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Original Article

Additions to the spider fauna (Araneae) of Algeria: first records of five species from the northern Sahara

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ABSTRACT. The spider fauna of the Algerian Sahara remains poorly studied despite its vast arid landscapes and unique ecological conditions. In this study, we report five spider species newly recorded from Algeria, based on material collected in the region of El Meghaier, northern Sahara. These are *Rhysodromus lepidus* (Blackwall, 1870) (Philodromidae), *Pellenes hedjazensis* Prószyński, 1993 (Salticidae), *Theridion jordanense* Levy & Amitai, 1982 (Theridiidae), *Ozyptila furcula* (Koch, 1882), and *Thomisus zyuzini* Marusik & Logunov, 1990 (both Thomisidae). Additionally, *O. furcula*, *P. hedjazensis* and *T. zyuzini* are recorded from Africa for the first time, and the genus *Rhysodromus* Schick, 1965, is newly reported from Algeria. Photographs of the habitus and copulatory organs are provided, along with a distribution map illustrating both known and newly recorded occurrences, and notes on the ecological conditions of the collection sites.

KEYWORDS: Agroecosystem, Arid land, El Meghaier, Philodromidae, Salticidae, Theridiidae, Thomisidae

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INTRODUCTION

Algeria, the largest country in Africa, exhibits a distinct climatic gradient ranging from Mediterranean conditions in the north, through the continental climates of the central highlands, to the hot desert climates of the southern Sahara (Haied et al. 2023; Zeroual et al. 2020). This variation is largely shaped by the country's complex topography, with the Tell and Saharan Atlas mountain ranges acting both as climatic barriers and as transitional zones leading into the vast arid expanse of the Sahara, which in total covers more than 80% of Algeria's territory. Currently, 899 species in 315 genera and 52 families of spiders are known from Algeria (Beladjal et al. 2025; Benslimane et al. 2025; Berretima et al. 2025). In recent years, research has increasingly focused on the spider fauna of the country's Saharan regions, with many studies reporting new records of species and genera from this arid environment (Alioua & Bosmans 2020; Alioua et al. 2020, 2022; Alioua & Bosmans, 2022, 2024; Bosmans & Alioua 2024; Berretima et al. 2025). To date, 254 species in 155 genera and 36 families have been recorded from the Algerian Sahara (Beladjal et al. 2025; Berretima et al. 2025). Within this vast desert region, El Meghaier Province (Wilaya) was previously known only by three species: the endemic *Dysdera deserticola* Simon, 1911 (Dysderidae) (Simon 1910); *Nomisia exornata* (C.L. Koch, 1839) (Gnaphosidae) (Dalmas 1921); and *Loxosceles rufescens* (Dufour, 1820) (Sicariidae) (Brignoli 1976).

Based on newly collected material from El Meghaier Province, and within the framework of ongoing studies on the spider fauna of Algeria's arid regions, this study documents five species for the first time in Algeria, including one new genus record. Distribution maps, compiled from published

literature and updated with new localities, as well as photographs of the habitus and detailed images of copulatory organs, are presented for all recorded species.

MATERIAL AND METHODS

Study area. This study was conducted in the northern part of the Oued Righ region, situated in the northern Sahara of Algeria, specifically in El Meghaier Province, approximately 550 km southeast of the capital, Algiers. The Oued Righ region is characterized by an arid climate with very hot, dry summers and mild winters. In 2023, the mean annual temperature was 23.3 ˚C, and the average annual rainfall was 29.71 mm (Tutiempo 2025). Spiders were sampled by the first author using three methods: hand collection, pitfall traps, and sweep-netting. Specimens were collected between November 2022 and October 2023 at five sites in El Meghaier region (Fig. 1).

Figure 1. Sampling habitats in El Meghaier region. **A.** Palm grove of Ain Chikh; **B.** Alfalfa field at Berkadjia; **C.** Cereal field at Berkadjia; **D.** Tomato crop at Messaka; **E.** Wetland of Chott Merouane.

Site 1 (Ain Chikh): a 6 ha date palm (*Phoenix dactylifera* L.) grove established in 1993, located ~20 km east of El Meghaier city (33°55'58.38"N, 05°58'16.74"E, –19 m a.s.l.; Fig. 1A). Date palm is the main crop, intercropped with pomegranate, fig, grapevine, and plum. The soil is also colonized by weeds such as *Cynodon dactylon*, *Dactyloctenium egyptiacum*, *Daucus carota*, *Melilotus indica* and *Phragmites communis*; **Site 2** (Berkadjia): a 12 ha alfalfa (*Medicago sativa* L.) field within a 32 ha farm (33°59'23.80"N, 05°44'35.80"E, 33 m a.s.l.; Fig. 1B); **Site 3** (Berkadjia): a 49 ha cereal field located ~26 km west of El Meghaier (33°58'30.80"N, 05°45'15.00"E, 35 m a.s.l.; Fig. 1C). Edges dominated by weeds like *Atractylis delicatula*, *Bromus rigidus*, *Hordeum murinum*, *Launaea glomerata*, *Sonchus oleraceus*, and *Zygophyllum album*; **Site 4** (Messaka): a 1.5 ha drip-irrigated tomato field (33°54'06.00"N, 05°53'53.70"E, 8 m a.s.l.; Fig. 1D); **Site 5** (Chott Merouane): the edge of the Ramsar wetland site of Chott Merouane (34°03'19.06"N, 05°57'17.40"E, –30 m a.s.l.; Fig. 1E), designated on 2 February 2001. Covering ~334,000 ha, there are saline and permanent water bodies fed by the Oued Khrouf, as well as excess irrigation water from palm groves and groundwater discharged from the neighboring cities of Touggourt, Djamaa, and El Meghaier in this site. Located in an arid steppe zone, the wetland provides habitat for a wide range of sedentary and migratory birds, as well as fish, including little-known indigenous species (Chott Merouane Ramsar Site 2025).

Collected specimens were preserved in 70% ethanol. Examinations were carried out using Nikon® SMA 1270 and Wild M7A stereomicroscopes. Photographs were taken with a Moticam® camera mounted on a Realux microscope and an Olympus® SZX7 stereomicroscope. All specimens are deposited in the Collection Badreddine Dekkoumi (CBD), University of Ghardaïa, Algeria.

RESULTS

Class Arachnida Lamarck, 1801

Order Araneae Clerck, 1757

Family Philodromidae Thorell, 1869

Rhysodromus lepidus (Blackwall, 1870)

(Figs 2 & 3)

Identification. Simon (1875, 1932).

Specimens examined. 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 13.V.2023, hand collection; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 13.V.2023, sweep net; 1♂, 4♀♀, Algeria, El Meghaier, Chott Merouane, 14.IV.2023, hand collection; 1♂, 1♀, Algeria, El Meghaier, Chott Merouane, 14.IV.2023, sweep net; 1♂, Algeria, El Meghaier, Chott Merouane, 27.IV.2023, hand collection; 1♂, 4♀♀, Algeria, El Meghaier, Chott Merouane, 27.IV.2023, sweep net; 1♀, Algeria, El Meghaier, Chott Merouane, 12.V.2023, hand collection; 2♀♀, Algeria, El Meghaier, Chott Merouane, 12.V.2023, sweep net; 3♂♂, 15♀♀, Algeria, El Meghaier, Chott Merouane, 27.V.2023, hand collection; 7♂♂, 15♀♀, Algeria, El Meghaier, Chott Merouane, 27.V.2023, sweep net; 1♀, Algeria, El Meghaier, Chott Merouane, 13.VI.2023, hand collection; 1♂, 1♀, Algeria, El Meghaier, Chott Merouane, 13.VI.2023, pitfall traps; 1♂, Algeria, El Meghaier, Chott Merouane, 25.VI.2023, pitfall traps; 1♂, Algeria, El Meghaier, Chott Merouane, 27.VII.2023, hand collection; 1♀, Algeria, El Meghaier, Chott Merouane, 18.VIII.2023, hand collection; 1♂, 1♀, Algeria, El Meghaier, Chott Merouane, 28.VIII.2023, hand collection; 1♂, Algeria, El Meghaier, Chott Merouane, 28.VIII.2023, sweep net.

Comments. For description, see Simon (1875) (sub *Philodromus maritimus*).

Distribution. From the Mediterranean region to India (WSC 2025): Tunisia, Egypt, Sicily, Corsica, Spain, Canary Islands, France, Italy, Romania, North Macedonia, Armenia, Turkmenistan, India, Southern European Russia, and Southern Russia (Blackwall 1870; Simon 1875; Simon 1932; Schmidt 1956; Blagoev 2002; Bosmans 2003; Kastrygina & Kovblyuk 2016; El-Hennawy 2017). This finding represents the first record of the genus and species for Algeria (Fig. 10).

Figure 2. Male (A) and female (B, C) of *Rhysodromus lepidus* (Blackwall, 1870). **A, B.** Habitus, dorsal view; **C.** Idem, ventral view.

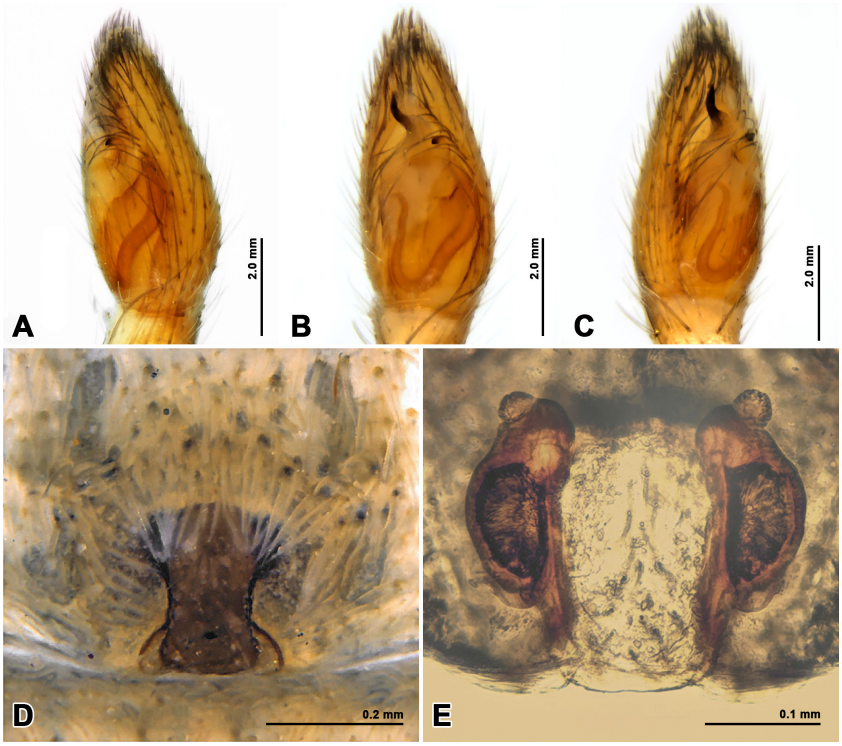

Figure 3. Copulatory organs of *Rhysodromus lepidus* (Blackwall, 1870). **A.** Male palp, retrolateral view; **B.** Idem, ventral view; **C.** Idem, prolateral view; **D.** Epigyne, ventral view; **E.** Vulva, dorsal view.

Family Salticidae Blackwall, 1841

Pellenes hedjazensis Prószyński, 1993

(Fig. 4)

Identification. Prószyński (1993)

Specimens examined. 1♂, ALGERIA, El Meghaier, Berkadjia alfalfa field, 28.IV.2023, pitfall traps; 1♂, ALGERIA, El Meghaier, Berkadjia cereals field, 14.V.2023, pitfall traps; 2♂♂, ALGERIA, El Meghaier, Berkadjia cereals field, 29.V.2023, pitfall traps.

Comments. For description, see Prószyński (1993).

Distribution. Previously known only from Saudi Arabia (Prószyński 1993) and the United Arab Emirates (Wesołowska & Harten 2010). Recorded from Africa for the first time (Fig. 10). El Meghaier represents the northwesternmost known locality in its range.

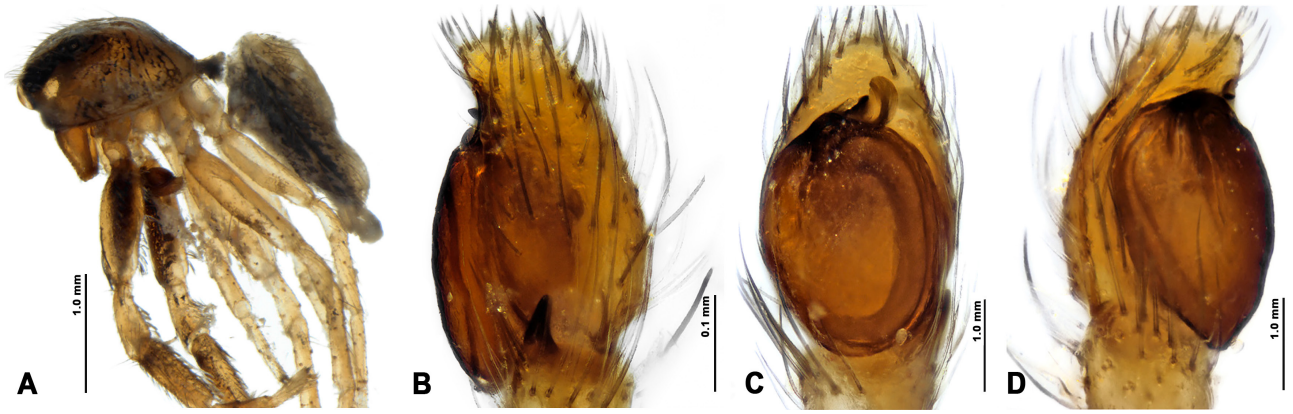

Figure 4. Male of *Pellenes hedjazensis* Prószyński, 1993. **A**. Habitus, lateral view; **B.** Palp, retrolateral view; **C.** Idem, ventral view; **D**. Idem, prolateral view.

Family Theridiidae Sundevall, 1833

Theridion jordanense Levy & Amitai, 1982

(Figs 5 & 6)

Identification. Levy & Amitai (1982), Fawzy & El-Erksousy (2002)

Specimens examined. 1♂, Algeria, El Meghaier, Ain Chikh, 11.III.2023, hand collection; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 12.II.2023, sweep net; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 13.V.2023, hand collection; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 28.V.2023, hand collection; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 28.VII.2023, hand collection; 1♂, 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 27.X.2023, hand collection.

Comments. For description, see Levy & Amitai (1982) and Thaler-Knoflach & El-Hennawy (2012). Photographs of the habitus of both sexes of *T. jordanense* are provided here for the first time (Figs 5–6).

Distribution. Previously known from the Golan Heights (Levy & Amitai 1982), Egypt, Syria, and the United Arab Emirates (Fawzy & El-Erksousy 2002; Thaler-Knoflach & El-Hennawy 2012; Abdel-Ghani et al. 2023). Recorded from Algeria for the first time (Fig. 10). This new record represents the westernmost known limit of its distribution.

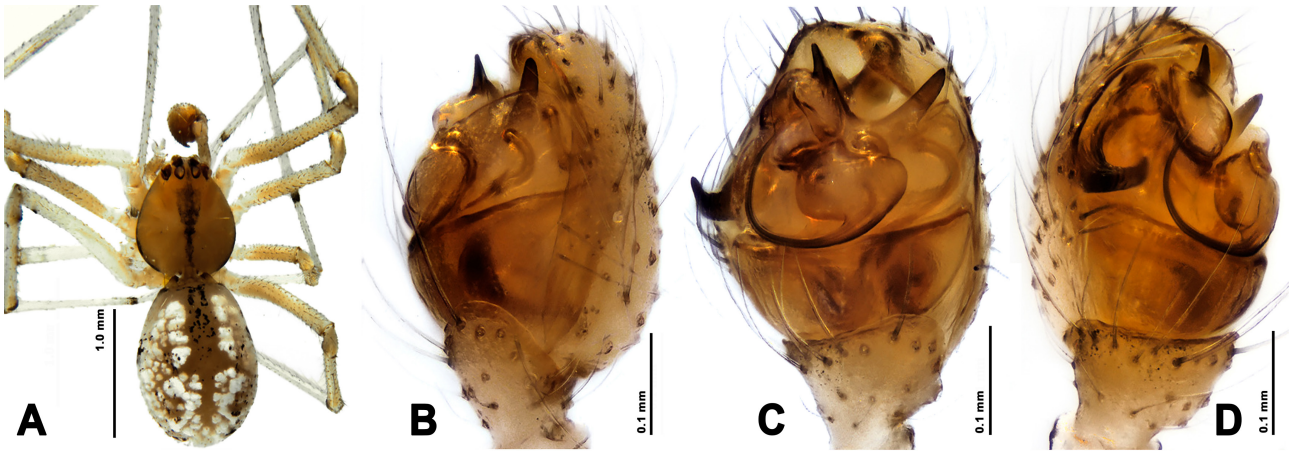

Figure 5. Male of *Theridion jordanense* Levy & Amitai, 1982. **A.** Habitus, dorsal view; **B.** Palp, retrolateral view; **C.** Idem, ventral view; **D**. Idem, prolateral view.

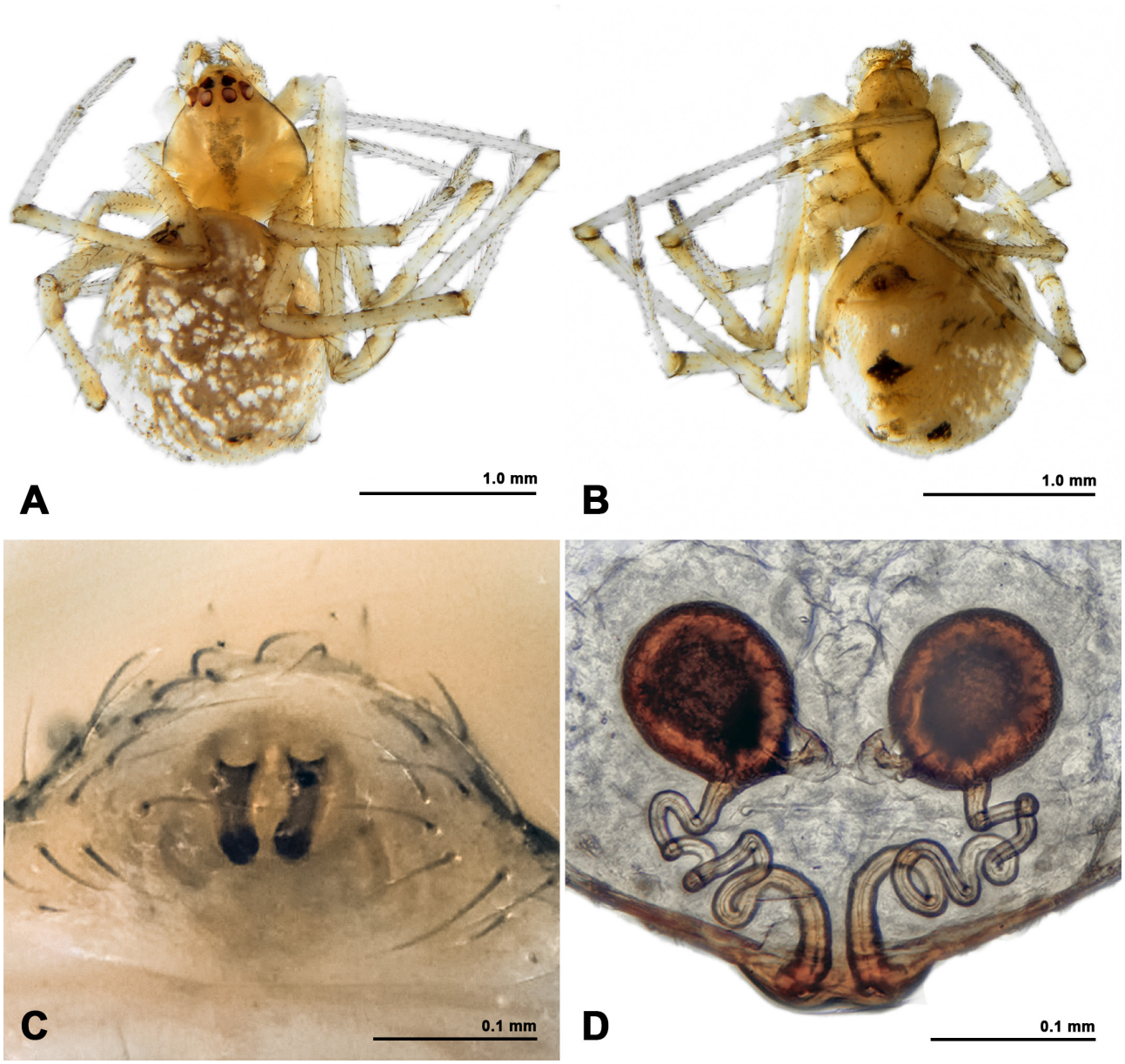

Figure 6. Female of *Theridion jordanense* Levy & Amitai, 1982. **A.** Habitus, dorsal view; **B.** Idem, ventral view; **C.** Epigyne, ventral view; **D.** Vulva, dorsal view.

Family Thomisidae Sundevall, 1833

Ozyptila furcula Koch 1882

(Fig. 7)

Identification. Simon (1932), Bosmans & van Keer (2012)

Specimens examined. 1♂, Algeria, El Meghaier, Ain Chikh, 26.IV.2023, hand collection; 1♂, Algeria, El Meghaier, Ain Chikh, 26.IV.2023, sweep net.

Comments. For description, see Bosmans & van Keer (2012).

Distribution. Previously known from France (Lecigne 2014), Italy (Lecigne 2014; Isaia et al. 2025), Portugal, and Spain (Barrientos & Febrer 2017; Branco et al. 2019) (Fig. 10). Recorded from Africa for the first time. El Meghaier Province is the southernmost known locality of the species.

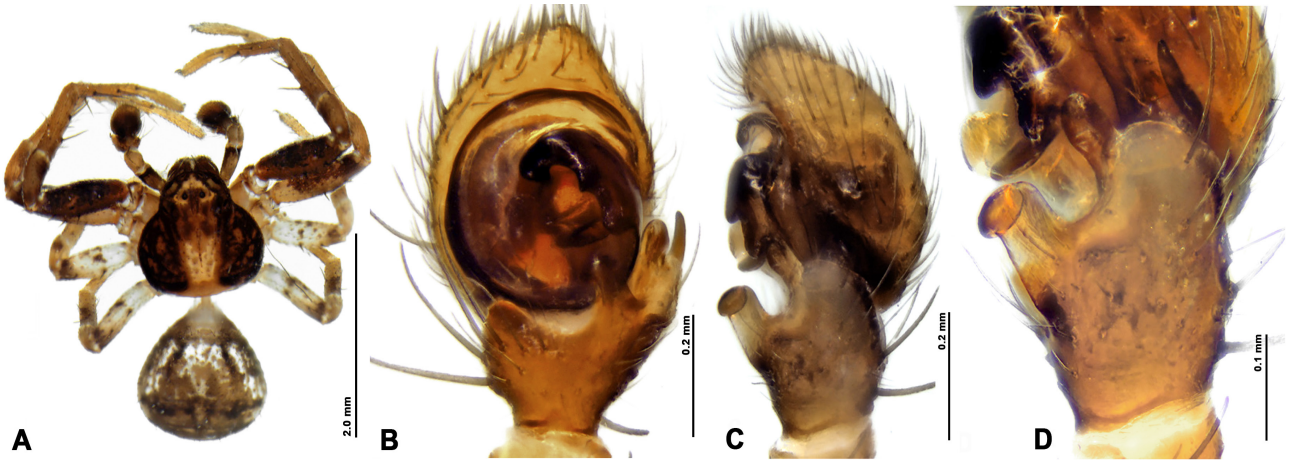

Figure 7. Male of *Ozyptila furcula* Koch 1882. **A.** Habitus, dorsal view; **B.** Palp, ventral view, **C.** Idem, retrolateral view, **D.** Detail of palpal tibia, retrolateral view.

Thomisus zyuzini Marusik & Logunov, 1990

(Figs 8 & 9)

Identification. Marusik & Logunov (1990, 1995)

Specimens examined. 1♂, Algeria, El Meghaier, Ain Chikh, 11.IV.2023, sweep net; 1♂, Algeria, El Meghaier, Ain Chikh, 26.V.2023, sweep net; 3♂♂, Algeria, El Meghaier, Berkadjia alfalfa field,14.III.2023, sweep net; 6♂♂, 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 28.III.2023, sweep net; 1♂, Algeria, El Meghaier, Berkadjia alfalfa field, 13.IV.2023, hand collection; 6♀♀, Algeria, El Meghaier, Berkadjia alfalfa field, 13.IV.2023, sweep net; 1♂, 1♀, 13.IV.2023, 28.IV.2020, hand collection; 4♂♂, Algeria, El Meghaier, Berkadjia alfalfa field, 13.IV.2023, sweep net; 3♂♂, Algeria, El Meghaier, Berkadjia alfalfa field, 13.V.2023, sweep net; 2♂♂, Algeria, El Meghaier, Berkadjia alfalfa field, 28.V.2023, sweep net; 1♂, Algeria, El Meghaier, Berkadjia alfalfa field, 14.VI.2023, sweep net; 1♂, Algeria, El Meghaier, Berkadjia alfalfa field, 26.VI.2023, sweep net; 1♀, Algeria, El Meghaier, Berkadjia alfalfa field, 14.VIII.2023, hand collection; 1♂, Algeria, El Meghaier, Berkadjia alfalfa field, 27.VIII.2023, sweep net; 3♂♂, Algeria, El Meghaier, Berkadjia alfalfa field, 14.IX.2023, sweep net; 1♂, 2♀♀, Algeria, El Meghaier, Berkadjia alfalfa field, 27.IX.2023, sweep net; 4♂♂, 3♀♀, Algeria, El Meghaier, Berkadjia cereals field, 15.III.2023, sweep net; 3♂♂, Algeria, El Meghaier, Berkadjia cereals field, 29.III.2023, hand collection; 5♂♂, Algeria, El Meghaier, Berkadjia cereals field, 29.III.2023, sweep net; 1♂, Algeria, El Meghaier, Berkadjia cereals field, 15.IV.2023, hand collection; 1♂, Algeria, El Meghaier, Berkadjia cereals field, 15.IV.2023, sweep net; 1♂, Algeria, El Meghaier, Berkadjia cereals field, 29.IV.2023, hand collection; 4♂♂, Algeria, El Meghaier, Berkadjia cereals field, 29.IV.2023, sweep net; 1♀, 29.IV.2023, 29.IV.2023, pitfall traps; 1♂, Algeria, El Meghaier, Berkadjia cereals field, 14.V.2023, hand collection; 1♂, 1♀, Algeria, El Meghaier, Berkadjia cereals field, 29.V.2023, hand collection; 1♂, Algeria, El Meghaier, Messaka,13.I.2023, hand collection; 1♂, Algeria, El Meghaier, Chott Merouane, 14.IV.2023, sweep net; 1♂, Algeria, El Meghaier, Chott Merouane, 26.VII.2023, sweep net.

Comments. For description, see Marusik & Logunov (1995).

Distribution. Previously known from Kazakhstan (Marusik & Logunov 1990), Saudi Arabia, Tajikistan, Turkey, Turkmenistan, Uzbekistan (Demir et al. 2008), Iran (Kiany et al. 2017), and Cyprus (Bosmans et al. 2019) (Fig. 10). Recorded from Africa for the first time. El Meghaier represents the westernmost known distribution record of the species.

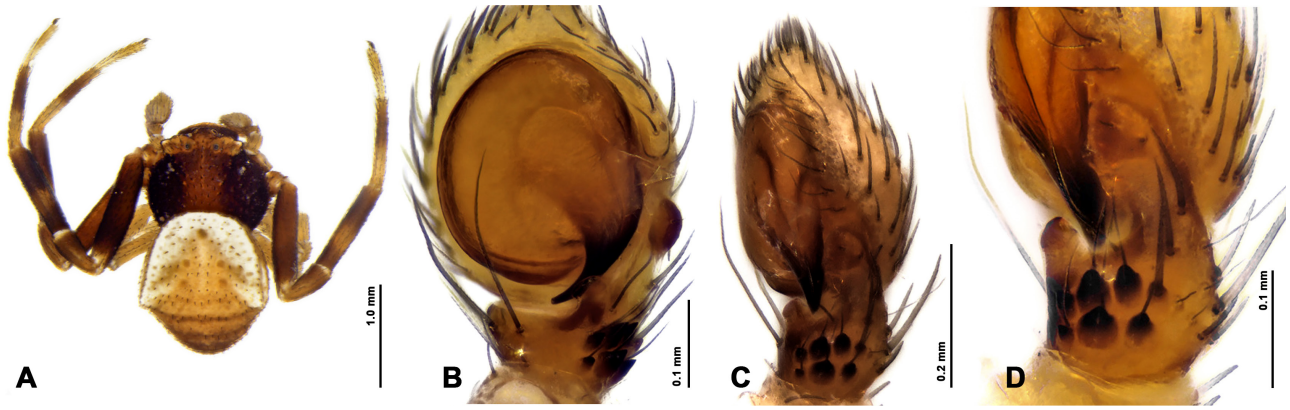

Figure 8. Male of *Thomisus zyuzini* Marusik & Logunov, 1990. **A.** Habitus, dorsal view, **B.** Palp, ventral view; **C.** Idem, retrolateral view; **D.** Detail of palpal tibia, retrolateral view.

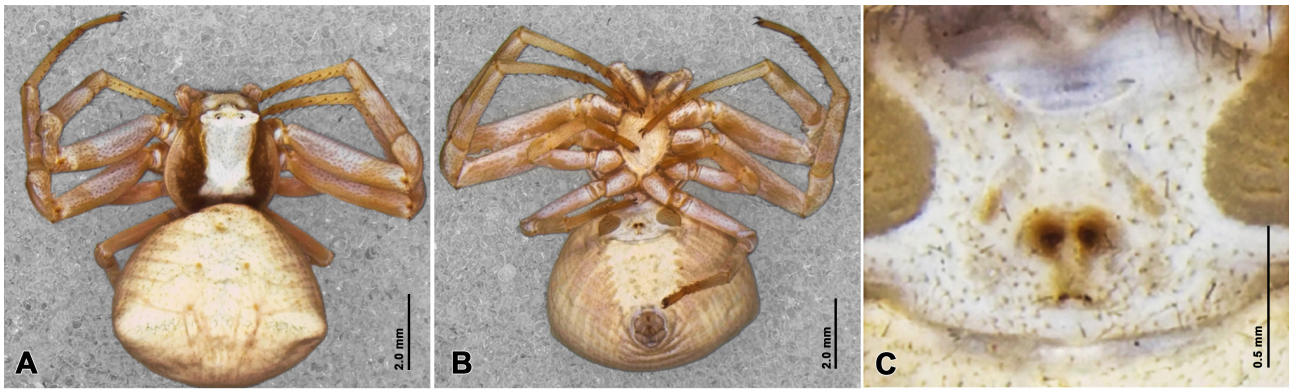

Figure 9. Female of *Thomisus zyuzini* Marusik & Logunov, 1990. **A.** Habitus, dorsal view; **B.** Idem, ventral view; **C.** Epigyne, ventral view.

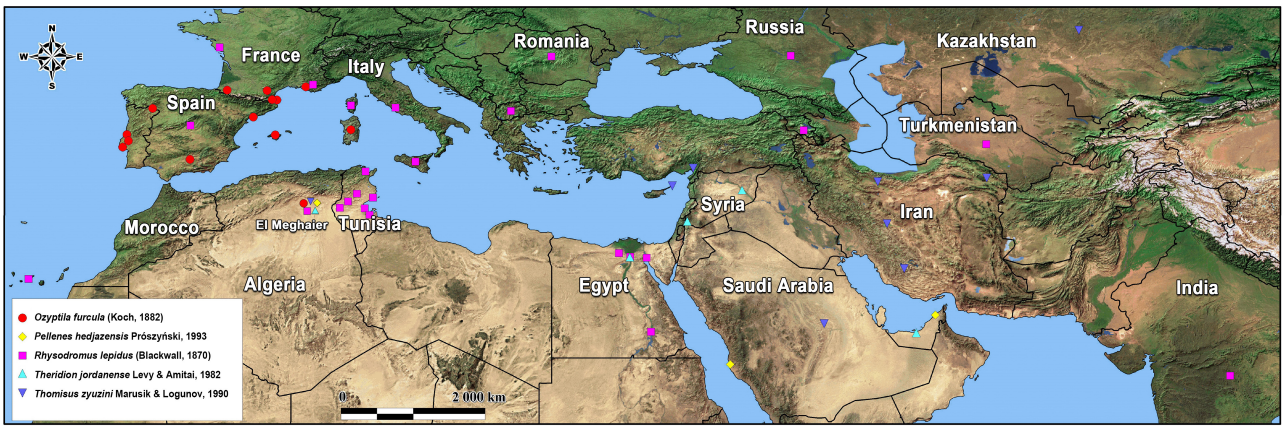

Figure 10. Distribution records of *Ozyptila furcula*, *Pellenes hedjazensis*, *Rhysodromus lepidus*, *Theridion jordanense*, and *Thomisus zyuzini* with new records from El Meghaier, Algeria.

DISCUSSION

Algeria lies at the transition between the Western Palearctic and Afrotropical regions, with the Sahara strongly influencing arachnid distributions (Beron 2016). These conditions help explain why El Meghaier hosts species from Southwestern Asia, Southwestern Europe, and the Mediterranean regions. Our records extend ranges at their margins: *O. furcula* reaches its southernmost limit, *T. jordanense* and *T. zyuzini* mark westernmost limits, and *P. hedjazensis* reaches its northwestern limit. Taken together, these range margins point to recent or previously undocumented faunal exchanges across the Sahara,

suggesting dispersal along Mediterranean corridors and reflecting the mixing of faunal elements in the Sahara lowlands.

Across El Meghaier, the newly recorded species were found at low elevations (–30 to 35 m a.s.l), occupying habitats ranging from irrigated agroecosystems to saline wetland margins. *Pellenes hedjazensis* was found in alfalfa and cereal fields (first habitat information). *Theridion jordanense* occurred on weeds in date palm orchards and in alfalfa, consistent with irrigated crops in Egypt (Fawzy & El-Erksousy 2002; Thaler-Knoflach & El-Hennawy 2012; Abdel-Ghani et al. 2023); both species, previously known from lowland sites in Southwestern Asia, are confirmed here at similar altitudes. *Ozyptila furcula* was collected on weeds under date palms, reflecting its affinity for moist Mediterranean and halophytic habitats (Le Péru 2007). *Thomisus zyuzini* exhibited the broadest ecological range, across sampled crops and wetland halophytes (*Limoniastrum guyonianum*, *Tamarix gallica,* and *Zygophyllum album*), whereas literature records note only stones in wasteland or flowers. Reported elevations range from near sea level in Cyprus to 2198 m in Fars Province, Iran (Kiany et al. 2017; Bosmans et al. 2019). *Rhysodromus lepidus* was mostly associated with vegetation along saline wetland margins, and only occasionally in alfalfa fields, consistent with previous records from sandy or coastal habitats (Simon 1875). Overall, the five species tolerate lowland Saharan habitats, with partial microhabitat overlap in some species across irrigated and wetland environments.

In Algeria, Salticidae (108 species) and Theridiidae (72 species) are among the most diverse families, whereas Thomisidae (34 species) and Philodromidae (25 species) are less diverse, with only a fraction recorded from the Sahara (Table 1) (Beladjal et al. 2025; Berretima et al. 2025). The present records from El Meghaier add Saharan occurrences for the studied genera (*Pellenes*, *Theridion*, *Ozyptila*, *Thomisus*, *Rhysodromus*), update the national checklist to 904 species in 316 genera and 52 families, and raise the total for El Meghaier Province to eight species. However, the study was limited to only selected sampling sites in one region; many species may have been overlooked. Future research should expand sampling across the broader Saharan region to provide a comprehensive understanding of the composition, distribution patterns, and ecological roles of spiders in these understudied arid environments.

Table 1. Previous records of the studied genera in Algeria by locality and region (after Beladjal et al. 2025).

Family	Species	Locality	Region
Salticidae	*Pellenes arciger* (Walckenear, 1837)	Algiers	Tell
	Pellenes durioei (Lucas, 1846)	Oran	Tell
	Pellenes levaillanti (Lucas, 1846)	Mila, Oran	Tell
Theridiidae	*Theridion familiare* O. Pickard-Cambridge, 1871	Tissemsilt	Tell
	Theridion furfuraceum Simon, 1914	Mila	Tell
	Theridion genistae Simon, 1873	Algiers, Annaba, El Tarf, Tlemcen	Tell
	Theridion hannoniae Denis, 1945	Aïn Defla, Algiers, Blida, Borj Bou Arreridj, Constantine, Guelma, Médea, M'sila, Oran, Saïda, Souk Ahras, Tizi Ouzou, Tlemcen	Tell
	Theridion melanostictum O. Pickard-Cambridge, 1876	Algiers, Ghardaïa	Tell & Sahara
	Theridion melanurum Hahn, 1831	Blida, Bouira, Mila	Tell
	Theridion mystaceum L. Koch, 1870	Algiers, Béjaïa, Blida, Skikda	Tell
	Theridion pinicola Simon, 1873	Blida, Bouira, Sétif, Tissemsilt, Tizi Ouzou	Tell
	Theridion wiehlei Schenkel, 1938	Mila	Tell
Thomisidae	*Ozyptila annulipes* (Lucas, 1846)	Algiers, Annaba, El Tarf	Tell
	Ozyptila atomaria (Panzer, 1801)	Algiers, Constantine	Tell
	Ozyptila barbara Denis, 1945	Algiers	Tell
	Ozyptila callitys (Thorell, 1875)	Annaba	Tell
	Ozyptila claveata (Walckenaer, 1837)	Algiers	Tell
	Ozyptila leprieuri Simon, 1875	Blida, Boumerdès	Tell
	Ozyptila numida (Lucas, 1846)	Annaba, Oran, Sétif	Tell
	Ozyptila pauxilla (Simon, 1870)	Algiers, Mila, Tizi Ouzou	Tell
	Ozyptila perplexa Simon, 1875	Without precise locality	
	Ozyptila varica Simon, 1875	Algiers, Saïda	Tell
	Thomisus ochraceus Walckenaer, 1841	Without precise locality	
	Thomisus onustus Walckenaer, 1805	Aïn Temouchent, Annaba, Constantine, El Oued, El Tarf, Ghardaïa, Laghouat, Mila, M'sila, Naâma, Saïda, Sétif, Tamanrasset, Tlemcen	Tell & Sahara
	Thomisus venulatus Walckenaer, 1841	Without precise locality	

AUTHOR'S CONTRIBUTION

The authors confirm their contribution to the paper as follows: B. Dekkoumi: Fieldwork and collecting the specimens, writing and reviewing the manuscript; Y. Alioua: Identification of specimens, writing and reviewing the manuscript; S. Meddour: Writing and reviewing the manuscript. The authors read and approved the final version of the manuscript.

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AVAILABILITY OF DATA AND MATERIAL

The specimens listed in this study are deposited in the Collection Badreddine Dekkoumi (CBD), University of Ghardaïa, Algeria, and are available from the curator upon request.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study only included arthropod material, and all required ethical guidelines for the treatment and use of animals were strictly adhered to in accordance with international, national, and institutional regulations. No human participants were involved in any studies conducted by the authors for this article.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this paper.

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REFERENCES

Abdel-Ghani, D.M., Hassan, M.F. & Sallam, G.M.E. (2023) Spiders as a bio-agent factor in a mango greenhouse at Giza Governorate, Egypt. *Serket,* 20 (1), 26–38.

Alioua, Y. & Bosmans, R. (2020) *Poecilochroa senilis* (O. Pickard-Cambridge, 1872) (Araneae: Gnaphosidae) recorded for the first time in Algeria and Morocco, with the proposition of a new synonym. *Serket,* 17 (2), 121–126.

Alioua, Y. & Bosmans, R. (2022) First record of the genus *Nita* Huber & El-Hennawy, 2007 (Araneae: Pholcidae) from Algeria. *Serket,* 18 (3), 282–286.

Alioua, Y. & Bosmans, R. (2024) Spiders of arid lands: the Ghardaïa region (northern Sahara) with seven new records for Algeria. *Zootaxa,* 5497 (3), 301–336. https://doi.org/10.11646/zootaxa.5497.3.1

Alioua, Y., Bosmans, R., Kherbouche, O. & Bissati, S. (2020) Distribution of the genus *Larinia* in the Maghreb, with the first record of *Larinia chloris* in Algeria (Araneae: Araneidae). *Arachnologische Mitteilungen,* 59, 1–4. https://doi.org/10.30963/aramit5901

Alioua, Y., Khadidja, B.B.Y., Meriem, H., Abderrahmane, H.M. & Bosmans, R. (2022) *Menemerus soldani* (Audouin, 1826) (Araneae: Salticidae) newly recorded in Algeria with the proposition of a new synonym. *Arachnology,* 19 (1), 28–30. https://doi.org/10.13156/arac.2022.19.1.28

Barrientos, J.A. & Febrer, B. (2017) Arañas (Arachnida, Araneae) de Menorca (Islas Baleares, España). Nuevos datos. *Revista Ibérica de Aracnología,* 31, 8–24.

Beladjal, L., Bouseksou, S., Kherbouche-Abrous, O., Alioua, Y. & Bosmans, R. (2025) First Exhaustive Catalog of Spiders of Algeria (Arachnida: Araneae). *Zootaxa,* 5598 (1), 1–185. https://doi.org/10.11646/zootaxa.5598.1.1

Benslimane, M., Kherbouche-Abrous, O., Sahki-Benabbas, I., Bendjoudi, D., Bosmans, R. & Beladjal, L. (2025) A new *Rhode* (Araneae, Dysderidae) from Djebel Zaccar, Algeria, with an identification key for the males of the Maghreb. *Zootaxa*, 5679 (1), 101–112. https://doi.org/10.11646/zootaxa.5679.1.5

Beron, P. (2016) Arachnogeographical comparison between West Palearctic and Afrotropical areas. *Ecologica Montenegrina*, 7, 464–506. https://doi.org/10.37828/em.2016.7.20

Berretima, W., Kherbouche-Abrous O., Doumandji S., Azarkina G.N. (2025) New data and a checklist of the jumping spiders (Aranei: Salticidae) of Algeria. *Arthropoda Selecta,* 34 (1), 64–76. https://doi.org/10.15298/arthsel.34.1.06

Blackwall, J. (1870) Notes on a collection of spiders made in Sicily in the spring of 1868, by E. Perceval Wright, M.D., with a list of the species, and descriptions of some new species and of a new genus. *Annals and Magazine of Natural History,* (4) 5 (30), 392–405, pl. 8. https://doi.org/10.1080/00222937008696185

Blagoev, G. (2002) Check list of Macedonian spiders (Araneae). *Acta Zoologica Bulgarica,* 54, 9–34.

Bosmans, R. (2003) A checklist of the spiders of Tunisia, with description of a new species of *Palliduphantes* Saaristo & Tanasevitch (Araneae: Linyphiidae). *Kaupia - Darmstädter Beiträge zur Naturgeschichte,* 12, 89–109.

Bosmans, R. & Alioua, Y. (2024) On two little-known Gnaphosidae from North Africa (Araneae). *Arachnology,* 19 (8), 1118–1121. https://doi.org/10.13156/arac.2024.19.8.1118

Bosmans, R. & van Keer, J. (2012) On the spider species described by L. Koch in 1882 from the Balearic Islands (Araneae). *Arachnologische Mitteilungen,* 43, 5–16. https://doi.org/10.5431/ARAMIT4306

Bosmans, R., van Keer, J., Russell-Smith, A., Hadjiconstantis, M., Komnenov, M., Bosselaers, J., Huber, S., McCowan, D., Snazell, R., Decae, A., Zoumides, C., Kielhorn, K.-H. & Oger, P. (2019) Spiders of Cyprus (Araneae). A catalogue of all currently known species from Cyprus. *Newsletter of the Belgian Arachnological Society,* 34 (Suppl.), 1–173.

Branco, V.V., Morano, E. & Cardoso, P. (2019) An update to the Iberian spider check list (Araneae). *Zootaxa,* 4614 (2), 201–254. https://doi.org/10.11646/zootaxa.4614.2.1

Brignoli, P.M. (1976) Beiträge zur Kenntnis der Scytodidae (Araneae). *Revue Suisse de Zoologie*, 83 (1), 125–191.

Chott Merrouane Ramsar Site. (2025) Ramsar Convention. Available from: https://rsis.ramsar.org/ris/1054 [Accessed May 14, 2025].

Dalmas, R. de (1921) Monographie des araignées de la section des Pterotricha (Aran. Gnaphosidae). *Annales de la Société Entomologique de France,* 89, 233–328.

Demir, H., Aktaş, M. & Topçu, A. (2008) Two thomisid species new to the Turkish spider fauna: *Ozyptila tricoloripes* Strand, 1913 and *Thomisus zyuzini* Marusik & Logunov, 1990 (Araneae: Thomisidae). *Turkish Journal of Arachnology,* 1 (1), 44–48.

El-Hennawy, H.K. (2017) A list of Egyptian spiders. *Serket,* 15 (4), 167–183.

Fawzy, M.M.H. & El Erksousy, M.H.M. (2002) Description of new comb-footed spider *Theridion egyptium* sp. n. in Egypt (Araneae: Theridiidae). *Proceedings of the 1st Conference of the Central Agricultural,* Pesticide Laboratory, Gizeh, Egypt, pp. 831–835.

Haied, N., Foufou, A., Khadri, S., Boussaid, A., Azlaoui M. & Bougherira, N. (2023) Spatial and temporal assessment of drought hazard, vulnerability and risk in three different climatic zones in Algeria using two commonly used meteorological indices. *Sustainability*, 15 (10), 7803. https://doi.org/10.3390/su15107803

Kastrygina, Z.A. & Kovblyuk, M.M. (2016) The spider genus *Rhysodromus* Schick, 1965 in the Crimea (Aranei: Philodromidae). *Arthropoda Selecta,* 25 (3), 283–292. https://doi.org/10.15298/arthsel.25.3.08

Kiany, N., Sadeghi, S., Kiany, M., Zamani, A. & Ostovani, S. (2017) Additions to the crab spider fauna of Iran (Araneae: Thomisidae). *Arachnologische Mitteilungen,* 53, 1–8.

Le Péru, B. (2007) Catalogue et répartition des araignées de France. *Revue Arachnologique*, 16, 1–468.

Lecigne, S. (2014) Contribution à l'inventaire aranéologique (Araneae) des Pyrénées-Orientales (Languedoc-Roussillon, France). *Revue Arachnologique,* 2 (1), 18–28.

Levy, G. & Amitai, P. (1982) The comb-footed spider genera *Theridion*, *Achaearanea* and *Anelosimus* of Israel (Araneae: Theridiidae). *Journal of Zoology London*, 196, 81–131. https://doi.org/10.1111/j.1469-7998.1982.tb03496.x

Marusik, Y.M. & Logunov, D. (1990) The crab spiders of Middle Asia, USSR (Aranei, Thomisidae): Descriptions and notes on distribution of some species. *Korean Arachnology,* 6 (1), 31–62.

Marusik, Y.M. & Logunov, D. (1995) The crab spiders of Middle Asia (Aranei, Thomisidae). *Beiträge zur Araneologie,* 4, 133–175.

Isaia, M., Tolve, M. & Pantini, P. (2025) Araneae.it 2.0: The new updated version of the digital catalog of the Italian Spiders and other Arachnids (Arachnida: Araneae, Opiliones, Scorpiones, Pseudoscorpiones, Palpigradi, Solifugae). *Fragmenta Entomologica*, 57 (2), 197–204. https://doi.org/10.13133/2284-4880/1862. Available online from: https://www.araneae.it/ [Accessed May 20, 2025]

Prószyński, J. (1993) Salticidae (Araneae) of Saudi Arabia II. *Fauna of Saudi Arabia,* 13, 27–54.

Schmidt, G. (1956) Die Spinnenfauna der Kanarischen Bananen. *Zeitschrift für Angewandte Zoologie,* 43, 237–249.

Simon, E. (1875) *Les Arachnides de France. Tome seconde. Contenant les familles des Urocteidae, Agelenidae, Thomisidae et Sparassidae*. Roret, Paris, 360 pp. + 4-8 pl.

Simon, E. (1910)[1911] Catalogue raisonné des arachnides du nord de l'Afrique (1re partie). *Annales de la Société Entomologique de France,* 79 (3), 265–332. https://doi.org/10.1080/21686351.1910.12279477

Simon, E. (1932) *Les arachnides de France. Synopsis générale et catalogue des espèces françaises de l'ordre des Araneae. Tome VI. 4e partie*. Roret, Paris, pp. 773–978.

Thaler-Knoflach, B. & El-Hennawy, H.K. (2012) *Theridion incanescens* Simon, 1890 and *Theridion jordanense* Levy & Amitai, 1982 new to the fauna of Egypt (Araneae: Theridiidae). *Serket,* 13, 91–98

Tutiempo Network, S.L. (2025) Tutiempo.net – Historical Weather Data. Available from: https://www.tutiempo.net [Accessed May 20, 2025]

Wesołowska, W. & Harten, A. van (2010) Order Araneae, family Salticidae. *Arthropod fauna of the UAE,* 3, 27–69.

WSC. (2025) World Spider Catalog. Version 26. Natural History Museum Bern. Available from: https://wsc.nmbe.ch/ [Accessed April 26, 2025]. https://doi.org/10.24436/2

Zeroual, A., Assani, A.A., Meddi, H., Bouabdelli, S., Zeroual, S., Alkama, R. (2020) Assessment of Projected Precipitations and Temperatures Change Signals over Algeria Based on Regional Climate Model: RCA4 Simulations. In: Negm, A.M., Bouderbala, A., Chenchouni, H., Barceló, D. (eds) *Water Resources in Algeria - Part I.* The Handbook of Environmental Chemistry, Springer Cham, pp. 135–159. https://doi.org/10.1007/698_2020_526

یافته‌های تکمیلی برای فون عنکبوت‌های (Araneae) الجزایر: گزارش نخست پنج گونه از صحرای شمالی

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چکیـده: فون عنکبوت‌های صحرای الجزایر با وجود چشم‌انداز وسیع خشک و شرایط بوم‌شناختی منحصر به فرد آن به‌خوبی مطالعه نشده است. در این تحقیق، ما حضور پنج گونه عنکبوت را بر اساس نمونه‌هایی که در منطقه ال‌مغیر، واقع در صحرای شمالی جمع‌آوری شده، برای اولین بار از الجزایر ثبت کردیم. این گونه‌ها عبارتند از: *Rhysodromus lepidus* (Blackwall, 1870) (Philodromidae)، *Pellenes hedjazensis* Prószyński, 1993 (Salticidae)، *Theridion jordanense* Levy & Amitai, 1982 (Theridiidae)، *Ozyptila furcula* (Koch, 1882) و *Thomisus zyuzini* Marusik & Logunov, 1990 (هر دو از خانوادهٔ Thomisidae). علاوه بر این، *O. furcula*، *P. hedjazensis* و *T. zyuzini* برای نخستین بار از آفریقا گزارش می‌شوند و جنس *Rhysodromus* Schick, 1965 به تازگی از الجزایر ثبت می‌شود. تصاویری از نمای عمومی و اندام‌های زادآوری، به همراه نقشه مناطق پراکنش گونه‌ها نیز ارایه شده است. همچنین نکاتی از شرایط بوم‌شناختی محل‌های جمع‌آوری نیز ذکر شده است.

واژگـان کلیدی: زیست‌بوم کشاورزی، زمین‌های خشک، ال‌مغیر، Philodromidae، Salticidae، Theridiidae، Thomisidae