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ARCHIDISPUS DUBININI SP. NOV., A NEW SPECIES OF MITES OF THE FAMILY SCUTACARIDAE (ACARINA: HETEROSTIGMATA) FROM UKRAINE

ARCHIDISPUS DUBININI SP. NOV. — НОВЫЙ ВИД КЛЕЩЕЙ СЕМЕЙСТВА SCUTACARIDAE (ACARINA: HETEROSTIGMATA) ИЗ УКРАИНЫ

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Ключевые слова: *Archidispus dubinini* sp. nov., Heterostigmata, жужелицы, Украина

ABSTRACT

A new species, *Archidispus dubinini* **sp. nov.**, is described from Ukraine. It was found to be phoretic on the carabid beetle *Stenolophus persicus* Mnnh.

РЕЗЮМЕ

Приводится описание нового вида клещей *Archidispus dubinini* **sp. nov.** из Украины. Вид был найден форезировавшим на жужелице *Stenolophus persicus* Mnńh.

Mites of the genus *Archidispus* Karafiat, 1959 are usually associated with different carabid beetles [Karafiat, 1959, Kurosa, 1983, Ebermann, 1991]. A new species of the genus *Archidispus* was found in Ukraine that is associated with carabid beetles (Coleoptera: Carabidae). The description of a new species is based on phoretic females only.

The terminology used in the description follows that of Lindquist [1986]. All measurements are given in micrometers (μm) for holotype and paratypes (in parenthesises). The type material is deposited in the collections of the Department of Acarology, Schmalhausen Institute of Zoology, Kiev, Ukraine.

Archidispus dubinini sp. n.

Figs. 1–8.

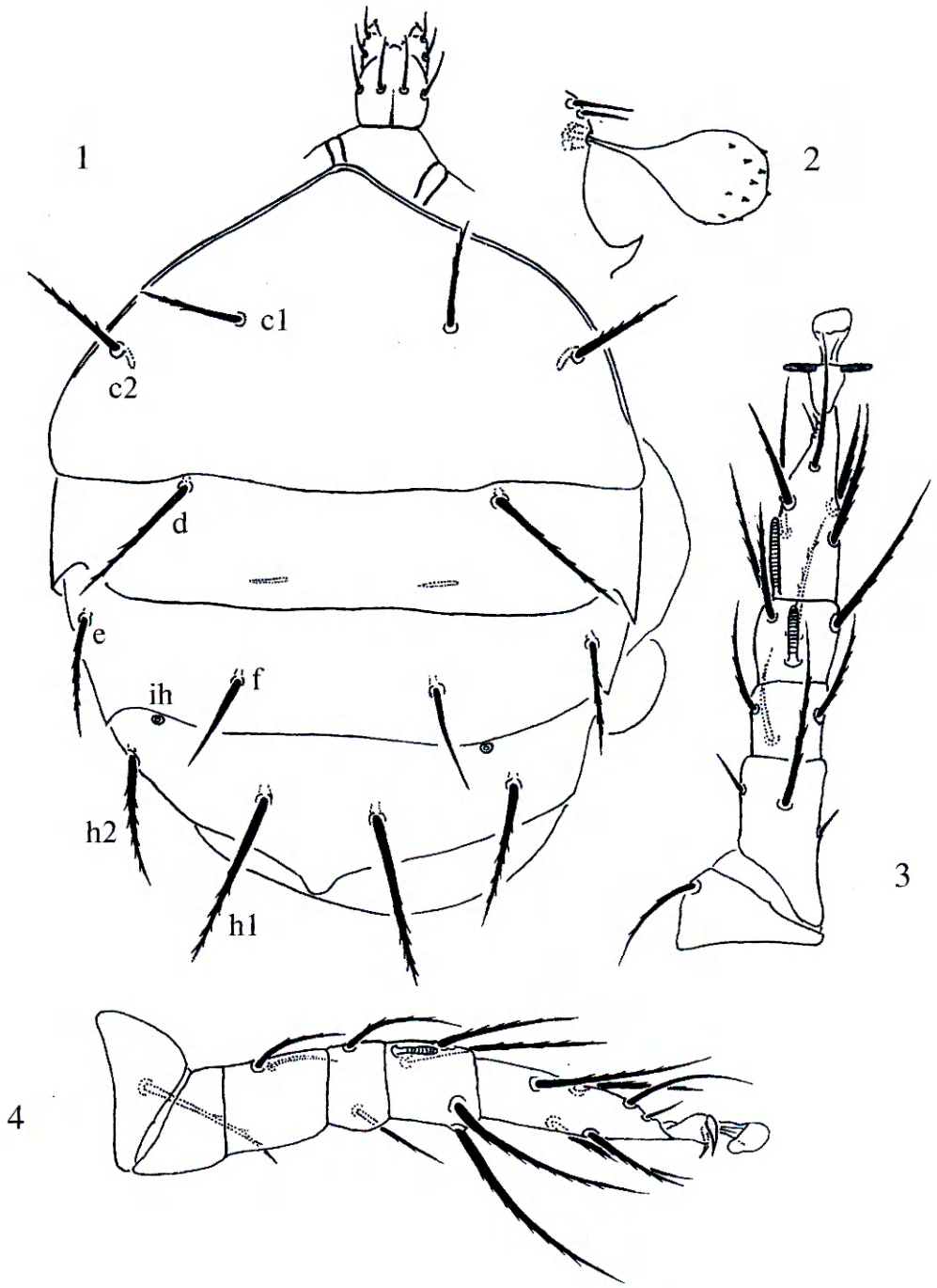
Description of phoretic female. Length of idiosoma 170 (151–172), maximum width 133 (127–139).

Gnathosoma (Figs. 1, 5). Dorsally with 3 pairs of setae, Gd1>Gd2, both on the same transverse line; pp tiny and hardly visible, inserted anterolaterad to setae Gd2. Ventral surface with 1 pair of setae. Each palp with 2 dorsal setae; ventral with mushroom-like process and solenidion.

Idiosomal dorsum (Fig. 1). Free margin of tergite C has poorly developed stripes, usually difficult to discern. Cupulae ia not evident. Cupulae ih large, oval. Tergite H with posteromedian tongue-like elongation. Setae c2 inserted on the free margin of tergite C and have a highly sclerotic short alveolar canal. All dorsal setae distinctly barbed, only setae f sometimes nude (Fig. 1). Length of dorsal setae: c1 31 (30–33), c2 33 (30–32), d 36 (33–36), e 32 (30–33), f 27 (23–28), h1 43 (37–41), h2 32 (32–35). Distances between dorsal setae: c1–1 46 (44–47), c1–2 29 (28–29), d–d 74 (72–76), e–f 34 (34–35), f–f 43 (41–44), h1–1 22 (22–23), h1–2 33 (32–35). Propodosomal setae v1 longer and thicker than v2. Trichobothrium with a thin stem, distally round, with fine barbs (Fig. 2).

Idiosomal venter (Fig. 5). Setae 2a, 3b, 4a bullet-like. Setae 1a, 1b, 3c, 4c distinctly barbed. Setae 1a and 4b thickened, lanceolate and nude. Setae 2b, 3a, 3c, 4c and ps2 nude. Setae 1b distinctly barbed. Apodemata IV highly sclerotic, extend to the insertion of setae 3b. Apodemata V reduced. Length of ventral setae: 1a 16 (15–17), 1b 30 (29–31), 2a 6 (6), 2b 17 (18–22), 3a 22 (21–25), 3b 7 (7), 3c 15 (15–17), 4a 7 (7), 4b 22 (20–25), 4c 23 (22–26), ps1 21 (19–22), ps2 10 (9–11), ps3 20 (19–22).

Legs (Figs. 3, 4, 6–8). Leg I (Fig. 6–7): setae formulae: Tr1–Fe3–Ge4–Ti–Ta16 (4) (number of solenidia in parenthesises). Tibiotarsus thickened, with massive claw (Fig. 7). Solenidia ω2 11 (11–12)=φ2 11 (10–11)>ω1 10 (9–10)>φ1 9 (9); ω2 and φ2 uniformly thin, ω1 and φ1 thickened distally. Setae dFe broadened, leaflike. Leg II (Fig. 3): setae formula: Tr1–Fe3–Ge3–Ti4 (1)–Ta6 (1). Tarsus with symmetrical claws. Solenidion ω 8 (8–9) broadened at the middle portion, solenidion φ8 (7–8) is uniformly thin. Leg III (Fig. 4): setae



Figs. 1–4. *Archidispus dubinini* **sp. n.**, phoretic female: 1 — dorsum, 2 — trichobothrium with setae v1 and v2, 3 — leg II, 4 — leg III.
Рис. 1–3. *Archidispus dubinini* **sp. n.**, форезирующая самка: 1 — дорсальная сторона тела, 2 — трихоботрий и щетинки v1 и v2, 3 — нога II, 4 — нога III.

formula: Tr1–Fe2–Ge2–Ti4 (1)–Ta6. Claws symmetrical. Solenidion φ 6 (7–9) of the same shape as on leg II. Leg IV (Fig. 8): setae formula: Tr1–Fe2–Ge1–Ti3 (1)–Ta6. Tarsus with pretarsus and two small claws, empodium extended, distally widened. Solenidion φ 10 (10–12) uniformly thin.

Male, non-phoretic female and immatures. Unknown.

DIFFERENTIAL DIAGNOSIS

The new species is closely related to *Archidispus pterostichi* Rack, 1973, *A. conspicuus* Kurosa, 1978, *A. arakawanus* Kurosa, 1990 and *A. iriomotensis* Kurosa, 1990 by having bullet-like setae 3b and 4a. However it differs by bullet-like setae 2a, which are seta-like in all above-mentioned species.

Figs. 5–8. *Archidispus dubinini* sp. n., phoretic female: 5 — venter, 6 — leg I, 7 — tibiotarsus I ventrodistally, 8 — leg IV.
Рис. 5–8. *Archidispus dubinini* sp. n., форезирующая самка: 5 — вентральная сторона тела, 6 — нога I, 7 — тибиотарзус I вентродистально, 8 — нога IV.

Type material. Holotype (female): slide No. 487, Ukraine, Odessa distr., Bolgradskiy reg., shore of Yalpugskiy liman, on *Stenolophus persicus* Mnnh., (date and collector unknown); paratypes: 6 females with same data as holotype.

ETYMOLOGY

The new species is named after Dr. V.B. Dubinin, a distinguished Russian acarologist.

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