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FEATHER MITES (SARCOPTIFORMES, ANALGOIDEA) OF SOME WARBLERS FROM CZECHOSLOVAKIA

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DEDICATED TO ACADEMICIAN J. KRATOCHVÍL AT THE OCCASION OF HIS 70TH BIRTHDAY

Abstract. Seven species of feather mites are reported from seven species of warblers. *Trouessartia kratochvili* sp. n. is described as new species.

Although the warblers of the genera *Acrocephalus* and *Locustella* represent a group rather numerous in species, the knowledge about the feather mites parasitizing these hosts is still incomplete. This contribution brings the results of examination of seven species of warblers.

MATERIAL AND METHODS

During the years 1972 and 1973 a total of 56 warblers of 5 species were examined for the presence of feather mites, 15 of them being found positive (numbers in parentheses): *Acrocephalus arundinaceus* (L.) 9 (5), *A. palustris* (Bechstein) 6 (1), *A. scirpaceus* (Hermann) 24 (3), *A. schoenobaenus* (L.) 12 (2) and *Locustella luscinioides* (Savi) 5 (4). The birds were captured in ornithological nets on several South Moravian ponds and after ringing and parasitological examination again released. From positive specimens only 1—2 wing feathers were taken. Four further samples from 3 warbler species were added. If not otherwise stated, the material was collected by Ing. M. Konečný.

Trouessartia kratochvili sp. n. Fig. 1

Material: ♂ (holotype), ♀ (allotype), 9 ♂ 19 ♀ (paratypes) from *Locustella l. luscinioides* (Savi), 16. 6. 1972, Lednice; 3 ♂ 16 ♀ from 2 *L. luscinioides*, 18. 6. 1972, Nesyt; 10 ♂ 8 ♀ 4 N from 2 *L. fluviatilis* (Wolf.), 7. 6. 1960, Vysoké Pole, distr. Gottwaldov, leg. F. Balát; 6 ♀ from *L. n. naevia* (Bodd.), 14. 9. 1960, Praha, leg. V. Černý. The holotype is deposited in the collections of the Institute of Parasitology (prep. No PaÚ ČSAV 1802).

Male (holotype). Length, excluding lamellae, 539 μm, width 215 μm. Propodosomal shield 146×150 μm, not produced laterally between legs I–II, without lacunae, not fused laterally with scapular shields. Setae *sci* 33 μm long, setiform, separated by 65 μm. Humeral shields with setae l_1, 53 μm long, setae *sh* 28 μm long, lanceolate, without distal expansions. Hysterosomal shield without lacunae, lateral margins strongly notched at level of coxae III, dorsal hysterosomal apertures absent, setae d_2 present. Lobar region separated from anterior hysterosomal shield at level of setae l_3. Terminal lobes, excluding lamellae, separated by 7 μm. Distance from base of terminal cleft to lamellar apices 51 μm, lamellae with convexe external margins, bluntly pointed, without dentations. Epimerites I free. Genital apparatus 53 μm long, about 3× longer than wide, posterior to setae *sh*, closer to setae c_2 than c_1. Alveoli of setae c_2 contiguous, very slightly posterior to setae cx_4. Translobar apodeme present, adanal apodemes with single pair of apophyses at level posterior to adanal discs. Ventral apophyses of legs lacking, legs IV extending to level of middistance between setae *pae* and l_5. Setae *sR*

on trochanter III 19 μm long, lanceolate. Setae *d* and *e* on tarsus IV separated by 4 μm, apices of *e* without discoid protrusions.

Female (allotype). Length, excluding lobar membrane 582 μm, width 202 μm. Dorsal idiosoma similar to male except: propodosomal shield 150×150 μm, setae *sci* separated by 67 μm. Hysterosomal shield with varying lacunae in its posterior half, smaller and rounded along its midline, larger and ovoid laterally. Setae d_4 minuscule, separated by 51 μm, positioned 12 μm from level of setae l_5, closer to hysterosomal midline than

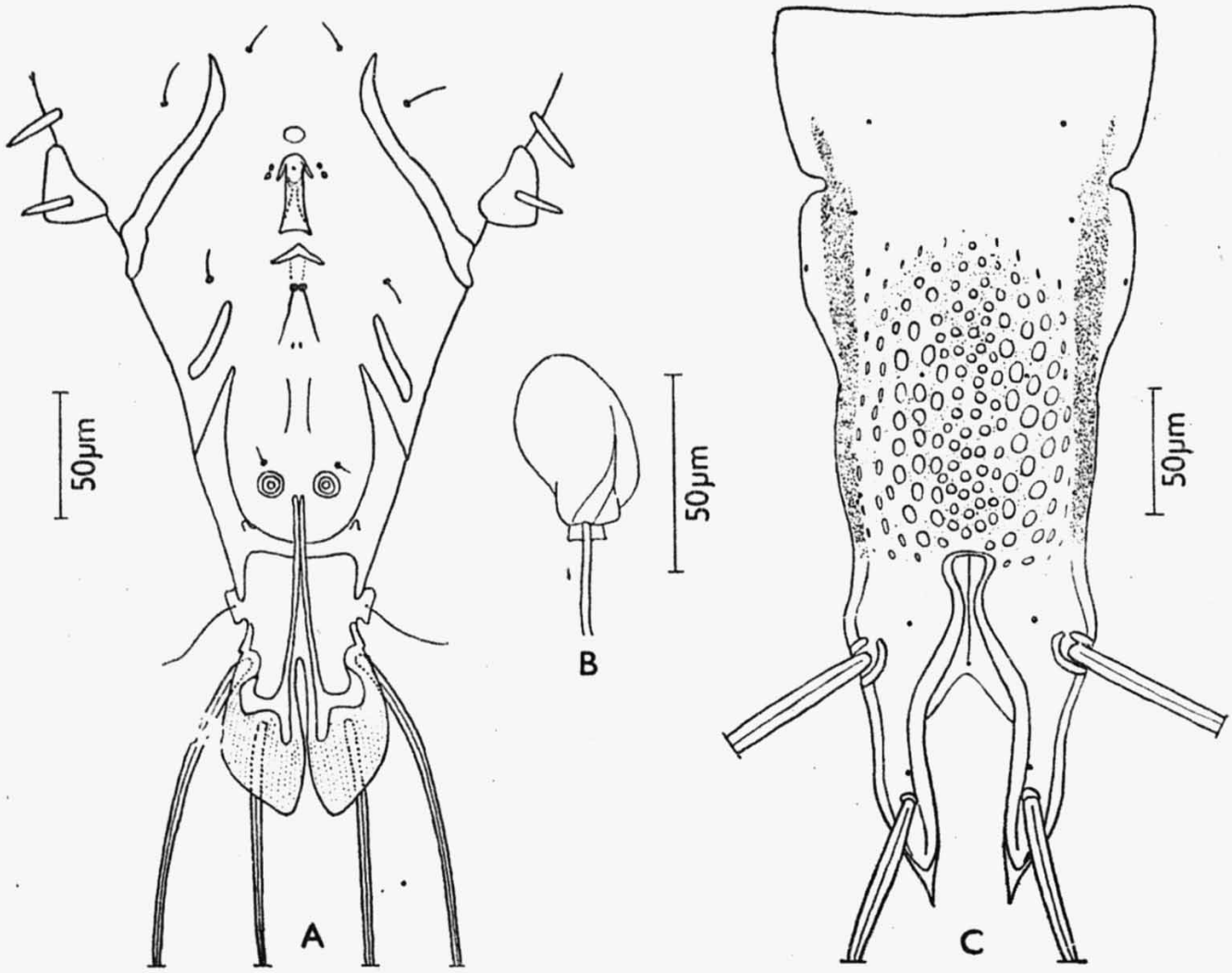

Fig. 1. *Trouessartia kratochvili* sp. n. A — male, body terminus, ventrally, B — spermatheca, C — female, hysterosomal shield and body terminus, dorsally.

margins, 28 μm from each margin. Setae *pai* positioned dorsal on lobes, 16 μm from base of setae d_5. Distance between levels of setae l_5 and lobar apices 97 μm. Supranal concavity continuous with terminal cleft, subtriangular. Terminal cleft slightly converging posteriorly, 28 μm wide at level of setae d_5. Interlobar membrane in the cleft bottom inverted V-shaped, terminal membrane pointed. Primary spermduct not projecting into terminal cleft, terminating in interlobar membrane, slightly anterior of posteromesal margin. Spermatheca as in Fig. 1B.

Trouessartia kratochvili sp. n. differs from both species known from the genus *Acrocephalus*, *T. bifurcata* (Trt.) and *T. trouessarti* Oudms., in the presence of setae d_2 in both sexes. By the combination of its characters, presence of translobar apodeme, entire terminal lamellae, completely separated lobar region from anterior hysterosomal shield in male, presence of setae d_2 and absence of dorsal hysterosomal apertures in

both sexes, the new species corresponds to the number 67 of the key given by Santana (1976) including 2 species. The male of *T. kratochvili* differs from *T. amadoni* Santana in the absence of ornamentation on hysterosomal shield and from *T. bulligera* Gaud in the form of lobar region, the female of *T. kratochvili* differs from both species in the absence of projection of primary spermduct into terminal cleft. The new species seems to be specific for the warblers of the genus *Locustella*.

Trouessartia trouessarti Oudemans, 1904

Material: 2 ♀ from *A. scirpaceus*, 25. 7. 1964, Lednice, leg. V. Černý; 13 ♂ 5 ♀ from *A. palustris*, 18. 6. 1972, Nesyt; 3 ♂ 3 ♀ from *A. arundinaceus*, 4. 6. 1973, Nesyt.

This species is extremely similar to *T. bifurcata* (Trouessart), a parasite of various Sylviidae. Under latter name it was already reported from Czechoslovakia from *A. arundinaceus* (Černý 1964). This misidentification was presumed by Santana (1976). The reexamination of the material from the great reed warbler confirmed this conclusion. Until now known only from *A. arundinaceus; A. palustris* and *A. scirpaceus* being new hosts.

Trouessartia rosterii (Berlese, 1886)

Material: 2 ♀ from *L. luscinioides*, 15. 6. 1973, Nesyt.

A typical parasite of *Sturnus vulgaris*. This accidental finding demonstrates possibilities of contact of starlings and warblers in reed growths.

Proctophyllodes clavatus Fritsch, 1961

Material: 2 ♂ 1 N from *L. luscinioides*, 16. 6. 1972, Lednice; 2 ♂ 8 ♀ from *A. schoenobaenus*, 16. 6. 1972, Lednice; 2 ♂ 8 ♀ 1 N from *A. schoenobaenus*, 15. 6. 1973, Nesyt.

The species is known to parasitize various sylviids including *L. luscinioides* and *A. schoenobaenus*.

Proctophyllodes vassilevi Atyeo et Braasch, 1966

Material: 2 ♂ 12 ♀ from 3 *A. scirpaceus*, 18. 6. 1972 and 15. 6. 1973, Nesyt.

The species is known from *A. palustris* and *A. scirpaceus*. *Proctophyllodes* sp. from the reed warbler in Sweden (Černý 1965) belongs to this species. New for Czechoslovakia.

Proctophyllodes sp.

Material: 1 ♀ from *L. naevia*, 14. 9. 1960, Praha, leg. V. Černý.

The single female specimen is characterized by hysterosomal lobes with almost touching inner margins and it may represent a hitherto undescribed species.

Dolichodectes edwardsi (Trouessart, 1885)

Material: 18 ♂ 26 ♀ 13 N from 3 *A. arundinaceus*, 18. 6. 1972, Nesyt; 1 ♂ 3 ♀ 1 N from *A. arundinaceus*. 4. 6. 1973, Nesyt.

Known from this host also from Czechoslovakia under the name *Pterodectes edwardsi* (Černý 1964).

The host-parasite relationships found during this investigation are shown in the following survey:

A. arundinaceus	*Dolichodectes edwardsi*
	Trouessartia trouessarti
A. palustris	*Trouessartia trouessarti**
A. schoenobaenus	*Proctophyllodes clavatus*
A. scirpaceus	*Proctophyllodes vassilevi***
	*Trouessartia trouessarti**
L. fluviatilis	*Trouessartia kratochvili* sp. n.
L. luscinioides	*Proctophyllodes clavatus*
	Trouessartia kratochvili sp. n.
	*Trouessartia rosterii**
L. naevia	*Trouessartia kratochvili* sp. n.
	Proctophyllodes sp.

* new host records
** new species for Czechoslovakia

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ПЕРЬЕВЫЕ КЛЕЩИ (SARCOPTIFORMES, ANALGOIDEA) НЕКОТОРЫХ КАМЫШЕВОК И СВЕРЧКОВ ИЗ ЧЕХОСЛОВАКИИ

В. Черны

Резюме. Семь видов перьевых клещей обнаружено на 7 видах камышевок и сверчков. *Trouessartia kratochvili* sp. n. описывается как новый вид.

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