

A new species of *Ulidia* (Diptera: Ulidiidae) from Turkmenistan and Uzbekistan

Новый вид рода *Ulidia* (Diptera: Ulidiidae) из Туркменистана и Узбекистана

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Ulidia transcaspica sp. nov. from Turkmenistan and Uzbekistan is described and depicted. The new species is close to *U. nigricubitalis* Zaitzev, 1982 from Mongolia; *U. nigricubitalis* is also depicted.

Описан новый вид *Ulidia transcaspica* sp. nov. из Туркменистана и Узбекистана, близкий к *U. nigricubitalis* Zaitzev, 1982 из Монголии. Для обоих видов приведены иллюстрации.

Key words: taxonomy, Diptera, Ulidiidae, *Ulidia*, new species

Ключевые слова: таксономия, Diptera, Ulidiidae, *Ulidia*, новый вид

INTRODUCTION

The genus *Ulidia* Meigen, 1826 includes 19 described species distributed mainly in semiarid areas from the Mediterranean in the West to China (Inner Mongolia and Tibet) in the East (Zaitzev, 1984; Kameneva, 2008, 2010; Chen & Kameneva, 2009).

Sometimes it is difficult to distinguish *Timia* Wiedemann, 1824 from *Ulidia*. The main diagnostic characters used so far are mainly as follows: the frons smooth (in *Timia*) or dimpled (in *Ulidia*) (with some exceptions in both genera), head and thorax microtrichose (in *Timia*) or bare (in *Ulidia*; some species assigned to *Timia* have shiny head and thorax, and *Ulidia metope* Kameneva, 2010 has frons widely microtrichose) (Chen & Kameneva, 2009; Kameneva, 2010).

During the study of Ulidiidae in the collection of the Zoological Museum of Lomonosov Moscow State University (ZMUM), the author recognized several

specimens belonging to the new species described below. The new species is similar to *Ulidia nigricubitalis* Zaitzev, 1982, which was described from a single male collected in Mongolia (Zaitzev, 1982). The holotype of *U. nigricubitalis* was re-examined and illustrated.

MATERIAL AND METHODS

The specimens listed in this paper are deposited at the Hungarian Natural History Museum (Magyar Természettudományi Múzeum), Budapest, Hungary (HNHM), at the Zoological Museum of Lomonosov Moscow State University, Russia (ZMUM), and at the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZIN). Morphological terminology generally follows McAlpine (1981). The abbreviations of veins and setae used in descriptions follow White et al. (1999). Series of photos were taken using a Stemi SV11 Apo Carl Zeiss stereomicroscope and

an Olympus CX41 microscope, and then composed with the use of CombineZM software (Hadley, 2007). Some pictures of the genitalia were made using a Corel DRAW X3 program.

TAXONOMIC ACCOUNT

Family ULIDIIDAE

Genus *Ulidia* Meigen, 1826

Ulidia nigricubitalis Zaitzev, 1982
(Figs 1a–e)

Holotype. Male; **Mongolia**, *Ömnögovi Aimag*, Tahilga-Ula, between Tsogt-Ovoo and Dalanzadgad, 1550 m, 12 June 1967; Z. Kaszab leg.; HNHM.

Ulidia transcaspica sp. nov.
(Figs 2a–e, 3a–d)

Holotype. Male; **Turkmenistan**, *Chardzhou Prov.*, Repetek, 30 Apr. 1990; A.L. Ozerov leg.; ZMUM.

Paratypes. **Turkmenistan**: female, same locality as for holotype, 24 Apr. 1990, A.L. Ozerov leg.; male and female, same locality, 27 Apr. 1990, A.L. Ozerov leg.; 4 males, 4 females, same locality, 30 Apr. 1990, A.L. Ozerov leg.; female, same locality, 3 May 1990, A.L. Ozerov leg.; male and female, same locality, 3 May 1990, A.I. Shatalkin leg.; ZMUM. Three males, 2 females, **Turkmenistan**, *Zakaspiyskaya Prov.*, Mulla-Kara [Mollakara], 18 Apr. 1903, K.O. Ahnger leg.; ZIN, A. Jakovlev collection. **Uzbekistan**: male, 2 females, 8 km N of Tamdy-Bulak, Kyzyl Kum desert, 5 May 1965, V.F. Zaitzev leg.; 4 males, female, same locality, 6 May 1965, V.F. Zaitzev leg.; male and female, same locality, 7 May 1965, V.F. Zaitzev leg.; ZIN.

Diagnosis. The new species is similar to *U. nigricubitalis* in having the wings with brown cell *bcu*, brown apical spot and brown cells *c* and *sc*. These two species clearly differ from all other species of *Ulidia* and *Timia* by this character.

The new species differs from *U. nigricubitalis* in the following characters: scutellum shining yellow (in *U. nigricubitalis*, shining black), face entirely yellow (in *U. nigricubitalis*, shining yellow with wide brown band along ventral edge), postgenae yellow (in

U. nigricubitalis, deep brown), occiput deep brown with a yellow spot behind ocellar triangle extending to compound eyes (in *U. nigricubitalis*, same but yellow spot not extending to eyes), and lateral parts of vertex not darkened (in *U. nigricubitalis*, deep brown). In addition, the surstylus of the new species has a deeper incision between the posteromedial and anteroventral lobes than that of *U. nigricubitalis*.

Description. *Male*. Head. Face yellow or yellow-brown, not microtrichose. Lunule yellow, not microtrichose. Antennal grooves deep, oval, yellow, finely microtrichose. Frons smooth, without pits, shining, wide (1.1–1.2 times as wide as long in posterior half), widened anteriorly (1.9 times as wide as long at lunule level), without microtrichia, with numerous short and thin black setulae. Ocellar triangle shining black. Lateral parts of vertex pale brown. Occiput covered with short and thin black setulae. Median occipital sclerite with a yellow spot posterior of ocellar triangle; lateral occipital sclerite pale brown, with a black spot close to occipital foramen. Compound eye vertical oval, 1.5 times as high as long. Postgena yellow. Parafacialium yellow, smooth, as wide as antennal groove, 1.5–2 times as wide as first flagellomere. Genae high, 0.4 times as high as eye, smooth, shining yellow. Antenna matt, mostly yellow. First flagellomere rounded apically, slightly longer than wide, with a pale brown apical spot. Antenna short thin grey microtrichose. Arista pale brown, bare. Palpus yellow, moderately wide, unmodified, parallel-sided, with long black setae. Proboscis with 3–4 pairs of black setae on prementum and black setulae on labellum. Setae: 1 small *or*, 1 divergent *oc*, 1 divergent *poc* (1.2 times as long as surrounding setulae), 1 long divergent *mv*, and 1 long convergent *iv* setae; 8–10 *gn* and 5–6 *pgn* setulae; two groups of *spc* setae dorsal of occipital foramen.

Thorax shagreened black, with black setae and setulae, without microtrichose areas. Mesonotum with greenish sheen. Scutellum entirely shining yellow. Pleura

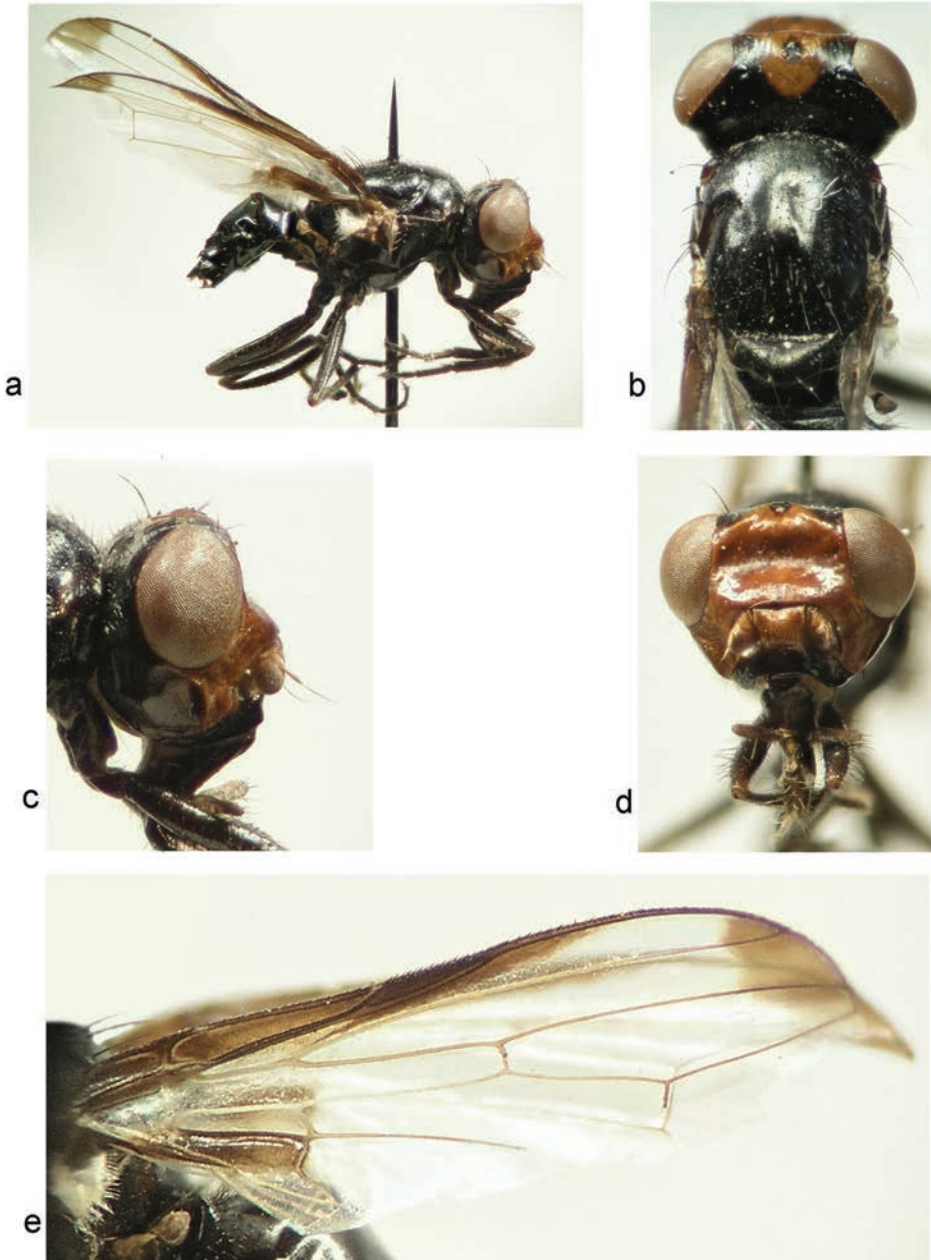


Fig. 1. *Ulidia nigricubitalis* Zaitzev, 1982, male (holotype): a – habitus, lateral view; b – head and thorax, dorsal view; c – head, lateral view; d – head, anterior view; e – wing. Photographs by G.D. Lengyel (HNHM).



Fig. 2. *Ulidia transcaspica* sp. nov., male (holotype): a – habitus, lateral view; b – head and thorax, dorsal view; c – head, lateral view; d – head, anterior view; e – wing.

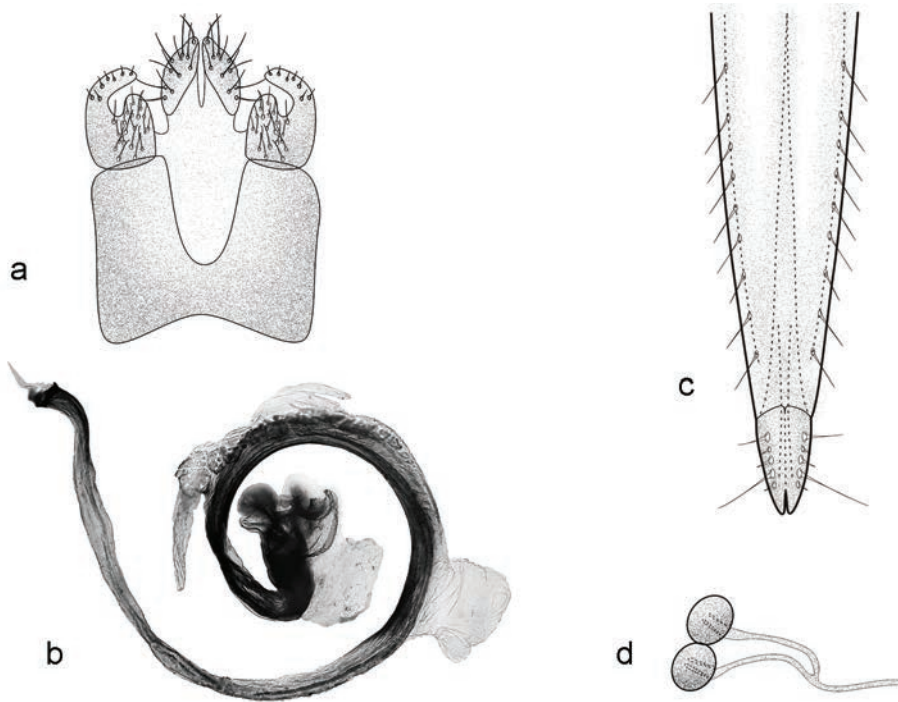


Fig. 3. *Ulidia transcaspica* sp. nov., genitalia of male (holotype) (a, b) and of female (c, d): a — epanthrium, posterior view; b — phallus; c — aculeus, compressed on slide; d — spermathecae.

shining black. Postpronotal lobe, mesonotal scutum, scutellum, proepisternum, anepisternum and katepisternum with numerous fine, long black setulae (0.5–0.6 times as long as setae). Setae: 1 *ppm*, 2 *npl*, 1 *spal*, 1 *ial*, 1 *pal*, 1 *prsc dc*, 2 pairs of *sctl*, 5 *anepst* and 1 *kepst*.

Legs blackish brown (except knees, proximal half of tibia and first tarsomere yellow-brown), long black setulose and setose; hind femur unmodified, as thick as midfemur.

Wing hyaline, except brown apical spot and brown cells *bc*, *c*, *sc*, a part of *r*₁ and brown *bcu*; veins yellow in basal half of its length, brown in apical half; posterior portion of vein *A*₁+*Cu*₂ (from break to apex of postero-apical lobe of *bcu* cell) 1.5 times as long as its anterior portion (anterior of its break). Distance between *R*₄₊₅ and *M* apices at wing apex slightly narrower than *R-M* crossvein. Calypter moderately enlarged, with long white fringe. Halter brown to black.

Abdomen shining black. Tergites and sternites smooth, with greenish sheen, long setulose. First tergite microtrichose.

Male genitalia. Surstylus with rounded posteromedial lobe and mesoventrally curved anteroventral lobe; no prenisetae; cerci separate. Phallus: one wide short membranous caecum in the middle of phallus, two long narrow membranous caeca basally of glans. Glans medium-sized, twice as wide as basal part of distiphallus (stipe), bowed and bearing a long sclerotized cuticular spur, 3–4 short hooks and two wide lobes.

Wing length 4.0–4.2 mm (in holotype, 4.1 mm). Body length 4.7–5.7 mm (in holotype, 4.8 mm).

Female. Similar to male, except genital structures. Tergite and sternite 6 setulose, short, narrowed and hidden underneath tergite 5.

Female terminalia. Tergosternum 7 dark brown or black, black setulose. Aculeus

moderately wide, 7–9 times as long as wide at its middle. Cercal unit elongate oval, with one pair of long basal and one pair of short apical setulae. Three spherical spermathecae with smoothed cellular surface and inverted neck, two left on T-shaped bifurcated common duct.

Wing length 4.0–4.2 mm. Body length 6.0–6.5 mm.

Etymology. The new species is named after its area of distribution.

Distribution. Turkmenistan, Uzbekistan.

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