

**A NEW SPECIES OF *PYEMOTES* (ACARI: HETEROSTIGMATA: PYEMOTIDAE)
ASSOCIATED WITH BARK BEETLES (COLEOPTERA: SCOLYTIDAE) FROM
CRIMEA**

**НОВЫЙ ВИД *PYEMOTES* (ACARI: HETEROSTIGMATA: PYEMOTIDAE),
СВЯЗАННЫЙ С КОРОЕДАМИ (COLEOPTERA: SCOLYTIDAE), ИЗ КРЫМА**

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Ключевые слова: *Pyemotes*, новый вид, короеды, Крым

ABSTRACT

Pyemotes mandelshtami sp.n. (Acari: Pyemotidae) is described from the galleries of *Ernoporus caucasicus* (Lindemann, 1876) (Coleoptera: Scolytidae) from Crimea.

РЕЗЮМЕ

Описан новый вид клеща *Pyemotes mandelshtami* sp.n. (Acari: Pyemotidae) из ходов *Ernoporus caucasicus* (Lindemann, 1876) (Coleoptera: Scolytidae) из Крыма.

Mites of the genus *Pyemotes* (Acari: Pyemotidae) are important enemies of different insect larvae. The genus *Pyemotes* was divided into two groups: *scolyti*-group and *ventricosus*-group [Cross et al., 1981]. The members of *scolyti*-group are associated with scolytid beetles. This group consists of 5 species: *P.scolyti* (Oudemans, 1936), *P.dryas* (Vitzthum, 1923), *P.parviscolyti* Cross & Moser, 1971, *P.dimorphus* Cross & Moser, 1975 and *P.giganticus* Cross, Moser & Rack, 1981. The newly described species also belongs to the *scolyti*-group.

In the description we follow the idiosomal chaetotaxy nomenclature developed for Heterostigmata by E.E. Lindquist [1986]. All measurements are given in micrometers (μm). The type material is deposited in the collections of the Department of Agroecology, State Nikita Botanical Gardens, Yalta, Crimea, Ukraine.

Pyemotes mandelshtami sp.n.

Figs. 1–6.

Female (Figs. 1–3). The length of the body 270–285, breadth 105–115.

Gnathosoma. Gnathosomal capsule with 5 pairs of setae and couple of small clavate solenidia. Pharynx well developed.

Idiosoma. Dorsal surface (Fig.1). Dorsal shielding with longitudinal striation on the plates C, D, EF and prodorsum. Stigmata opening situated on the anterolateral surface of propodosoma. All setae of idiosoma are nude, slender. The length of dorsal

idiosomal setae of holotype is as follows: v_1 17, v_2 12, sc_2 68, c_1 15, c_2 36, d 17, e 12, h_1 23, h_2 11. The length of dorsal idiosomal setae of paratypes is as follows: v_1 16–19, v_2 11–14, sc_2 60–70, c_1 15–18, c_2 30–38, d 16–18, e 11–14, h_1 20–26, h_2 10–13.

Ventral surface (Fig. 2). Ventral shielding with apodemes 1 forming Y-shaped juncture with prosternal apodeme. Apodemes 2 well separated from prosternal apodeme.

Legs. Ambulacrum of leg I with large, strongly hooked claw (Fig. 3). Number of setae and solenidia (in brackets) on femur, genu, tibia and tarsus, respectively: leg I: 4–4–6(2)–12(1); leg II: 3–3–4–7(1); leg III: 2–3–4–7; leg IV: 2–2–4–6.

Male (Figs. 4–6). The length of the body 140–160, breadth 95–107.

Gnathosoma. Gnathosomal capsule oval, with 5 pairs of setae and couple of rodlike solenidia. Pharynx well developed.

Idiosoma. Dorsal surface (Fig.4). Dorsal shielding smooth. Dorsal setae long, finely serrate, variable in length. Propodosomal setae sc_1 clearly anterior to sc_2 .

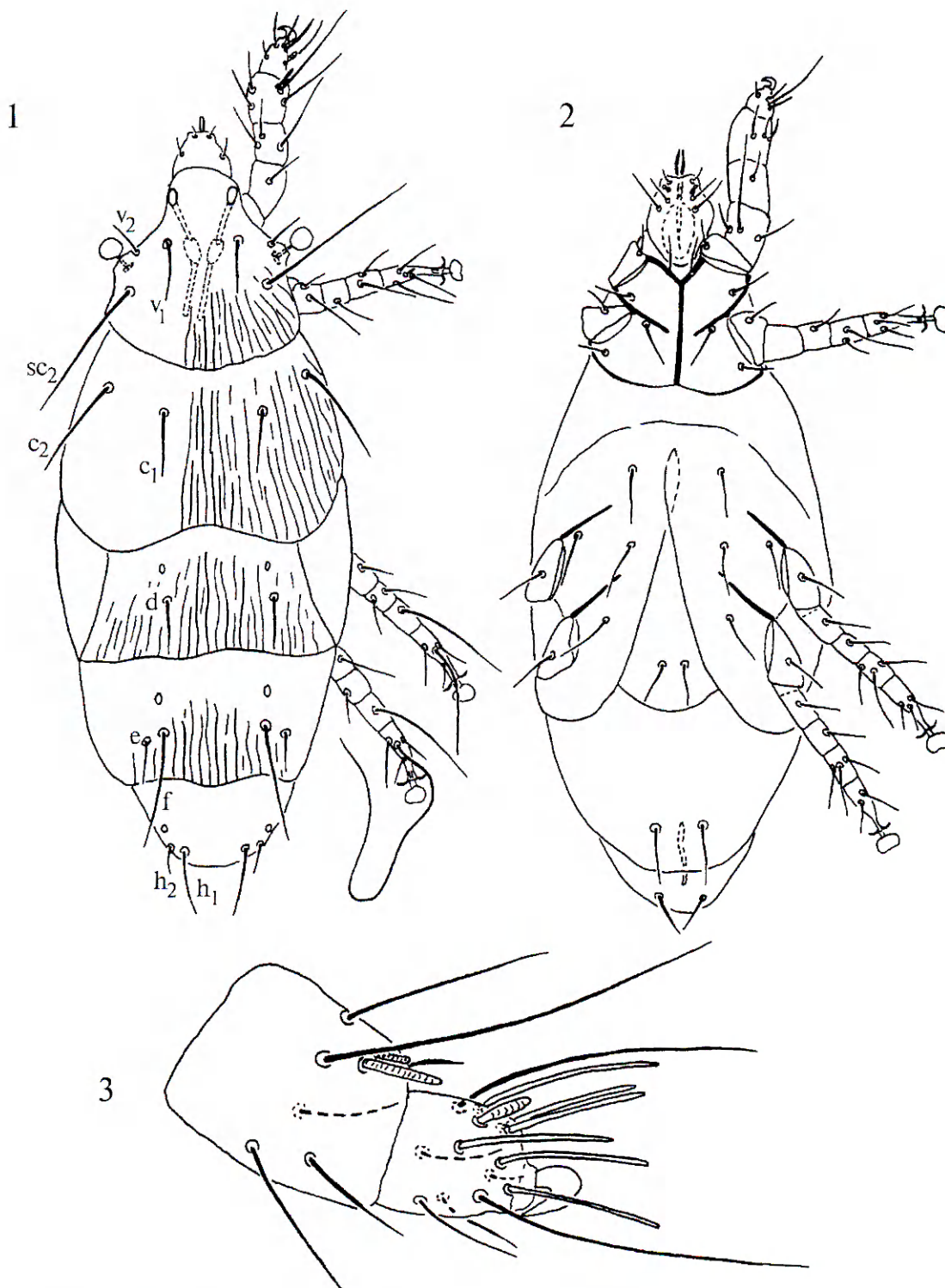
Ventral surface (Fig. 5). Ventral shielding with apodemes 1 forming Y-shaped juncture with prosternal apodeme. Apodemes 2 united with prosternal apodeme.

Legs. Ambulacrum of leg I with small claw (Fig. 6). The number of setae and solenidia on femur, genu, tibia and tarsus, respectively: leg I: 4–4–6(1)–12(1); leg II: 2–3–4–6(1); leg III: 2–3–4–6; leg IV: 2–2–4(1)–5. Solenidion ω_1 is lanceolate in shape.

DIFFERENTIAL DIAGNOSIS

The new species differs from *Pyemotes dryas* (Vitzthum, 1923) by the shape of solenidion on the tarsus I of males, and by the position of setae sc_1 on the prodorsum of the male. Females of the new species are not separable from *P.dryas* females.

Type material. Holotype: male (Pm-26), paratypes: 7 males, 10 females, Crimea, Yalta, in



Figs. 1-3. *Pyemotes mandelshtami* sp.n., female: 1 — dorsal view, 2 — ventral view, 3 — tibia and tarsus I dorsally.
 Рис. 1-3. *Pyemotes mandelshtami* sp.n., самка: 1 — дорсально, 2 — вентрально, 3 — голень и лапка I дорсально.

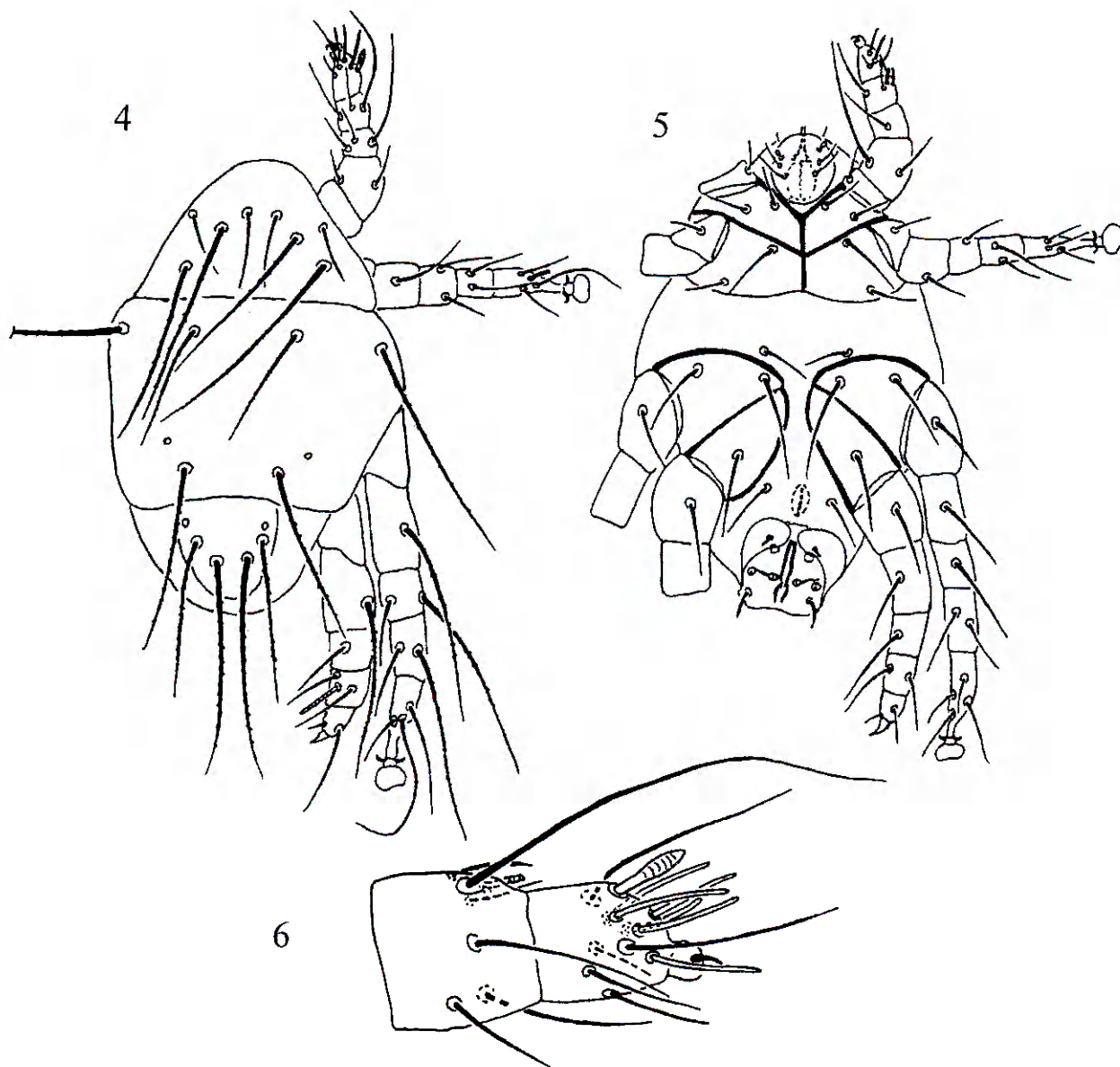
the galleries of *Ernoporus caucasicus* (Lindemann, 1876) (Coleoptera: Scolytidae), under the bark of *Tilia caucasica* Rupr. (Tiliaceae), 20.09.1997, coll. A.A. Khaustov.

ETYMOLOGY

Species is named for Dr. M.Yu. Mandelshtam (Institute of Experimental Medicine, St. Petersburg, Russia).

REFERENCES

Cross E.A., Moser J.C., Rack G. 1981. Some new forms of *Pyemotes* (Acari: Pyemotidae) from forest insects, with remarks on polymorphism // *Int. J. Acarol.* 7: P.179-196.
 Lindquist E.E. 1986. The world genera of Tarsonemidae (Acari: Heterostigmata): a morphological, phylogenetic, and systematic revision, with a reclassification of family-group taxa in the Heterostigmata // *Mem. Entomol. Soc. Canada.* №136. P.1-517.



Figs. 4-6. *Pyemotes mandelshtami* sp.n., male: 4 - dorsal view, 5 - ventral view, 6 - tibia and tarsus I dorsally.
Рис. 4-6. *Pyemotes mandelshtami* sp.n., самец: 4 - дорсально, 5 - вентрально, 6 - голень и лапка I дорсально.