae. Leg chaetotaxy (number of setae on legs II-IV): trochanters 3-3-3, femora 5-2-2, genua, tibiae and tarsi 6-6-6.

Male (Fig. 2): Idiosoma in allotype 408 long and 215 wide. Dorsum.—setae v i and v e on sclerotized areas; setae v i 11 long. Setae sc e much longer (150) than v e (59). Length of setae d i 21. Venter.—as in female. The ic ic 4 very small and 70 apart. Penis long, with several loops. Genital orifice with a rather long sclerotized and recurved sheath for the penis. Legs thicker than in female. Leg I slightly asymmetrical.

Host and locality: Holotype female from Sorex bendirii (cm 3310), from Cascade, Lincoln Co., Oregon, 15 Aug. 1972 (coll. C. Maser). Allotype and 1 paratype female from the same host, in Big Lagoon, California, 25 June 1973 (coll. G. S. Jones). One paratype female from the same host, at 4 mi SE Bandon, 14 June 1972.

Acanthophthirius (Myotimyobia) oregonensis sp. n. (Figs. 4-6)

This new species is known only from the male holotype. On the basis of the key given by Fain and Whitaker (1976), this species appears to be close to A. klapaleki (Dusbábek 1963). It differs from the latter by the symmetrical aspect of the genital plate, the much greater length of the d 2, the presence of long l 1 and of three pairs of posterodorsal setae (absent in A. klapaleki).

Male (Figs. 4-6): Idiosoma (gnathosoma included) 414 long and 135 wide. Dorsum.—genital plate symmetrical, with 3 pairs of small setae. Penis 100 long. Most of setae thick, striated and not toothed. Setae sc i shorter (81) than sc e (126). The d 1 much shorter (69) than d 2 (140); setae l 1 154 long. Posterodorsal setae 34-40 long. Venter.—coxae I-IV with 2-3-0-1 setae; setae ic 2, ic 3, ic 4 65, 60 and 40-45 long, respectively. Distances ic 2-ic 2 = 55, ic 3-ic 3 = 60. Seta coxae IV 20 long. Gnathosoma small with posterolateral lobes dorsally. Legs II-IV relatively small, with rather long setae. Leg chaetotaxy II-IV: trochanters 3-3-3, femora 5-3-3, genua 7-6-5, and tibiae and tarsi 6-6-6.

Host and locality: Holotype male from Pipistrellus hesperus (cm 6539), Malheur Co., Oregon, 12 May 1975 (coll. C. Maser).

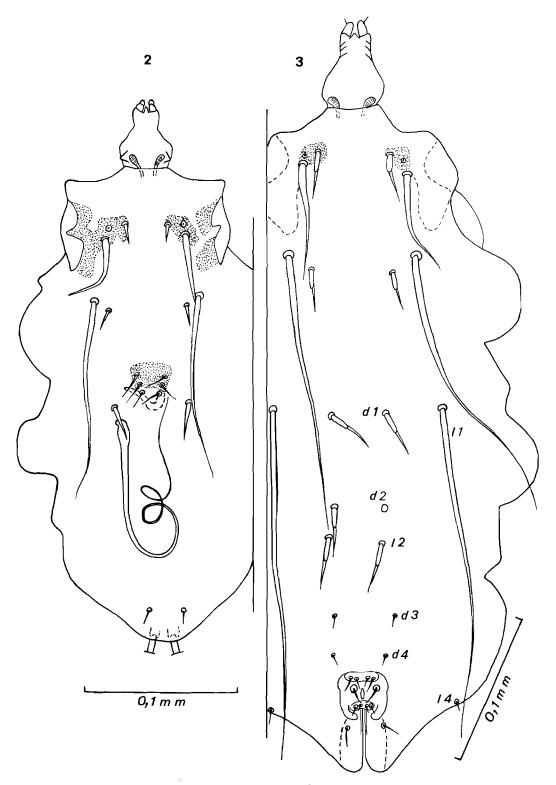
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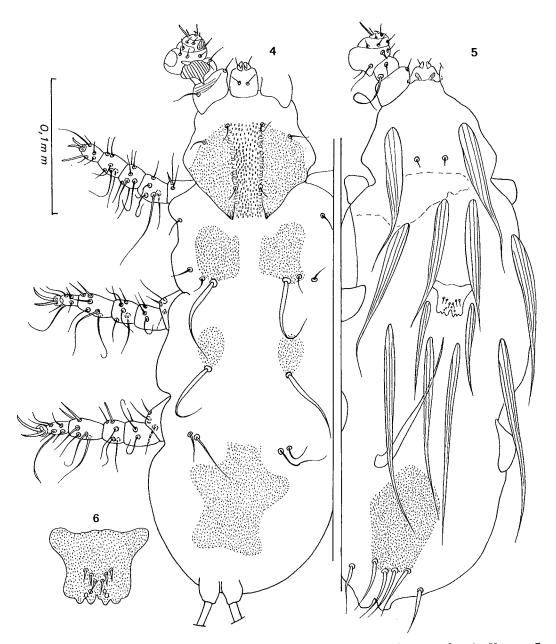
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FIGURE 1. Amorphacarus soricis sp. n. Female ventrally.



FIGURES 2-3. Amorphacarus soricis sp. n. 2. Male dorsally. 3. Female dorsally.



FIGURES 4-6. Acanthophthirius (Myotimyobia) oregonensis sp. n. Holotype male. 4. Venter. 5. Dorsum. 6. Genital area.

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