

ACANTHOPHTHIRIUS (MYOTIMYOBIA) NYCTICEIUS, NEW SPECIES (ACARI: MYOBIIDAE), FROM THE EVENING BAT, NYCTICEIUS HUMERALIS, IN THE USA

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Abstract. A new species of Myobiidae, *Acanthophtirius* (*Myotimyobia*) *nycticeius*, is described from a bat, *Nycticeius humeralis*, from Indiana, USA.

Five species of *Acanthophtirius* Perkins, 1925, subgenus *Myotimyobia* Fain, 1972 (myobiid mites of bats), one of which includes 2 subspecies, are presently known from North America. They are *A. caudatus caudatus* (Banks) and *A. lucifugus* Fain & Whitaker from *Myotis lucifugus*; *A. caudatus eptesicus* Fain & Whitaker from *Eptesicus fuscus*; *A. gracilis* Fain & Whitaker from *Myotis keenii* and *M. volans*; *A. lasiurus* Fain & Whitaker from *Lasiurus borealis* and *L. cinereus*; and *A. oregonensis* Fain & Whitaker from *Pipistrellus hesperus* (Fain & Whitaker 1976, 1978).

We have found an additional new species in this genus and subgenus, which we describe in this paper. It is from the Evening Bat, *Nycticeius humeralis*. All measurements are in micrometers (μm).

Acanthophtirius (*Myotimyobia*) *nycticeius* Fain & Whitaker, new species FIG. 1-3

♂. Holotype 486 long (including gnathosoma), 219 wide; paratype 444 long, 190 wide. *Dorsum*. Sexual orifice slightly anterior to level of coxae III. Genital plate with anterior corners prolonged into 2 anterior arms. Posterior margin asymmetrical, bearing 4 pairs of small spinelets. Penis straight or slightly curved, 150 long. Setae *d1* thick, striated, with a strong tooth in posterior $\frac{1}{2}$, 45 long. All other dorsal setae toothless. Setae *d2* thick and striated, only slightly attenuated posteriorly, 93 long, inserted close to *d1*. Setae *ve*, *sc e*, and *l1* striated, strongly attenuated posteriorly and 123, 165, and 195 long, respectively. Setae *vi* are microsetae. Setae *sc i* striated, 70-75 long. Setae *d4*, *d5*, and *l4* almost rodlike and 32 to 35 long. Setae *l5* terminal 375 long. *Venter*. Setae *ic 1* very thin and short; *ic 2* strong (90-105 long); *ic 3* very thin and

short (12 long), closer to lateral margin of body than to midline (distance *ic 3-ic 3* 135); *ic 4* strong (75 long). Coxal setae: coxa I with 2 small setae, coxa II with 1 external spine (33 long) and 2 internal thin setae (25-30 long), coxa IV with 1 thin seta (18 long). Number of setae on legs II-IV: trochanters 3-3-3, ventral setae formed as spines; femora 5-3-3, anterior one a spine; genua 6-6-6; tibiae 6-6-6; tarsi II with 5 thin setae, 1 thick unequal cylindrical seta (? eupathidia), and 1 solenidion; tarsi III and IV with 6-6 setae, some being spines.

♀. Represented by only an immature specimen still enclosed in its nymphal skin and badly folded. It is not possible to give an adequate description.

Type data. Holotype ♂, 1♂ paratype, 1N containing a ♀, ex *Nycticeius humeralis* (JOW 11999), USA: INDIANA: Jay Co, 8.VI.1983. Mites collected by J. Whitaker. Holotype in U.S. National Museum, Washington; paratype in the collection of A. Fain.

Remarks. Including the new species described here, the subgenus *Myotimyobia* contains 38 species and 3 subspecies, all from Vespertilionidae, and mostly from the genus *Myotis*.

The male of *A. (M.) nycticeius* has very short and thin setae *ic 3*. This character is shared by only 7 other species, all from *Myotis* spp.: *Acanthophtirius (M.) natalensis* (Lawrence, 1951); *A. (M.) gracilis* Fain & Whitaker, 1976; *A. (M.) polonicus* Haitlinger, 1978; *A. (M.) capaccinii* Uchikawa, 1981; *A. (M.) uenoi* Uchikawa, 1982; *A. (M.) spiralis* Uchikawa, 1982; and *A. (M.) pruinosi* Uchikawa, 1982. *Acanthophtirius (M.) nycticeius* is clearly distinct from all these species (in the male) by setae *d2* being very close to *d1*; in the other species these setae are far behind *d1*. Also, *ic 3* is close to the lateral margins of the body, while in the other species these setae are close to the midline. Moreover, the genital plate is only slightly asymmetrical and approximately as long as wide; in the other species this plate is either strongly asymmetrical (*natalensis*, *gracilis*, *polonicus*, and *uenoi*) or much longer than wide (*capaccinii*, *spiralis*, and *pruinosi*).

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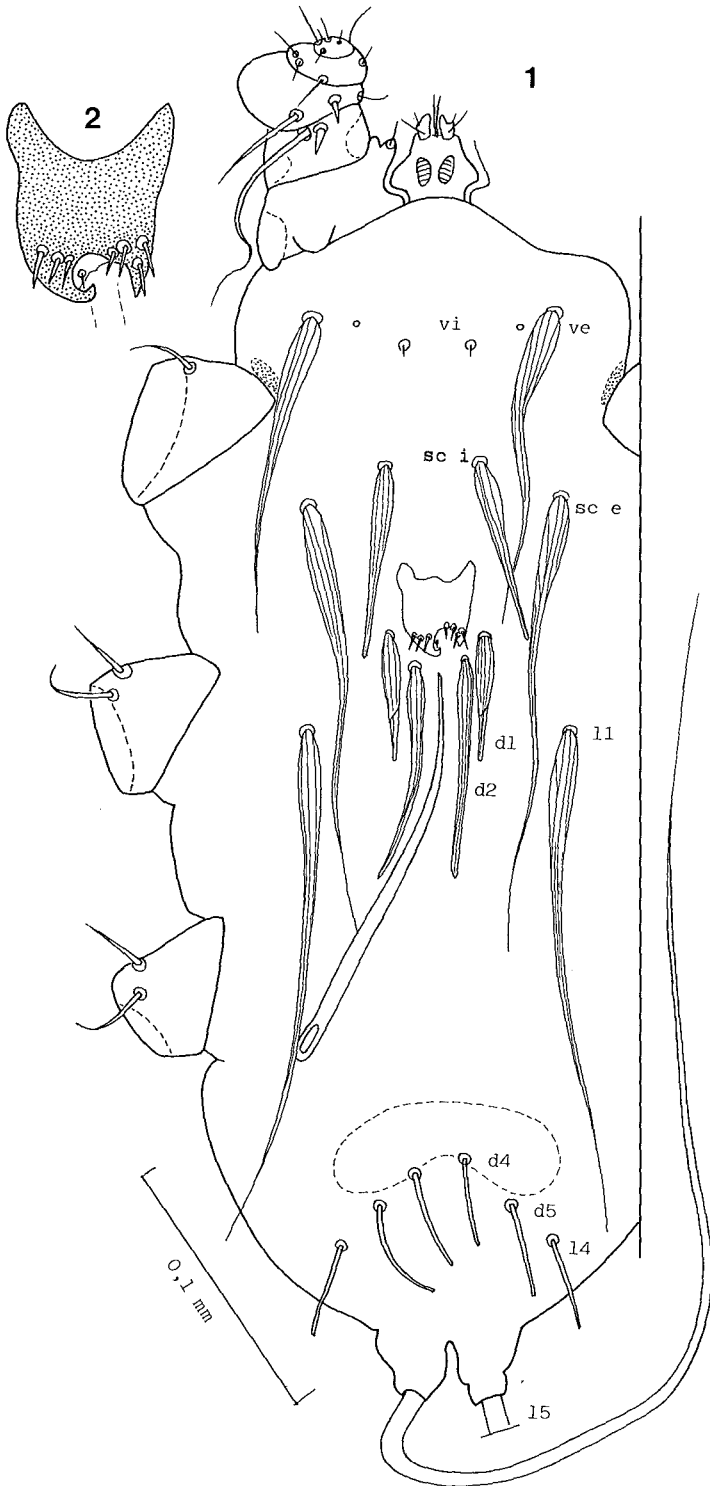


FIG. 1, 2. *Acanthophthirius (Myotimyobia) nycticeius*, ♂: 1, dorsal view; 2, genital plate.

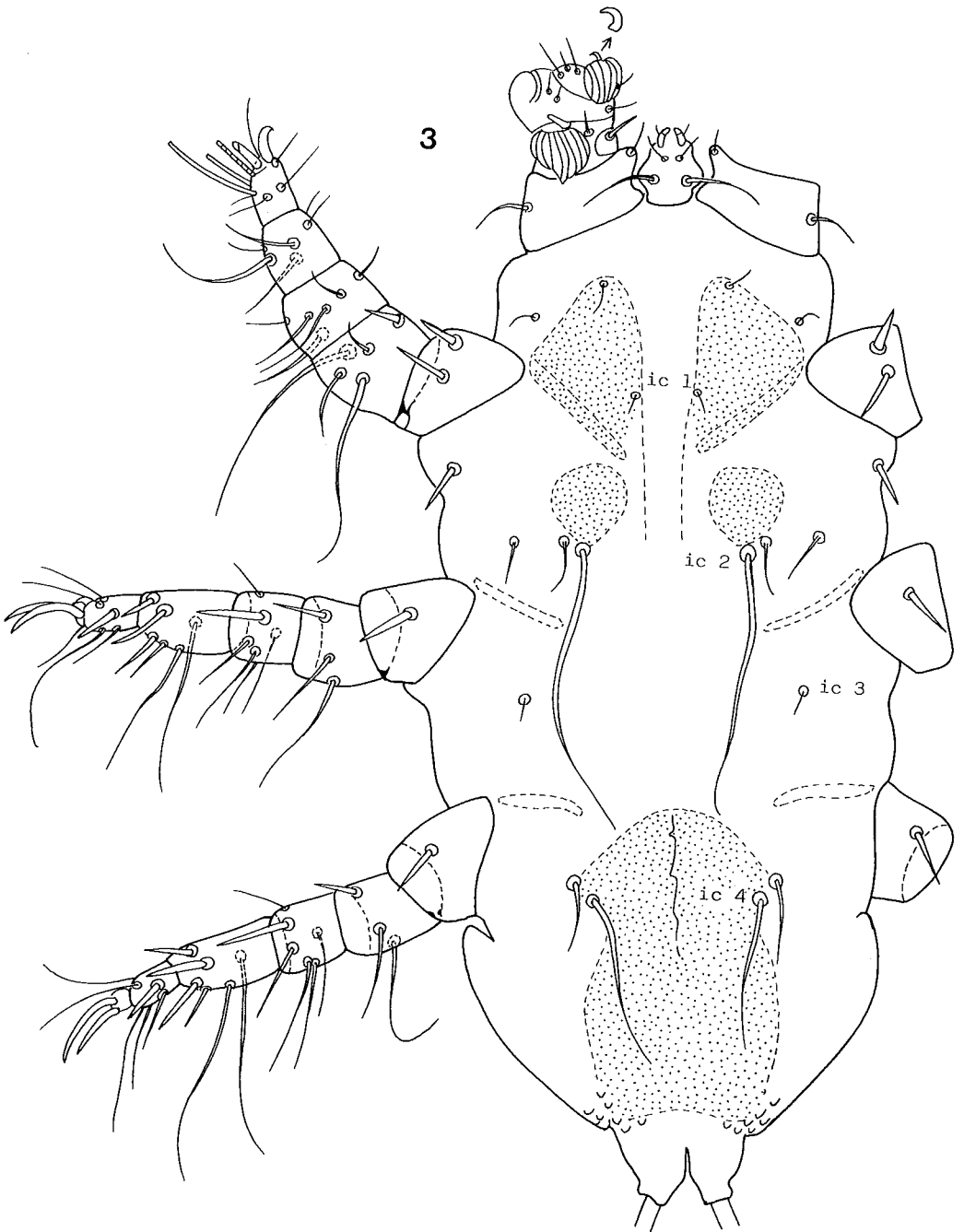


FIG. 3. *Acanthophthirus (Myotimyobia) nycticeius*, ♂, ventral view.

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