

The first record of the spider subfamily Urocteinae Thorell, 1869 (Aranei: Oecobiidae) in Tajikistan

Urocteinae Thorell, 1869 (Aranei: Oecobiidae) — новое для Таджикистана подсемейство пауков

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КЛЮЧЕВЫЕ СЛОВА: Araneae, Центральная Азия, Гиссарский хребет, новая находка.

ABSTRACT: The female of a poorly known species, *Uroctea grossa* Roewer, 1960, is redescribed based on newly collected material from Tajikistan. The genus *Uroctea* Dufour, 1820 and the subfamily Urocteinae Thorell, 1869 are recorded from Tajikistan for the first time, and the new record represents the northeasternmost locality of the species' range. Digital photographs (including the first illustration of the vulva) and a map of distribution records of *U. grossa* are provided.

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РЕЗЮМЕ: На основании нового материала переписана самка плохо известного вида *Uroctea grossa* Roewer, 1960. Род *Uroctea* Dufour, 1820 и подсемейство Urocteinae Thorell, 1869 впервые отмечаются для Таджикистана. Новая находка является самой северо-восточной известной точкой ареала вида. Приводятся фотографии *U. grossa* (включая первую иллюстрацию вульвы) и карта находок вида.

Introduction

Oecobiidae Blackwall, 1862 is a relatively small spider family consisting of 119 species in six genera distributed almost worldwide [WSC, 2020]. Three genera are known from Central Asia: *Ambika* Lehtinen, 1967, *Oecobius* Lucas, 1846 (Oecobiinae) and *Uroctea* Dufour, 1820 (Urocteinae) [Mikhailov, 2013]. *Uroctea* is a single genus of the subfamily Urocteinae Thorell, 1869. Two species of *Uroctea* are known to occur in Central Asia: *U. grossa* Roewer, 1960 and *U. limbata*

(C.L. Koch, 1843) [WSC, 2020]. To date, *Uroctea* is known only in two Central Asian countries (former Soviet Union republics), Turkmenistan and Kazakhstan [Mikhailov, 2013]. While examining spider material collected in Tajikistan, we found a female belonging to *U. grossa*, a species known from females only and considered in only two taxonomic publications [Roewer, 1960; Zamani *et al.*, 2015]. The goals of this paper are to report that this species and the subfamily Urocteinae that have been found in Tajikistan for the first time and to provide a detailed redescription of the female of *U. grossa*.

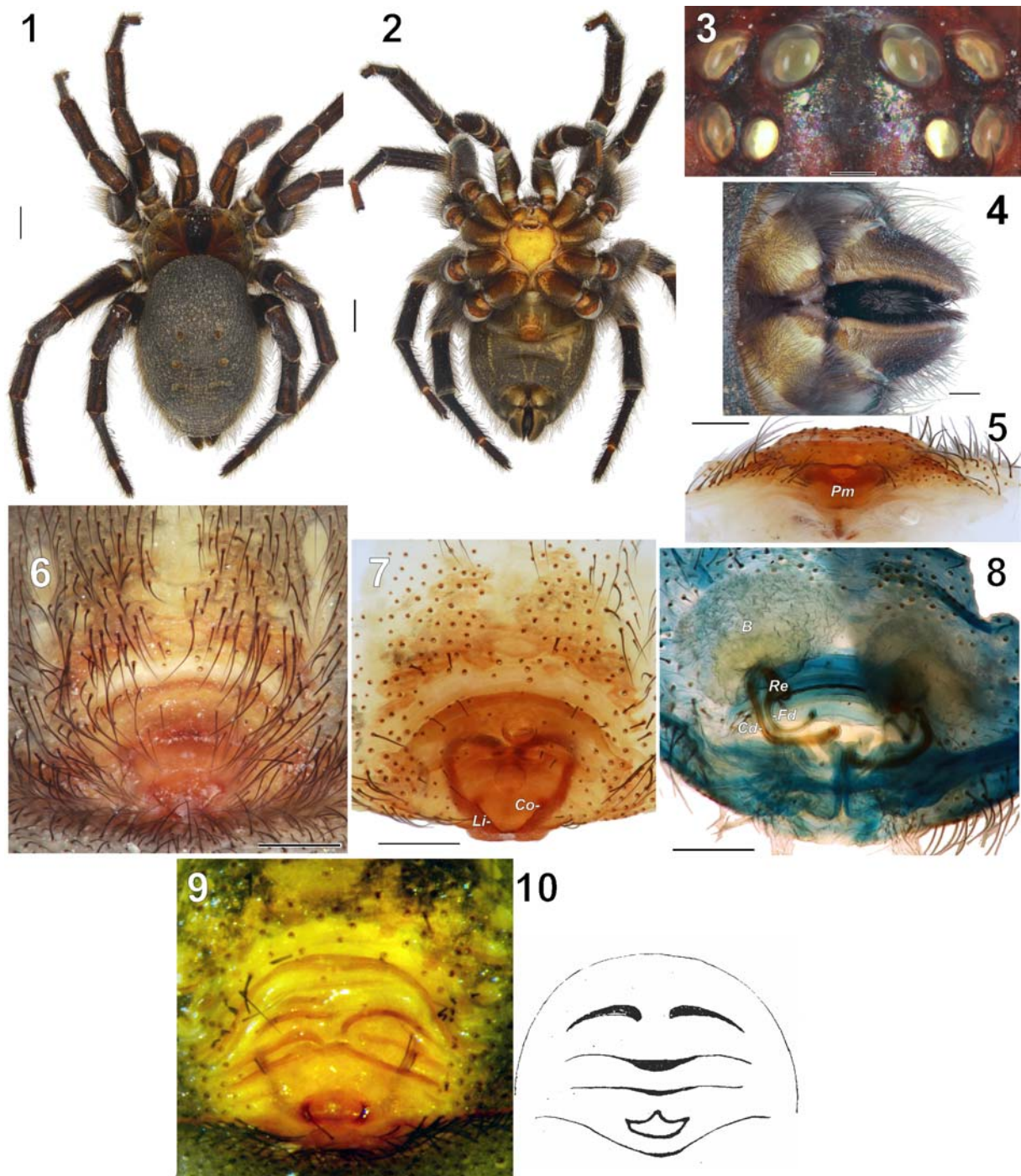
Material and methods

The specimen was photographed with a Canon EOS 7D camera attached to an Olympus SZX16 stereomicroscope at the Zoological Museum, University of Turku, Finland. Photographs were taken in a dish filled with alcohol, with cotton on the bottom. The epigyne was macerated in a KOH/water solution until the soft tissues were dissolved. Digital images were prepared using Helicon Focus software (<https://www.photo-soft.ru/helicon-focus/>). All measurements are in millimeters. Lengths of leg segments were measured on the dorsal side and are given as: total (femur, patella, tibia, metatarsus, tarsus). We followed the standard description and terminology used in Yang *et al.* [2019], with some changes. The material will be deposited in the Institute of Systematics and Ecology of Animals SB RAS, Novosibirsk, Russia (ISEA) and in the Zoological Museum, University of Turku, Finland (ZMUT).

Abbreviations

Collectors: AF — Alexander A. Fomichev, YM — Yuri M. Marusik.

Eyes: ALE — anterior lateral eye, AME — anterior median eye, MOA — median ocular area, MOA-L — length of MOA, MOA-WA — anterior width of MOA, MOA-WP — posterior width of MOA, PLE — posterior lateral eye, PME — posterior median eye.



Figs 1–10. Female of *Uroctea grossa* from Tajikistan (1–8), Iran (9) and Afghanistan (10): habitus (1–2), eyes (3), spinnerets (4), intact (5–7, 9–10) and macerated (8) epigyne. 1, 3, 8 — dorsal; 2, 4, 6–7, 9–10 — ventral; 5 — posterior. 9 — after Zamani *et al.* [2015]; 10 — after Roewer [1960]. Scale bars: 1–2 — 2 mm, 3 — 0.2 mm, 4–8 — 0.5 mm. Abbreviations: *Bu* — bursa, *Cd* — copulatory duct, *Co* — copulatory opening, *Fd* — fertilization duct, *Li* — lip of epigyne, *Pm* — posterior epigynal margin, *Re* — receptacle.

Рис. 1–10. Самка *Uroctea grossa* из Таджикистана (1–8), из Ирана (9) и из Афганистана (10): внешний вид (1–2), глаза (3), паутинные бородавки (4), интактная (5–7, 9–10) и мацерированная (8) эпигина. 1, 3, 8 — дорзально; 2, 4, 6–7, 9–10 — вентрально; 5 — сзади. 9 — по Zamani *et al.* [2015]; 10 — по Roewer [1960]. Масштабные линейки: 1–2 — 2 мм, 3 — 0,2 мм, 4–8 — 0,5 мм. Сокращения: *Bu* — бурса, *Cd* — копулятивный проток, *Co* — копулятивное отверстие, *Fd* — оплодотворительный проток, *Li* — губа эпигины, *Pm* — задний край эпигины, *Re* — рецептакула.



Figs 11–12. Distribution records of *Uroctea grossa*. Type locality — diamond; record from Iran — triangle; new record from Tajikistan — circle; juvenile specimens from Tajikistan — square. Frame on Fig. 12 refers to Fig. 11.

Рис. 11–12. Точки находок *Uroctea grossa*. Типовая местность — ромб; находка в Иране — треугольник; новая находка в Таджикистане — кружок; ювенильные особи из Таджикистана — квадрат. Рамка на рис. 12 соответствует рис. 11.

Redescription

Uroctea grossa Roewer, 1960

Figs 1–12.

U. grossa Roewer, 1960: 51, f. 18a–d (♀).

U. grossa: Zamani *et al.*, 2015: 342, f. 4a–d (♀).

MATERIAL EXAMINED. TAJIKISTAN: *Khatlon* Region: ♀ (ISEA) Aруктау Mt. Range, 7 km SW from Sambuli Village, 37°45.602'N, 68°32.741'E, dry stony shiblyak shrubland with rocks, 660–980 m, 9.04.2019, AF; 1 juv. (ISEA) Aруктау Mt. Range, 6 km ENE from Garavuti Village, 37°35.389'N, 68°31.654'E, stony desert, 400–630 m, 7–8.04.2019, AF; 2 juv. (ISEA) Ichkoran Mt. Range, 2 km E from Teshiktosh Village, 37°08.310'N, 68°15.462'E, stony desert with rocks, 600–760 m, 6.04.2019, AF; 1 juv. (ZMUT) Khuroson Dist., Gandzhina Village, 37°57.701'N 68°33.717'E, cliff, dry slopes, under stones, 716 m, 21.04.2015, YM; 2 juv. (ZMUT) foothills of Astana Mt., 37°22.919'N, 69°12.540'E, canyon stony-clay, 870 m, 4.05.2015, YM.

DIAGNOSIS. This species differs from all other *Uroctea*, with the exception of *U. thaleri* Rheims, Santos et van Harten, 2007, by the wrinkled epigyne and uniformly-colored, dark abdomen lacking a pattern. *Uroctea grossa* can be distinguished from *U. thaleri* by the diverging distal parts of the copulatory ducts (*vs.* converging) (*cf.* Fig. 8 and fig. 8 in Rheims *et al.* [2007]).

DESCRIPTION. Female. Total length 14.5. Carapace: 5.7 long, 7.0 wide. Abdomen: 11.3 long, 8.0 wide. Eye measurements: AME 0.33, ALE 0.29, PME 0.2, PLE 0.27; AME–AME 0.26, AME–ALE 0.06, ALE–PLE 0.09, PME–PLE 0.03, PME–PME 0.64; MOA–L 0.64, MOA–WA 0.81, MOA–WP 0.99. Coloration. Carapace brown, with longitudinal dark brown median stripe and dirty-yellow edges. Sternum bright yellow. Labium yellow anteriorly, dark brown posteriorly. Maxillae yellow-brown. Chelicerae dark brown. Coxae brown with yellow spots. Palps and legs dark brown with longitudinal yellow-brown stripes. Abdomen gray with small dirty-yellow speckles. Spinnerets yellow-gray (Figs 1–2). Leg measurements: I 19.15 (5.8, 3.0, 3.65, 4.35, 2.35); II 19.65 (5.95, 3.1, 3.7, 4.65, 2.25); III 20.35 (6.15, 3.15,

3.6, 5.25, 2.2); IV 21.15 (6.5, 3.6, 3.4, 5.35, 2.3). Epigyne as in Figs 5–10. The posterior epigynal margin (*Pm*) with a small triangular notch. Copulatory openings (*Co*) small and barely visible, located on the posterior part of the epigyne. Copulatory ducts (*Cd*) thin and long, forming an obtuse angle. Receptacles (*Re*) elongated, widely spaced. Fertilization ducts (*Fd*) thin and long. All parts of the endogyne asymmetric.

Male unknown.

DISTRIBUTION. The species is known from northeastern Iran and from southern Afghanistan [Roewer, 1960; Zamani *et al.*, 2015]. The new record from southwestern Tajikistan represents the northeasternmost locality of the species. The record of *U. limbata* from the Kyzylkum Desert [Logunov *et al.*, 2012] may refer to *U. grossa*. *Uroctea limbata* has an abdominal pattern, but the figure of the female provided in Logunov *et al.* [2012] has no abdominal pattern, as in the species re-described here. The same may be true for the records of *U. limbata* from Turkmenistan (see Simon [1899] and consequent authors).

Discussion

The genus *Uroctea* and the subfamily Urocteinae were found in Tajikistan for the first time. In addition to the adult female, we collected several juvenile *Uroctea* specimens that we assume to be *U. grossa* from four other localities. All collections in Tajikistan are from the southern part of the Hissar Mt. Range (Fig. 11). It is likely that this species is widespread in Asia and occurs also in Pakistan, Turkmenistan, Uzbekistan and Kazakhstan (Fig. 12).

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