

Four new records for the spider fauna of Turkey (Araneae: Salticidae)

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Abstract: Four Salticidae spider species, *Euophrys sulphurea* (L. Koch, 1867), *Neon levis* (Simon, 1871), *Pellenes brevis* (Simon, 1868), and *Sibianor aurocinctus* (Ohlert, 1865), are recorded for the first time from Turkey. Their morphology is briefly described and illustrated.

Key words: Araneae, Salticidae, spider, new records, Turkey

Salticidae Blackwall, 1841 is the largest family of spiders, with 5755 described species (Platnick, 2014). A total of 106 species in 40 genera are known in Turkey (Bayram et al., 2014) from Salticidae. In this paper, we add 4 jumping spider species to the spider fauna of Turkey. These species are *Euophrys sulphurea* (L. Koch, 1867), *Neon levis* (Simon, 1871), *Pellenes brevis* (Simon, 1868), and *Sibianor aurocinctus* (Ohlert, 1865).

This study is based on materials collected from different regions of Turkey. Specimens were collected by means of a hand aspirator from under stones and on plants. Well-known identification keys were used for identification (Heimer and Nentwig, 1991; Prószyński, 2003; Almquist, 2006). Identification was made using a Leica S8APO stereo microscope. Pictures were taken using a Leica S8APO microscope by means of a Leica DC 160 camera. Scanning electron microscopy microphotographs were made with a JEOL JSM-5600 at Kırıkkale University. Specimens were preserved in 70% ethanol. Abbreviations used in the text are as follows: Cx, coxa; Tr, trochanter; Fe, femur; Pa, patella; Ti, tibia; Mt, metatarsus; Ta, tarsus. All measurements are given in millimeters. Specimens are deposited in the collection of the Arachnological Museum of Kırıkkale University (KUAM).

Euophrys sulphurea (L. Koch, 1867)

Material: 1♂, Kastamonu Province, Küre District (41°50'N, 33°43'E), 17.09.2011 (Figure 1).

Distribution: Southern Europe, Syria (Platnick, 2014).

Male. Total length 3.70, prosoma length 1.95, prosoma width 1.45, opisthosoma length 1.75, opisthosoma width 1.25, ocular area 1.20. While dorsal eye area of prosoma is blackish-brown and extensively covered with yellow hairs, the remaining part is covered with light brown and yellow

hairs. Opisthosoma has a light yellow color, blackish patterns in some places, and light yellow hairs. Anterior median eyes are covered with yellow hairs. Clypeus is light brown and extensively covered with orange hairs. Chelicerae are light brown. Leg formula: IV–I–III–II.

Lengths of legs: Male (♂)

Leg I: Cx 0.40, Tr 0.20, Fe 1.20, Pa 0.55, Ti 0.85, Mt 0.55, Ta 0.35, total 4.10.

Leg II: Cx 0.35, Tr 0.20, Fe 1.10, Pa 0.50, Ti 0.75, Mt 0.45, Ta 0.35, total 3.70.

Leg III: Cx 0.35, Tr 0.20, Fe 1.20, Pa 0.5, Ti 0.70, Mt 0.60, Ta 0.50, total 4.05.

Leg IV: Cx 0.50, Tr 0.20, Fe 1.30, Pa 0.60, Ti 1.0, Mt 0.65, Ta 0.55, total 4.80.

Neon levis (Simon, 1871)

Material: 1♂, Bolu Province, Mudurnu District, Sülüklü Lake (40°32'N, 40°52'E), 18.04.2013. 1♂, Bolu Province, Devrek District, Dirgine village (41°04'N, 31°53'E), 19.04.2013. 1♂, Sinop Province, Sivrice Hill (41°48'N, 35°00'E), 08.06.2013 (Figure 2).

Distribution: Palearctic (Platnick, 2014).

Male. Total length 2.0–2.75, prosoma length 0.95–1.30, prosoma width 0.75–1.35, opisthosoma length 1.05–1.45, opisthosoma width 0.80–1.10, ocular area 0.8–1.0. While anterior part of prosoma is black in the dorsal direction, the remaining part is greenish-yellow. Surrounding of posterior lateral eyes and posterior median eyes is black. Anterior median eyes are covered with yellow hairs. Opisthosoma has light yellow color and intensely black patterns. While underside of anterior median eyes is black in clypeus, underside of anterior lateral eyes is greenish-yellow. Dorsal part of chelicerae is black but the ventral part is yellow. Leg formula: IV–I–II–III.

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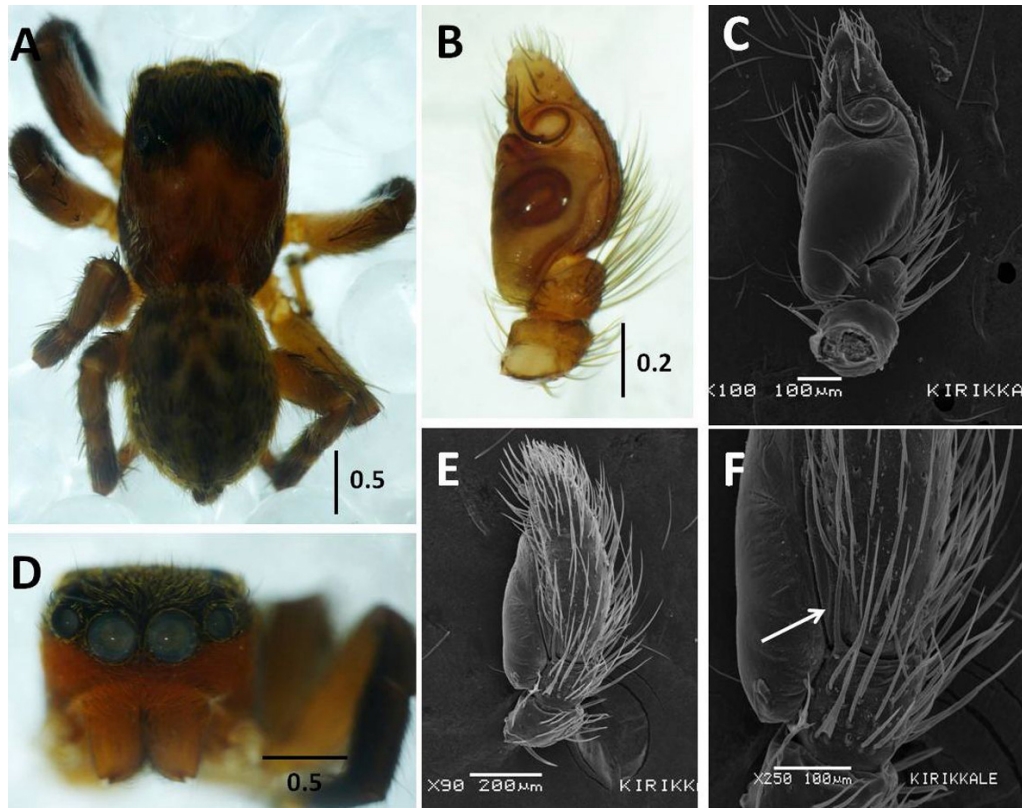


Figure 1. *Euophrys sulphurea*, male: dorsal view (A), ventral view of pedipalp (B, C), ocular area frontal view (D), retrolateral view of pedipalp (E), retrolateral tibial apophysis (F).

Lengths of legs: Male (♂)

Leg I: Cx 0.25, Tr 0.20, Fe 0.75, Pa 0.30, Ti 0.60, Mt 0.35, Ta 0.30, total 2.75.

Leg II: Cx 0.20, Tr 0.20, Fe 0.75, Pa 0.25, Ti 0.50, Mt 0.30, Ta 0.30, total 2.50.

Leg III: Cx 0.25, Tr 0.15, Fe 0.60, Pa 0.30, Ti 0.50, Mt 0.35, Ta 0.30, total 2.45.

Leg IV: Cx 0.30, Tr 0.20, Fe 0.85, Pa 0.25, Ti 0.60, Mt 0.55, Ta 0.35, total 3.10.

***Pellenes brevis* (Simon, 1868)**

Material: 1♂, Gaziantep Province, İslahiye District (37°03'N, 36°36'E), 05.05.2012 (Figure 3).

Distribution: Spain, France, Italy, Germany, Macedonia, Rhodes (Platnick, 2014).

Male. Total length 3.35, prosoma length 1.65, prosoma width 1.30, opisthosoma length 1.70, opisthosoma width 1.10, ocular area 1.0. Prosoma has black hairs and line-like white hairs, which are laterally located. There are a few white hairs behind posterior lateral eyes. Surrounding of frontal eyes is covered with yellow hairs. Opisthosoma is black and extensively covered with yellow hairs. Line-shaped white hairs are present in the middle of opisthosoma. Clypeus is dark and underneath line-like white hairs are located. Chelicerae are brown and white-

haired dorsally. Leg formula: I–III–IV–II.

Lengths of legs: Male (♂)

Leg I: Cx 0.40, Tr 0.30, Fe 1.10, Pa 0.55, Ti 0.80, Mt 0.50, Ta 0.35, total 4.0.

Leg II: Cx 0.25, Tr 0.20, Fe 0.75, Pa 0.35, Ti 0.45, Mt 0.35, Ta 0.30, total 2.65.

Leg III: Cx 0.35, Tr 0.20, Fe 1.15, Pa 0.55, Ti 0.65, Mt 0.50, Ta 0.35, total 3.75.

Leg IV: Cx 0.35, Tr 0.20, Fe 0.85, Pa 0.40, Ti 0.55, Mt 0.50, Ta 0.35, total 3.20.

***Sibianor aurocinctus* Ohlert, 1865**

Material: 1♂, Bolu Province, Yeniçağa District (40°46'N, 32°01'E), 15.04.2011 (Figure 4).

Distribution: Palearctic (Platnick, 2014).

Male. Total length 2.50, prosoma length 1.30, prosoma width 1.10, opisthosoma length 1.20, opisthosoma width 1.0, ocular area 0.90. Prosoma reddish-dark brown. Opisthosoma dark brown, dorsum with dark spots and stripes. Clypeus black, eye field glossy black. Chelicerae blackish-brown. Embolus thin and tibial apophysis curved. Bulb laterally dome-shaped. The beginning of sperm duct flush with the apical part of the tibial apophysis. Leg I thick with dense hairs; femora and patellae dark brown, tibiae reddish-brown, and metatarsi dark yellow. Leg formula: I–IV–III–II.

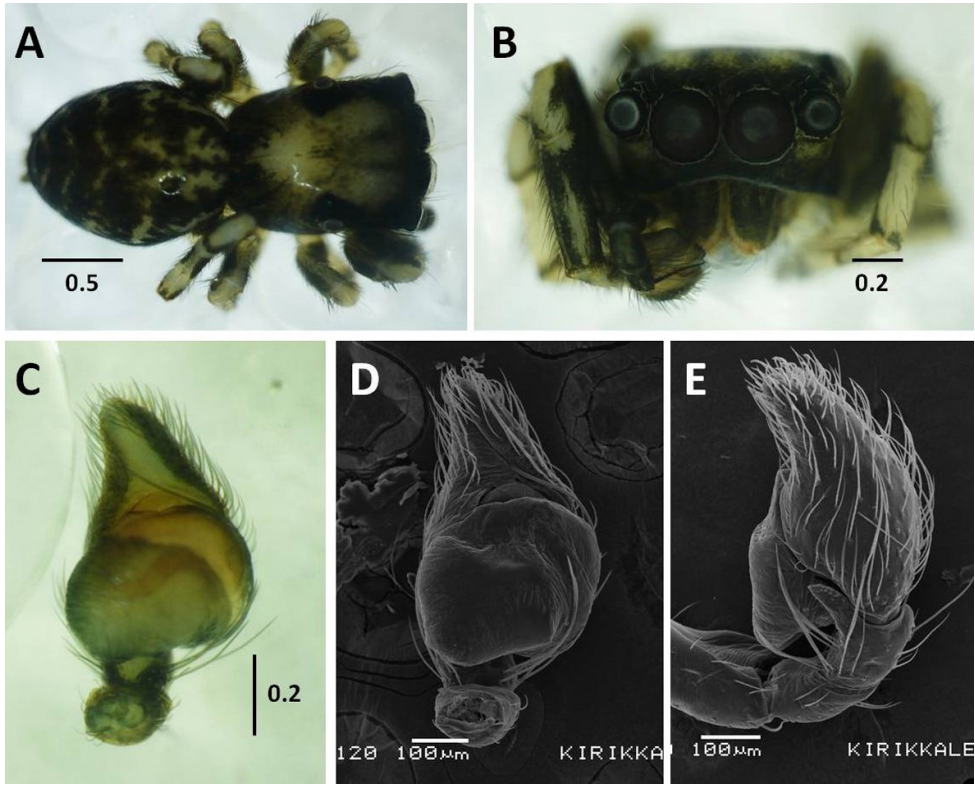


Figure 2. *Neon levis*, male: dorsal view (A), ocular area frontal view (B), ventral view of pedipalp (C, D), retrolateral view of pedipalp (E).

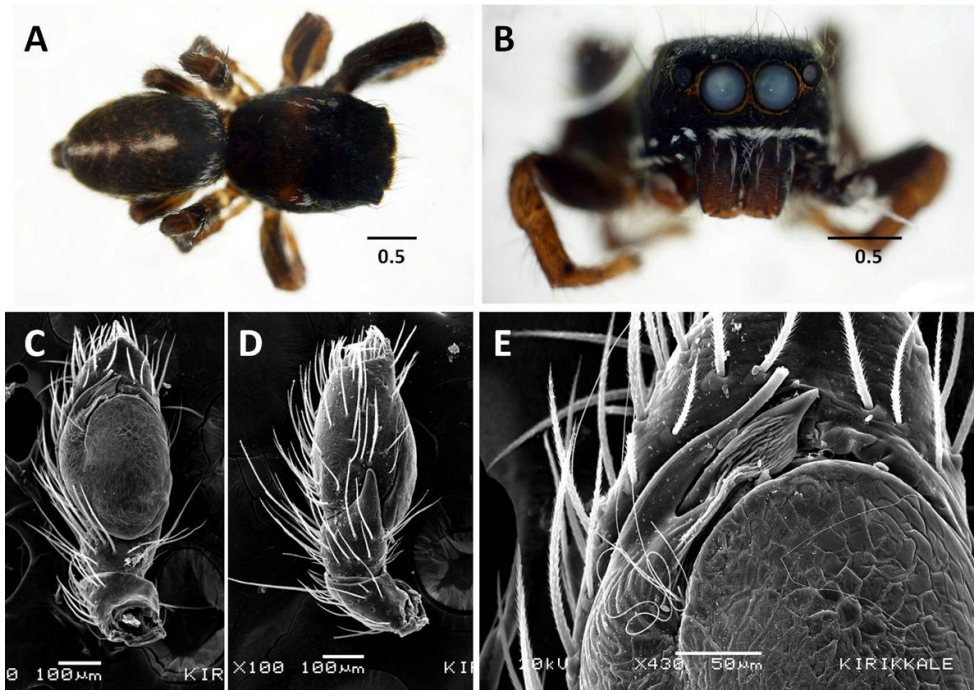


Figure 3. *Pellenes brevis*, male: dorsal view (A), ocular area frontal view (B), ventral view of pedipalp (C), retrolateral view of pedipalp (D), embolus view (E).

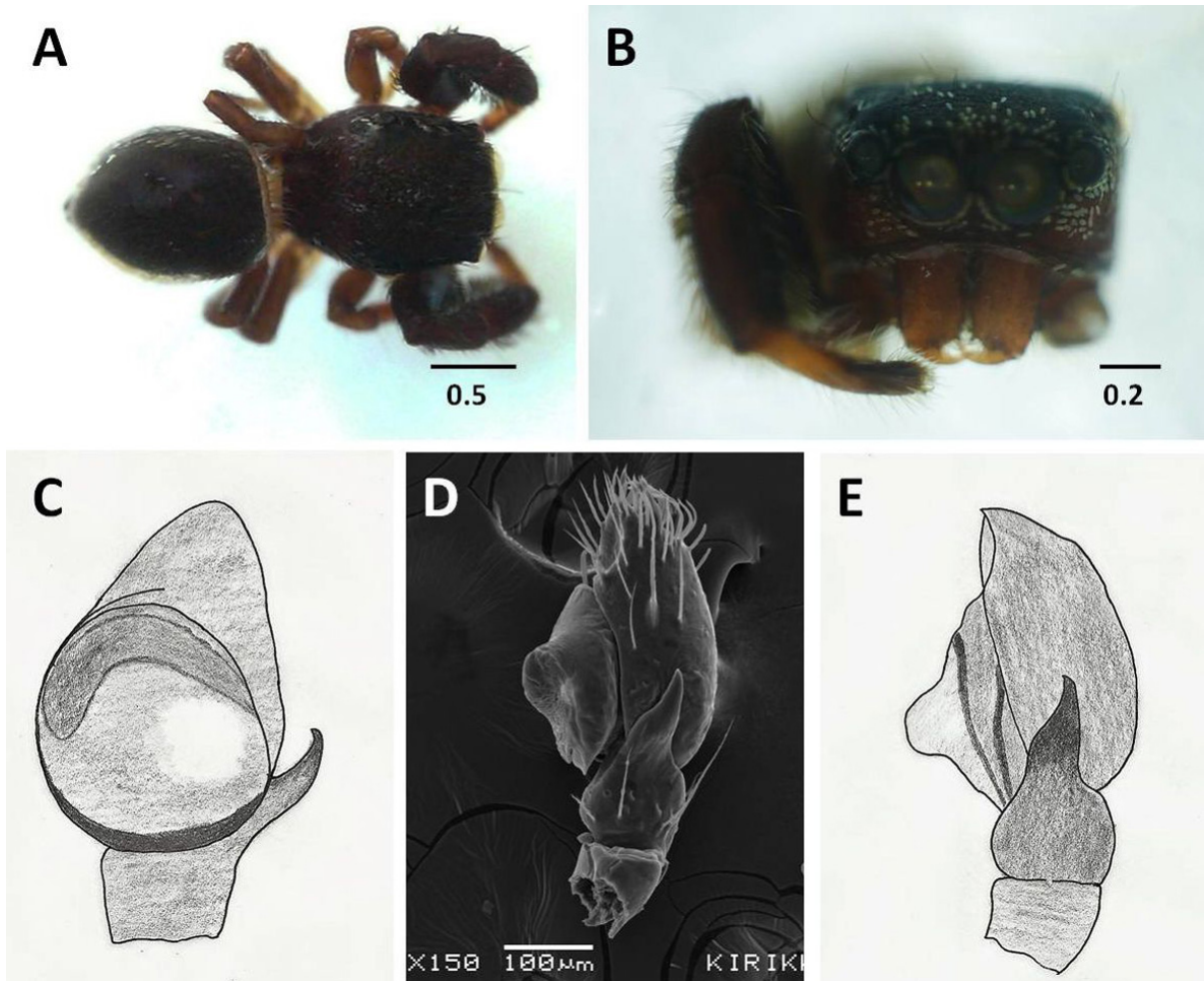


Figure 4. *Sibianor aurocinctus*, male: dorsal view (A), ocular area frontal view (B), ventral view of pedipalp (C), retrolateral view of pedipalp (D, E).

Lengths of legs: Male (♂)

Leg I: Cx 0.33, Tr 0.23, Fe 0.69, Pa 0.36, Ti 0.39, Mt 0.36, Ta 0.29, total 2.65.

Leg II: Cx 0.26, Tr 0.16, Fe 0.46, Pa 0.39, Ti 0.36, Mt 0.26, Ta 0.23, total 2.02.

Leg III: Cx 0.19, Tr 0.16, Fe 0.63, Pa 0.23, Ti 0.33, Mt 0.33, Ta 0.29, total 2.16.

Leg IV: Cx 0.26, Tr 0.23, Fe 0.59, Pa 0.26, Ti 0.39, Mt 0.43, Ta 0.33, total 2.49.

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