

# Contributions to the Turkish Wolf Spiders (Arachnida: Lycosidae)

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**Abstract:** One genera and six species of family Lycosidae were reported for the first time in Turkey: *Wadicosa fidelis* (O. P.-Cambridge, 1872) (new genus for Turkish spider fauna), *Lycosa boninensis* Tanaka, 1989, *Trochosa abdita* (Gertsch, 1934), *Arctosa maculata* (Hahn, 1822), *Pardosa aquila* Buchar&Thaler, 1998, *P. anomala* gertsch, 1933. Information about their distribution in Turkey and worldwide is presented.

**Key words:** new records, Turkey, *Wadicosa fidelis*, *Lycosa boninensis*, *Arctosa maculata*, *Trochosa abdita*, *Pardosa aquila*, *P. anomala*.

## Introduction

Spiders of the Lycosidae SUNDEVAL, 1833 are found worldwide and constitute the fifth largest spider family with 2387 species in 120 genera (PLATNIC 2012). However, only 77 species belonging to 12 genera are documented in Turkey (BAYRAM *et al.* 2012). This family, the wolf spiders, is distinguished by three characters: eye arrangement (with three rows), absence of retrolateral tibial apophysis on the male pedipalp and the young carried on specialised setae on the dorsal surface of the mother's abdomen (VINK 2002).

Like all spiders, Lycosids are predators and their main prey is arthropods, mostly insects. Wolf spiders do not build a web for prey capture and are sit-and-wait predators. They are found in a wide range of habitats but are most common in open country.

In this study, one genera, *Wadicosa*, and six species were reported in Turkey for the first time: *Wadicosa fidelis* (O.P.-Cambridge, 1872), *Lycosa boninensis* Tanaka, 1989, *Trochosa abdita* (Gertsch, 1934), *Arctosa maculata* (Hahn, 1822), *Pardosa aquila* Buchar & Thaler, 1998, *P. anomala* Gertsch, 1933.

The results of this investigation have increased the Turkish wolf spider diversity from twelve genera and 77 species to thirteen genera and 83 species.

## Material and Methods

The specimens were collected from Adıyaman and Kahramanmaraş provinces. Species descriptions are based on specimens preserved and examined in 70% ethanol under an Olympus SZX12 stereomicroscope. SEM photograph of male palp was examined with JEOL JSM 6390 Scanning Electron Microscope. The specimens were deposited in the University of Gaziantep, Zoology Museum. All measurements are in millimeters. Abbreviations used in this paper are as follows: GAUNZM (Zoology Museum of Gaziantep University), AME; Anterior Median Eyes, ALE; Anterior Lateral Eyes, PLE; Posterior Lateral Eyes, PME; Posterior Median Eyes.

The keys of HEIMER, NENTWIG (1991), NENWIG *et al* (2011) and ROBERTS (1995) were used for identifications.

## Results

*Wadicosa* Zyunin, 1985

*Wadicosa fidelis* (O. P.-Cambridge, 1872)

**Material examined:** Turkey: Adıyaman province, Samsat district, edge of Atatürk Dam in Kırmacık village, 37°31'N, 38°27'E, 529 m, 26.IV.2008, 4 ♂; Kahramanmaraş province, Pazarcık district, 37°29'N, 37°17'E, 23.VI.2007, 778 m, 1 ♂.

**Distribution:** Palearctic and Canary islands (PLATNIC 2012).

*Lycosa boninensis* Tanaka, 1989

**Material Examined:** Turkey: Kahramanmaraş province, Center, Yeniköy Village 38°01'N, 37°02'E, 1117 m, 12.IV.2008, 1 ♀; Pazarcık district, Armutlu village, 37°30'N, 37°15'E, 858 m, 27.X.2007, 1 ♀; Pazarcık district, Sakarkaya village, 37°39'N, 37°25'E, 884 m, 27.X.2007, 1 ♀.

**Distributions:** Taiwan, Japan (PLATNIC 2012).

*Trochosa abdita* (Gertsch, 1934)

**Material Examined:** Turkey: Kahramanmaraş province, Andırın district, Canbaz village, 37°41'N, 36°20'E, 1054 m, 03.V.2009, 2 ♀; Andırın district, Kabağağaç village, 37°27'N, 36°15'E, 1153 m, 02.V.2009, 1 ♀.

**Distributions:** USA (PLATNIC 2012).

*Arctosa maculata* (Hahn, 1822)

**Material Examined;** Turkey: Kahramanmaraş province, Andırın district, Kuzgun village, 37°25'N, 36°23'E, 733 m, 02.V.2009, 1 ♀.

**Distributions:** Europe, Russia (PLATNIC 2012)

*Pardosa anomala* Gerstch 1933

**Material Examined;** Turkey: Adıyaman province, Çomak village, 37°31'N, 38°01'E, 524 m, 12.IV.2008, 1 ♂; Besni district, İnce village, 37°32'N 37°50'E, 602 m 12.IV.2008, 1 ♂.

**Distributions:** USA, Canada (PLATNIC 2012).

*Pardosa aquila* Buchar&Thaler, 1998

**Material Examined:** Turkey: Adıyaman province, Kahta district, Mülk village, 37°44'N, 38°37'E, 626 m, 6.IV.2008, 1 ♀; Kahramanmaraş province, Andırın district, village, 37°41'N, 36°20'E, 1054 m, 03.V.2009, 1 ♀; Göksun district, Ericek town, 38°05'N, 36°52'E, 1386 m, 31.VII.2008, 1 ♀; Pazarcık district, center, near of the Kartalkaya Dam 37°29'N 37°16'E, 706 m, 23.VI.2007, 1 ♀; Pazarcık district, İnce village, 37°32'N 37°50'E, 602 m, 12.IV.2008, 1 ♀.

**Distributions:** Russia, Georgia (PLATNIC 2012).

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