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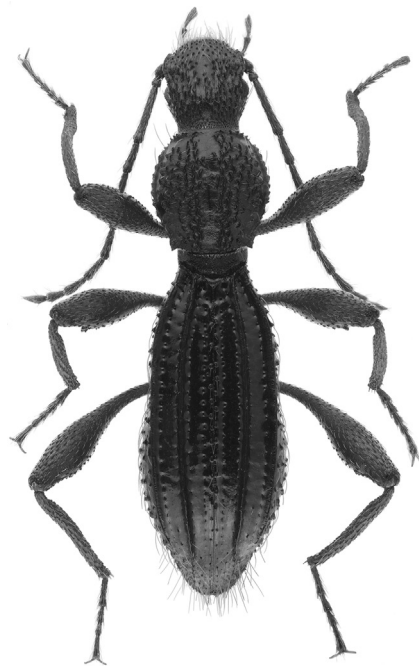


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The genus *Mesiotelus* Simon, 1897 (Araneae: Liocranidae) in Turkey

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Abstract. Two spider species of the liocranid genus *Mesiotelus* Simon, 1897 new to the fauna of Turkey are recorded on the basis of female specimens: *M. caucasicus* Zamani et Marusik, 2021 from Hakkari Province in the Eastern Anatolia and *M. deltshevi* Naumova, 2020 from Diyarbakır Province in the Southeast Anatolia. The characteristic features are illustrated. In addition, *M. scopensis* Drensky, 1935 and *M. tenuissimus* (L. Koch, 1866), two other species found in Turkey, are illustrated. The distribution records of all of these species in Turkey are mapped. With these new records, the number of species belonging to the family Liocranidae in Turkey has increased to 18.

Key words: Liocranidae, new records, morphology, Anatolia.

Род *Mesiotelus* Simon, 1897 (Araneae: Liocranidae) в Турции

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Резюме. Два вида пауков рода *Mesiotelus* Simon, 1897 (Liocranidae) впервые указаны для фауны Турции по находкам самок: *M. caucasicus* Zamani et Marusik, 2021 из провинции Хаккари в Восточной Анатолии и *M. deltshevi* Naumova, 2020 из провинции Диярбакыр в Юго-Восточной Анатолии. Проиллюстрированы характерные признаки этих видов. Кроме того, даны изображения диагностических признаков *M. scopensis* Drensky, 1935 и *M. tenuissimus* (L. Koch, 1866), двух других видов, обитающих в Турции. Благодаря новым находкам количество видов семейства Liocranidae в Турции увеличилось до 18.

Ключевые слова: Liocranidae, новые находки, морфология, Анатолия.

Introduction

Liocranidae Simon, 1897 comprises 312 species belonging to 35 genera globally. The genus *Mesiotelus* Simon, 1897 is represented by 16 species [World Spider Catalog, 2022]. Currently, 70 liocranid species belonging to 14 genera are known from Europe, with *Mesiotelus* represented by 10 species [Nentwig et al., 2022]. In Turkey, 55 families, 369 genera, and 1251 species of spiders were recorded, with Liocranidae comprising 16 species belonging to 10 genera [Danişman et al., 2022]. *Mesiotelus* is represented by only two species in the country: *M. scopensis* Drensky, 1935 and *M. tenuissimus* (L. Koch, 1866) [Elverici et al., 2013; Danişman et al., 2022]. In this study, we contribute to the knowledge on Liocranidae of Turkey by adding two new species records from different regions: *M. caucasicus* Zamani et Marusik, 2021 and *M. deltshevi* Naumova, 2020.

Material and methods

Females of four different species of *Mesiotelus* were collected from different regions of Turkey using aspirator and pitfall traps. The specimens were examined using a Leica S8APO stereomicroscope, and photographed using a

Canon EOS 250D camera attached to the stereomicroscope. All measurements are given in millimeters. Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus). The specimens were preserved in 70% ethanol and deposited in the collection of the Arachnological Museum of Kırıkkale University (Turkey).

Family Liocranidae Simon, 1897

Genus *Mesiotelus* Simon, 1897

Mesiotelus caucasicus Zamani et Marusik, 2021
(Figs 1–5, 22)

Zamani, Marusik, 2021: 560, figs 3, 4A–G, 5A–E.

Material. 1♀, Turkey, Hakkari Prov., Bağışlı Village, 37°43'48"N / 44°02'53"E, 2022 m, pitfall trap, 4.06–26.09.2020 (M. Erdek).

Brief description of studied specimen. Total length 4.1. Carapace length 1.8, width 1.7. Abdomen length 2.3, width 1.4. Ocular area length 0.45. Chelicera length 1, width 0.95. Sternum length 0.8, width 0.4. Leg formula IV, I, II, III. Legs: leg I 6.5 (1.8, 0.7, 1.8, 1.3, 0.9), leg II 5.95 (1.65, 0.7, 1.55, 1.25, 0.8), leg III 5.4 (1.45, 0.6, 1.4, 1.3, 0.65), leg IV 7.8 (2.1, 0.7, 2., 2.1, 0.9).

Carapace light yellow, darker anteriorly (Fig. 1). Clypeus narrow, dark yellow. Chelicerae long, light brown, with intense hairs near teeth (Fig. 3). Sternum light yellow, labium and maxillae light brown. Abdomen light yellowish-brown densely covered with long hairs (Fig. 2). Legs light yellow and covered with long thick black hairs (Fig. 1).

Epigyne. Lateral margins of fovea straight, margins form an angle of approximately 60° between each other. Spermathecae almost contiguous. Anterior hood (i.e. anterior pocket) prominent, its width approximately twice the interspermathecal distance (Figs 4, 5).

Distribution. Armenia, Azerbaijan, Iran [World Spider Catalog, 2022], Turkey.

Mesiotelus deltshevi Naumova, 2020
(Figs 6–11, 22)

Naumova, 2020: 4, figs 2, 3.

Material. 2♀, Turkey, Diyarbakır Prov., Hani District, 38°27'25"N / 40°24'39"E, 1018 m, under stone, 13.06.2018 (T. Danişman).

Brief redescription based on studied specimens. Total length 4.6. Carapace length 1.8, width 1.5. Abdomen length 2.8,

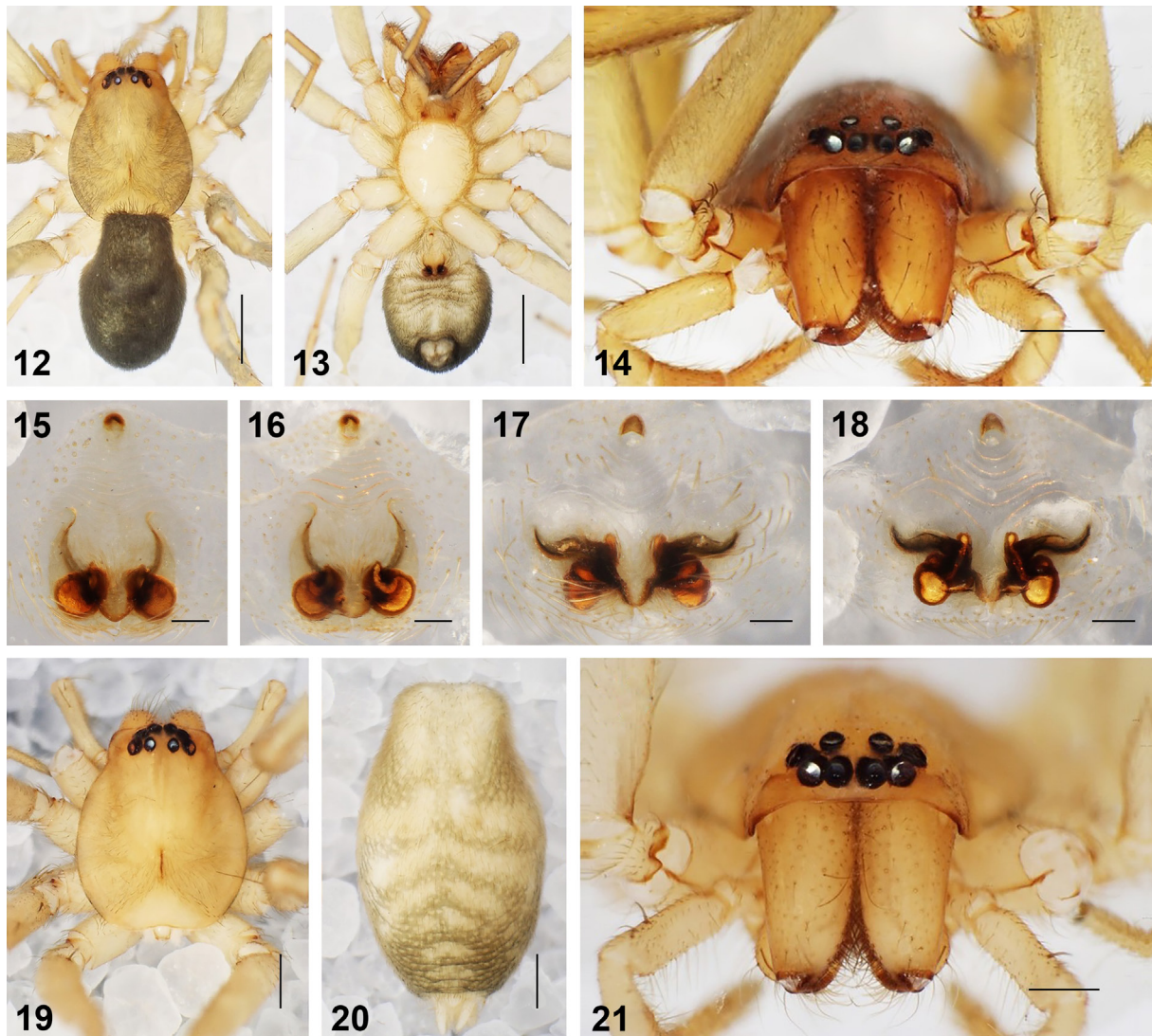


Figs 1–11. Species of the genus *Mesiotelus*, females, general view and details of structure.

1–5 – *M. caucasicus*; 6–11 – *M. deltshevi*. 1, 3, 11 – cephalothorax: 1 – dorsal view, 3, 11 – frontal view; 2 – abdomen, dorsal view; 4–7 – epigyne: 4, 6 – ventral view, 5, 7 – dorsal view; 8–10 – habitus: 8 – dorsal view, 9 – ventral view, 10 – dorsolateral view. Scale bars: 1–2 – 1 mm; 3 – 0.2 mm; 4–7 – 0.1 mm; 8–11 – 0.5 mm.

Рис. 1–11. Виды рода *Mesiotelus*, самки, общий вид и детали строения.

1–5 – *M. caucasicus*; 6–11 – *M. deltshevi*. 1, 3, 11 – головогрудь: 1 – дорсально, 3, 11 – вид спереди; 2 – брюшко, дорсально; 4–7 – эпигина: 4, 6 – вентрально, 5, 7 – дорсально; 8–10 – габитус: 8 – дорсально, 9 – вентрально, 10 – дорсолатерально. Масштабные линейки: 1–2 – 1 мм; 3 – 0.2 мм; 4–7 – 0.1 мм; 8–11 – 0.5 мм.



Figs 12–21. Species of the genus *Mesiotelus*, females, general view and details of structure.

12–16 – *M. scopensis*; 17–21 – *M. tenuissimus*. 12–13 – habitus: 12 – dorsal view, 13 – ventral view; 14, 19, 21 – cephalothorax: 14, 21 – frontal view, 19 – dorsal view; 15–18 – epigyne: 15, 17 – ventral view, 16, 18 – dorsal view; 20 – abdomen, dorsal view. Scale bars: 12–13 – 1 mm; 14, 19–20 – 0.5 mm; 15–18 – 0.1 mm; 21 – 0.2 mm.

Рис. 12–21. Виды рода *Mesiotelus*, самки, общий вид и детали строения.

12–16 – *M. scopensis*; 17–21 – *M. tenuissimus*. 12–13 – габитус: 12 – дорсально, 13 – вентрально; 14, 19, 21 – головогрудь: 14, 21 – вид спереди, 19 – дорсально; 15–18 – эпигина: 15, 17 – вентрально, 16, 18 – дорсально; 20 – брюшко, дорсально. Масштабные линейки: 12–13 – 1 мм; 14, 19–20 – 0.5 мм; 15–18 – 0.1 мм; 21 – 0.2 мм.

width 1.8. Ocular area length 0.6. Chelicera length 0.8, width 0.45. Sternum length 1.1, width 1 Leg formula IV, I, II, III. Legs: leg I 6.75 (1.9, 0.7, 1.9, 1.35, 0.9), leg II 5.4 (1.5, 0.65, 1.45, 1.1, 0.7), leg III 5.25 (1.05, 0.6, 1.45, 1.4, 0.75), leg IV 8.4 (2.25, 0.8, 2.15, 2.3, 0.9).

Carapace light yellow (Fig. 8). Clypeus narrow, dark yellow (Fig. 11). Chelicerae long, light brown, dorsally with long dark setae (Fig. 11). Sternum light yellow, without setae and edges dark (Fig. 9). Labium and maxillae light yellow (Fig. 9). Abdomen grayish, densely covered with long hairs and pattern with a white stripe (Figs 8, 10), ventrally light yellow (Fig. 9). Legs dark yellow and covered with long light hairs (Figs 8, 9).

Epigyne. Lateral margins of fovea straight, margins form an angle of approximately 50° between each other. Spermathecae almost contiguous. Anterior hood (i.e. anterior pocket) indistinct, about as wide as the interspermathecal distance (Figs 10, 11).

Distribution. Albania [World Spider Catalog, 2022], Turkey.

Mesiotelus scopensis Drensky, 1935
(Figs 12–16, 22)

Elverici et al., 2013: 306, figs 6–11; Naumova, 2020: 4, figs 4, 5; Zamani, Marusik, 2021: 560, fig. 5F–G; Zarikian et al., 2022: 109, fig. 5, as *Mesiotelus* cf. *scopensis*.

Material. 1♀, Turkey, Kahramanmaraş Prov., Onikişubat Distr., 37°51'40"N / 36°38'27"E, 900 m, 2.10.2020 (İ. Coşar, T. Danişman); 2♀, Turkey, Kahramanmaraş Prov., Onikişubat Distr., 37°54'28"N / 36°35'47"E, 1083 m, 24.10.2020 (İ. Coşar, T. Danişman).

Brief redescription based on studied specimens. Total length 5.3. Carapace length 2.1, width 1.7. Abdomen length 3.2, width 1.8. Ocular area length 0.55. Chelicera length 1, width 0.5. Sternum length 1.2, width 1 Leg formula IV, I, II, III. Legs: leg I 7.5 (2.1, 0.9, 2, 1.5, 1), leg II 6.4 (1.8, 0.8, 1.7, 1.3, 0.8), leg III 6 (1.6, 0.7, 1.4, 1.5, 0.8), leg IV 8.8 (2.3, 0.9, 2.2, 2.4, 1).

Carapace light yellow, covered with small black hairs (Fig. 13). Clypeus narrow and light brown (Fig. 14). Chelicerae



Fig. 22. Distribution records of *Mesiotelus caucasicus* (square), *M. deltshevi* (circle), *M. scopensis* (black stars; white star is the first record in Turkey), and *M. tenuissimus* (triangle) in Turkey.

Рис. 22. Распространение *Mesiotelus caucasicus* (квадрат), *M. deltshevi* (круг), *M. scopensis* (черные звезды; белая звезда – первая находка в Турции) и *M. tenuissimus* (треугольник) в Турции.

long, yellowish-brown, dorsally with long dark setae (Fig. 14). Sternum light yellow, without setae (Fig. 13). Labium and maxillae yellow (Fig. 13). Abdomen blackish, densely covered with long hairs (Fig. 13), ventrally light yellow and covered with small black hairs (Fig. 13). Legs light yellow and covered with light hairs (Figs 12, 13).

Epigyne. Lateral margins of fovea concave, margins form an angle of approximately 70° between each other. Spermathecae separated by about half their diameter. Anterior hood (i.e. anterior pocket) prominent, about as wide as the interspermathecal distance (Figs 15, 16).

Distribution. North Macedonia, Bulgaria, Greece, Turkey, Iran (?) [World Spider Catalog, 2022].

Mesiotelus tenuissimus (L. Koch, 1866)
(Figs 17–21, 22)

Mikhailov, Fet, 1986: 173, fig. 1; Kovblyuk et al., 2008: 19, figs 6–12; Bosmans et al., 2009: 35, figs 24–28; Bosmans, El-Hennawy, 2018: 101, figs 1, 2; El-Hennawy, 2022a: 418, figs 2–5.

Material. 1♀, Turkey, Kırıkkale Prov., Yaşlıhan District, 39°53'13"N / 33°27'00"E, 856 m, 5.02.2018 (T. Danişman).

Brief description of studied specimen. Total length 5.1. Carapace length 1.9, width 1.6. Abdomen length 3.2, width 1.8. Ocular area length 0.55. Chelicera length 0.9, width 0.45. Sternum length 1.2, width 1. Leg formula IV, I, II, III. Legs: leg I 7.2 (2, 0.9, 1.9, 1.5, 0.9), leg II 6.3 (1.8, 0.7, 1.7, 1.3, 0.8), leg III 5.9 (1.6, 0.6, 1.4, 1.5, 0.8), leg IV 8.7 (2.3, 0.8, 2.2, 2.5, 0.9).

Carapace light yellow, covered with small dark colour hairs and edges dark (Fig. 19). Clypeus narrow and dark yellow (Fig. 21). Chelicerae long, yellow, dorsally with long dark setae (Fig. 21). Sternum light yellow, without setae. Labium and maxillae dark yellow. Abdomen grayish, densely covered with long hairs, with white patterned (Fig. 20). Legs yellow, covered with light hairs (Fig. 19).

Epigyne. Lateral margins of fovea horizontal, margins form an angle of approximately 180° between each other. Spermathecae separated from each other by their diameter. Anterior hood

(i.e. anterior pocket) prominent, its width about half of interspermathecal space (Figs 17, 18).

Distribution. North Africa, Europe, Turkey (Anatolia), Turkmenistan [World Spider Catalog, 2022].

Discussion

In total, four species of *Mesiotelus* are known in Turkey including *M. caucasicus* and *M. deltshevi*. The morphometric measurements and other characteristic features of the Turkish *Mesiotelus* species are not different from European and Caucasian specimens. In comparison to countries such as Spain (2 species), France (2), Italy (2), Bulgaria (2), Greece (3), Cyprus (2), Israel (1), Armenia (2) and Iran (3), the species diversity of the genus *Mesiotelus* in Turkey is high [Danişman et al., 2022; Nentwig et al., 2022; Otto, 2022; Zamani et al., 2022; World Spider Catalog, 2022]. This current number can be increased even more, especially with new records or new species to be obtained by faunistic studies to be carried out in areas close to the borders of neighboring countries.

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