

**ORNITHOCHEYLETIA MIRONOVI SP.N. (ACARI: CHEYLETIDAE), A NEW SPECIES OF PARASITIC MITES OF THE BANK SWALLOW FROM KIRGHIZIA**

**ORNITHOCHEYLETIA MIRONOVI SP.N. (ACARI: CHEYLETIDAE) — НОВЫЙ ВИД ПАРАЗИТИЧЕСКИХ КЛЕЩЕЙ С БЕРЕГОВОЙ ЛАСТОЧКИ ИЗ КИРГИЗИИ**

P.A. Chirov\*, A.V. Bochkov\*\*

П.А. Чиров\*, А.В. Бочков\*\*

\*Saratov Zoological Veterinary Institute, Saratov, 410071 Russia

\*\*Zoological Institute, Russian Academy of Sciences, St. Petersburg, 199034 Russia

\*Саратовский зооветеринарный институт, Саратов, 410071 Россия

\*\*Зоологический институт Российской академии наук, Санкт-Петербург, 199034 Россия

Key words: Cheyletidae, *Ornithocheyletia*, *Ornithocheyletia mironovi* sp.n., *Riparia riparia*, Kirghizia

Ключевые слова: Cheyletidae, *Ornithocheyletia*, *Ornithocheyletia mironovi* sp.n., *Riparia riparia*, Киргизия

**ABSTRACT**

A new species of parasitic mites, *Ornithocheyletia mironovi* sp.n. (Acari: Cheyletidae) is described from bank swallow *Riparia riparia* (L.) (Passeriformes: Hirundinidae) from Kirghizia.

**РЕЗЮМЕ**

Описан новый вид паразитических клещей *Ornithocheyletia mironovi* sp.n. (Acari: Cheyletidae) с береговой ласточки *Riparia riparia* (L.) (Passeriformes: Hirundinidae) из Киргизии.

Two species of the genus *Ornithocheyletia* Volgin, 1964 were known from the territory of the former USSR: *O.dubunini* Volgin, 1964 ex sturling *Sturnus vulgaris* L. (Passeriformes: Sturnidae) from Moldova [Volgin, 1964] and *O.phylloscopi* Bochkov et al., 1994 ex willow warbler *Phylloscopus trochilus* L. (Passeriformes: Sylviidae) from Leningrad Prov. (Russia) and Kiev Prov. (Ukraine) [Bochkov et al., 1994].

This paper presents a description of the new species *O.mironovi* sp.n. ex bank swallow *Riparia riparia* (L.) (Passeriformes: Hirundinidae) collected in Kirghizia.

All measurements are given in micrometers ( $\mu\text{m}$ ). The nomenclature of idiosomal chaetotaxy follows that of Fain [1979]. The holotype and paratype series are deposited in Zoological Institute of Russian Academy of Sciences (St. Petersburg, Russia); one paratype is deposited in Institute royal des Sciences naturelles de Belgique (Bruxelles, Belgium).

*Ornithocheyletia mironovi* Bochkov et Chirov,  
sp.n.

Figs. 1–6.

**Female** (holotype). Length 301 (ranges 283–324 for 6 paratypes), breadth 180 (162–180).

**Gnathosoma** (Figs. 1–2): length 56 (51–56), width 47 (45–47). Peritremes arch-like, consist of 3 pairs of segments. Palptibia with 3 smooth setae;

palpenu with 2 barbed setae; palpemur with 2 barbed and 1 smooth setae.

**Idiosoma** (Figs. 1–2). Propodosomal shield 77 (76–92) length, 83 (81–101) width; hysterosomal shield 58 (56–58) length, 83 (81–101) width; pygidial shield 27 (22–33) length, 33 (33–40) width; distance between propodosomal and hysterosomal shields 38 (33–51). Length of setae: *vi*, *ve*, *sci*, *sce*, *I1* 31–33 (29–35), all barbed; *d1* 105 (95–108), *h* 114 (74–114), *I2*, *B1* 11 (11–15), *I4* 20 (13–21), *I5* 112 (112–117), *ic1*–*ic4* 47 (45–51), all smooth. Setae *I2* bases situated at anterior angles of hysterosomal shield; setae *I3* bases remote from hysterosomal shield, distance between shields posterior margin and bases of setae *I3* 17 (12–18).

**Legs.** Coxal chaetotaxy formula 2–1–2–1, longest seta of coxa III 67 (51–67), barbed; tibiae III–IV with 3 setae; solenidion on tibia I curved, 4 (4–4.5) (Fig. 3); solenidion on genu I 3 (2–3.5) (Fig. 4); tarsi I as in Figs. 5–6.

Male and immatures unknown.

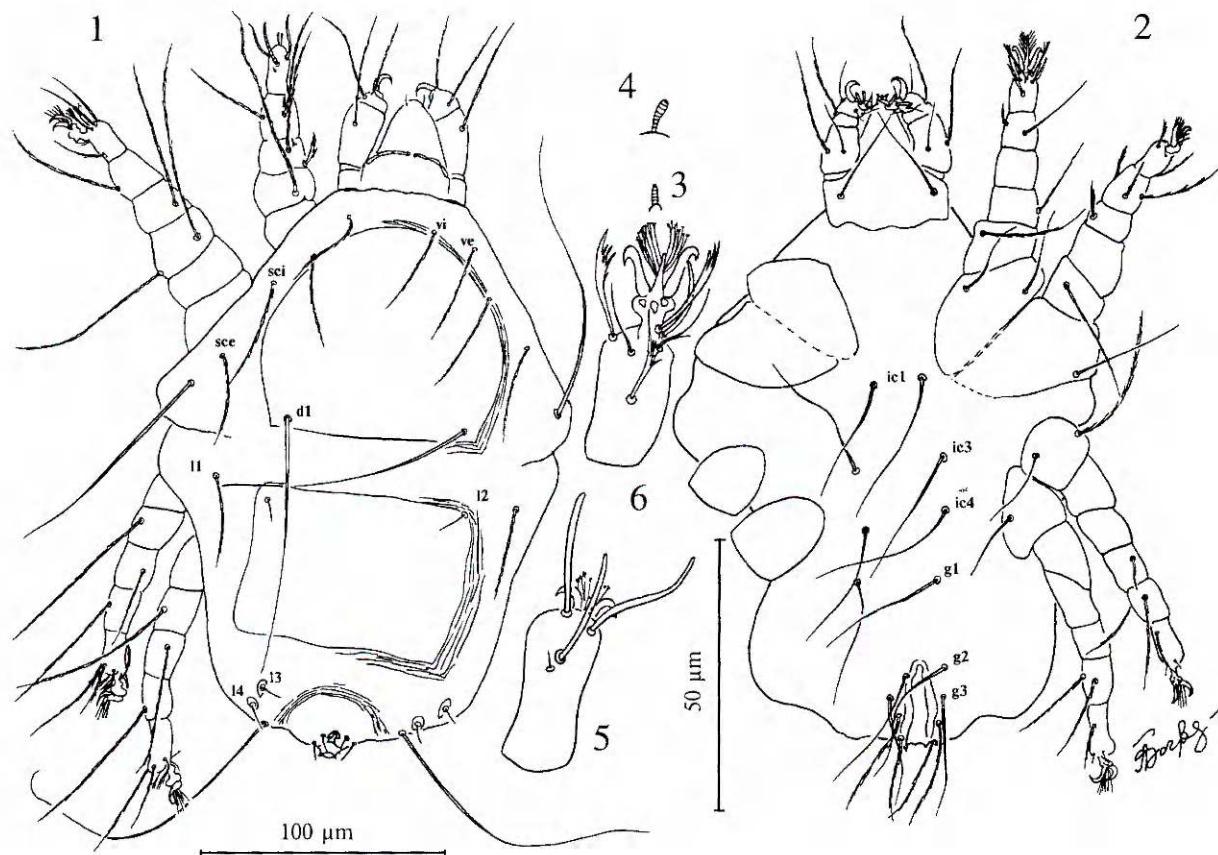
**DIFFERENTIAL DIAGNOSIS**

The new species is closely related to *O.lukoschusi* Smiley, 1970, described ex barn swallow *Hirundo rustica* L. (Passeriformes: Hirundinidae) from Holland [Smiley, 1970; Fain, 1981].

In females *O.mironovi* *I3* bases are not situated on the hysterosomal shield, the distance between the posterior margin of the shield and the bases *I3* 12–18; setae *d1* 95–108, *I4* 13–21; *d1* tips almost reach the level of bases *I3*.

According to the original description of *O.lukoschusi* the holotype female setae *I3* are situated on the hysterosomal shield; *d1* 80, *I4* 25 in length; tips of setae *d1* not reaching the level of seta *I3* bases [Smiley, 1970; Fain, 1981].

**Type material.** Holotype female (T-Ch-57), paratypes 5 females ex bank swallow *Riparia riparia* (L.) — Kirghizia, vicinities of lake Issyk-Kul', Ottuk village, 22.07.1978, P.A.Chirov coll.



Figs. 1–5. *Ornithochyleletia mironovi* sp.n., female: 1 — dorsal view; 2 — ventral view; 3 — solenidion on tibia I; 4 — solenidion on genu I; 5 — dorsal view of tarsus I; 6 — ventral view of tarsus I.

Рис. 1–5. *Ornithochyleletia mironovi* sp.n., самка: 1 — дорсально; 2 — вентрально; 3 — соленидий голени I; 4 — соленидий колена I; 5 — лапка I дорсально; 6 — лапка I вентрально.

#### ACKNOWLEDGEMENTS

The research was partially supported by the grant from the Russian Foundation for Basic Research (№97–04–48977).

#### REFERENCES

Bochkov A.V., Mironov S.V., Gorgol V.T. 1994. *Ornithochyleletia philloscopi* sp.n. (Acariformes: Cheyletidae), a new species of parasitic mites from the willow warbler // Acarina. Vol.2. №1–2. P.73–80.

- Fain A. 1979. Idiosomal and leg chaetotaxy in the Cheyletidae // Int. J. Acarol. Vol.5. №4. P.305–310.  
 Fain A. 1981. Revision of the genus *Ornithochyleletia* Volgin, 1964 (Acaria: Cheyletidae) // System. Parasitol. Vol.2. P.181–205.  
 Smiley R.L. 1970. A review of the family Cheyletiellidae (Acarina) // Ann. Entomol. Soc. America. Vol.63. №4. P.1056–1078.  
 Volgin V.I. 1964. [Materials on the systematics of the family Cheyletidae. IV. Genus *Ornithochyleletia* Volgin gen.nov.] // Zoologicheskiy Zhurnal. T.43. №1. S.28–36. [in Russian]