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ACANTHOPHTHIRIUS KOLENATII, A NEW SPECIES, AND SOME NEW RECORDS OF FUR-MITES (ACARINA: MYOBIIDAE AND LABIDOCARPIDAE) FROM ARMENIA

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Dedicated to Professor V. V. Kucheruk on the occasion of his 60th birthday

Abstract. A description of the female of a new species, *Acanthophthirius kolenatii* sp.n., is given. The species is very closely related to *A. poppei* (Trouessart, 1895) and *A. ethelbrehae* Perkins, 1925 and has been collected from *Pipistrellus kuhli* (Kuhl) in the Armenian S.S.R. The species *Pteracarus pipistrellius pipistrellius* (Radford, 1938) and *Alabidocarpus calcaratus calcaratus* Lawrence, 1952 are recorded from the territory of Armenia for the first time.

Only very few reports are available on bat parasitizing mites of the families Myobiidae and Labidocarpidae from the territory of the U.S.S.R. Recently Andreyko et al. (1968) recorded *Calcarmyobia rhinolophia* (Radf., 1940) from bats in Moldavia and some other undetermined myobiids as well as *Alabidocarpus calcaratus* Lawrence, 1952 from *Myotis blythi* Tomes. The same species from the same host was also reported by Dubovchenko (1966, 1968) from Azerbaijan. Of the family Myobiidae she recorded *Pteracarus minutus* (Radf., 1940) from *Myotis blythi* Tomes, *Calcarmyobia rhinolophia* (Radf., 1940) from *Miniopterus schreibersi* (Kuhl) and three other unidentified species from bats.

During investigations of bat parasites in the Armenian S.S.R. carried out by the junior author, only one species of labidocarpid and two species of myobiid mites have been found. One of them proved to be a hitherto undescribed species for which we propose the name *Acanthophthirius kolenatii* sp.n.

Acanthophthirius kolenatii sp. n.

Type series: Female, holotype and 1 female, paratype, ex *Pipistrellus kuhli* (Kuhl), Chiman, Artashat Region, Armenian S.S.R., June 8, 1973, lgt. E. S. Arutunian. The holotype is deposited in the collection of the Institute of Parasitology, Czechoslovak Academy of Sciences, Prague. The paratype is deposited in the Institute of Zoology, Academy of Sciences of the Armenian S.S.R., Erevan.

Female (Holotype) (Fig. 1): Body elongated, integument finely transversely striated, only the areas between coxal setae smooth, without such striae.

Idiosoma: Dorsal setae moderately expanded, striated, without a barb, only d_4, d_5 and l_3 are setiform. Series of dorsal setae (d_1—d_5) complete, lateral series lacking l_4 setae. Setae *v i* shorter than *sc i*, l_1 longer than *sc i*. Setae d_1 — d_3 and l_2 subequal in form and length, expanded and striated, smooth, setae d_4, d_5 and l_3 also subequal,

setiform and relatively long. On venter only coxal and paragenital setae are developed and are discussed together with chaetotaxy of legs and of genito-anal complex. Genito-anal complex: Vulva with two finger-like vulvar valves. Four pairs of genital setae, g_1 and g_2 being setiform to spine-like, bluntly ended, g_1 longer and situated terminally on the genital conus, g_2 shorter and situated dorsally on the conus. Setae g_4 and g_5 very short, situated at dorsal edge of genital opening, functionally attached to the copulatory apparatus, g_4 setiform, very fine, g_5 thorn-like and slightly curved. Three pairs of anal setae, $a\ i$ spine-like and slightly curved, $a\ e$ setiform and

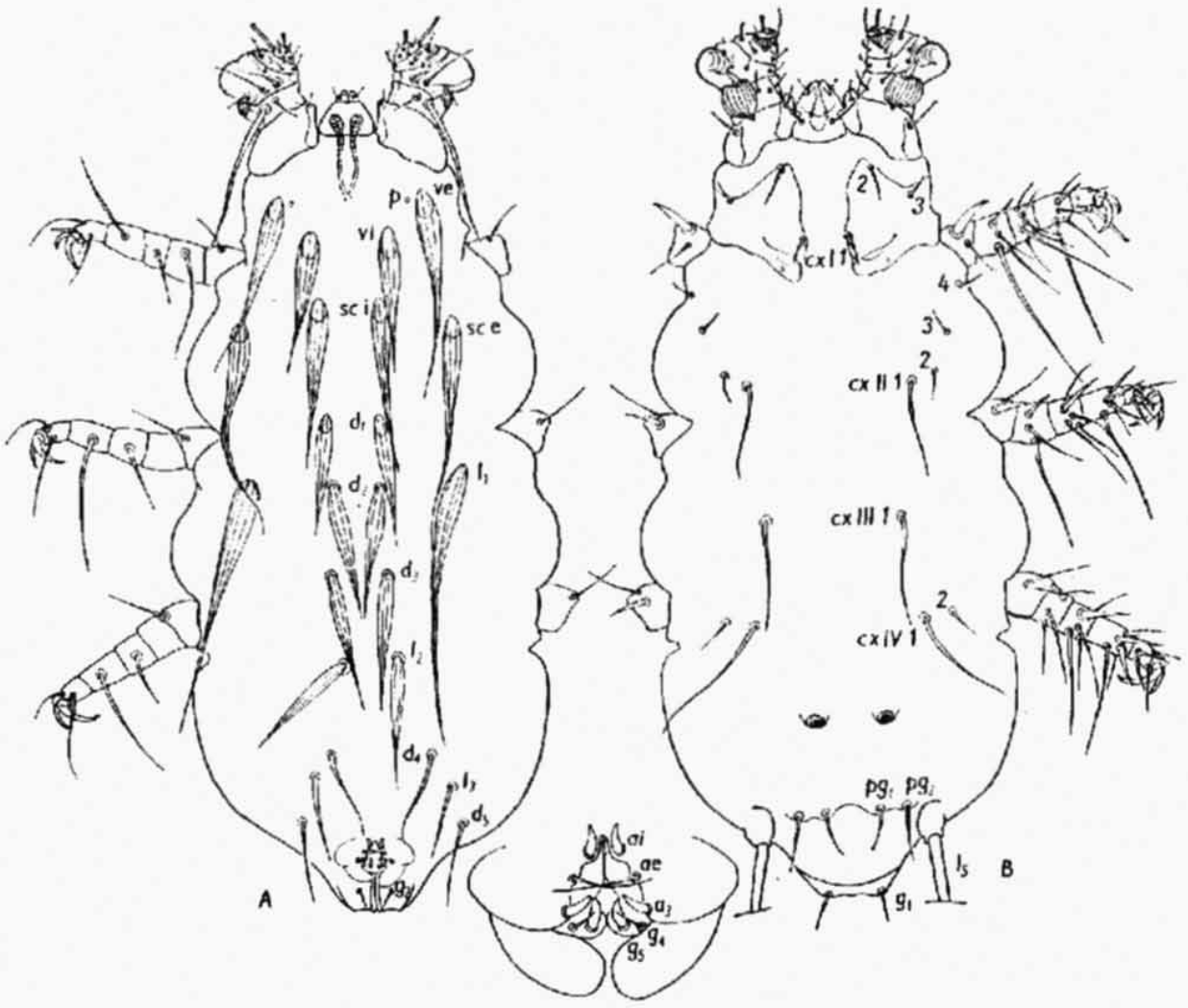

Fig. 1. *Acanthophthirius kolenatii* sp. n., female. A — dorsal view, B — ventral view, C — vulva.

long, a_3 spine-like, resembling genital hooks. Two pairs of setiform paragenital setae (pg_1 and pg_2) form ventrally a transverse row at the level of l_5, the inner pair (pg_1) being shorter than the outer one (pg_2).

Legs: The structure of legs I typical for the genus, bearing broad shell-like striated formation on venter of femur and one similar triangular formation on venter of tarsus. Finger-like sensory seta on dorsum of femur I present. One of the dorsal setae on genu I spine-like. Tarsus I with two small curved claws, tarsus II with two unequal curved claws, tarsus III and IV each with two unequal straight claws. The leg chaetotaxy as follows:

cx	3—4—1—2	ge	7—7—6—6
tr	3—3—3—3	ti	6—6—6—6
fe	5—5—3—3	ta	6—6—6—6

The leg solenidiotaxy as follows: ge 1—1—0—0 ta 3—2—0—0
All coxal setae setiform, only the first pairs of *cx* II, III and IV long, the others relatively short. Ventral setae on tibiae II—IV spine-like, similarly as antero-ventral setae on free segments of legs II—IV, with the exception of tarsus II. The thickest setae are antero-ventral seta on trochanter II and medio-ventral seta on trochanters III and IV. Femora III and IV lacking dorsal setae.
Measurements (in microns, the holotype first): Body L. 547 (534), W. 262 (283); *v e* 131 (138); *v i* 86 (88); *sc e* 175 (165); *sc i* 114 (116); d_1 85 (88); d_2 86 (92); d_3 90 (80); d_4 57 (59); d_5 45 (43); l_1 210 (210); l_2 85 (83); l_3 58 (60); l_5 326 (323); pg_1 29 (21); pg_2 40 (31).

Female of the new species is very closely related to *Acanthophthirius etheldredae* Perkins, 1925, but it differs in a more thickset body, in longer body setae, mostly *v e*, *v i*, l_2 etc. and in narrower *v e* and other dorsal setae (Tab. 1). The female of

Table 1. Comparative measurements of females of three species of *Acanthophthirius* (in microns)

	A. kolenatii sp.n.	*A. etheldredae*	*A. poppei*
Body L.	534—547	496—566	497
W.	262—283	205—237	213
v e	131—138	113—119	104
v e width	16—17	18—19	19
v i	86—88	76—79	76
sc e	165—175	149—164	149
sc i	114—116	113—117	114
d_1	85—88	73—83	78
d_2	86—92	71—85	76
d_3	80—90	76—82	78
d_4	57—59	46—54	46
d_5	43—45	35—43	38
l_1	210	196—205	200
l_2	83—85	66—74	—
l_3	58—60	47—56	50
l_5	323—326	324—364	—
pg_1	21—29	19—21	23
pg_2	31—40	26—31	33

Material measured: *A. kolenatii* sp.n. — holotype and paratype described; *A. etheldredae* — five females from *Pipistrellus pipistellus* (Schreber) from Czechoslovakia; *A. poppei* — one female from *Pipistrellus nathusii* (Keys. et Blasius) from Switzerland.

A. kolenatii sp.n. can be separated from *A. poppei* (Trouessart, 1895), dimensions of which agree with *A. etheldredae*, on the basis of the same features.
Derivatio nominis: The new species is dedicated to Fridrich Anton Kolenati, famous Czech naturalist, one of the founders of modern acarology, who visited the Caucasus during his scientific expeditions and work in Russia.

Pteracarus pipistrellius pipistrellius (Radford, 1938)

Only one female specimen has been collected on the same occasion as *Acanthophthirius kolenatii* sp.n. on *Pipistrellus kuhli* (Kuhl), captured in Chinan, Artashat

Region, Armenian S.S.R., June 8, 1973, lgt. E. S. Arutunian. The re-description of species and distribution records have been recently given by Dusbábek (1973).

Alabidocarpus calcaratus calcaratus Lawrence, 1952

Two females have been collected on *Myotis blythi oxygnathus* (Monticelli) in the environs of Erevan, "Karmir-Blur", May 29, 1973, and on *Plecotus auritus* L. in Vedy Region, "Khosrov" Reservation, June 6, 1973. The specimens fully agree with the re-description of species given by Fain (1971).

НОВЫЙ ВИД КЛЕЩА *ACANTHOPHTHIRIUS KOLENATII* SP. N. И НЕКОТОРЫЕ НОВЫЕ СВЕДЕНИЯ О ВОЛОСЯНЫХ КЛЕЩАХ (ACARINA: MYOBIIDAE И LABIDOCARPIDAE) ИЗ АРМЕНИИ

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Резюме. Дано описание самки нового вида клеща *Acanthophthirius kolenatii* sp. n., очень близкого видам *A. poppei* (Trouessart, 1895) и *A. etheldredae* Perkins, 1925 и полученного от *Pipistrellus kuhli* (Kuhl) в Армянской ССР. Виды *Pteracarus pipistrellius pipistrellius* (Radford, 1938) и *Alabidocarpus calcaratus calcaratus* Lawrence 1952 зарегистрированы на территории Армении в первый раз.

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