# A new species of Eudusbabekia Jameson, 1971 (Acari: Myobiidae) parasitising Rhinophylla pumilio Peters (Chiroptera: Phyllostomidae) from Ecuador 

A. Fain ${ }^{1}$ \& A.V. Bochkov ${ }^{2}$<br>${ }^{1}$ Institut Royal des Sciences Naturelles de Belgique, Rue Vautier 29, B - 1000, Bruxelles, Belgique<br>${ }^{2}$ Zoological Institute, Russian Academy of Sciences, 199034, St Petersburg, Russia

Accepted for publication 19th October, 2001


#### Abstract

The mite Eudusbabekia rhinophylla n. sp. is described from the bat Rhinophylla pumilio Peters in Ecuador. It is considered to be a member of the subgenus Eudusbabekia, differing from other representatives of this group by the lanceolate shape of the coxal setae.


## Introduction

Eudusbabekia Jameson, 1971 previously included 28 species divided into two subgenera, Eudusbabekia (27 species) and Synoecomyobia Lukoschus et al., 1981 (one species) (Dusbábek \& Lukoschus, 1975; Lukoschus et al., 1981; de la Cruz \& Abreu, 1984; Uchikawa, 1987). All representatives of this genus are associated with American bats of the families Phyllostomidae and Mormoopidae (Chiroptera).

We describe here a new species of this genus from a bat, Rhinophyyla pumilio Peters (Phyllostomidae), in Ecuador.

## Materials and methods

The mites described here, were collected by the senior author, from a spirit-stored specimen of R. pumilio housed in the mammal collection of The Natural History Museum, London.

The mites were mounted in Hoyer medium (chloral gum) and examined with a phase-contrast microscope.

The nomenclature of the idiosomal chaetotaxy follows Fain (1973). All the measurements are in micrometres.

Eudusbabekia (E.) rhinophylla n. sp.
Type-host: Rhinophylla pumilio (Chiroptera: Phyllostomidae).
Type-locality: Santiago Province, Ecuador.
Specimens deposited: Female holotype (BMNH(E) 2001-141) from host no. 78. 1440-51 is deposited in the Arachnida collection of The Natural History Museum, London; a single female paratype from the same host specimen is in the Institut Royal des Sciences Naturelles de Belgique, Brussels.

Description (Figures 1-4)
Female (holotype).
Gnathosoma longer than wide dorsally and wider than long ventrally, bears one pair of ventral lobes.
Body, including gnathosoma, 460 long (500 in paratype) and 215 wide (225).
Dorsum. Setae vi, ve, sci, sce and dl-d3 lanceolate and striate; $d 4$ narrowly lanceolate and striate only on one side in holotype and on both sides in paratype; $d 5$ rod-like. Setae $11-13$ lanceolate and striate; 14 setiform. Setae sci situated slightly posterior to sce; sce-sci distance 15 . Vulva with well-developed lobes; setae $a e$ and $g 3$ setiform; $a i$ and $g 1$ club-like; $g 2$ short, mushroom-shaped.
Venter. Setae icl short; ic2-ic4 long. All coxal setae lanceolate and striate, except cxII-3 which are setiform


Figures 1-4. Eudusbabekia himophylla n. sp., female. 1. Dorsal view. 2. Ventral view. 3. Vulva. 4. Leg III in ventral view.
and very short. Two pairs of rod-like paragenital setae ( $p g 1$ and $p g 2$ ) present, situated posterior to 15 on smooth integument; pg1-15 distance 33. Length and width of setae: vi $50 \times 8$; ve $90(115) \times 20$; sci 85 $(100) \times 10$; sce and $l l \mathrm{c} .100 \times 8 ; d l-d 3, l 2$ and 13 c. $65 \times 6-7$ wide; $d 460(55) \times 4-5$. Length of other setae: 1425 ; d5 16 (20); ic1 17; ic2 85; ic3 90; ic4 100; pgI and pg2 c.20; cx I-1, 2 c .35 ; cx I-1; cx II-1 35; cx II-2 55; cx II-3 15; cx III-1 50; cx IV-1 40. Setae cx I-1, 23 wide; other coxal setae 8 wide.
Legs. Trochanter I prolonged apically and with ventromedian retrorse projection. Inner dorsal seta of trochanter I slightly thickened, without barb. Tibiotarsus I with ventral striated scale. Tarsi II-IV with large claw. Ventral setae of tarsi II-IV strongly spinelike. Leg II-IV chaetotaxy: trochanters 3-3-3; femora 5-3-1; genua 7 (+ solenidion)-6-6; tibiae 6-6-6; tarsi 6 $(+$ solenidion) -6-6.

Male. Unknown.

## Discussion

This new species differs from all the representatives of the subgenus Eudusbabekia by the lanceolate shape of the coxal setae. It is closest to Eudusbabekia (E.) glossophaga Dusbábek \& Lukoschus, 1975, known from Glossophaga soricina soricina (Chiroptera: Phyllostomidae) in Surinam and French Guiana (Dusbábek \& Lukoschus, 1975). In females of both species, setae $l 4$ and two pairs of paragenital setae are present, setae sci are expanded' and striated and trochanter I bears an antero-lateral protrusion. These species can be distinguished from each other by the following characters:

In E. rhinophylla n. sp., setae $v i$ are lanceolate striate, setae sce and $l l$ remain far from the levels of setae $l 2$ and $l 3$, respectively, setae $l 3$ are striated and setae $p g 2$ are situated posterior to pg 1 .
In E. glossophaga, setae $v i$ are thin and short, setae sce and $l l$ reach the levels of setae $l 2$ and $l 3$, respectively, setae $l 3$ are not striated and setae $p g 2$ are situated at the level of $p g l$.

## Acknowledgement

For this project, Dr A. V. Bochkov was the recipient of a grant from the Belgian Federal Services for Scientific, Technical and Cultural Affairs.

## References

de la Cruz, J \& Abreu, R. (1984) Ectoparasitos de los murciélagos cubanos de la Coleccion "Charles T. Ramsden" (I). Poeyana, 281, 1-19.
Dusbábek, F. \& Lukoschus, F.S. (1975) Parasitic mites of Surinam. XXXIV. Mites of the genus Eudusbabekia (Myobiidae: Trombidiformes) of phyllostomid and desmodontid bats, with a key to known species. Acarologia, 17, 306-319.
Fain, A. (1973) Notes sur la nomenclature des poils idiosomaux chez les Myobiidae avec description de taxa nouveaux (Acarina: Trombidiformes). Acarologia, 15, 279-309.
Lukoschus, F.S., Scheperboer, G., Mendéz, E. \& Fain A. (1981). Eudusbabekia (Synoecomyobia) artibei, new subgenus, new species (Acarina: Prostigmata: Myobiidae), infesting the phyllostomid bat Artibeus phaeotis in Panama. Pacific Insects, 23, 478-486.
Uchikawa, K. (1987). Myobiid mites (Trombidiformes: Myobiidae) associated with the vampire bats (Chiroptera: Phyllostomatidae) and information on host taxonomy deduced from them. Journal of Parasitology, 73, 640-645.

