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A new quill mite species *Bubophilus asiobius* sp. n. from the Long-eared Owl *Asio otus* (Strigiformes: Strigidae) (Acari: Syringophilidae)

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ABSTRACT. A new species of the quill mites *Bubophilus asiobius* sp. n. (Acari: Syringophilidae) is described from the Long-eared Owl *Asio otus* (Strigiformes: Strigidae) captured in Poland.

Key words: acarology, taxonomy, new species, Acari, Syringophilidae, *Bubophilus*, *Asio otus*.

INTRODUCTION

The genus *Bubophilus* was established by PHILIPS and NORTON (1978) for single species *B. ascalaphus* PHILIPS et NORTON, 1978 ex the Great Horned Owl *Bubo virginianus* (Strigiformes: Strigidae) from USA. The present paper contains a description of the second species of this genus, *Bubophilus asiobius* sp. n., that was collected from quills of the Long-eared Owl *Asio otus* (Strigiformes: Strigidae) from Poland.

The nomenclature of idiosomal setae is based on that of FAIN (1979), in the version adapted for the family Syringophilidae (BOCHKOV & MRONOV, 1999). The terminology and leg chaetotaxy follow these of KETHLEY (1970). All measurements are given in micrometers (µm).

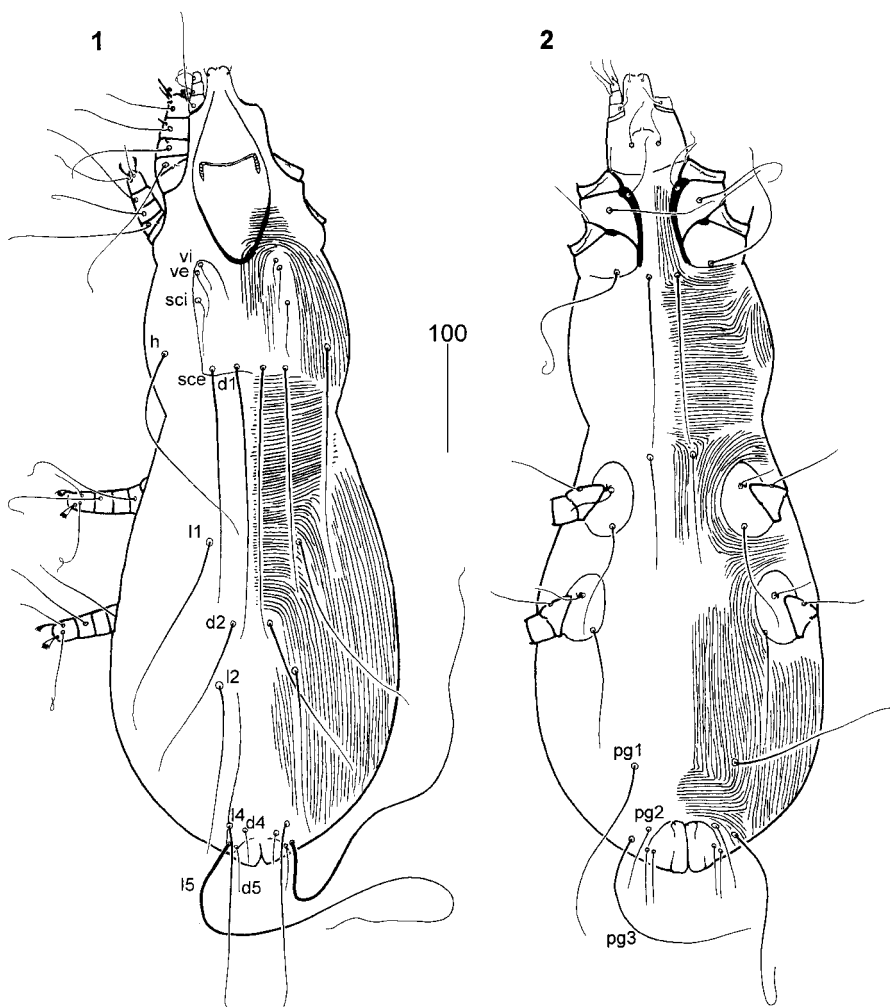
The set of setal measurements in the holotype is incomplete, because some setae are broken.

The holotype and most of the paratypes are deposited at the Department of Animal Morphology of A. Mickiewicz University, Poznań, Poland, other paratypes – at the Zoological Institute of the Russian Academy of Sciences, Sankt-Petersburg, Russia.

***Bubophilus asiobius* n. sp.**

ETYMOLOGY

Combination of *Asio*, the generic name of the host, and *bios* (Gr., life).

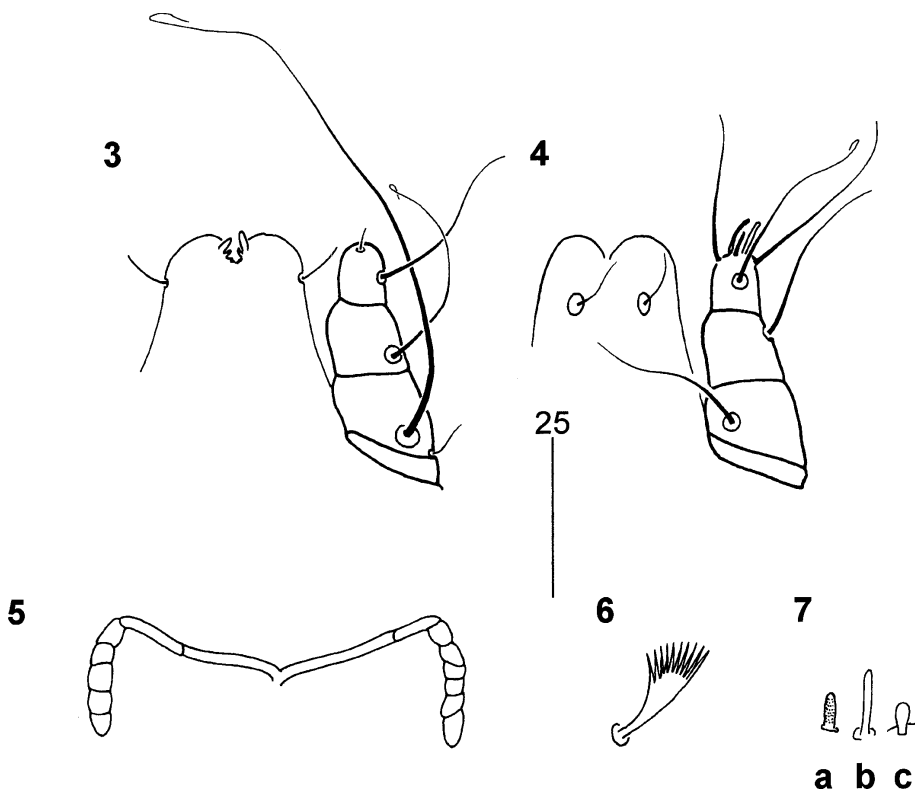


1, 2. *Bubophilus asiobius* sp. n., female: 1 - dorsal view, 2 - ventral view

DESCRIPTION

Female (Figs. 1-7). Total length of holotype 715 (695-770 in 11 paratypes), width at level of setae *h* 180 (170-200). Gnathosoma: Hypostomal apex smooth, hypostomal lips tongue-like (Fig. 3, 4). Stylophore 190 (180-185) in length, slightly tapering posteriorly, not extending beyond the propodosomal plate. Peritremes: lateral branch with 1-2 chambers, longitudinal branch with 4-6 chambers (Fig. 5).

Dorsal idiosoma: Cuticular striations as in Fig. 1. Propodosomal plate weakly sclerotized, with deep cleft on anterior margin. Setae *vi*, *ve*, *sci*, *sce* and *d1* situated on propodosomal plate. Hysterosomal plate absent. Pygidial plate well developed, with indistinct anterior margin. Distances *l1-d2* and *l2-d2* subequal or setae slightly closer to *l1* than to *l2*. Length of setae: *vi* 27 (25-30); *ve* 50 (40-55); *sci*: 57 (50-70); *sce* (225-260); *h* 196 (200-255); *d1* (250-275); *d2* (145-170); *d4* 30 (35-40); *d5* 52 (40-45); *l1* (175-185); *l2* 152 (140-170); *l4* 166 (160-205); *l5* 420 (435-485). Anal setae *a1* and *a2* subequal 27 (25-30).



3-7. *Bubophilus asiobius* sp. n., female: 3 - gnathosoma, dorsal view, 4 - gnathosoma, ventral view, 5 - peritremes, 6 - setae *a* IV, 7 - solenidia: a - ω on tarsus I, b - ϕ on tibia I, c - σ on genu I

Ventral idiosoma: Cuticular striations as in Fig. 2. Length of setae: *ic1* (135-165); *ic3* (105-120), *pg1* 168 (175-195); *pg2* 71 (70-85); *pg3* (195-220), *gl* 45 (40-45); *g2* 40 (40-50).

Legs. Epimeres I slightly divergent, fused to epimeres II. Coxae III and IV weakly sclerotized. Setae *tc* 'III and IV each about " length of *tc* 'III and IV. Setae *a* ' and *a* '' III-IV with 8-12 tines (Fig. 6). Solenidia as in Fig. 7. Length of setae: *1b* 63 (60-70); *2b* 157 (145-160); *3b* 45 (40-45); *sc1* 27 (25-30); *sc2* (45-50); *sc3* 54 (55-65); *sc4* (45-60).

Male. Unknown.

DIAGNOSIS

The female of new species differs from *B. ascalaphus* in the following characters: in *B. asiobius* sp. n. the body length is 695-770, the length of setae *vi*, *ve* and *sci* are 25-30, 40-55 and 50-70 respectively; in *B. ascalaphus* the body length is 560-645, the lengths of setae *vi*, *ve* and *sci* are 40-53, 70-110 and 110-190 respectively.

TYPE MATERIAL

Holotype female (coll. No. S 6.1), paratypes 15 females, 7 nymphae and 6 larvae ex *Asio otus* (tail feathers). 6 km NW from Darłówko Wschodnie; Poland; 30th October 1999; M. SKORACKI & W. BUSSE coll.

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