

REDESCRIPTION OF <*PEDICULOIDES*> *IPIDARIUS* REDIKORTZEV, 1947, AND A DESCRIPTION OF A NEW SPECIES FROM THE GENUS *PARACAROPHENAX* (ACARI: HETEROSTIGMATA: ACAROPHENACIDAE)

ПЕРЕОПИСАНИЕ <*PEDICULOIDES*> *IPIDARIUS* REDIKORTZEV, 1947 И ОПИСАНИЕ НОВОГО ВИДА ИЗ РОДА *PARACAROPHENAX* (ACARI; HETEROSTIGMATA: ACAROPHENACIDAE)

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Ключевые слова: *Pediculoides ipidarius*, переописание, *Paracarophenax*, новый вид, Крым

ABSTRACT

The mite <*Pediculoides*> *ipidarius* is redescribed based on material collected in North-West Russia. A new species of *Paracarophenax* is described from Crimea.

РЕЗЮМЕ

Переописывается клещ <*Pediculoides*> *ipidarius* на основании материала, собранного на северо-западе России. Новый вид клещей из рода *Paracarophenax* описывается из Крыма.

The species *Pediculoides ipidarius* Redikortzev, 1947 was described from central Russia as a parasite of the bark beetle *Ips typographus* (Linne, 1758) (Coleoptera: Scolytidae) [Redikortzev, 1947]. However, it was described inadequately. Cross and Moser [1971] placed it in the genus *Paracarophenax* Cross, 1965. Since that time the species was reported from Poland, Germany, Sweden and North America [Cross, Moser, 1971; Kielczewski et al., 1983; Moser et al., 1984; Moser et al., 1989]. Recently Magowski [1994] correctly placed <*Pediculoides*> *ipidarius* in the genus *Aethiophenax* Mahunka, 1981. The species has not been redescribed in spite of numerous collection records. The redescription of <*Pediculoides*> *ipidarius* is presented based on the material collected from *Ips typographus* (Linne, 1758) and some other bark beetles from North-West Russia.

The new species of *Paracarophenax* is described from the galleries of *Lepresinus fraxini* (Panzer, 1779) (Coleoptera: Scolytidae) from Crimea.

The idiosomal and leg chaetotaxy nomenclature developed for Heterostigmata by E. E. Lindquist [1986] is used in the descriptions. All measurements are given in micrometers ( $\mu\text{m}$ ). The type material is deposited in the collections of the Department of Agroecology, State Nikita Botanical Gardens, Yalta, Crimea, Ukraine.

*Aethiophenax ipidarius* (Redikortzev, 1947)

Figs. 1–2.

**Female.** The length of the body 222–233, width 138–160.

**Gnathosoma.** Fused with idiosoma, palpi fused with gnathosoma, with 1 pair of setae. Pharynx enlarged.

**Idiosoma.** Dorsal surface (Fig. 1). Prodorsal shield with two pairs of setae. Stigmatal openings located anterolaterally on prodorsum. Tracheal trunks each with a well sclerotized atrium. All dorsal setae setiform, weakly spiculate. Length of setae:  $v_2$  28–31,  $sc_2$  28–30,  $c_1$  25–27,  $c_2$  27–29,  $d$  23–28,  $f$  22–26,  $h_1$  18–20,  $h_2$  19–21.

Ventral surface (Fig. 2). Epimeres I and II each with pair of setae, those of plate II longer than those of plate I. Metapodosomal venter with 5 pairs of flagellate, nude setae. Opisthosomal venter with 1 pair of aggenital setae. Apodemes 5 well developed.

**Legs.** Tarsi of legs II–IV with a pair of weak claws. Tibiotarsus I with 1 large, hook-like claw. Chaetotaxy of legs (number of solenidia in parentheses): trochanters: 1–1–1–1; femora: 3–3–2–2; genua: 3–3–1–1; tibiotarsus I: 17(2); tibiae II–IV: 4(1), 4–4; tarsi II–IV: 7(1)–7–6.

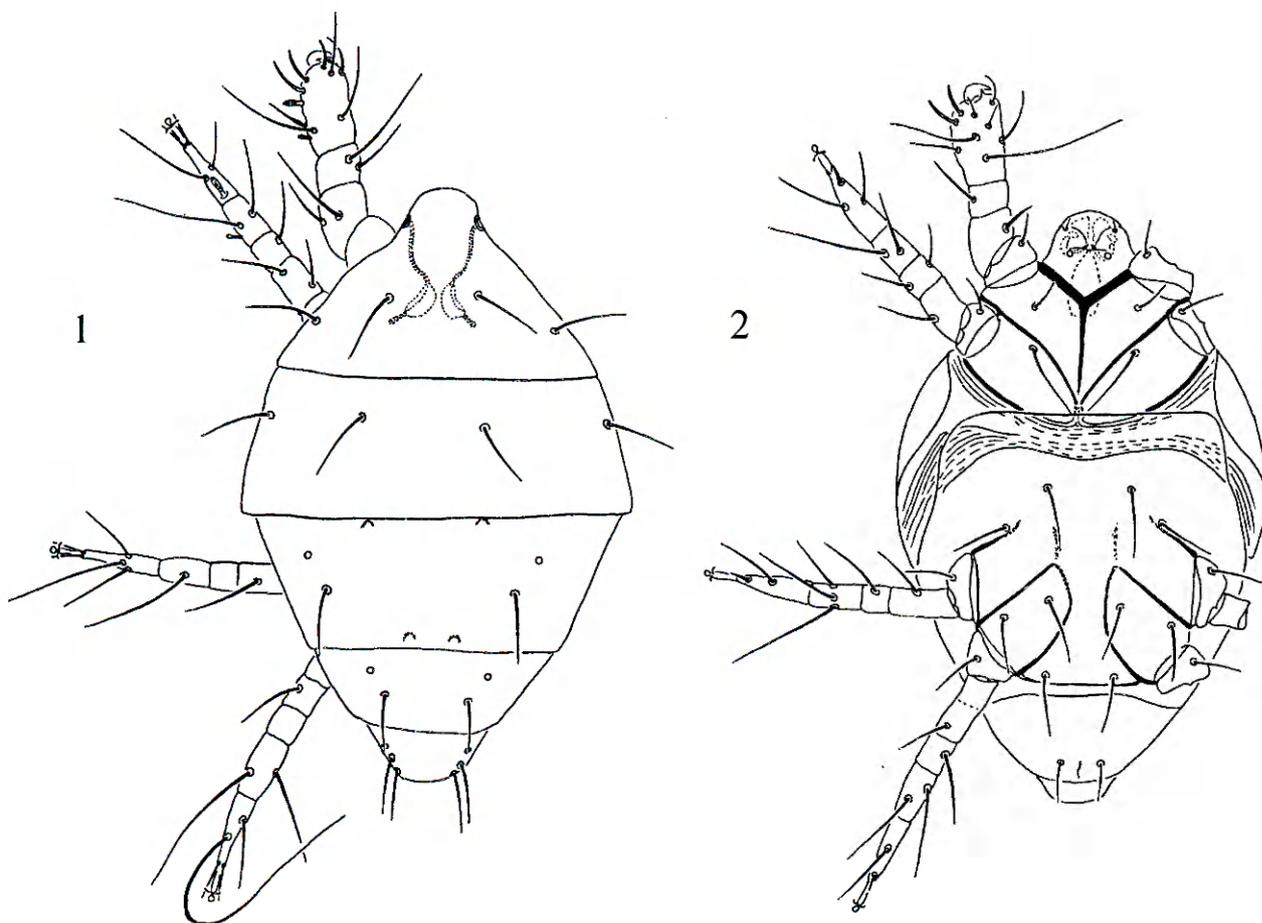
**Material.** 10 females from *Ips typographus* (Linne, 1758), Leningrad district, settl. Taytsy, Russia, 18.10.1997, coll. A.A. Khaustov; 7 females from *Ips typographus*, 2 females from *Ips amitinis* (Eichhoff, 1871), 1 female from *Orthotomicus laricis* (Eichhoff, 1867) (Coleoptera: Scolytidae), Leningrad distr., settl. Vaskelovo, 18.08.1997, coll. M.Y. Mandelshtam.

*Paracarophenax scolyti* sp.n.

Figs. 3–4.

**Female.** The length of the body 250–260, width 123–130.

**Gnathosoma.** Fused with idiosoma, palpi fused with gnathosoma, with 1 pair of setae. Pharynx enlarged.



Figs.1-2. *Aethiophenax ipidarius* Redikortzev, 1947, female: 1 — dorsal view, 2 — ventral view.  
 Рис.1-2. *Aethiophenax ipidarius* Redikortzev, 1947, самка: 1 — дорсально, 2 — вентрально.

**Idiosoma.** Dorsal surface (Fig.3). Prodorsal shield with two pairs of setae. Stigmatal openings located anterodorsally on prodorsum. Tracheal trunks with a well developed, brush-like atrium. Posterior margin of prodorsal shield weakly concave. All dorsal setae (exception  $h_2$ ) stout, spiculate, setae  $h_1$  setiform, nude. Length of setae (of holotype):  $v_2$  26,  $sc_2$  28,  $c_1$  22,  $c_2$  23,  $d$  25,  $e$  26,  $f$  21,  $h_1$  22,  $h_2$  17.

Length of setae (of paratypes):  $v_2$  25-28,  $sc_2$  26-29,  $c_1$  22-24,  $c_2$  22-25,  $d$  23-26,  $e$  26-28,  $f$  20-23,  $h_1$  22-24,  $h_2$  16-19.

Ventral surface (Fig.4). Epimeres I and II each with 1 pair of setae, those of plate II longer than those of plate I. Metapodosomal venter with 5 pairs of flagellate, nude setae. Anterior margin of posterior ventral plate trilobed. Posterior margin of posterior ventral plate with well developed tegula. Apodemes 5 not developed. Epimeres I-IV weakly punctated. Opisthosomal venter with 1 pair of setae.

**Legs.** Tarsi of legs I-IV with a pair of weakly developed claws. Tibiotarsus I with 1 large, hook-like claw. Chaetotaxy of legs is as follows: trochanters: 1-1-1-1; femora: 3-3-1-0; genua: 4-1-1-1; tibiotarsus I: 17(2); tibiae II-IV: 4(1)-4-4; tarsi II-IV: 6(1)-6-6.

**Type material.** Holotype female (Aph-3). Paratypes 12 females, Crimea, Yalta, from the galleries

of *Leperesinus fraxini* (Panzer, 1779), under the bark of *Fraxinus* sp. (Oleaceae), 3.11.1996, coll. A.A. Khaustov.

#### DIFFERENTIAL DIAGNOSIS

The species closely related to *Acarophenax* is not known for the author. A new species differs from all other known representatives of the genus by the presence of tracheal trunks with a well sclerotized, brush-like atrium.

#### ETYMOLOGY

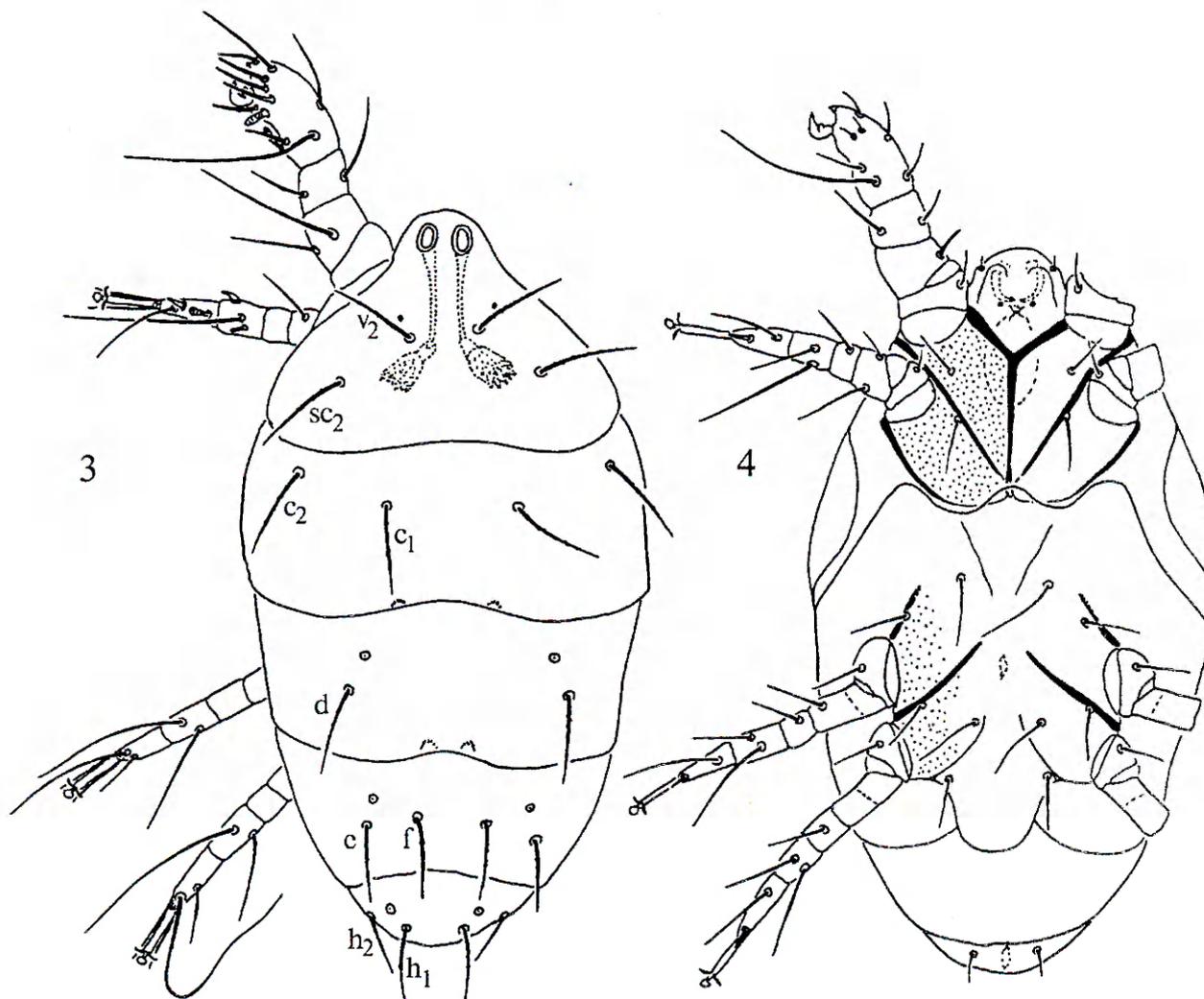
The new species is named «*scolyti*» referring to its association with scolytid beetles.

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Figs.3-4. *Paracarophenax scolyti* sp.n., female: 3 — dorsal view, 4 — ventral view.  
Рис.3-4. *Paracarophenax scolyti* sp.n., самка: 3 — дорсально, 4 — вентрально.

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