

A NEW SPECIES OF THE GENUS SYRINGOPHILOPSIS KETHLEY, 1970 (ACARI: PROSTIGMATA: SYRINGOPHILIDAE) FROM THE TREE PIPIT ANTHUS TRIVIALIS (PASSERIFORMES: MOTACILLIDAE)

НОВЫЙ ВИД КЛЕЩА РОДА SYRINGOPHILOPSIS KETHLEY, 1970 (ACARI: PROSTIGMATA: SYRINGOPHILIDAE) С ЛЕСНОГО КОНЬКА ANTHUS TRIVIALIS (PASSERIFORMES: MOTACILLIDAE)

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ABSTRACT

A new quill mite species, *Syringophilopsis blaszaki* sp. n. is described from the Tree Pipit *Anthus trivialis* captured in Poland.

РЕЗЮМЕ

Описан новый вид очинного клеща, *Syringophilopsis blaszaki* sp. n., с лесного конька *Anthus trivialis* из Польши.

Quill mites of the family Syringophilidae are permanent parasites of birds. These mites inhabit quills of different feathers (primaries, secondaries, coverts of wings and tail). They feed on soft tissue fluids of birds by piercing the quill wall with long stylet-like chelicerae [Kethley, 1971; Casto, 1974]. Taking into consideration this way of feeding the Syringophilidae can be listed among possible disease vectors [Clark, 1964].

The present paper gives a description of one new species of the genus *Syringophilopsis* Kethley, 1970 found on the tree pipit *Anthus trivialis* in Poland. The genus *Syringophilopsis* includes nine species: *S.elongatus* (Ewing, 1911), *S.fringilla* (Fritsch, 1958), *S.troglodytis* (Fritsch, 1958), *S.turdus* (Fritsch, 1958), *S.passerina* (Clark, 1964), *S.hylocichla* (Clark, 1964), *S.hunanensis* Liu Bai-li 1988, *S.sturnus* Chirov et Kravtsova, 1995, *S.acrocephali* Skoracki, 1999 [Clark, 1964; Kethley, 1970; Liu Bai-li, 1988; Chirov, Kravtsova, 1995; Kivganov, Sharafat, 1995; Bochkov, Mironov, 1998; Skoracki, 1999].

Mite specimens were collected from quills of wing feathers (secondaries) and stored in vials with 70% ethanol. Subsequently, they were mounted in a polyvinilolactophenol medium in microslides. The morphological terminology and setal designations used in the descriptions follow those of Kethley [1970, 1973]. All measurements are given in micrometers (µm).

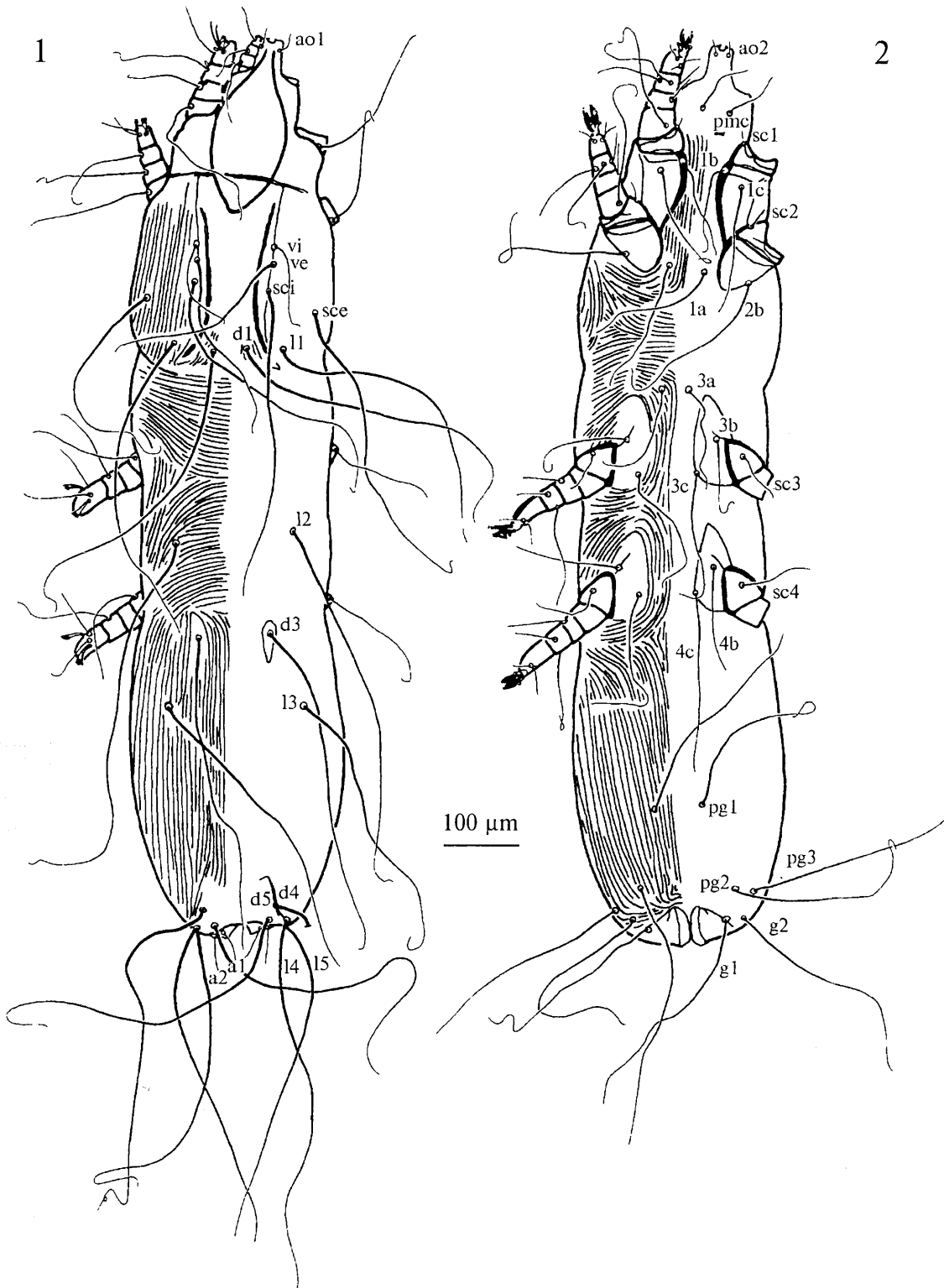
***Syringophilopsis blaszaki*
Scoracki et Dabert sp. n.**

Female (Figs. 1, 2). Total length of holotype 1200 (in paratypes 1192–1228), propodosoma width 273 (257–275).

Gnathosoma: Apical margin of hypostome with one pair of median protuberances (Fig. 3). Chelicerae dentate. Stylophore 236–257 long, rounded posteriorly. Peritremes M-shaped, each lateral branch with 4–6 chambers, each longitudinal branch with 10–11 chambers (Fig. 4).

Idiosoma: Propodosomal plate ornamented, anterior and posterior margins indistinct. Setal pattern of propodosomal region with six pairs of setae, arranged 3–1–2. Setae *vi*, *ve* and *sci* situated on plate or near margins. Setae *d3* closer to *l3* than to *l2*. Pygidial plate present, bearing setae *l4*, *l5*, *d4*, *d5*, anterior margin indistinct. Setae *a'*, *a''* of tarsi I–IV multiserrate. MCA1 divergent, fused to MCA2 at anterior part of MCA2. Length of sectors: **m** 16; **s** 71–76 (Fig.5).

Length of setae and distances between setal bases: *ao1* 23; *ao2* 29; *vi* 126–142; *ve* 236–252; *sci* 425–478; *sce* 450–471; *l1* 450–460; *d1* 425–471; *vi-ve* 21–25; *vi-vi* 93; *ve-ve* 89; *ve-sci* 21–23; *sci-l1* 90–96; *sci-sci* 95; *sce-sce* 202; *d1-d1* 36–39; *d1-l1* 53–57; *l2* 418–470; *d3* 450; *l3* 428–443; *l2-d3* 140–160; *d3-l3* 104–118; *l3-l3* 161–170; *l2-l2* 150; *d3-d3* 93; *d4* 471–510; *d5* 482–446; *d4-d4* 100; *d5-d5* 61; *l4* 511; *l5* 471–490; *a1*, *a2* 57; *g1* 262; *g2* 295–303; *pmc* 89–113; *pmc-pmc* 30–37; *sc1* 28–30; *sc2* 36–41; *sc3* 64–73; *sc4* 66–82; *la* 196–232; *pmc-la* 205; *la-la* 40–46; *lb* 109–118; *lb-lb* 60; *lc* 177–193; *lc-lc* 129; *2b* 207–244; *lc-2b* 120; *3a* 191; *la-3a* 170; *3a-3a* 27; *3b* 145–170; *3c* 238–271; *4b* 152; *4c* 241–250; *3b-4c* 205; *4b-4c* 45; *pg1* 250–255; *pg2* 293–300; *pg3* 304–355; *pg1-pg1* 82–85; *pg2-pg2* 125; *pg1-pg2* 87–91; *pg2-pg3* 30.



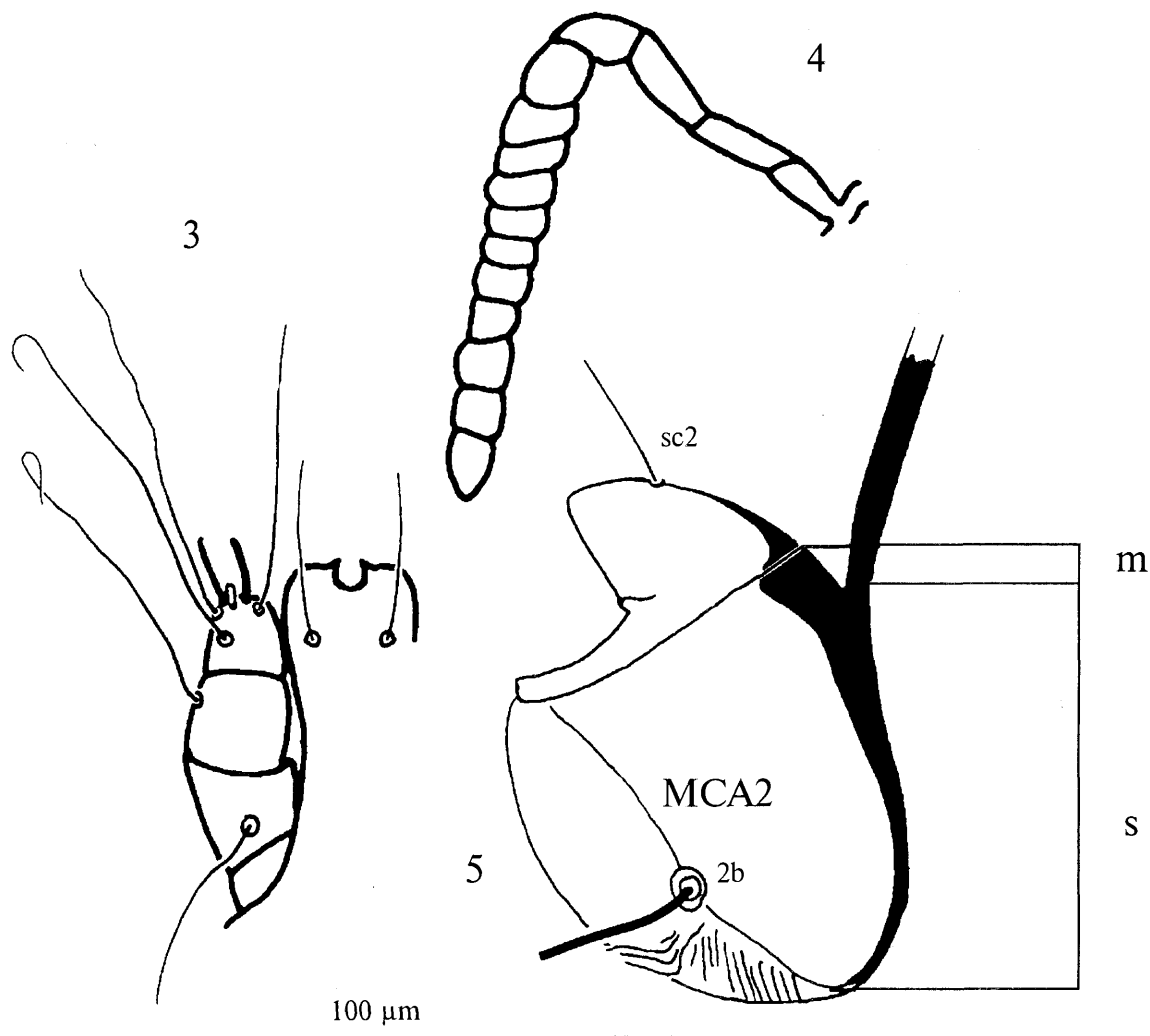
Figs. 1, 2. *Syringophilopsis blaszaki* sp. n., female. 1 — dorsal view; 2 — ventral view.
 Рис. 1, 2. *Syringophilopsis blaszaki* sp. n., самка. 1 — дорсально, 2 — вентрально.

Male (Figs. 6–7). Total length 829–871, propodosoma width 257–264.

Gnathosoma: Apical margin of hypostome smooth. Chelicerae dentate. Stylophore 200–207, rounded posteriorly. Peritremes M-shaped, each lateral branch with 4–6 chambers, each longitudinal branch with 7–9 chambers.

Idiosoma: Propodosomal plate ornamented, anterior and posterior margins weakly defined. Setal pattern of propodosomal region with six pairs

of setae, arranged 3–1–1–1. Setae *vi*, *ve* and *sci* situated on plate or near margins. Setae *d3* closer to *l2* than to *l3* or equidistant from setae *l2* and *l3*. Hysterosomal plate extending anterior to setae *d3*, setae *d3*, *l3*, *d4*, *l4* situated on plate. Tarsal setae *a'*, *a''* of tarsi I–IV multiserrate. MCA1 divergent, fused to MCA2 at posterior part MCA2. Length of setae and distances between setal bases: *ao1* 18; *ao2* 18–21; *vi* 41–48; *ve* 48–52; *sci* 160–200; *sce* 170–235; *l1* 225; *D1* 210; *vi-ve* 16; *vi-vi* 103; *ve-ve* 93;



Figs 3–5. *Syringophilopsis blaszaki* sp. n., female. 3 — hypostomal apex, ventral view; 4 — peritreme; 5 — trochanter II and MCA2. m, s — sectors of MCA2.

Рис. 3–5. *Syringophilopsis blaszaki* sp. n., самка. 3 — вершина гипостома, вентрально; 4 — перитрема; 5 — вертлуг II и MCA2. m, s — сектора MCA2.

ve-sci 20; *sci-sce* 43; *sci-l1* 48; *sci-sci* 93–95; *sce-sce* 170; *d1-d1* 44; *d1-l1* 44; 12 40–60; *d3* 39; 13 36; 12–*d3* 73; 12–12 111; *d3-l3* 77; *d4* 36; *d4-d4* 114; 14 250–277; 14–14 100; *a1, a2* 9; *g1* 7; *g2* 9; *pmc* 44–48; *pmc-pmc* 52; *sc1* 23–25; *sc2* 25–28; *sc3* 48–55; *sc4* 44–48; *1a* 107; *pmc-1a* 170; *1a-1a* 27; *1b* 78–112; *1b-1b* 69; *1c* 107–134; *1c-1c* 129; *2b* 134–152; *2b-2b* 193; *3a* 59–67; *1a-3a* 187; *3a-3a* 63; *3b* 75–91; *3c* 104; *4b* 67–83; *4c* 116; *3b-4c* 180; *pg1* 91–119; *pg2* 75–112; *pg3* absent.

Material. Female (holotype), 31 females (paratypes), 3 males (paratypes); 27 nymphae (paratypes) and 11 larvae (paratypes) from secondaries feathers of the Tree Pipit *Anthus trivialis* (Passeriformes: Motacillidae), Poland, 6km NW from Darlowko Wschodnie; 11 May 1999; leg. M. Skoracki, W. Busse. Holotype and paratypes are deposited in the Department of Animal Morphology of A. Mickiewicz University (Poznan, Poland).

DIFFERENTIAL DIAGNOSIS

This species is most closely related to *S. elongatus* (Ewing, 1911) from the red-winged blackbird *Agelaius*

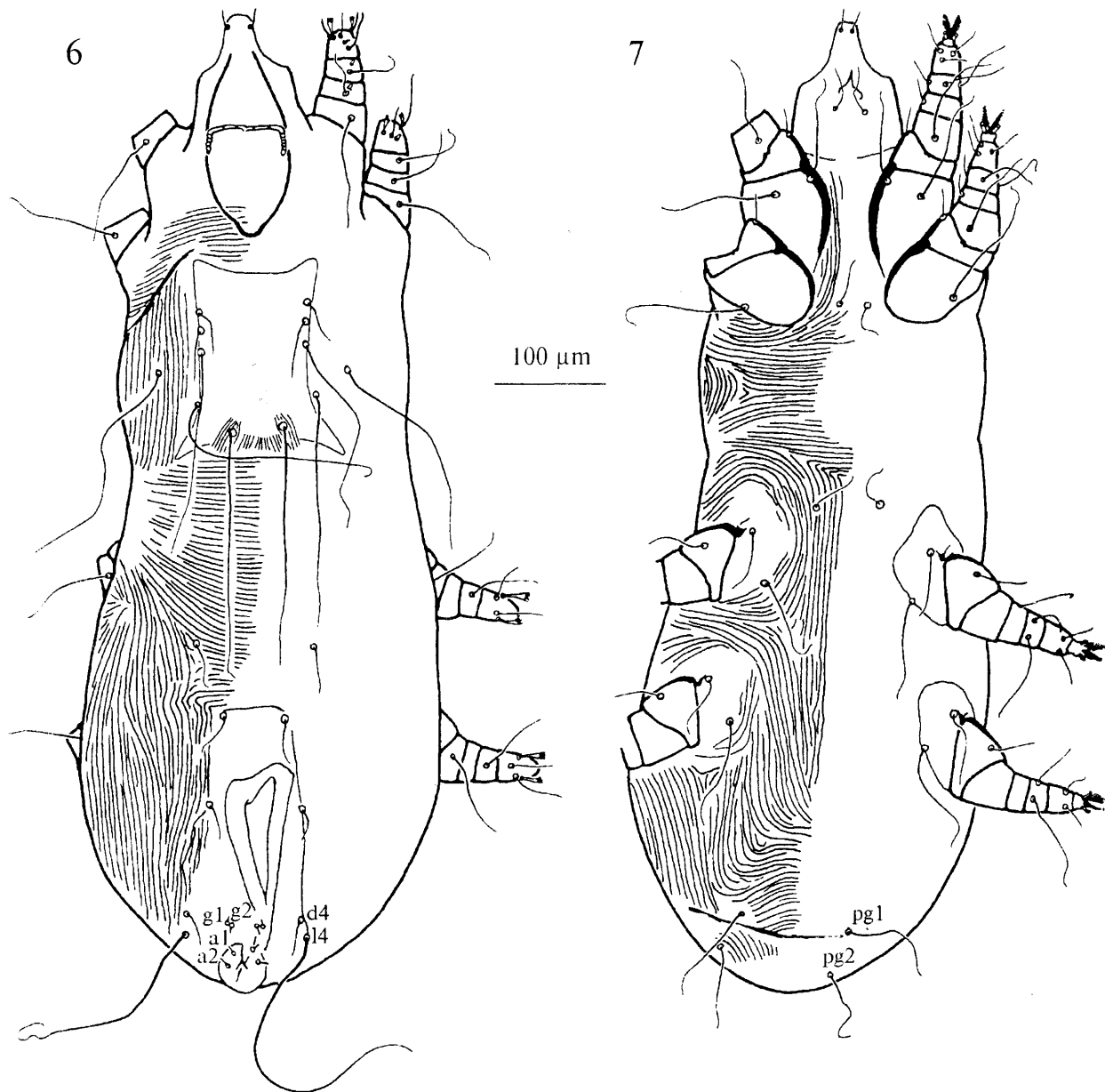
phoeniceus (Passeriformes: Icteridae) by the following characters: MCA1 divergent and fused with MCA2 in anterior part of MCA2; setae *d4, d5, l4, l5* long; setae *sci* and *sce* are equal in length. *S. blaszaki* is distinguished from that species by having the hypostome with one pair of median protuberances only and setae *g1, g2* are equal in length to setae *pg*. In *S. elongatus*, the hypostome with 2–3 pairs of median protuberances and setae *g1, g2* are shorter than setae *pg*.

ETYMOLOGY

The species is named in a honor of Prof. Czeslaw Blaszak (A. Mickiewicz University, Poznan), an outstanding Polish acarologist and our teacher.

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Figs. 6, 7. *Syringophilopsis blaszaki* sp. n., male. 6 — dorsal view; 7 — ventral view.
Рис. 6, 7. *Syringophilopsis blaszaki* sp. n., самец. 6 — дорсально, 7 — вентрально.

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