

A NEW SPECIES OF MITES OF THE FAMILY SCUTACARIDAE (ACARI: HETEROSTIGMATA) ASSOCIATED WITH *PASIRA MEDITERRANEA* (HETEROPTERA, REDUVIIDAE) FROM CRIMEA

НОВЫЙ ВИД КЛЕЩЕЙ СЕМЕЙСТВА SCUTACARIDAE (ACARI: HETEROSTIGMATA), СВЯЗАННЫЙ С *PASIRA MEDITERRANEA* (HETEROPTERA, REDUVIIDAE) ИЗ КРЫМА

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Ключевые слова: Scutacaridae, *Imparipes*, новый вид, форе́зия, Reduviidae, Крым

ABSTRACT

A new species of mites of the family Scutacaridae (Acari: Heterostigmata), *Imparipes nikitensis* sp.n., is described from reduviid bugs *Pasira mediterranea* Dispons, 1959 (Heteroptera: Reduviidae) from Crimea. Phoresy of scutacarid mites on insects of the order Heteroptera is recorded for the first time.

РЕЗЮМЕ

Приводится описание нового вида клещей семейства Scutacaridae (Acari: Heterostigmata) *Imparipes nikitensis* sp.n. с клопов-хищнецов *Pasira mediterranea* Dispons, 1959 (Heteroptera: Reduviidae) из Крыма. Форе́зия клещей-скутакарида на насекомых отряда Heteroptera отмечена впервые.

Mites of the family Scutacaridae (Acari: Heterostigmata) are known to be phoretic on numerous insects from the orders Coleoptera, Hymenoptera, Isoptera, Diptera, as well as some arachnids, including parasitiform mites [Ebermann, 1988, 1988a, Ebermann & Goloboff, 2002]. I found a new species of scutacarid mites phoretic on a species from the order Heteroptera, *Pasira mediterranea* Dispons, 1959 (Reduviidae) in Crimea. The purpose of this paper is to describe the new species.

The terminology follows that of Lindquist [1986]. All measurements are given in micrometers (μm) for the holotype and five paratypes (in parenthesis). The type material is deposited in the collection of the department of Acarology, Schmalhausen Institute of Zoology, Kiev, Ukraine.

***Imparipes (Imparipes) nikitensis* sp.n.**

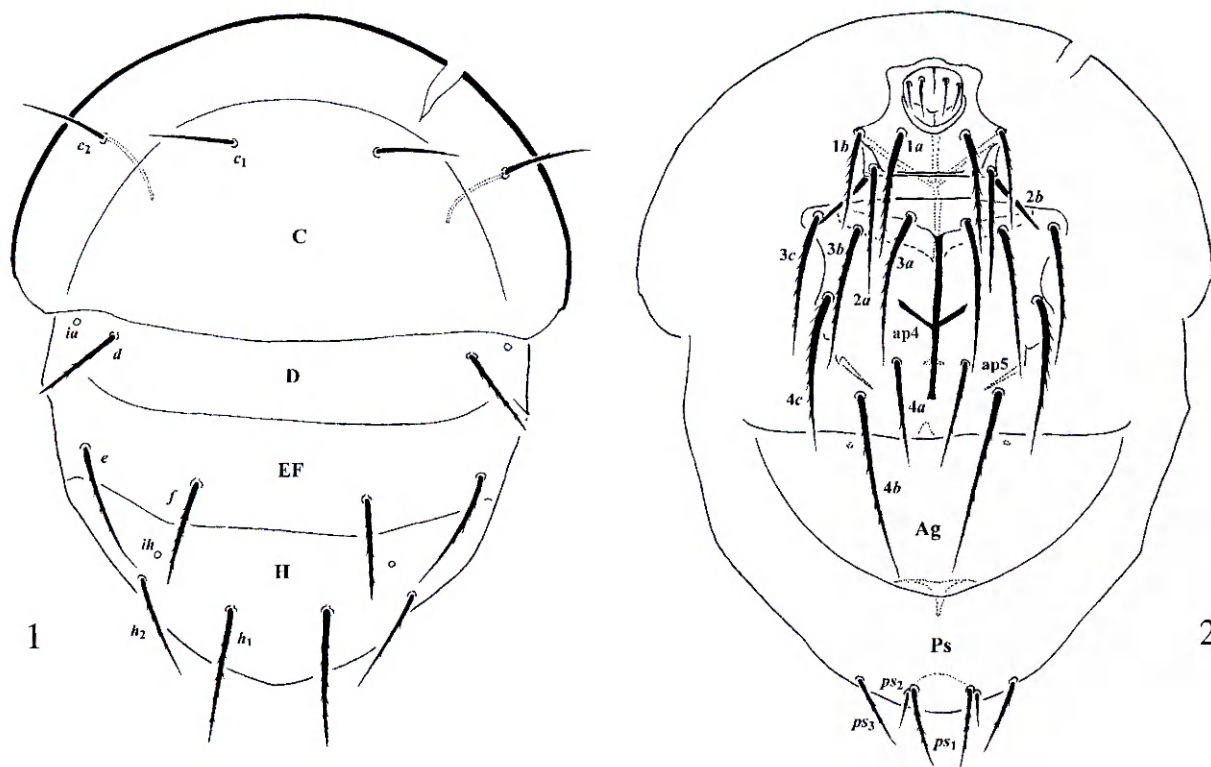
Figs. 1–6.

Female. Idiosomal length 258 (244–272), maximum width 239 (210–248).

Gnathosoma. Two pairs of dorsal setae, ch_1 and ch_2 , present; ch_1 little longer and slightly posterior to ch_2 . Pair of setae su present. Palps with 2 pairs of setae dGe and dFe , small ventral solenidion, and accessory setigenous structure. Dorsal medial apodeme well developed.

Idiosomal dorsum (Fig. 1). Free margin of tergite C with distinct stripes. Setae c_2 with distinct alveolar canal. Cupuli ia and ih small, round. Tergites smooth. All dorsal setae barbed. Length of dorsal setae: c_1 34 (33–37), c_2 38 (37–41), d 36 (36–41), e 51 (50–56), f 42 (41–49), h_1 52 (51–63), h_2 42 (41–50). Distances between dorsal setae: c_1-c_1 57 (55–63), c_1-c_2 58 (54–59), $d-d$ 149 (138–151), $e-f$ 55 (51–58), $f-f$ 72 (69–73), h_1-h_1 39 (38–40), h_1-h_2 41 (39–42). Trichobothrium with thin stem, distally spherical.

Idiosomal venter (Fig. 2). Apodemes 1, 2 and sejugal apodeme well developed and fused with presternal apodeme. Sejugal apodeme v-shaped. Setae $2b$ smooth, saber-like. Other setae of anterior and posterior sternal plates filiform, strongly barbed. Posterior margin of posterior sternal plate slightly convex at middle part. Setae ps_1 and ps_3 strongly barbed, setae ps_2 short and smooth. Apodemes 3 weakly developed; apodemes 4 (ap4) rather short and joined with poststernal apodeme; apodemes 5 (ap5) well sclerotized and situated between setae $4b$ and base of trochanter IV. Setae $4b$ distinctly longer than $4a$. Posterior margin of aggenital plate



Figs. 1–2. *Imparipes (Imparipes) nikitensis* sp.n., female: 1 — dorsum; 2 — venter.

round. Length of ventral setae: *1a* 55(53–60), *1b* 35(33–39), *2a* 49(45–51), *2b* 28(27–29), *3a* 62(58–67), *3b* 62(60–70), *3c* 56(55–42), *4a* 47(45–48), *4b* 73(69–79), *4c* 70(69–75), *ps*₁ 32(31–33), *ps*₂ 10(9–11), *ps*₃ 30(29–33).

Legs (Figs. 3–6). Leg I (Fig. 3): setal formula: Tr 1–Fe 3–Ge 4–Ti+Ta 16 (4) (number of solenidia in parenthesis). Tibiotarsus with well developed claw. Lengths of solenidia ω_1 10(10–11) < ω_2 12(11–13), > ϕ_1 9(8–9), > ϕ_2 6(6–7). Solenidion ω_1 finger-shaped. Solenidion ϕ_1 baculiform. Solenidia ω_2 and ϕ_2 uniformly thin. Seta *d* of femur I spine-like. Leg II (Fig. 4): Tr 1–Fe 3–Ge 3–Ti 4 (1)–Ta 6 (1). Tarsus with sickle-like padded claws. Solenidion ω 10(9–11) finger-shaped. Leg III (Fig. 5): Tr 1–Fe 2–Ge 2–Ti 4 (1)–Ta 6. Claws of same shape as on tarsus II. Leg IV (Fig. 6): Tr 1–Fe 2–Ge 1–Ti 3 (1)–Ta 6. Trochanter with ventrodiscal spine-like process. Tarsus with long pretarsus, two small seta-like claws, and thin distal empodium. Length of tarsus 47(45–49), length of pretarsus 39 (37–41). Solenidion ϕ 8 (8–9) uniformly thin. Seta *u'* needle-like 4 (4–5).

Male and larva. Unknown.

Type material. Holotype: female, Crimea, Yalta, settl. Nikita, on *Pasira mediterranea* Dispons, 1959, 08.01.2001 (leg. Khaustov); paratypes: 4 females same data as holotype, 6 females,

same data, 3.01.2001, 4 females same data, 26.01.2003.

DIFFERENTIAL DIAGNOSYS

The new species is most similar to *Imparipes lenticulatus* Mahunka, 1981, but differs by longer pretarsus IV, which about as long as trochanter IV, and shorter setae *u'* TaIV, which not reaching the apex of tarsus IV (in *I. lenticulatus* pretarsus IV is about half of trochanter IV length and seta *u'* is reaching the apex of pretarsus IV).

ETYMOLOGY

The specific epithet *nikitensis* derived from the name of the settlement Nikita, the type locality of the new species.

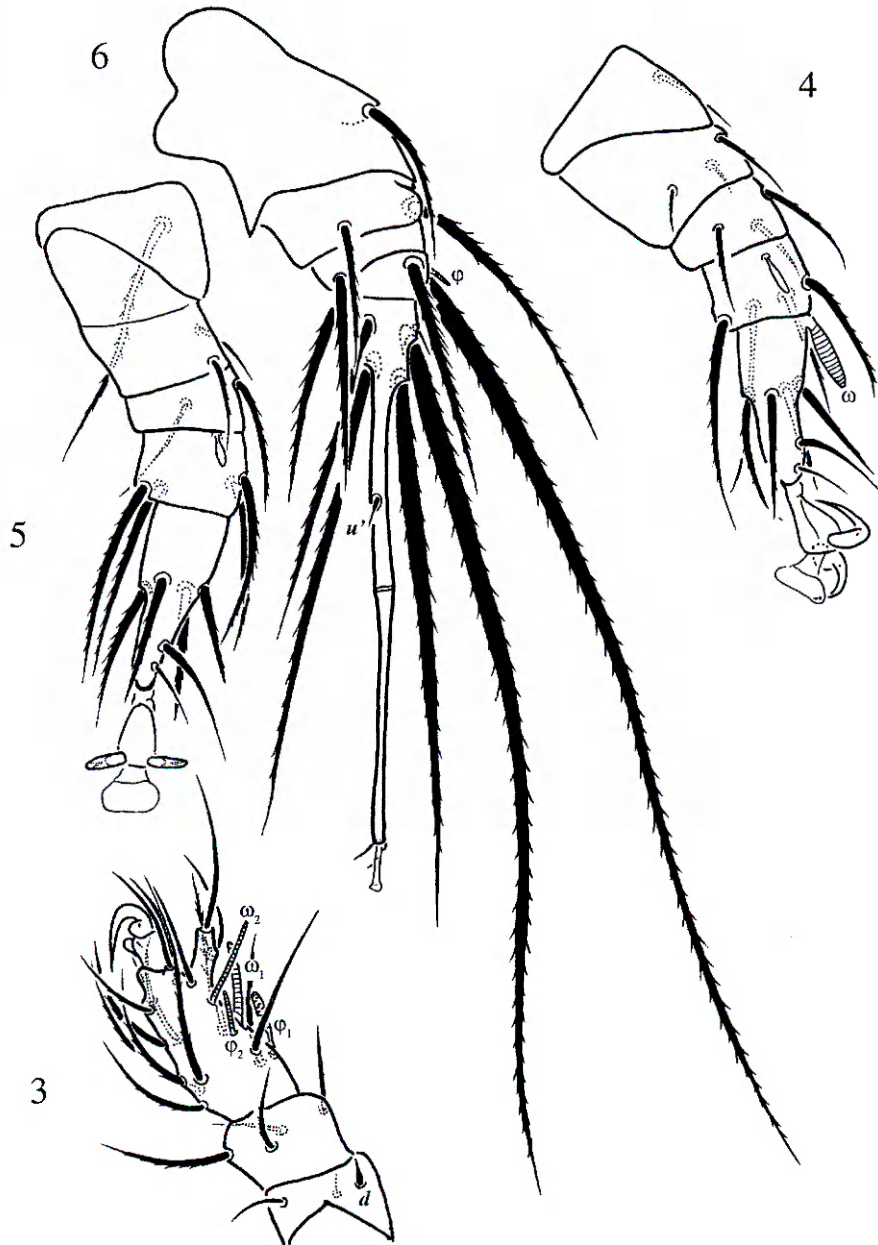
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Figs. 3–6. *Imparipes (Imparipes) nikitensis* sp.n., female: 3–6 — legs I–IV, respectively.

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