

## NEW SPECIES OF MITES OF THE GENUS *BAKERDANIA* (ACARI: HETEROSTIGMATA: PYGMEPHOROIDEA) FROM THE BLACK SEE SHORE OF RUSSIA

A. A. Khaustov<sup>1\*</sup>, V. D. Sevastianov<sup>2</sup>

<sup>1</sup> Nikita Botanical Gardens — National Scientific Center, Yalta, Crimea 98648, Ukraine, e-mail: alkhaustov@mail.ru

<sup>2</sup> I.I. Mechnikov Odessa National University, Shampanskiy al., 2, Odessa, 65058 Ukraine

ABSTRACT: A new species of pygmephorid mites, *Bakerdania caucasica* sp. n., is described from the litter in the Black See shore of Russia.

Key words: Pygmephoridae, *Bakerdania*, new species, Caucasus

### INTRODUCTION

The genus *Bakerdania* Sasa, 1961 (Acari: Pygmephoridae) includes about 100 species (Khaustov and Makarova 2005; Kurosa, 1999). In this paper we describe one new species of this genus collected from the litter in the Black See Shore of Russia.

### MATERIALS AND METHODS

In the description, the terminology follows Lindquist (1986). All measurements are given in micrometers (μm) for holotype and for 5 paratypes (in parenthesis).

### SYSTEMATICS

#### Family Pygmephoridae Cross, 1965

#### Genus *Bakerdania* Sasa, 1961

#### *Bakerdania caucasica* Khaustov sp. nov.

Figs 1–5.

**Description. Female.** Gnathosoma (Fig. 2) dorsally with 2 pairs of simple subequal setae  $ch_1$  and  $ch_2$ . Dorsal medial apodeme well developed.

Idiosomal length 270(233–286), maximal width 145(145–155). Idiosomal dorsum (Fig. 1). All tergites with small numerous dimples. Setae  $v_2$  short, smooth, other dorsal setae barbed. Tips of setae  $d$ ,  $e$ ,  $f$ , and  $h_1$  blunt. Other dorsal setae pointed. Length of dorsal setae:  $v_2$  6(5–6),  $sc_2$  39(39–44),  $c_1$  43(43–49),  $c_2$  58(55–58),  $d$  38(38–41),  $e$  36(36–38),  $f$  42(42–44),  $h_1$  40(38–42),  $h_2$  46(46–51). Distances between dorsal setae:  $v_2$ – $v_2$  43(42–44),  $sc_2$ – $sc_2$  43(42–43),  $c_1$ – $c_1$  50(48–50),  $c_1$ – $c_2$  40(33–40),  $d$ – $d$  53(50–53),  $e$ – $f$  14(10–14),  $f$ – $f$  69(68–74),  $h_1$ – $h_1$  29(27–31),  $h_1$ – $h_2$  9(9–11). Setae  $sc_2$  usually shorter than  $f$ .

Idiosomal venter (Fig. 2). Apodemes 1, 2, and sejugal apodeme well developed and joined with presternal apodeme. Secondary transverse apodeme (sta) weakly developed and not joined with apodemes 2. All ventral plates with numerous small

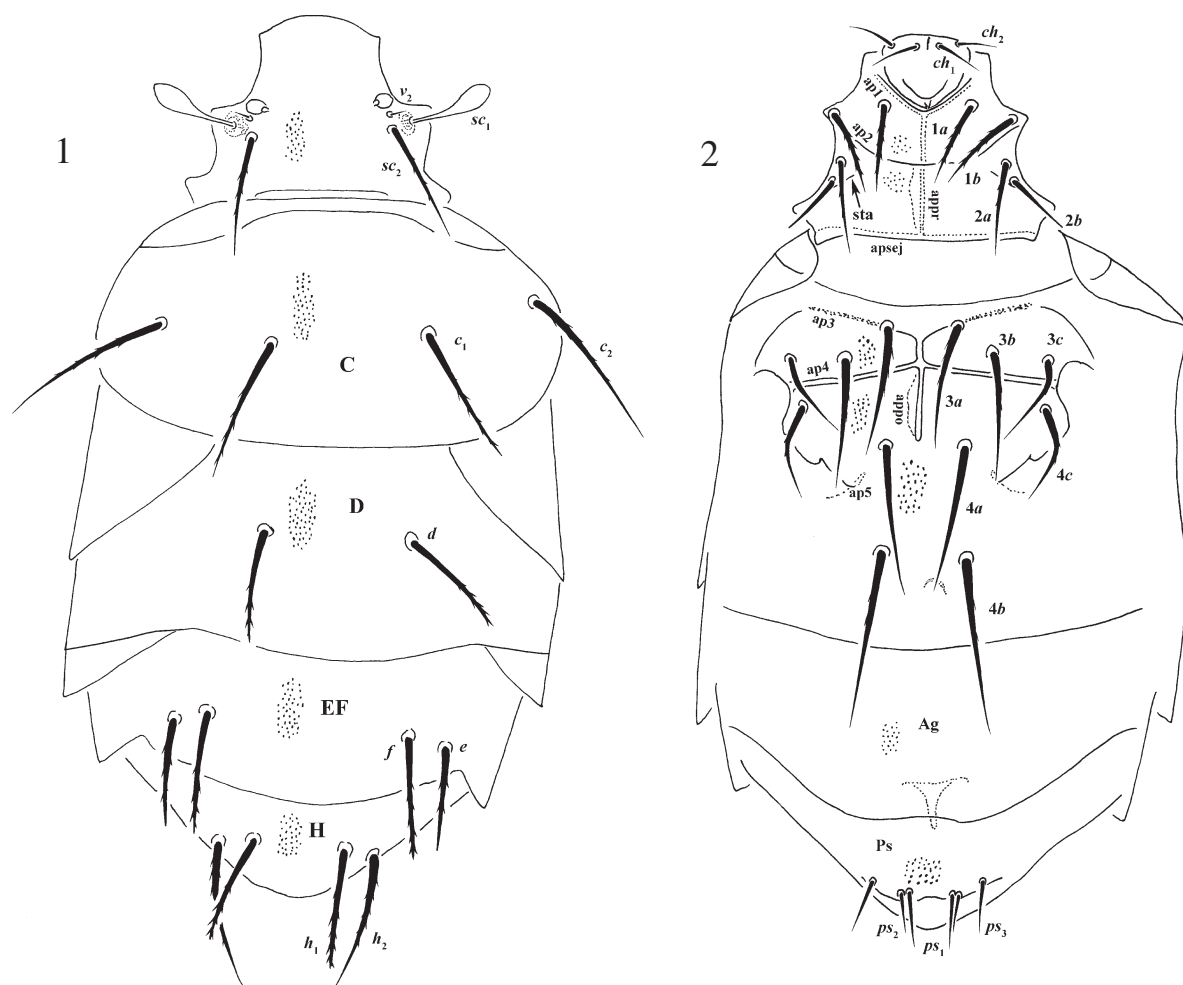
dimples. Almost all ventral setae weakly barbed. Posterior margin of posterior sternal plate convex in middle part. All pseudanal setae smooth, setae  $ps_1$  and  $ps_3$  subequal and longer than  $ps_2$ . Apodemes 3 well developed. Apodemes 4 long, reaching level of setae 3c. Apodemes 5 vestigial. Posterior margin of aggenital plate weakly concave. Length of ventral setae: 1a 30(30–33), 1b 28(27–29), 2a 31(31–34), 2b 28(25–28), 3a 42(42–51), 3b 48(47–50), 3c 29(27–32), 4a 50(46–50), 4b 61(60–62), 4c 35(35–38),  $ps_1$  14(14–17),  $ps_2$  9(9–11),  $ps_3$  15(15–17).

Legs (Figs. 3–5). Chaeto- and solenidiotaxy (parenthesis) of legs I: Tr1–Fe3–Ge4–TiTa16(4). Tibiotarsus with well developed claw. Solenidion  $\omega_1$  13(12–13) =  $\omega_2$  13(11–13) >  $\phi_1$  8(8–10) =  $\phi_2$  9(9–10). Solenidion  $\omega_1$  finger-shaped. Solenidion  $\phi_1$  baculiform. Solenidia  $\omega_2$  and  $\phi_2$  uniformly thin. Seta  $d$  FeI hook-like. Leg II: Tr1–Fe3–Ge3–Ti4(1)–Ta6(1). Tarsus with sickle-like padded claws. Solenidion  $\omega$  11(10–12) finger-shaped. Solenidion  $\phi$  small, difficult to see. Empodium tongue-like, sharpened distally. Leg III: Tr1–Fe2–Ge2–Ti4(1)–Ta6. Solenidion  $\phi$  depressed, indistinct. Leg IV: Tr1–Fe2–Ge1–Ti4(1)–Ta6. Tarsus rather short. Pretarsus short, with small large simple claws and thin, tongue-like empodium distally.

**Male and larva unknown.**

**Type material.** Female holotype, slide # AD 000868 and 25 female paratypes, RUSSIA: the Black See Shore, Sochi, in litter, August 1968, coll. A.D. Petrova.

**Type depositories. Holotype and 5 paratypes** are deposited in collection of Zoological Institute of Russian Academy of Sciences, S. Petersburg, Russia, 5 paratypes are deposited in the collection of the department of Acarology, Shmalgausen Institute of Zoology, Kiev, Ukraine, the rest of paratypes are deposited in collection of Nikita Botanical Gardens, Yalta, Ukraine.



Figs. 1, 2. *Bakerdania caucasica* sp. n., female: 1 — dorsum, 2 — venter.

**Etymology.** The species name refers to the geographical distribution of the new species.

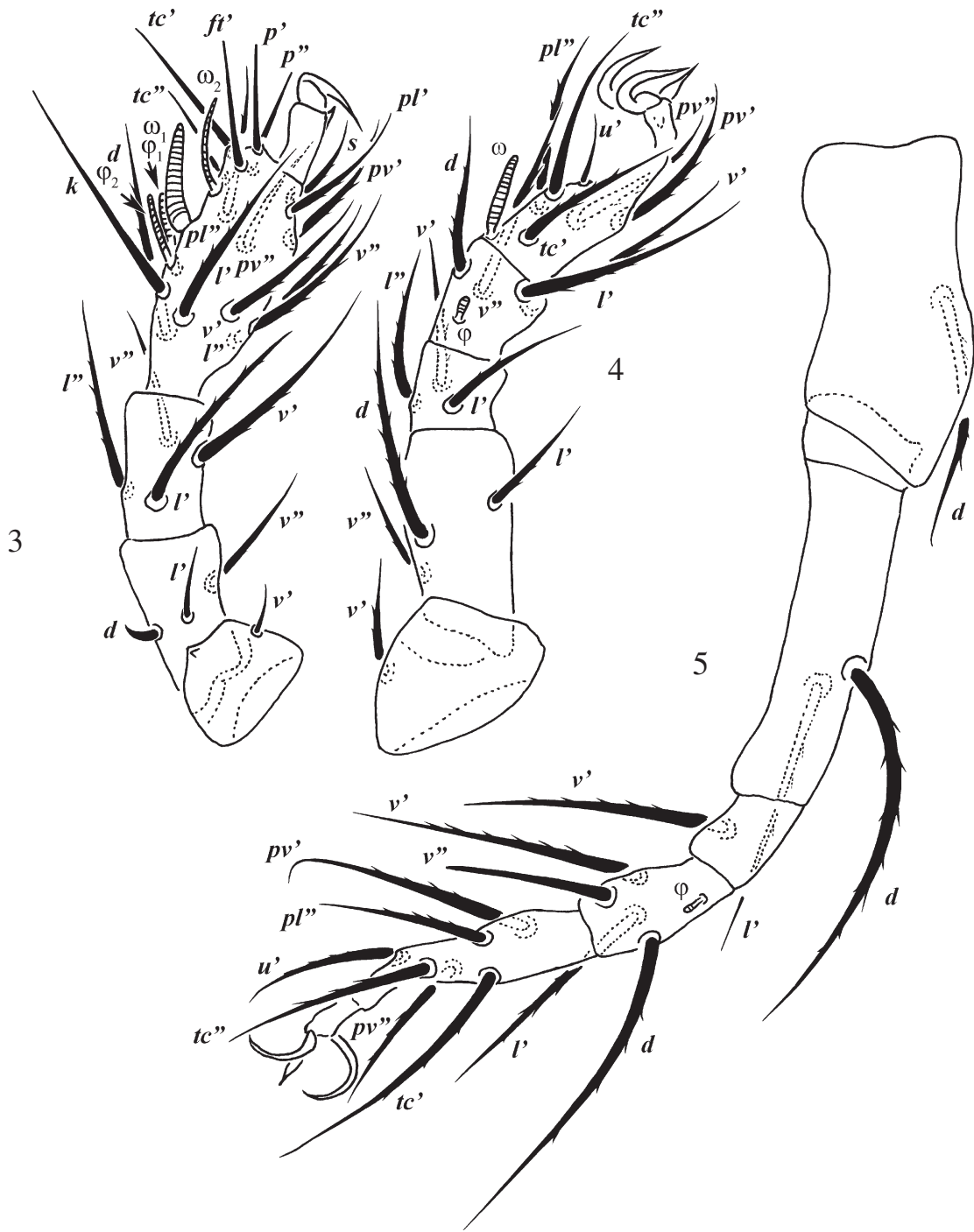
**Differential diagnosis.** The new species is very similar to *B. gracilis* (Krczal, 1958) but differs by setae  $f=h_1$  ( $f < h_1$  in *B. gracilis*), and by setae  $h_2$  which are distinctly longer than  $h_1$  (subequal in *B. gracilis*). The new species also similar to *B. delanyi* (Evans, 1952), but differs by much longer and sharply pointed setae  $h_2$ , which longer than  $h_1$  (in *B. delanyi*  $h_2$  distinctly shorter than  $h_1$  and blunt-ended).

#### ACKNOWLEDGEMENTS

Authors thanks A.D. Petrova (Moscow State University, Russia) for providing us with materials of pygmephorid mites from Caucasus.

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Figs. 3–5. *Bakerdania caucasica* sp. n., female legs I, II, and IV, respectively (1–3).