

New data on the spider fauna of Iran (Arachnida: Araneae), Part IX

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Abstract

New faunistic and taxonomic data are provided for 15 families of Iranian spiders. Two lycosid species, *Alopecosa murphyorum* sp. n. (♂, Semnan Province) and *Alopecosa robertsi* sp. n. (♂, Zanjan Province), are described as new to science. Nine species are recorded from Iran for the first time, and 182 new provincial records are provided for 53 species. Among new distributional data, the first confirmed record of the family Leptonetidae in Iran, representing its easternmost record in the West Palaearctic, is provided, as well as a redescription of the recently described *Evipppa amitaii* Armiach Steinpress, Alderweireldt, Cohen, Chipman & Gavish-Regev, 2021 (Lycosidae), and illustrations for the examined type material of *Evipppa luteipalpis* Roewer, 1955 (Lycosidae). Two species, *Aulonia albimana* (Walckenaer, 1805) (Lycosidae) and *Tetragnatha javana* (Thorell, 1890) (Tetragnathidae) are removed from the list of Iranian spiders, while *Piratula insularis* (Emerton, 1885) (Lycosidae) is removed from the list of Turkish spiders. Furthermore, *Seatoda paykulliana* (Walckenaer, 1806) (Theridiidae) is recorded from India for the first time. The newly described and some other species representing new country or provincial records are illustrated.

Keywords: Aranei • faunistics • India • new records • new species • taxonomy • Turkey

Introduction

The present paper is the ninth contribution in the series devoted to the faunistic and taxonomic study of Iranian spiders. Currently, 906 spider species in 323 genera and 55 families are known from Iran (Zamani *et al.* 2022). Although the systematics and faunistics of Iranian spiders

have been subject of relatively intensive investigations during the past decade (e.g. Esyunin & Zamani 2020; Montemor *et al.* 2020; Nadolny & Zamani 2020; Zamani & Bosselaers 2020; Zamani & Marusik 2021a,b; Logunov 2021), still, vast areas of the country remain largely unexplored and new species and records are found frequently. In the previous eight parts of this series, six families (Liocranidae, Mimetidae, Mysmenidae, Miturgidae, Hahniidae, and Zoropsidae), 53 genera and 235 species have been recorded from Iran for the first time (Zamani *et al.* 2014b, 2015, 2016, 2017, 2018, 2019, 2020, 2021). The aims of the present paper are as follows: 1) to describe two new species, 2) to record nine species new to the fauna of Iran, 3) to provide additional faunistic records, including 182 new provincial records for 53 species, and the first confirmed record of Leptonetidae from Iran, 4) to remove two species from the list of Iranian spiders and one from that of Turkish spiders, and 5) to record one species from India for the first time.

Material and methods

The material treated in this paper was collected from different provinces of Iran between 1939 and 2020. Species distribution is presented and modified according to the information available in several databases and catalogues, including World Spider Catalog (2022), Nentwig *et al.* (2022), and Mikhailov (2013). In order to recognize the new record status of the studied taxa, all records were checked against the checklist by Zamani *et al.* (2022); previous Iranian provincial records of each species are presented according to this database as well (hereafter are listed as *Records in Iran*). Specimens were photographed using the following equipment: a Canon EOS 7D camera attached to an Olympus SZX16 stereomicroscope and a JEOL JSM-5200 scanning electron microscope at the Zoological Museum of the University of Turku, an Olympus OMD EM-10 digital camera with a Panasonic Lumix H-H025 25 mm f/1.7 lens mounted on a Zeiss microscope and a Hitachi TM3000 scanning electron microscope with BSE (back-scattered electrons) at the Zoological Museum of the Perm State University, or a Canon EOS 550D camera mounted on MBS-1 and Olympus CX41 microscopes and a Hitachi SU3500 scanning electron microscope at the A.O. Kovalevsky Institute of Biology of the Southern Seas (Sevastopol). Specimens were photographed in dishes with paraffin on the bottom holding the specimens in desired position. Digital images were automontaged using CombineZP and Helicon focus 3.10 image stacking software, and edited using CorelDraw and Adobe Photoshop CC graphic design. Length of leg segments, if provided, was measured on the dorsal side and listed as: total length (femur, patella, tibia, metatarsus, tarsus). Species that are new to Iran are marked with asterisks.

Abbreviations: Eyes: ALE = anterior lateral eye, AME = anterior median eye, PLE = posterior lateral eye, PME = posterior median eye. Chaetotaxy: d = dorsal, Fe = femur, Mt = metatarsus, pl = prolateral, rl = retrolateral, Ti = tibia,

v = ventral. Depositories: AZMI = Agricultural Zoology Museum of Iran, Tehran Iran (A. Khaleghizadeh), GNM = Göteborgs Naturhistoriska Museum, Göteborg, Sweden (C. G. Jonsson), TNU = National Arachnological Collection, Department of Zoology, V. I. Vernadsky Taurida National University, Simferopol, Ukraine (M. M. Kovblyuk), MHNG = Muséum d'histoire naturelle, Genève, Switzerland (L. Monod), NHMW = Natural History Museum of Vienna, Austria (C. Hörweg), SMF = Senckenberg Museum, Frankfurt am Main, Germany (P. Jäger, J. Altmann), ZMFUM = Zoological Museum of Ferdowsi University of Mashhad, Mashhad, Iran (O. Mirshamsi), ZMMU = Zoological Museum of Moscow University, Russia (K. G. Mikhailov), ZMUT = Zoological Museum of the University of Turku, Turku, Finland (V. Vahtera).

Agelenidae C. L. Koch, 1837

***Azerithonica hyrcanica* Guseinov, Marusik & Koponen, 2005**

Material: IRAN: Mazandaran Province: 1♂ (SMF), Elburs, Klard, 20 km S of Amol, 500 m, 24 May 1978, J. Martens, H. Pieper.

Records in Iran: Gilan, Mazandaran.

Distribution: Azerbaijan, Iran.

***Persiscape gideoni* (Levy, 1996)**

Material: IRAN: East Azerbaijan Province: 1♂ (SMF), Arasbaran Wildlife Refuge, 2450–2650 m, 10 June 1978, J. Martens, H. Pieper.

Records in Iran: Alborz, Chaharmahal & Bakhtiari, Golestan, Isfahan, Kerman, Mazandaran, Qazvin, Tehran. New record for East Azerbaijan.

Distribution: Turkey, Georgia, Azerbaijan, Israel, Iran.

***Tegenaria domestica* (Clerck, 1757)**

Material: IRAN: East Azerbaijan Province: 1♂ (SMF), Arasbaran Wildlife Refuge, Makidi, 1650–1800 m, 15 June 1978, J. Martens, H. Pieper.

Records in Iran: Golestan, Isfahan, Kurdistan, Mazandaran, Razavi Khorasan, Tehran. New record for East Azerbaijan.

Distribution: Cosmopolitan.

***Tegenaria eros* Zamani & Marusik, 2019**

Material: IRAN: Mazandaran Province: 1♂ (SMF), near Alamdeh, 1450 m, 30 May 1978; 1♀ (SMF), Noor Reserve, 29 June 1978, J. Martens, H. Pieper.

Records in Iran: Golestan. New record for Mazandaran.

Distribution: Iran.

***Tegenaria lenkoranica* (Guseinov, Marusik & Koponen, 2005)**

Material: IRAN: Mazandaran Province: 1♂ (SMF), Noor, 1650–1800 m, 29 May 1978, J. Martens, H. Pieper.

Records in Iran: Alborz, Gilan, Golestan, Mazandaran, North Khorasan, Tehran, Zanjan.

Distribution: Azerbaijan, Iran.

Araneidae Clerck, 1757

***Aculepeira ceropegia* (Walckenaer, 1802)**

Material: IRAN: East Azerbaijan Province: 1♀ (SMF), Kalan, Arasbaran Wildlife Refuge, 2450–2650 m, 06–10 June 1978, J. Martens, H. Pieper. Tehran Province: 1♀ (SMF), Shemshak, 2650–2900 m, 17–25 July 1978, J. Martens, H. Pieper.

Records in Iran: Kerman. New records for East Azerbaijan and Tehran.

Distribution: Europe, Turkey, Caucasus, Russia (Europe to West Siberia), Kazakhstan, Iran.

***Araniella alpica* (L. Koch, 1869)**

Material: IRAN: Mazandaran Province: 1♂ (SMF), Kojur to Alamdeh, 1540 m, 31 May 1978, J. Martens, H. Pieper.

Records in Iran: Golestan. New record for Mazandaran.

Distribution: From Iberian Peninsula to Western Siberia and south to Iran and Turkey.

***Araniella opisthographa* (Kulczyński, 1905)**

Material: IRAN: East Azerbaijan Province: 2♂, 3♀, 2juv. (SMF), Makidi, Arasbaran Wildlife Refuge, 1650–1800 m, 10–15 June 1978, J. Martens, H. Pieper.

Records in Iran: Ardabil, Golestan, Mazandaran. New record for East Azerbaijan.

Distribution: From Iberian Peninsula to Central Asia, south to Iran.

***Araniella villanii* Zamani, Marusik & Šestáková, 2020**

Material: IRAN: Tehran Province: 1♂, 2♀ (SMF), Fasham, 2350–2500 m, 04–06 July 1978, J. Martens, H. Pieper.

Records in Iran: Chaharmahal & Bakhtiari. New record for Tehran.

Distribution: Iran, eastern Kazakhstan and India (the northern Himalaya).



Figs. 1–13: Males of *Drassyllus dadia* Komnenov & Chatzaki, 2016 (1–3), *Zelotes alpujarraensis* Senglet, 2011 (4–10), and *Zelotes laetus* (O. Pickard-Cambridge, 1872) (11–13) from Iran. **1, 4, 11** habitus, dorsal view; **2, 5, 12** palp, retrolateral view; **3, 6, 13** same, ventral view; **7–9** bulb, retro-lateral, ventral, and anterior views; **10** apical part of bulb, dorsal view. Scale bars = 1.0 mm (1, 4, 11), 0.1 mm (other images).

Cyclosa conica (Pallas, 1772)

Material: IRAN: East Azerbaijan Province: 4♀ (SMF), Makidi, Arasbaran Wildlife Refuge, 1650–1800 m, 10–15 June 1978, J. Martens, H. Pieper.

Records in Iran: Gilan, Golestan, Mazandaran, Qazvin, Zanjan. New record for East Azerbaijan.

Distribution: Holarctic.

Gibbaranea gibbosa (Walckenaer, 1802)*

Gibbaranea sp.: Kashefi *et al.* (2013): 9.

Material: IRAN: Mazandaran Province: 1♀ (ZMFUM-Ar-1225), Nokandeh, 36°42'51.5"N 53°54'06.8"E, 06 May 2011, F. Kashefi.

Distribution: West Palaearctic. New to Iran, with the current finding representing the easternmost record of the species within the whole known range.

Mangora acalypha (Walckenaer, 1802)

Material: IRAN: East Azerbaijan Province: 1♂ (SMF), Makidi, Arasbaran Wildlife Refuge, 1650–1800 m, 10–15 June 1978, J. Martens, H. Pieper.

Records in Iran: Alborz, Chaharmahal & Bakhtiari, Gilan, Golestan, Isfahan, Kermanshah, Markazi, Mazandaran, North Khorasan (?), Qazvin, Razavi Khorasan (?), Semnan, Tehran. New record for East Azerbaijan.

Distribution: Iberian Peninsula to Xinjiang.

Dictynidae O. Pickard-Cambridge, 1871

Dictyna arundinacea (Linnaeus, 1758)

Material: IRAN: Alborz Province: 1♀ (MHNG), Gadjereh, 36°05'N 51°22'E, 2500 m, 13 July 1973, A. Senglet. Ardabil Province: 5♀ (MHNG), Kivi Pain, 37°41'N 48°21'E, 09 June 1975, A. Senglet. Chaharmahal & Bakhtiari Province: 1♀ (MHNG), E of Farsan, 32°17'N 50°38'E, 17 June 1974, A. Senglet. East Azerbaijan

Province: 4♀ (MHNG), Bostanabad, 37°48'N 46°51'E, 25 June 1973, A. Senglet. Isfahan Province: 1♂, 5♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet; 1♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet. Kermanshah Province: 2♀ (MHNG), Geravand, 5 August 1973, A. Senglet. Lorestan Province: 1♀ (MHNG), NE of Borujerd, 33°57'N 48°41'E, 19 September 1975, A. Senglet. Mazandaran Province: 1♀ (MHNG), Pol-e Zanguleh, 36°14'N 51°24'E, 06 July 1975, A. Senglet. Tehran Province: 1♀ (MHNG), Dizin, 36°02'N 51°25'E, 3500 m, 13 July 1973, A. Senglet.

Records in Iran: Kurdistan, Markazi. New records for Alborz, Ardabil, Chaharmahal & Bakhtiari, East Azerbaijan, Isfahan, Kermanshah, Lorestan, Mazandaran, and Tehran.

Distribution: Holarctic.

Nigma laeta (Spassky, 1952)

Material: IRAN: West Azerbaijan Province: 7♂, 18♀ (MHNG), Khoy, 38°41'N 45°08'E, 24 June 1973, A. Senglet.

Records in Iran: Kurdistan, Tehran. New record for West Azerbaijan.

Distribution: Azerbaijan, Iran, Tajikistan.

Filistatidae Simon, 1864

Sahastata amethystina Marusik & Zamani, 2016

Material: IRAN: Sistan & Baluchistan Province: 1♀ (MHNG), Khash, surroundings of Taftan volcano, 28°28'05.3"N 60°51'32.6"E, May 2018, A. Zamani.

Records in Iran: Kerman. New record for Sistan & Baluchistan.

Distribution: Southern Iran.

Gnaphosidae Banks, 1892

Drassyllus dadia Komnenov & Chatzaki, 2016* (Figs. 1–3)

Material: IRAN: Hormozgan Province: 1♂ (NHMW), 30 km N of Bandar Abbas, no date, G. Pretzmann.

Distribution: Greece, Turkey. New to Iran, with the current material representing the south-easternmost record of the species within its known range.

Nomisia ameretatae Zamani, Chatzaki, Esyunin & Marusik, 2021

Material: IRAN: East Azerbaijan Province: 1♂ (MHNG), Maragheh, 37°24'N 46°16'E, 04 June 1975, A. Senglet.

Records in Iran: Tehran. New record for East Azerbaijan.

Distribution: Iran.

Nomisia conigera (Spassky, 1941)

Material: IRAN: East Azerbaijan Province: 1♀ (MHNG), Maragheh, 37°24'N 46°16'E, 04 June 1975, A. Senglet.

Records in Iran: Ardabil, Fars, Golestan, Isfahan, Kermanshah, Khuzestan, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Lorestan, North Khorasan, Sistan & Baluchistan, Tehran, West Azerbaijan (?), Zanjan. New record for East Azerbaijan.

Distribution: Turkey to Tajikistan, south to Sistan & Baluchistan in Iran.

Talanites dunini Platnick & Ovtsharenko, 1991

Material: IRAN: East Azerbaijan Province: 1♂ (MHNG), E of Miyaneh, 37°28'N 47°52'E, 08 June 1975, A. Senglet.

Records in Iran: East Azerbaijan, Gilan, Khuzestan, Lorestan, Markazi, Mazandaran.

Distribution: Cyprus to Western Turkmenistan, north to Northern Caucasus.

Zelotes alpujarraensis Senglet, 2011* (Figs. 4–10)

Type: Holotype ♂ (MHNG): SPAIN: Andalucía, Granada, Puerto del Lino, 1200 m, 36°48'N 03°18'W, 26 May 2002, A. Senglet.

Material: IRAN: Hormozgan Province: 1♂ (NHMW), Geno, 38 km NW of Bandar Abbas, 03 April 1972, K. Bilek.

Remarks: The present identification is provisional. Although there are minor differences in the palps between the two populations, we are not confident to propose a new name based on them. It is possible that this species is distributed, but not yet reported, in North Africa.

Distribution: Previously known only from the type locality in southern Spain. New to Iran, with the current finding representing the south-easternmost record of the species.

Zelotes laetus (O. Pickard-Cambridge, 1872)* (Figs. 11–13)

Material: IRAN: Hormozgan Province: 1♂ (NHMW), Geno, 38 km NW of Bandar Abbas, 3 April 1972, K. Bilek.

Distribution: West Palaearctic (east to Iran), Senegal, Kenya. Introduced to New World. New to Iran, with the current finding representing the easternmost record of the species of its known range.

Leptonetidae Simon, 1890

Remarks: This family has an exclusively Holarctic distribution, known from southern Nearctic, the Mediterranean and the Far East. The new record in Iran is the easternmost in the West Palaearctic. Leptonetidae remain unrecorded between Mazandaran and eastern China.



Figs. 14–15: *Leptonetela* (?) sp. from Iran. **14** habitus, dorsal view; **15** same, lateral view. Scale bar = 0.2 mm.

***Leptonetela* (?) sp. (Figs. 14–15)**

Material: IRAN: Mazandaran Province: 4 juv. (ZMUT), Chalus, 17 July 1971, P. T. Lehtinen.

Remarks: This is the first record of the family in Iran. The material examined contains three subadult males and one subadult female. The correct generic identification is impossible; currently there is a single genus known in the Caucasus.

Linyphiidae Blackwall, 1859

***Linyphia hortensis* Sundevall, 1830**

Material: IRAN: Yazd Province: 1♂ (NHMW), 10 km NW of Yazd, no date, G. Pretzmann.

Records in Iran: East Azerbaijan, Gilan. New record for Yazd.

Distribution: Palaearctic.

Liocranidae Simon, 1897

***Sestakovaia hyrcania* Zamani & Marusik, 2021**

Material: IRAN: Golestan Province: 1♂ (MHNG), Shast Kalateh, 36°46'N 54°11'E, 2018, R. Rafiei-Jahed.

Records in Iran: Golestan.

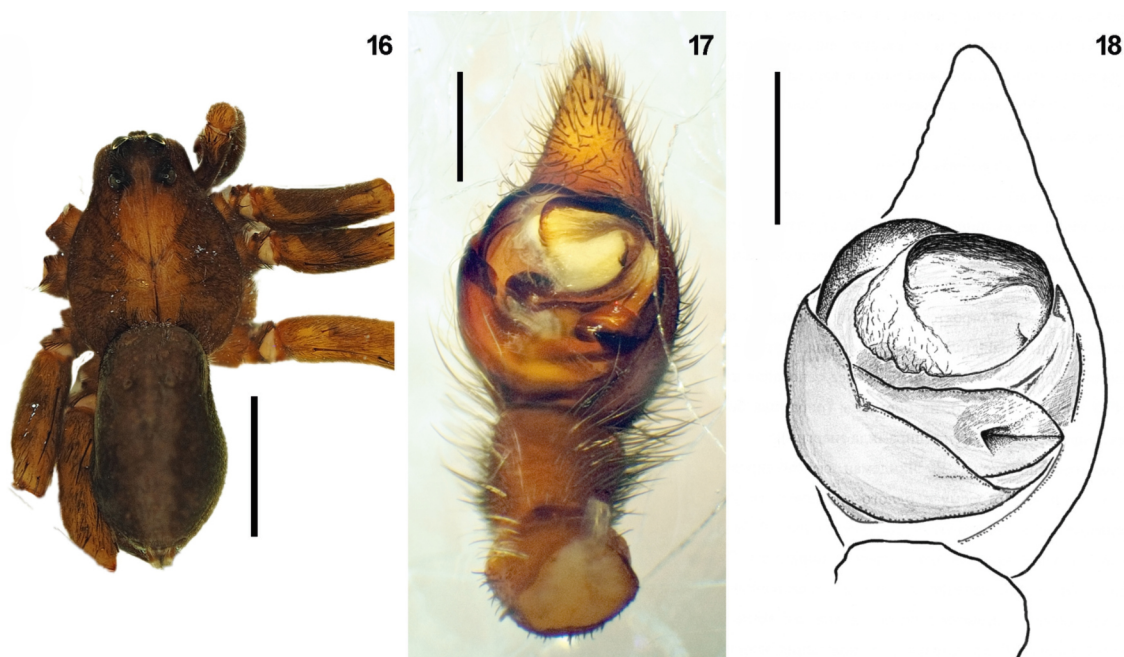
Distribution: Iran.

Lycosidae Sundevall, 1833b

***Alopecosa murphyorum* sp. n. (Figs. 16–21)**

Type: Holotype ♂ (ZMMU), IRAN: Semnan Province: W of Tuchah, 35°26'38.3"N, 54°27'19.8"E, 1460 m, 12 May 2016, V. Hula, Z. F. Fric & L. Purchart.

Etymology: The new species is dedicated to the late British arachnologists John Alan Murphy (1922–2021) and his wife Frances Mary Murphy (1926–1995).



Figs. 16–18: *Alopecosa murphyorum* sp. n., male holotype. **16** habitus, dorsal view; **17–18** palp, ventral views. Scale bars = 2.5 mm (16), 0.5 mm (17–18).

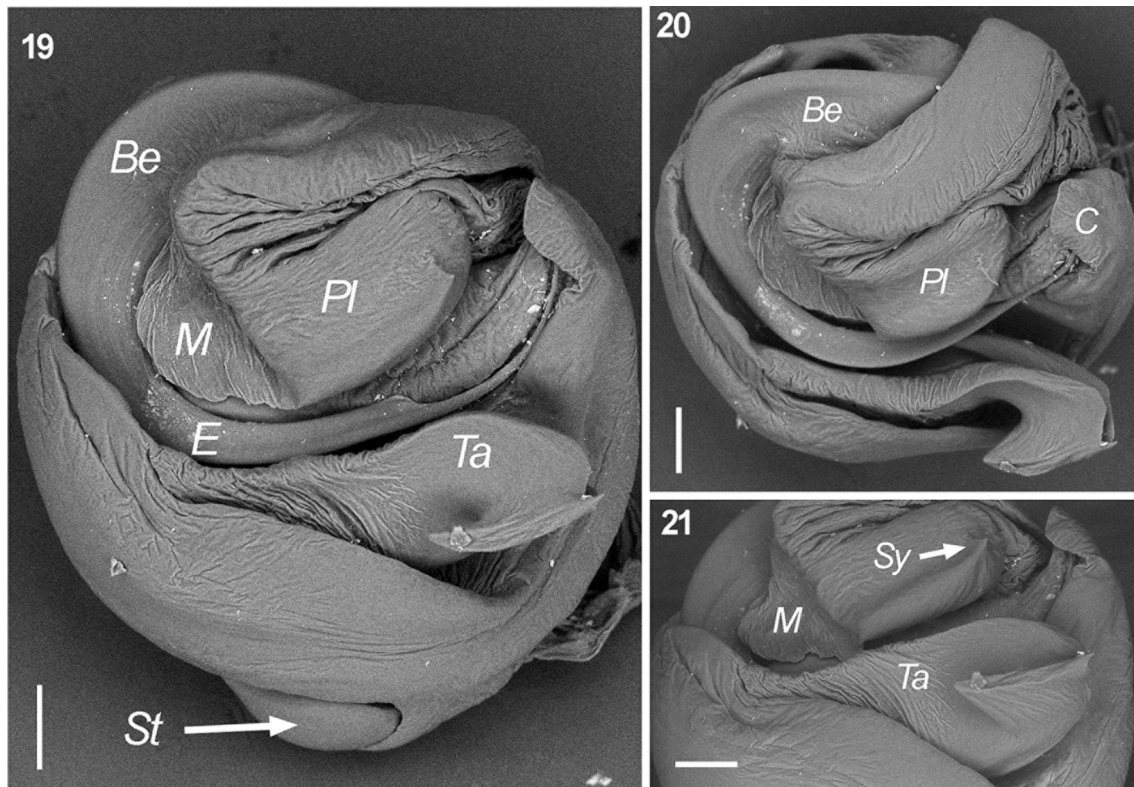


Fig. 19–21: *Alopecosa murphyorum* sp. n., SEM images of male palp. **19** bulb, apical-ventral view; **20** same, apical view; **21** tegular apophysis, ventral view. Be = base of embolus, C = conductor, E = embolus, M = membranous outgrowth of palea, Pl = palea, St = subtegulum, Sy = synembolus, Ta = tegular apophysis. Scale bars = 0.1 mm.

Diagnosis: *A. murphyorum* sp. n. belongs to the *aculeata* species group *sensu* Kronstedt (1990: sub *pulverulenta* group) and resembles *A. albofasciata* (Brullé, 1832) in the shape of the male palp, but can be distinguished from it by the absence of a contrasting body pattern (compared to longitudinal pale stripes in *A. albofasciata*). In addition, it differs in having a more rounded apex of the tegular apophysis and a smaller synembolus.

Description of holotype male: Habitus as in Fig. 16. Total length 8.0. Carapace 3.0 long, 3.1 wide. Eye sizes: ALE: 0.13, AME: 0.13, PLE: 0.25, PME: 0.35. Chelicera with 2 pro- and 2 retromarginal teeth. Carapace brown, covered with black setae, with a median yellowish brown band covered with white setae. Chelicerae brown, covered with black setae. Maxillae and labium yellowish brown with white apices; labium blackish basally. Sternum dark brown, covered with black setae. Palp yellowish brown, femur blackish, cymbium black brown. Legs yellow; femora I and II dark brown, femora III and IV blackish. Tarsi I–IV with scopula. Abdomen dorsally black, lighter medially and without distinct pattern, covered with pale setae and short black setae; venter monochrome black, with grey book lung covers. Measurements of leg segments: I: 10.4 (2.9, 1.3, 2.1, 2.4, 1.7); II: 9.6 (2.6, 1.3, 1.9, 2.3, 1.5); III: 9.3 (2.6, 1.2, 1.8, 2.4, 1.3); IV: 12.5 (3.3, 1.3, 2.6, 3.7, 1.6). Spination of legs: Fm I: d 1-1-1, pl 0-0-1, rl 0-0-1; II, III: d 1-1-1, pl 0-1-1, rl 0-1-1; IV: d 1-1-1, pl 0-1-1, rl 0-0-1; Tb I: pl 0-1-1, rl 0-1-1, v 2-2-2a; II: d 0-1-0, pl 0-1-1, rl 0-1-1, v 2-2-2a; III: d 0-1-1, pl 0-1-1, rl 0-1-1, v 2-1-2a; IV: d 1-1(0)-0, pl 0-1-1(0), rl 0-1-1, v 2-2-2a; Mt with numerous ventral, lateral and

dorsal setae. Spination of Palp: Fm d1-1-3, Pt pl 0-1-0. Palp as in Figs. 17–21; tibia short, equal to 0.3 the length of the cymbium; cymbium elongate, clawless, with tip about 1/3 of cymbial length; bulb almost round; subtegulum small; tegular apophysis transverse, narrow with apical hook-shaped process; palea with a transparent membranous outgrowth (M; only visible on SEM images) and a small synembolus (Sy); embolus long and thin with accompanying membrane in the basal half.

Female unknown.

Distribution: Known only from the type locality in Semnan Province, northern Iran.

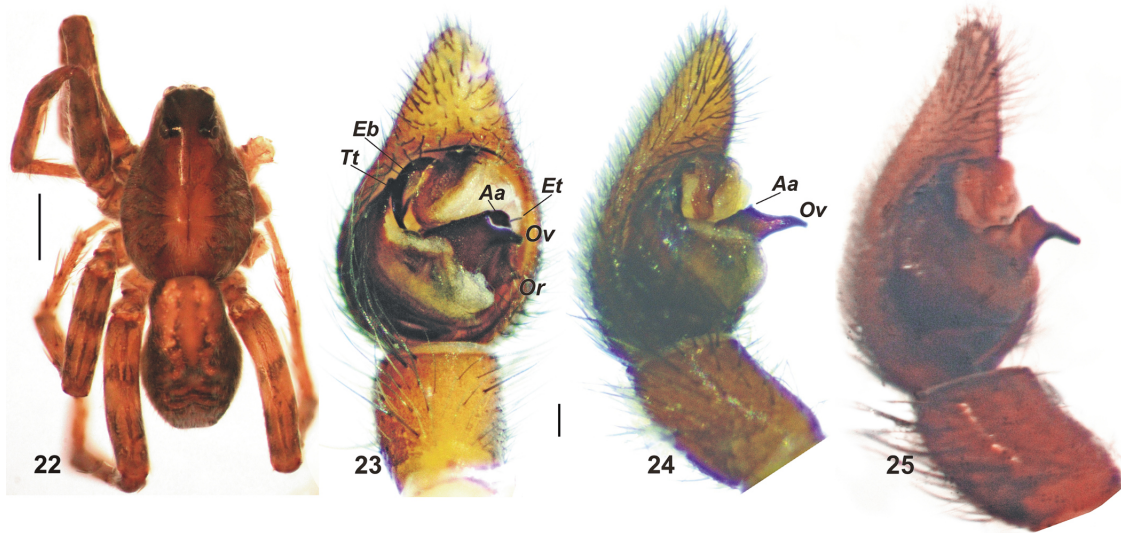
Alopecosa robertsi sp. n. (Figs. 22–24, 26, 28, 31–33)

Type: Holotype ♂ (ZMMU), IRAN: Zanjan Province: Garmab, 35°50'N 48°11'E, 20 April 2017, A. Zamani.

Comparative material: See Marusik *et al.* (2018).

Etymology: This new species is dedicated to the late British arachnologist Michael John Roberts (1945–2020).

Diagnosis: The new species is most similar to *Alopecosa cursor* (Hahn, 1831) (Fig. 25) and *A. cursorioides* Charitonov, 1969 (for details, see the revision of *A. cursor* group by Marusik *et al.* 2018) but differs from them in the shape of the embolic division and tegular apophysis: the new species has a wide space between retrolateral edge of the palea and tip of the embolus, which is equal to the ~30 widths of the embolic tip (in *A. cursor* and *A. cursorioides* this distance is two times smaller, Figs. 28–30); the new



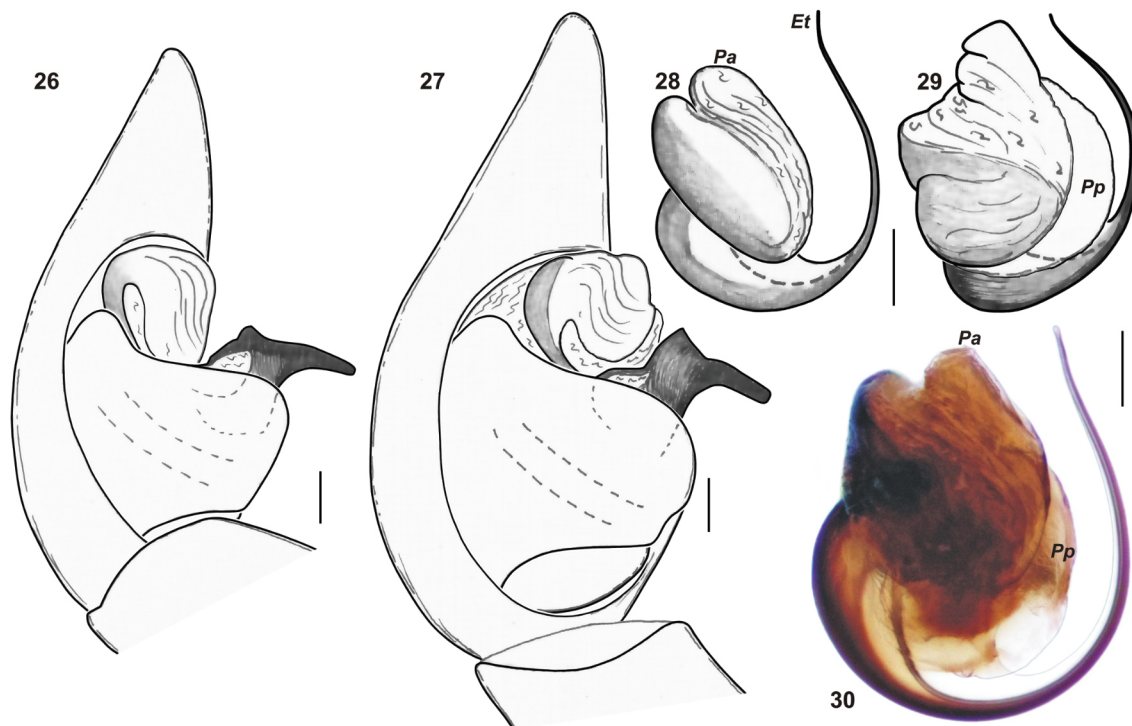
Figs. 22–25: *Alopecosa robertsi* sp. n. (22–24) and *A. cursor* (Hahn, 1831) from the Crimea (25). **22** male habitus, dorsal view; **23** palp, ventral view; **24–25** same, ventro-prolateral. Aa = anterior edge of tegular apophysis, Eb and Et = base and tip of embolus, Or and Ov = retrolateral and ventral outgrowths of tegular apophysis, Tt = prolateral tip of tegulum. Scale bars = 1.0 mm (22), 0.1 mm (23–25).

species lacks the posterior plate of palea (present in *A. cursor* and *A. cursorioides*); the new species has a well visible tip of the embolus (in *A. cursor* and *A. cursorioides* the tip is hidden behind the tegular apophysis in ventral view); the new species has anterior edge of tegular apophysis standing out less noticeably than in *A. cursor*. The important feature for separating these species is the ventro-prolateral side of the male palp, which shows clearly visible differences in the tegular apophysis contours.

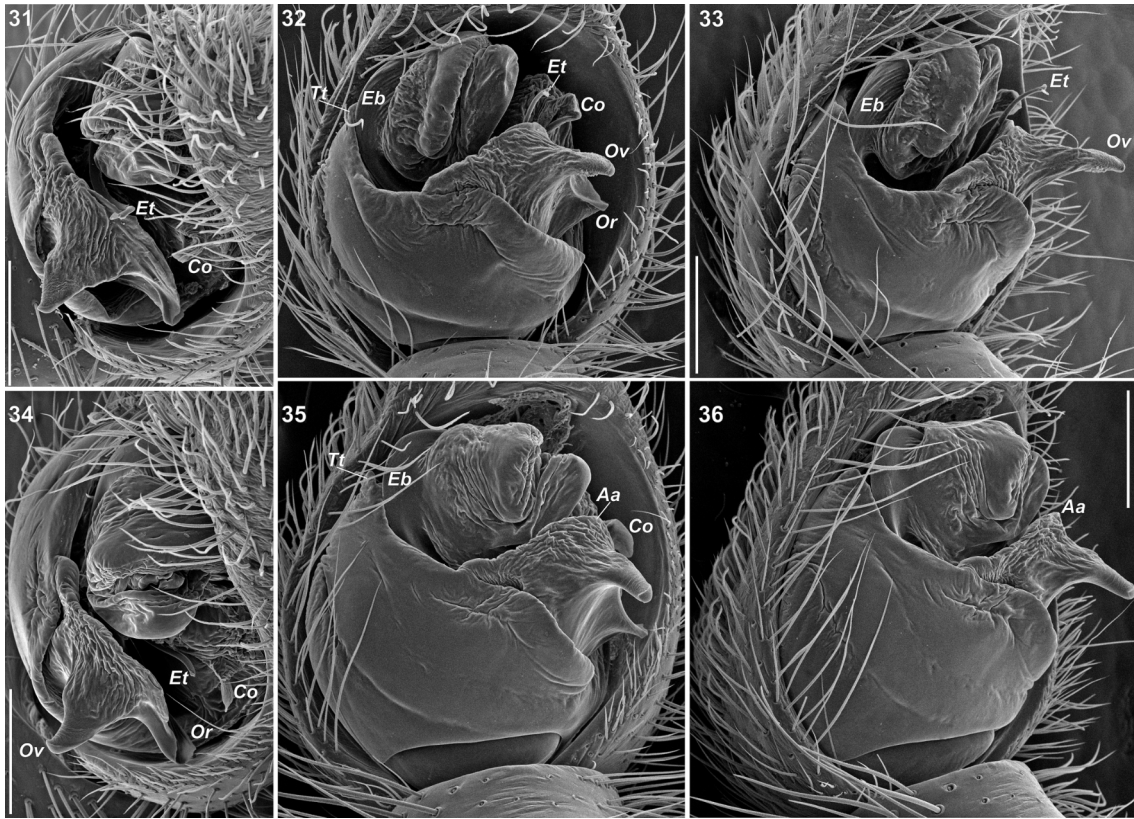
Description of holotype male: Habitus as in Fig. 22. Total length 5.25. Carapace 3.0 long, 2.0 wide. Cymbium 1.1 long. Coloration and spination as in other members of *A.*

cursor group (see Marusik *et al.* 2018). Measurements of leg segments: I: 7.39 (2.0, 1.0, 1.62, 1.65, 1.12); II: 6.95 (1.8, 1.0, 1.45, 1.65, 1.05); III: 6.85 (1.8, 0.9, 1.35, 1.8, 1.0); IV: 9.3 (2.35, 1.0, 1.9, 2.75, 1.3). Palp as in Figs. 23, 24, 26, 28, 31–33; prolateral tip of tegulum (Tt) not hidden by embolus; tegular apophysis length and width equal; tip of embolus not hidden by tegular apophysis in ventral view; anterior edge of tegular apophysis (Aa) rounded, outgrowths widely separated; ventral outgrowth longer than retrolateral one.

Female unknown.



Figs. 26–30: *Alopecosa robertsi* sp. n. (26, 28), *A. cursor* (Hahn, 1831) from the Crimea (27, 29), and *A. cursorioides* Charitonov, 1969 from Uzbekistan (30). **26–27** palp, ventro-prolateral views; **28–30** embolic division, ventral views. Et = tip of embolus, Pa = retrolateral edge of palea, Pp = posterior plate of palea. Scale bars = 0.1 mm.



Figs. 31–36: *Alopecosa robertsi* sp. n. (31–33) and *A. cursor* (Hahn, 1831) from the Crimea (34–36), SEM images of male palps. **31, 34** anterior views; **32, 35** ventral views; **33, 36** ventro-prolateral views. Aa = anterior edge of tegular apophysis, Co = conductor, Eb and Et = base and tip of embolus, Or and Ov = retrolateral and ventral outgrowths of tegular apophysis, Tt = prolateral tip of tegulum. Scale bars = 0.2 mm.

Distribution: Known only from the type locality in Zanjan Province, northwestern Iran. The record of *A. cursor* from Razavi-Khorasan Province in northeastern Iran by Mirshamsi *et al.* (2015) probably belongs to this species.

Arctosa cinerea (Fabricius, 1777)

Material: IRAN: Chaharmahal & Bakhtiari Province: 2♂ (MHNG), Kuhrang, 32°26'N 50°06'E, 18 June 1974, A. Senglet. Fars Province: 2♂, 2♀, 1juv. (TNU), nr Doroudzan Dam, 17 May 2015, H. Darvishnia.

Records in Iran: East or West Azerbaijan, Fars, Razavi Khorasan, Zanjan. New record for Chaharmahal & Bakhtiari.

Distribution: Palearctic.

Arctosa leopardus (Sundevall, 1833a)

Material: IRAN: Chaharmahal & Bakhtiari Province: 1♂, 2♀ (MHNG), Kuhrang, 32°26'N 50°06'E, 18 June 1974, A. Senglet; 2♀ (MHNG), Dimeh, 32°29'N 50°16'E, 08 September 1973, A. Senglet; 1♂ (MHNG), Dimeh, 32°29'N 50°16'E, 21 June 1974, A. Senglet. East Azerbaijan Province: 1♀ (MHNG), E of Bostanabad, 37°55'N 46°42'E, 1900 m, 07 June 1975, A. Senglet. Fars Province: 1♀ (MHNG), around Ghaderabad, 30°22'N 53°18'E, 11 June 1974, A. Senglet; 1♀ (MHNG), south of Fahlyan, 30°00'N 51°35'E, 04 September 1975 A. Senglet; 1♀ (MHNG),

Semargoun, 28°57'N 52°33'E, 07 June 1974, A. Senglet; 1♂ (MHNG), Kavar, 29°12'N 52°37'E, 05 June 1974, A. Senglet; 1♀ (MHNG), Bishapour, 29°47'N 51°35'E, 03 September 1975, A. Senglet; 2♂, 2♀ (MHNG), Baba Hadji, 29°23'N 52°41'E, 07 June 1974, A. Senglet. Gilan Province: 5♂, 2♀ (MHNG), Galugah, 37°31'N 49°19'E, 12 June 1975, A. Senglet. Hamedan Province: 1♀ (MHNG), Ganjnameh/Hamedan, 34°44'N 48°30'E, 2100 m, 04 July 1974, A. Senglet; 2♂, 2♀ (MHNG), Hamedan, 34°44'N 48°47'E, 16 June 1975, A. Senglet. Ilam Province: 1♂, 1♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet. Isfahan Province: 1♀ (MHNG), Isfahan, 32°34'N 51°31'E, 23 August 1973, A. Senglet. Kermanshah Province: 1♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 July 1974, A. Senglet. Khuzestan Province: 2♂ (MHNG), Behbahan, 30°35'N 50°16'E, 05 September 1975, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 1♂, 1♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975 A. Senglet. Kurdistan Province: 1♀ (MHNG), Hoseynabad, 35°33'N 47°08'E, 22 June 1975, A. Senglet; 1♀ (MHNG), south of Divandareh, 35°45'N 47°05'E, 23 June 1975, A. Senglet. Lorestan Province: 3♂, 1♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet. Mazandaran Province: 1♀ (MHNG), Hamsehkola, 36°30'N 52°31'E, 19 July 1973, A. Senglet; 1♀ (MHNG), Kiyasar, 36°15'N 53°29'E, 12 July 1975, A. Senglet; 6♂, 6♀ (MHNG), Farahabad, 36°49'N 53°12'E, 9 July 1975, A. Senglet; 2♂, 1♀ (MHNG), Mahmoudabad, 36°38'N 52°15'E, 02 August 1974, A. Senglet; 2♀ (MHNG), Chorteh, 36°46'N 50°35'E,

08 July 1973, A. Senglet. North Khorasan: 1♀ (MHNG), Garmab, 37°43'N 56°18'E, 18 July 1975, A. Senglet. Qazvin Province: 1♂ (MHNG), N of Avadj, 35°36'N 49°13'E, 14 June 1975, A. Senglet; 3♀ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet. Razavi Khorasan Province: 2♀ (MHNG), Emamgholi, 37°26'N 58°30'E, 15 July 1974, A. Senglet. West Azerbaijan Province: 1♀ (MHNG), nr Mahabad, 36°50'N 45°47'E, 03 June 1975, A. Senglet.

Records in Iran: Gilan, Golestan, Ilam, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Mazandaran, Razavi Khorasan, Zanjan. New records for Chaharmahal & Bakhtiari, East Azerbaijan, Fars, Hamedan, Isfahan, Khuzestan, Kurdistan, Lorestan, North Khorasan, Qazvin and West Azerbaijan.

Distribution: West Palaearctic.

Arctosa maculata (Hahn, 1822)* (Figs. 60–62)

Material: IRAN: Khuzestan Province: 1♂, 1♀ (MHNG), N of Andimeshk, 32°41'N 48°15'E, 17 May 1974, A. Senglet.

Distribution: West Palaearctic. New to Iran, with the current finding representing the south-ernmost record of the known species range.

Arctosa stigmosa (Thorell, 1875)

Material: IRAN: West Azerbaijan Province: 1♂, 2♀ (MHNG), Khoy, 38°41'N 45°08'E, 24 June 1973, A. Senglet.

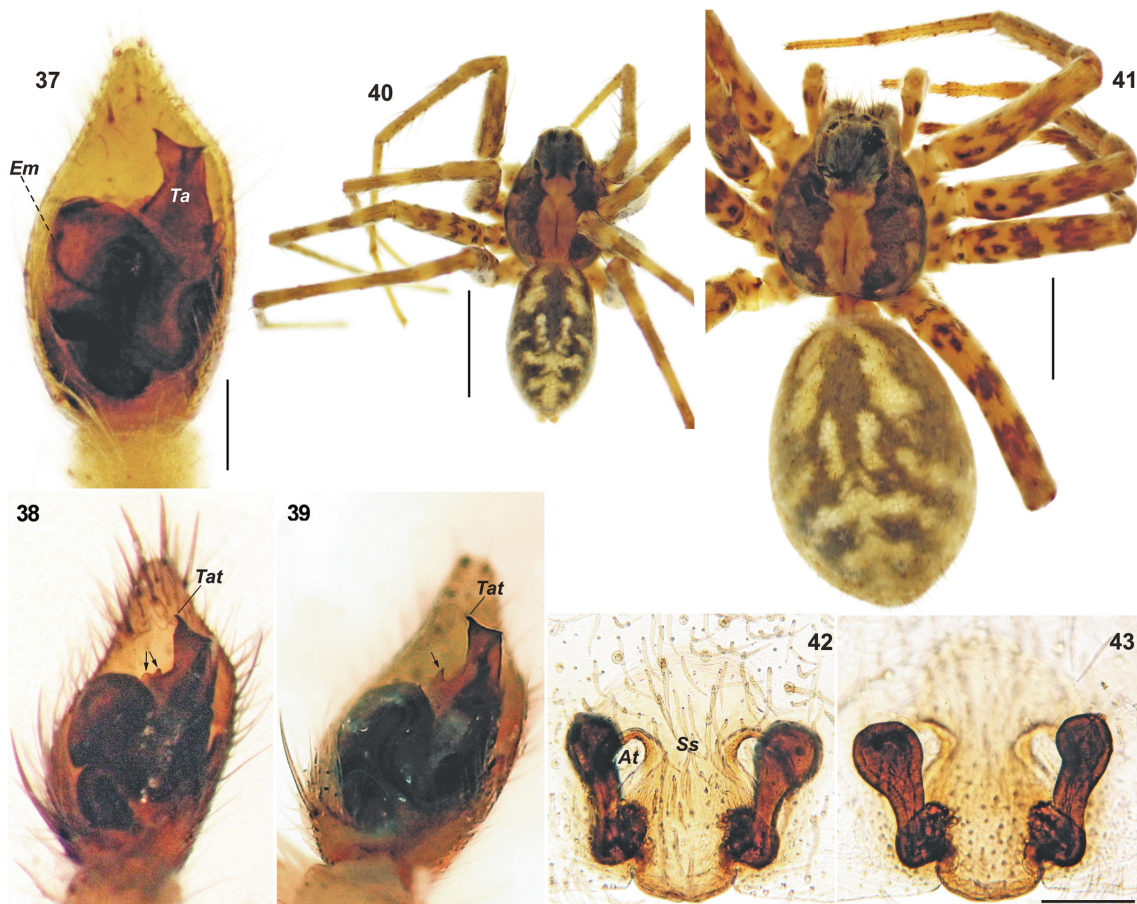
Records in Iran: Razavi Khorasan. New record for West Azerbaijan.

Distribution: West Palaearctic.

Arctosa tbilisiensis Mcheidze, 1946

Material: IRAN: East Azerbaijan Province: 1♀ (MHNG), E of Bostanabad, 37°55'N 46°42'E, 1900 m, 07 June 1975, A. Senglet; 3♂, 1♀ (MHNG), Maragheh, 37°24'N 46°16'E, 04 June 1975, A. Senglet; 2♀ (MHNG), E of Miyaneh, 37°29'N 47°36'E, 07 June 1975, A. Senglet; 1♂, 1♀ (MHNG), E of Miyaneh, 37°28'N 47°52'E, 08 June 1975, A. Senglet; 4♀ (MHNG), N of Bonab, 37°26'N 45°57'E, 04 June 1975, A. Senglet. Fars Province: 1♂, 1♀ (MHNG), around Ghaderabad, 30°22'N 53°18'E, 11 June 1974, A. Senglet; 1♂ (MHNG), Dasht-e Arjan, 29°40'N 51°59'E, 01 June 1974, A. Senglet; 3♂, 1♀ (MHNG), Semargoun, 28°57'N 52°33'E, 07 June 1974, A. Senglet; 4♂, 3♀ (MHNG), Aliabad, 30°01'N 53°00'E, 09 June 1974, A. Senglet; 4♂, 7♀ (MHNG), Kavar, 29°12'N 52°37'E, 05 June 1974, A. Senglet; 1♂, 1♀ (MHNG), Firouzabad, 28°52'N 52°32'E, 06 June 1974, A. Senglet; 6♂, 2♀ (MHNG), Baba Hadji, 29°23'N 52°41'E, 07 June 1974, A. Senglet; 2♂ (MHNG), Shiraz, 29°37'N 52°23'E, 02 June 1974, A. Senglet. Gilan Province: 1♂, 2♀ (MHNG), Chela-

vand, 38°19'N 48°51'E, 27 June 1973, A. Senglet; 2♂ (MHNG), Pareh-Sar, 37°37'N 49°03'E, 02 July 1973, A. Senglet; 1♀ (MHNG), Chaboksar, 36°59'N 50°34'E, 07 July 1973, A. Senglet. Golestan Province: 1♂2♀ (MHNG), Shahpasand, 37°02'N 55°17'E, 28 July 1974, A. Senglet; 2♀ (MHNG), Naharkhoran/Gorgan, 36°44'N 54°29'E, 20 July 1973, A. Senglet. Hamedan Province: 3♂3♀ (MHNG), Ganjnameh/Hamedan, 34°44'N 48°30'E, 2100 m, 04 July 1974, A. Senglet; 1♀ (MHNG), NE of Serkan, 34°42'N 48°23'E, 16 June 1975, A. Senglet; 2♀ (MHNG), Asadabad, 34°51'N 48°12'E, 02 July 1974, A. Senglet. Ilam Province: 2♀ (MHNG), Tchaharmelieh, 33°57'N 46°17'E, 28 June 1974, A. Senglet; 4♂, 4♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet; 7♂, 4♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet. Isfahan Province: 1♂ (MHNG), Falavarian, 32°34'N 51°31'E, 14 June 1974, A. Senglet; 2♂, 2♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet. Kermanshah Province: 2♂, 2♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 July 1974, A. Senglet; 1♂ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 29 June 1974, A. Senglet; 1♂ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet. Khuzestan Province: 2♀ (MHNG), N of Andimeshk, 32°41'N 48°15'E, 17 May 1974, A. Senglet; 2♂, 4♀ (MHNG), Shush, 32°02'N 48°18'E, 18 May 1974, A. Senglet; 1♂, 6♀ (MHNG), Masjed Soleyman, 31°59'N 49°16'E, 20 May 1974, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 4♂, 4♀ (MHNG), road to Yasuj, 30°32'N 51°32'E, 27 May 1974, A. Senglet; 1♂, 3♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975, A. Senglet; 4♂, 1♀ (MHNG), Yasuj, 30°36'N 51°36'E, 26 May 1974, A. Senglet; 6♂, 16♀ (MHNG), Charam, 30°44'N 50°44'E, 23 May 1974, A. Senglet; 1♂, 1♀ (MHNG), Arow, 30°35'N 50°43'E, 25 May 1974, A. Senglet; 7♂, 5♀ (MHNG), Dogonbadán, 30°22'N 50°47'E, 21 May 1974, A. Senglet. Kurdistan Province: 1♂ (MHNG), N of Sanandaj, 35°28'N 47°01'E, 22 June 1975, A. Senglet; 1♂, 1♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet. Lorestan Province: 1♀ (MHNG), Hatemvand, 33°28'N 48°07'E, 09 September 1975, A. Senglet; 1♀ (MHNG), Azna, 33°28'N 49°22'E, 23 June 1974, A. Senglet; 2♂, 3♀ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974, A. Senglet; 1♂, 2♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet; 2♂, 1♀ (MHNG), Pol-e Dokhtar, 33°10'N 47°44'E, 17 May 1974, A. Senglet; 8♂, 11♀ (MHNG), Dizgaran, 33°43'N 47°00'E, 25 June 1974, A. Senglet. Mazandaran Province: 1♂, 1♀ (MHNG), Sari, 36°34'N 53°09'E, 22 July 1973, A. Senglet; 1♂, 6♀ (MHNG), Farahabad, 36°49'N 53°12'E, 09 July 1975, A. Senglet; 1♀ (MHNG), Mahmoudabad, 36°38'N 52°15'E, 02 August 1974, A. Senglet. North Khorasan Province: 1♂, 1♀ (MHNG), E of Badranlu, 37°31'N 57°08'E, 18 July 1975, A. Senglet. Qazvin Province: 1♂, 1♀ (MHNG), Mo'allem Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet; 4♂, 3♀ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet; 2♀ (MHNG), Ab Garm, 35°41'N 46°13'E, 05 July 1974, A. Senglet. Razavi Khorasan Province: 1♀ (MHNG), Amirabad, 36°47'N 59°54'E, 23 July 1974, A.



Figs. 37–43: *Evippa amitaii* Armiach Steinpress, Armiach Steinpress, Alderweireldt, Cohen, Chipman & Gavish-Regev, 2021 from Iran (37–38, 40–43) and its holotype (39; courtesy of I. Armiach Steinpress). **37** male palp, ventral view; **38–39** same, ventro-posterior views; **40** male habitus, dorsal view; **41** female habitus, dorsal view; **42** epigyne, ventral view; **43** same, dorsal view. At = atrium, Em = embolus, Ta = tegular apophysis, Tat = tegular apophysis tip, Ss = septal stem. Arrows indicate basal processes of tegular apophysis. Scale bars = 0.2 mm (37, 42–43), 2.0 mm (40–41).

Senglet. West Azerbaijan Province: 1♀ (MHNG), Mahabad, 36°47'N 45°45'E, 24 June 1975, A. Senglet; 5♂ (MHNG), N of Khoy, 18 September 1974, A. Senglet.

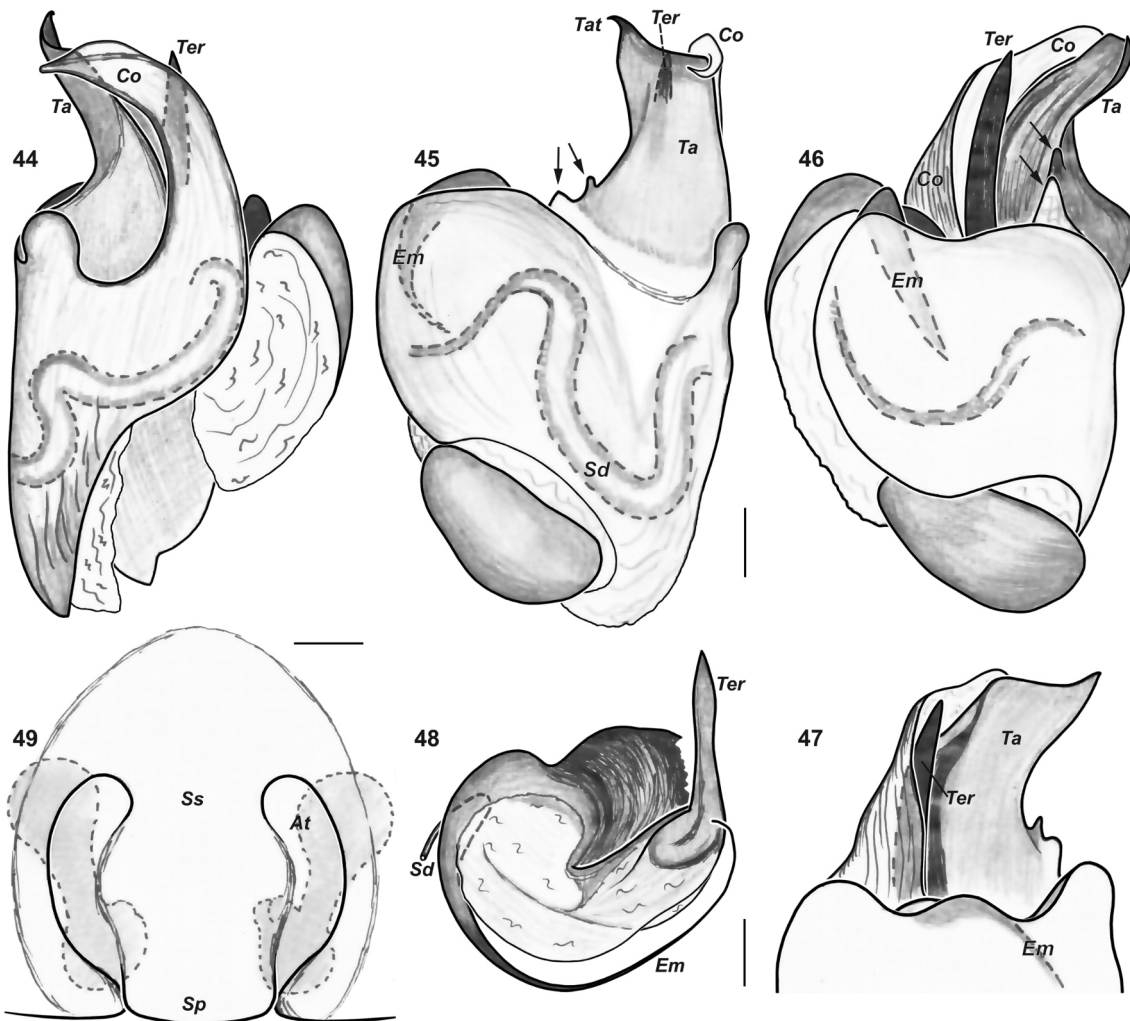
Records in Iran: Alborz, Fars, Gilan, Golestan, Hamedan, Ilam, Isfahan, Kerman, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Markazi, Mazandaran, North Khorasan, Qazvin, Qom, Razavi Khorasan, South Khorasan, Tehran, Zanjan. New records for East Azerbaijan, Khuzestan, Lorestan and West Azerbaijan.

Distribution: East Mediterranean (Balkans) to Afghanistan.

Aulonia kratochvili Dunin, Buchar & Absolon, 1986

Material: IRAN: East Azerbaijan Province: 3♂, 4♀ (MHNG), E of Miyaneh, 37°29'N 47°36'E, 07 June 1975, A. Senglet; 2♂, 6♀ (MHNG), Maragheh, 37°24'N 46°16'E, 04 June 1975 A. Senglet; 2♂2♀ (MHNG), N of Bonab, 37°26'N 45°57'E, 04 June 1975, A. Senglet; 8♀ (MHNG), E of Miyaneh, 37°28'N 47°52'E, 08 June 1975, A. Senglet. Fars Province: 2♀ (MHNG), nr Ghaderabad, 30°22'N 53°18'E, 11 June 1974 A. Senglet; 1♀ (MHNG), Bishapour, 29°47'N 51°35'E, 03 September 1975 A. Senglet; 1♂, 8♀ (MHNG), Sivand, 30°07'N 52°58'E, 10 June 1974, A. Senglet; 2♀ (MHNG), Aliabad, 30°01'N 53°00'E, 09 June

1974, A. Senglet. Gilan Province: 1♀ (MHNG), Parih-Sar, 37°37'N 49°03'E, 02 July 1973, A. Senglet; 3♀ (MHNG), Galugah, 37°31'N 49°19'E, 12 June 1975, A. Senglet. Golestan Province: 1♀ (MHNG), around Kalaleh, 37°19'N 55°33'E, 14 July 1975, A. Senglet; 2♀ (MHNG), Tang-e Rah, 37°23'N 55°50'E, 13 July 1974, A. Senglet; 1♀ (MHNG), Shahpasand, 37°02'N 55°17'E, 28 July 1974, A. Senglet. Ilam Province: 11♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet; 3♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet. Isfahan Province: 2♂, 9♀ (MHNG), Pol-e Kaleh, 32°23'N 51°14'E, 15 June 1974, A. Senglet; 10♀ (MHNG), Falavarian, 32°34'N 51°31'E, 14 June 1974, A. Senglet. Kermanshah Province: 8♀ (MHNG), NE of Kanduleh, 34°44'N 47°17'E, 20 June 1975 A. Senglet; 1♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet; 1♀ (MHNG), Sahneh, 34°28'N 47°36'E, 02 August 1973, A. Senglet; 2♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 August 1973 A. Senglet; 1♂, 14♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 29 June 1974, A. Senglet; 4♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 04 August 1973, A. Senglet; 1♀ (MHNG), Kenesht, 34°29'N 47°09'E, 03 August 1973, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 1♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975, A. Senglet; 22♀ (MHNG), Charam, 30°44'N 50°44'E, 23 May



Figs. 44–49: *Evippa amitaii* Armiach Steinpress, Armiach Steinpress, Alderweireldt, Cohen, Chipman & Gavish-Regev, 2021 from Iran, copulatory organs. **44** bulb, retrolateral view; **45** same, ventral view; **46** same, prolateral view; **47** apical part of bulb, dorso-prolateral view; **48** embolic division, ventral view; **49** epigyne, ventral view. At = atrium, Em = embolus, Co = conductor, Ta = tegular apophysis, Tat = tegular apophysis tip, Ter = terminal apophysis, Sd = sperm duct, Sp = posterior part of septum, Ss = septal stem. Arrows indicate basal processes of tegular apophysis. Scale bars = 0.1 mm.

1974, A. Senglet. Kurdistan Province: 6♀ (MHNG), N of Sanandaj, 35°28'N 47°01'E, 22 June 1975, A. Senglet; 1♂, 3♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet; 1♀ (MHNG), E of Nyabad, 35°20'N 46°39'E, 14 September 1975, A. Senglet. Lorestan Province: 5♀ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974, A. Senglet; 3♀ (MHNG), Pol-e Dokhtar, 33°10'N 47°44'E, 17 May 1974, A. Senglet; 1♀ (MHNG), Hatemvand, 33°28'N 48°07'E, 23 June 1974, A. Senglet. Mazandaran Province: 1♀ (MHNG), Sari, 36°34'N 53°09'E, 22 July 1973, A. Senglet; 2♀ (MHNG), Amol, 36°18'N 52°21'E, 18 July 1973, A. Senglet; 13♀ (MHNG), Farahabad, 36°49'N 53°12'E, 09 July 1975, A. Senglet. North Khorasan Province: 1♀ (MHNG), Bojnurd, 37°29'N 57°26'E, 26 July 1974, A. Senglet; 1♂ (MHNG), Ab Garm, 35°41'N 46°13'E, 05 July 1974, A. Senglet. Qazvin Province: 6♀ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet; 4♀ (MHNG), Tarazan/Lowshan, 36°28'N 49°31'E, 1500 m, 02 July 1975, A. Senglet. West Azerbaijan: 1♂, 5♀ (MHNG), N of Khoy, 18 September 1974, A. Senglet. Zanjan Province: 1♀ (MHNG), SE of Nikpey, 36°47'N 48°14'E, 30 June 1975, A. Senglet.

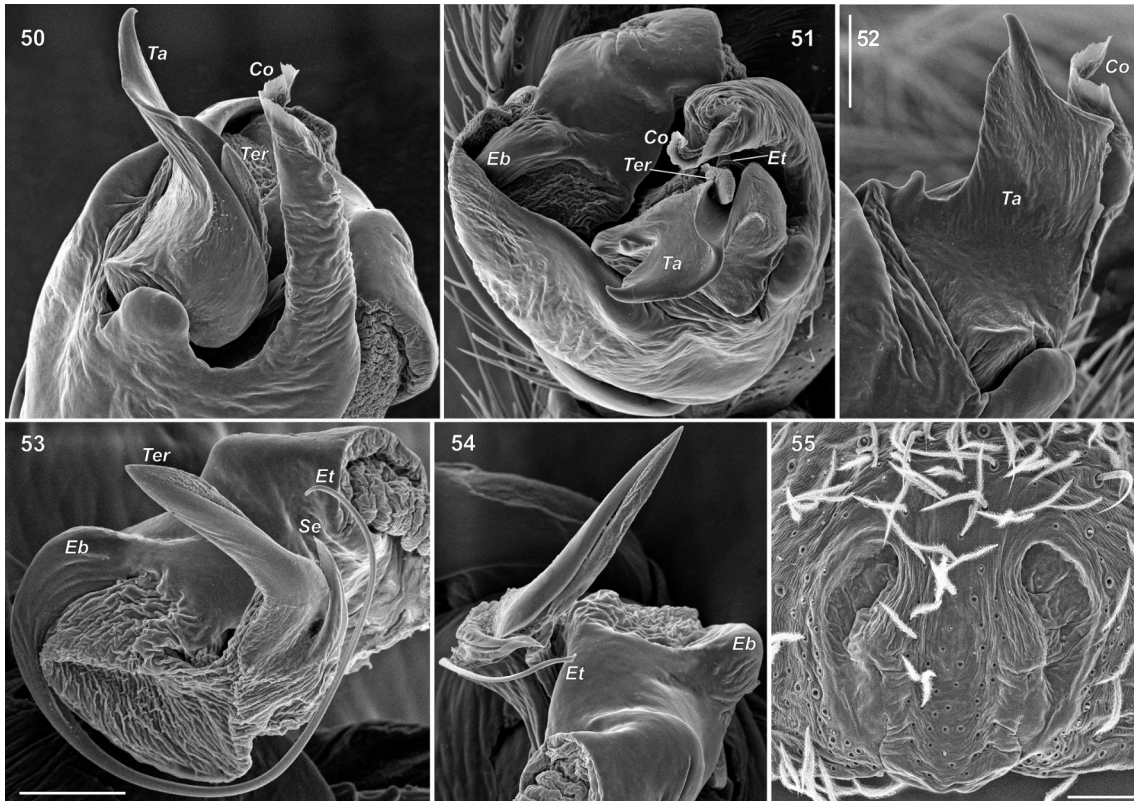
Remarks: The previous Iranian records of *Aulonia albimana* (Walckenaer, 1805) (Ghavami 2006, 2008; Ghavami *et al.* 2007; Ghahari & Tabari 2012) and the Turkish record of *Piratula insularis* (Emerton, 1885) (Demircan & Topçu 2011) are misidentifications of *A. kratochvili* and are to be assigned to this species.

Records in Iran: Alborz, Fars, Golestan, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Markazi, Mazandaran, Semnan, Tehran, Zanjan. New records for East Azerbaijan, Gilan, Ilam, Isfahan, Lorestan, North Khorasan, Qazvin and West Azerbaijan.

Distribution: Greece to Iran.

Evippa amitaii* Armiach Steinpress, Alderweireldt, Cohen, Chipman & Gavish-Regev, 2021 (Figs. 37–55)

Material: IRAN: Hormozgan Province: 1♂ (TNU), Parsian, January 2016, A. Zamani. Khuzestan Province: 1♂, 1♀ (TNU), Dezful, March 2018, A. Zamani. Kohgiluyeh & Boyer-Ahmad Province: 5♂, 1♀ (TNU), Pashehkan, 30°19'10.6"N 50°48'46.0"E, April 2017, M. A. Hossein-



Figs. 50–55: *Evippa amitaii* Armiach Steinpress, Armiach Steinpress, Alderweireldt, Cohen, Chipman & Gavish-Regev, 2021 from Iran, SEM images of the copulatory organs. **50** bulb, retrolateral view; **51** same, anterior view; **52** apical part of bulb, ventral view; **53** embolic division, ventro-retrolateral view; **54** same, retrolateral view; **55** epigyne, ventral view. Co = conductor, Eb and Et = base and tip of embolus, Ta = tegular apophysis, Ter = terminal apophysis, Se = synembolus. Scale bars = 0.1 mm.

pour. Lorestan Province: 2♂, 2♀ (ZMMU), Pol-e Dokhtar, April 2017, A. Zamani.

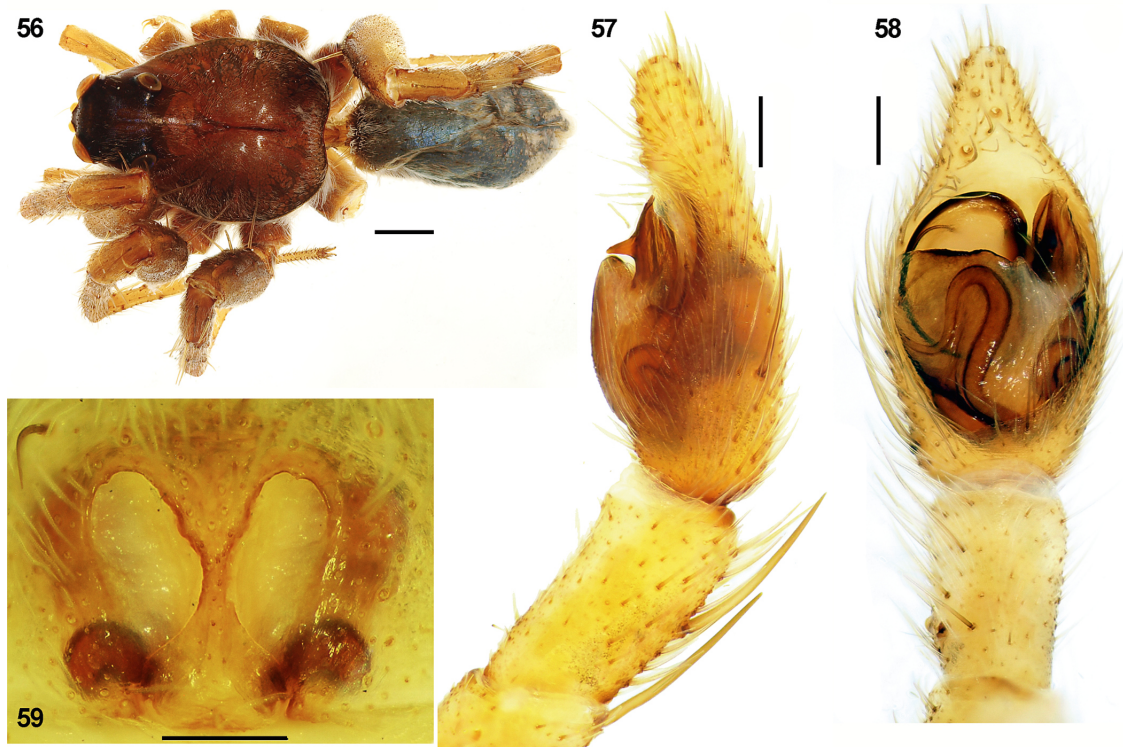
Description of male: Habitus as in Fig. 40. Total length 7.75. Carapace 3.85 long, 3.0 wide. Measurements of leg segments: I: 15.5 (4.0, 1.65, 3.75, 4.15, 1.95), II: 15.3 (3.9, 1.65, 3.65, 4.2, 1.9), III: 16.2 (3.95, 1.55, 3.65, 4.95, 2.1), IV: 22.1 (5.25, 1.7, 4.95, 7.45, 2.72). Metatarsus I ventral spination: 3 pairs + apical triplet; tibia I ventral spination: 6 pairs + apical pair. Variation (n = 9): carapace 3.0–3.85 long, 2.35–3.0 wide. Palp as in Figs. 37–38, 44–48, 50–54; tegulum with retrolateral rounded protrusion; tegular apophysis trapezoidal with a tip directed prolaterally (Tat), the gutter on dorsal side, and two basal processes; conductor relatively long, crescent-shaped, transparent and pointed membranous, in ventral view almost hidden by the tegular apophysis, distal part of conductor snuggle to the tegular apophysis; embolic division with membrane synembolus in posterior part which contour coincide with curvature of embolus and lanceolate terminal apophysis which is laying in gutter of tegular apophysis; terminal apophysis hidden by tegular apophysis in ventral view; sperm duct zigzag curved.

Description of female: Habitus as in Fig. 41. Total length 10.0. Carapace 3.75 long, 3.0 wide. Measurements of leg segments: I: 11.82 (3.35, 1.5, 2.8, 2.72, 1.45), II: 11.38 (3.25, 1.4, 2.58, 2.7, 1.45), III: 11.5 (3.1, 1.3, 2.45, 3.1, 1.55), IV: 16.75 (4.4, 1.45, 3.75, 5.0, 2.15). Spination as in male. Variation (n = 4): carapace 3.75–4.2 long, 3.0–3.25 wide. Epigyne as in Figs. 42–43, 49, 55; covered with setae,

except for atrium; septum pelike-shaped, widened in middle part, its stem and posterior edge having the same width; head of spermatheca spherical with several pores, width of head twice of its stem.

Remarks: This species was recently described from Dead Sea area. *Evippa amitaii* is most similar to *E. arenaria* (Audouin, 1826) and *E. aequalis* Alderweireldt, 1991. The shape of the tegular apophysis of Iranian specimens fits well with those depicted in the original description of *E. amitaii* (cf. Figs. 38 and 39). Although the holotype has one well visible basal process on the tegular apophysis, at a certain angle the corner of the tegular apophysis resembles a second process (I. Armiach Steinpress, pers. comm.). Also, in the original description, the epigyne has hourglass-shaped septum, which is slightly different in those from Iran (cf. Fig. 42; Armiach Steinpress *et al.* 2021: Figs. 10A, 13A). The variability in the copulatory organs of males and females of wolf spiders has already been well documented (e.g. Nadolny & Kovblyuk 2012; Azarkina & Trilikauskas 2019; Marusik & Nadolny 2020). Based on such information, we assume that the two populations discussed are conspecific. Additional morphological (e.g., the shape of the embolic division) and molecular data are needed to confirm/reject the latter conclusion, as the populations might as well represent two sibling species.

Distribution: Previously known only from the type locality in Israel. New to Iran, with the current material representing the easternmost distribution limit of the species.



Figs. 56–59: *Evippa luteipalpis* Roewer, 1955, holotype male (56–58) and paratype female (59). **56** habitus, dorsal view; **57** palp, retrolateral view; **58** same, ventral view; **59** epigyne, ventral view. Scale bars = 1 mm (56), 0.2 mm (57–59).

***Evippa luteipalpis* Roewer, 1955 (Figs. 56–59)**

Types: Holotype ♂ and paratype ♀ (SMF), IRAN: Kerman Province: Sabzevārān, no date, F. Starmühlner (Figs. 56–59).

Material: IRAN: Fars Province: 1 ♀ (MHNG), Firouzabad, 28°52'N 52°32'E, 06 June 1974, A. Senglet.

Records in Iran: Kerman, Razavi Khorasan. New record for Fars.

Distribution: Endemic to Iran, with the current record representing the westernmost limit of the known species range.

***Geolycosa vultuosa* (C. L. Koch, 1838)**

Material: IRAN: Zanjan Province: 1 ♂ (TNU), Garmab, 35°50'N 48°11'E, 20 April 2017, A. Zamani.

Records in Iran: Mazandaran. New record for Zanjan.

Distribution: From Croatia eastward to Iran.

***Halocosa cereipes* (L. Koch, 1878)**

Material: IRAN: Kerman Province: 1 ♂ (TNU), Lut Desert, Kal-e Shoor, June 2013, B. Izadi.

Records in Iran: Fars, Razavi Khorasan. New record for Kerman.

Distribution: From the Crimea eastward to south-western Siberia.

***Hippasa deserticola* Simon, 1889**

Material: IRAN: Fars Province: 1 ♀ (MHNG), Bishapour, 29°47'N 51°35'E, 28 May 1974, A. Senglet. Hormozgan Province: 1 ♂ (TNU), surroundings of Minab, February 2018, A. Zamani. Lorestan Province: 2 ♂, 6 ♀ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974, A. Senglet; 3 ♀ (MHNG), Pol-e Dokhtar, 33°10'N 47°44'E, 17 May 1974, A. Senglet. Sistan & Baluchistan Province: 1 ♂, 2 ♀ (TNU), Chabahar, November 2017, A. Zamani.

Records in Iran: Isfahan, Kermanshah, Razavi Khorasan. New records for Fars, Hormozgan, Lorestan and Sistan & Baluchistan.

Distribution: From Iran eastward to Afghanistan.

***Hogna effera* (O. Pickard-Cambridge, 1872)**

Material: IRAN: Golestan Province: 1 ♀ (TNU), Miankaleh Peninsula, Ashuradeh, 36°50'N 53°51'E, May 2015, A. Zamani. Kohgiluyeh & Boyer-Ahmad Province: 1 ♂ (MHNG), Charam, 30°44'N 50°44'E, 23 May 1974, A. Senglet.

Records in Iran: Alborz, East Azerbaijan, Fars, Hormozgan, Isfahan, Kerman, Kurdistan, Mazandaran, Semnan, Tehran. New records for Golestan and Kohgiluyeh & Boyer-Ahmad.

Distribution: From Greece to Iran, southward to Yemen.

***Hogna radiata* (Latreille, 1817)**

Material: IRAN: Fars Province: 1♂ (MHNG), Ghaderabad, 30°21'N 53°19'E, 18 August 1973, A. Senglet. Gilan Province: 1♀ (MHNG), around Kelatchay, 37°01'N 50°27'E, 06 August 1974, A. Senglet. Lorestan Province: 1♂ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974, A. Senglet. Mazandaran Province: 1♂ (MHNG), Galugah/Behshahr, 36°42'N 53°38'E, 19 July 1973, A. Senglet; 1♂, 1♀ (MHNG), Ivel, 36°14'N 53°37'E, 11 July 1975, A. Senglet. North Khorasan Province: 1♂ (MHNG), Bojnurd, 37°29'N 57°26'E, 26 July 1974, A. Senglet.

Records in Iran: Alborz, Fars, Gilan, Golestan, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Markazi, Mazandaran, North Khorasan, Razavi Khorasan, Tehran, West Azerbaijan, Zanjan. New record for Lorestan.

Distribution: West Palaearctic.

***Lycosa praegrandis* C. L. Koch, 1836**

Material: IRAN: Mazandaran Province: 2♂ (MHNG), Valiabad, 36°16'N 51°16'E, 05 July 1975, A. Senglet.

Records in Iran: Alborz, Golestan, Ilam, Khuzestan, Kohgiluyeh & Boyer-Ahmad, Mazandaran, Razavi Khorasan, Tehran.

Distribution: From Balkan Peninsula to Tajikistan.

***Pardosa aenigmatica* Tongiorgi, 1966**

Material: IRAN: East Azerbaijan Province: 1♀ (MHNG), E of Miyaneh, 37°28'N 47°52'E, 8 June 1975, A. Senglet. Fars Province: 1♀ (MHNG), Izad Khast, 31°31'N 52°09'E, 16 August 1973, A. Senglet; 2♂ (MHNG), Semargoun, 28°57'N 52°33'E, 07 June 1974, A. Senglet; 2♀ (MHNG), Sivand, 30°07'N 52°58'E, 10 June 1974, A. Senglet; 1♀ (MHNG), Persepolis, 29°59'N 52°54'E, 18 August 1973, A. Senglet; 2♂ (MHNG), Firouzabad, 28°52'N 52°32'E, 06 June 1974, A. Senglet. Gilan Province: 4♀ (MHNG), Rudbar, 36°49'N 49°25'E, 04 September 1973, A. Senglet. Ilam Province: 1♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet; 1♀ (MHNG), Tchaharmelieh, 33°57'N 46°17'E, 28 June 1974, A. Senglet. Isfahan Province: 1♂, 1♀ (MHNG), Riz-e Landjan, 32°24'N 51°19'E, 11 August 1973, A. Senglet. Kermanshah Province: 1♂, 6♀ (MHNG), Garavand/Shahabad, 05 August 1973, A. Senglet; 7♂, 5♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet; 1♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 04 August 1973, A. Senglet. Kurdistan Province: 1♀ (MHNG), SE of Qal'eh Dju, 35°19'N 46°20'E, 14 September 1975, A. Senglet. Lorestan Province: 1♀ (MHNG), Aligudarz, 33°21'N 49°48'E, 07 August 1973, A. Senglet; 7♂, 3♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet; 3♀ (MHNG), Dizgaran, 33°43'N 47°00'E, 25 June 1974, A. Senglet; 1♀ (MHNG), N of Pol-e Dokhtar, 33°12'N 47°44'E, 07 September 1975, A. Senglet. Mazandaran Province: 1♀ (MHNG), Nashtarud, 36°43'N 51°08'E, 10

July 1973, A. Senglet; 2♀ (MHNG), Delasm, 36°26'N 51°52'E, 04 August 1974, A. Senglet. Qazvin Province: 1♀ (MHNG), Mo'allem Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet; 1♂ (MHNG), Hassanabad, 36°26'N 50°13'E, 1750 m, 03 July 1975, A. Senglet; 1♂ (MHNG), Shahrak, 36°25'N 50°30'E, 02 July 1975, A. Senglet. West Azerbaijan Province: 1♀ (MHNG), Mahabad, 36°47'N 45°45'E, 24 June 1975, A. Senglet.

Records in Iran: Alborz, Fars, Ilam, Kermanshah, Markazi. New records for East Azerbaijan, Gilan, Isfahan, Kurdistan, Lorestan, Mazandaran, Qazvin and West Azerbaijan.

Distribution: From Italy to Iran.

***Pardosa azerifalcata* Marusik, Guseinov & Koponen, 2003 (Figs. 63–66, 74–76)**

Material: IRAN: Fars Province: 1♂, 5♀ (MHNG), Izad Khast, 31°31'N 52°09'E, 16 August 1973, A. Senglet; 1♂, 6♀ (MHNG), Izad Khast, 31°31'N 52°08'E, 12 June 1974, A. Senglet.

Records in Iran: Markazi, Tehran. New record for Fars, with the current material representing the southernmost record of the species within the whole known range.

Distribution: From the northern Caucasus to southern Iran.

***Pardosa buchari* Ovtsharenko, 1979**

Material: IRAN: Alborz Province: 1♂, 7♀ (MHNG), Gadjereh, 36°05'N 51°22'E, 13 July 1973, A. Senglet. Gilan Province: 2♂ (MHNG), Astara, 38°24'N 48°36'E, 26 June 1973, A. Senglet. Hamedan Province: 6♂, 10♀ (MHNG), Hamedan, 34°44'N 48°47'E, 16 June 1975, A. Senglet. Isfahan Province: 4♂, 10♀ (MHNG), Nowgahan, 37°14'N 49°59'E, 07 August 1973, A. Senglet; 5♂, 14♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet. Kurdistan Province: 1♂, 1♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet. Mazandaran Province: 1♂, 4♀ (MHNG), Ivel, 36°14'N 53°37'E, 11 July 1975, A. Senglet; 9♀ (MHNG), E of Pol-e-Zanguleh, 36°14'N 51°24'E, 06 June 1975, A. Senglet; 1♂, 4♀ (MHNG), Dunah, 36°14'N 51°27'E, 11 July 1974, A. Senglet; 5♂, 22♀ (MHNG), E of Baladeh, 36°14'N 51°34'E, 06 July 1975, A. Senglet. Tehran Province: 2♂, 2♀ (MHNG), Dizin, 36°03'N 51°25'E, 3500 m, 13 July 1973, A. Senglet.

Records in Iran: Golestan, Kohgiluyeh & Boyer-Ahmad, Markazi, Mazandaran, Tehran, Zanjan. New records for Alborz, Gilan, Hamedan, Isfahan and Kurdistan.

Distribution: The Crimea, the Caucasus and Iran.

***Pardosa colchica* Mcheidze, 1946**

Material: IRAN: West Azerbaijan Province: 1♂3♀ (MHNG), Qara Zia-ed-Din, 38°56'N 45°03'E, 28 May 1975, A. Senglet.



Figs. 60–73: *Arctosa maculata* (Hahn, 1822) (60–62), *Pardosa azerifalcata* Marusik, Guseinov & Koponen, 2003 (63–66), *Pardosa cf. lugubris* (Walckenaer, 1802) (67), *Pardosa nebulosa* (Thorell, 1872) (68), and *Pardosa ovtchinnikovi* Ballarin, Marusik, Omelko & Koponen, 2012 (69–73) from Iran. **60, 64, 69** male palp, ventral views; **61** female habitus, dorsal view; **62, 66–68, 70** epigyne, ventral views; **63** male palp, retrolateral view; **65** bulb, ventral view; **71** female habitus, dorsal view; **72** male habitus, dorsal view; **73** male leg I, lateral view. Scale bars = 1.0 mm (61, 73), 0.2 mm (other images).

Records in Iran: West Azerbaijan.

Distribution: The Caucasus and Iran.

Pardosa italica Tongiorgi, 1966

Material: IRAN: East Azerbaijan Province: 1♂ (MHNG), Maragheh, 37°24'N 46°16'E, 04 June 1975, A. Senglet. Isfahan Province: 1♂, 1♀ (MHNG), Organ, 32°35'N 50°24'E, 08 August 1973, A. Senglet. Kurdistan Province: 1♂ (MHNG), south of Sanandaj, 35°13'N 47°00'E, 21 June 1975, A. Senglet. Mazandaran Province: 1♂ (MHNG), Amol, 36°18'N 52°21'E, 18 July 1973, A. Senglet. North Khorasan Province: 1♂ (MHNG), Garmab, 37°43'N 56°18'E, 18 July 1975, A. Senglet. Razavi Khorasan Province: 1♂ (MHNG), Emamgholi, 37°26'N

58°30'E, 15 July 1974, A. Senglet. 1♂, 4♀ (MHNG), Kabkan, 37°17'N 58°51'E, 16 July 1974, A. Senglet.

Records in Iran: Fars, Isfahan, Kermanshah, Kohgiluyeh & Boyer-Ahmad, North Khorasan, Razavi Khorasan, Tehran, Zanjan. New records for East Azerbaijan, Kurdistan and Mazandaran.

Distribution: Portugal, Italy to Xinjiang.

Pardosa jaikensis Ponomarev, 2007

Material: IRAN: Alborz Province: 2♀ (TNU), Karaj, May 2017, A. Zamani.

Records in Iran: Mazandaran. New record for Alborz.

Distribution: Northern Caspasia and northern Iran.

***Pardosa luctinosa* Simon, 1876**

Material: IRAN: Mazandaran Province: 5♂, 1♀ (MHNG), Farahabad, 36°49'N 53°12'E, 9 July 1975, A. Senglet.

Records in Iran: Fars. New record for Mazandaran.

Distribution: From Iberian Peninsula to Central China.

***Pardosa cf. lugubris* (Walckenaer, 1802) (Fig. 67)**

Material: IRAN: Mazandaran Province: 1♀ (MHNG), road to Chorteh, 36°49'N 50°38'E, 1300 m, 05 August 1974, A. Senglet; 2♀ (MHNG), road to Chorteh, 36°49'N 50°38'E, 1000–1300 m, 08 July 1973, A. Senglet; 2♀ (MHNG), E of Kiyasar, 36°14'N 53°33'E, 1500 m, 11 July 1975, A. Senglet.

Remarks: Since there are no male specimens within the studied material, this identification is to be considered provisional.

Records in Iran: Kerman, South Khorasan. New record for Mazandaran.

Distribution: Europe, Turkey, the Caucasus, Russia (Europe to South Siberia), Kazakhstan, Iran.

***Pardosa mirzakhaniae* Shafaie, Mirshamsi, Aliabadian, Moradmand & Marusik, 2018**

Material: IRAN: Golestan Province: 2♂, 7♀ (MHNG), around Kalaleh, 37°19'N 55°33'E, 14 July 1975, A. Senglet. Mazandaran Province: 2♂, 4♀ (MHNG), Farahabad, 36°49'N 53°12'E, 9 July 1975, A. Senglet; 2♂, 1♀ (MHNG), Amol, 36°18'N 52°21'E, 18 July 1973, A. Senglet; 4♂ (MHNG), E of Baladeh, 36°12'N 51°57'E, 2000 m, 08 July 1975, A. Senglet; 1♂, 2♀ (MHNG), Amol, 36°18'N 52°21'E, 18 July 1973, A. Senglet. North Khorasan Province: 1♂ (MHNG), Bojnurd, 37°29'N 57°26'E, 26 July 1974, A. Senglet; 1♂, 1♀ (MHNG), Garmab, 37°43'N 56°18'E, 18 July 1975, A. Senglet.

Records in Iran: Golestan, Mazandaran, North Khorasan.

Distribution: Northern Iran, Turkmenistan.

***Pardosa morosa* (L. Koch, 1870)**

Material: IRAN: Chaharmahal & Bakhtiari Province: 2♂ (MHNG), NE of Zardkuh, 32°23'N 50°07'E, 2700 m, 20 June 1974, A. Senglet. Golestan Province: 1♂, 2♀ (MHNG), Arab, 37°40'N 55°47'E, 15 July 1975, A. Senglet. Hamedan Province: 1♂ (MHNG), Hamedan, 34°44'N 48°47'E, 2600 m, 16 June 1975, A. Senglet. North Khorasan Province: 4♀ (MHNG), E of Chamanbid, 37°26'N 56°37'E, 14 July 1974, A. Senglet; 2♂, 6♀ (MHNG), N of Qouchan, 37°12'N 58°29'E, 15 July 1974, A. Senglet; 1♂, 1♀ (MHNG), Bojnurd, 37°29'N 57°26'E, 26 July 1974, A. Senglet. Razavi Khorasan Province: 1♂ (MHNG), road to Amirabad, 1400 m, 36°47'N 59°49'E, 21 July 1974, A. Senglet; 1♂, 3♀ (MHNG), Mashhad, 36°26'N 59°38'E, 20 July

1973, A. Senglet; 2♂, 13♀ (MHNG), Amirabad, 36°47'N 59°54'E, 23 July 1974, A. Senglet; 1♂ (MHNG), Emamgholi, 37°26'N 58°30'E, 15 July 1974, A. Senglet.

Remarks: It is possible that the studied materials (and other reports of this species from Iran) belong to a closely-related and currently undescribed species. This matter will be investigated in a revision of the species group in the near future.

Records in Iran: North Khorasan, Razavi Khorasan, Semnan. New records for Chaharmahal & Bakhtiari, Golestan and Hamedan.

Distribution: West Palaearctic to western Turkmenistan.

***Pardosa nebulosa* (Thorell, 1872)* (Fig. 68)**

Material: IRAN: West Azerbaijan Province: 1♀ (MHNG), Khoy, 38°41'N 45°08'E, 24 June 1973, A. Senglet.

Remarks: It is possible that this Iranian material belongs to a poorly known subspecies *Pardosa nebulosa orientalis* (Kroneberg, 1875), of which the status is to be evaluated by a thorough revision of the species group.

Distribution: Italy, Central Europe to Greece and Ukraine, Turkey, the Caucasus, Russia (Europe to South Siberia), Kazakhstan, Central Asia, China. New to Iran (previously reported from Khuzestan Province (Zamani 2015), but this record is attributed to *Pardosa persica* (Roewer, 1955) in this paper).

***Pardosa ovtchinnikovi* Ballarin, Marusik, Omelko & Koponen, 2012* (Figs. 69–73)**

Material: IRAN: Razavi Khorasan Province: 2♂, 3♀ (MHNG), Kabkan, 37°17'N 58°51'E, 16 July 1974, A. Senglet.

Distribution: Central Asia (Turkmenistan, Uzbekistan and Tajikistan). New to Iran, with the current material representing the southernmost limit of the known species range.

***Pardosa persica* (Roewer, 1955)**

P. nebulosa: Zamani (2015): 15 (misidentification).

Material: IRAN: Khuzestan Province: 1♀ (AZMI), Bagh Malek, 21 August 1996, Kaibafvala.

Records in Iran: Kerman, Khuzestan.

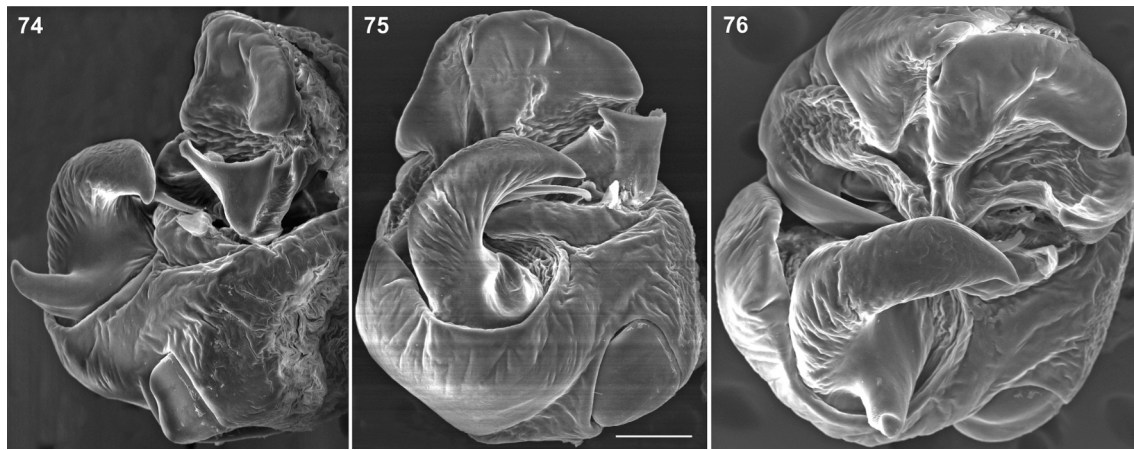
Distribution: Endemic to Iran.

***Pardosa persiana* Marusik & Nadolny, 2020**

Material: IRAN: Lorestan Province: 1♂5♀ (MHNG), Azna, 33°28'N 49°22'E, 23 June 1974, A. Senglet.

Records in Iran: Fars. New record for Lorestan.

Distribution: Iran.



Figs. 74–76: *Pardosa azerifalcata* Marusik, Guseinov & Koponen, 2003 from Iran, SEM images of bulb. **74** retrolateral view; **75** ventral view; **76** anterior view. Scale bar = 0.1 mm.

Pardosa pontica (Thorell, 1875)

Material: IRAN: Alborz Province: 8♂, 13♀ (MHNG), Asara, 36°02'N 51°14'E, 04 July 1975, A. Senglet. Ardabil Province: 3♀ (MHNG), N of Hero-Abad, 37°42'N 48°29'E, 10 August 1974, A. Senglet. East Azerbaijan Province: 12♂, 11♀ (MHNG), N of Bonab, 37°26'N 45°57'E, 04 June 1975, A. Senglet; 7♂, 5♀ (MHNG), Bostanabad, 37°48'N 46°51'E, 25 June 1973, A. Senglet; 1♂ (MHNG), Zaradjabad, 37°38'N 48°03'E, 08 June 1975 A. Senglet; 2♂, 1♀ (MHNG), NE of Sofian, 38°21'N 45°50'E, 05 June 1975, A. Senglet. Gilan Province: 2♂, 2♀ (MHNG), Chelavand, 38°19'N 48°51'E, 27 June 1973, A. Senglet; 3♂, 8♀ (MHNG), Pareh-Sar, 37°37'N 49°03'E, 02 July 1973, A. Senglet; 1♀ (MHNG), Galugah, 37°31'N 49°19'E, 12 June 1975, A. Senglet; 1♂ (MHNG), Astara, 38°24'N 48°36'E, 26 June 1973, A. Senglet; 3♂, 3♀ (MHNG), Hashtpar, 37°50'N 48°58'E, 29 June 1973, A. Senglet. Hamedan Province: 1♀ (MHNG), Hamedan, 34°44'N 48°47'E, 16 June 1975, A. Senglet. Isfahan Province: 1♂, 2♀ (MHNG), Nowgahan, 37°14'N 49°59'E, 07 August 1973, A. Senglet. Kermanshah Province: 2♂, 1♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 July 1974, A. Senglet. Kurdistan Province: 1♂, 1♀ (MHNG), south of Sanandaj, 35°13'N 47°00'E, 21 June 1975, A. Senglet. Lorestan Province: 1♂, 6♀ (MHNG), Aligudarz, 33°21'N 49°48'E, 07 August 1973 A. Senglet. Mazandaran Province: 7♂, 38♀ (MHNG), route to Djavaherdeh, 36°55'N 50°33'E, 1200 m, 07 August 1974, A. Senglet. Qazvin Province: 2♀ (MHNG), N of Avadj, 35°36'N 49°13'E, 14 June 1975, A. Senglet; 2♀ (MHNG), Mo'alleh Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet; 1♂, 6♀ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet; 4♂, 8♀ (MHNG), Avadj, 35°38'N 49°13'E, 27 July 1973, A. Senglet; 1♂ (MHNG), Tarazan/Lowshan, 36°28'N 49°31'E, 1500 m, 02 July 1975 A. Senglet. Razavi Khorasan Province: 3♂, 6♀ (MHNG), road to Amirabad, 36°47'N 59°49'E, 1400 m, 21 July 1974, A. Senglet; 2♂ (MHNG), Zavi, 36°52'N 59°53'E, 22 July 1974, A. Senglet. Tehran Province: 1♀ (MHNG), Rudehen, 35°44'N 51°55'E, 17 July 1973, A. Senglet; 1♂, 6♀ (MHNG), Firuzkuh, 35°45'N 52°46'E, 23 July 1973, A. Senglet. West

Azerbaijan Province: 1♀ (MHNG), nr. Mahabad, 36°50'N 45°47'E, 03 June 1975, A. Senglet; 1♀ (MHNG), Mahabad, 36°47'N 45°45'E, 24 June 1975, A. Senglet. Zanjan Province: 1♀ (MHNG), SE of Nikpey, 36°47'N 48°14'E, 30 June 1975, A. Senglet.

Records in Iran: Markazi, Razavi Khorasan, South Khorasan, Tehran, West Azerbaijan, Zanjan. New records for Alborz, Ardabil, East Azerbaijan, Gilan, Hamedan, Isfahan, Kermanshah, Kurdistan, Lorestan, Mazandaran and Qazvin.

Distribution: Romania and Bulgaria to western Turkmenistan. Our record from Lorestan lies at the southernmost limit of the known species range.

Pardosa proxima (C. L. Koch, 1847)

Material: IRAN: Ardabil Province: 1♂ (MHNG), N of Hero-Abad, 37°42'N 48°29'E, 10 August 1974, A. Senglet. Fars Province: 1♂, 1♀ (MHNG), Dasht-e Arjan, 29°40'N 51°59'E, 01 June 1974, A. Senglet; 5♂, 6♀ (MHNG), Baba Hadji, 29°23'N 52°41'E, 07 June 1974, A. Senglet. Ilam Province: 1♂ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet. Isfahan Province: 1♂5♀ (MHNG), Pol-e Kaleh, 32°23'N 51°14'E, 15 June 1974, A. Senglet. Kermanshah Province: 3♂, 4♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 1♂, 3♀ (MHNG), Charam, 30°44'N 50°44'E, 23 May 1974, A. Senglet; 1♂, 1♀ (MHNG), Arow, 30°35'N 50°43'E, 25 May 1974, A. Senglet. Kurdistan Province: 2♀ (MHNG), Marivan, 35°32'N 46°09'E, 15 September 1975, A. Senglet. Lorestan Province: 1♂ (MHNG), Aligudarz, 33°21'N 49°48'E, 07 August 1973, A. Senglet; 3♂, 1♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet. Mazandaran Province: 1♂, 2♀ (MHNG), Ivel, 36°14'N 53°37'E, 11 July 1975, A. Senglet. Qazvin Province: 6♂, 3♀ (MHNG), Mo'alleh Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet. Razavi Khorasan Province: 1♂ (MHNG), Emamgholi, 37°26'N 58°30'E, 15 July 1974, A. Senglet.

Records in Iran: Razavi Khorasan, South Khorasan. New records for Ardabil, Fars, Ilam, Isfahan, Kermanshah,

Kohgiluyeh & Boyer-Ahmad, Kurdistan, Lorestan, Mazandaran and Qazvin.

Distribution: West Palaearctic.

***Pardosa roscai* (Roewer, 1951)**

Material: IRAN: Kohgiluyeh & Boyer-Ahmad Province: 1♂, 3♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975, A. Senglet. Khuzestan Province: 6♀ (MHNG), Behbahan, 30°35'N 50°16'E, 05 September 1975, A. Senglet.

Records in Iran: Kermanshah, Khuzestan. New record for Kohgiluyeh & Boyer-Ahmad.

Distribution: Italy, Bulgaria, Romania, Cyprus, Turkey, Iran.

***Pardosa tatarica* (Thorell, 1875)**

Material: IRAN: Alborz Province: 1♂ (MHNG), Asara, 36°02'N 51°14'E, 04 July 1975, A. Senglet. Fars Province: 1♂, 4♀ (MHNG), south of Fahlyan, 30°00'N 51°35'E, 04 September 1975, A. Senglet; 3♂, 4♀ (MHNG), Semargoun, 28°57'N 52°33'E, 07 June 1974, A. Senglet; 5♂, 8♀ (MHNG), Kavar, 29°12'N 52°37'E, 05 June 1974, A. Senglet; 1♂, 8♀ (MHNG), Sivand, 30°07'N 52°58'E, 10 June 1974 A. Senglet; 5♂, 4♀ (MHNG), Aliabad, 30°01'N 53°00'E, 09 June 1974, A. Senglet. Gilan Province: 1♂ (MHNG), Masuleh, 37°09'N 48°59'E, 2000 m, 09 September 1973, A. Senglet; 1♂, 1♀ (MHNG), Chaboksar, 36°59'N 50°34'E, 07 July 1973, A. Senglet; 2♂, 3♀ (MHNG), Asalem, 37°41'N 48°51'E, 300–600 m, 30 June 1973, A. Senglet. Golestan Province: 2♀ (MHNG), Naharkhoran/Gorgan, 36°44'N 54°29'E, 20 July 1973, A. Senglet; 1♂, 1♀ (MHNG), around Kalaleh, 37°19'N 55°33'E, 14 July 1975, A. Senglet. Hamedan Province: 1♂ (MHNG), Hamedan, 34°44'N 48°27'E, 2600 m, 11 September 1975, A. Senglet. Ilam Province: 9♂, 7♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet; 4♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet. Isfahan Province: 3♂, 1♀ (MHNG), Pol-e Kaleh, 32°23'N 51°14'E, 15 June 1974, A. Senglet. Khuzestan Province: 1♂, 3♀ (MHNG), N of Andimeshk, 32°41'N 48°15'E, 17 May 1974, A. Senglet; 3♂, 4♀ (MHNG), Masjed Soleyman, 31°59'N 49°16'E, 20 May 1974, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 2♂, 2♀ (MHNG), road to Yasuj, 30°32'N 51°32'E, 27 May 1974, A. Senglet; 2♀ (MHNG), Charam, 30°44'N 50°44'E, 23 May 1974, A. Senglet; 2♂ (MHNG), Yasuj, 30°36'N 51°36'E, 26 May 1974, A. Senglet; 9♂, 9♀ (MHNG), Arow, 30°35'N 50°43'E, 25 May 1974, A. Senglet. Kurdistan Province: 1♂, 1♀ (MHNG), N of Sanandaj, 35°28'N 47°01'E, 22 June 1975, A. Senglet; 5♂, 2♀ (MHNG), E of Nyabad, 35°20'N 46°39'E, 14 September 1975, A. Senglet; 1♂, 3♀ (MHNG), SE of Qal'eh Dju, 35°19'N 46°20'E, 14 September 1975, A. Senglet; 3♂, 1♀ (MHNG), E of Marivan, 35°32'N 46°20'E, 16 September 1975, A. Senglet. Lorestan Province: 1♀ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974

, A. Senglet; 1♂, 3♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet; 1♂ (MHNG), Dizgaran, 33°43'N 47°00'E, 25 June 1974, A. Senglet. Mazandaran Province: 1♂ (MHNG), E of Baladeh, 36°12'N 51°57'E, 2000 m, 08 July 1975, A. Senglet; 1♂1♀ (MHNG), Chalus, 36°38'N 51°24'E, 11 July 1973, A. Senglet; 1♂ (MHNG), Kiyasar, 36°22'N 53°16'E, 22 July 1973, A. Senglet. North Khorasan Province: 1♂ (MHNG), Bojnurd, 37°29'N 57°26'E, 20 August 1975, A. Senglet. Qazvin Province: 2♀ (MHNG), Mo'allem Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet; 1♂ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet. Tehran Province: 2♂ (MHNG), Shemshak, 36°01'N 51°29'E, 2600 m, 27 August 1973, A. Senglet; 1♂, 1♀ (MHNG), Pol-e-Djajrud, 35°45'N 51°42'E, 16 July 1973 A. Senglet.

Records in Iran: Lorestan, Mazandaran, Tehran, Zanjan. New records for Alborz, Fars, Gilan, Golestan, Hamedan, Ilam, Isfahan, Khuzestan, Kohgiluyeh & Boyer-Ahmad, Kurdistan, North Khorasan and Qazvin.

Distribution: The northern Mediterranean to the Caucasus and Iran.

***Pirata piraticus* (Clerck, 1757)**

Material: IRAN: Ardabil Province: 1♀ (MHNG), Kivi Pain, 37°41'N 48°21'E, 18 September 1974, A. Senglet. Fars Province: 3♂, 4♀ (MHNG), south of Fahlyan, 30°00'N 51°35'E, 04 September 1975, A. Senglet; 2♀ (MHNG), Semargoun, 28°57'N 52°33'E, 07 June 1974, A. Senglet; 1♂ (MHNG), Dasht-e Arjan, 29°40'N 51°59'E, 01 June 1974, A. Senglet. Gilan Province: 1♂ (MHNG), Limir, 38°12'N 48°52'E, 28 June 1973, A. Senglet; 7♂, 11♀ (MHNG), Galugah, 37°31'N 49°19'E, 12 June 1975, A. Senglet; 2♀ (MHNG), Fowmen, 37°12'N 49°12'E, 07 September 1973, A. Senglet. Ilam Province: 2♂, 4♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet; 3♂, 4♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet. Isfahan Province: 1♀ (MHNG), Pol-e Kaleh, 32°23'N 51°14'E, 15 June 1974, A. Senglet; 1♂, 1♀ (MHNG), Riz-e Landjan, 32°24'N 51°19'E, 11 August 1973, A. Senglet. Kermanshah Province: 1♂, 6♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet. Kohgiluyeh & Boyer-Ahmad Province: 1♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975, A. Senglet. Kurdistan Province: 2♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet; 1♀ (MHNG), E of Marivan, 35°32'N 46°20'E, 16 September 1975, A. Senglet. Lorestan Province: 5♀ (MHNG), Hatemvand, 33°28'N 48°07'E, 09 September 1975, A. Senglet; 4♀ (MHNG), Veisian, 33°29'N 48°04'E, 08 September 1975, A. Senglet. Mazandaran Province: 1♂, 1♀ (MHNG), Hamsehkola, 36°30'N 52°31'E, 19 July 1973, A. Senglet; 1♂, 4♀ (MHNG), Ivel, 36°14'N 53°37'E, 11 July 1975, A. Senglet; 14♂, 24♀ (MHNG), Kiyasar, 36°15'N 53°29'E, 12 July 1975, A. Senglet. North Khorasan Province: 1♂ (MHNG), Bojnurd, 37°29'N 57°26'E, 26 July 1974, A. Senglet. Qazvin Province: 2♀ (MHNG), Mo'allem Kelayeh, 36°26'N 50°27'E, 3 July 1975, A. Senglet; 4♂, 4♀

(MHNG), Ab Garm, 35°41'N 46°13'E, 05 July 1974, A. Senglet. Razavi Khorasan Province: 2♂, 2♀ (MHNG), Emamgholi, 37°26'N 58°30'E, 15 July 1974, A. Senglet. Tehran Province: 1♀ (MHNG), Firuzkuh, 35°43'N 52°40'E, 24 July 1973, A. Senglet. Zanjan Province: 1♀ (MHNG), SE of Nikpey, 36°47'N 48°14'E, 30 June 1975, A. Senglet.

Records in Iran: East or West Azerbaijan, Gilan, Golestan, Isfahan, Mazandaran, Razavi Khorasan. New records for Ardabil, Fars, Ilam, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Lorestan, North Khorasan, Qazvin, Tehran and Zanjan.

Distribution: Holarctic

Piratula latitans (Blackwall, 1841)

Material: IRAN: Alborz Province: 9♂, 25♀ (MHNG), Asara, 36°02'N 51°14'E, 04 July 1975, A. Senglet. Ardabil Province: 1♂, 5♀ (MHNG), Kivi Pain, 37°41'N 48°21'E, 18 September 1974, A. Senglet; 6♀ (MHNG), N of Hero-Abad, 37°42'N 48°29'E, 10 August 1974, A. Senglet. East Azerbaijan Province: 1♀ (MHNG), E of Miyaneh, 37°29'N 47°36'E, 07 June 1975, A. Senglet; 1♂ (MHNG), NE of Sofian, 38°21'N 45°50'E, 05 June 1975, A. Senglet. Gilan Province: 2♀ (MHNG), Chelavand, 38°19'N 48°51'E, 27 June 1973, A. Senglet; 3♀ (MHNG), Lahidjan, 37°11'N 49°54'E, 06 July 1973, A. Senglet; 3♀ (MHNG), Asalem, 37°45'N 48°57'E, 11 June 1975, A. Senglet; 1♀ (MHNG), Pareh-Sar, 37°37'N 49°03'E, 02 July 1973, A. Senglet. Golestan Province: 1♀ (MHNG), Naharkhoran/Gorgan, 36°44'N 54°29'E, 20 July 1973, A. Senglet. Hamedan Province: 2♂ (MHNG), Asadabad, 34°51'N 48°12'E, 02 July 1974, A. Senglet. Ilam Province: 2♂, 18♀ (MHNG), Sarab Eyvan, 33°45'N 46°22'E, 26 June 1974, A. Senglet; 6♂, 44♀ (MHNG), Ilam, 33°37'N 46°23'E, 27 June 1974, A. Senglet. Isfahan Province: 8♂, 14♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet; 1♀ (MHNG), Falavarian, 32°34'N 51°31'E, 14 June 1974 A. Senglet; 9♂, 7♀ (MHNG), Pol-e Kaleh, 32°23'N 51°14'E, 15 June 1974, A. Senglet. Kermanshah Province: 6♂, 19♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 July 1974, A. Senglet; 1♂, 16♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet; 6♂, 35♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 29 June 1974, A. Senglet; 9♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 04 August 1973, A. Senglet; 7♀ (MHNG), Kenesht, 34°29'N 47°09'E, 03 August 1973, A. Senglet; 6♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 August 1973, A. Senglet. Kurdistan Province: 5♂, 26♀ (MHNG), N of Sanandaj, 35°28'N 47°01'E, 22 June 1975, A. Senglet; 5♀ (MHNG), N of Kamyaran, 34°48'N 46°57'E, 14 September 1975, A. Senglet; 1♀ (MHNG), E of Nyabad, 35°20'N 46°39'E, 14 September 1975, A. Senglet; 5♂, 3♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet; 1♂ (MHNG), Hoseynabad, 35°33'N 47°08'E, 22 June 1975, A. Senglet; 1♀ (MHNG), Divandareh, 35°45'N 47°05'E, 23 June 1975, A. Senglet; 1♀ (MHNG), Sheikh Ata, 35°30'N 46°28'E, 16 September 1975, A. Senglet. Lorestan Province: 2♀ (MHNG), Veisian, 33°29'N

48°04'E, 08 September 1975, A. Senglet; 20♀ (MHNG), Hatemvand, 33°28'N 48°07'E, 09 September 1975, A. Senglet; 4♀ (MHNG), Tang-e Malavi, 33°15'N 47°48'E, 24 June 1974, A. Senglet; 2♀ (MHNG), NE of Borujerd, 33°57'N 48°41'E, 10 September 1975, A. Senglet; 3♀ (MHNG), Malavi-Shahabad, 33°35'N 47°14'E, 15 June 1974, A. Senglet; 1♂, 3♀ (MHNG), Pol-e Dokhtar, 33°10'N 47°44'E, 17 May 1974, A. Senglet; 3♂, 29♀ (MHNG), Ma'mulan, 33°20'N 47°54'E, 24 June 1974, A. Senglet; 2♂, 25♀ (MHNG), Hatemvand, 33°28'N 48°07'E, 23 June 1974, A. Senglet; 3♀ (MHNG), E of Khorramabad, 33°29'N 48°28'E, 10 September 1975, A. Senglet. Mazandaran Province: 2♀ (MHNG), Hamsehkola, 36°30'N 52°31'E, 19 July 1973, A. Senglet; 3♀ (MHNG), Sari, 36°34'N 53°09'E, 22 July 1973, A. Senglet; 5♀ (MHNG), Nashtarud, 36°43'N 51°08'E, 10 July 1973, A. Senglet; 1♀ (MHNG), Kiyasar, 36°15'N 53°29'E, 12 July 1975, A. Senglet; 4♂, 9♀ (MHNG), Ivel, 36°14'N 53°37'E, 11 July 1975, A. Senglet; 10♀ (MHNG), Kiyasar, 36°22'N 53°16'E, 22 July 1973, A. Senglet; 2♀ (MHNG), Delasm, 36°26'N 51°52'E, 04 August 1974, A. Senglet; 2♂, 2♀ (MHNG), Chorteh, 36°46'N 50°35'E, 08 July 1973, A. Senglet. Qazvin Province: 8♂, 4♀ (MHNG), N of Avadj, 35°36'N 49°13'E, 14 June 1975, A. Senglet; 1♂, 14♀ (MHNG), Shahrak, 36°25'N 50°30'E, 1500 m, 02 July 1975, A. Senglet; 6♂, 24♀ (MHNG), Mo'allem Kelayeh, 36°26'N 50°27'E, 03 July 1975, A. Senglet; 4♀ (MHNG), Tarazan/Lowshan, 36°28'N 49°31'E, 1500 m, 02 July 1975, A. Senglet. Tehran Province: 14♀ (MHNG), Shemshak, 36°01'N 51°29'E, 2600 m, 27 August 1973, A. Senglet. West Azerbaijan Province: 18♂, 30♀ (MHNG), N of Khoy, 18 September 1974, A. Senglet; 1♂ (MHNG), Khoy, 24 June 1973, A. Senglet. Zanjan Province: 2♀ (MHNG), SE of Nikpey, 36°47'N 48°14'E, 30 June 1975, A. Senglet.

Records in Iran: Mazandaran, Zanjan. New records for Alborz, Ardabil, East Azerbaijan, Gilan, Golestan, Hamedan, Ilam, Isfahan, Kermanshah, Kurdistan, Lorestan, Qazvin, Tehran and West Azerbaijan.

Distribution: West Palaearctic (eastward to Iran).

Trochosa hispanica Simon, 1870

Material: IRAN: Fars Province: 1♂ (MHNG), Ghaderabad, 30°21'N 53°19'E, 18 August 1973, A. Senglet; 1♂ (MHNG), Sivand, 30°07'N 52°58'E, 22 August 1973, A. Senglet. Gilan Province: 8♂, 14♀ (MHNG), Lahidjan, 37°11'N 49°54'E, 06 July 1973, A. Senglet; 2♂, 2♀ (MHNG), Masuleh, 37°09'N 48°59'E, 2000 m, 09 September 1973, A. Senglet; 6♂, 9♀ (MHNG), Limir, 38°12'N 48°52'E, 28 June 1973, A. Senglet; 5♂, 4♀ (MHNG), Asalem, 37°45'N 48°57'E, 11 June 1975, A. Senglet; 1♂, 4♀ (MHNG), Asalem, 37°40'N 48°52'E, 1200 m, 10 June 1975, A. Senglet; 10♂, 16♀ (MHNG), Pareh-Sar, 37°37'N 49°03'E, 02 July 1973, A. Senglet. Golestan Province: 1♂, 2♀ (MHNG), Naharkhoran/Gorgan, 36°44'N 54°29'E, 20 July 1973, A. Senglet. Kermanshah Province: 2♀ (MHNG), Kangavar, 34°29'N 47°55'E, 01 July 1974, A. Senglet.

Kohgiluyeh & Boyer-Ahmad Province: 2♀ (MHNG), Basht, 30°20'N 51°15'E, 05 September 1975, A. Senglet; 2♂, 10♀ (MHNG), Charam, 30°44'N 50°44'E, 23 May 1974, A. Senglet; 4♂, 6♀ (MHNG), Arow, 30°35'N 50°43'E, 25 May 1974, A. Senglet; 1♂, 1♀ (MHNG), Yasuj, 30°36'N 51°36'E, 26 May 1974, A. Senglet. Kurdistan Province: 1♂, 1♀ (MHNG), N of Kamyaran, 34°48'N 46°57'E, 14 September 1975, A. Senglet; 1♂ (MHNG), Marivan, 35°32'N 46°09'E, 15 September 1975, A. Senglet. Mazandaran Province: 1♂, 8♀ (MHNG), Hamsehkola, 36°30'N 52°31'E, 19 July 1973, A. Senglet; 1♂, 2♀ (MHNG), Sari, 36°34'N 53°09'E, 22 July 1973, A. Senglet; 2♂, 7♀ (MHNG), Nashtarud, 36°43'N 51°08'E, 10 July 1973, A. Senglet; 1♂, 1♀ (MHNG), Amol, 36°18'N 52°21'E, 18 July 1973, A. Senglet; 1♂, 1♀ (MHNG), Galugah/Behshahr, 36°42'N 53°38'E, 19 July 1973, A. Senglet. West Azerbaijan Province: 2♂, 1♀ (MHNG), N of Saghez, 37°23'N 46°12'E, 18 September 1974, A. Senglet; 1♂, 5♀ (MHNG), N of Khoi, 18 September 1974, A. Senglet.

Records in Iran: Golestan, Kerman, Lorestan, Mazandaran, North Khorasan, Razavi Khorasan, Tehran, Zanjan. New records for Fars, Gilan, Kermanshah, Kohgiluyeh & Boyer-Ahmad, Kurdistan and West Azerbaijan.

Distribution: The Mediterranean to Iran.

***Trochosa ruricola* (De Geer, 1778)**

Material: IRAN: East Azerbaijan Province: 1♂ (MHNG), Qara Zia-ed-Din, 38°56'N 45°03'E, 21 September 1975, A. Senglet. Hormozgan Province: 1♂ (TNU), Bandar-e Abbas, env. of Geno Biosphere Reserve, 27°24'N, 56°7'E, 03.2015, A. Zamani. West Azerbaijan Province: 1♂ (MHNG), NE of Sofian, 38°21'N 45°51'E, 21 September 1975, A. Senglet.

Records in Iran: Alborz, Mazandaran. New records for East Azerbaijan, Hormozgan and West Azerbaijan.

Distribution: Palearctic, introduced to the New World.

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

Material: IRAN: Fars Province: 2♂ (MHNG), Bishapour, 29°47'N 51°35'E, 03 September 1975, A. Senglet; 1♀ (MHNG), Bishapour, 29°47'N 51°35'E, 28 May 1974, A. Senglet. Gilan Province: 4♂, 6♀ (MHNG), Hashtpar, 37°50'N 48°58'E, 29 June 1973, A. Senglet; 6♀ (MHNG), Chaboksar, 36°59'N 50°34'E, 07 July 1973, A. Senglet. Golestan Province: 1♂ (MHNG), around Kalaleh, 37°19'N 55°33'E, 14 July 1975, A. Senglet. Khuzestan Province: 1♀ (MHNG), Behbahan, 30°35'N 50°16'E, 05 September 1975, A. Senglet. Kurdistan Province: 1♀ (MHNG), Marivan, 35°32'N 46°09'E, 15 September 1975, A. Senglet. Lorestan Province: 2♀ (MHNG), Ma'mulan, 33°20'N 47°54'E, 24 June 1974, A. Senglet; 1♀ (MHNG), N of Pol-e Dokhtar, 33°12'N 47°44'E, 07 September 1975, A. Senglet. Mazandaran Province: 8♂, 2♀ (MHNG), Nashtarud, 36°43'N 51°08'E, 10 July 1973, A. Senglet.

Records in Iran: Golestan, Hormozgan, Ilam, Kermanshah, Khuzestan, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Razavi Khorasan. New records for Fars, Gilan, Lorestan and Mazandaran.

Distribution: Palearctic and South Asia.

Salticidae Blackwall, 1841

***Aelurillus concolor* Kulczyński, 1901**

Material: IRAN: Hormozgan Province: 2♀ (MHNG), Siahu, 30 January 2020, A. Zamani.

Records in Iran: Kerman, Khuzestan, Markazi, Razavi Khorasan, Tehran, Yazd. New record for Hormozgan.

Distribution: From the Balkan Peninsula to Kyrgyzstan.

Selenopidae Simon, 1897

***Selenops radiatus* Latreille, 1819 (Fig. 77)**

Photographic record: IRAN: Hormozgan Province: 1♀, near Chahestan, 27°30'N 56°46'E, 23 March 2021, S. Sami.

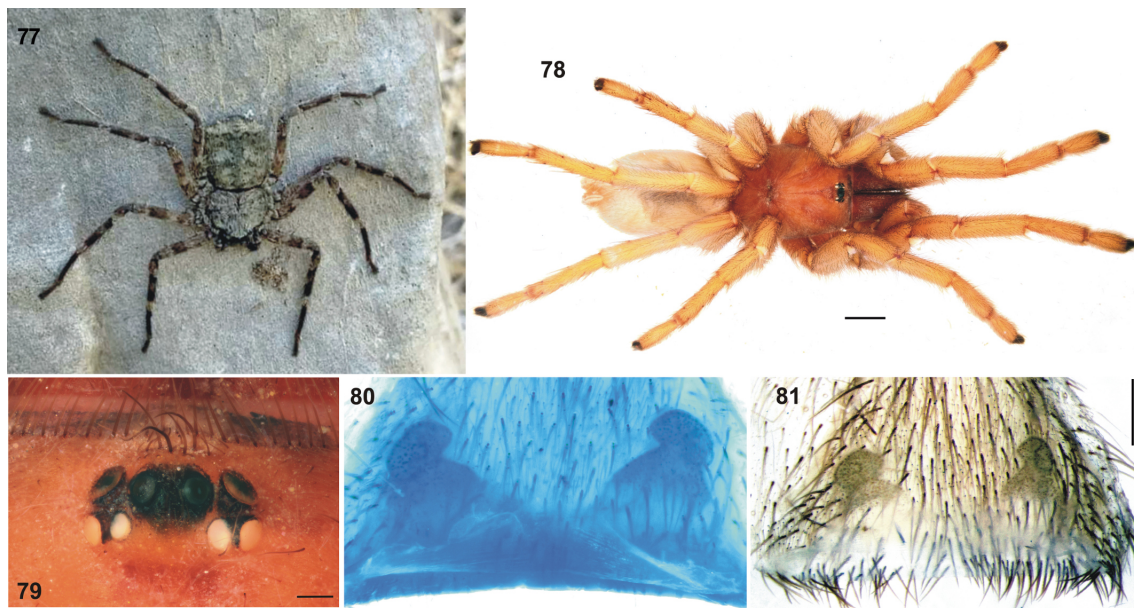
Records in Iran: Sistan & Baluchistan. New record for Hormozgan.

Distribution: the Mediterranean, Africa, the Middle East, India, Myanmar, China.

Tetragnathidae Menge, 1866

***Tetragnatha extensa* (Linnaeus, 1758)**

Material: IRAN: Chaharmahal & Bakhtiari Province: 9♂, 7♀ (MHNG), Dimeh, 32°29'N 50°16'E, 21 September 1974, A. Senglet. East Azerbaijan Province: 1♂, 1♀ (MHNG), E of Bostanabad, 37°55'N 46°42'E, 1900 m, 07 June 1975, A. Senglet. Fars Province: 5♂, 11♀ (MHNG), Sivand, 30°07'N 52°58'E, 10 June 1974, A. Senglet. Hamedan Province: 2♂, 1♀ (MHNG), Asadabad, 34°51'N 48°12'E, 02 July 1974, A. Senglet. Isfahan Province: 2♂ (MHNG), Isfahan, 32°34'N 51°31'E, 23 August 1973, A. Senglet. Kermanshah Province: 1♂, 10♀ (MHNG), N of Kermanshah, 34°28'N 47°00'E, 23 June 1974, A. Senglet; 1♂ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 04 August 1973, A. Senglet. Kurdistan Province: 1♂ (MHNG), Hoseynabad, 17 September 1975, A. Senglet; 2♂, 3♀ (MHNG), south of Sanandaj, 35°13'N 47°00'E, 23 June 1974, A. Senglet. Lorestan Province: 17♂, 18♀ (MHNG), Azna, 33°28'N 49°22'E, 23 June 1974, A. Senglet. North Khorasan Province: 1♂, 1♀ (MHNG), Bojnurd, 37°29'N 57°26'E, 20 August 1975, A. Senglet. Qazvin Province: 1♂ (MHNG), Avadj, 35°38'N 49°13'E, 27 July 1973, A. Senglet. Razavi Khorasan Province: 1♂, 1♀ (MHNG), road to Amirabad, 36°47'N 59°54'E, 23 July 1974, A. Senglet. Tehran Province: 2♂, 3♀ (MHNG), Firuzkuh, 35°43'N 52°40'E, 24 July 1973, A. Senglet. West Azerbaijan



Figs. 77–81: *Selenops radiatus* Latreille, 1819 (77; courtesy of Soheyl Sami) and *Ischnocolus jickelii* L. Koch, 1875 (78–81), females, from Iran. 77–78 habitus, dorsal views; 79 eyes, dorsal view; 80–81 vulva, dorsal views. Scale bars = 2.0 mm (78), 0.2 mm (79, 81).

Province: 4♂, 3♀ (MHNG), N of Khoy, 38°37'N 45°02'E, 01 June 1975, A. Senglet.

Records in Iran: Ardabil, East Azerbaijan, Gilan, Golestan, Isfahan, Kerman, Kohgiluyeh & Boyer-Ahmad, Mazandaran, North Khorasan, Qazvin, Razavi Khorasan, West Azerbaijan. New records for Chaharmahal & Bakhtiari, Fars, Hamedan, Kermanshah, Kurdistan, Lorestan and Tehran.

Distribution: Holarctic.

Tetragnatha isidis (Simon, 1880)

Material: IRAN: Gilan Province: 2♂, 2♀ (MHNG), Galugah, 37°31'N 49°19'E, 04 July 1973, A. Senglet; 1♂ (MHNG), Galugah, 37°31'N 49°19'E, 04 July 1973, A. Senglet. Hamedan Province: 1♀, 1juv. (MHNG), Asadabad, 34°51'N 48°12'E, 02 July 1974, A. Senglet. Kermanshah Province: 1♂, 1♀ (MHNG), N of Kermanshah, 34°28'N 47°00'E, 23 June 1974, A. Senglet; 1♂, 2♀ (MHNG), Bistoun, 34°23'N 47°26'E, 17 June 1975, A. Senglet. Khuzestan Province: 1♂, 2juv. (MHNG), Shush, 32°02'N 48°18'E, 18 May 1974, A. Senglet. Lorestan Province: 6♂, 2♀ (MHNG), Ma'mulan, 33°20'N 47°54'E, 24 June 1974, A. Senglet.

Remarks: The earlier Iranian records of *Tetragnatha javana* (Thorell, 1890) (Ghavami & Amooz 2008; Zamani 2015; Zamani & Mozaffarian 2017) are misidentifications of *T. isidis* and are to be assigned to this species.

Records in Iran: Gilan, Golestan, Mazandaran. New records for Hamedan, Kermanshah, Khuzestan and Lorestan.

Distribution: West Palearctic

Tetragnatha montana Simon, 1874

Material: IRAN: Gilan Province: 1♂, 5♀ (MHNG), Chelavand, 38°19'N 48°51'E, 04 August 1974, A. Senglet. Mazandaran Province: 6♂, 10♀ (MHNG), Delasm, 36°26'N 51°52'E, 04 August 1974, A. Senglet.

Records in Iran: Gilan, Golestan, Mazandaran, Qazvin, Razavi Khorasan.

Distribution: Palearctic.

Tetragnatha nigrita Lendl, 1886

Material: IRAN: Gilan Province: 7♂, 6♀ (MHNG), Bidjar, 37°00'N 49°34'E, 06 September 1973, A. Senglet; 1♂, 1♀ (MHNG), Galugah, 37°31'N 49°19'E, 04 July 1973, A. Senglet.

Records in Iran: Gilan, Golestan, Mazandaran.

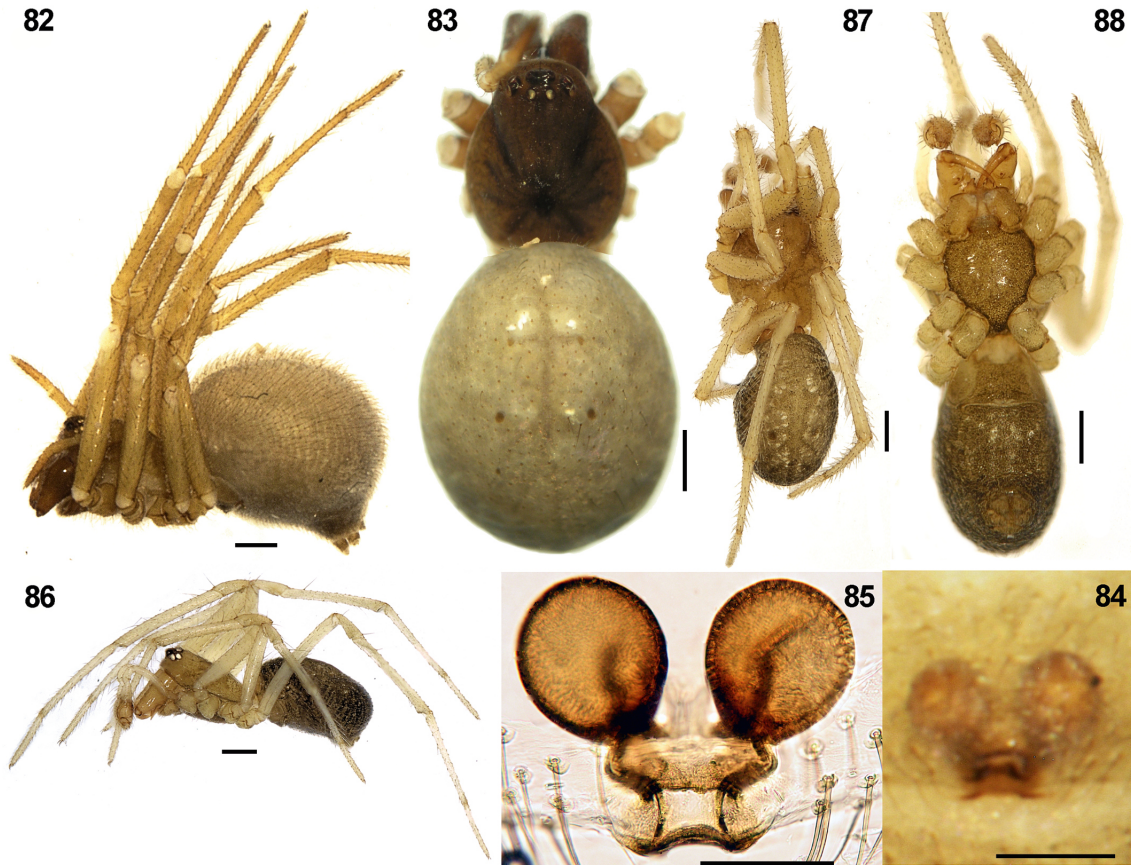
Distribution: Palearctic.

Tetragnatha obtusa C. L. Koch, 1837

Material: IRAN: Gilan Province: 2♂, 13♀ (MHNG), Lahidjan, 37°11'N 49°54'E, 05 July 1973, A. Senglet; 1♂, 2♀ (MHNG), Hashtpar, 37°50'N 48°58'E, 29 June 1973, A. Senglet; 1♂, 1♀ (MHNG), Bidjar, 37°00'N 49°34'E, 06 September 1973, A. Senglet. Mazandaran Province: 5♂, 11♀ (MHNG), Nashtarud, 26°43'N 51°08'E, 10 July 1973, A. Senglet.

Records in Iran: Mazandaran, Qazvin, South Khorasan. New record for Gilan.

Distribution: Palearctic.



Figs. 82–88: *Enoplognatha mediterranea* Levy & Amitai, 1981, male (86–88) and female (82–85). **82, 86** habitus, lateral view; **83, 87** same, dorsal view; **88** same, ventral view; **84** epigyne, ventral view; **85** same, dorsal view. Scale bars = 0.5 mm (82–83, 86–88), 0.1 mm (84–85).

Tetragnatha pinicola L. Koch, 1870

Material: IRAN: Gilan Province: 1♂, 9♀ (MHNG), Asalem, 37°40'N 48°52'E, 10 June 1975, A. Senglet.

Records in Iran: Mazandaran. New record for Gilan.

Distribution: Palearctic.

Tetragnatha shoshone Levi, 1981

Material: IRAN: Chaharmahal & Bakhtiari Province: 20♂, 1♀ (MHNG), E of Farsan, 32°17'N 50°38'E, 17 June 1974, A. Senglet. East Azerbaijan Province: 1♂ (SMF), Arasbaran Wildlife Refuge, Makidi and Mahmudabad, 1600–1700 m, 15 June 1978, J. Martens, H. Pieper. Fars Province: 7♂, 7♀ (MHNG), Ghaderabad, 30°21'N 53°19'E, 17 August 1973, A. Senglet; 1♂, 3♀ (MHNG), Aliabad, 30°01'N 53°00'E, 09 June 1974, A. Senglet; 7♂, 10♀ (MHNG), Kavar, 29°12'N 52°37'E, 05 June 1974, A. Senglet. Isfahan Province: 4♂, 3♀ (MHNG), Nowgahan, 33°11'N 50°04'E, 22 June 1974, A. Senglet. Kermanshah Province: 1♂, 1♀ (MHNG), Mahi Dasht, 34°14'N 46°42'E, 04 August 1973, A. Senglet. Kurdistan Province: 2♂, 6♀ (MHNG), Santeh, 36°11'N 46°32'E, 23 June 1975, A. Senglet; 1♂, 5♀ (MHNG), N of Sanandaj, 35°28'N 47°01'E, 22 June 1975, A. Senglet; 1♂, 1♀ (MHNG), Saghez, 36°23'N 46°12'E, 18 September 1975, A. Senglet. Lorestan Province: 1♂, 1♀ (MHNG), Aligudarz, 33°21'N 49°48'E,

07 August 1973, A. Senglet. Mazandaran Province: 1♂ (MHNG), E of Baladeh, 36°14'N 51°34'E, 06 July 1975, A. Senglet. Razavi Khorasan Province: 5♂, 8♀ (MHNG), Mashhad, 36°26'N 59°38'E, 20 July 1974, A. Senglet. Tehran Province: 3♂, 3♀ (MHNG), Firuzkuh, 35°45'N 52°46'E, 23 July 1973, A. Senglet.

Records in Iran: Tehran. New records for Chaharmahal & Bakhtiari, East Azerbaijan, Fars, Isfahan, Kermanshah, Kurdistan, Lorestan, Mazandaran and Razavi Khorasan.

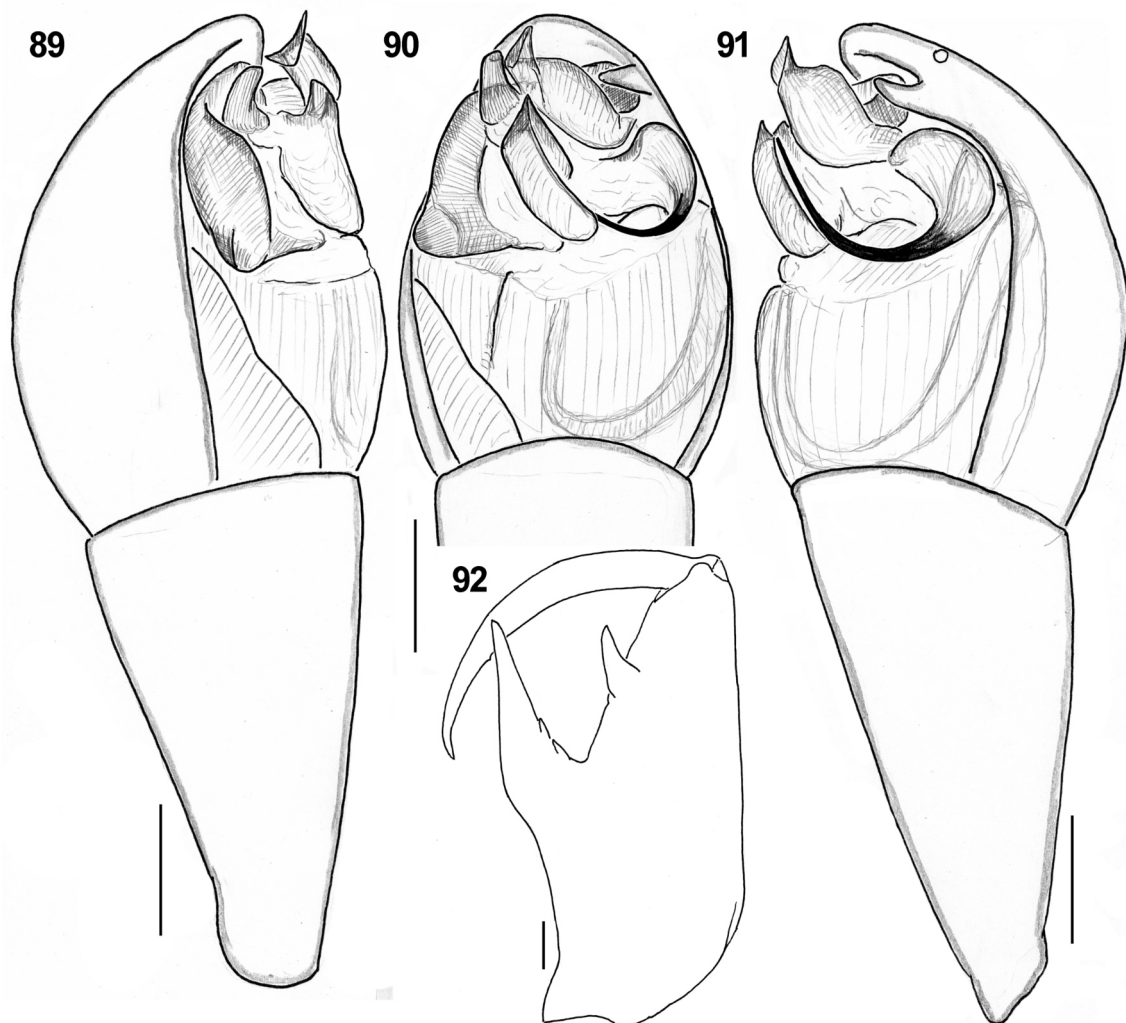
Distribution: Holarctic.

Theraphosidae Thorell, 1869

Ischnocolus jickelii L. Koch, 1875* (Figs. 78–81)

Material: IRAN: Kerman Province: 1♀ (NHMW), 52 km SW of Sirjan, 17 April 1972, K. Bilek.

Distribution: Ethiopia, Eritrea, Djibouti, Somalia, Yemen, Saudi Arabia, Oman, United Arab Emirates. New to Iran, with the current record representing the north-ernmost limit of the known species range. It is the second theraphosid species reported from Iran (Montemor *et al.* 2020).



Figs. 89–92: *Enoplognatha mediterranea* Levy & Amitai, 1981. **89** male palp, prolateral view; **90** same, ventral view; **91** same, retrolateral view; **92** chelicera, posterior view. Scale bars = 0.1 mm.

Theridiidae Sundevall, 1833b

Enoplognatha mediterranea Levy & Amitai, 1981 (Figs. 82–100)

Material: IRAN: Hormozgan Province: 5♂, 4♀ (MHNG), Siahu, 30 January 2020, A. Zamani. Kerman Province: 3♀ (NHMW), 52 km S of Sirjan, 17 April 1972, K. Bilek.

Records in Iran: Kohgiluyeh & Boyer-Ahmad. New records for Hormozgan and Kerman, with the latter representing the easternmost record of this species in the whole known range.

Distribution: Turkey, Cyprus, Israel, Azerbaijan, Iran.

Steatoda paykulliana (Walckenaer, 1806)

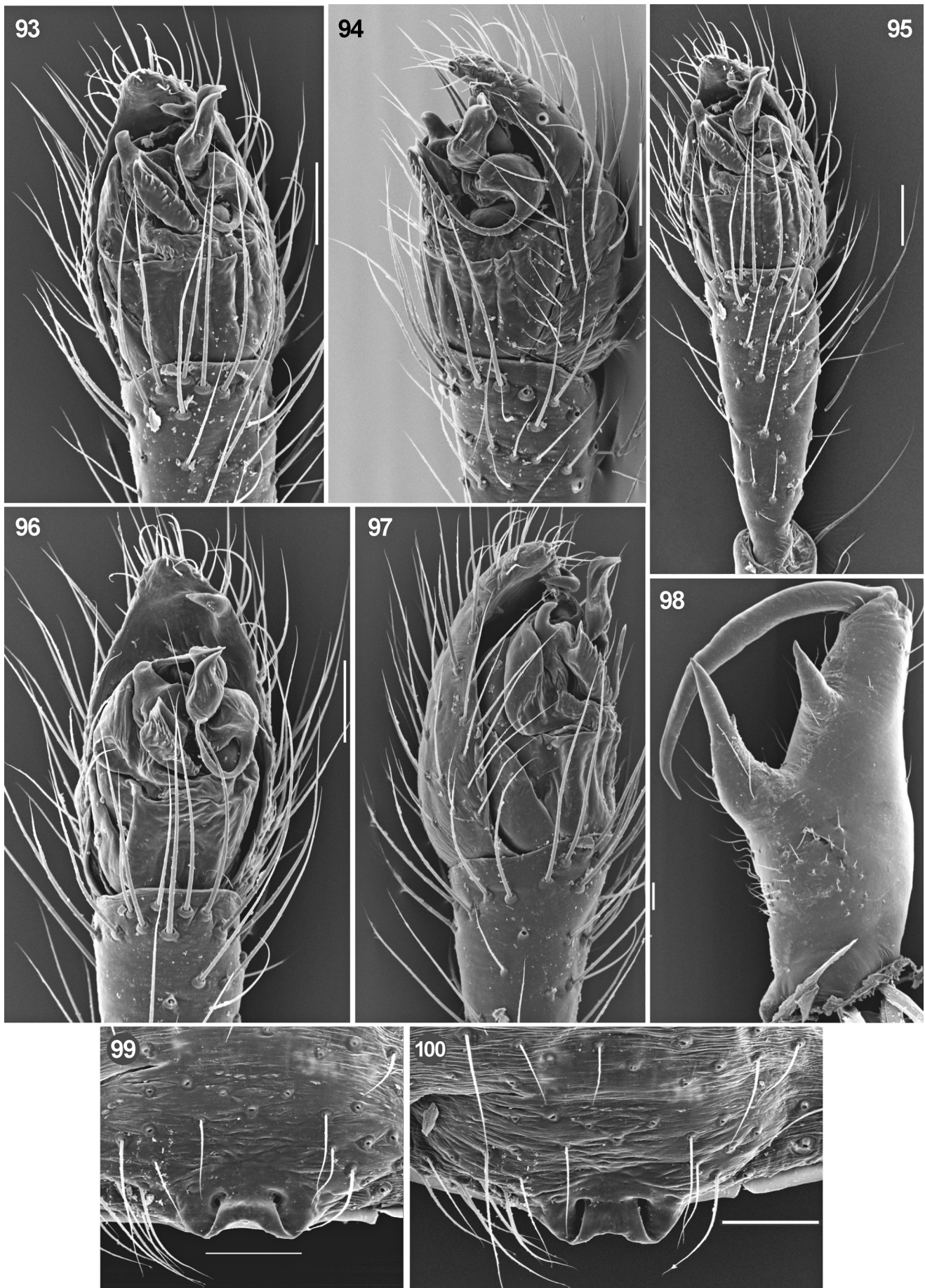
Latrodectus hasselti: Roewer (1959): 12 (misidentified).

Material: IRAN: Mazandaran Province: 1 sub♀ (GNM), Ramsar, under stone, 05 November 1939, K. Lindberg. INDIA: Sikkim State: 1♂, 1sub♀ (GNM), Baghul Khole,

between Singtam and Rangpou, 01 October 1943, K. Lindberg.

Remarks: Roewer (1959) reported on two samples from Iran and India which he identified as *L. hasselti* Thorell, 1870, a widow spider with a native range covering the territory from SE Asia to Australia (World Spider Catalog 2022). Without re-examination of the material, Zamani *et al.* (2014a) considered the Iranian record to be a misidentified *L. tredecimguttatus* (Rossi, 1790). Recently, we had an opportunity to re-examine Roewer's material, and can confirm that both records belong to *S. paykulliana* (erroneously both Indian specimens have been considered as females according to the original label, while in fact one of them is an adult male and the other is a subadult female). It is noteworthy that neither vials contain locality data, but the one with two specimens has the code IN90 on the identification label, which we assume is referring to India.

Records in Iran: Alborz, Ardabil, Bushehr, Chaharmahal & Bakhtiari, East Azerbaijan, Fars, Gilan, Golestan, Hormozgan, Ilam, Kermanshah, Khuzestan, Kohgiluyeh & Boyer-Ahmad, Kurdistan, Lorestan, Markazi, Mazandaran, Qazvin, Qom, Razavi Khorasan, Semnan, Tehran, West Azerbaijan, Zanjan.



Figs. 93–100: *Enoplognatha mediterranea* Levy & Amitai, 1981, SEM images of copulatory organs and chelicera. **93, 95–96** male palp, ventral views; **94** same, retrolateral view; **97**, same, prolateral view; **98** male chelicera, posterior view; **99** epigyne, ventral view; **100** same, anterior view. Scale bars = 0.1 mm.

Distribution: West Palaearctic. First record for India (cf. Caleb & Sankaran 2021).

Theridion varians Hahn, 1833

Material: IRAN: Gilan Province: 1♂ (MHNG), Limir, 38°12'N 48°52'E, 28 June 1973, A. Senglet.

Records in Iran: Fars, Kerman, Mazandaran, Qazvin. New record for Gilan.

Distribution: Holarctic.

Thomisidae Sundevall, 1833

Ozyptila simplex (O. Pickard-Cambridge, 1862)

Material: IRAN: Hamedan Province: 1♂ (MHNG), Asadabad, 34°51'N 48°12'E, 02 July 1974, A. Senglet. Qazvin Province: 2♂, 3♀ (MHNG), Shahrak, 36°25'N, 50°30'E, 02 July 1975, A. Senglet.

Records in Iran: Gilan, Mazandaran. New records for Hamedan and Qazvin.

Distribution: West Palaearctic south to northern Iran.

Discussion

Based on the results in this paper, there are 915 species in 323 genera and 55 families of spiders known from Iran. Two species of the wolf spider genus *Alopecosa* Simon, 1885 are described as new to science, nine species are recorded from Iran for the first time, two species are removed from the list of Iranian spiders, and 182 new provincial records are provided for 53 species. Additionally, one species is recorded from India for the first time, while another is removed from the list of Turkish spiders. Of the studied material, the records of four species (*Enoplognatha mediterranea*, *Evippa amitaii*, *Gibbaranea gibbosa*, *Zelotes laetus*) represent easternmost limits of their ranges, those of four species (*Arctosa maculata*, *Pardosa azerifalcata*, *P. ovtchinnikovi*, *P. pontica*) are their southernmost limits, those of two species (*Drassyllus dadia*, *Zelotes alpujarraensis*) are their south-easternmost limits, that of *Evippa luteipalpis* is its westernmost limit, and that of *Ischnocolus jickelii* is its northernmost limit.

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