

UDC 595.42(477)

A NEW SPECIES OF THE GENUS *TROUESSARTIA* (ANALGOIDEA, TROUESSARTIIDAE) FROM UKRAINE

S. J. Burdejnaja, D. A. Kivganov

I. I. Mechnikov Odessa National University,
Shampanskij al, Odessa, 65058 Ukraine
E-mail: svetikburdejnaja@mail.ru

Received 19 November 2010

Accepted 30 March 2011

A New Species of the Genus *Trouessartia* (Analgoidea, Trouessartiidae) from Ukraine. Burdejnaja S. J., Kivganov D. A. — *Trouessartia phylloscopi* sp. n. from Willow Warbler *Phylloscopus trochilus* Linnaeus, 1758 (Passeriformes) (type locality: Zmeinij Island, Ukraine) is described. The new species is morphologically similar to *T. microcaudata* Mironov, 1983 from Barn Swallow *Hirundo rustica* Linnaeus, 1758.

Key words: *Trouessartia*, Analgoidea, feather mites, Ukraine, new species.

Новый вид рода *Trouessartia* (Analgoidea, Trouessartiidae) из Украины. Бурдейная С. Я., Кивганов Д. А. — Описан *Trouessartia phylloscopi* sp. n. с пеночки-веснички *Phylloscopus trochilus* Linnaeus, 1758 (Passeriformes) (типовая местность: Украина, о. Змеиний). Новый вид морфологически сходен с *Tr. microcaudata* Мironov, 1983 описанным с деревенской ласточки *Hirundo rustica* Linnaeus, 1758.

Ключевые слова: *Trouessartia*, Analgoidea, перьевые клещи, Украина, новый вид.

Introduction

The genus *Trouessartia* Canestrini, 1899 is the largest among 9 feather mites genera of the family Trouessartiidae (Analgoidea) including now 90% species of the world fauna. In general, mites of this family are specific for the passerine birds (Passeriformes).

When studying the feather mites on the passerine birds migrated through the Zmiinyi Island we found 13 species of *Trouessartia* genus on 16 species of birds (Burdejnaja, Kivganov, 2009). A previously unknown species found on the Willow Warbler (*Phylloscopus trochilus*) is described below.

Trouessartia phylloscopi sp. n. Holotype and some paratypes are deposited in the collections of the Museum of Zoology, I. I. Mechnikov Odessa National University, Ukraine (ZMUO); other type material is deposited in the collections of the Department of Zoology I. I. Mechnikov Odessa National University (DZUO). The measurements of the holotype and allotype are given in micrometers (mkm), measurements of paratypes are in parentheses. The idiosomal chaetotaxy nomenclature follows Santana (1976).

Trouessartia phylloscopi Burdejnaja et Kivganov sp. n. (fig. 1–2)

Type material. Holotype ♂: Zmiinyi Island, on Willow Warbler *Phylloscopus trochilus* L. 29.04.05 (Burdejnaja and Kivganov leg.) (ZMUO). Paratypes: 2 ♂, 3 ♀, same labels as in the holotype (ZMUO, DZUO).

Male (fig. 1. 1–3). Length, excluding lamellae, 438.7 (414.7–438.7), width 171.8 (158.4–171.8). Propodosomal shield 136.3 (130.8–136.3) long, width 135.5 (130.4–135.5), front angle of shield prolate (extended) to middle part of legs I–II. Propodosomal shield solid, without lacune, setae of *sci* are capillaceous 13.7 long (8.8–13.7), interval between its bottoms 66.6 (63–68.7), not joined with scapular shields. Humeral setae of *l*₁ lanceolate, length 15.5 (13.7–15.5). Subhumeral setae of *sh* needle-shaped, partly extended, length 17.9 (13.7–17.9). Length of metapodosomal shield 180.5 (172.8–180.5), width 122.9 (109.4–122.9). Surface of shield with small, oval lacunae in back-end. Lateral

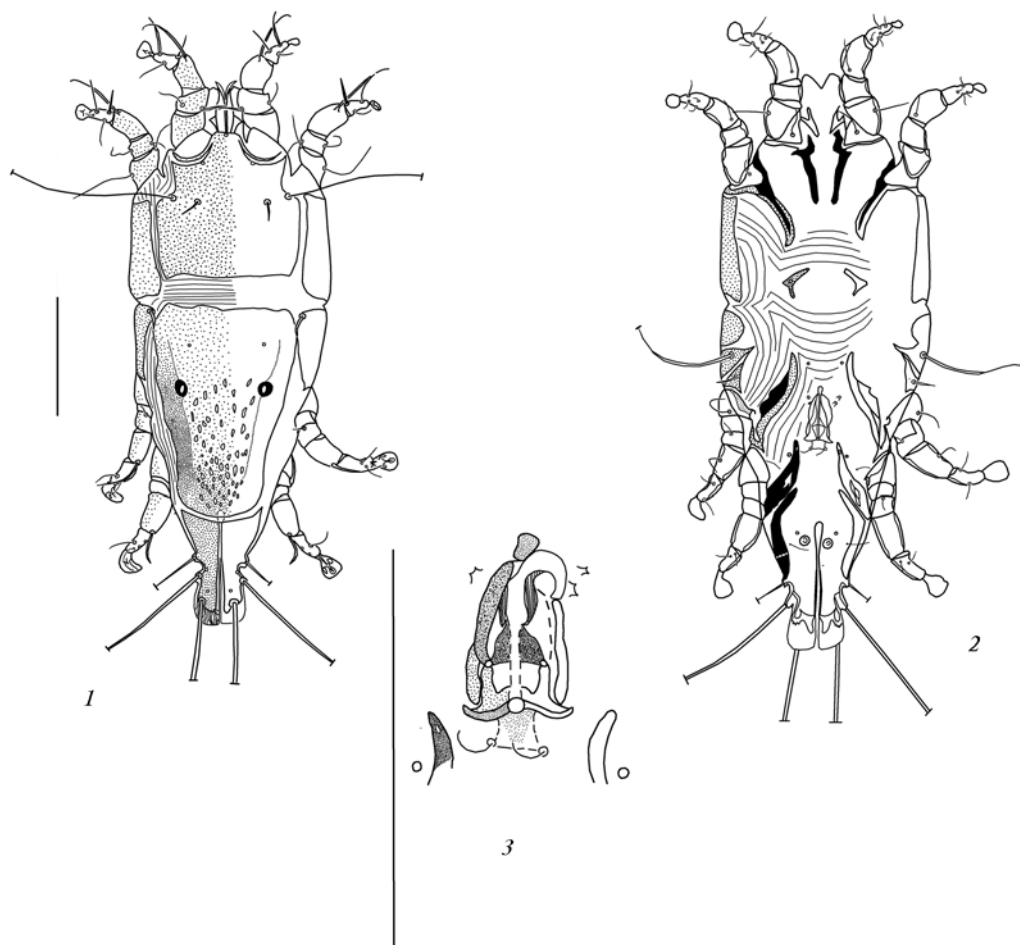


Fig. 1. *Trouessartia phylloscopi* sp. n. male: 1 — dorsal view; 2 — ventral view; 3 — genital organ.

Рис. 1. *Trouessartia phylloscopi* sp. n., самец: 1 — дорсально; 2 — вентрально; 3 — генитальный орган.

edge of shield without undercut, dorsal apertures present, setae of l_2 and l_3 absent. Opistosomal shield connected with metapodosomal with narrow bridge. Terminal lobes with narrow chinked excision almost adjoined. Terminal lamellas 22.9 (22.3–22.9) long, 27.1 (21.2–27) width, rounded on top. Epimerites I free. Rudimentary epimerites II, boomerang-shaped, with rounded lacuna at center. Height of genital arch 46.8 (45.8–46.8), width 25.2 (22.1–25.2). Distance between setae of c_2 14.5 (11.6–14.5); situated insignificantly in front of cx_4 setae. Front pair of genital suckers placed wider than back ones. Translobar apodeme absent. Legs IV not exceeding tops of terminal lamellae. Epimerites IV large, with extended base, extending behind genital arch base.

Female (fig. 2. 1–3). Length of idiosoma 525.1 (512.6), width 194.9 (194.9). Propodosomal shield as in male, 146.4 (149.3) long, 159.6 (153.7) wide. Distance between seta bases of *sci* 56.3 (60.9). All surface of back-end of hysterosomal shield filled up with large rounded lacunas. Starting with central part of hysterosoma, lacunary pattern considerably tapered to medial part and ends with lacuna ranged in line with overhead edge. Setae of d_4 large, lanceolate, 29.2 (26.7) long, distance between their bases 41.8 (40.1). Of setae, distance between l_5 14.5 (14.1). Setae of *pai* located dorsal, ahead of setae of d_5 . Distance between their bases 10.5 (10.5). Length of opistosomal lobes 107.5 (99.8). Length of terminal cleft 94.7 (83), width 37.8 (38.9). Inter-lobar membrane well-developed. Spermoduct situated in terminal cleft, not reaching base of *pai* setae top. Length of primary spermoduct 23.7 (27.9).

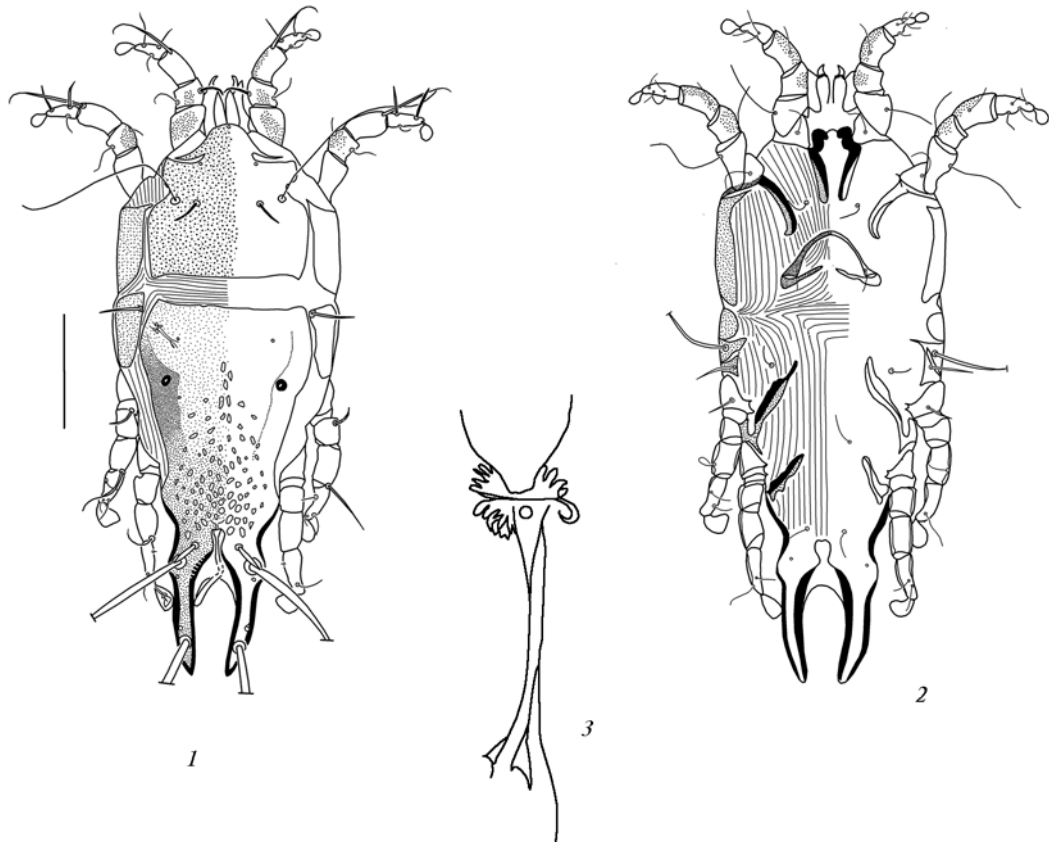


Fig. 2. *Trouessartia phylloscopi* sp. n. female: 1 — dorsal view; 2 — ventral view; 3 — spermatheca.

Рис. 2. *Trouessartia phylloscopi* sp. n., самка: 1 — дорсально; 2 — вентрально; 3 — сперматека.

Differential diagnosis. *Trouessartia phylloscopi* sp. n. is similar to *T. microcaudata* Mironov, 1983, described from a Barn Swallow *Hirundo rustica* L. (Mironov, 1983). Males of the new species differ by pattern of metapodosomal shield. In males of *T. microcaudata*, the medial part of shield has poorly expressed reticulated picture, whereas in males of the new species the metapodosomal shield is covered with large lacunae in posterior two-thirds. Large epimerites 4 of *T. phylloscopi* sp. n. exceed far behind the end of the genital arch (only reach them in *T. microcaudata* epimerites 4). Females of *T. phylloscopi* sp. n. are larger, differing by long opistosomal lobes, long and wide terminal cleft. In addition, females of *T. phylloscopi* sp. n. have large setae of d_4 , lanceolate and long spermoduct, whereas females of *T. microcaudata* has the opistosomal lobes *ca.* 74–80 micrometers long, and the terminal cleft 58–60 x 7–9 micrometers, the setae of d_4 are microchaeta and spermoduct is *ca.* 10–12 micrometers long.

Burdejnaja S. J., Kivganov D. A. Feather mites of genus *Trouessartia* Canestrini, 1899 (Acari, Trouessartiidae) passerine birds of Ukraine // *Visnyk Odes'kogo nacional'nogo universytetu.* — 2009. — 14, is. 8. — P. 75–80. — Ukrainian : *Бурдейна С. Я., Ківганов Д. А.* Пир'яні кліщі роду *Trouessartia* Canestrini, 1899 (Acari: Trouessartiidae) горобиних птахів України.

Mironov S. V. Feather mites of the genus *Trouessartia* of the USSR fauna and descriptions of new species (Analgoidea) // *Parazitologia.* — 1983. — 17, is. 5. — P. 361–369. — Russian : *Миронов С. В.* Перьевые клещи рода *Trouessartia* фауны СССР с описанием новых видов (Analgoidea).

Santana F. A review of the genus *Trouessartia* (Analgoidea, Alloptidae) // *Suppl. to the journal of medical entomology.* — 1976. — 128 p.