

TWO NEW GENUS RECORDS FOR SPIDER FAUNA OF TURKEY (ARANEAE: LINYPHIIDAE)

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ABSTRACT: This study reports two linyphiid genera as new genus record for the Turkish araneo-fauna. The characteristic features and photographs of *Piniphantes pinicola* (Simon, 1884) and *Trichoncoides piscator* (Simon, 1884) are presented. The total number of linyphiid species recorded from Turkey is now 107.

KEY WORDS: *Piniphantes*, *Trichoncoides*, Linyphiidae, Araneae, Turkey, New records.

A total of 4419 species in 589 genera have been identified in the family Linyphiidae all over the world (Platnick, 2012). A total of 105 species in 60 genera are known in Turkey (Bayram et al., 2012) from Linyphiidae. With this paper, we add two genera to the spider fauna of Turkey. These taxa are *Piniphantes pinicola* (Simon, 1884) and *Trichoncoides piscator* (Simon, 1884).

MATERIAL AND METHODS

The main materials in this study were collected from Ağrı and Çankırı province. Specimens were preserved in 70% ethanol. The identification of spiders and photography were made with Lieca S8APO Stereo microscope and Leica DC 160 camera. Photographs have been taken in dishes of different size with paraffin on the bottom. Different size holes were made in the bottom to keep specimens in the right position. Images have been montaged using "CombineZM" image stacking software and "Photoshop CS5" image editing software. SEM photographs were taken with JEOL JSM-5600. The specimens were deposited in the collection of the Arachnological Museum of Kırıkkale University (KUAM). All measurements are in millimeters.

RESULTS

Piniphantes pinicola (Simon, 1884)

Material examined: 2♀, 2♂ from Ağrı province, Diyadin district (39°54'06" N, 43°68'06" E), 14.12.2011 (leg. İ. Coşar), 4♀, 4♂ from Çankırı province, Ilgaz district (40°52'30" N, 33°39'19" E), 09.09.2011 (leg. T. Danişman).

Description: Male. Total length 1.9 mm, carapace length 0.925 mm, width 0.825 mm; abdomen length 0.975 mm, width 0.8 mm. Anterior eye row recurved, posterior eye row slightly recurved. Cephalothorax brownish yellow, without marginal bands, dots and stripes. Abdomen dirty yellow (Fig. 1). Leg formula I, II, IV, III. Paracymbium large, with 2 teeth. Males recognized by having an elongated

projection with numerous finger-like protrusions at the proximal part of the embolus (Fig. 2). **Female.** Total length 2.0 mm, carapace length 0.975 mm, width 0.85 mm; abdomen length 1.025 mm, width 0.85 mm. Anterior eye row recurved, posterior eye row slightly recurved. Cephalothorax yellow, without marginal bands. Abdomen brownish yellow (Fig. 1). Leg formula I, II, IV, III. Epigyne with a strongly protruding epigyneal area and markedly hypertrophied posterior median plate (Fig. 2).

***Trichoncoides piscator* (Simon, 1884)**

Material examined: 1♀, 1♂ from Çankırı Province, Ilgaz district (40°52'30" N, 33°39'19" E), 09.09.2011 (leg. T. Danişman).

Description: Male. Total length 1.5 mm, carapace length 0.625 mm, width 0.52 mm; abdomen length 0.875 mm, width 0.5 mm. Anterior eye row recurved, posterior eye row straight. Cephalothorax fawn coloured, anteriorly with hairs. Abdomen straw-colored (Fig. 3). Leg formula IV, I, II, III. Male palpal paracymbium sickle-shaped. Palpal tibia with three prominent, the first piece in the form of a binary hook. Distal part of the embolus hook shaped (Fig. 4). **Female.** Total length 1.8 mm, carapace length 0.66 mm, width 0.44 mm; abdomen length 1.14 mm, width 0.74 mm. Anterior eye row recurved, posterior eye row straight. Cephalothorax brownish yellow coloured, without hairs. Abdomen straw-colored (Fig. 3). Leg formula IV, I, II, III. Epigyne with trapezoid medial structure, characteristic, with septum, interiorly bears two rounded spermatechae (Fig. 5).

DISCUSSION

With this study, the number of linyphiid spiders in Turkey has increased from 105 species belonging to 60 genera to 107 species belonging to 62 genera. The morphometric measurements of this species are not different from European specimens. As a result of our study, two new genera record were given for the araneofauna of Turkey. Therefore, we expect that more new Turkish records will be found in the future for this families.

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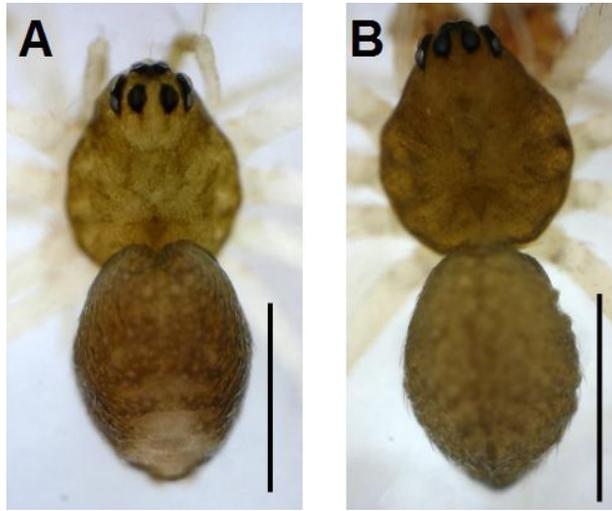


Figure 1. *Piniphantes pinicola* A: female dorsal view, B: male dorsal view (scale 1 mm).

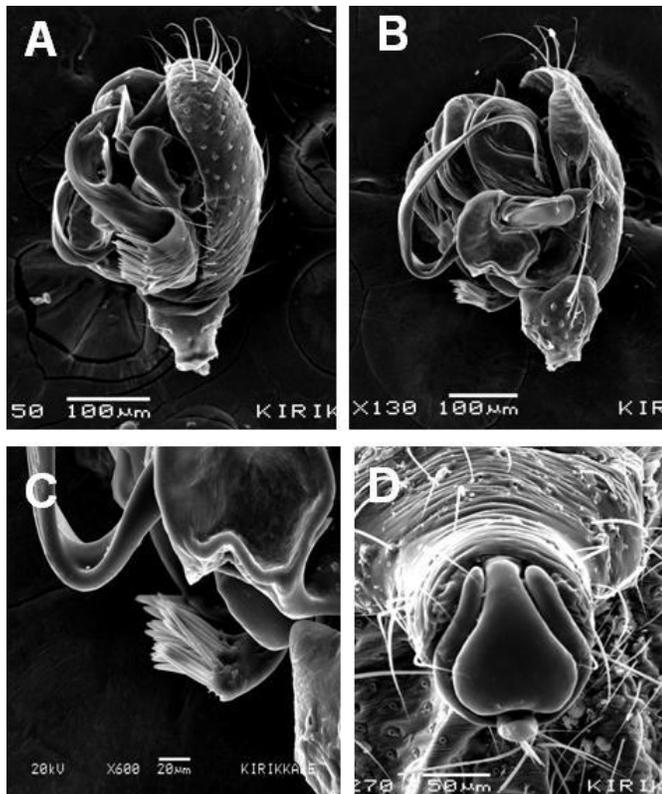


Figure 2. *Piniphantes pinicola*, SEM micrographs, A: male pedipalp median view, B: male pedipalp retrolateral view C: proximal part of the embolus, D: epigyne, ventral view.



Figure 3. *Trichoncoides piscator* A: female dorsal view, B: male dorsal view (scale 0.5 mm).

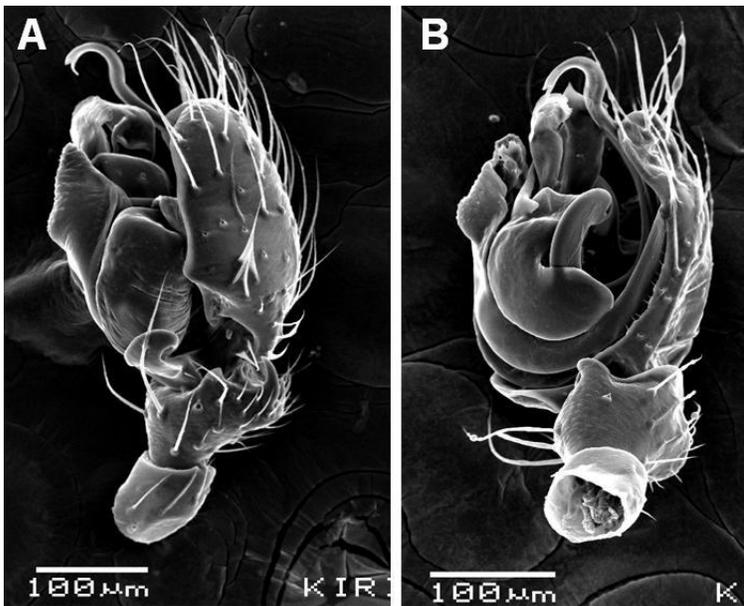


Figure 4. *Trichoncoides piscator*, SEM micrographs, A: male pedipalp retrolateral view, B: male pedipalp ventral view.

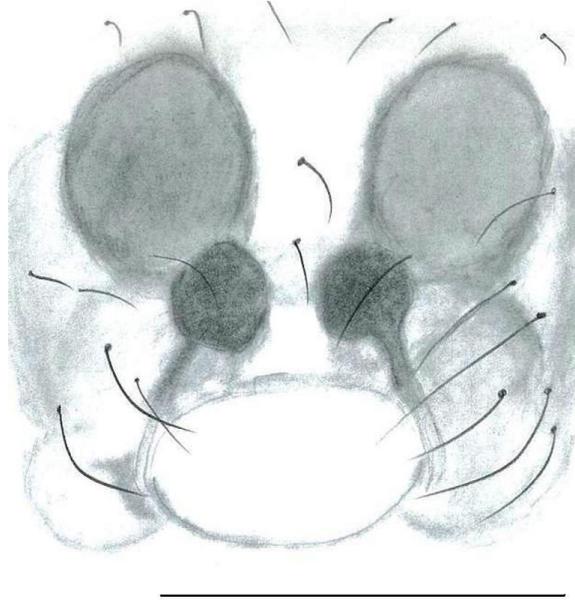


Figure 5. *Trichoncoides piscator*, epigyne, ventral view (scale 0.1 mm).