Arachnological contributions

Contribution to the knowledge of the spider fauna of Morocco (Arachnida: Araneae) – Second note

On new species and new records from caves and miscellaneous terrestrial ecosystems

Sylvain Lecigne, Soumia Moutaouakil and Josiane Lips

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Authors:

Sylvain Lecigne
406, rue d'Aubencheul, 59268 Fressies, France. E-mail: lecigne.sylvain@bbox.fr

Soumia Moutaouakil
Laboratoire d'Amélioration de la Production Agricole, Biotechnologie et Environnement (LAPABE), Faculté des Sciences Oujda, Université Mohammed Premier; Muséum d'Histoire Naturelle de Marrakech, Université Cadi Ayyad, Morocco. E-mail: moutaouakil.soumia@gmail.com

Josiane Lips
Fédération Française de Spéléologie, Groupe d'Étude de Biospéologie. E-mail: josiane.lips@free.fr

Website: https://belgianspiders.be/category/arachnologische-bijdragen/

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Front cover: Female of *Eratigena africana* (Lucas, 1846) **comb. nov.**, a species that had not been recorded since its description (WSC 2024). It was originally discovered in Algeria "dans les bois du lac Houbeira" (El Kala). In Morocco, we found it in 3 localities, but only in caves. This species is probably widely distributed between the Middle Atlas Mountains and northeastern Algeria. The publication of photos and drawings of genitalia of both sexes should help to facilitate its identification and, hopefully, clarify its distribution and ecology. © B. Lips

Contents

Abstract

A survey of spiders from Moroccan caves is provided (Arachnida: Araneae), collected between November 2018 and August 2024. All material originates from 33 caves in various mountainous areas, from Bedouza to Aziza, Taza and Beni Ayat. Several other ecosystems were also surveyed (e.g. coastal habitats, high altitude lakes and meadows, ancient forests, lapiaz, etc.). In total 225 species and 35 families were recorded. 24 species are new to science: *Dysdera andreae* Lecigne **sp. nov.**, *Dysdera mariae* Lecigne **sp. nov.**, *Eresus almaghrib* Szűts, Lecigne & Moutaouakil **sp. nov.**, *Eresus gharbi* Szűts, Lecigne & Moutaouakil **sp. nov.**, *Gnaphosa afnourir* Lecigne **sp. nov.**, *Lycosoides toubkal* Lecigne **sp. nov.**, *Megalepthyphantes salam* Lecigne **sp. nov.**, *Nomisia amizmiz* Lecigne **sp. nov.**, *Phrurolithus sandrae* Lecigne **sp. nov.**, *Tapinocyba ifrane* Lecigne **sp. nov.**, *Textrix denisi* Lecigne **sp. nov.**, *Turkozelotes africanus* Lecigne **sp. nov.**, *Zelotes lapiazi* Lecigne **sp. nov.**, *Zodarion camillae* Lecigne **sp. nov.**, *Zodarion ghamizii* Lecigne & Moutaouakil **sp. nov.**, *Zodarion legrouni* Lecigne & Lips **sp. nov.**, 8 of which may be considered troglophile i.e. *Lepthyphantes* s. lat. *brahimi* Lecigne & Moutaouakil **sp. nov.**, *Eratigena boussalhami* Lecigne **sp. nov.**, *Eratigena chefchaouen* Lecigne & Bosmans **sp. nov.**, *Lycosoides taghzout* Lecigne **sp. nov.**, *Tegenaria azilaneensis* Lecigne **sp. nov.** or troglobiont i.e. *Diplocephalus bosmansi* Lecigne **sp. nov.**, *Dysdera guennouni* Lecigne, Szűts & Moutaouakil **sp. nov.**, *Oecobius chassieri* Lecigne & Moutaouakil **sp. nov.**. The female of *Dysdera caeca* Ribera, 1993 and the male of *Eratigena africana* (Lucas, 1846) **comb. nov.** were discovered and are described for the first time. 51 other records represent new species records to Africa or to the fauna of Morocco e.g. *Amphiledorus histrionicus* (Simon, 1885),

Canariphantes naili (Bosmans & Bouragba, 1992), *Castianeira badia* (Simon, 1877), *Micaria corvina* Simon, 1878, *Ozyptila judaea* Levy, 1975, *Pterotricha schaefferi* (Audouin, 1826), *Scotophaeus dolanskyi* Lissner, 2017, *Thanatus setiger* (O. Pickard-Cambridge, 1872). *Dysdera seclusa* Denis, 1961 and *Dysdera tenuistylus* Denis, 1961 are poorly known species; we provide a redescription based on specimens of both sexes; the male of *Echemus* cf. *escalerai* Simon, 1909 and *Zelotes erythrocephalus* (Lucas, 1846), the female of *Zodarion azrouense* Bosmans & Benhalima, 2020, *Lepthyphantes biospeleologorum* Barrientos, 2020 and *Micropholcus khenifra* Huber, Lecigne & Lips 2024 are described and illustrated as well. The findings of several other species already known from Morocco are noteworthy taxa (either endemic or recently described species, but also species with a poorly known taxonomy, ecology or distribution) and hence represent important records for the local fauna e.g. *Apostenus humilis* Simon, 1932, *Apostenus maroccanus* Bosmans, 1999, *Ariadna maroccana* Wunderlich, 2011, *Heliophanus machaerodus* Simon, 1909, *Lepthyphantes imazigheni* Barrientos, 2020, *Menemerus guttatus* Wesołowska, 1999, *Micropholcus ghar* Huber, 2024, *Micropholcus tegulifer* Barrientos, 2019, *Pellenes maderianus* Kulczyński, 1905, *Rhode scutiventris* Simon, 1882, *Steatoda koeni* Van Keer, 2024, *Trichoncus* cf. *uncinatus* Denis, 1965. Drawings and photographs of most of these species are provided.

Introduction

This second note aims to achieve the same objectives as defined and presented in the previous paper (LECIGNE et al. 2023). Thus, it is intended to discover and promote the specific richness of Morocco's spiders and, as far as possible, to contribute to the improvement of knowledge, especially with regard to the ecology of the species. These are essential first steps before considering the protection of species in need, as well as their habitats. The first note related to samples collected between 2010 and 2022. They yielded 8 species new to Morocco, 6 of which were new to science. At the time, we pointed out that Morocco's spider fauna numbered just 487 species. A few months later, BENHALIMA & BOSMANS (2024) drew up the first historical checklist of spiders, which reveals 549 species for the country.

While the paper of these authors provides a much-needed snapshot of the state of knowledge at the end of 2024, it is not unwise to consider that we are still far from grasping the limits of the overall species richness of Moroccan spiders given the great diversity of landscapes, ecosystems and biogeographic sectors. Morocco's protected areas, i.e. the 10 National Parks and 154 Sites of Biological and Ecological Interest (SIBE's) covering wetlands, continental environments and the coastal zone, perfectly illustrate the great diversity of the ecosystems present, from the wooded coastal dunes of Essaouira to the highest mountains of the Middle and High Atlas (Bou Naceur, Toubkal), from coastal wetlands (estuary zone of the Lower Tahaddart Complex; Sidi Boughaba Lake, etc.) and dam lakes (e.g. Mohammed V) to grasslands and high-altitude lakes (e.g. Afnourir), from deserts and oases (Tafilalet, Tinghir, Fint, Tata and Figuig...) to steppes and forest ecosystems (e.g. old-growth forests in Ifrane and Khénifra National Parks, Upper Moulouya Valley).

In our first note, we highlighted the fact that subterranean environments were under-studied habitats, and we believe that this is also the case for many terrestrial ecosystems. The results we present below illustrate this statement. The national action plan for biodiversity in Morocco is based on 6 strategic axes (MINISTÈRE DE LA TRANSITION ÉNERGÉTIQUE ET DU DÉVELOPPEMENT DURABLE 2025). The present work and the sharing of its results are fully in line with these 2 axes: “Improve, enhance and share knowledge on national biodiversity” and “Strengthen the conservation of species, ecosystems and the services they provide”.

Material and methods

The present work is the result of ongoing surveys, covering the period 2018 - 2024. A total of 33 caves were surveyed, as well as several other terrestrial ecosystems. Most of the sites are located in Figure 1 and illustrated in Figures 2 and 3. The principal methods used were hand collection (especially under stones), beating, sieving and pitfall trapping. Several immature specimens were fed until maturity; this information is systematically specified. Position and elevation of localities were recorded by use of a smartphone's GPS; geographic coordinates are presented in the WGS 84 system.

All specimens were preserved in 70% ethanol for identification purposes. Species were examined using a Nikon SMZ800N and a Nikon SMZ1270 stereo microscope. Most of the photographs of genitalia were taken under an Olympus CH-2 microscope. Wherever possible, specimens were photographed in their habitat or in an environment that allowed photography. Some photographs were also taken through a stereo microscope ocular using a Huawei P30 pro smartphone. For identification we relied on several publications and reference websites including SIMON (1870, 1876, 1884, 1885, 1907, 1909, 1911, 1932), MACHADO (1949), DENIS (1956, 1961, 1966), BRIGNOLI (1971, 1976, 1978), WESOŁOWSKA (1986, 1999), LEVY (1991, 1995, 2002, 2003), BOSMANS (1999, 2006a, 2006b, 2007), BOSSELAERS (2009, 2010), BARRIENTOS et al. (2019, 2020, 2024), NENTWIG et al. (2025), OGER (2024) etc. Somatic measurements were made with a scaled eye-piece in the stereo microscope and are expressed in mm. Measurements of the legs were taken from the dorsal side. Type material as well as a few rarely recorded specimens were deposited at the Senckenberg Museum Frankfurt (SMF). Unless otherwise specified, non-type material is conserved in the private collection of the first author. The taxonomic status follows the WORLD SPIDER CATALOG (2024). Unless otherwise indicated, the terminology of genital structures follows SAARISTO & TANASEVITCH (1996) in Micronetinae and is inspired by ARNEDO et al. (2000) in *Dysdera* species. For the purpose of this study, we use the traditional speleobiological nomenclature (SKET 2008) to indicate ecological distributions of species: a troglobiont is strongly bound to hypogean habitats; a troglophile is able to maintain hypogean populations but relies on epigean habitats for some biological functions; a trogloxene occurs only sporadically in a hypogean habitat and is unable to establish stable subterranean populations.

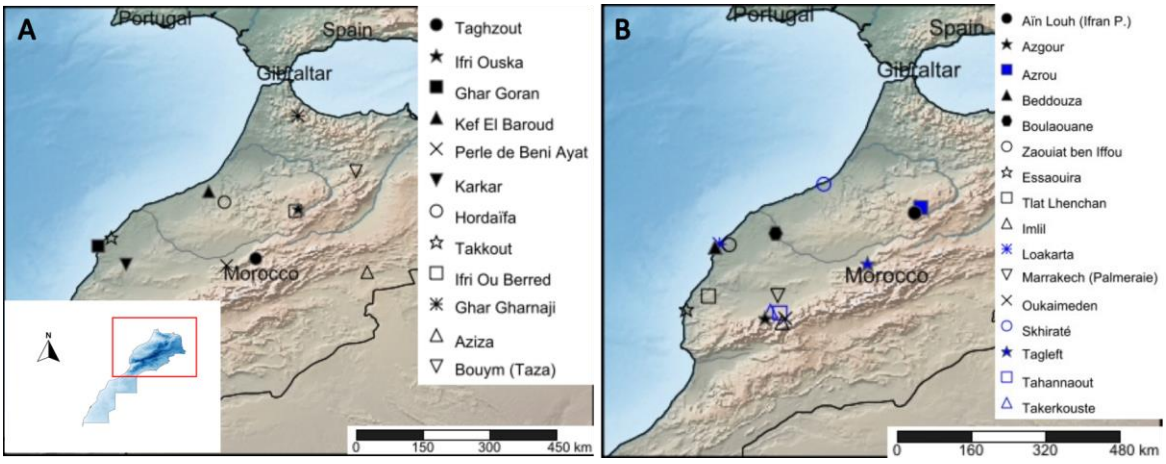

Figure 1: Geographical location of the study area; main sectors surveyed. **A.** Caves. **B.** Other habitats (Source: SHORTHOUSE 2010).

Abbreviations

AME – anterior median eyes; **AME-AME** – distance between AMEs; **CD** – copulatory duct; **CL** – carapace length; **CW** – carapace width; **E** – embolus; **Fe** – femur; **juv.** – juvenile; **MA** – median apophysis; **MNHNP** – Muséum national d'Histoire naturelle de Paris; **Mt** – metatarsus; **Pa** – patella; **PLE** – posterior lateral eyes; **PME** – posterior median eyes; **PME-PME** – distance between PMEs; **RTA** – retrolateral tibial apophysis; **SMF** – Senckenberg Museum Frankfurt; **Sp** – spermatheca; **Ta** – tarsus; **Te** – tegulum ; **Ti** – tibia; **WSC** – World Spider Catalog.
For genital characters, see also the legend of the figures.

Results

A total of 1,779 specimens from 225 species and 35 families have been recorded, 2 of which have yet to be confirmed. The complete list of records is presented in the Appendix 1 (Table A1).

Taxonomy

The findings of several species considered as noteworthy taxa (new species to science or for the Moroccan fauna; endemic species; recent description, poorly known ecology or distribution; few citations to date) are discussed in this part. Other spider species, most of which are either new to Africa or to Morocco or rarely recorded, are illustrated in Appendix 1; for several of them, a distribution map of the species in Morocco is added (Figs 102-109).

Class Arachnida Cuvier, 1812
Order Araneae Clerck, 1757
Family Agelenidae C. L. Koch,1837
***Eratigena* Bolzern, Burckhardt & Hänggi, 2013**

***Eratigena africana* (Lucas, 1846) comb. nov.**
(Figs 4A-I, 5A-F)

Identification

LUCAS (1846): p. 240, pl. 15, fig. 3.

Previous citation

LUCAS (1846, ♀ descr. as *Tegenaria africana*).

Type material

Holotype ♀ of *Tegenaria africana* from Algeria, El Kala; MNHNP-AR16032 (tube n°1298). Examined on the basis of photographs (Bosmans, pers. comm.).

New records

MOROCCO • 1♀, 5 juv.; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; in line with the chasm, by hand; ref. MOR_0906. 1♀, 5 juv.; Bab Boudir, Tazekka National Park, Bouslama cave; 34.09177°N, 4.11208°W; 1512 m a.s.l.; 20 Apr. 2019; S. Moutaouakil leg.; cave, by hand; ref. MOR_0326. Remark: abdomen and vulva separated. 1♂, 5♀♀, 5 juv.; Sidi El Makhfi, Ifrane national Park, Ifri Ou Berred; 33.26218°N, 5.24590°W; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_ 0899; 1♂, 2♀♀ deposited in SMF; remark: tip of embolus and conductor of male left pedipalp broken, left pedipalp detached; left chelicera separated.

Figure 2: Main habitats surveyed. **A.** Taghzout Ait Sidi Moha cave (Aghlef). **B.** Ifri Ouska cave (Aïn Louh). **C.**;Mixed *Cedrus* and *Quercus ilex* forest (Aïn Louh, Ifrane National Park). **D.** Rocky shrub slope of altitude (Azgour). **E.** Lawn on basalt field (Azrou). **F.** Pebble banks and stony slopes (Lalla Takerkouste lake). **G.** Karkar cave (Chemaia). **H.** Ghar Goran cave and calcicole fallow (lawn), beside crops (Kasbat Ayir). **I.** Lapiaz and Eucalyptus grove (Zaouiat ben Iffou). © A. S. Moutaouakil; B-I S. Lecigne.

Figure 3: Main habitats surveyed. **A.** Stony grassland on sand, along the coastline (Laakarta). **B.** Anthropized xerothermophilous scrubland (Palmeraie, Marrakech). **C.** Takkout cave (Oualidia). **D.** High altitude grassland (Oukaïmeden). **E.** Ifri Ou Berred cave (Sidi El Makhfi). **F.** High altitude xeric grassland (Tagleft). **G.** Pebble bank (Tahannaout, Oued Ghighaya). **H.** La Perle de Beni Ayat cave (Beni Ayat). **I.** Hordaïfa cave (Laghoualem). © S. Lecigne.

Comments

Lucas (1846) described a female from El Kala in Algeria as *Tegenaria africana*. During our expeditions, the species was found in 3 caves in Morocco in the northern part of the Middle Atlas. We redescribed here the female and describe for the first time the unknown male based on the specimens from Morocco, as well as on one male from Algeria (coll. R. Bosmans). The species is new to Morocco.

Diagnosis

Males of *Tegenaria africana* differ from other representatives of the Maghreb by the shape of its strongly sclerotized RTA and the presence of an additional short and robust ventro-retrolateral tooth (Fig. 4G, black arrow), as well as in the shape and size of the median apophysis (Fig. 4G, MA). Females of *T. africana* can be distinguished, firstly by the size and shape of the median plate and the anterior position of the copulatory openings (Fig. 5E, CO), and secondly by the size and shape of the spermathecae, massive and notably longer than wide.

Description

Male (Fig. 4A-I)

Measurements (n=1). Total length 11.50; carapace length 4.79, width 3.82, CL/CW 1.25.

Color. Carapace with cephalic part orange brown, thoracic part yellowish brown, margin black. Chelicerae reddish brown; sternum grey, median stripe and three lateral spots yellowish brown; legs yellowish brown, metatarsi and tarsi orange brown; abdomen grey suffused with pale grey, mostly in posterior part with traces of chevrons, venter grey, paler in the middle.

Chelicerae. Fang groove with 3 teeth on outer cheliceral margin, the middle one the largest, and 7 to 8 teeth on inner margin, proximally decreasing in size.

Palp (Fig. 4C-I). Tibia with strong, sclerotized dorso-retrolateral tibial apophysis (Fig. 4G, RTA), ventrally with a blunt denticle (Fig. 4G, dotted arrow) and a broad, triangular, short tooth (Fig. 4C; 4G, black arrow); tip of conductor in ventral view sigmoid, pointed backwards (Fig. 4I, C); embolus gradually narrowing, describing a semi-circle (Fig. 4H, E); median apophysis folded, its sclerotized part pointed towards the base of the embolus (Fig. 4H, MA).

Female (Fig. 5A-F)

Measurements (min.–max. (average)) (n=7). Total length 10.20–14.60 (12.40); carapace length 4.90–6.20 (5.60), width 3.45–4.25 (4.05), CL/CW 1.30–1.45 (1.39).

Color and *chelicerae*. As in male.

Epigyne/Vulva (Fig. 5C-F). Chitinisation variable; median plate mostly strongly chitinised, reddish to dark brown (Fig. 5-C); conspicuous copulatory openings, in a lateral position on the anterior margin of the median plate (Fig. 5E, CO); presence of a pair of posterior discrete teeth (Fig. 5E, ET). Spermathecae barely visible by transparency, located on either side of the median plate, massive, strongly and irregularly sclerotized, about 2.0 to 2.3 times longer than wide (Fig. 5F, Sp); antero-median copulatory ducts, strongly curved inwards, close or touching each other.

Distribution and habitat

Only known from Algeria (mainly in forests, also in abandoned fields, garden etc.) and Morocco (caves).

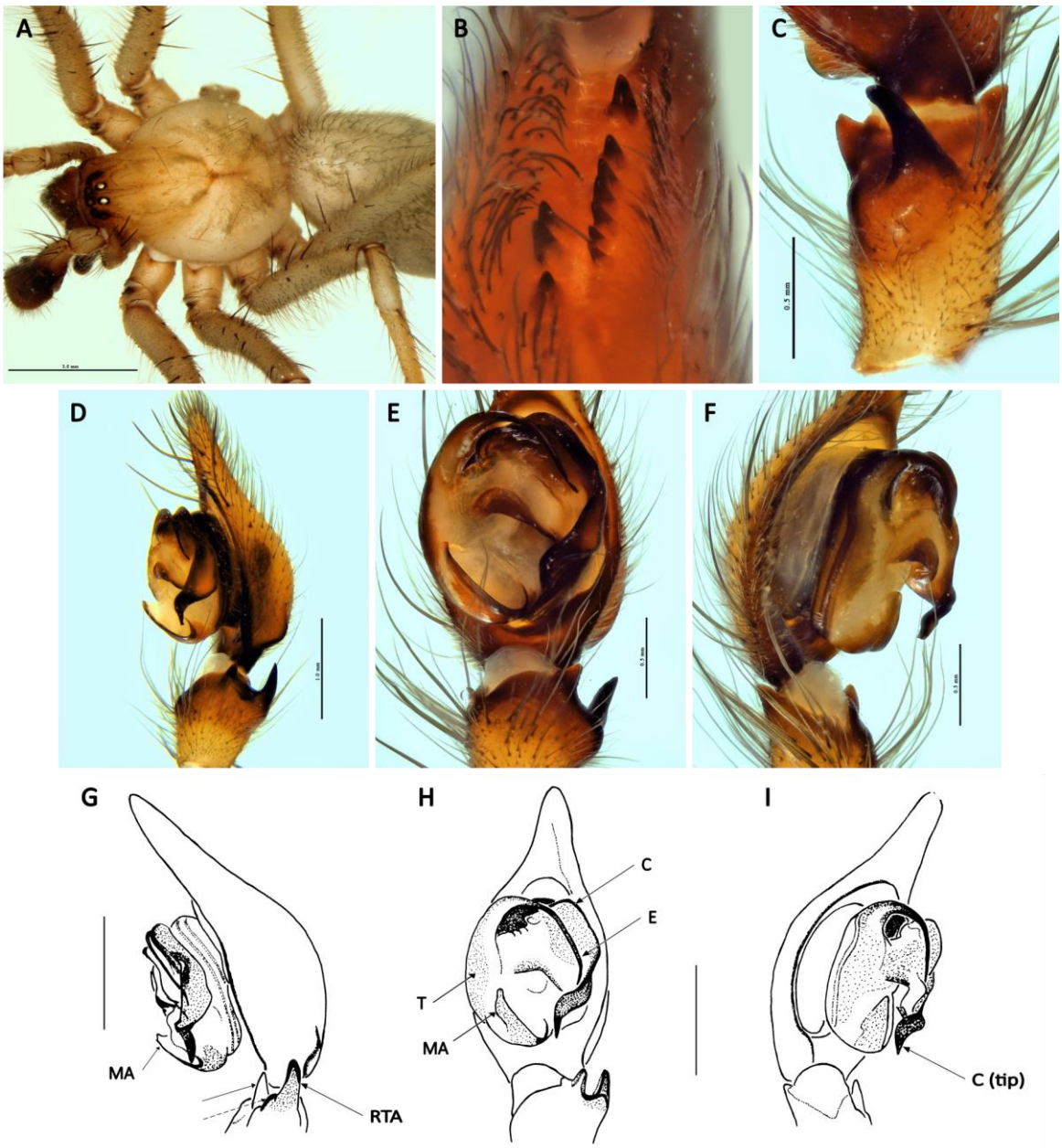

Figure 4: *Eratigena africana* (Lucas) **comb. nov. A–F.** Male (ref. MOR_0899). **G-I.** Male from Algeria. **A.** Dorsal view. **B.** Chelicera, fang furrow, ventral view. **C.** Palpal tibia, lateral view. **D, G.** Palp, retrolateral view (black arrow: additional tooth; dotted arrow: blunt denticle). **E, H.** Idem, ventral view. **F, I.** Idem, ventro-prolateral view. Photos © P. Oger. Abbreviations: C: conductor; E: embolus; MA: median apophysis; RTA: retrolateral tibial apophysis; T: tegulum. Scale bars: A = 3.0 mm; D, G-I = 1 mm; C, E–F = 0.5mm.

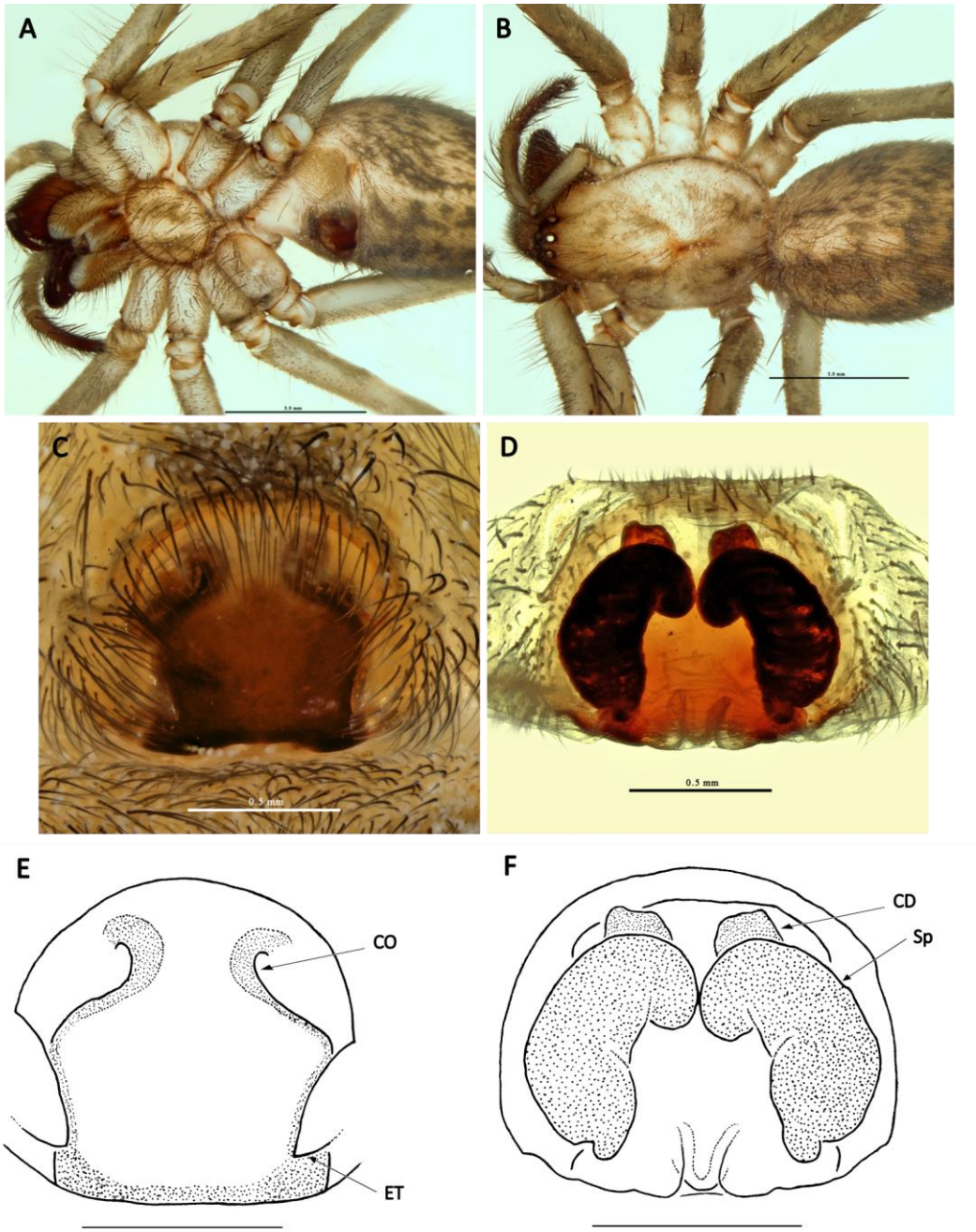

Figure 5: *Eratigena africana* (Lucas) **comb. nov.**, female (ref. MOR_0906). **A.** Dorsal view. **B.** Ventral view. **C, E.** Epigyne. **D, F.** Vulva, dorsal view. Photos © P. Oger. Abbreviations: CD: copulatory ducts; CO: copulatory openings; ET: epigynal teeth; MP: median plate; Sp: spermatheca. Scale bars: A, B = 3.0 mm; C–F = 0.5mm.

***Eratigena boussalhami* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/a190daca-edee-4d3b-95c6-01009be44b43

(Fig. 6A-I)

Diagnosis

The shape, size and position of the spermathecae dis2nguish *E. boussalhami* from all other females of *Era-gena* species known to date (see descrip2on).

Etymology

The name of this species refers to Abdellah Boussalham, who kindly shared with us this cave, recently discovered by his team of Moroccan biospeleologists from the "Association du Moyen et Haut Atlas de Spéléologie et de la Recherche Scientifique, Tourisme et Sports de Montagne", and who helped us to search for and sample this new species.

Material examined

Holotype
MOROCCO • 1♀; Beni Ayat, "La Perle de Beni Ayat" cave; 32.16140°N, 6.64220°W; 1387 m a.s.l.; 10 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, A. Boussalham leg.; cave, by hand; ref. MOR_0782. Remark: abdomen and vulva separated.

Paratype
MOROCCO • 1♀; same as holotype.

Description

Female holotype
Measurements. Total length 10.60, carapace length 4.70, width 3.50.
Color (Fig. 6A-B, F). Carapace pale brown, fovea darker as well as the edge of the carapace above the condyles. Chelicerae brown; sternum and legs yellowish brown; abdomen pale brown, cardiac mark orange-brown, grey markings on the lateral and dorsal sides in front of the spinnerets, venter pale brown.
Chelicerae (Fig. 6G). Fang groove with 3 teeth on outer cheliceral margin, the middle one the largest, and 8 teeth on inner margin (the six distal teeth conical and subequal; the two proximal teeth decreasing in size).
Epigyne/Vulva (Fig. 6E-I). Epigynal plate pale yellow, an opening (atrium) in its anterior part, wider than long, its anterior margin slightly chitinised; posterior part of the epigynal plate thickened, forming a slightly chitinised projection (also visible in lateral view); copulatory openings barely visible (Fig. 6H, CO); presence of a pair of posterior discrete teeth (Fig. 6H, ET). Spermathecae visible by transparency, located on either side of the epigynal plate, massive, strongly sclerotized, about 2 times longer than wide (Fig. 6I, Sp), straight; separated by about 1.2 times their width.

Male
Unknown.

Variation

Measurements (n=2): total length 10.60-11.60, carapace length 4.70-5.40, width 3.50-3.80. Fang groove with 3, less frequently 4 teeth on outer cheliceral margin.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Beni Ayat, province of Azilal), on the mid-western edge of the Moroccan High Atlas.

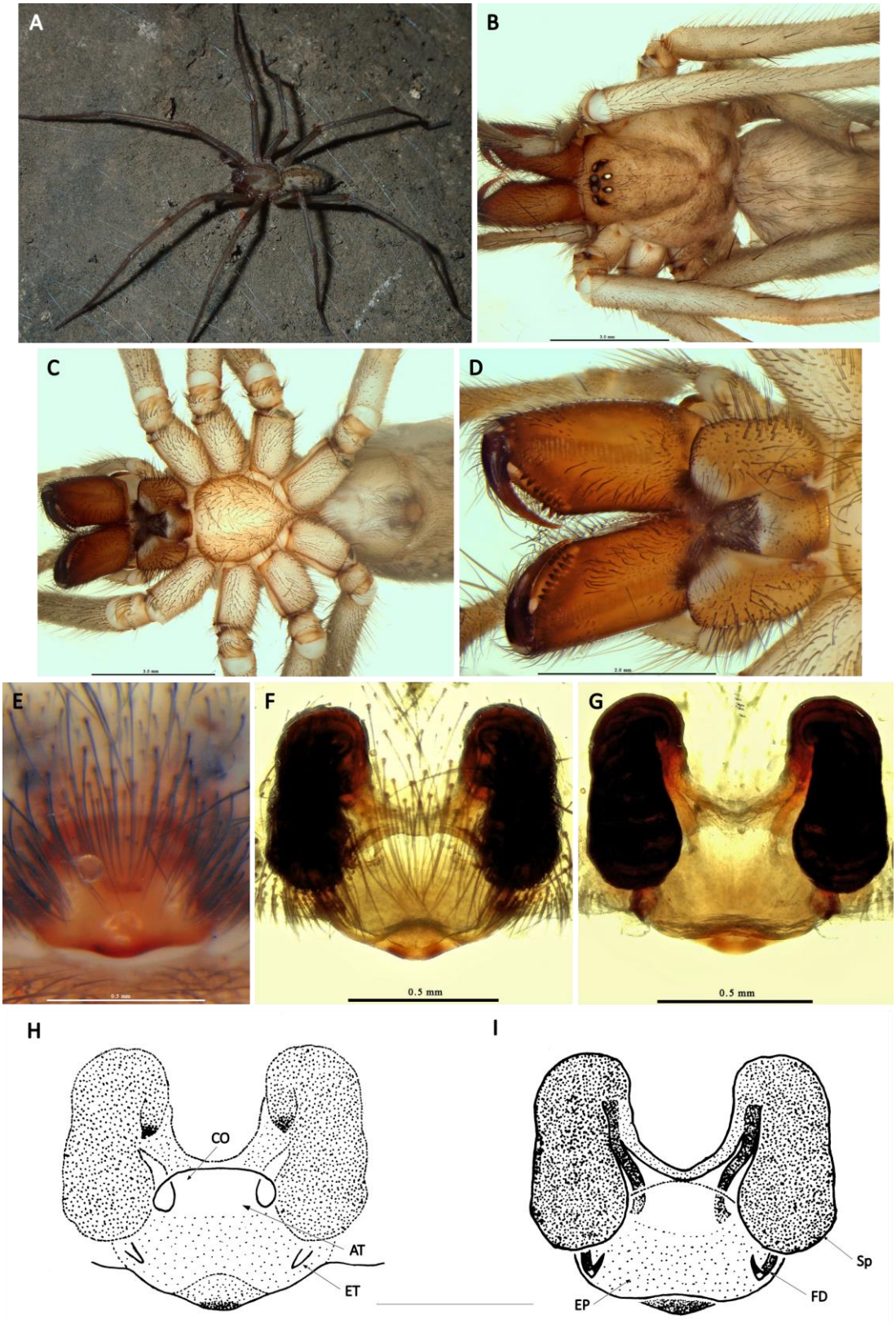

Figure 6: *Eratigena boussalhami* **sp. nov.**, female paratype (ref. MOR_0782). **A-B.** Dorsal view. **C.** Ventral view. **D.** Chelicerae, ventral view. **E.** Epigyne. **F, H.** Vulva, ventral view. **G, I.** Idem, dorsal view. Photos © A J. Lips, B-G P. Oger. Abbreviations: AT: atrium; CO: copulatory opening; EP: epigynal plate; ET: epigynal teeth; FD: fertilisation duct; Sp: spermatheca. Scale bars: A, C = 3.0 mm; E–I = 0.5mm; D = 2.0 mm.

***Eratigena chefchaouen* Lecigne & Bosmans sp. nov.**

https://zoobank.org/NomenclaturalActs/26d00b62-3638-4c6f-b691-514ce0724f96

(Fig. 7A-H)

Diagnosis

Eratigena chefchaouen **sp. nov.** is a species of small size; females can be distinguished from all other congeners by the lack of a median plate, the presence of an atrium, arch-shaped (Fig. 7C, G, AT), the copulatory openings directed outwards and the spermathecae not touching, about twice as long as wide

Etymology

The name of this species refers to the province of Chefchaouen where the species was first recorded.

Material examined

Holotype
MOROCCO • 1♀; Laghoualem, Cercle de Rommani, Hordaïfa cave; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_0851. Remark: abdomen and vulva separated; left legs I-II detached.

Paratypes
MOROCCO • 2♀♀; same as holotype.

Further material examined
MOROCCO • 3♀♀, 26 juv.; same as holotype. 1♀; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_1188.

Description

Female holotype (Fig. 7A-H)
Measurements. Total length 5.95, carapace length 2.90, width 2.08, CL/CW 1.40.
Color (Fig. 7A-B). Carapace yellow, cephalic part hardly darker; chelicerae pale orange to pale brown; legs and sternum yellow; abdomen pale grey with a vague pattern, venter paler.
Chelicerae. Fang groove with 3 triangular teeth on outer cheliceral margin, the middle one the strongest, and 8 conical teeth on inner margin of which 3 proximal minute ones.
*Epigyne/Vulva (*Fig. 7C-H). No median plate but an atrium, as long as wide, arch-shaped, its anterior margin visibly sclerotized (Fig. 7C, G); copulatory openings on either side of the atrium, directed outwards, also marked by a clearly more sclerotized area (Fig. 7G, CO); a pair of posterior discrete teeth; spermathecae oblique, about twice as long as wide, converging anteriorly but not touching (Fig. 7G, H, Sp).

Male
Unknown.

Variation

Carapace yellow, cephalic part sometimes hardly darker; chelicerae pale orange to pale brown; abdomen pale yellow to pale grey. Measurements (min.–max. (average)) (n=7): total length 4.60-6.00 (5.33), carapace length 2.15-2.90 (2.58), width 1.53-2.08 (1.82), CL/CW 1.40-1.45 (1.42). Fang groove with 5 teeth on inner cheliceral margin, and 3, less frequently 4 or 5 additional proximal minute teeth.

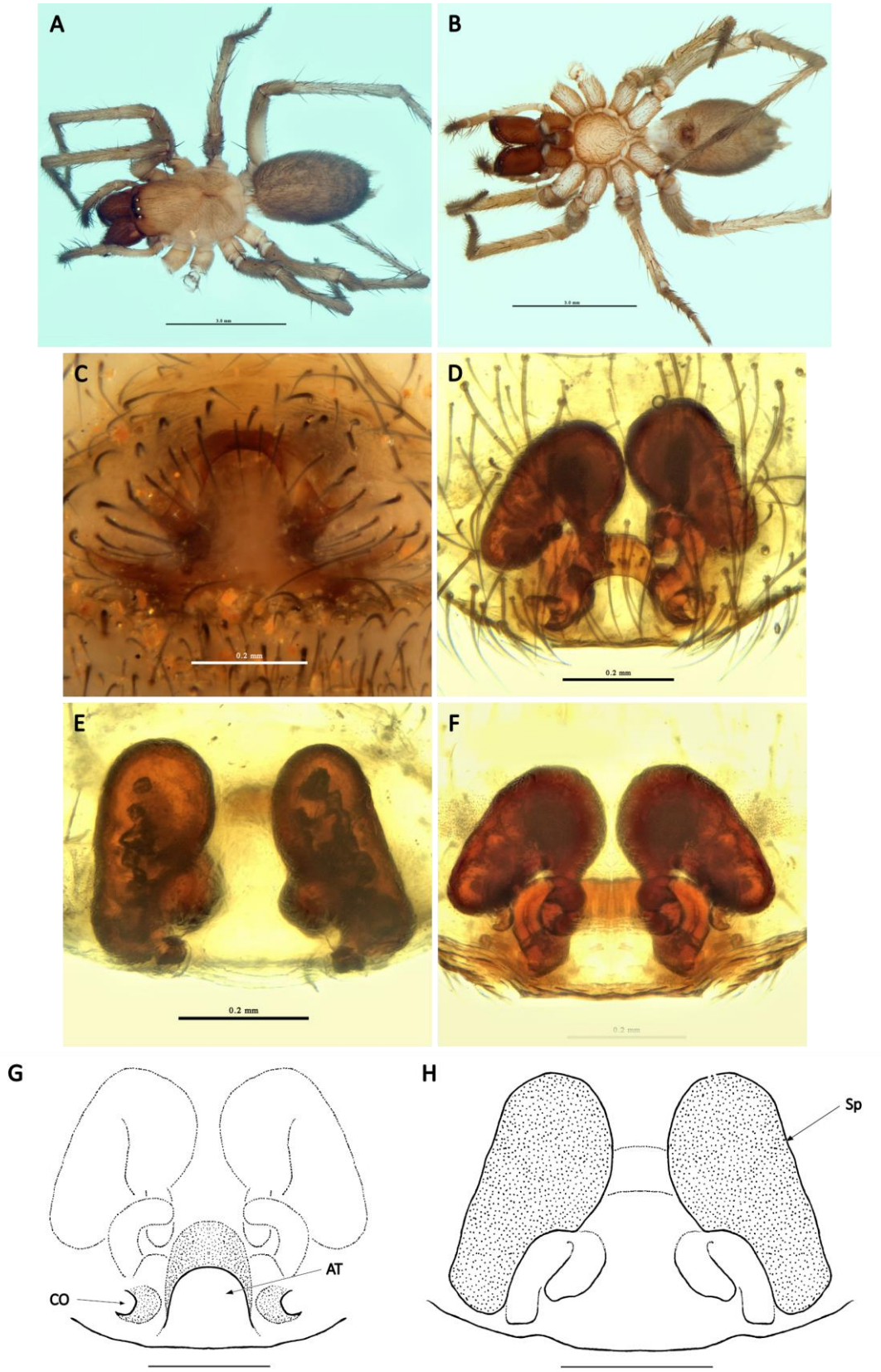

Figure 7A-H: *Eratigena chefchaouen* **sp. nov.**, female holotype (ref. MOR_0851). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne, postero-ventral view. **D, G.** Vulva, ventral view. **E, H.** Vulva, postero-dorsal view. **F.** Vulva, anterior view. Abbreviations: AT: atrium; CO: copulatory opening; Sp: spermatheca. Scale bars: A-B = 3 mm; C-H = 0.2 mm.

Distribution and habitat

Endemic to Morocco. Until now, known only to the provinces of Chefchaouen and Youssoufia. Troglophile species; so far found in one cave and under stones in an old olive grove.

***Lycosoides* Lucas, 1846**

***Lycosoides taghzout* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/B79B15EA-7D6A-4DCB-902A-B72804CEBD21

(Figs 8A-I, 9A-E)

Diagnosis

Males of *Lycosoides taghzout* **sp. nov.** can be distinguished from all other congeners on the patella by the absence of an apophysis and the presence of a single small tubercle, the shape and size of the retrolateral tibial apophysis, the existence of a strongly sclerotized structure forming a robust protuberance at basal part of dorsal branch of conductor (Fig. 9A, dotted arrow). Such a structure also exists in *Lycosoides parva* (Denis, 1954), but in the latter, the process is pointing in postero-dorsal direction, posteriorly in *L. taghzout*. Females of this species can be distinguished by the size and shape of spermathecae separated by less than 0.4 their diameter (Fig. 9E).

Etymology

The name refers to the cave, type locality of the species.

Material examined

Holotype

MOROCCO • 1♂; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.051000°W; 1059 m a.s.l.; 11 Nov. 2023; S. Lecigne leg.; cave, by hand; ref. MOR_0880. Remark: left pedipalp detached.

Paratypes

MOROCCO • 1♂, 2♀♀; same as holotype. Remark: abdomen and vulva of one female separated.

Further material examined

MOROCCO • 1♀, 1 juv.; same as holotype.

Description

Male holotype (Figs 8A-F, 9A-C)

Measurements. Total length 4.70, carapace length 2.27, width 1.56, CL/CW 1.46.

Color (from specimen in alcohol) (Fig. 8A). Carapace, sternum and legs pale yellow; fovea darker, thoracic part also with 4 pairs of yellowish radiating striae; chelicerae pale brown. Abdomen greyish; sides punctuated with light-colored dotted lines; light-colored median stripe stretching dorsally over the anterior two-thirds, 2 pairs of spots on either side of this stripe, a light-colored arc-shaped spot in front of the spinnerets, venter pale yellow.

Chelicerae. Fang groove with 3 teeth on outer cheliceral margin, the middle one the largest, and 2 teeth on inner margin (the proximal tooth shaped like an equilateral triangle; the distal tooth smaller, subconical).

Leg spination. Fe I-IV: 2 dorsal spines, 1 pair of latero-apical spines.

Palp (Figs 8B-F, 9A-C). Patella with small, retro-dorsal, sclero;zed boss; ;bia bulging dorsally, with slender retrolateral apophysis, terminally bent, distal part needle-shaped (Fig. 9A), addi;onally with a discrete ventro-retrolateral crest; basal part of dorsal branch of conductor a strongly

sclerotized structure forming a robust, protuberance pointing posteriorly (Fig. 9A, dotted arrow), dorsal part running retrolaterally behind the embolus (Fig. 9A, C), then twisted and ending in a "chistera" shape (Fig. 9B-C, CDB); ventral part of dorsal branch barely visible, translucent, pointing posteriorly (most visible in ventral view, Fig. 9B, black arrow); ventral branch of conductor (extension of the membranous connection) enlarged (Fig. 9B, CVB); embolus ending at about 4 o'clock position.

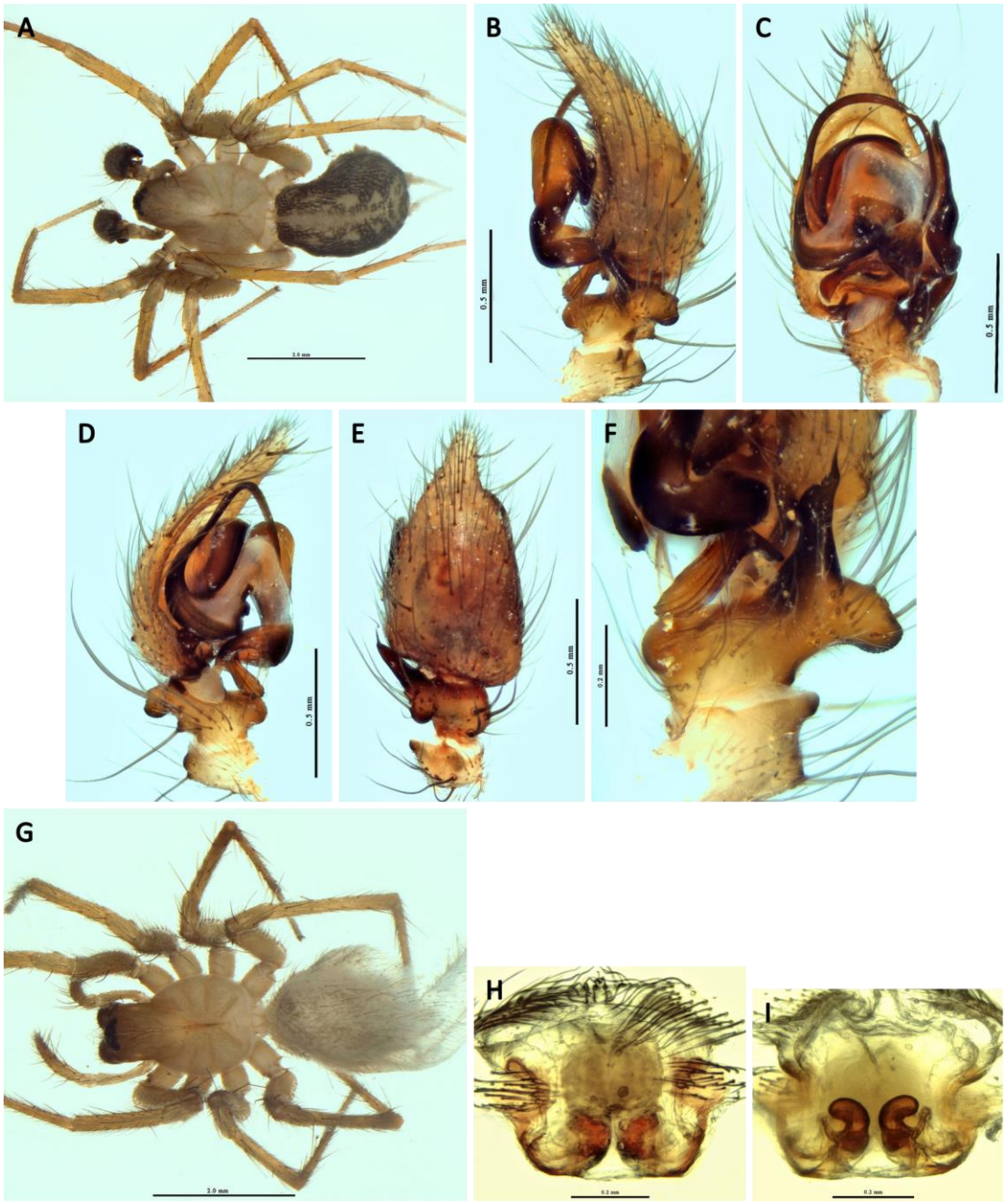

Figure 8: *Lycosoides taghzout* **sp. nov. A–F.** Male holotype (ref. MOR_0880). **G-I.** Female paratype (same ref.). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, ventro-prolateral view. **E.** Idem, dorsal view. **F.** Idem, retrolateral tibial apophysis. **G.** Dorsal view. **H.** Vulva, ventral view. **I.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, G = 2.0 mm; B–E = 0.5mm; F, H, I = 0.2 mm.

Female paratype (Figs 8G-I, 9D-E):

Measurements (n=2). Total length 5.00-5.10, carapace length 1.95-2.10, width 1.28-1.40, CL/CW 1.50-1.53.

Color (Fig. 8G). As in male; pattern less contrasted.

Leg spination. As in male.

Epigyne/Vulva (Figs 8H-I, 9D-E). Epigyne without any contrast except the greyish median part of epigynal plate; atrium barely distinguishable, whitish, wider than long. Spermathecae visible in posterior view (Fig. 9D, Sp), small, bean-shaped, separated at closest by about a third of their median width; tips pointing outwards (Fig. 9E).

Variation

Measurements (min.–max. (average)). Male (n=2): total length 4.70-5.00, carapace length 2.10-2.27, width 1.43-1.56, CL/CW 1.46-1.47. Female (n=3): total length 5.00-5.10 (5.05), carapace length 1.95-2.10 (2.05), width 1.28-1.40 (1.36), CL/CW 1.50-1.53 (1.51). Leg spination. Female: Fe I-II sometimes with a small additional dorso-apical spine; Fe III-IV with 2 (more rarely 1) dorsal spines.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Taghzout, province of Tinghir, Ait Sidi Moha cave), on the mid-eastern edge of the Moroccan High Atlas.

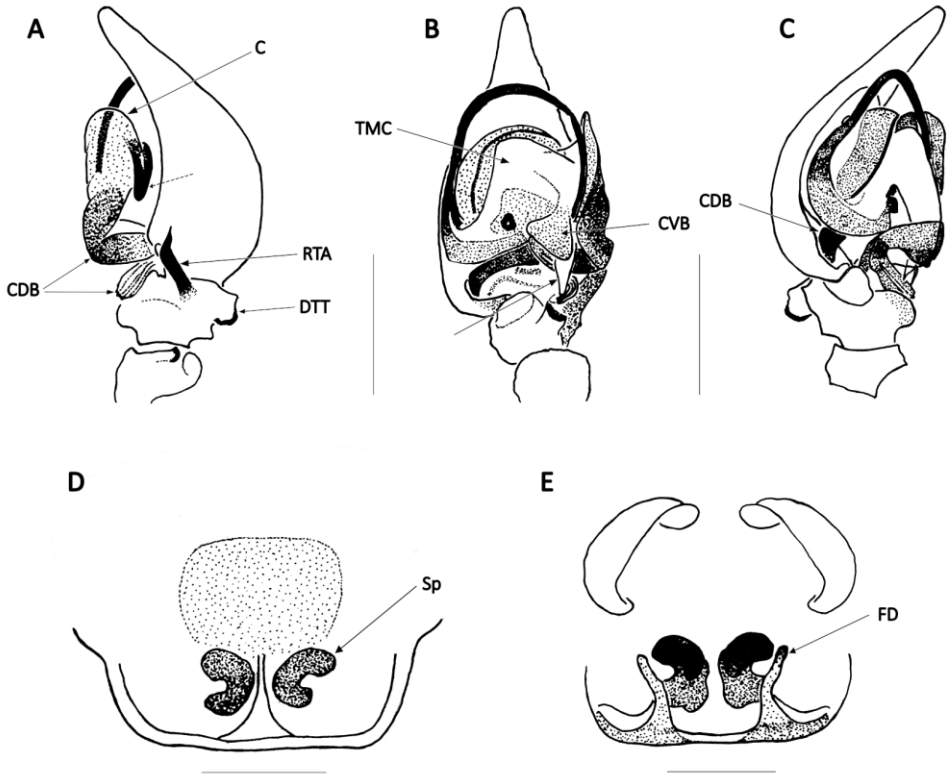

Figure 9: *Lycosoides taghzout* **sp. nov. A–C.** Male holotype (ref. MOR_0880). **D-E.** Female paratype (same ref.). **A.** Palp, retrolateral view (dotted arrow: protuberance of the basal part of dorsal branch of conductor). **B.** Idem, ventral view (black arrow: ventral part of dorsal branch of the conductor). **C.** Idem, ventro-prolateral view. **D.** Epigyne/vulva, posterior view. **E.** Vulva, dorsal view. Abbreviations: C: conductor; CDB: conductor, dorsal branch; CVB: conductor, ventral branch; DTT: dorsal tibial tubercle; E: embolus; FD: fertilisation duct; RTA: retrolateral tibial apophysis; Sp: spermatheca; TMC: transverse membranous connection. Scale bars: A-C = 0.5 mm; D–E = 0.2mm.

***Lycosoides toubkal* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/EC9655CE-B03F-4CAE-AC35-6E9638B81836

(Figs 10A-J, 11A-E)

Diagnosis

The male of the new species most resembles *Lycosoides instabilis* (Denis, 1954) but differs in particular in the shape of the ventral branch of the conductor, curved in ventral direction and not notched by the passage of the ventral part of the dorsal branch of the conductor in *L. instabilis*, straight and conspicuously indented medially by the passage of the ventral part of dorsal branch of the conductor in *L. toubkal* **sp. nov.**. The female can be distinguished from other representatives of the genus by the size of the epigynal atrium, barely wider than long (see the updated key below).

Etymology

The name refers to Jebel Toubkal, the highest peak in North Africa, on the first wooded slopes of which the holotype of the new species was found.

Material examined

Holotype
MOROCCO • 1♂; Imlil; 31.12864°N, 7.91906°W; 1878 m a.s.l.; 28 Mar. 2023; S. Lecigne, S. Moutaouakil & K. Lecigne leg.; rocky undergrowth on a slope, by hand; ref. MOR_0764. Remark: left pedipalp detached.

Paratypes
MOROCCO • 1♀; Akhlij, Ourika valley, le Jardin du Safran; 31.37814°N, 7.79025°W; 13 to 21 Feb. 2024; N. Hénon leg.; olive grove, pitfall; ref. MOR_1459. Remark: abdomen and vulva separated. 1♂; same data; ref. MOR_1460. Remark: left pedipalp detached; right leg I detached; left leg II missing.

Further material examined
MOROCCO • 1♂; same as holotype.

Description

Male holotype (Figs 10A-F, 11A-C)
Measurements. Total length 7.50; carapace length 4.00, width 2.60, CL/CW 1.54.
Color (from specimen in alcohol) (Fig. 10A). Carapace medium brown, posterior half of cephalic part lighter; sternum and legs medium brown, femora with dark ventral markings; fovea brown, finely marked and stretched (0.80-0.85 long); chelicerae brown. Abdomen greyish brown, a vague dorso-median pattern; venter greyish, area extending from behind the epigastric fold to the middle of the posterior spinnerets lighter.
Chelicerae. Fang groove with 3 teeth on outer cheliceral margin, the middle one the largest, and 3 to 4 teeth on inner margin, the proximal tooth the largest (when 4 teeth, the two middle ones side by side).
Leg spination. Fe I-IV: 3 dorsal spines, the apical one with a pair of lateral spines.
Palp (Figs 10B-F, 11A-C). Patella with a black antero-dorsal boss and one small retrolateral crest; tibia with a ventro-retrolateral crest, dorsal tubercle hardly pronounced, dorso-retrolateral apophysis robust, retrolaterally thickened giving a triangular appearance, clearly visible at its base, terminally pointed (Fig. 11A, RTA); dorsal branch of conductor ribbon-shaped with 3 ridges, terminally rounded, thickened and slightly curved (Fig. 11B, CDB); ventral part of dorsal branch forming a thin lamella (Fig. 11B-C, black arrow); ventral branch of conductor (extension of the

membranous connection) dorso-ventrally enlarged, with strongly serrated margin (Fig. 10B), indented medially by the passage of the ventral part of dorsal branch of conductor (Fig. 11A, space between the two dotted arrows), a dorso-retrolaterally lamellar extension in its distal part, tip bent and directed prolaterally (Fig. 11B, CVB); embolus partially twisted, of irregular thickness, terminally pointed, ending at about 4 o'clock position.

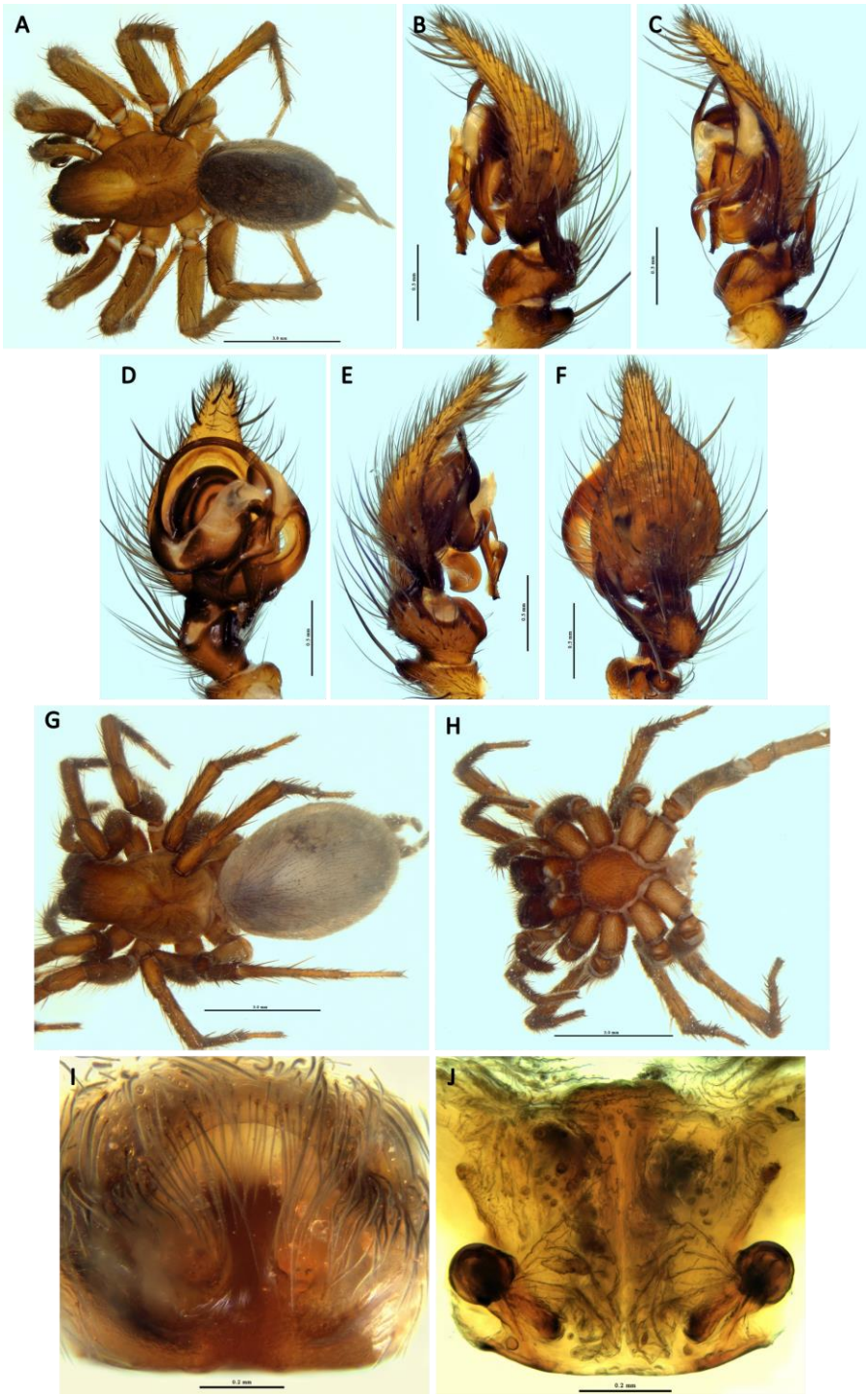

Figure 10: *Lycosoides toubkal* **sp. nov. A-F.** Male holotype (ref. MOR_0764). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventro-retrolateral view. **D.** Idem, ventral view. **E.** Idem, prolateral view. **F.** Idem, dorsal view. **G-I.** Female paratype (ref. MOR_1459). **G.** Dorsal view. **H.** Prosoma, ventral view. **I.** Epigyne. **J.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, G-H = 3.0 mm; B–E = 0.5mm; I-J = 0.2 mm.

Female paratype (Figs 10G-J, 11D-E)

Measurements (n=1). Total length 8.70; carapace length 3.95, width 2.45, CL/CW 1.61; epigynal atrium length 0.38, width 0.52

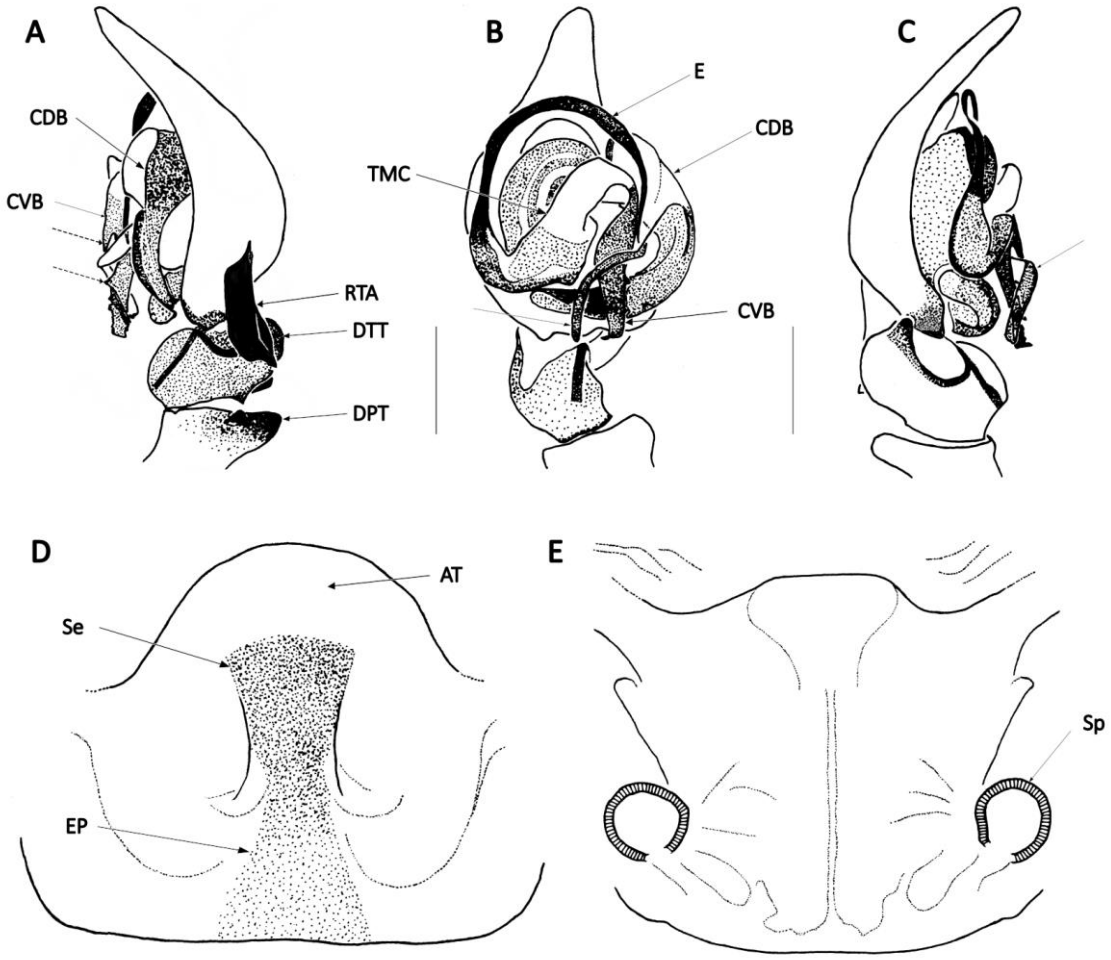

Figure 11: *Lycosoides toubkal* **sp. nov. A-C.** Male holotype (ref. MOR_0764). **A.** Palp, retrolateral view (dotted arrows: indentations of the ventral branch of the conductor). **B.** Idem, ventral view (black arrow: ventral part of dorsal branch of the conductor). **C.** Idem, postero-prolateral view (black arrow: idem). **D-E.** Female paratype (ref. MOR_1459). **D.** Epigyne. **E.** Vulva, dorsal view. Abbreviations: AT: atrium; CDB: conductor, dorsal branch; CVB: conductor, ventral branch; DPT: dorsal patellar tubercle; DTT: dorsal tibial tubercle; E: embolus; EP: epigynal plate; RTA: retrolateral tibial apophysis; Se: septum of the epigynal plate; Sp: spermatheca; TMC: transverse membranous connection. Scale bars: A-C = 0.5 mm; D-E = 0.2 mm.

Color (from specimen in alcohol) (Fig. 10G-H). Seems poorly preserved. Femora with 3 dark ventral markings (best visible on legs III-IV), more contrasted than in male holotype.

Leg spination. As in male.

Epigyne/vulva (Figs 10I-J, 11G-H). Epigynal plate conspicuously wider than long (ventral view); atrium transverse, barely (1.3x) wider than long, with rounded anterior margin, posteriorly with broad chitinized septum of the epigynal plate (Fig. 10I); spermathecae close to the posterior margin, small, rounded, separated by about 3.7 times their diameter (0.127 mm) (Fig. 11E, Sp).

Variation

Measurements (min.–max. (average)). Male (n=3): total length 7.50-9.60 (8.27), carapace length 4.00-4.85 (4.42), width 2.60-3.00 (2.80), CL/CW 1.54-1.62 (1.58).

Distribution and habitat

Endemic to Morocco. Only known from two localities in the province of Al Haouz, in the High Atlas Mountains, both in a natural site (on a wooded slope near Toubkal National Park) and in a cultivated area (olive grove of "Le Jardin du Safran").

Keys

We complete the keys to the *Lycosoides* species of the Maghreb (BOSMANS et al. 2022) by including the 2 new species described above. Figure numbers in italics refer to the publication by BOSMANS et al. (2022). Added text is in bold.

Males

1 Distal part of palpal femur with a retrolateral sclerotized fork-shaped incision (*fig. 38*, FI) ..... *incisofemoralis*
– Distal part of palpal femur without incision 2
2 Palpal patella with three tubercles, 2 dorsal and 1 retro-lateral (*figs 59, 61*); embolus long, forming ⅔ of a circle (*fig. 60*) ..... *kabyliana*
– Palpal patella at most with one tubercle (*figs 6, 17, 27,38, 49, 69, 78, 89, 98, 106, 115*); embolus shorter, forming half a circle (*figs 7, 18, 28*) 3
3 Tip of 'bial apophysis with a thorn (*figs 99, 101*, RTA) ..... *robertsi*
– Tip of tibial apophysis without thorn..... 4
4 Tip of tibial apophysis thread **or needle**-like (*figs 89, 92*, RTA) **4bis**
– Tip of tibial apophysis not thread **or needle**-like 5
4bis Part of the tip of ventral branch of conductor rounded and curved in antero-ventral direction (*fig. 89,* CVB) ..... *parva*
– Tip of ventral branch of conductor not rounded nor curved in antero-ventral direction (Fig. 9B, CVB) ..... ***taghzout***
5 Patella with dis,nct apophysis (*fig. 27, 71*) 6
– Patella without apophysis, at most with a small tubercle (*figs 6, 17, 49, 109*) 7
6 Patella with thick, terminally incised apophysis, not pointed (*figs 27, 31*, RPA) ..... *flavomaculata*
– Patella with slender, terminally pointed apophysis (*fig. 71*, RPA) ..... *leprieuri*
7 Tibia with a minute dorsal tooth (*fig*. 81, RTA) ..... *murphyorum*
– Tibia with well-developed pointed apophysis (*figs 6, 18, 50, 107, 116*) 8
8 Conductor *p with subterminal white, recurved process (*fig. 10*, RP) ..... *coarctata*
– Conductor *p without such process (*figs 18, 50, 107, 117*) 9
9 Tibia dorsally with a triangular tubercle (*fig. 106*); embolus with subterminal twist *(fig. 107)* ..... *saiss*
– Tibia dorsally with a rounded tubercle *(figs 16, 49, 115);* embolus without subterminal twist (*figs 18, 50*, *117*) 10
10 Legs annulated (*figs 35, 36*) ..... *instabilis*
– Legs not annulated (*figs 14–15, 113–114*) 11
11 Bulbus wider than long, with very wide conductor (*fig. 117*) ..... *variegata*
– Bulbus longer than wide, conductor less prominent (*fig. 18*) **12**
12 Ventral branch of conductor straight, formed of a single part, margin strongly serrated (Fig. 11A, CVB) ..... ***toubkal***

– Ventral branch of conductor oblique, formed of more than one part, margin not serrated (*fig. 17*) ..... *crassivulva*

Females (unknown in *L. robertsi*)

1 Epigynal atrium transverse, wider than long (**Fig. 11D**; *figs 11, 21*) **1bis**
– Epigynal atrium slightly longer than wide (f*igs 32, 43, 53, 63, 73, 83, 93, 110, 120*) 3
1bis Epigynal atrium transverse, 3–4× wider than long (*figs 11, 21*) 2
– Epigynal atrium slightly transverse, less than 2× wider than long (Figs 10I, 11D, AT) ..... ***toubkal***
2 Spermathecae bean-shaped, separated by less than 1 diameter (Fig. 9E) ..... ***taghzout***
– Spermathecae not bean-shaped, separated by at least 3 diameters (*figs 13, 23*) **2bis**
2bis Spermathecae small, separated by more than 5 diameters (*fig. 13)* ..... *coarctata*
– Spermathecae larger, separated by 3 diameters (*fig. 23*) ..... *crassivulva*
3 Epigynal atrium much longer than wide (*figs 43, 83*) 4
– Epigynal atrium not longer than wide (*figs 32, 53, 63, 73, 93, 110, 120*) 5
4 Spermathecae large, separated by less than 2 diameters; fer7lisation ducts prominent, having an oblique posi7on (*figs 44–45*) ..... *incisofemoralis*
– Spermathecae smaller, separated by more than 2 diameters; fer7lisation ducts not prominent, having a transverse posi7on (*figs 84–85*) ..... *murphyorum*
5 Atrium sickle-shaped (*fig. 73*) ..... *leprieuri*
– Atrium not sickle-shaped (*figs 32, 53, 63, 93, 110, 120*) 6
6 Atrium diamond-shaped, nearly touching the epigastric groove (*fig. 63*) ..... *kabyliana*
– Atrium not diamond-shaped, having a more anterior posi4on (*figs 32, 53, 110, 120*) 7
7 Atrium very small, quadrangular, only posterior margin sclero6zed; spermathecae having a posterolateral position (*figs 93–95*) ..... *parva*
– Atrium larger and of another form; spermathecae in a different position (*figs 32–34, 53–55, 110–112, 120–122*) 8
8 Atrium oval or rounded, with semi-circular anterior margin (*figs 110, 120*) 9
– Atrium rectangular or quadrangular, with anterior margin more angular (*figs 32, 53*) 10
9 Atrium rectangular to quadrangular (*fig. 110*) ..... *saiss*
– Atrium reversed trapezoid (*fig. 120*) ..... *variegata*
10 Atrium wider than long; spermathecae touching epigastric groove (*figs 32–34*) ..... *flavomaculata*
– Atrium as wide as long; spermathecae not touching epigastric groove (*figs 53–55*) ..... *instabilis*

Tegenaria Latreille, 1804

***Tegenaria azilaneensis* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/7378AA9F-52B1-4978-A0AC-133325EE4CA6

(Fig. 12A-G)

Diagnosis

Tegenaria azilaneensis **sp. nov.** resembles *Tegenaria montana* Deltshev, 1993 in its internal genital structures, i.e. the shape and course of the copulatory ducts, but differs in the absence of contact between them (Fig. 12E, G); they are separated by at least 5 times their width. It also differs in the appearance of its epigyne; in *T. azilaneensis* **sp. nov.**, the lateral margins of the median plate are strongly rounded, and the latter is disEnctly much wider than long (vs. the lateral margins are slightly curved inwards and the median plate is barely (about 1.45 times) wider than long.

Etymology

The name of this new species refers to the locality of Azilane, which hosts the cave from which it was discovered.

Material examined

Holotype
MOROCCO • 1♀; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Lecigne, J. Lips, P. Lips, S. Moutaouakil leg.; cave, by hand; ref. MOR_1284. Remark: abdomen and vulva separated; left leg IV detached; sub-circular latero-anterior parts of the median plate of the epigyne probably partially pluged.

Paratype
MOROCCO • 1♀. Remark: left legs III-IV detached

Further material examined
MOROCCO • 9 juv.; same as holotype.

Description

Female holotype (Fig. 12A-G)
Measurements. Total length 9.10, carapace length 4.15, width 2.90, CL/CW 1.43.
Color (Fig. 12A-B). Carapace: cephalic part yellowish, a pair of darker, parallel median lines, terminating slightly behind the PME-PME space and a pair of darker, stretched spots in a latero-posterior position (only slightly marked on the holotype); thoracic part whitish; fovea barely darker. Chelicerae brown. Sternum yellow with a whitish pattern consisting of a series of 3 more or less fused lateral spots and a thick median band narrowed posteriorly, the terminal part arrow-head shaped. Legs I-II yellowish pale brown, hind legs lighter; femora with 2 large dark rings, ventral side whitish. Abdomen whitish.
Chelicerae (Fig. 12C). Fang groove with 4 triangular teeth on outer cheliceral margin, the proximal one the smallest, and 5 teeth on inner margin (the 3 distal teeth conical, subequal; the proximal one the strongest).
Epigyne/Vulva (Fig. 12D-F). Epigynal plate pale yellow, about 2.2 times wider than long, without any conspicuous distinguishing features. Copulatory ducts wide, located on either side of the epigynal plate.

Male
Unknown.

Variation

Measurements (n=2): total length 9.10-9.30, carapace length 4.15-4.20, width 2.90-3.00, CL/CW 1.40-1.43. Fang groove with 5 teeth on inner margin, sometimes with an additional proximal minute tooth.

Distribution and habitat

Endemic to Morocco. Only known from the type locality, in one cave (Azilane, province of Chefchaouen).

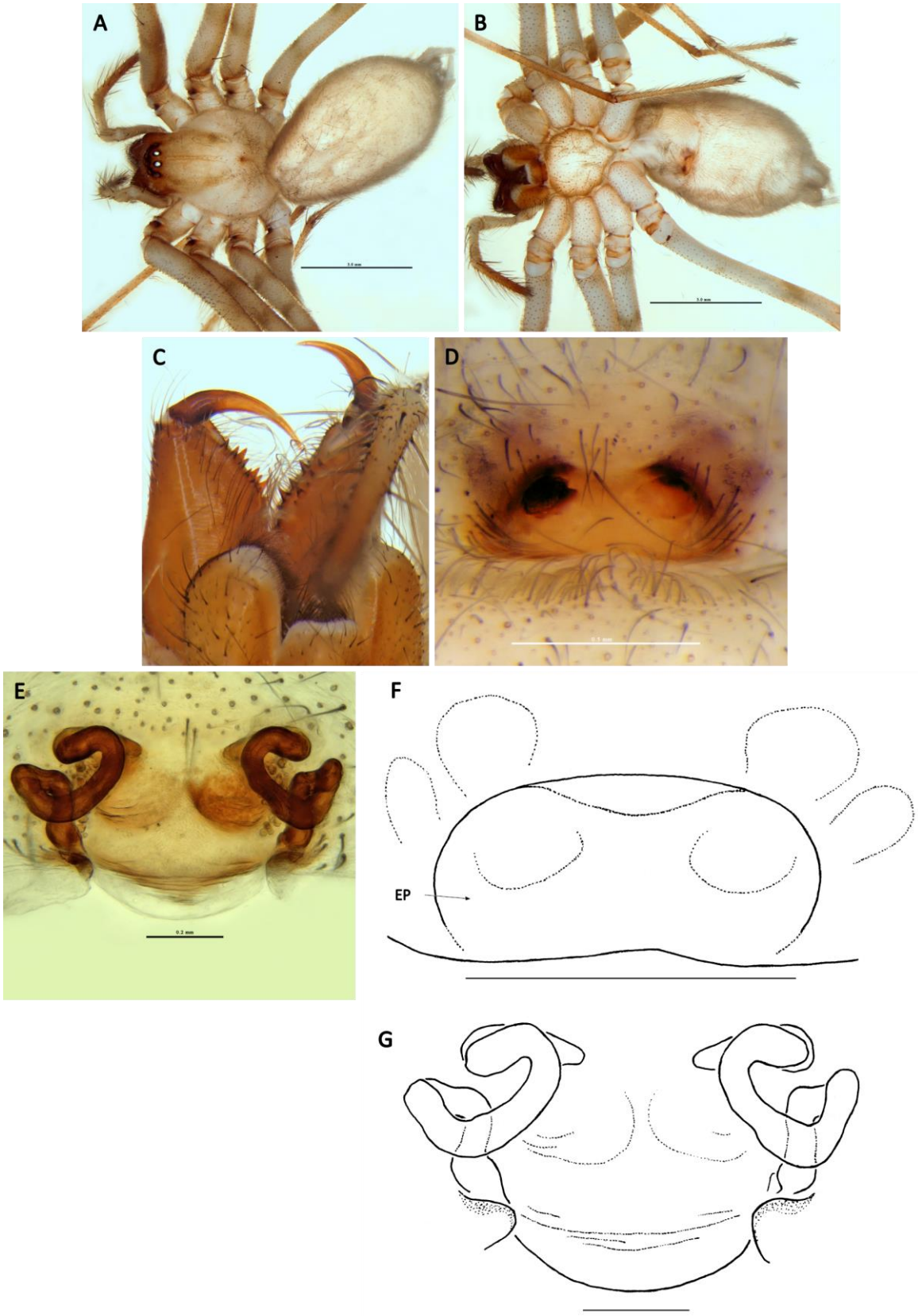

Figure 12: *Tegenaria azilaneensis* **sp. nov.**, female holotype (ref. MOR_1284). **A.** Dorsal view. **B.** Ventral view. **C.** Chelicera. **D, F.** Epigyne. **E, G.** Vulva, dorsal view. Photos © P. Oger. Abbreviations: EP: epigynal plate. Scale bars: A-B = 3 mm; D, F = 0.5 mm; E, G = 0.2 mm.

Textrix Sundevall, 1833

***Textrix denisi* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/35500AB0-06E0-4ABB-87D2-F6F7F22A73C5

(Fig. 13A-I)

Diagnosis

Textrix denisi **sp. nov.** differs from all other representatives of the genus mainly in the shape of its epigynal plate, i.e. considerably wider than long, with a broad hood largely covering the atrium (Fig. 13I), and the indistinguishable protusion at the posterior margin of the median plate.

Etymology

This new species is named in homage to Jacques Denis, one of the specialists involved in highlighting the remarkable diversity of Moroccan spiders. Also through his work on the spider fauna of northern France, he greatly inspired the first author in his curiosity and his outlook on spiders.

Material examined

Holotype
MOROCCO • 1♀; Chefchaouen, Talambote, Talassemtane National Park, Kehf Bradâa; 35.19496°N, 5.18005°W; 843 m a.s.l.; 8 Aug. 2024; S. Lecigne, P. Lips leg.; cave, by hand; ref. MOR_1265. Remark: abdomen and vulva separated.

Paratype
MOROCCO • 1♀; Afaska, Talassemtane National Park, Kehf Fouk Anser Afaska; 35.16007°N, 5.18846°W; 1340 m a.s.l.; 15 Aug. 2024; B. Lips leg.; cave, by hand; ref. MOR_1476.

Further material examined
MOROCCO • 1♀, 4 juv.; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Lecigne, S. Moutaouakil, J. Lips leg.; cave, by hand; ref. MOR_1285. 3 juv.; same as holotype.

Description

Female holotype (Fig. 13A-F)
Measurements. Total length 6.45, carapace length 2.75, width 1.82, CL/CW 1.52.
Color (Fig. 13A-B). Carapace pale brown, rear part of the cephalic region lighter, fovea darker. Chelicerae brown; sternum and legs yellowish brown, femora and tibiae respectively with 3 and 2 large ventral dark blotches; abdomen anthracite, median part with a pattern formed by 3 pairs of small whitish spots followed at the rear and reaching the spinnerets by 4 to 5 fine light chevrons; sides mottled, venter pale brown.
Chelicerae. Fang groove with 2 triangular teeth on outer cheliceral margin, and 3 triangular teeth on inner margin (the distal one the smallest, the middle one the widest.
Epigyne/vulva (Fig. 13C-F). Epigynal plate pale yellow, 4 times wider than long; an opening (atrium) in its median part, in ventral view almost entirely covered by a kind of wide hood formed by an extension of the anterior margin of the epigynal plate (Fig. 13I; not visible on postero-ventral views, Fig. 13C, E); posterior margin of the epigynal plate slightly chitinised; with an additional posterior inconspicuous projection (Fig. 13E, dotted arrow); internal extension of the epigynal plate, triangle-shaped with rounded corners, pointing forwards (Fig. 13D-F, IP). Spermathecae sub-circular, located posteriorly, on either side of the internal extension of the epigynal plate (Fig. 13D-F, Sp), separated by about 1.3 times their width.

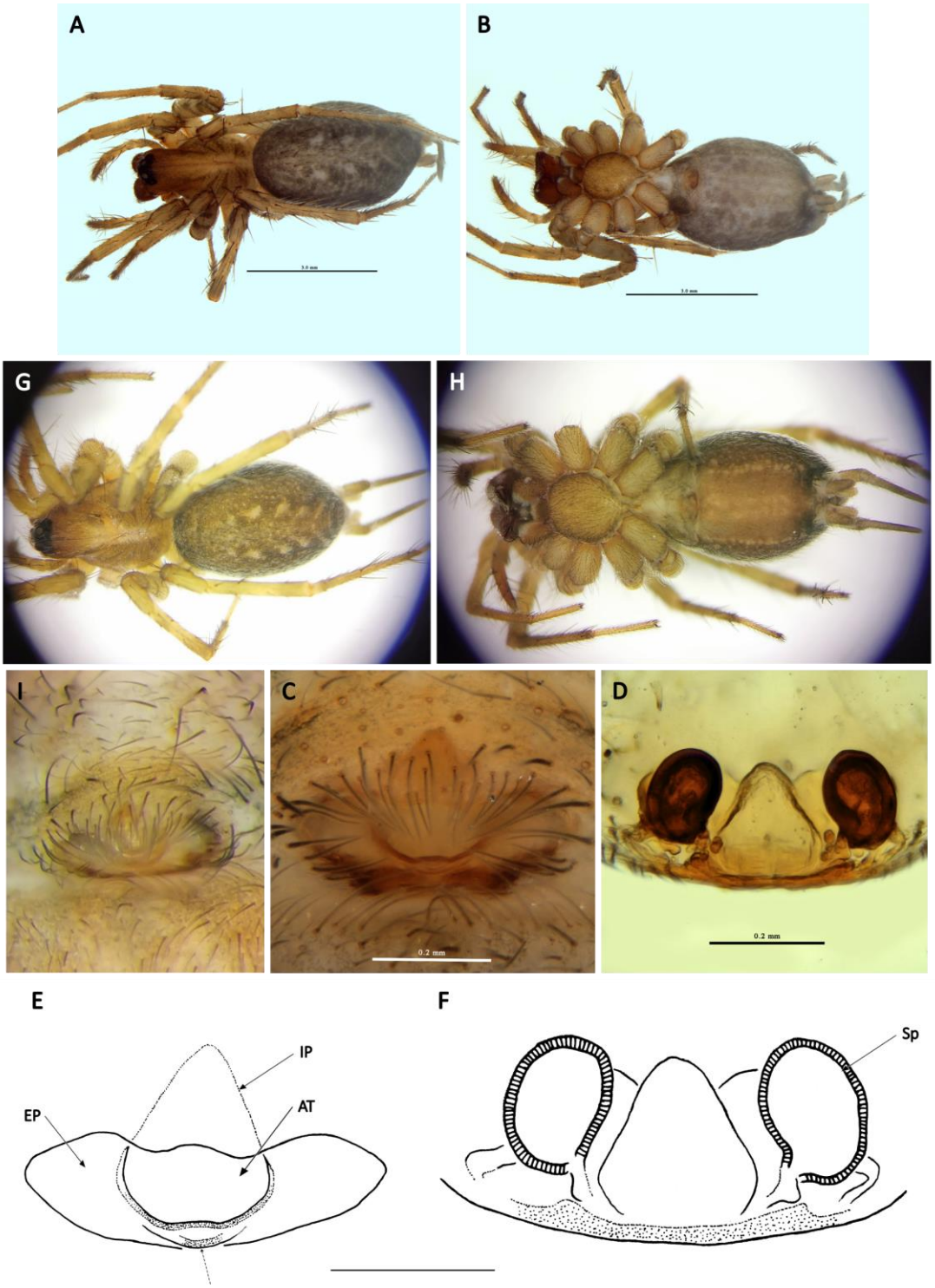

Figure 13: *Textrix denisi* **sp. nov. A-F.** Female holotype (ref. MOR_1265). **A.** Dorsal view. **B.** Ventral view. **C, E.** Epigyne, postero-ventral view (dotted arrow: chitinised projection of the posterior part of the epigynal plate). **D, F.** Vulva, dorsal view. **G-I.** Female paratype (ref. MOR_1476). **G.** Dorsal view. **H.** Ventral view. **I.** Epigyne, ventral view. Photos © A-F P. Oger; G-I S. Lecigne. Abbreviations: AT: atrium; EP: epigynal plate; IP: internal extension of the epigynal plate; Sp = spermatheca. Scale bars: A-B = 3 mm; C-F = 0.2 mm.

Male

Unknown.

Variation

Measurements (n=2): total length 6.45-8.45, carapace length 2.75-3.33, width 1.82-2.25, CL/CW 1.48-1.52. Color. Sternum and legs yellow to pale brown. Abdomen with a grey or brown tinge.

Distribution and habitat

Endemic to Morocco. Only known from three caves on the Rif Mountain range, in the Talassemtane National Park (province of Chefchaouen).

Family Cheiracanthiidae Wagner, 1887
***Cheiracanthium* C. L. Koch, 1839**

***Cheiracanthium furculatum* Karsch, 1879**
(Fig. 14A-C)

Identification
ROZWALKA et al. (2017): p. 62, fig. 1e

Previous citation in Morocco
BAYER (2014).

New records
MOROCCO • 1♀; Marrakech; 31.64942°N, 8.01080°W; 438 m a.s.l.; 25 Apr. 2022; S. Moutaouakil leg.; in a house, by hand; ref. MOR_0588. 1♀; Mesfioua-Zat, Tassourte river; 31.46083°N, 7.54033°W; 964 m a.s.l.; 15 Oct. 2022; N. Fetnassi leg.; near a river, by trap; det. S. Lecigne, P. Oger; ref. MOR_0519.

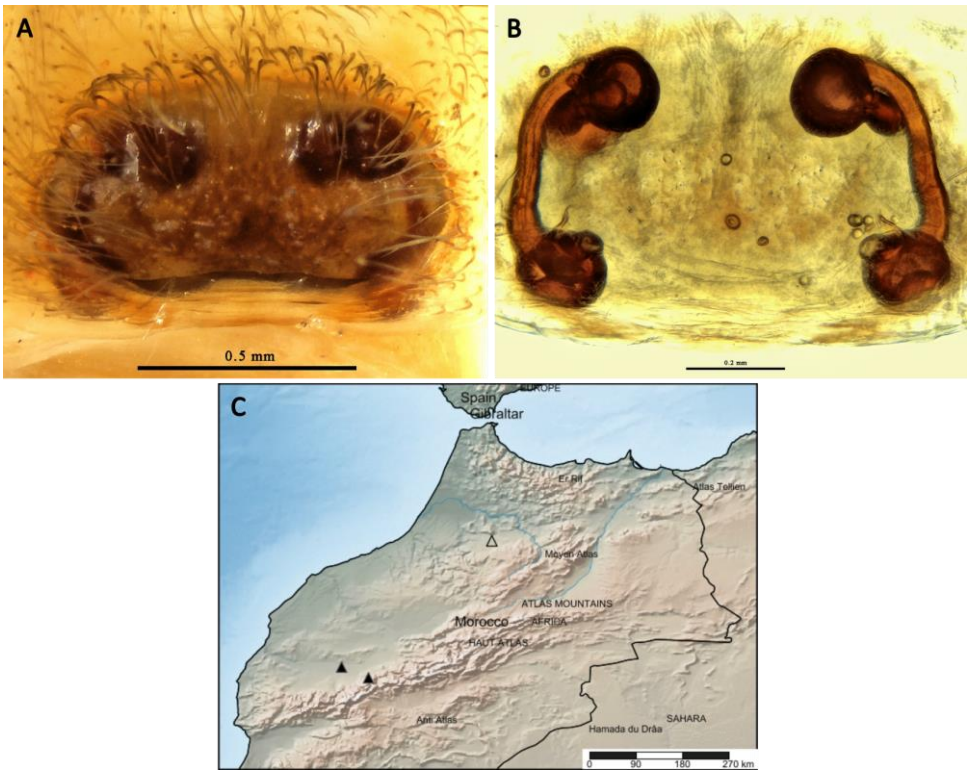

Figure 14: *Cheiracanthium furculatum*. **A-B.** Female (ref. MOR_0519). **A.** Epigyne. **B.** Vulva, ventral view. **C.** Records from Morocco; open triangle = previous citation; solid triangle = new record. Photos © P. Oger. Scale bars: A = 0.5 mm; B = 0.2 mm.

Comments

Cheiracanthium furculatum is an African species, described from Gabon and widespread throughout Africa. It is commonest in its southern part. The species was introduced in several European countries. It is already known from Morocco (indirect record) resulting from a transfer to Germany from the vicinity of Meknes via the import of white grapes (approximately N33°51'33.57", W5°23'05.39") (BAYER 2014). ROZWALKA et al. (2017) report the introduction of the species into Poland with grapes also from Morocco, however without specifying the locality of origin. Figure 10C shows the known distribution of the species in Morocco; these are the most northerly records of *C. furculatum* in its natural range. Our observations represent the second and third records of the species for Morocco from both open and synanthropic biotopes. About its description and variation of male and female copulatory organs, see BAYER 2014. About its behavior as synanthropic species (araneism) and importance as agrobiont species, see DIPPENAAR et al. 2021.

Family Dysderidae C. L. Koch, 1837

***Dysdera* Latreille, 1804**

***Dysdera andreae* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/A010D368-BFF4-4044-8A55-00885D9BFA49

(Figs 15A-J, 16A-E)

Diagnosis

The male of *Dysdera andreae* **spec. nov.** can be distinguished from other representatives of the species complex by the peculiar shape of the distal apophysis (raptor-beak-shaped, Fig. 16A, see D). The female can be recognized by the umbrella-shaped appearance of the spermatheca (Fig. 16D, Sp).

Etymology

The name of this new species is a tribute in memory to the first author's mother, Andrée Lecigne.

Material examined

Holotype

MOROCCO • 1♂; Laakarta, Kasbat Ayir; 32,64970°N, 9,13077°W; 78 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand; ref. MOR_1034.

Paratypes

MOROCCO • 1♀; Beddouza, Kasbat Ayir; 32.58990°N, 9.21719 W; 6 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; seafront, under stones, by hand; ref. MOR_ 1049. Remark: abdomen and vulva separated. 1♂; Zaouiat ben Iffou, Tnine Lgharbia; 32.63807°N, 8.94409°W; 125 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; eucalyptus grove, sandy soil on limestone, under a stone, by hand; ref. MOR_1015. Remark: left pedipalp detached.

Further material examined

MOROCCO • 2♂♂; same as holotype. 1♂; Zaouiat ben Iffou, same as paratype. 1♀; Laakarta, Kasbat Ayir; 32,64970°N, 9,13077°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand; ref. MOR_1034. Remark: specimen lost.

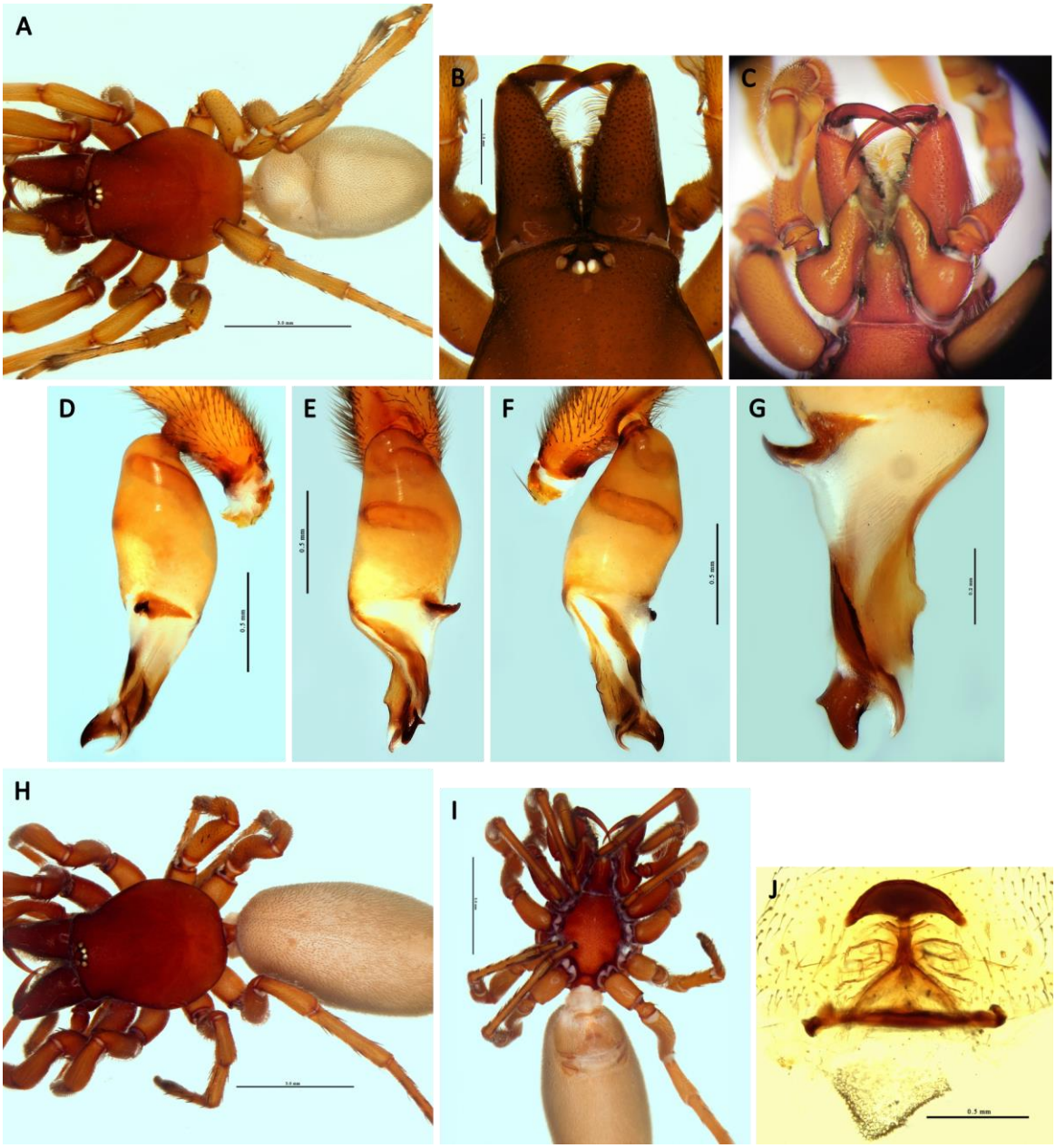

Figure 15: *Dysdera andreae* **sp. nov. A–G.** Male paratype (ref. MOR_1015). **H-J.** Female (ref. MOR_1034). **A.** Dorsal view. **B.** Carapace, cephalic part, dorsal view. **C.** Idem, ventral view. **D.** Palp, antero-retrolateral view. **E.** Idem, anterior view. **F.** Idem, antero-prolateral view. **G.** Idem, dorso-retrolateral view. **H.** Dorsal view. **I.** Ventral view. **J.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, H-I = 3.0 mm; B = 1 mm; D-F, J = 0.5 mm; G = 0.2 mm.

Description

The new species features the following characters: strong, more or less projected chelicerae, all femora with at least one spine; fang shorter (1.5 mm) than the basal segment of the chelicera (2.1 mm). However, on average for both sexes the length of the chelicerae is roughly equivalent and not longer than half the length of the cephalothorax. Therefore, we tentatively assign the species to the *Dysdera crocata*-complex as defined by DEELEMAN-REINHOLD & DEELEMAN (1988).

Male holotype (Figs 15A-G, 16A-C)

Measurements. Total length 9.90; carapace length 4.40, width 3.55, CL/CW 1.24; chelicerae length 2.30, fang length 1.67; anterior eyes diameter 0.18.

Color. Carapace orange, edged by a thin black line more marked anteriorly, cephalic part darker; chelicerae reddish orange; legs and sternum orange, the latter with posterior part lighter; abdomen cream.

Carapace. Flat, cephalic part slightly convex with few short setae, slightly denser anteriorly forming a finely punctate appearance. Posterior eye-row procurved. Anterior eyes separated by 1 to 1.1 time their diameter. Height of clypeus 1.18 times the diameter of the anterior eyes. Chelicerae massive, projected; basal part with piligerous granulations more pronounced on inner sides; inner cheliceral margin armed with three teeth, the middle one the smallest; basal part with a smooth keel.

Legs. Ventral and lateral sides of Mt III-IV distally densely covered with short hairs.

Leg spination. Fe I, 2 antero-apical spines; Fe II, 1 antero-apical spines; Fe III, 2 dorso-anterior spines (last third); Fe IV, 7-8 dorso-basal spines (first half). Other segments of legs I and II spineless.

Palp (Figs 15D-G, 16A-C). Tegulum as long as distal division (Fig. 16C, T v DD); internal sclerite anteriorly covering external sclerite, the former distally strongly sclerotized, raptor-beak-shaped (Fig. 16A, see D), with an additional small teeth (Fig. 16B, dotted arrow); prolateral margin with a small rounded bulge (Fig. 16C, PB); retrolateral margin with a reduced translucent membranous structure (Fig. 16A, MS); posterior apophysis pointed retrolaterally (Fig. 16B, P).

Female paratype (Figs 15H-J, 16D)

Measurements. Total length 11.10; carapace length 4.10, width 3.43, CL/CW 1.20; chelicerae length 2.10, fang length 1.55; anterior eyes diameter 0.18.

Color. Carapace and legs as in male; sternum with markings hardly darker between coxae.

Leg spination. Fe I, 2 antero-apical spines; Fe II, 1-2 antero-apical spines; Fe III, 1-2 dorso-anterior spines (second half); Fe IV, 8-11 dorso-basal spines (first half).

Vulva (Fig. 16D). Spermatheca evenly rounded, umbrella-shaped, about 3 times wider than long, edges directed backwards (Fig. 16D, Sp); dorsal arch as wide as spermatheca, 1.5 times wider than long (Fig. 16D, DA); transversal bar sub-rectilinear, 1.6 to 1.7 times wider than spermatheca, lateral edges curved (Fig. 16D, TB); posterior diverticulum triangular (Fig. 15J).

Variation

Measurements (min.–max. (average)). Male (n=5): total length 8.50-9.90 (9.10); carapace length 3.90-4.40 (4.11), width 3.18-3.55 (3.33), CL/CW 1.20-1.26 (1.23); chelicerae length 2.00-2.30 (2.15), fang length 1.38-1.67 (1.48). Female (n=2): total length 11.1-11.6; carapace length 4.10-4.55, width 3.43-3.60, CL/CW 1.20-1.26; chelicerae length 2.10-2.30, fang length 1.55-1.60. Leg spination (in brackets: less frequent pattern for spines number). Fe I, 2 antero-apical spines; Fe II, 1 (2) antero-apical spines; Fe III, 2 or 3 (1 or 4) dorso-anterior spines (second half); Fe IV, 7 to 10 (6, 11 to 12) dorso-basal spines (first half).

Distribution and habitat

Endemic to Morocco. To date, the species is only known from three nearby localities, at most about 20 km apart, in a triangle formed by El Beddouza, Ouled Sbaita and Ouled Ghanem, in the coastal area north of Safi. It is found under stones, in dry sandy and calcareous environments.

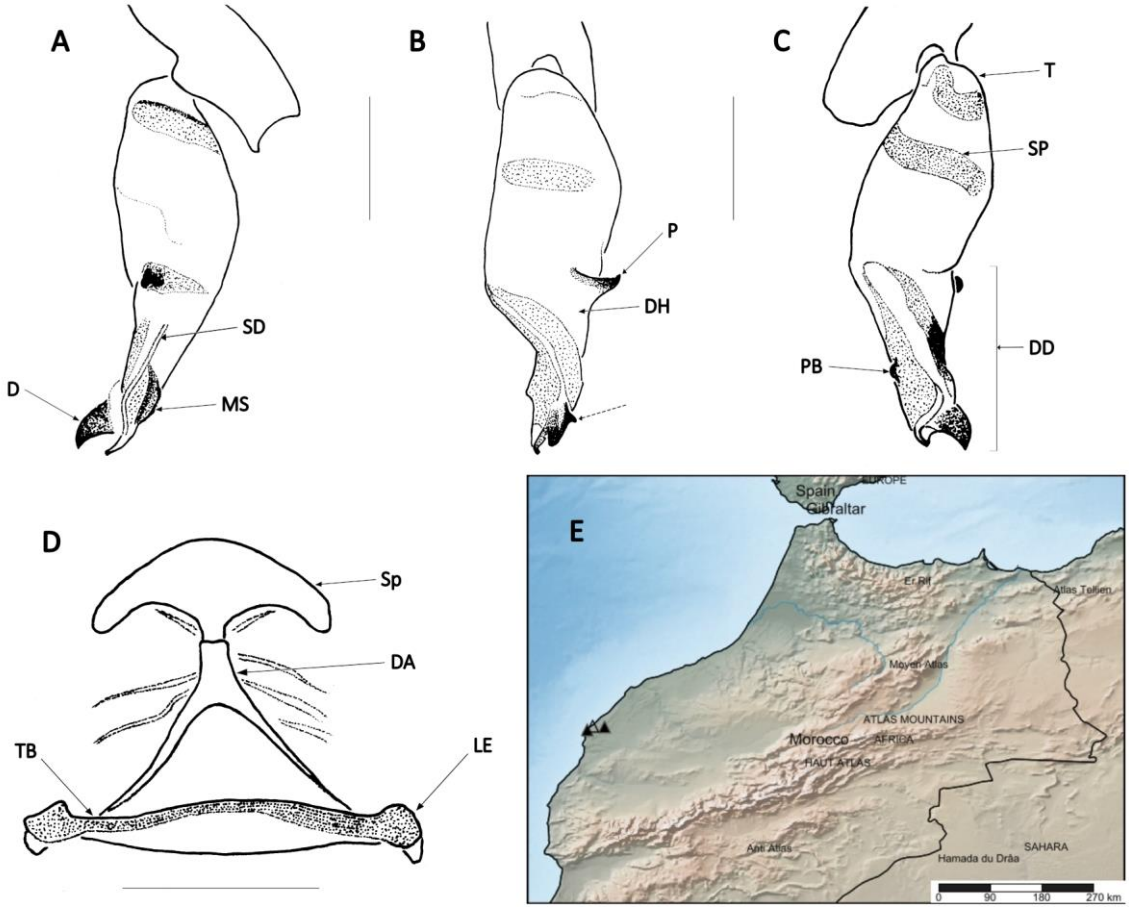

Figure 16: *Dysdera andreae* **sp. nov. A–C.** Male paratype (ref. MOR_1015). **D.** Female paratype (ref. MOR_1049). **A.** Palp, antero-retrolateral view. **B.** Idem, anterior view. **C.** Idem, antero-prolateral view. **D.** Vulva, dorsal view. **E.** Distribution map of the species; open triangle = loc. typ. (see Distribution); solid triangle = other records. Abbreviations: D: distal apophysis; DA: dorsal arch of anterior diverticulum; DD: distal division of the bulb; DH: distal haematodocha; LE: lateral edge; MS: membranous structure; P: posterior apophysis; PB: prolateral bulge; SD: seminiferous duct; Sp: spermatheca; SP: spermophore; T: tegulum; TB: transversal bar. Scale bars: A-D = 0.5 mm.

Dysdera caeca Ribera, 1993

(Figs 17A-H, 18A-F, 19)

Identification

RIBERA (1993): p. 6, figs 5-9.

Previous citation

RIBERA (1993, ♂ descr.).

New records

MOROCCO • 2♀♀; Errachidia, Aziza cave; 32.02298°N, 3.78809°W; 1063 m a.s.l.; 11 Dec. 2020; S. Moutaouakil leg.; cave, by hand; ref. MOR_0340; deposited in SMF; remark: abdomen and vulva of one female separated. 1♂, 1 juv.; same data; 8 Oct. 2022; det. S. Lecigne, P. Oger; ref. MOR_0283; 1♂ deposited in SMF; remark: left pedipalp detached.

Comments

Dysdera caeca is a troglobiont, anophthalmic species endemic to Morocco. So far, only the male was known (RIBERA 1993). No new observations have been recorded since. A male was found again

in October 2022 in the same cave (loc. typ.: Kehf Aziza cave, Tazouguert). Previously, two anophthalmic female specimens were captured in December 2020 in the same cave and were determined as *D. caeca* based on their occurrence at the type locality. We describe the unknown female of *D. caeca*.

Figure 17: *Dysdera caeca*, male topotype (ref. MOR_1564). **A.** Dorsal view. **B.** Carapace. **C.** Chelicerae, ventral view. **D-E.** Palp, retrolateral view. **F.** Idem, anterior view. **G.** Idem, prolateral view. **H.** Idem, posterior view. Photos © P. Oger. Scale bars: A = 2.0 mm; B = 1 mm; C = 0.5 mm; D-H = 0.2 mm.

Figure 18: *Dysdera caeca*, female topotype (ref. MOR_1464). **A.** Dorsal view. **B.** Ventral view. **C.** Carapace, dorsal view. **D.** Idem, ventral view. **E.** Epigyne. **F.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A-B = 2.0 mm; C-D = 1mm; E-F = 0.2 mm.

Description

Male topotype (Figs 17A-H, 19A-C)

Measurements. Total length 5.05; carapace length 2.08, width 1.65, CL/CW 1.26; chelicerae length 0.98; Fe I-II-III-IV length 2.75-2.60-2.18-2.58, Fe pedipalp length 1.21.

Color. Carapace pale orange, anterior edge barely darker; chelicerae orange; legs and sternum yellowish, abdomen pale cream.

Carapace. Flat; posterior part to anterior lateral sides very evenly rounded; median anterior edge with tiny chitinized projection. Chelicerae projected with few piligerous granulations; inner

cheliceral margin armed with three teeth, the middle one the smallest; basal part with a smooth keel.
Eyes. Completely absent (Fig. 17A-B).
Legs. Thin, very long.
Leg spination. Several spines on femora, tibiae and metatarsi I-IV. Pedipalp: femur with one prolateral distal spine; patella with 2-3 prolateral spines (first half).
Palp (Figs 17D-H, 19A-C). Tegulum as long as distal division; internal and external sclerites equally developed, fused basally, continuous to tip (Fig. 19C, IS, ES); distal part of internal sclerite pointed, prolateral margin straight (Fig. 19B, IS); distal part of external sclerite forked (Fig. 19B, dotted arrow); retrolateral margin with a translucent membranous structure (Fig. 19A-B, MS); posterior apophysis almost flat, as wide laterally as tegulum (Fig. 19A, dotted arrows).

Female topotype (Figs 18A-F, 19D)
Measurements. Total length 4.80; carapace length 2.25, width 1.65, CL/CW 1.36; chelicerae length 1.00; Fe I-II-III-IV length 2.70-2.58-2.20-2.65, Fe pedipalp length 1.20.
Color, carapace, eyes and *legs*. As in male.
Vulva (Figs 18F, 19D). Spermatheca slightly convex, flattened and narrow (Fig. 19D, Sp); dorsal arch semicircular, 1.4 times wider than spermatheca (Fig. 19D, DA); transversal bar 1.6 times wider than dorsal arch, slightly convex, lateral edges 2.5 to 3 times longer than wide (Fig. 19D, LE); posterior diverticulum circular (Fig. 18F).

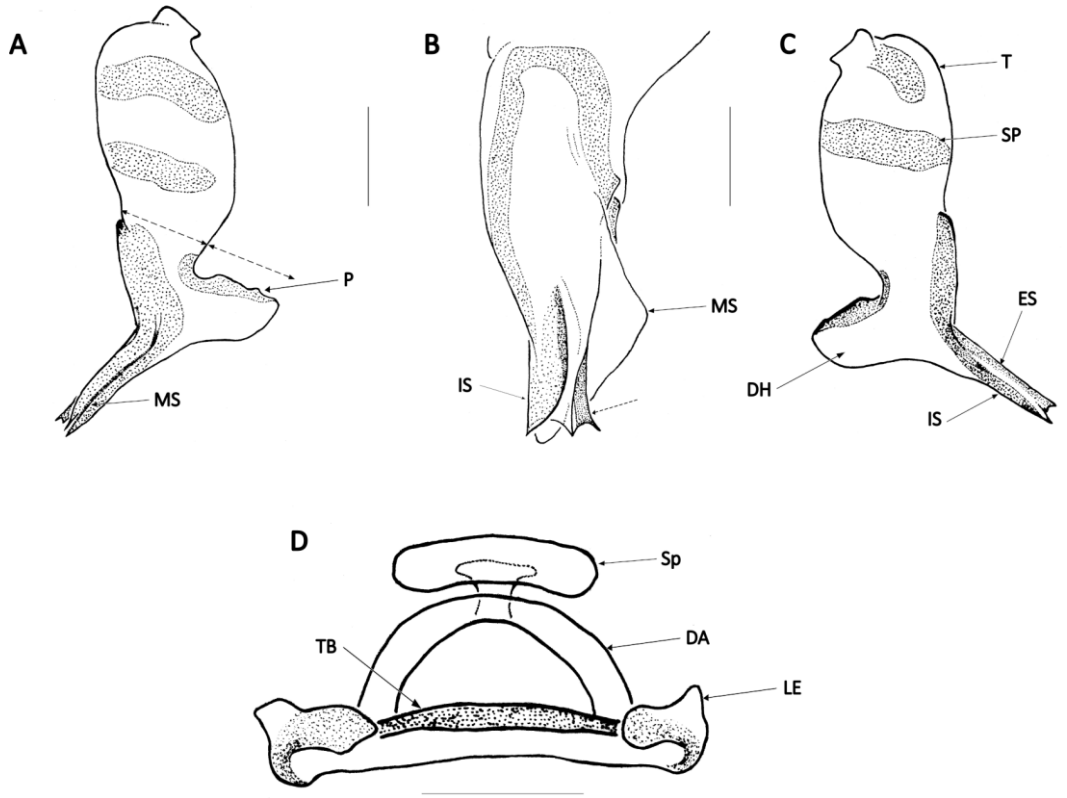

Figure 19: *Dysdera caeca*. **A-C.** Male topotype (ref. MOR_1564). **D.** Female topotype (ref. MOR_1464). **A.** Palp, retrolateral view. **B.** Bulb, distal part, anterior view. **C.** Palp, prolateral view. **D.** Vulva, dorsal view. Abbreviations: DA: dorsal arch of anterior diverticulum; DH: distal haematodocha; ES: external sclerite; IS: internal sclerite; LE: lateral edge; MS: membranous structure; P: posterior apophysis; Sp: spermatheca; SP: spermophore; T: tegulum; TB: transversal bar. Scale bars: A-D = 0.2 mm.

Variation

Measurements (min.–max.). Female (n=2): total length 4.80–5.50; carapace length 2.25–2.30, width 1.65–1.78, CL/CW 1.30–1.36; chelicerae length 1.00–1.04; Fe I, II, III, IV length 2.70–2.85,2.58–2.80, 2.20, 2.65–2.83, Fe pedipalp length 1.20–1.28.

Distribution and habitat

Troglobiont species, endemic to Morocco, only known from the type locality in the Moroccan Eastern High Atlas Mountains (province of Errachidia, Oued Naam, Aziza cave).

***Dysdera guennouni* Lecigne, Szűts & Moutaouakil sp. nov.**

https://zoobank.org/NomenclaturalActs/FCA5DF28-4EEE-4D2A-8AB3-55E026855BD2

(Fig. 20A-E)

Diagnosis

The female of *Dysdera guennouni* **spec. nov.** can be distinguished from other representatives of the species complex particularly by the overall trapezoidal shape of the spermatheca and the rounded forms of its anterior part, giving it an almost three-lobed appearance (Fig. 20D-E, Sp).

Etymology

The name of this species is for Fatima Zahra Guennoun, a specialist in malacology at the Natural History Museum of Marrakech. Part of the sampling was conducted during her field missions for the study of terrestrial mollusks of Morocco, and she herself participated in the sampling.

Material examined

Holotype
MOROCCO • 1♀; Chemaia, Laghoualem village, Karkar cave; 32.18394°N, 8.68841°W; 5 May 2021; S. Moutaouakil leg.; cave, by hand; ref. MOR_0289. Remark: abdomen and vulva separated.

Further material examined
MOROCCO • 2 juv.; same locality as holotype; 9 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips; cave, by hand; ref. MOR_0870.

Description

The new species features the characters of the *Dysdera crocata*-complex (after DEELEMAN-REINHOLD & DEELEMAN 1988): strong, more or less projected chelicerae; fang slightly shorter than the basal segment of the chelicera; length of the chelicerae longer than half the length of the cephalothorax; all femora with at least one spine.

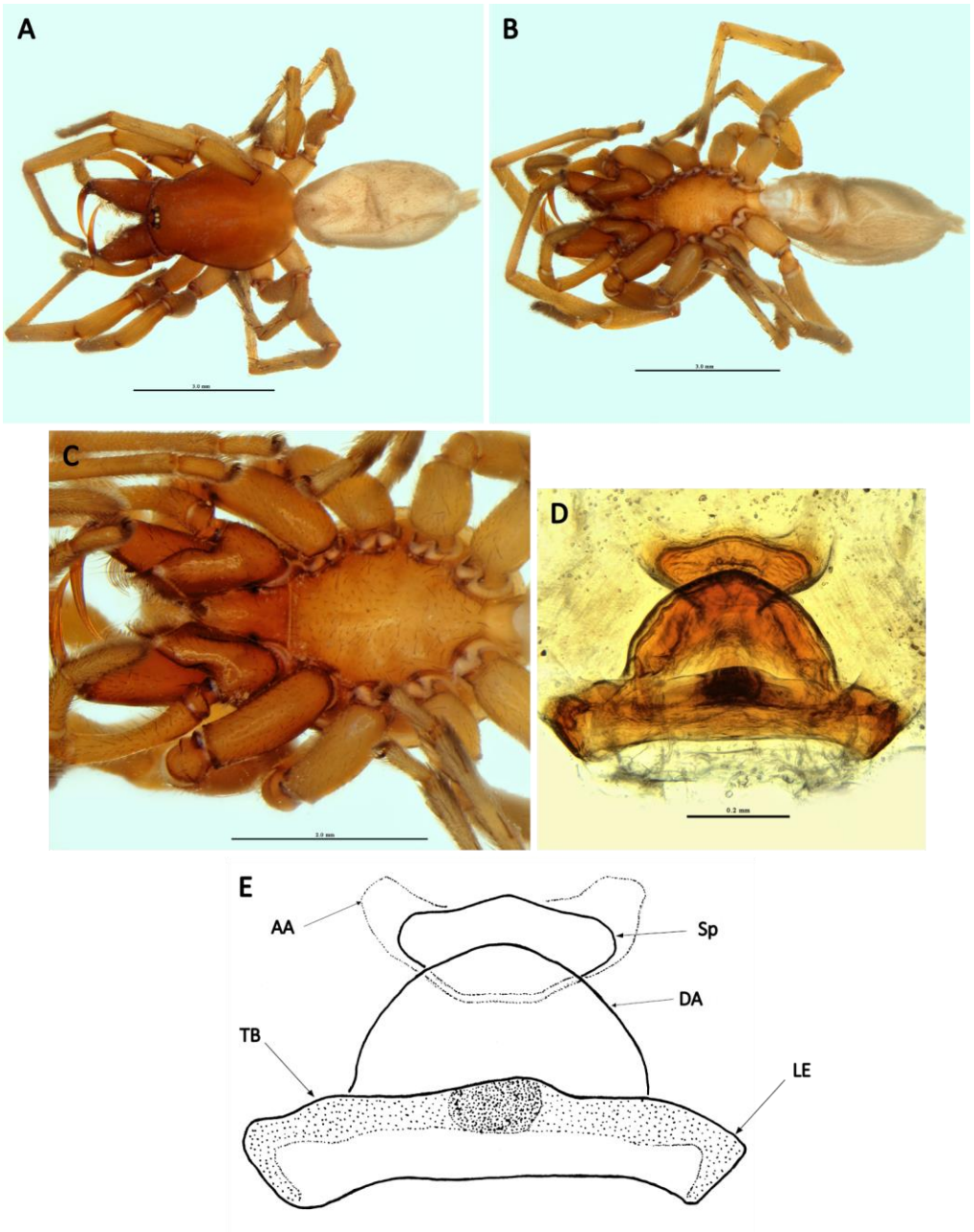

Figure 20: *Dysdera guennouni* **sp. nov.**, female holotype (ref. MOR_0289). **A.** Dorsal view. **B.** Ventral view. **C.** Idem, carapace. **D-E.** Vulva, dorsal view. Abbreviations: AA: anterior angle; DA: dorsal arch of anterior diverticulum; LE: lateral edge; Sp: spermatheca; TB: transversal bar. Scale bars: A-B = 3.0 mm; C = 2.0 mm; D-E = 0.2 mm.

Female holotype (Fig. 20A-E)

Measurements. Total length 7.00; carapace length 3.30, width 2.45, CL/CW 1.35; chelicerae length 1.73; anterior eyes diameter 0.13.
Color. Carapace and chelicerae orange; legs and sternum pale orange; abdomen cream.
Carapace. Posterior part to anterior lateral sides evenly rounded. Posterior eye-row slightly procurved. Anterior eyes separated by 1.5 times their diameter. Height of clypeus 0.96 times the diameter of the anterior eyes. Chelicerae projected, with few thin black setae; inner cheliceral margin armed with three teeth, the middle one the smallest, the proximal tooth directed forward; basal part with a smooth keel.

Legs. Ventral and lateral sides of Mt III-IV distally densely covered with short hairs.
Leg spination. Fe I, 1-2 antero-apical spines; Fe II, 1 antero-apical spines; Fe III, 2 dorso-anterior spines (in the middle and last quarter); Fe IV, 3-4 dorso-basal spines. Other segments of legs I and II spineless.
Vulva (Fig. 20D-E). Spermatheca trapezoid, lateral edges rounded, median part of anterior margin slightly forward (Fig. 20E, Sp); dorsal arch semicircular, 1.4 times wider than spermatheca (Fig. 20D, DA); transversal bar 1.7 times wider than dorsal arch, as thick as the spermatheca, lateral edges slightly directed posterolaterally (Fig. 20E, TB, LE).

Male
Unknown.

Comments. We retain the troglobiont character of this new species, based on the same analysis as established for *Dysdera agadirensis* Lecigne, 2023 i.e. cave-dwelling species, all specimens sampled far inside the cave and never observed in the vicinity of the entrance.

Distribution and habitat

Troglobiont species, endemic to Morocco, only known from the type locality (province of Youssoufia, Chemaia, Laghoualem village, Karkar cave).

***Dysdera mariae* Lecigne sp. nov.**
https://zoobank.org/NomenclaturalActs/9D931508-71E7-4B16-B2F5-B451A3341365
(Figs 21A-J, 22A-D)

Diagnosis

The new species resembles *D. subnubila* Simon, 1907 by the conforma9on of the genitalia, but male can be dis9nguished by its bulb having a flat posterior apophysis (P) and a distal apophysis (D) terminally bent inwards (vs. posterior apophysis arched, distal apophysis not bent inwards) (cf. Figs 21E, 22B-C and DEELEMAN-REINHOLD & DEELEMAN 1988: p. 159, figs 28-29) and having a ra9o CL/CW 1.34 (vs 1.26). The females of the two species differ by the shape and the width of the spermatheca (Sp) and the dorsal arch (DA): spermatheca of the new species is wider than the dorsal arch (x1.05-1.1) (vs. 1.0), the anterior margin is straight in its median part and curved only at its ends (vs. spermatheca evenly convex) (cf. Fig. 22D and DEELEMAN-REINHOLD & DEELEMAN 1988: p. 159, fig. 31), and the dorsal arch is thin (vs. thick).

Etymology

The name of this new species is a tribute that the first author wished to pay to his grandmother Marie Thélier, for her values, fortitude and so many unforgettable memories.

Material examined

Holotype
MOROCCO • 1♂; Imlil; 31.128639°N, 7.919058°W; 1878 m a.s.l.; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded slope, under a stone, by hand; ref. MOR_0760. Remark: left pedipalp detached; right leg IV lost.

Paratypes
MOROCCO • 2♀♀; same as holotype. Remark: abdomen and vulva of one female separated.

Further material examined
MOROCCO • 1♀, 1 juv.; same as holotype.

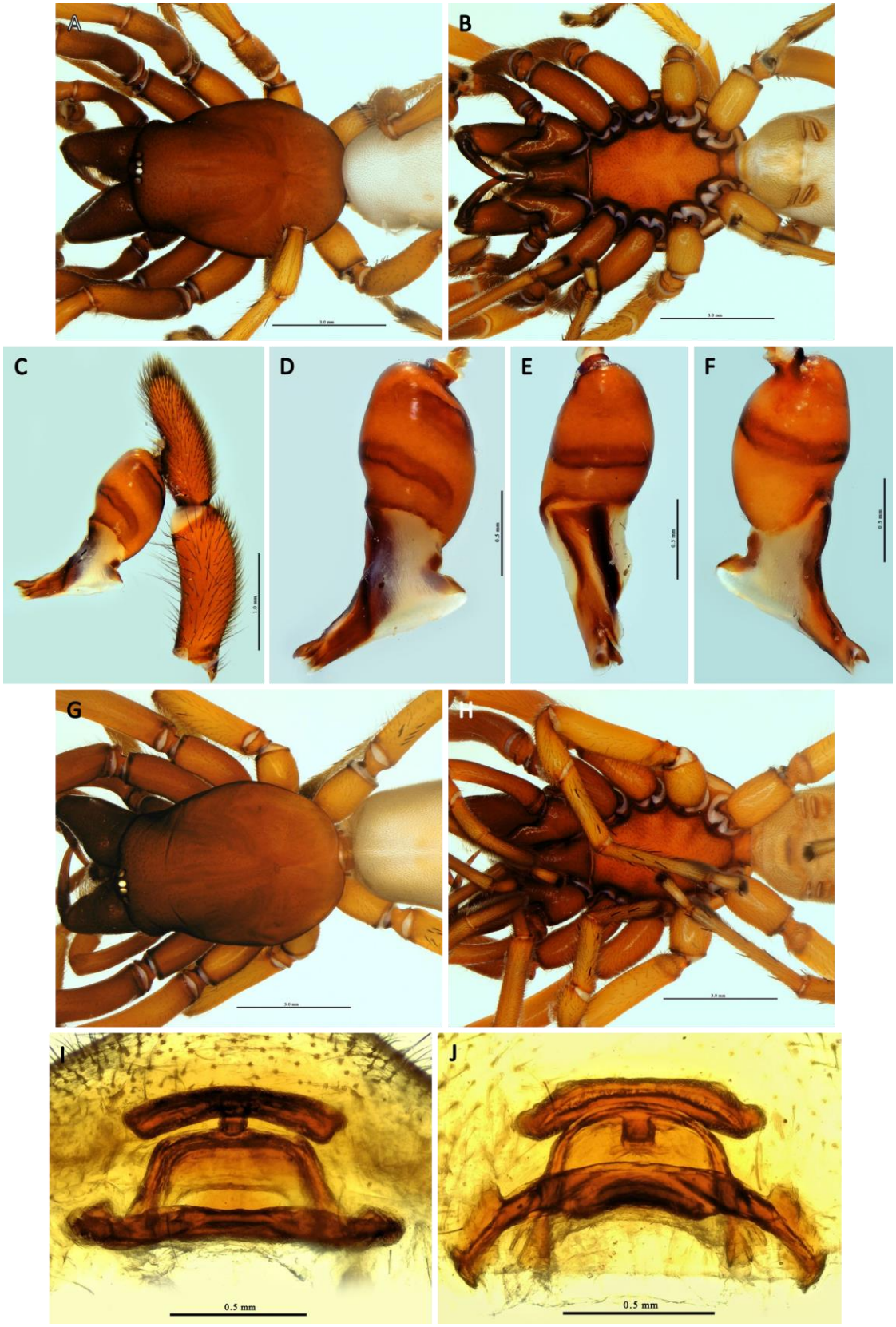

Figure 21: *Dysdera mariae* **sp. nov. A–F.** Male holotype (ref. MOR_0760). **G-J.** Female paratype (same ref.). **A.** Dorsal view. **B.** Ventral view. **C-D.** Palp, dorso-retrolateral view. **E.** Idem, anterior view. **F.** Idem, ventro-prolateral view. **G.** Dorsal view. **H.** Ventral view. **I.** Vulva, antero-dorsal view. **J.** Idem, dorsal view. Photos © P. Oger. Scale bars: A-B, G-H = 3.0 mm; C = 1 mm; D, I-J = 0.5 mm.

Description

Dysdera mariae **sp. nov.** is a large species; it features the following characters: strong, more or less projected chelicerae; fang shorter than the basal segment of the chelicera; length of the chelicerae longer than half the length of the cephalothorax. On average for both sexes, Fe I-II and sometimes Fe III are spineless but Fe IV bears at least 6 spines. For the species of the *Dysdera crocata*-complex, Fe I-III are often and Fe IV are almost always armed with one or more spines (after DEELEMAN-REINHOLD & DEELEMAN 1988). Therefore, we tentatively assign the species to the *Dysdera crocata*-complex as defined by DEELEMAN-REINHOLD & DEELEMAN (1988).

Male holotype (Figs 21A-F, 22A-C)

Measurements. Total length 12.70; carapace length 5.75, width 4.30, CL/CW 1.34; chelicerae length 2.95, fang length 2.40; anterior eyes diameter 0.20.

Color. Carapace and chelicerae purplish, edged by a thin black line more marked anteriorly; legs orange, coxae, trochanters, femora of legs I-II and sternum darker, the latter with thick black margin; abdomen cream.

Carapace. Flat, posterior eye-row barely procurved. Anterior eyes separated by 1.67 time their diameter. Height of clypeus 1.25 times the diameter of the anterior eyes. Chelicerae massive, projected; basal part with few piligerous granulations; inner cheliceral margin armed with three teeth, the middle one the smallest; basal part with a smooth keel.

Legs. Ventral and inner side of Mt III-IV distally densely covered with short hairs.

Leg spination. Legs I and II spineless. Fe III, 1 dorso-basal spine, 0-1 antero-apical spine; Fe IV, 6 dorso-basal spines.

Palp (Figs 21C-F, 22A-C). Tegulum as long as distal division; prolateral margin straight (Fig. 22B, IS), distal part rounded, membranous and translucent, a sub-terminal structure roll-shaped (Fig. 22B, dotted arrow); distal apophysis strongly sclerotized, beak-shaped, curved inwards (Figs 21E, 22A, see D); retrolateral margin with a reduced translucent membranous structure (Fig. 22B, MS); posterior apophysis flat (Fig. 22C, see P).

Female paratype (Figs 21G-J, 22D)

Measurements. Total length 13.00; carapace length 5.90, width 4.55, CL/CW 1.30; chelicerae length 3.08, fang length 2.55; anterior eyes diameter 0.23.

Color, carapace, eyes and *legs*. As in male.

Leg spination. Legs I and II spineless. Fe III, 0-1 antero-subapical spine; Fe IV, 6-7 dorso-basal spines.

Vulva (Figs 21I-J, 22D). Spermatheca wide and flat, anterior margin straight in its median part, ends curved backwards (Fig. 22D, Sp); dorsal arch strongly arched, less wide than the spermatheca (Fig. 22D, DA); transversal bar 1.5 times wider than spermatheca, median part thicker (Figs 21J, 22D), anterior margin convex, lateral edges strongly bent backwards and finally inwards (Fig. 22D, LE).

Variation

Measurements (min.–max. (average)). Female (n=3): total length 11.80–14.80 (13.20); carapace length 4.38–5.90 (5.26), width 3.48–4.55 (4.07), CL/CW 1.26–1.32 (1.29); chelicerae length 2.25–3.08 (2.76); fang length 1.93–2.55 (2.27). Leg spination (in brackets: less frequent pattern for spines number). Fe III spineless (1 antero-subapical spine); Fe IV, 5 (6-7) dorso-basal spines.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (village of Imlil, province of Al Haouz, Moroccan High Atlas Mountains), on a wooded slope near the Toubkal National Park.

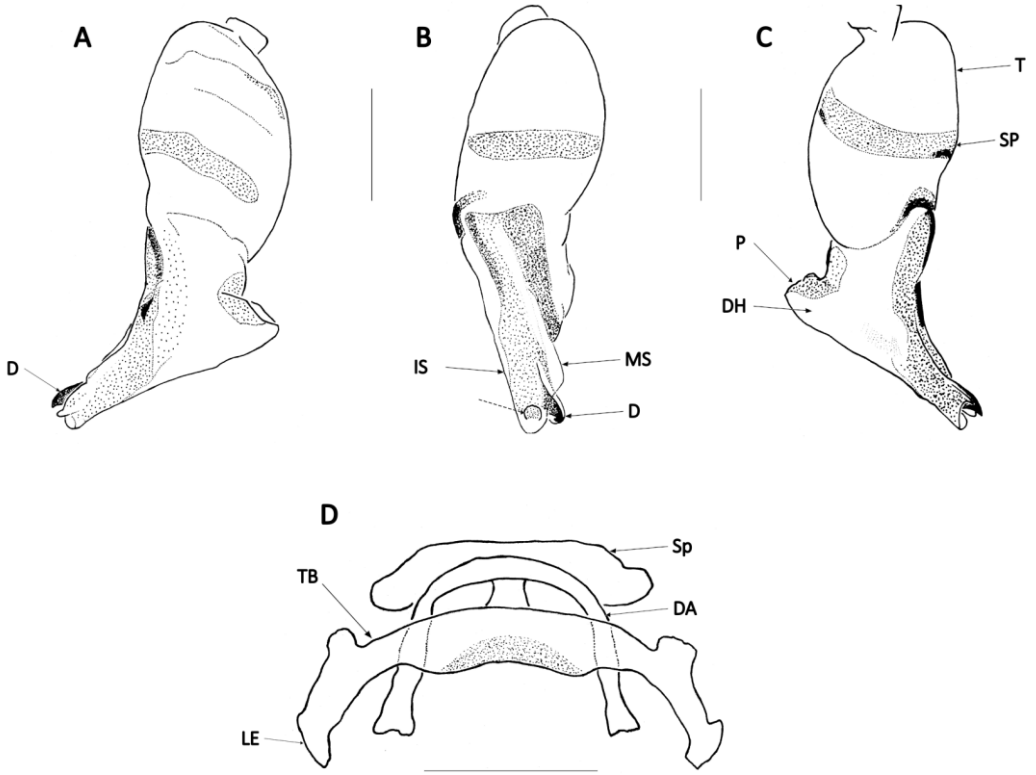

Figure 22: *Dysdera mariae* **sp. nov. A–C.** Male holotype (ref. MOR_0760). **D.** Female paratype (same ref.). **A.** Palp, dorso-retrolateral view. **B.** Idem, anterior view. **C.** Idem, ventro-prolateral view. **D.** Vulva, dorsal view. Abbreviations: D: distal apophysis; DA: dorsal arch of anterior diverticulum; DH: distal haematodocha; IS: internal sclerite; LE: lateral edge; MS: membranous structure; P: posterior apophysis; Sp: spermatheca; SP: spermophore; T: tegulum; TB: transversal bar. Scale bars: A-D = 0.5 mm.

***Dysdera seclusa* Denis, 1961**
(Figs 23A-H, 24A-E)

Identification
DENIS (1961): p. 154, figs 7-9.

Previous citations
DENIS (1961).

Material examined

Holotype
None; syntypes not available; considered lost (see comments).

Neotype
MOROCCO • 1♂; Skhirate, near Oued Cherrat; 33,81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Moutaouakil, J.-P. Dégletagne leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_0994; deposited in SMF. Remark: abdomen separated; left pedipalp and left leg I detached.

Allotype
MOROCCO • 1♀; same as neotype; deposited in SMF. Remark: abdomen and vulva separated.

Comments
A couple of *Dysdera* Latreille, 1804 was found in the locality of Skhirate, near the Cherrat wadi (under a stone, in the same silk loge), about 25 km south of Rabat. In the absence of a description of the epigyne/vulva, examination of the male allowed us to assign this pair to *Dysdera seclusa* Denis, 1961. The species, endemic to Morocco, was not found since its discovery in December 1951 by Jean Gattefossé. Figure 20E shows the new record and the type locality Sidi Abder Rhamane. In the absence of any further details from Denis (1961), we assume that the type locality refers to the islet so named, located about 60 km south of Skhirate. Research has also revealed the existence of a lake bearing the same name a few kilometers north-east of Safi. It has not been possible to examine the syntypes (MNHNP) despite several searches of the museum's collections; they are consequently considered lost. We propose to designate the male from Skhirate as neotype (ICZN 1999, art. 75) and the female as allotype.

Description

Male neotype (Figs 23A-E, 24A-C)
Measurements. Total length 5.40; carapace length 2.40, width 1.85, CL/CW 1.30; chelicerae length 1.20, fang length 1.03; anterior eyes diameter 0.13.
Color (probable recent moult). Carapace, chelicerae, legs and sternum yellowish; abdomen pale grey.
Carapace. Flat; cephalic part mainly finely punctuated (Fig. 23A). Posterior eye-row barely procurved; anterior eyes separated by 0.9 time their diameter. Height of clypeus about 0.5 times the diameter of the anterior eyes. Chelicerae slender, projected; anterior and inner side of basal part with piliferous granulations; inner cheliceral margin armed with three teeth, the middle one the smallest; basal part with a smooth keel.
Legs. Ventral and lateral sides of Mt III-IV distally covered with short hairs.
Leg spination. Legs I and II spineless. Fe III spineless; Fe IV, 1 dorso-basal spine.
Palp (Figs 23C-E, 24A-C). Distal division about 1.15 times longer than tegulum (Fig. 24A, T v DD); embolic division with massive process starting from its base, strongly sclerotized, broad (half the width of the embolic division), last third bent 90 degrees forwards, pointed (Fig. 24A-C, PE); external sclerite partially twisted, distal part subvertical, forked (Fig. 24B, ES; 24A-C, dotted arrow); retrolateral margin with a large vertical translucent membranous structure (Fig. 24A, C, MS); posterior apophysis inconspicuous (Fig. 24A, P).

Female allotype (Figs 23F-H, 24D)
Measurements. Total length 6.80; carapace length 2.93, width 2.25, CL/CW 1.30; chelicerae length 1.63, fang length 1.40; anterior eyes diameter 0.18.
Color. Carapace greyish orange, chelicerae and sternum orange; legs pale orange, coxae of legs III-IV paler; abdomen pale grey.
Color, carapace, eyes and *legs*. As in male.
Leg spination. As in male but Fe IV spineless.
Vulva (Figs 23H, 24D). Spermatheca trapezoidal, anterior angles rounded (Fig. 24D, Sp, AA); dorsal arch subtriangular, 1.4 times wider than spermatheca (Fig. 24D, DA); transversal bar 1.45 times wider than dorsal arch, anterior margin slightly convex, median part thicker (Fig. 23H), lateral edges rounded (Fig. 24D, LE).

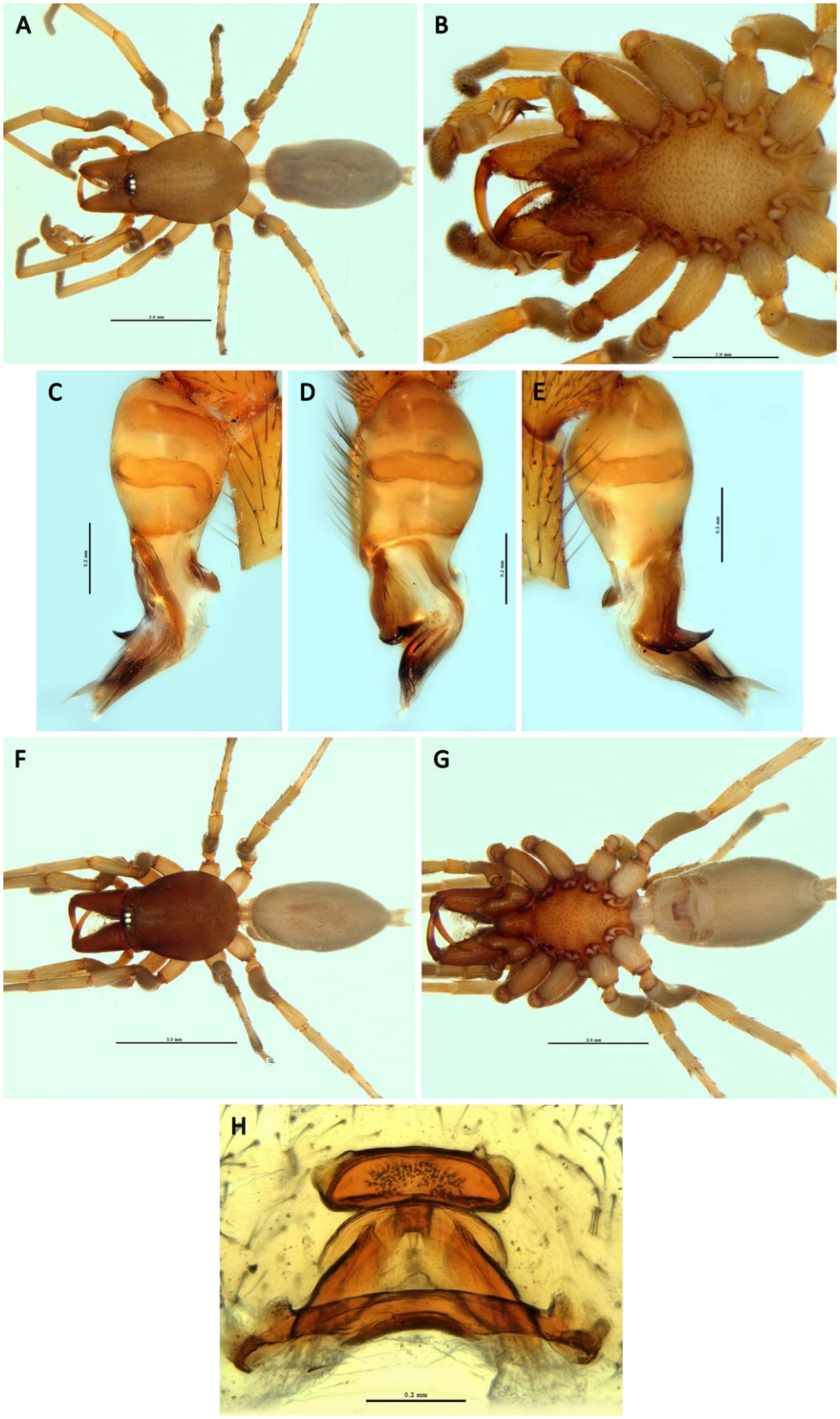

Figure 23: *Dysdera seclusa*. **A–E.** Male neotype (ref. MOR_0994). **F-H.** Female allotype (same ref.). **A.** Dorsal view. **B.** Carapace, ventral view. **C.** Palp, retrolateral view. **D.** Idem, anterior view. **E.** Idem, prolateral view. **F.** Dorsal view. **G.** Ventral view. **H.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, G = 2.0 mm; B = 1mm; C-E, H = 0.2 mm; F = 3.0 mm.

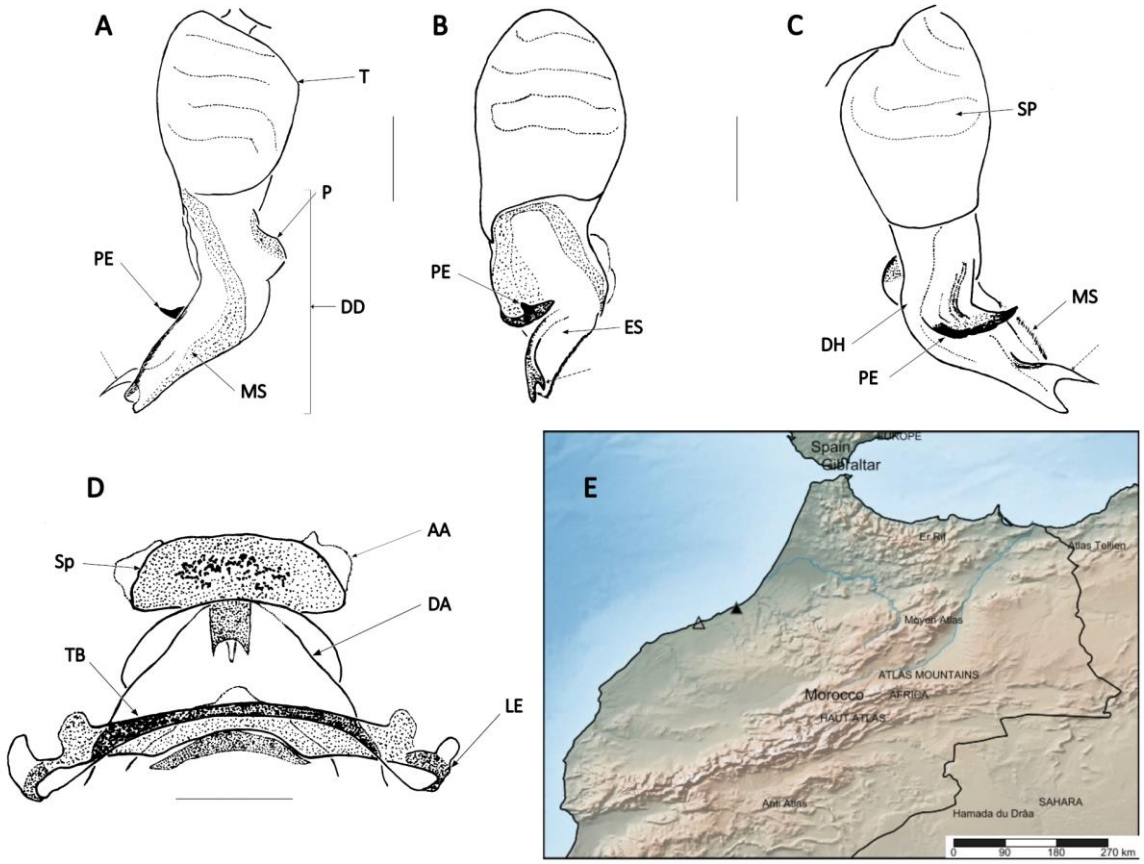

Figure 24: *Dysdera seclusa*. **A–C.** Male neotype (ref. MOR_0994). **D.** Female allotype (same ref.). **A.** Palp, retrolateral view. **B.** Idem, anterior view. **C.** Idem, prolateral view. **D.** Vulva, dorsal view. **E.** Distribution map of the species; open triangle = loc. typ.; solid triangle = new record. Abbreviations: AA: anterior angle; DA: dorsal arch of anterior diverticulum; DD: distal division; DH: distal haematodocha; LE: lateral edge; MS: membranous structure; P: posterior apophysis; PE: process of the embolic division; Sp: spermatheca; SP: spermophore; T: tegulum; TB: transversal bar. Scale bars: A-D = 0.2 mm.

Distribution and habitat

See comments.

***Dysdera tenuistylus* Denis, 1961**
(Figs 25A-I, 26A-C)

Identification
DENIS (1961): p. 153, fig. 2; p. 154, fig. 3.

Previous citations
DENIS (1961).

Type material

Dysdera tenuistylus Denis, 1961. **Holotype** (1♂)**, paratype** (2♀♀)**, allotype** (1♀) (WSC 2025)
Not available, considered lost; author's doubts as to whether paratypes belong to the species, unverifiable (see comments).

Dysdera littoralis Denis, 1962. **Holotype** (1♂) (WSC 2025)
Not available; considered lost (see comments).

Material examined

Neotype
MOROCCO • 1♂; Laakarta, Kasbat Ayir; 32,64970°N, 9,13077°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand.; ref. MOR_1033; deposited in SMF. Remark: left pedipalp detached.

Allotype
MOROCCO • 1♀; same as neotype; same reference; deposited in SMF.

Further material examined
MOROCCO • 1♂, 2♀♀, 2 juv.; Cap Beddouza; 32,56655°N, 9,24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand; ref. MOR_0531. 2♀♀, Zaouiat ben Iffou, Tnine Lgharbia; 32.63807°N, 8.94409°W; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; eucalyptus grove, sandy soil on limestone, under a stone, by hand; ref. MOR_1251. 1♀; Oualidia, Cercle de Zemamra; 32,72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; S. Lecigne leg.; lapiaz, under a stone, approach walk to Takkout cave, by hand; ref. MOR_1028. 1♂, 5♀♀; Beddouza, Kasbat Ayir; 32,55619°N, 9,25161°W; 39 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; calcicole fallow (lawn), beside crops, under stones, near the entrance to Ghar Goran cave, by hand; ref. MOR_1043. 6♂♂, 2♀♀, 1 juv.; Laakarta, Kasbat Ayir; 32,64970°N, 9,13077°W; 78 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand; ref. MOR_1033; 1♂, 1♀ deposited in SMF. Remark: male left pedipalp detached.

Comments
Dysdera tenuistylus is another species endemic to Morocco that had not been found since its discovery in January 1952 by Jean Gattefossé. Denis (1961) also described *D. flagellifera*, renamed *D. littoralis* in 1962. The author specifies that *D. tenuistylus* is very close to the latter and differs only in the "style" (distal part), which is longer and thinner, "l'extrémité filiforme" (flagellum), which is shorter, and "le processus postérieur" (posterior apophysis), which is implanted in the anterior concavity. According to the drawings by Denis (1961), the ratio of the height of the distal division to the height of the bulb is approximately the same (1.7 in *D. littoralis* vs 2.0 in *D. tenuistylus*), taking into account that the measurement of this ratio depends both on the angle of view and the inclination of the palp. The drawings of the author do not seem to have been made from the same angle. The author based his diagnosis on the examination of a single male specimen of each species. The shorter flagellum in *D. tenuistylus* may be related to a break in the distal, thinnest part of the embolus. The positioning of the posterior apophysis in the anterior concavity of *D. littoralis* is a highly atypical, even abnormal conformation. The two type localities are about one hundred kilometers apart (Zenata for *D. tenuistylus*, located between Casablanca and Mohammedia; Mazagan = El Jadida for *D. littoralis*); both species inhabit the coastal zone (under limestone stones for *D. tenuistylus*; on a beach of rocks and pebbles for *D. littoralis*). The new records are located around 100 km south of El Jadida, and refer to similar habitat (i.e. under stones in sandy or calcareous coastal areas) of both species (see Fig. 26C; approximative location of typ. loc.; we did not include the other observations of *D. tenuistylus* mentioned by Denis (1961) because the author himself expressed doubts about the identification of the females from Dar Bou Azza (dec. 1951) when writing “Deux femelles capturées le 9 XII 1951 à Dar bou Azza (J. G.) me paraissent devoir être rapportées à cette espèce”. Nor did we include the specimens from Mazagan (may 1953) which relate to two juveniles). The main somatic characters of the two species provided by the author are comparable e.g. Fe I-IV without spines. Thus, we assume a possible synonymy between *D. littoralis* Denis 1962 and *D. tenuistylus* Denis 1961. To confirm this, we plan to survey the type locality of *D. littoralis* to identify the *Dysdera* species that colonize

coastal habitats around El Jadida. In Laakarta, among the new records, it is noteworthy that under the stones of the sandy dunes; another species i.e. *D. andreae* **sp. nov.** is also present and occupies the same habitat as *D. tenuistylus*. It has not been possible to examine the type specimens (MNHNP) despite several searches of the museum's collections; they are consequently considered lost. Paratype specimens are uncertain, and there are no descriptions or drawings of the female genitalia (allotype). Thus, we propose to designate one male from Laakarta, Kasbat Ayir (ref. MOR_1033) as neotype and one female from the same place (same ref.) as allotype. An additional couple will also be deposited in SMF (same ref.).

Description

Male neotype

*Measurements.*Total length 10.90; carapace length 4.95, width 3.78, CL/CW 1.31; chelicerae length 2.98, fang length 2.60; anterior eyes diameter 0.30.

Color. Carapace, chelicerae and sternum orange-brown to red brown, legs orange; abdomen cream.

Carapace. Finely punctuated. Posterior eye-row procurved. Anterior eyes separated by 0.80 time their diameter. Height of clypeus 0.94 times the diameter of the anterior eyes. Chelicerae massive, projected; prolateral and dorso-retrolateral sides with piligerous granulations; inner cheliceral margin armed with three teeth, the middle one the smallest; distal tooth subconical, blunt, slightly inclined downwards; basal part with a smooth keel.

Legs. Ventral and lateral sides of Mt III-IV distally covered with short hairs.

Leg spination. Legs I and II spineless; Fe, Pa and Ta III-IV spineless; Ti and Mt III-IV with few spines.

Palp (Figs 25C-E, 26A). Distal division about 1.4 times longer than tegulum (Fig. 26A, T v DD); embolic division arising on the antero-prolateral side and twisted, distal apophysis sclerotized, narrow, flat, distal part bifid (better visible laterally), posterior tooth shorter and curved backwards (Figs 25D-E, 26A, see D); retrolateral margin with a sub-vertical translucent membranous structure partially covering the terminal apophysis (Fig. 26A, MS), distal tip projected in a flagellum forming a half loop, undulated and translucent terminal part barely visible (Figs 25C-E, 26A, F); posterior apophysis in retrolateral position forming a tiny, partially rounded membranous ridge (Fig. 26A, P).

Female allotype

Measurements. Total length 13.10; carapace length 4.65, width 3.60, CL/CW 1.29; chelicerae length 2.70; fang length 2.25; anterior eyes diameter 0.27.

Color, carapace, eyes and *legs*. As in male.

Vulva (Figs 25G-I, 26B). Spermatheca formed by two lateral outgrowths connected by a thin arch, below which is a sub-rectangular structure with clearly rounded edges (Figs 25G-H, 26B, Sp); dorsal arch evenly rounded, as wide as spermatheca (Fig. 22B, DA); transversal bar sub-rectilinear, slender and extended, 1.7-1.8 times wider than spermatheca (Fig. 26B, TB).

Variation

Measurements (min.–max. (average)). Male (n=4): total length 9.20–11.60 (10.47); carapace length 4.25–4.95 (4.65), width 3.33–3.78 (3.48), CL/CW 1.28–1.39 (1.34); AE-AE 0.50–0.88 (0.76) times the diameter of the anterior eyes; height of clypeus 0.67–0.94 (0.78) times the diameter of the anterior eyes; chelicerae length 2.58–2.98 (2.78); fang length 2.17–2.60 (2.30). Female (n=11): total length 8.40–14.10 (11.74); carapace length 3.70–5.45 (4.81), width 2.75–4.37 (3.71), CL/CW 1.25–1.35 (1.30); AE-AE 0.50–0.88 (0.76) times the diameter of the anterior eyes; height of clypeus

0.78–1.42 (1.03) times the diameter of the anterior eyes; chelicerae length 2.08–3.23 (2.79); fang length 1.80–2.70 (2.43). Two of the females sampled (ref. MOR_0531) have a fourth tooth on the inner cheliceral margin. Probably depending on the inclination of the vulva, the lateral lobes of the spermatheca are ovoid or subtriangular with rounded edges (Fig. 25G-I).

Distribution and habitat

See comments.

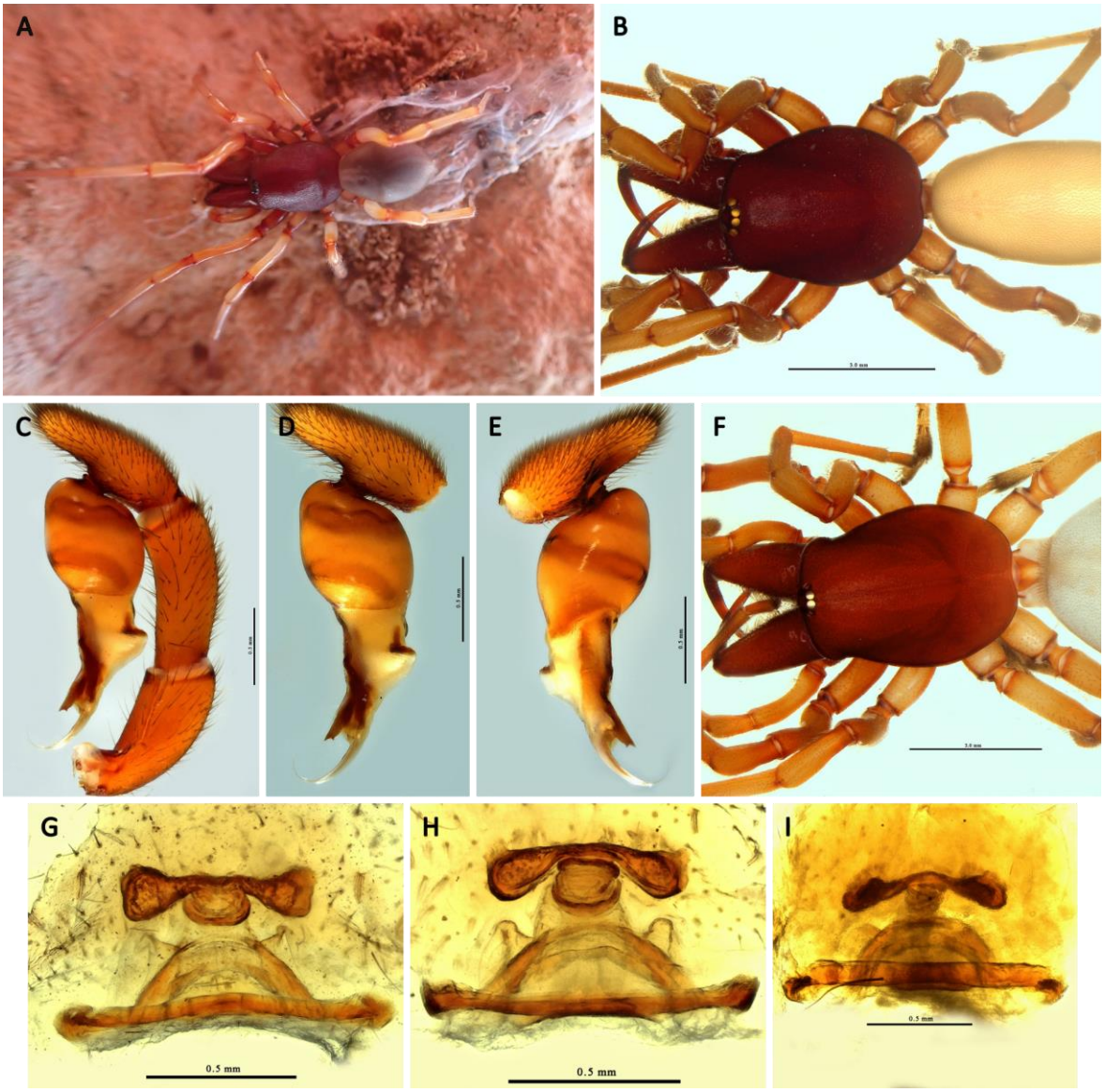

Figure 25: *Dysdera tenuistylus*. **A.** Male neotype (ref. MOR_1033). **B–E.** Male (ref. MOR_0531). **F-G.** Female (MOR_1251). **H.** Female (MOR_1028). **I.** Female (MOR_0531). **A-B.** Dorsal view. **C-D.** Palp, ventro-retrolateral view. **E.** Idem, dorso-prolateral view. **F.** Dorsal view. **G-I.** Vulva, dorsal view. Photos © A S. Moutaouakil, B-H P. Oger. Scale bars: B, F = 3.0 mm; C-E, G-I = 0.5 mm.

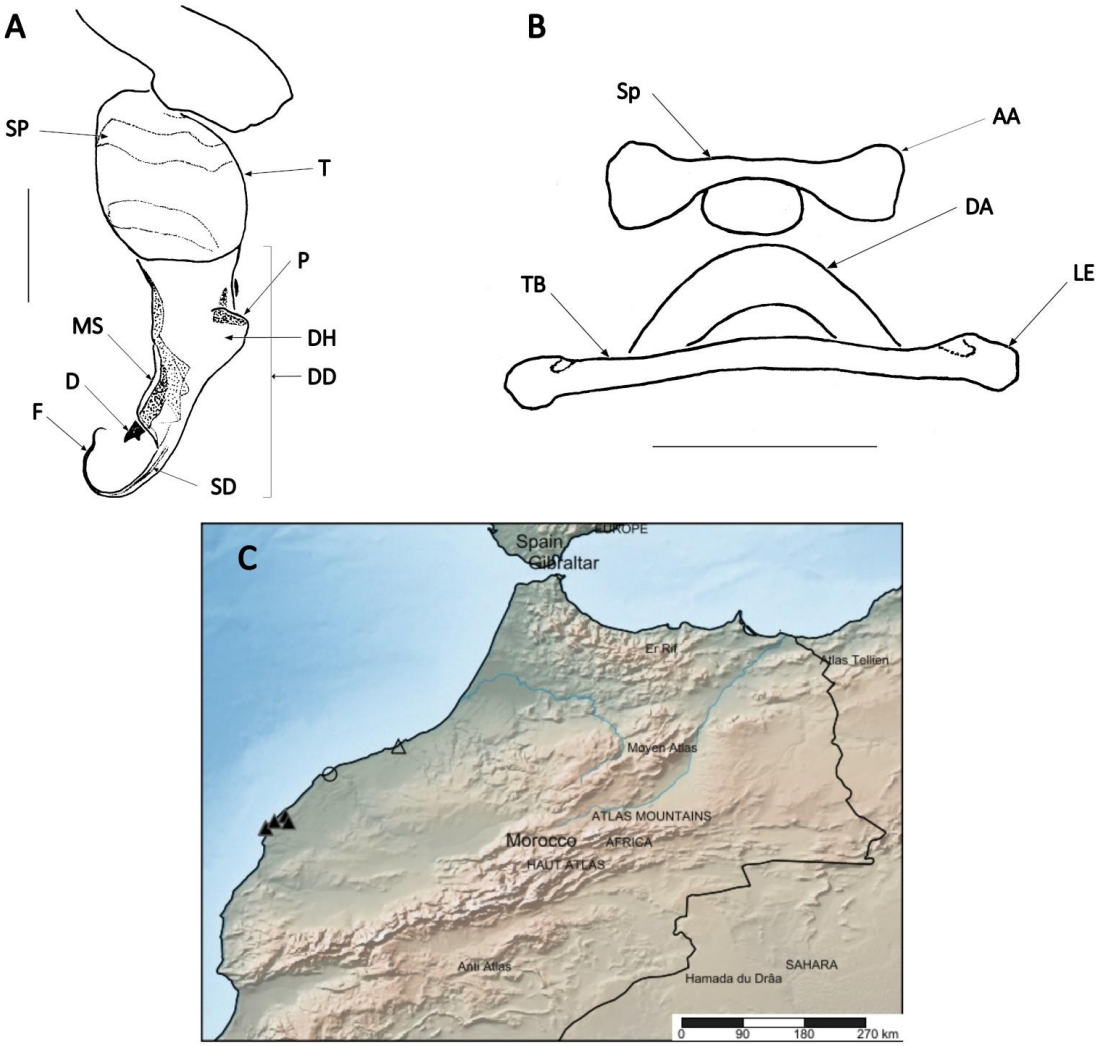

Figure 26: *Dysdera tenuistylus*. **A.** Male (ref. MOR_0531), palp, ventro-retrolateral view. **B.** Female (MOR_1251), vulva, dorsal view. **C.** Distribution map of the species; open triangle = loc. typ.; solid triangle = new records; open circle = loc. typ. *D. littoralis*. Abbreviations: D: distal apophysis; DA: dorsal arch of anterior diverticulum; DD: distal division; DH: distal haematodocha; F: flagellum; LE: lateral edge; MS: membranous structure; P: posterior apophysis; SD: seminiferous duct; Sp: spermatheca; SP: spermophore; T: tegulum; TB: transversal bar. Scale bars: A-B = 0.5 mm.

Family Eresidae C. L. Koch, 1845

***Eresus* Walckenaer, 1805**

***Eresus almaghrib* Szűts, Lecigne & Moutaouakil sp. nov.**

https://zoobank.org/NomenclaturalActs/E4D29EEB-8B61-448A-9B30-AA71FD09AF47

(Fig. 27A-F)

Diagnosis

Males can be recognized by the following characters: male without the characteristic red abdomen, but with anterior red small patch, a posterior white patch and a transverse white line with red setae (Fig. 27A). Male conductor with a thin, bent conductor tooth branching off from the conductor, pointing at the cymbium's tip easily observed in ventral view (Fig. 27E).

Etymology

This new species is currently endemic to Morocco; its Arabic name refers to the country where it was discovered.

Material examined

Holotype
MOROCCO • 1♂; Essaouira; 31,49993°N, 9,73073°W; 79 m a.s.l.; 5 Jul. 2021; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; ref. MOR_0521. Remark: left pedipalp detached.

Description

Male holotype (Fig. 27A-F)
Measurements. Total length 4.39. Carapace length 2.64, width 1.64, height 1.22. Abdomen length 2.06, width 1.38; clypeus height 0.10; chelicera length 1.10.
Color (from specimen in alcohol) (Fig. 27A-B). Carapace light brown, covered with white setae in the thoracic region (Fig. 27A), sparse red setae on the sides (Fig 27B); ocular area black, with white setae around PLE (Fig. 27A). Chelicerae and labium dark brown, covered with black setae. Carapace rather low (Fig. 27B). First femur, patella, tibia black, with white hairs coverage on femur I apical, patella I proximal half, metatarsus I proximal half, tarsus proximal area. Second leg similar, but femur lighter in color. Hind legs light brown covered with whitish hairs. Abdomen black, with three markings (Fig 27A); one in the anterior, one in the median and one in the posterior dorsum. Anterior patch round and red, with white setae around. Median with three elongated patches comprising a procurved abrupted line, formed by two white side patches: median patch triangle-shaped with a longitudinal red and transverse white setae coverage; posterior patch elliptical and white. Spinnerets black.
Eye sizes and inter-distances. AME 0.06, ALE 0.06, PME 0.14, PLE 0.11, AME-AME 0.07, AME-ALE 0.52, PME-PME 0.16, PME-PLE 0.84.
Leg measurements (Table 1).

Table 1: *Leg measurements (mm) of the male holotype of* Eresus almaghrib *Szűts, Lecigne & Moutaouakil* ***sp. nov.***

	Fe	P	Ti	Mt	t	total
I	1.49	0.79	0.93	0.99	0.93	5.13
II	1.19	0.73	0.73	0.85	0.64	4.14
III	1.10	0.69	0.57	0.59	0.46	3.41
IV	1.65	0.75	0.96	0.98	0.61	4.95

Palp (Fig. 27C–F). Conductor (Fig. 27D) rela6vely low (height less than 1.5 × its width in retrolateral view, Figs 27D, F), terminal tooth thin slightly curved backwards. The dome-shaped lamella (Fig. 27D) with a dis6nct notch, then eleva6ng steep; wide lamellar groove with strongly diverging sides (Fig. 27C).

Female
Unknown.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Essaouira, eponymous province), in wooded sandy coastal dune.

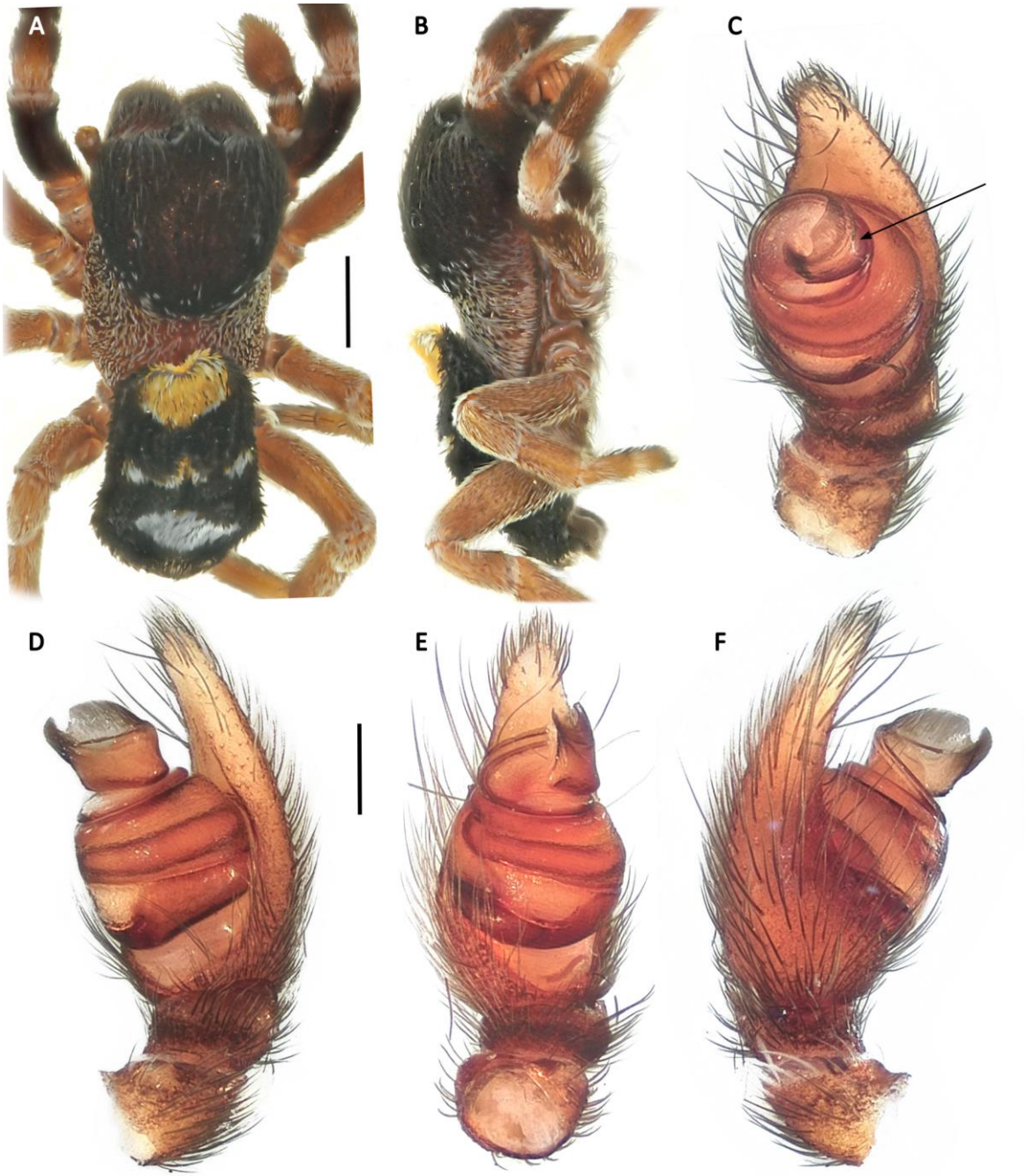

Figure 27: *Eresus almaghrib* **sp. nov.**, male holotype (ref. MOR_0521). **A.** Habitus, dorsal view. **B.** Idem, lateral view. **C.** Palp, antero-ventro-retrolateral view (arrow: conductor). **D.** Idem, retrolateral view. **E.** Idem, ventral view. **F.** Idem, prolateral view. Photos © T. Szűts. Scale bars: A, B = 1.0 mm; C, D, E, F = 0.2 mm.

***Eresus gharbi* Szűts, Lecigne & Moutaouakil sp. nov.**

https://zoobank.org/NomenclaturalActs/94800E7A-F769-4C72-B2A4-8A8870BF872D

(Fig. 28A-F)

Diagnosis

The males of the species can be recognized by the large body size, elevated carapace, the thick and bent terminal tooth of the conductor, and by the semicircular dome shaped lamella. The red legs seem also characteristic, just as the thick white patch on the first patellae. Conductor quite similar to that of *Eresus moravicus* Řezáč, 2008, but the dome-shaped lamella is semicircular, not straight as in *E. moravicus* (compare Fig. 28D vs Kovács et al. 2015 fig. 3E).

Etymology

The species name is a noun in apposition originating from the term gharbi (Arabic: غربي), meaning Western referring to the distribution of the species in the Maghreb.

Material examined

Holotype
MOROCCO • 1♂; Sidi Ifni; 28 Mar. 2023; S. Macík leg. Remark: left pedipalp detached.

Description

Male holotype (Fig. 28A-F)

Measurements. Total length 7.35. Carapace length 4.00, width 2.58, height 1.92. Abdomen length 4.35, width 3.17; clypeus height 0.17; chelicera length 1.78.

Color (Fig. 28A-B). Carapace black, covered densely with red setae, sparsely with white at the posterior end. Cephalic and thoracic region divided by a whitish procurved line. Cephalic area black, well elevated, with white setae around PLE. Chelicerae and labium, endites black, with grayish setae on chelicerae. First leg black, with dense white adpressed setae on the femur I apical, patella I proximal, tibia I apical, and metatarsus I proximal and apical ends. Leg II with red femur and patella, tibia, metatarsus and tarsus same as leg I. Hind legs with red femora, patellae and tibiae, with black metatarsi and tarsi. Tarsi III-IV with apical white and proximal red adpressed setae. Abdomen red on dorsum, with sparse white setae and with white border. Dorsum with four equal sized dots, with white borders.

Eye sizes and inter-distances. AME 0.08, ALE 0.10, PME 0.17, PLE 0.14, AME-AME 0.14, AME-ALE 0.88, PME-PME 0.32, PME-PLE 1.60.

Leg measurements (Table 2).

Table 2: *Leg measurements (mm) of the male holotype of* Eresus gharbi *Szűts, Lecigne & Moutaouakil* ***sp. nov.***

	Fe	P	Ti	Mt	t	total
I	2.29	1.39	1.26	1.53	1.10	7.57
II	2.00	1.15	1.09	1.19	0.93	6.36
III	1.72	1.04	0.94	1.03	0.73	5.46
IV	2.52	1.27	1.60	1.47	0.80	7.66

Palp (Fig. 28C-F). Conductor (Fig. 28D) rela7vely low (height less than 1.5 × its width in retrolateral view, Fig 28D, F), and terminal tooth thick, with a straight lower margin strongly curved back. Dome-shaped lamella semicircular; lamella with a dis7nct notch, lamellar groove wide with strongly diverging sides (compare Fig. 28C vs Kovács et al. 2015: p. 23, fig. 3F).

Female

Unknown.

Distribution and habitat

Probably endemic to Morocco; specimen collected on sandy dunes.

Figure 28: *Eresus gharbi* **sp. nov.**, male holotype. **A.** Habitus, dorsal view. **B.** Idem, lateral view. **C.** Palp, conductor, oblique view. **D.** Idem, retrolateral view. **E.** Idem, ventral view. **F.** Idem, prolateral view. Photos © T. Szűts. Scale bars: A, B = 2.0 mm; C, D, E, F = 0.2 mm.

***Stegodyphus* Simon, 1873**

***Stegodyphus* cf. *nathistmus* Kraus & Kraus, 1989**

(Fig. 29A-D)

Identification

KRAUS & KRAUS (1989): p. 223, fig. 200.

Previous citations in Morocco

KRAUS & KRAUS (1989).

New record

MOROCCO • 1♂ juv.; Amezmiz, Azgour; 31.18192°N, °W; 1671 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; rocky undergrowth on a slope, by hand; ref. MOR_0427.

Comments

An immature male specimen was captured on the wooded rocky slopes near Azgour in the High Atlas. Its abdominal pattern and several somatic characters suggest that it could be assigned to *Stegodyphus nathistmus*: carapace bright red brown in male (dark red brown in *S. lineatus* (Latreille, 1817)); lateral parts of the cephalic area of carapace without more dark than white hairs and no additional hair stripes or spots (unlike *S. lineatus*). Figure 29D shows the current known distribution of *S. nathistmus* for Morocco (approximate communal location, after KRAUS & KRAUS 1989, p. 231), and the new record (about thirty kilometers north of loc. typ.). It is also cited from Algeria and Yemen. *S. nathistmus* appears to be uncommon throughout its range. *S. lineatus* is more widely distributed, extending from Southern Europe and North Africa to Tajikistan and China (WSC 2025).

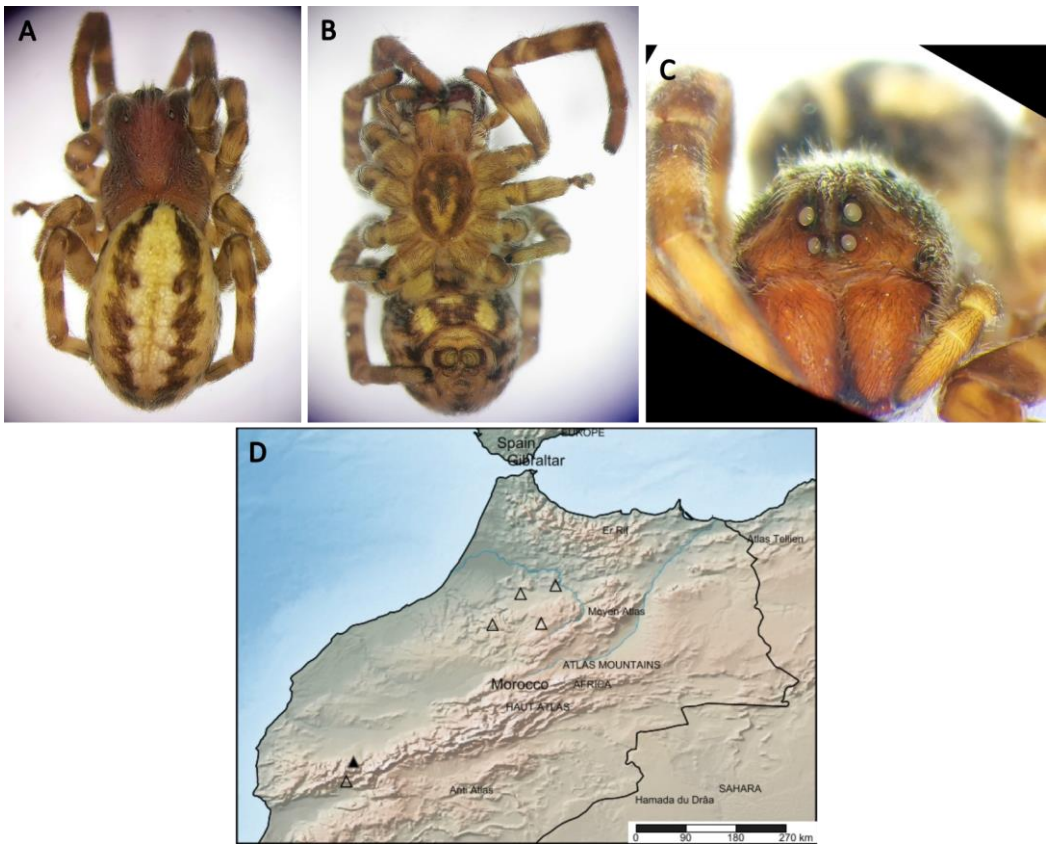

Figure 29: *Stegodyphus* cf. *nathistmus*, male immature (ref. MOR_0427). **A.** Dorsal view. **B. V**entral view. **C.** Frontal view. **D.** Records from Morocco; open triangle = previous citation; solid triangle = new record. Photos © S. Lecigne.

Family Gnaphosidae Banks, 1892
***Echemus* Simon, 1878**

***Echemus escalerai* Simon, 1909**
(Figs 30A-L, 103)

Identification
Bosmans & Alioua (2024, female): p. 1120, figs 2B-C, 3D-E.
Bosmans & Alioua (2024) recently published a description of the female and the unknown male of *Echemus escalerai*, a species endemic to Morocco. However, it turned out that the pair was not conspecific; the male belongs to a new species currently being described (Bosmans, pers. comm.). As this pair is closely related to *E. escalerai* and the male from Skhirate is itself very close to the male currently being described, we provisionally assign the male from Skhirate to *E. escalerai*.

Diagnosis
The male from Skhirate resembles the male of Bosmans & Alioua (2024: p. 1120, figs A-C) by the conformation of the genitalia, but can be distinguished by its tibial apophysis (TA) straight and spike-shaped, the sub-terminal part of the embolus (E) narrowing; the outer cheliceral margin armed with 3 teeth and a very reduced scutum covering about 10% of abdomen length (cf. Fig. 30A, G-H) (vs. tibial apophysis triangular and pointed dorsally, sub-terminal part of embolus distinctly wide; outer cheliceral margin armed with 4 teeth; scutum covering one third of abdomen length).

Previous citations
Simon (1909): p. 18 (female).
Bosmans & Alioua (2024, female only): p. 1120, figs 2B-C, 3D-E.

Material examined
Echemus escalerai Simon, 1909, holotype female, La Escalera leg., Morocco: Essaouira (Mogador), ref. AR 7010, based on photographs.

New records
MOROCCO • 1♂, 2 juv.; Skhirate, near Oued Cherrat; 33,81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_0993, deposited in SMF. Remark: left pedipalp and left leg II detached; left leg I missing. 1♀; Oukaïmeden; 31.25094°N, 7.81085W; 1834 m a.s.l.; 19 Mar. 2021; S. Moutaouakil leg.; rocky undergrowth on a slope, by hand; det. S. Lecigne; ref. MOR_0469. 1♀; Essaouira, Tlat Lhenchan; 31.67003°N, 9.34885°W; 391 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne; ref. MOR_0546, deposited in SMF. 1♀; Takerkouste, Lalla Taberkouste lake; 32.01283°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; rocky slope near a lake, under stones, by hand; det. S. Lecigne; ref. MOR_1232.

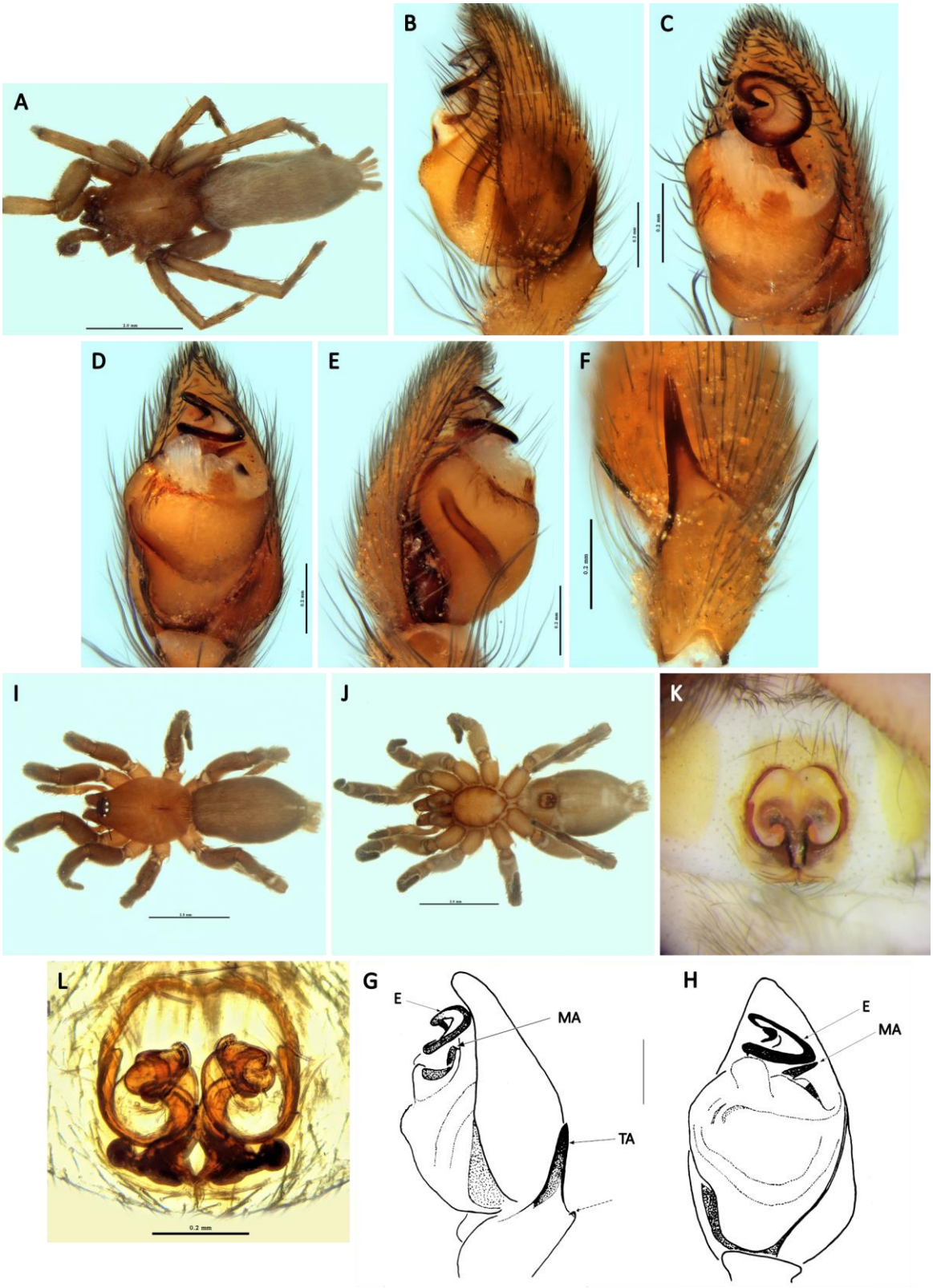

Figure 30: *Echemus escalerai*. **A–H.** male (*E.* cf. *escalerai*; ref. MOR_0993). **I-J, L.** Female (ref. MOR_0546). **K.** Female (ref. MOR_0469). **A.** Dorsal view. **B, G.** Palp, retrolateral view (dotted arrow: rounded dorso-anterior angle of the tibial apophysis base). **C.** Idem, ventro-retrolateral view. **D, H.** idem, ventral view. **E.** Idem, prolateral view. **F.** Tibial apophysis, retrolateral view. **I.** Dorsal view. **J.** Ventral view. **K.** Epigyne. **L.** Vulva, dorsal view. Abbreviations: E: embolus; MA: median apophysis; TA: tibial apophysis. Photos © K S. Lecigne; A-F, I-J, L P. Oger. Scale bars: A, I-J = 2.0 mm; B-H, L = 0.2 mm.

Description

Male (Fig. 30A-H)

Measurements. Total length 5.65; carapace length 2.17, width 1.67, CL/CW 1.30, fovea 0.23 length; chelicerae length 0.67; scutum 0.4 length.

Color (from specimen in alcohol) (Fig. 30A). Carapace, sternum, chelicerae and legs pale brown, fovea dark brown; abdomen yellow greyish.

Carapace. With a fovea in the posterior half. Chelicerae with a few scattered thin setae on anterior side, outer cheliceral margin armed with three teeth, the middle one the largest, the proximal one the smallest; inner cheliceral margin with a small tooth.

Leg spination. Palpal femur, a sub-median and a sub-distal dorsal spines, the first one the longest. Femora I-II, 2 dorsal spines, the basal one the longest, 1 prolateral sub-distal spine; metatarsus II, 1 ventral sub-basal spine; legs III-IV with numerous spines.

Abdomen. With short and narrow scutum occupying about 10% of its length, covered with medium flat-lying setae.

Palp (Fig. 30C-H). Tibial apophysis in dorso-retrolateral position, base broad, its lateral margins almost parallel, dorsal margin marked anteriorly by a small, rounded protrusion (Fig. 30F, G dotted arrow), distal part of the apophysis straight, spike-shaped (Fig. 30B, F, G, TA). Median apophysis bent at about 90°, distal part pointed and curved outwards (Fig. 30H, MA). Embolus emerging from backside of tegulum across the distal end of the palpal bulbus, apical part in the shape of a sub-horizontal helix wound counter-clockwise for 2 turns, provided with a membranous structure (Fig. 30D, H, see E).

Distribution and habitat

Figure 103 shows the distribution of the species (previous citations after BOSMANS & ALIOUA 2024) with the available current records. According to these authors, *E. escalerai* appears to be common in the region between Essaouira (loc. typ.), Marrakech and Agadir. However, the actual extent of its range has yet to be clarified, given the small number of records; it is also likely that some of the records refer to the new species currently being described (see above "Identification"). The species inhabits dry environments in open or wooded areas, under stones or in litter (*Argania* steppe, palm yard, rocky slopes... including urban parks) (BOSMANS & ALIOUA 2024).

Gnaphosa Latreille, 1804

***Gnaphosa afnourir* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/73CAB6B8-0047-4552-801A-E541E2013273

(Fig. 31A-I)

Diagnosis

Males of *Gnaphosa afnourir* are distinguished by the double-toothed appearance of their tibial apophysis and by the length, shape and prolateral running of the embolus.

Etymology

The name of this new species refers to the lake (Afnourir or Afennourir) on the shore of which it was found.

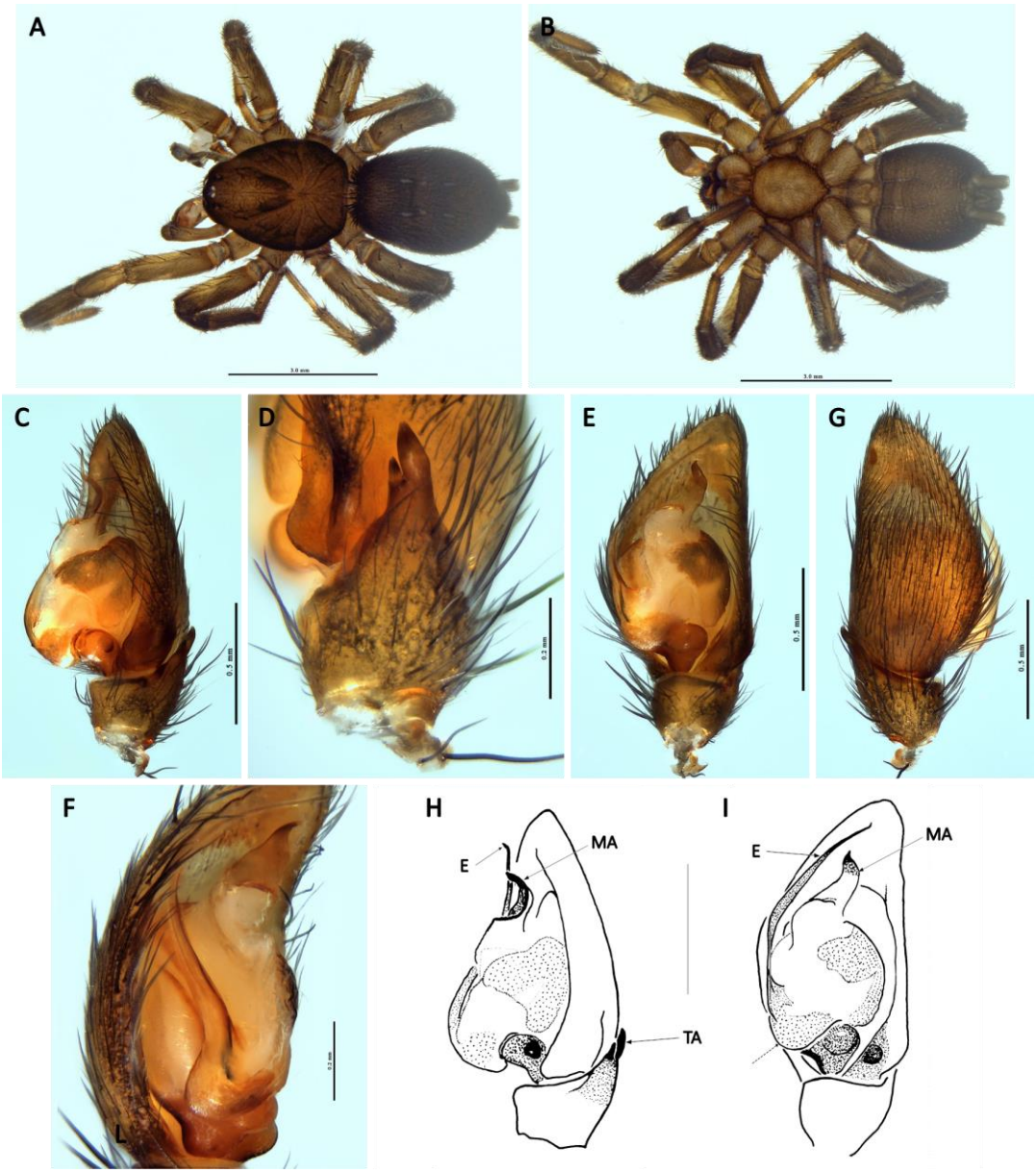

Figure 31: *Gnaphosa afnourir* **sp. nov.**, male holotype (ref. MOR_1156). **A.** Dorsal view. **B.** Ventral view. **C, H.** Palp, ventro-retrolateral view. **D.** Tibial apophysis, dorso-retrolateral view. **E, I.** Palp, ventral view (dotted arrow: wide rounded base of embolus). **F.** Idem, ventro-prolateral view. **G.** Idem, dorsal view. Abbreviations: E: embolus; MA: median apophysis; TA: tibial apophysis. Photos © P. Oger. Scale bars: A-B = 3.0 mm; C-E, G-I = 0.5 mm; D, F = 0.2 mm.

Material examined

Holotype
MOROCCO • 1♂ ,5 juv.; Aïn Louh, Afnourir (Afennourir) lake; 33.28010°N, 5.25354°W; 1800 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; high altitude lawn, on the shore of a dry lake, under a stone, by hand; ref. MOR_1156. Remarks: immature specimen raised to maturity. Left pedipalp detached; right pedipalp malformed.

Description

Gnaphosa afnourir **sp. nov.** has "a long, narrow embolus occupying most of the prolateral side of the palpal bulb" as defined by OVTSHARENKO *et al.* (1992); we also tentatively assigned the species to the *muscorum* group.

Male holotype (Fig. 31A-I)

Measurements. Total length 6.05; carapace length 2.95, width 2.24, CL/CW 1.32, clypeus height 0.09, ALE 0.10; chelicerae length 0.87; femur I length 1.70, metatarsus I length 1.33, femur II length 1.60, metatarsus II length 1.20.

Color (from specimen in alcohol) (Fig. 31A-B). Carapace brown, sides darker; chelicerae brown, sternum pale brown; legs brown, metatarsi paler; abdomen dark grey, venter paler.

Eye. Posterior eye-row recurved, PME almost touching. Anterior spinnerets widely spaced, bearing 7 piriform gland spigots.

Leg spination. Patellae and tibiae I-II spineless; metatarsi I-II, 1 pair of short ventral spines, position 0.45; tarsi spineless, other segments with a variable number of spines, more numerous on legs III-IV.

Palp (Fig. 31C-I). Tibial apophysis in dorso-retrolateral position, bifid, in the shape of pointed conical teeth, the dorsal one the strongest, its distal half slightly inclined outwards, the ventral one distinctly smaller and straight (Fig. 31D, H, TA). Basal part of median apophysis wide, distal part pointed and bent outwards (Fig. 31I, MA). Base of embolus robust (Fig. 31F), visibly rounded (Fig. 31I, dotted arrow), embolus arising at about 8 o'clock, partially twisted at origin, running along entire prolateral side, evenly tapering to 13 o'clock position (Fig. 31F, I, see E).

Female

Unknown.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Afnourir high-altitude lake, province of Ifrane).

Haplodrassus Chamberlin, 1922

Haplodrassus dentifer Bosmans & Abrous, 2018

(igs. 32A-E)

Identification

BOSMANS et al. (2018): p. 19, figs 49-51.

Previous citations in Morocco

BOSMANS et al. (2018).

New record

MOROCCO • 1♂; Amezmiz, Azgour; 31.20650°N, 8.24773°W; 1113 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; rocky undergrowth on a slope, by hand; det. R. Bosmans; ref. MOR_0373.

Comments

Haplodrassus dentifer was only recently described (BOSMANS et al. 2018); it is one of the eleven representatives of the genus currently known from Morocco (BENHALIMA & BOSMANS 2024). It is also present in Algeria and was once recorded in Tunisia and Spain. This observation in the Moroccan High Atlas Mountains confirms the known phenology and ecology of the species.

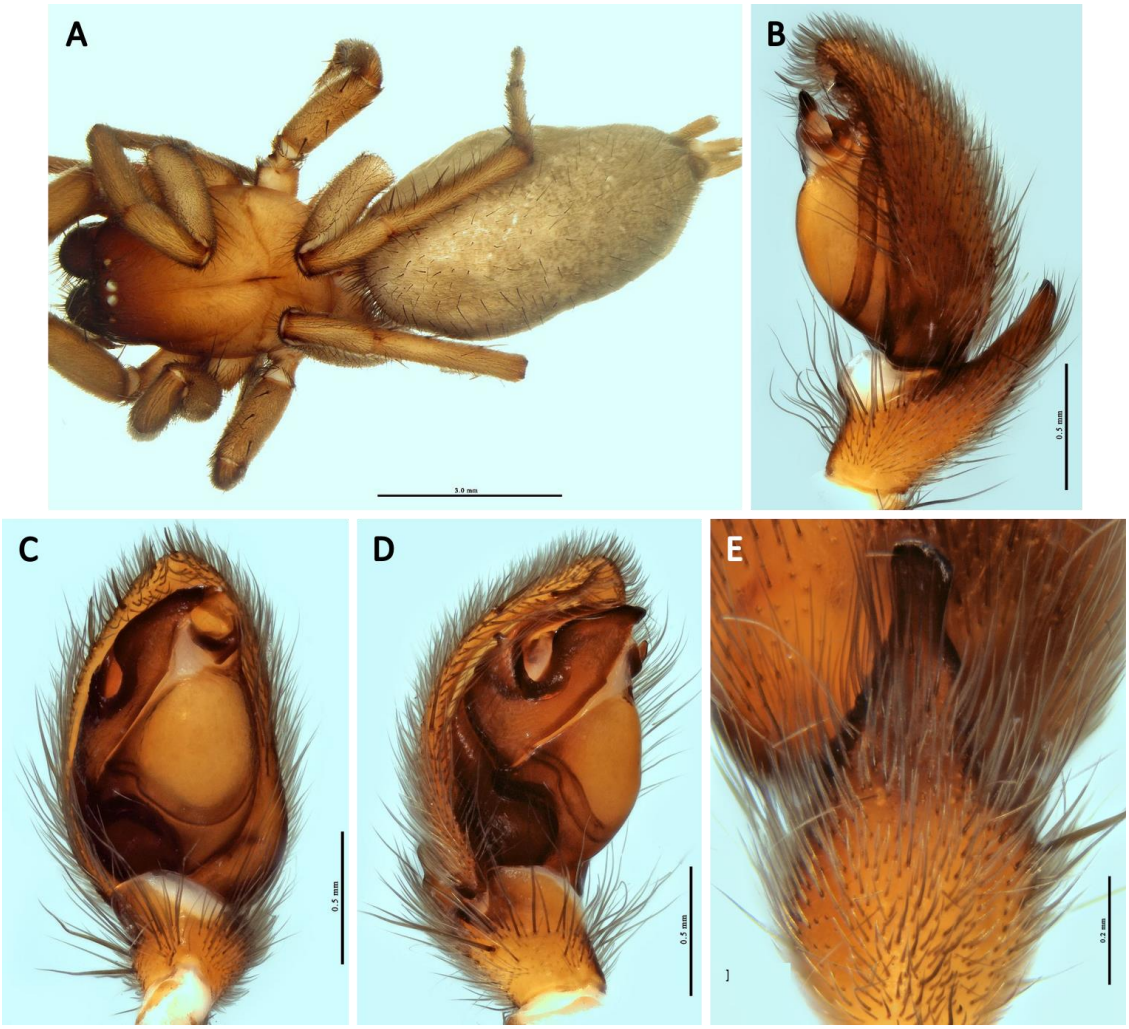

Figure 32: *Haplodrassus dentifer*, male (ref. MOR_0373). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, prolateral view **E.** Tibial apophysis, dorsal view. Photos © P. Oger. Scale bars: A = 3.0 mm; B-D = 0.5 mm; E = 0.2 mm.

Haplodrassus lyndae Abrous & Bosmans, 2018

(Fig. 33A-I)

Identification

BOSMANS et al. (2018): p. 20, figs 58-66.

Previous citations in Morocco

BOSMANS et al. (2018).

New record

MOROCCO • 1♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0811. 1♂, 1♀; Tagleft; 32.26916°N, 6.25973°W; 1730 m a.s.l.; 11 Nov. 2023; S. Moutaouakil leg.; high altitude stony grassland, under stones, by hand; det. S. Lecigne, P. Oger; ref. MOR_0897.

Comments

Haplodrassus lyndae was also recently described. The species also occurs in Algeria and Spain, and possibly in Italy (BOSMANS et al. 2018). These two recent records from the Moroccan High Atlas Mountains help to complete and refine the phenology and ecology of the species: both males and females can be found from November onwards; to date up to 2330 m; in addition to high altitude *Cedrus* and *Quercus* forests, *H. lyndae* can also be present in open habitats e.g. high altitude xerothermophilous stony grassland.

Micaria Westring, 1851

Micaria corvina Simon, 1878

(Fig. 34A-D)

Identification

LEVY (2002): p. 125, figs 34-39; p. 127, figs 43-44 (types not available; Gavish-Regev, pers. comm.).

First record

MOROCCO • 1♀; Azrou; 33.30247°N, 5.22469°W; 13 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; lawn on basalt field, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_1167.

Comments

Micaria corvina is very close to *Micaria triguttata* Simon, 1884. Both species occur in Algeria; *M. corvina* is also reported from Israel where it appears to be relatively common in the Negev (LEVY 2002; descr. female) and Tunisia. *M. triguttata* is also recorded from Algeria, Spain, Portugal and France (WSC 2025). In the absence of type material, we studied several females from the National Natural History Collections (NNHC-HUJ) (Hebrew University of Jerusalem) on the basis of photographs; however, these did not permit us to define the spination of tibiae I-II. Based on the comparative analysis presented in Table 3 (for this purpose, we consider that the female described by WUNDERLICH (1980) is conspecific with the male of *M. triguttata* described by SIMON (1884) from Spain; specimen not examined), we tentatively assign the specimen to *M. corvina*. The species is new to Morocco (after BENHALIMA & BOSMANS 2024).

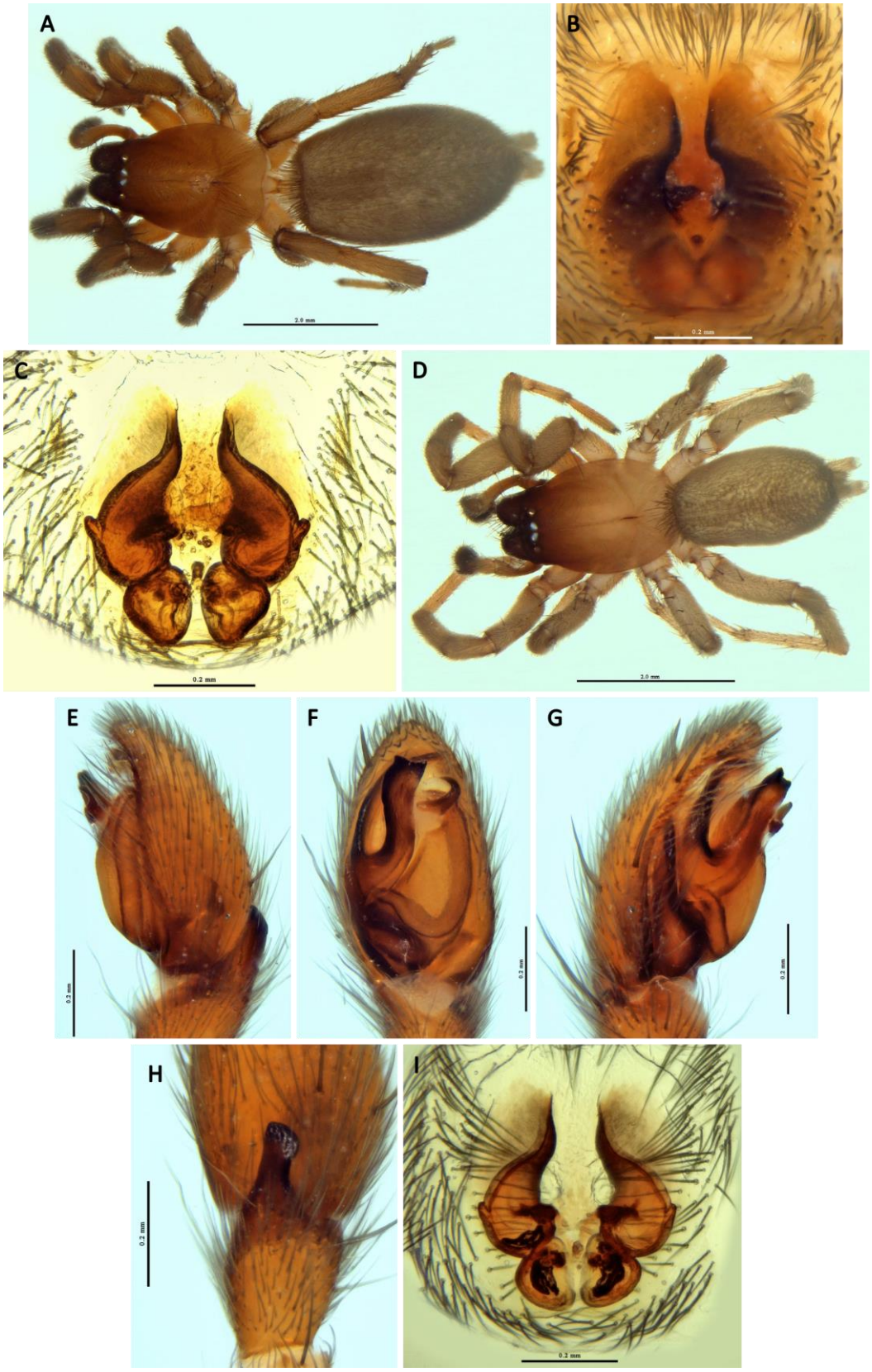

Figure 33: *Haplodrassus lyndae*. **A-C.** Female (ref. MOR_0811). **D-I.** Male, female (ref. MOR_0897). **A.** Dorsal view. **B.** Epigyne. **C.** Vulva, dorsal view. **D.** Male, dorsal view. **E.** Male, palp, retrolateral view. **F.** Idem, ventral view. **G.** Idem, prolateral view **H.** Tibial apophysis, dorsal view. **I.** Female, vulva, dorsal view. Photos © P. Oger. Scale bars: A, D = 2.0 mm; B-C, E-I = 0.2 mm.

Table 3: *Respective characters of the female of* Micaria corvina *and* M. triguttata*, in comparison with the specimen sampled from Azrou. Measurements in mm.*

Characters	***Micaria* from Azrou** (present study)	***Micaria corvina*** (after LEVY 2002)	***Micaria triguttata*** (after WUNDERLICH 1980)
Total length	3.40	2.90-3.80	2.60-3.35
Carapace length	1.43	1.20-1.50	1.20
Carapace width	0.90	0.85-1.00	0.80
Number ventral spines Ti I	6 pairs	?	5-6 pairs
Number ventral spines Ti II	3	?	5-6 pairs
Arrangment ventral spines Mt I-II	9 pairs apically decreasing in size	?	Double row of long setae
Carapace coloration	Black with white spots on posterior margin	Black with white spots on posterior margin	Dark brown
Abdominal pattern	Black, variously marked along dorsal and lateral sides; venter pale with white marking in front of the spinnerets. As in Figs 38-39, p. 125 (LEVY 2002), except for the white spot on the posterior third, which is missing	Black, variously marked along dorsal and lateral sides; venter yellow	Grey-brown as a whole, ventrally likewise, dorsally with 1 white transverse band in the middle of the length, 1 white spot immediately in front of this, 1 further spot at the very front
Epigyne	Fig. 30C	Brownish, raised lateral expansions project into central cavity; cavity bordered anteriorly by fine sclerotic ridge	Similar to *M. guttigera*, anteriorly with a broad transverse ridge; receptacula barely translucent (covered by pigments)
Vulva	Fig. 30D; spermathecae do not seem to extend beyond anterior sclerotic ridge	Fig. 44; spermathecae do not seem to extend beyond anterior sclerotic ridge	Fig. 47b; spermathecae seem to extend beyond anterior sclerotic ridge

Figure 34: *Micaria corvina*, female (ref. MOR_1167). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne. **D.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A-B = 1.0 mm; C-D = 0.1 mm.

Nomisia Dalmas, 1921

Nomisia amizmiz Lecigne sp. nov.

https://zoobank.org/NomenclaturalActs/20038FB8-7B08-4C84-9F65-9AADD49732C5

(Figs 35A-I, 36A-C)

Diagnosis

The new species most resembles *Nomisia palaestina* (O. Pickard-Cambridge, 1872) by the S-shaped embolus of the male pedipalp, *Nomisia orientalis* Dalmas, 1921 and *Nomisia celerrima* (Simon, 1914) by the shape of the retrolateral Gbial apophysis. *Nomisia amizmiz* **sp. nov.** can be disGnguished from the former by the absence of an angular prolateral projection of the tegulum (Figs 35D-E, 36A) (vs. present in *N. palaestina*, CHATZAKI 2010, fig. 32) and a clearly ventrally inclined retrolateral Gbial apophysis (vs. not inclined in *N. palaestina*, CHATZAKI 2010, fig. 33). It differs from *N. orientalis* in the appearance of its S-shaped or coiled embolus (Fig. 36A) without protrusion at its base (vs wedge shaped with a protrusion near the base in *N. orientalis*, SEYYAR et al. 2009, fig. 13) and from *N. celerrima* in the presence of a membranous ventral Gbial apophysis (Figs 35H, 36B) (inconspicuous in *N. celerrima*, DALMAS 1921, fig. 84).

Etymology

The name of this new species refers to the name of the small town (Amezmiz or Amizmiz) in which it was found.

Material examined

Holotype
MOROCCO • 1♂; Amizmiz, Azgour; 31.20650°N, 8.24773°W; 1113 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; rocky undergrowth on a slope, by hand; ref. MOR_0432. Remark: left pedipalp detached; left leg I, right leg II and IV missing.

Comments

The genus *Nomisia* currently comprises 39 species (WSC 2025), of which only 3 were recorded from Morocco (BENHALIMA & BOSMANS 2024).

Description

Male holotype (Figs 35A-I, 36A-C)
Measurements. Total length 6.50; carapace length 2.85, width 2.25, CL/CW 1.27; chelicerae length 1.00.
Color (from specimen in alcohol) (Fig. 35A-B). Carapace, sternum, legs and anterior spinnerets brown; chelicerae and fovea dark brown; carapace with numerous dark stripes radiating from fovea to submarginal area. Abdomen greyish, a vague darker dorsal median pattern, venter paler.
Carapace. With a fovea in the posterior half; anterior eye line as wide as posterior eye line. Clypeus with few long setae, chelicerae with scattered setae, inner cheliceral margin with a serrated keel.
Eyes measurements. ALE 0.15; AME 0.12; clypeus height at ALE 0.22, at AME 0.28.
Palp (Figs 35C-I, 36A-B). Tibia with small, rounded, membranous ventro-retrolateral extension (Fig. 36B, ME) and well sclerotized dorso-retrolateral apophysis (Fig. 36B, TA), the latter ribbon-shaped, inclined ventrally by about 45°, sub-terminal part enlarged (Fig. 35H), apex folded pointing dorso-posteriorly. Tegulum with rounded prolateral extension (Fig. 36A, dotted arrow) and membranous apical extension (Fig. 36A, ET). Embolus robust, sclerotized, twisted, distal part with translucent structure (Figs 35D, 36A, see E). Median apophysis hook-shaped (Fig. 36B, MA),

directed outwards, a small part visible when viewed from ventral side (Fig. 36A, MA), as most of it is covered by the upper surface of the tegulum.

Female

Unknown.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (province of Al Haouz, Amizmiz, Azgour), Moroccan High Atlas.

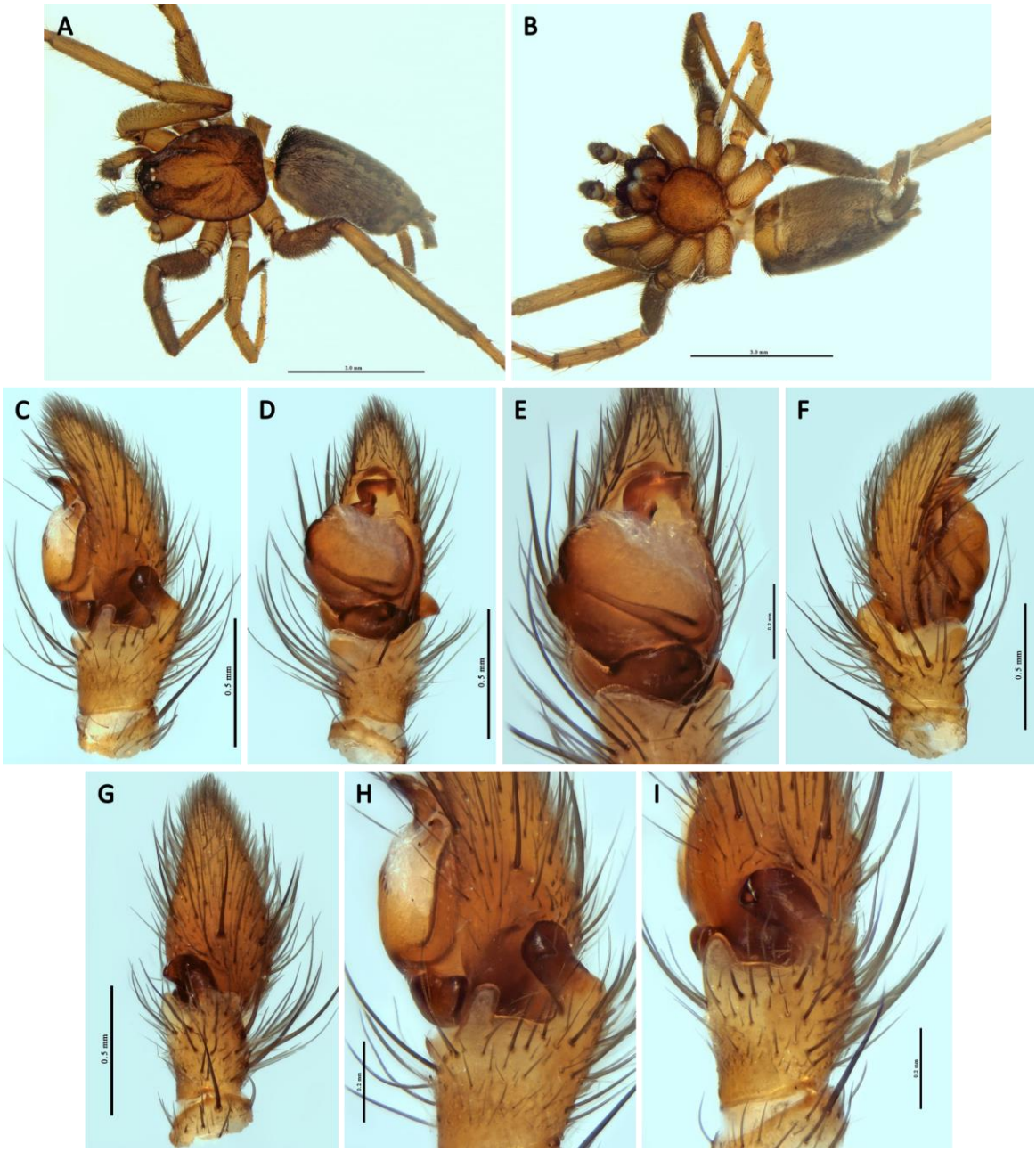

Figure 35: *Nomisia amizmiz* **sp. nov.**, male holotype (ref. MOR_0432). **A.** Dorsal view. **B.** Ventral view. **C.** Palp, retrolateral view. **D-E.** Idem, ventral view. **F.** Idem, prolateral view. **G.** Idem, dorsal view. **H.** Tibial apophysis, retrolateral view. **I.** Idem, dorso-retrolateral view. Photos © P. Oger. Scale bars: A-B = 3.0 mm; C-D, F-G = 0.5 mm; E, H, I = 0.2 mm.

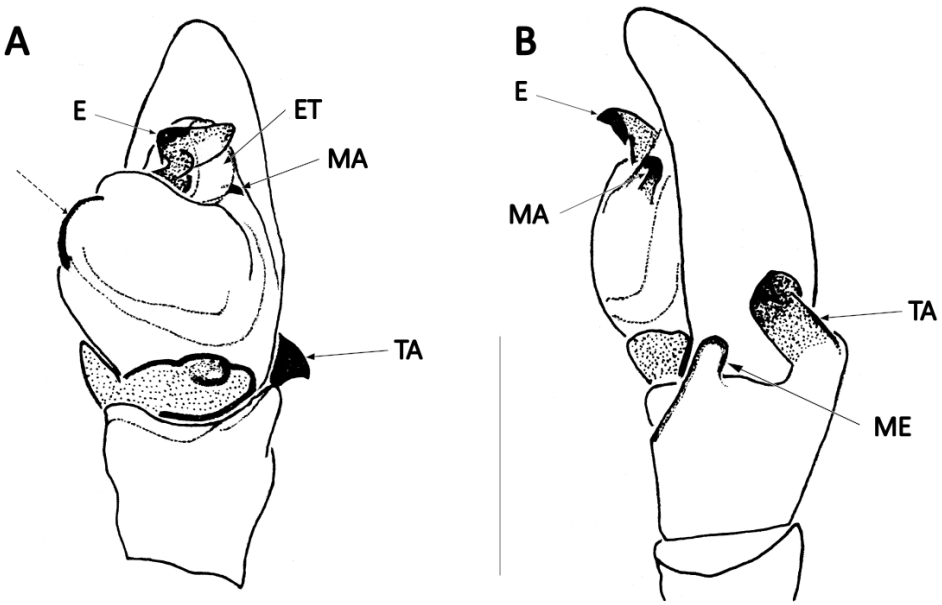

Figure 36: *Nomisia amizmiz* **sp. nov.**, male holotype (ref. MOR_0432). **A.** Palp, ventral view (dotted arrow: prolateral extension of the tegulum). **B.** Idem, retrolateral view. Abbreviations: E: embolus; ET: membranous extension of the tegulum; MA: median apophysis; ME: membranous ventro-retrolateral extension of the tibia; TA: dorso-retrolateral tibial apophysis. Scale bars: A-B = 0.5 mm.

Nomisia castanea Dalmas, 1921

(Figs 37A-E)

Identification

LEVY (1995): p. 937, fig. 47.

First records

MOROCCO • 1♀; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 14 Dec. 2020; S. Moutaouakil leg.; forest, by hand; ref. MOR_0366. 3♀♀; idem; 17 Jan. 2022; ref. MOR_0643. 1♀; Asni, Tamadout; 31,19287°N, 7,96830°W; 1824 m a.s.l.; 17 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger, R. Bosmans; ref. MOR_0445. 6♀♀, 4 juv.; Azgour; 31.20650°N, 8.24773°W; 1113 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0660; 3♀♀ deposited in SMF.

Comments

To date, there are only a few records of *Nomisia castanea*. The species appears to be rare throughout its range, as Dalmas (1921) already pointed out. It inhabits North Africa and is currently only known from Algeria, Tunisia and Libya (WSC 2025). Its ecology is unknown; there is no mention of its habitats. In Morocco, the only two localities where it was found are wooded rocky slopes, from 1100 m up to 1820 m a.s.l. The female was recorded from October to March; there is no indication for the male. The species is new to Morocco (after BENHALIMA & BOSMANS 2024).

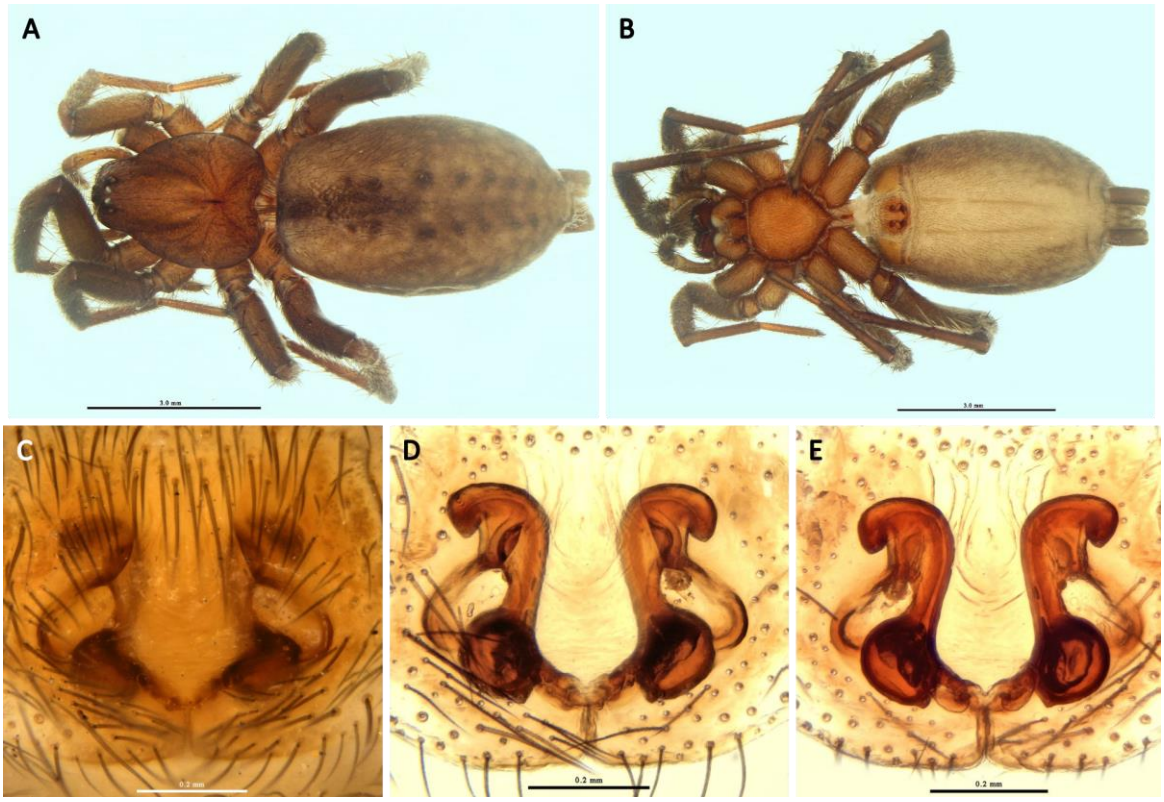

Figure 37: *Nomisia castanea*, female (ref. MOR_0445). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne. **D.** Vulva, ventral view. **E.** Idem, dorsal view. Photos © P. Oger. Scale bars: A-B = 3.0 mm; C-E = 0.2 mm.

Pterotricha Kulczyński, 1903

Pterotricha schaefferi (Audouin, 1826)

(Figs 38A-H)

Identification

LEVY (1995): p. 964, figs 108-110.

First record

MOROCCO • 2♂♂ sub.; Amezmiz, Azgour; 31.18426°N, 8.26919°W; 1653 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; sunny shrubby rocky slope, under a stone, by hand; ref. MOR_1242. Remarks: specimens raised to maturity. Left pedipalp detached.

Comments

According to Simon (1907), *Pterotricha schaefferi* is very common throughout the desert region of North Africa and Arabia. It occurs in Libya, Egypt, Sudan and Ethiopia (WSC 2025) and was recently added to the spiders fauna of Cyprus (BOSMANS et al. 2019; in sand dunes) and Algeria (BENHACENE et al. 2023). In Israel, LEVY (1995) reports it from only one locality (Ashdod, coastal plain). The species is close to *P. chazaliae* (Simon, 1895) and *P. lesserti* Dalmas, 1921; the male differs in the shape both of median apophysis and retrolateral tibial apophysis. *P. schaefferi* is new to Morocco (BENHALIMA & BOSMANS 2024).

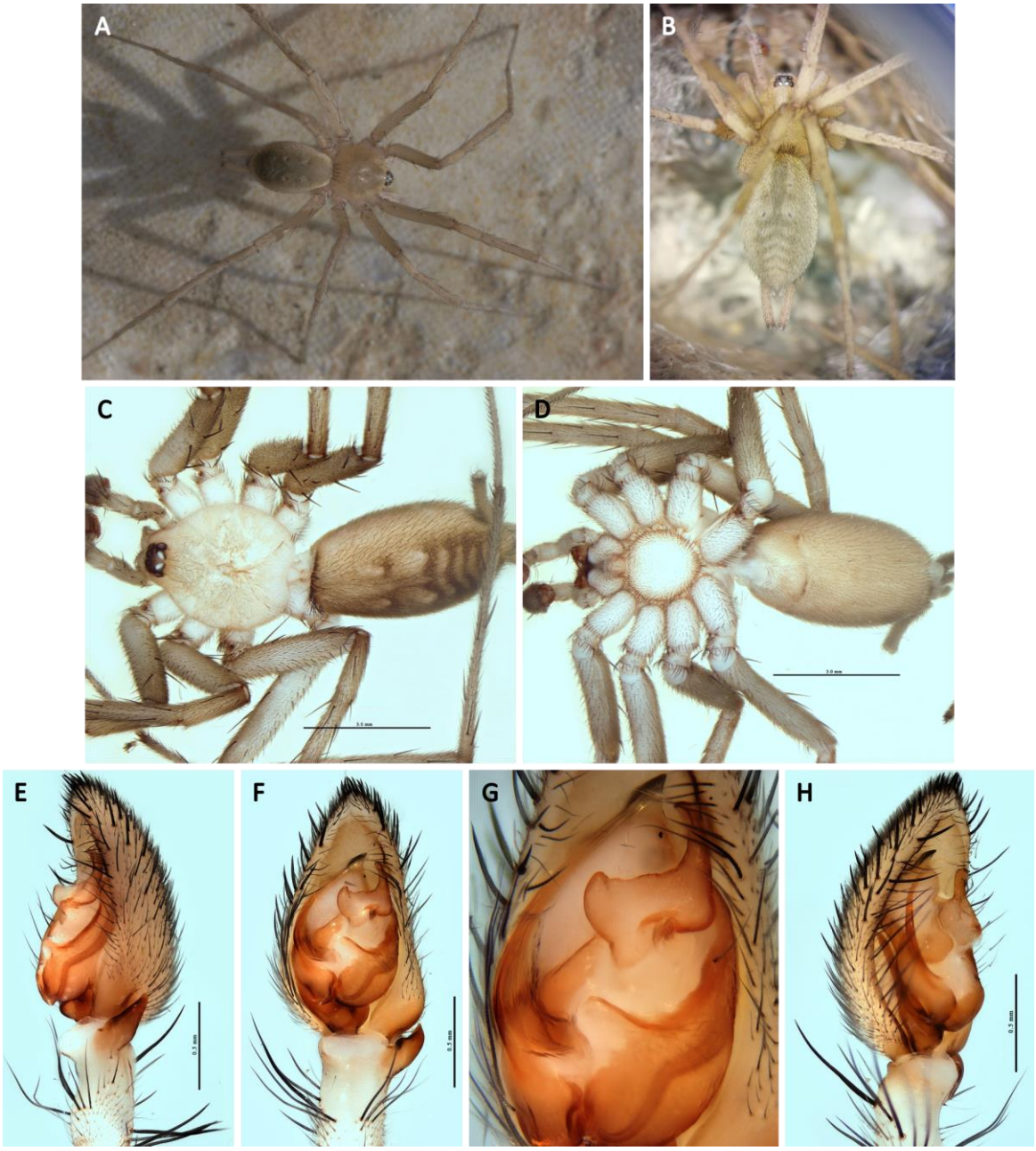

Figure 38: *Pterotricha schaefferi*, male (ref. MOR_1242). **A-C.** Dorsal view. **D.** Ventral view. **E.** Male, palp, retrolateral view. **F-G.** Idem, ventral view. **H.** Idem, ventro-prolateral view. Photos © A-B S. Lecigne, C-G P. Oger. Scale bars: C-D = 3.0 mm; E-F, H = 0.5 mm.

Setaphis Simon, 1893

Setaphis mollis (O. Pickard-Cambridge, 1874)

(Fig. 39A-I)

Identification

BOSMANS & JANSSEN (2009): p. 87, figs 9-12.

Figure 39: *Setaphis mollis*. **A–E.** Male (ref. MOR_0810). **F-I.** Female (same ref.). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventro-retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Dorsal view. **G.** Ventral view. **H.** Epigyne. **I.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, F-G = 2.0 mm; B-E, H-I = 0.2 mm.

First record

MOROCCO • 2♂♂, 1♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; det. R. Bosmans, S. Lecigne; ref. MOR_0810. Remarks: specimens raised to maturity.

Comments

Setaphis mollis is currently known from almost all of North Africa, from Italy (Sicily) and Israel (WSC 2025). Its discovery in the Moroccan High Atlas Mountains represents both the new western limit of its range and one of the highest altitudes of its known records. Too few citations make its ecology as yet unclear. However, it appears to occupy a fairly wide variety of habitats: fixed dunes, open steppes in semi-arid region (main habitat in Algeria), abandoned fields, stones along an oued, *Pinus halepensis* forest (Bosmans & Janssen 2009). The new records (Oukaïmeden, Province of Al Haouz) correspond to a wooded, dry and rocky mountain environment. *S. mollis* is easily distinguished from all other *Setaphis* species by its genital characters (see diagnosis, Platnick & Murphy 1996). The species is new to Morocco (Benhalima & Bosmans 2024).

Turkozelotes Kovblyuk & Seyyar, 2009

Turkozelotes africanus Lecigne sp. nov.

https://zoobank.org/NomenclaturalActs/AFDAE382-ECE5-4CCF-89AD-CB5893FA15E3

(Figs 40A-G)

Diagnosis

Male of the new species most resembles *Turkozelotes attavirus* Chatzaki, 2019 by the size and the shape both of the RTA and the terminal apophysis, and by its general appearance (e.g. orange color and punctation of the carapace, coloraCon of the abdomen). *Turkozelotes africanus* **sp. nov.** can be disCnguished from the laEer by the posiConing of the Cp of the embolus, parCally hidden behind the scleroCzed median apophysis (Fig. 40G, E) (vs. anteriorly in “the soL cavity of the median apophysis”, Chatzaki 2018, figs 52-53) and by the size of the terminal membrane, nearly as long as terminal apophysis (Fig. 40G, TM) (vs. “reduced at base of terminal apophysis”, Chatzaki 2018, Tm in Figs 53−55).

Etymology

The new species is named as the first representative of the genus on the African continent.

Material examined

Holotype

MOROCCO • 1♂; Marrakech, “La Palmeraie”; 31.66775°N, 7.88725°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid anthropized area, with sparse vegetation, under a piece of cardboard, by hand; ref. MOR_0745. Remark: left pedipalp detached.

Comments

The genus *Turkozelotes* currently comprises 6 species, distributed from western Europe to the Near East, mainly in the Eastern Mediterranean, none of which was previously known from Africa (WSC 2025). The new species features the male genital characters of the genus (after Chatzaki 2018) i.e. presence of a long, thin embolus originating prolaterally, hidden dorsally and reappearing retrolaterally; a characteristic heavily sclerotized median apophysis and a terminal membrane.

Description

Male holotype (Figs 40A-G)

Measurements. Total length 3.75; carapace length 1.59, width 1.16, CL/CW 1.37; PME 0.05. *Color* (from specimen in alcohol) (Figs 40A-B). Carapace orange, scattered with long fine black hairs; white plumose setae on the margins and more densely behind PME; area surrounding AMEs and between PLE-PMEs black; chelicerae orange; sternum orange, margin darker; legs pale orange except all palpal segments and trochanter, femora and patellae I-II, black. Abdomen black, uniformly covered with short black hairs, a lighter transverse band anteriorly with a median spot of white plumose setae, 2 large pale orange latero-transverse patches in median position also covered with white setae; a band of white setae in front of the anal tubercle, not reaching the posterior spinnerets; ventral surface with three broad yellowish longitudinal stripes covering the second third, the rear third dark grey (Fig. 40B).

Carapace. Completely punctuated with remarkable granulation (Fig. 40A); fovea not visible; posterior eye line straight, barely wider than anterior eye line, PME-PME 1.25 times their diameter; inner cheliceral margin with 1 conical tooth, outer cheliceral margin with 1 triangular strongly sclerotized tooth (seems to be extended by a short sclerotized keel). Dorsal scutum large, covering 70% of the abdominal surface; ventral surface covered with a scutum in the first third (up to the epigastric fold).

Spination. Legs I-II spineless; leg III: femora with 2 dorsal spines and one prolateral apical spine, tibiae with 2 ventral spines and 1 or 2 prolateral apical spine(s); leg IV: femora with 2 dorsal spines, tibiae with 2 ventral spines.

Palp (Fig. 40C-G). Tibial apophysis short, base broad (Fig. 40F, RTA), sub-apical part slightly narrowed, apex hardly bent inwards. Terminal apophysis (especially the inner margin) strongly sclerotized, originating from median part of tegulum, terminally pointed in 2 o'clock position (Fig. 40G, TA). Terminal part of median apophysis folded, lamella-shape, moderately sclerotized, tip rounded and pointing forwards (Fig. 40F-G, MA). Terminal membrane whitish, running along the outer margin of the terminal apophysis for almost 4/5ths of its length (Fig. 40G, TM). Embolar base barely seen from ventral side, arising from dorso-prolateral part of the tegulum (Fig. 40G, EB). Embolus largely hidden by the dorsal part of the tegulum, thin apical part spine-shaped, curved inwards, emerging from 3 o'clock position, terminally partially hidden by the sclerotized part of the median apophysis (Fig. 40F-G, E).

Female

Unknown.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Marrakech, “La Palmeraie”), in arid and bare anthropic area.

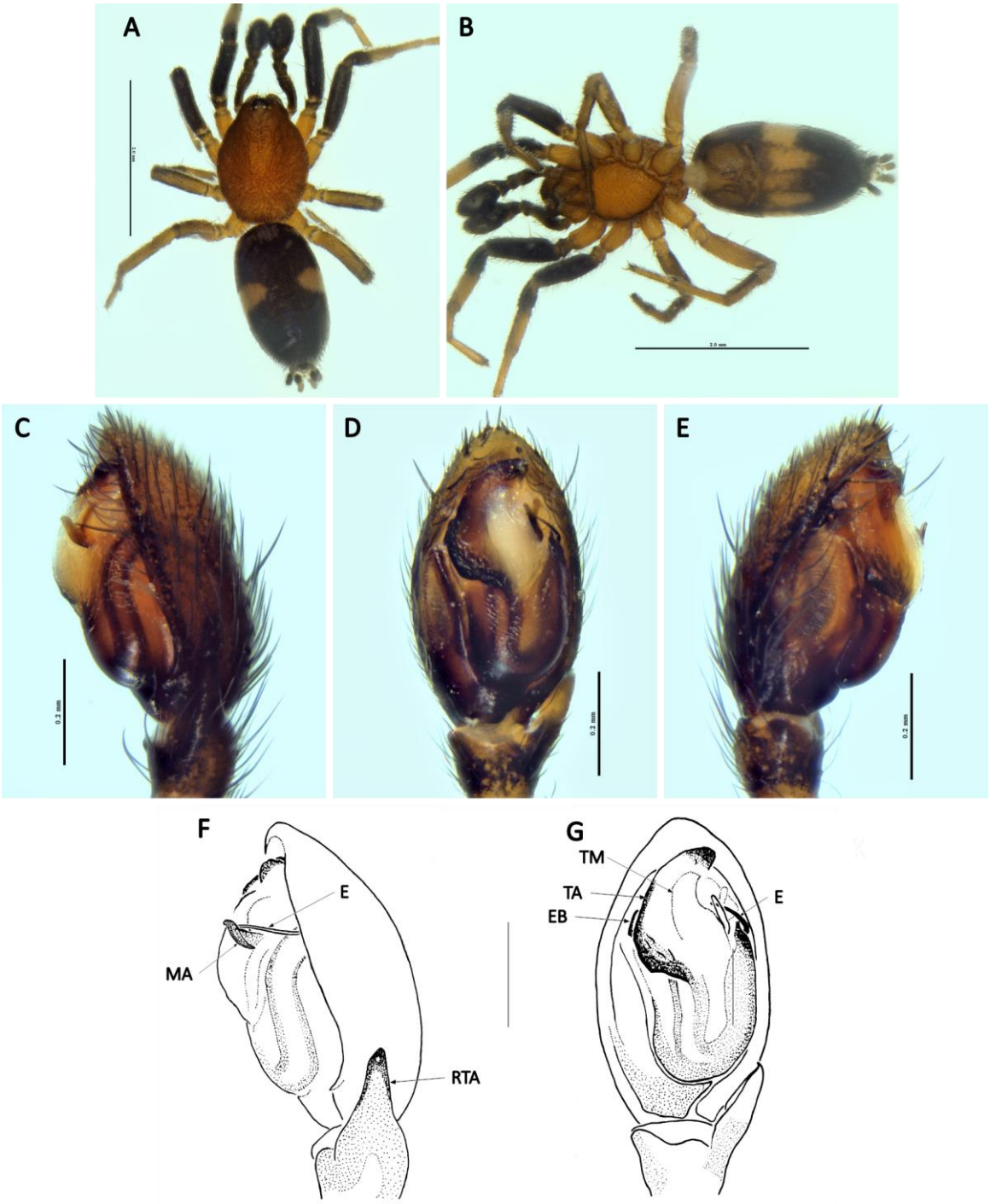

Figure 40: *Turkozelotes africanus* **sp. nov.**, male holotype (ref. MOR_0745). **A.** Dorsal view. **B.** Ventral view. **C, F.** Palp, retrolateral view. **D, G.** Idem, ventral view. **E.** Idem, prolateral view. Abbreviations: E: embolus; EB: embolar base; MA: median apophysis; RTA: retrolateral tibial apophysis; TA: terminal apophysis; TM: terminal membrane. Photos © P. Oger. Scale bars: A-B = 2.0 mm; C-G = 0.2 mm.

Zelotes Gistel, 1848

Zelotes erythrocephalus (Lucas, 1846)

(Fig. 41A-F)

Identification

DENIS (1937): p. 1037, pl. 2, fig. 5.

Material examined

ALGERIA • "*Zelotes erythrocephalus* (Les) Algérie : forêt de Zouagha", coll. Denis, males, ref. AR 17728 (MNHNP); based on photographs.

First record

MOROCCO • 1♂; Marrakech, "La Palmeraie"; 31.66770°N, 7.88887°W; 452 m a.s.l.; 25 Jul. 2024; S. Lecigne leg.; arid anthropized area, with sparse vegetation, under a stone at the base of a palm tree, by hand; ref. MOR_1244. Remarks: specimen raised to maturity.

Comments

Zelotes erythrocephalus was currently only known from Algeria (BELADJAL et al. 2025). The specimen captured in the vicinity of Marrakesh was first compared with the drawings of DENIS (1937); it shows many similarities (particularly with fig. 5b, pl. 2) but certain details of our specimen were not visible on the retrolateral view of the author (fig. 5a, pl. 2) i.e. the median apophysis as well as the embolus. Furthermore, there is no true description of the male pedipalp of this species. However, three males from Denis collection (MNHNP) could be examined and confirmed the matching. Therefore, we assign the identification of this specimen to *Z. erythrocephalus* and redescribe the male. According to the genital features (see description), the species may be related to the *Laetus* sub-group (after LEVY 1998). The species is new to Morocco (BENHALIMA & BOSMANS 2024).

Description

Male (Fig. 41A-F)

Measurements. Total length 5.05; carapace length 2.22, width 1.45, CL/CW 1.53.

Color (from specimen in alcohol) (Fig. 41A). Carapace light orange, finely dotted with grey veiling, fovea darker; chelicerae orange; sternum yellow; legs greyish, femora and especially metatarsi and tarsi lighter. Abdomen entirely dark grey, scutum indistinct.

Carapace. With a short fovea in the posterior half; eyes small, PME and ALE subequal, posterior eye line straight, barely wider than anterior eye line. Median part of chelicerae with few long dorso-prolateral setae (Fig. 41A); inner cheliceral margin with 1 inconspicuous blunt denticule, outer cheliceral margin with 3 small teeth, the middle one the largest.

Spination. Legs I-II: femora I-II with 2 dorsal spines and one prolateral apical spine, other segments spineless. Legs III-IV, particularly tibiae and metatarsi, with numerous spines.

Palp (Fig. 41B-F). Tibial apophysis short, about 0.75x the width of the tibia (at its base), apically barely bent inwards (visible in ventral and dorsal views, Fig. 41C, F, RTA). Terminal apophysis, in ventral view, broad and regularly rounded except the outer margin, subvertical (Fig. 41C, TA). Posterior part of subtegulum very elongated and sub-rectangular (Fig. 41D, ST). Embolar base partially concealed by the terminal apophysis, evenly rounded (Fig. 41D-E, EB). Embolus strongly folded (at a position of about 2 o'clock), only the chitinized terminal part is visible, thin ribbon-shaped, its tip truncated, pointing between positions 10 and 11 o'clock (Fig. 41C, E). Median apophysis weakly sclerotized, strongly folded, terminal part high (visible laterally), its upper margin rounded, its apex pointed, directed ventrally (Fig. 41B, MA).

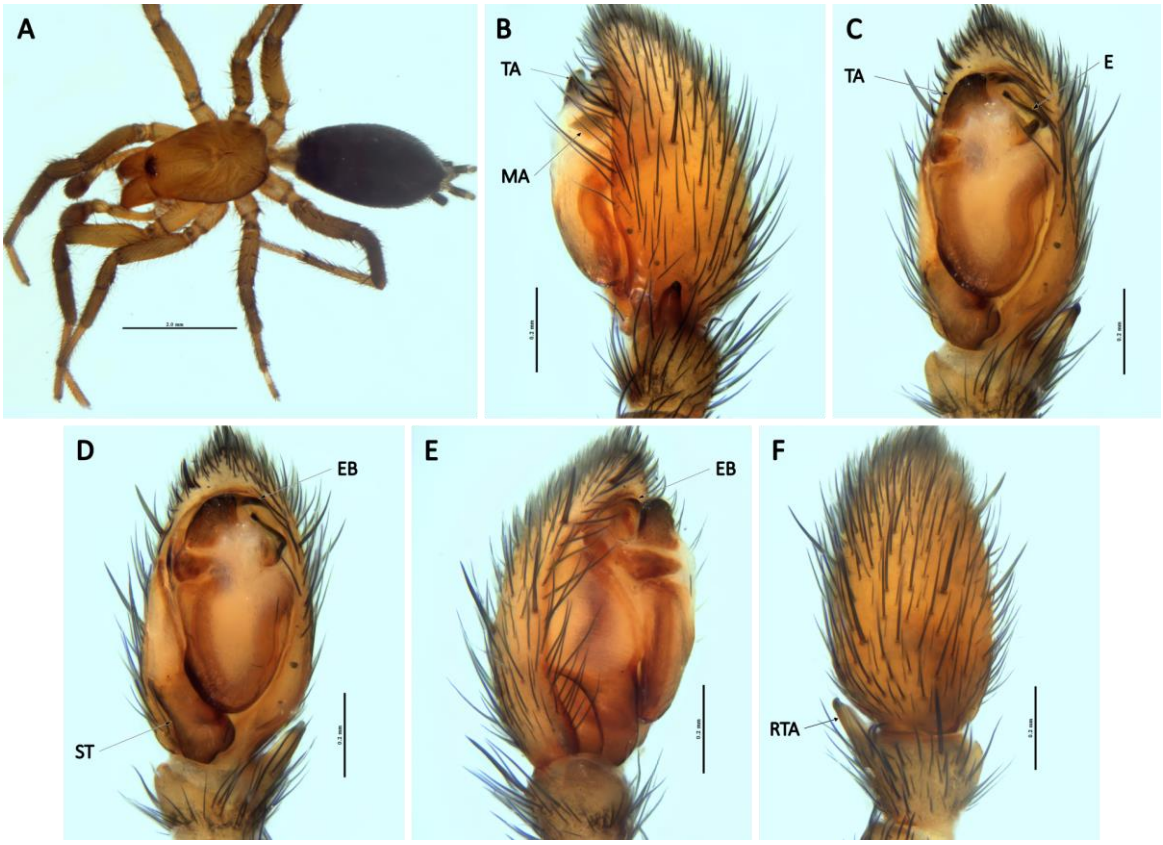

Figure 41: *Zelotes erythrocephalus*, male (ref. MOR_1244). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventro-retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Dorsal view. Abbreviations: E: embolus; EB: embolar base; MA: median apophysis; RTA: retrolateral tibial apophysis; ST: subtegulum; TA: terminal apophysis. Photos © P. Oger. Scale bars: A = 2.0 mm; B-F = 0.2 mm.

***Zelotes lapiazi* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/40F59092-ADC6-403B-BD03-EA97DEB3BC32

(Fig. 42A-E)

Diagnosis

Females of *Zelotes lapiazi* **sp. nov.** are distinguished both by the length and shape of its copulatory ducts, and by its V-shaped median plate.

Etymology

The name of the new species refers to the peculiar rocky limestone surface habitat (lapiaz) where it was discovered.

Material examined

Holotype
MOROCCO • 1♀; Zaouiat ben Iffou, Tnine Lgharbia; 32.63807°N, 8.94409°W; 125 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; scattered calcicole lawn (lapiaz), under limestone blocks, by hand; ref. MOR_1014.

Paratypes
MOROCCO • 2♀; same as holotype. Remark: abdomen and vulva of one specimen separated; right leg I of the second specimen missing.

Further material examined
MOROCCO • 1♀; same as holotype.

Description

Female holotype (Fig. 42A-E)
Measurements. Total length 7.60; carapace length 2.65, width 2.00, CL/CW 1.33.
Color (from specimen in alcohol) (Fig. 42A). Carapace dark chestnut; sternum dark brown; legs chestnut except brown metatarsi, pale brown tarsi, yellowish large blotch on inner face of the femora, antero-external side of femora I and ventro-basal part of coxae; anterior face of chelicerae black, posterior face pale brown, fangs orange except black basal part (first third). Abdomen dark grey, venter paler.
Posterior eye line straight, eyes almost equally spaced. Anterior face of chelicerae with few long setae; outer cheliceral margin with 4 teeth, the two intermediate one the largest, the distal one inconspicuous, inner cheliceral margin with 1 minute tooth. Fovea present. Anterior spinnerets widely spaced, bearing 5 piriform gland spigots.
Leg spination. Femora I-II, 2 dorsal spines; metatarsi I-II, 1 pair of ventro-basal spines; legs III-IV with numerous spines.
Epigyne/Vulva (Fig. 42B-E). Epigyne about 1.25 times higher than wide, widest at anterior margin, the latter with distinct lateral pockets evenly inclined retro-posteriorly (Figs 42B, D-E, LP). Lateral epigynal margins slightly curved. Median part of epigyne plate-like, with V-shaped posterior edge reaching lateral margins (Fig. 42D, MP); posterior part of epigyne partially covered by membranous area (Fig. 42D, dotted arrow). Copulatory ducts long, about 0.27 times the height of the epigyne, first inclined to each other without touching and then diverging outwards (Fig. 42E, CD); glandular heads pointing forwards but not reaching the anterior edge of the lateral margins (Fig. 42D, GH). Spermathecae large, circular, separated by less than 1/5 of their diameter (Fig. 42E, Sp).

Male
Unknown.

Variation

Measurements (min.–max. (average)). Female (n=4): total length 6.20–7.90 (7.03); carapace length 2.25–2.73 (2.52), width 1.70–2.10 (1.93), CL/CW 1.29–1.33 (1.31). Leg spination (in brackets: less frequent pattern for spines number). Mt I, 1 pair ventro-basal spines (no spine); Mt II, 1 pair ventro-basal spines (1 additional ventral spine; only 1 ventro-basal spines or no spine). One female (paratype) has only 3 teeth on outer cheliceral margin.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (province of Sidi Bennour, Zaouiat ben Iffou, Tnine Lgharbia), in a surface karstic rock formation of the inner coastal area.

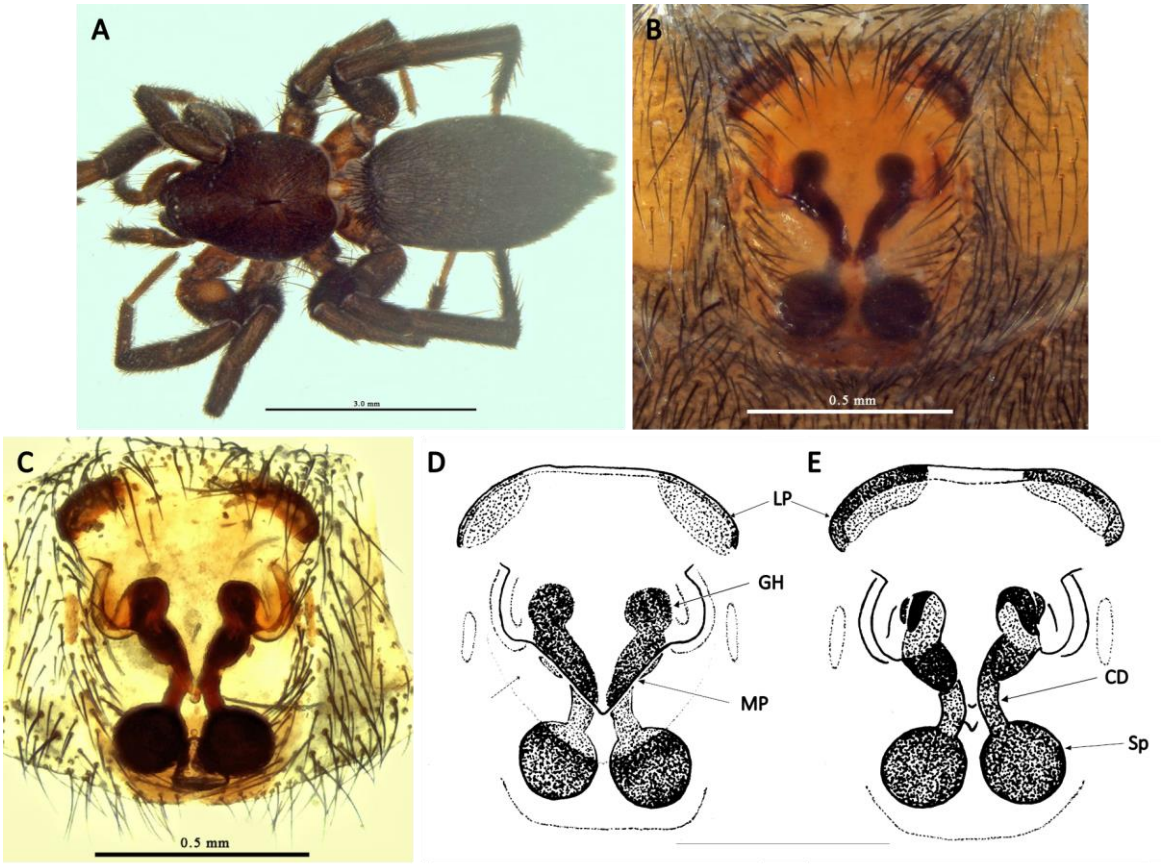

Figure 42: *Zelotes lapiazi* **sp. nov.**, female holotype (ref. MOR_1014). **A.** Dorsal view. **B, D.** Epigyne (dotted arrow: membranous area). **C.** Vulva, ventral view. **E.** Idem, dorsal view. Abbreviations: CD: copulatory duct; GH: glandular head; LP: lateral pocket; MD: median plate; Sp: spermatheca. Photos © P. Oger. Scale bars: A = 3.0 mm; B-E = 0.5 mm.

Family Linyphiidae Blackwall, 1859
***Canariphantes* Wunderlich, 1992**

***Canariphantes naili* (Bosmans & Bouragba, 1992)**
(Fig. 43A-F)

Identification
BOSMANS & BOURAGBA (1992): p. 937, fig. 47.

First records
MOROCCO • 1♀; Essaouira, Tlat Lhenchan; 31.63997°N, 9.42285°W; 442 m a.s.l.; 24 Feb. 2021; S. Moutaouakil leg.; forest, by hand; det. P. Oger; ref. MOR_0624. 1♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; det. S. Lecigne, P. Oger, R. Bosmans; ref. MOR_0823.

Comments
Canariphantes naili was hitherto only recorded from the Ouled Nail Mountains (Djebel Senalba: loc. typ. and Djebel Djellal) in Algeria north of the central Saharan Atlas, in *Pinus halepensis* forest at altitudes between 1350 m and 1450 m a.s.l., as well as in Aures and Djurdjura mountain massifs (BOSMANS & BOURAGBA 1992).

The present study adds 2 further localities (always in forested environments) and extends its known range westwards. The new records concern a near coastal area and a mountain habitat, at altitudes between 440 and 2330 m a.s.l. The species is new to Morocco (BENHALIMA & BOSMANS 2024).

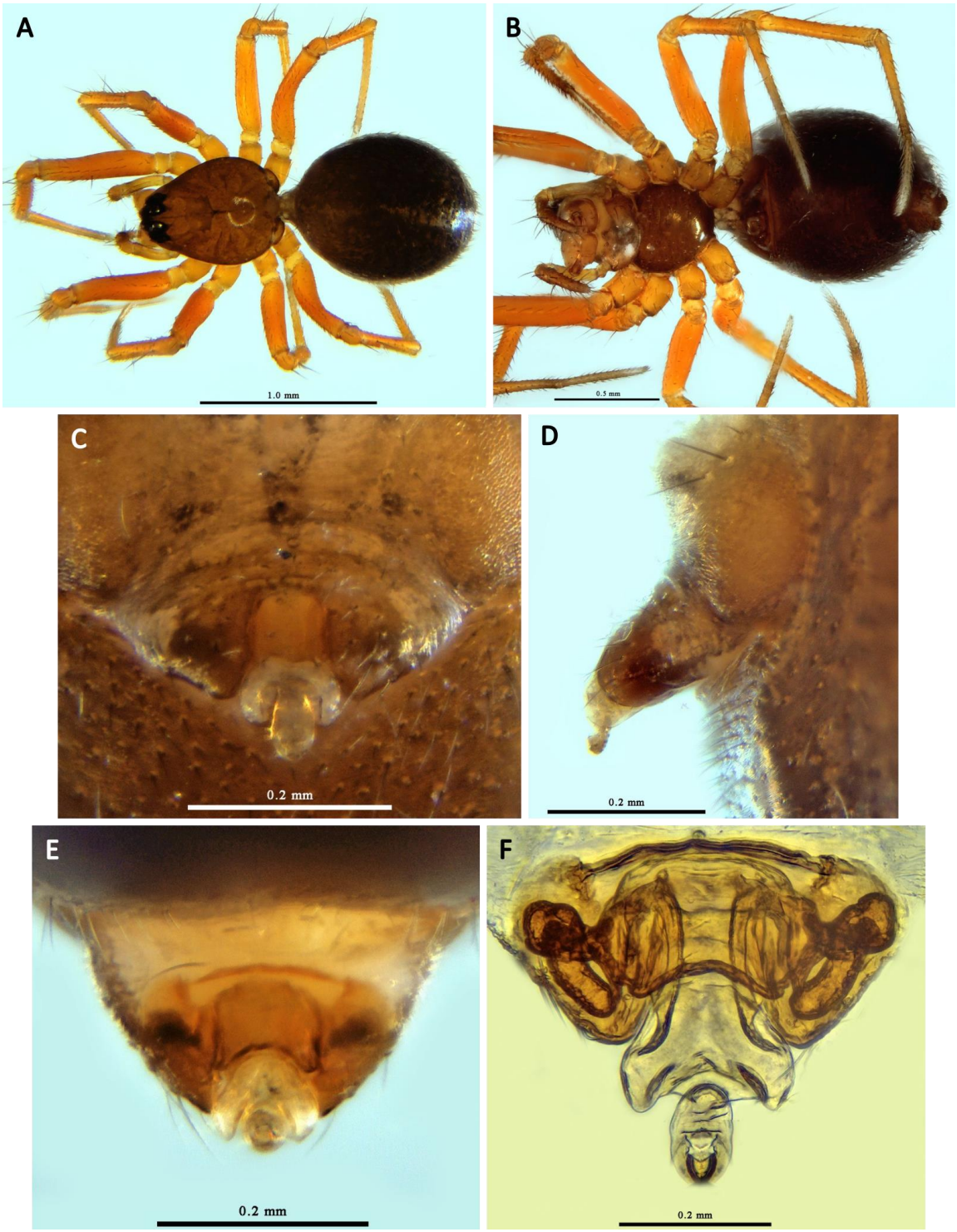

Figure 43: *Canariphantes naili*, female (ref. MOR_0823). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne, ventral view. **D.** Idem, lateral view. **E.** Idem, aboral view. **F.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A-B = 1.0 mm; C-F = 0.2 mm.

Diplocephalus Bertkau, 1883

Diplocephalus bosmansi Lecigne sp. nov.

https://zoobank.org/NomenclaturalActs/DB9EDAEB-8DF1-44EF-AAFC-906999BEF1AD

(Fig. 44A-H)

Diagnosis

Diplocephalus bosmansi **sp. nov.** resembles *D. picinus* (Blackwall, 1841), mainly in the conformation of the internal genital structures (e.g. position, size and orientation of spermathecae). Besides the blindness of the new species, the position of the constriction of the epigynal fissure is different (posterior in *D. picinus*, anterior in the new species). This same difference separates *D. bosmansi* **sp. nov.** from *Diplocephalus inanis* Tanasevitch, 2014, also a blind species from the Tazekka National Park.

Etymology

The new species is named in honour of Dr Robert Bosmans for his major contribution to knowledge of North African and, more generally, Mediterranean spiders. The first author wishes to thank him personally for his assistance and support in studying the fauna of Morocco over many years.

Comments

The specimens found in the Bouslama cave do not resemble any currently known species. The conformation of the epigyne i.e. formed by wing-like branches protruding from the ventral plate forming a central longitudinal bisection (after MILLIDGE 1984) suggests that these specimens belong to the *Savignia*-group. MILLIDGE (1977) points out that "The separation of these species [of the *Savignia*-group] into genera has been based almost entirely on the form of the male…". According to the genital structure (conformation of epigyne; see also Diagnosis) and chaetotaxy, we provisionally assign these specimens from Bouslama cave to the genus *Diplocephalus* Bertkau, 1883. *Diplocephalus inanis* is another recently described troglobitic species (TANASEVITCH 2014), also blind, but whose type locality is in the south of the Tazekka National Park (Chaâra, near Ain Teslit) about 20 km south-west of the Bouslama cave.

Material examined

Holotype
MOROCCO • 1♀; Bab Boudir, Tazekka National Park, Bouslama cave; 34.09177°N, 4.11208°W; 1512 m a.s.l.; 20 Apr. 2019; S. Moutaouakil leg.; cave, by hand; ref. MOR_0324. Remark: abdomen and vulva separated; spines on the legs almost all broken off.

Paratypes
MOROCCO • 1♀; same as holotype. Remark: right leg III detached. 1♀; same as holotype; 1 Aug. 2023; ref. MOR_0934. Remark: specimen probably partially dried before being preserved in alcohol.

Further material examined
MOROCCO • 2♀♀; same as paratype; ref. MOR_0934. Remark: specimen probably partially dried before being preserved in alcohol.

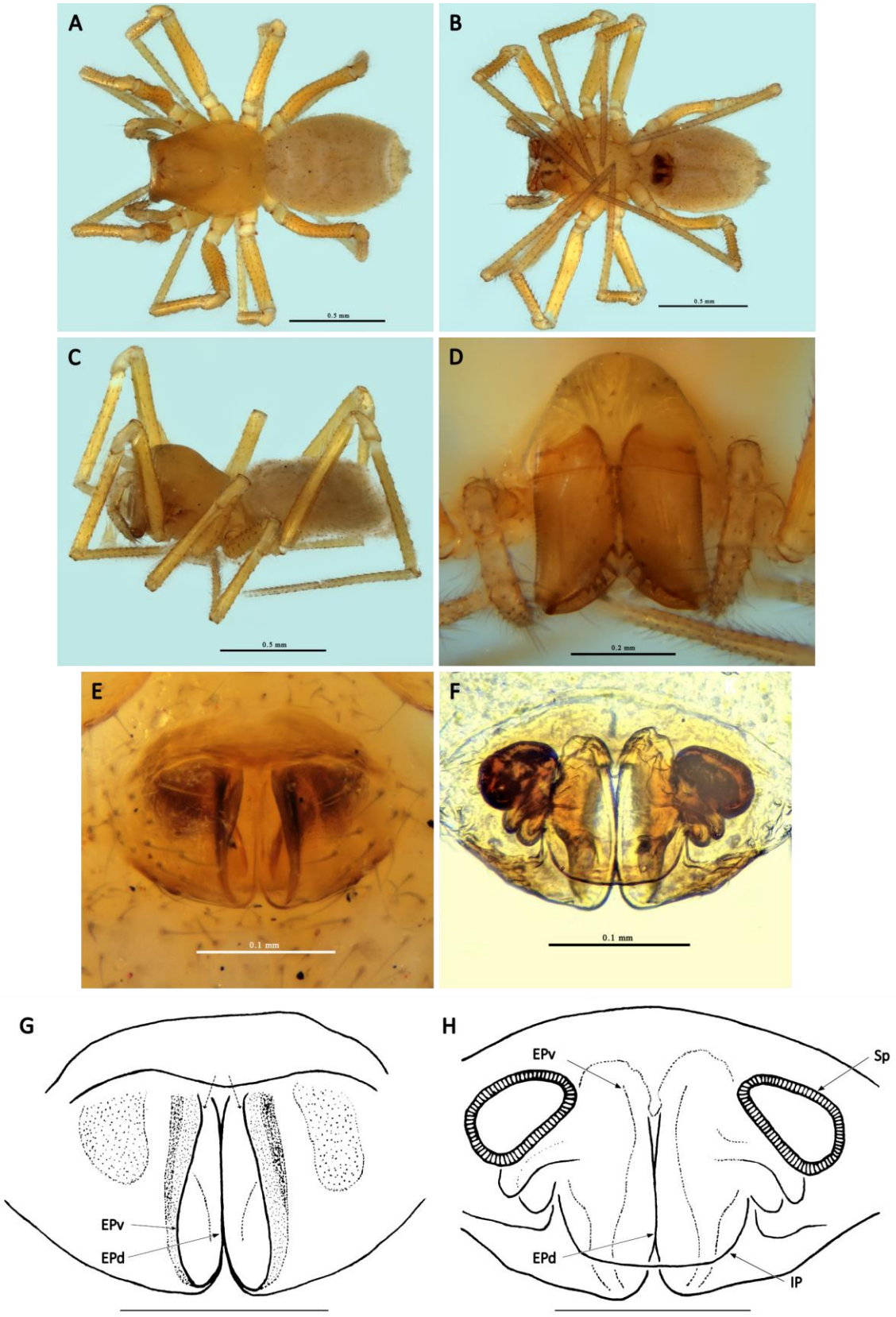

Figure 44: *Diplocephalus bosmansi* **sp. nov.**, female holotype (ref. MOR_0324). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Carapace, frontal view. **E, G.** Epigyne (dotted arrows: constriction of the fissure of the epigynal plates). **F, H.** Vulva, dorsal view. Photos. © P. Oger. Abbreviations: EPd: dorsal part of the epigynal plates; EPv: ventral part of the epigynal plates; IP: internal plate; Sp: spermatheca. Scale bars: A-C = 0.5 mm; D = 0.2 mm; E-H = 0.1 mm.

Description

Female holotype (Fig. 44A-H)

Measurements. Total length 1.42; carapace length 0.64, width 0.51, CL/CW 1.25; sternum length 0.40, width 0.37; chelicerae length 0.30.

Color (from specimen in alcohol) (Fig. 44A-C). Carapace pale yellow, cephalic area and chelicerae barely darker. Legs and sternum pale yellow. Abdomen whitish, mottled with pale yellow spots dorsally and on the sides; venter with a broad, lighter longitudinal band between the epigyne and the spinnerets.

Chelicerae. Cheliceral inner margin with 3 minute teeth, outer margin armed with 4 to 5 strong teeth.

Sternum. Nearly as long as wide.

Eyes. completely absent or totally reduced.

Leg spination. tibial spine formula 2211; position of trichobothrium on metatarsus I 0.31, metatarsus IV without trichobothrium.

Epigyne/Vulva (Fig. 44E-H). Ventral part of the epigynal plates relatively widely separated by a broad fissure (Fig. 44G, EPv) constricted anteriorly (Fig. 44G, dotted arrows). Dorsal part of the epigynal plates visible through the median fissure, in contact at length in their median part (Fig. 44G, EPd). Internal plate with posteriorly rounded corners (Fig. 44H, IP). Spermathecae almost ovoid, flattened on their inner side, inclined against the anterolateral margin of the internal plate, separated by almost 1.5 times their width (Fig. 44H, Sp).

Variation

Measurements (min.–max. (average)). Female (n=5): total length 1.00–1.50 (1.31); TmI 0.30–0.37 (0.34). Measurements (min.–max.). Female (n=2): carapace length 0.64–0.67, width 0.51–0.52, CL/CW 1.25–1.29; sternum length 0.30, width 0.37–0.39; Ti I, position of first dorsal spine 0.13, position of second dorsal spine 0.78, Ti II position of first dorsal spine 0.19–0.25, position of second dorsal spine 0.76–0.88.

Distribution and habitat

Troglobiont species, endemic to Morocco, only known from the type locality (province of Taza, Bab Boudir, Tazekka National Park, Bouslama cave).

Lepthyphantes Menge, 1866

Lepthyphantes s. lat. *brahimi* Lecigne & Moutaouakil sp. nov.

https://zoobank.org/NomenclaturalActs/BFD3DFD2-F752-4842-9C50-52C3F16C7E61

(Fig. 45A-J)

Diagnosis

The male of *Lepthyphantes* s. lat. *brahimi* **sp. nov.** clearly differs from all other *Lepthyphantes* species first and foremost by the size and the shape of its lamella characteristica (Fig. 45I, LC), the presence of two branches both for the embolus (Fig. 45J, EP and dotted arrow) and the distal suprategular apophysis (Fig. 45I, DSA; Fig. 45J, SSA), a conspicuous rounded outgrowth on the outer margin of the tegulum (Fig. 45I, OT), also by its cymbium with wide postero-dorsal projection and an additional retrolateral tooth (Fig. 45H, Cp, Ct).

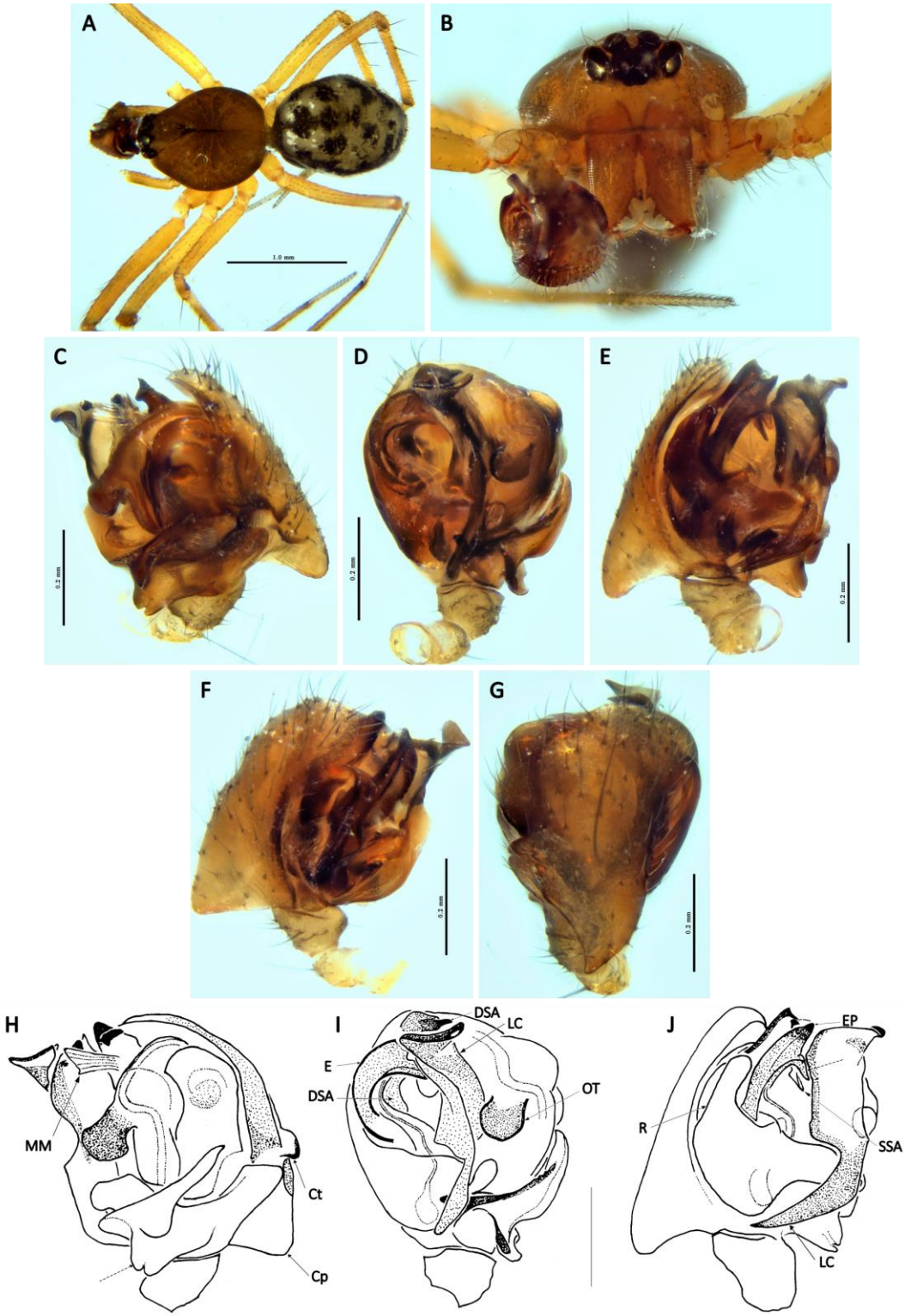

Figure 45: *Lepthyphantes* s. lat. *brahimi* **sp. nov. A-B, G.** Male (ref. MOR_0884a). **C-F, H-J.** Male paratype (ref. MOR_0884b). **A.** Dorsal view. **B.** Frontal view. **C.** Palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Idem, prolateral view. **G.** Idem, dorsal view. **H.** Palp, ventro-retrolateral view (dotted arrow: lamellar projection of the middle part of the paracymbium). **I.** Idem, ventral view. **J.** Idem, ventro-prolateral view (dotted arrow: secondary branch of the embolus). Abbreviations: Cp: postero-dorsal projection of the cymbium; Ct: retrolateral tooth of the cymbium; DSA: distal suprategular apophysis; E: embolus; EP: embolus proper; LC: lamella characteristica; MM: median membrane; OT: outgrowth of the tegulum; P: paracymbium; PPo: posterior pocket of paracymbium; R: radix; SSA: secondary branch of the distal suprategular apophysis. Photos © P. Oger. Scale bars: A = 1.0 mm; C-J = 0.2 mm.

Etymology

This new species is a tribute to the second author's father, Brahim, for his moral and material support.

Material examined

Holotype
MOROCCO • 1♂; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65854°N, 7.00694°W; 166 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; stony slope, under a stone, by hand; ref. MOR_0949. Remark: left tarsus IV detached.

Paratype
MOROCCO • 1♂; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.051000°W; 1059 m a.s.l.; 11 Nov. 2023; S. Moutaouakil, J. Lips leg.; cave, by hand; ref. MOR_0884b. Remark: left pedipalp detached.

Further material examined
MOROCCO • 1♂; same as paratype; ref. MOR_0884a. Remark: left pedipalp detached.

Comments

The new species fit the chaetotaxy of the genus *Lepthyphantes* Menge, 1866 sensu SAARISTO & TANASEVITCH (1996) but shows a very particular lamella characteristica (see description) and the embolus is not sickle-shaped, which suggests that it should be assigned as *Lepthyphantes* sensu lato. The terminology of genital structures is inspired by MERRET (1963), Millidge (1977) and SAARISTO & TANASEVITCH (1996).

Description

Male (Fig. 45A-J)
Measurements. Total length 1.98; carapace length 0.93, width 0.79, CL/CW 1.17; sternum length 0.50, width 0.50; clypeus height 0.20; chelicerae length 0.38; Fe I length 1.15, Ti I length 1.15; Mt I length 1.20.
Color (from specimen in alcohol) (Fig. 45A-B). Carapace and sternum yellow, covered with fine black pigmentation, carapace with a thin darker median line (which does not reach the eye area) and few radiating striae. Chelicerae yellow brown. Legs yellow, ventral part of joints blackish. Abdomen light brown covered with a blackish spotted pattern, sides with a thick interrupted black line, venter blackish.
Chelicerae. Cheliceral inner margin with 2 small denticles, outer margin armed with 3 teeth, the first one small, raised by a prominent tubercle, the middle one the strongest and a minute distal tooth (Fig. 45B).
Sternum. As long as wide.
Eyes measurements. AME 0.050.
Leg spination. Fe I, 1 prolateral spine; Pa I-IV, 1 dorsal spine; tibial spine formula 2222, Ti I, position of first dorsal spine 0.23, position of second dorsal spine 0.74, 1 prolateral and 1 retrolateral spines, Ti II 1 retrolateral spine; Mt I, 1 dorsal spine in position 0.25, position of trichobothrium 0.21, Mt II, 1 dorsal spine in position 0.25, Mt III, 1 dorsal spine, trichobothrium on Mt IV absent.
Palp. Patella with 1 long seta. Cymbium with a wide postero-dorsal projection (Fig. 45H, Cp), its posterior margin rounded and slightly bent outwards, its anterior margin followed by a tooth-like protrusion pointing outwards (Fig. 45H, Ct). Paracymbium large; middle part with wide projection (Fig. 45H, dotted arrow); proximal part with 4-5 short setae. Radix with dorso-retrolaterally bent

pointed projection (Fig. 45J, R). Tegulum with a subcircular outgrowth (Fig. 45I, OT). Embolus strong, curved prolaterally (Fig. 45I, E), embolus proper pointing near the apex of the cymbium (Fig. 45J, EP), second branch of embolus directed posteriorly (Fig. 45J, dotted arrow). Lamella characteristica long, anterior part rounded, calyx-like (Fig. 45I, LC), posterior part sabre-shaped, pointed dorsoprolaterally (Fig. 45J, LC). Distal suprategular apophysis mostly covered by both the radix and the embolus, apical part rounded, a subapical tooth pointing outwards (Fig. 45I, DSA), secondary branch poorly developed (Fig. 45J, SSA).

Female
Unknown.

Variation

Measurements (min.–max. (average)). Male (n=3): total length 1.98–2.17 (2.07); carapace length 0.93–1.00 (0.96), width 0.79–0.87 (0.82), CL/CW 1.15–1.19 (1.17); sternum length 0.48–0.53 (0.50), width 0.50–0.54 (0.51); clypeus height 0.18–0.21 (0.20); chelicerae length 0.33–0.38 (0.36); Fe I length 1.13–1.18 (1.15), Ti I length 1.13–1.15 (1.14); Mt I length 1.13–1.20 (1.16). Leg spination (min.–max.). Male (n=2): Ti I, position of first dorsal spine 0.23–0.28, position of second dorsal spine 0.74; Mt I, 1 dorsal spine in position 0.25–0.26, position of trichobothrium 0.18–0.21, Mt II, 1 dorsal spine in position 0.25–0.27.

Distribution and habitat

Endemic to Morocco. Only known from two localities: Ben Slimane (eponymous province), about 20 km from the coast, under a stone on a dry, rocky slope and Aghlef (province of Azilal), in a cave near Tagleft in the Middle Atlas Mountains. The two records are about 180 km apart.

Lepthyphantes biospeleologorum Barrientos, 2020

(Figs 46A-J, 47A-G)

Identification
BARRIENTOS et al. (2020): p. 7, fig. 3; p. 22, fig. 13C-D.

Previous citation
BARRIENTOS et al. (2020, ♀ descr.).

New record
MOROCCO • 1♂, 6♀♀, 9 juv.; Beni Ayat, “La Perle de Beni Ayat” cave; 32.16140°N, 6.64220°W; 1387 m a.s.l.; 10 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; det. S. Lecigne, J. A. Barrientos; ref. MOR_0783; 1♂, 2♀♀ deposited in SMF. Remarks, male: right pedipalp detached; left legs III-IV and right legs I-II, IV partly missing; abdomen damaged; figures 41A-C show mirror images of the right pedipalp.

Comments
Lepthyphantes biospeleologorum is an endemic species of the Moroccan High Atlas, recently described from the Ifri Bouyzem cave (Aglefth, Taglefth), from 3 female specimens (BARRIENTOS et al. 2020). Several other female specimens and 1 male were captured in the "Perle de Beni Ayat" cave, around 60 km from the type locality (Fig. 41G; approximative location of the loc. typ.). We describe the unknown male of *L. biospeleologorum*. The conformation of the male pedipalp confirms the suggestion by BARRIENTOS et al. (2020) so as *L. biospeleologrum* belongs to the *afer* species-group of *Lepthyphantes* s. lat., i.e. bulb extremely complex with a relatively large, rather

short, neither forked nor pointed lamella characteristica; median membrane broad and fringed, terminal apophyses very robust (after BRIGNOLI 1971).

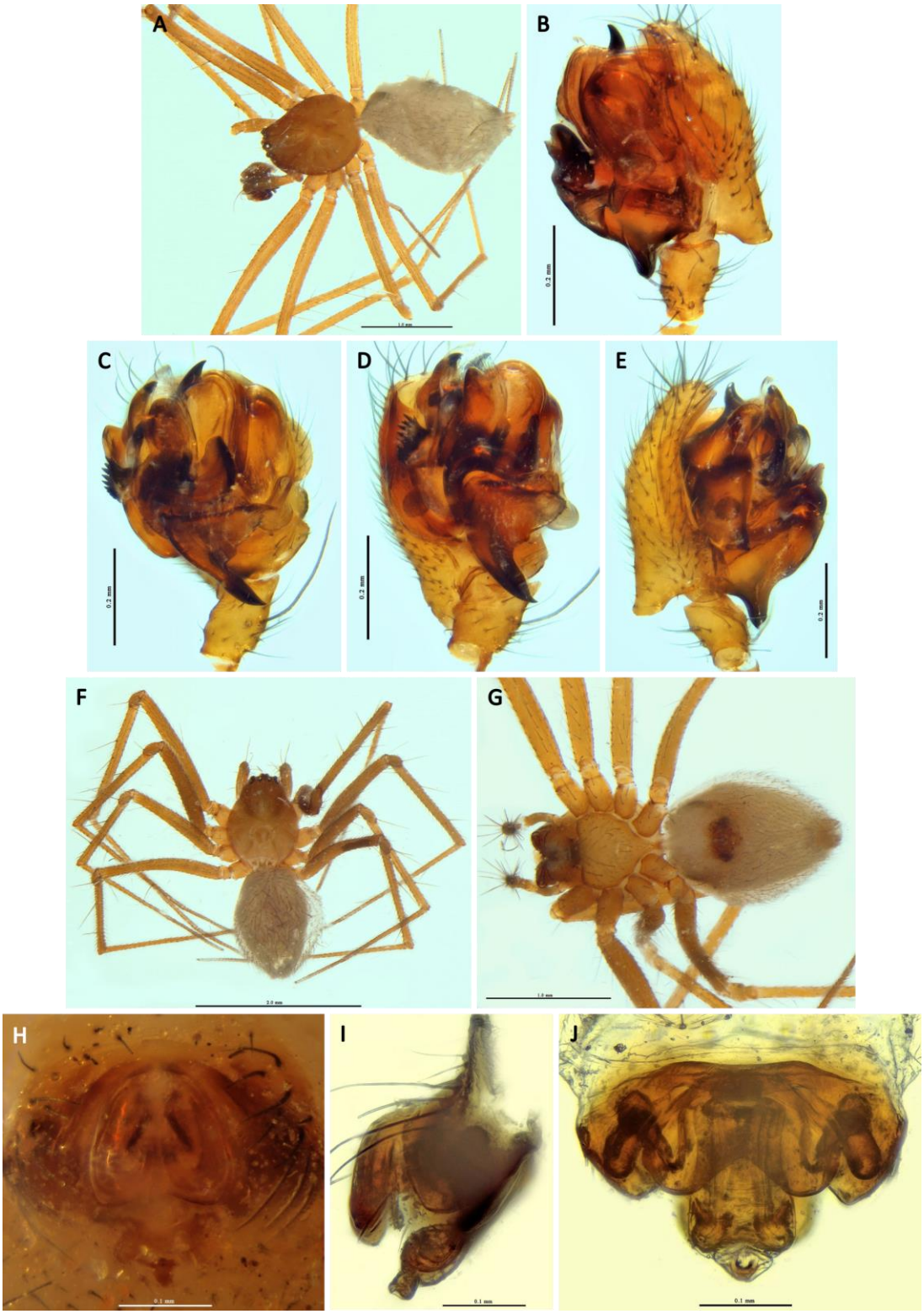

Figure 46: *Lepthyphantes biospeleologorum*. **A–E.** Male (ref. MOR_0873). **F-J.** Female (same ref.). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventro-retrolateral view. **D.** Idem, ventral view. **E.** Idem, prolateral view. **F.** Dorsal view. **G.** Ventral view. **H.** Epigyne, ventro-posterior view. **I.** Epigyne, lateral view. **J.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, G = 1.0 mm; B-E = 0.2 mm; F = 2 mm; H-J = 0.1 mm.

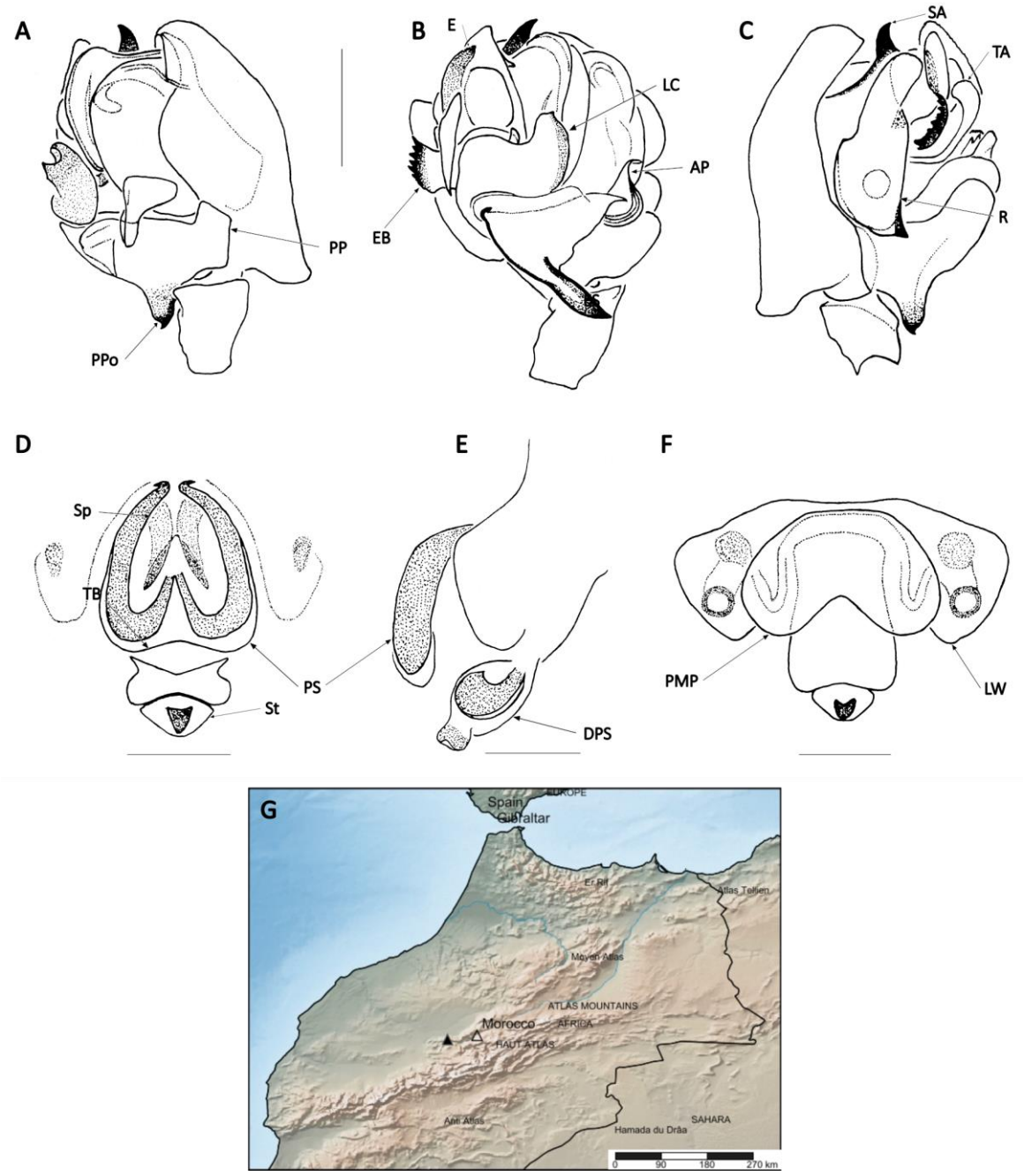

Figure 47: *Lepthyphantes biospeleologorum*. **A–C.** Male (ref. MOR_0873). **D-F.** Female (same ref.). **A.** Palp, retrolateral view. **B.** Idem, ventro-retrolateral view. **C.** Idem, prolateral view. **D.** Epigyne, ventro-posterior view. **E.** Idem, lateral view. **F.** Vulva, dorsal view. **G.** Distribution map of the species; open triangle = loc. typ. (see comments); solid triangle = new record. Abbreviations: AP: apical part of paracymbium; DPS: distal part of scape; E: embolus; EB: embolar base; LC: lamella characteristica; LW: lateral wall; PMP: posterior median plate; PP: proximal part of paracymbium; PPo: posterior pocket of paracymbium ; Ps: proscape; SA: suprategular apophysis; St: stretcher; TA: terminal apophysis. Scale bars: A-C = 0.2 mm; D-F = 0.1 mm.

Diagnosis

The male described herein can easily be recognized by the very distinctive shape of the lamella characteristica, the paracymbium and the embolar base.

Description

Male (Figs 46A-E, 47A-C)

Measurements. Total length 2.60; carapace length 1.10, width 0.88, CL/CW 1.26; sternum length 0.59, width 0.59; clypeus height 0.18; chelicerae length 0.36; Fe I length 1.93, Ti I length 2.03; Mt I length 2.00; Mt II length 1.84.

Color (from specimen in alcohol) (Fig. 46A). Carapace, chelicerae, sternum and legs yellow orange. Abdomen as in female.

Chelicerae. Cheliceral inner margin with 4 very minute distal teeth raised on a subtriangular short keel; outer margin armed with 3 teeth, the middle one the strongest.

Sternum as long as wide. Cephalic part of carapace and eyes area with few setae.

Eyes measurements. AME 0.050.

Leg spination. Fe I, 1-2 prolateral spine(s); Pa I-IV, 1 dorsal spine; tibial spine formula 2222, Ti I, position of first dorsal spine 0.39, position of second dorsal spine 0.79, 2 prolateral and 2 retrolateral spines, Ti II 1 prolateral and 1 retrolateral spines; Mt I, 2 dorsal spines, position of first dorsal spine 0.31, position of second dorsal spine 0.59, position of trichobothrium 0.18, Mt II, 1 dorsal spine in position 0.34, position of trichobothrium 0.17.

Palp (Figs 46B-E, 47A-C). Patella and tibia with 1 long curved dorsal bristle (Fig. 40A). Cymbium with a postero-dorsal projection (Fig. 46B). Paracymbium broad; basal part truncated (Fig. 47A, PP), 7 setae of increasing size away from the proximal margin; posterior pocket consisting of a robust, retro-posteriorly pointing projection (Figs 46B, 47A, PPo); apical part undulated and finally folded and rounded (Fig. 47B, AP). Radix with prolateral long finger-like projection, apical part rounded and folded outwards (Fig. 47C, R). Lamella characteristica very broad, apical part rounded and directed forwards (Fig. 47B, LC). Embolar base with 6 strong sclerotized teeth, 1 anterior and 3 posterior smaller ones (Fig. 47B, EB). Suprategular apophysis very broad, apical part strong, sclerotized, pointing retro-anteriorly (Fig. 47C, SA).

***Lepthyphantes imazigheni* Barrientos, 2020**

(Fig. 48A-D)

Identification

Barrientos et al. (2020): p. 23, fig. 14A-B.

Previous citations

Barrientos et al. (2020).

New record

MOROCCO • 1♀, 4 juv.; Taza, Ifri Bouym; 34,06667°N, 4.01667°W; 1365 m a.s.l.; 3 Aug. 2023; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_0923. 1♀ deposited in SMF.

Comments

Lepthyphantes imazigheni is a cave-dwelling species endemic to Morocco only known from the cave of Bab Bou Idir (= Ghar Zrek, loc. typ.). To date, only the female was described (Barrientos et al. 2020). No new observations have been recorded since. A female specimen was found again in August 2023 in another cave ("Bouym 1") located about 11 km east-northeast of the type locality (Fig. 48D). This is the second known location for the species; the male remains unknown.

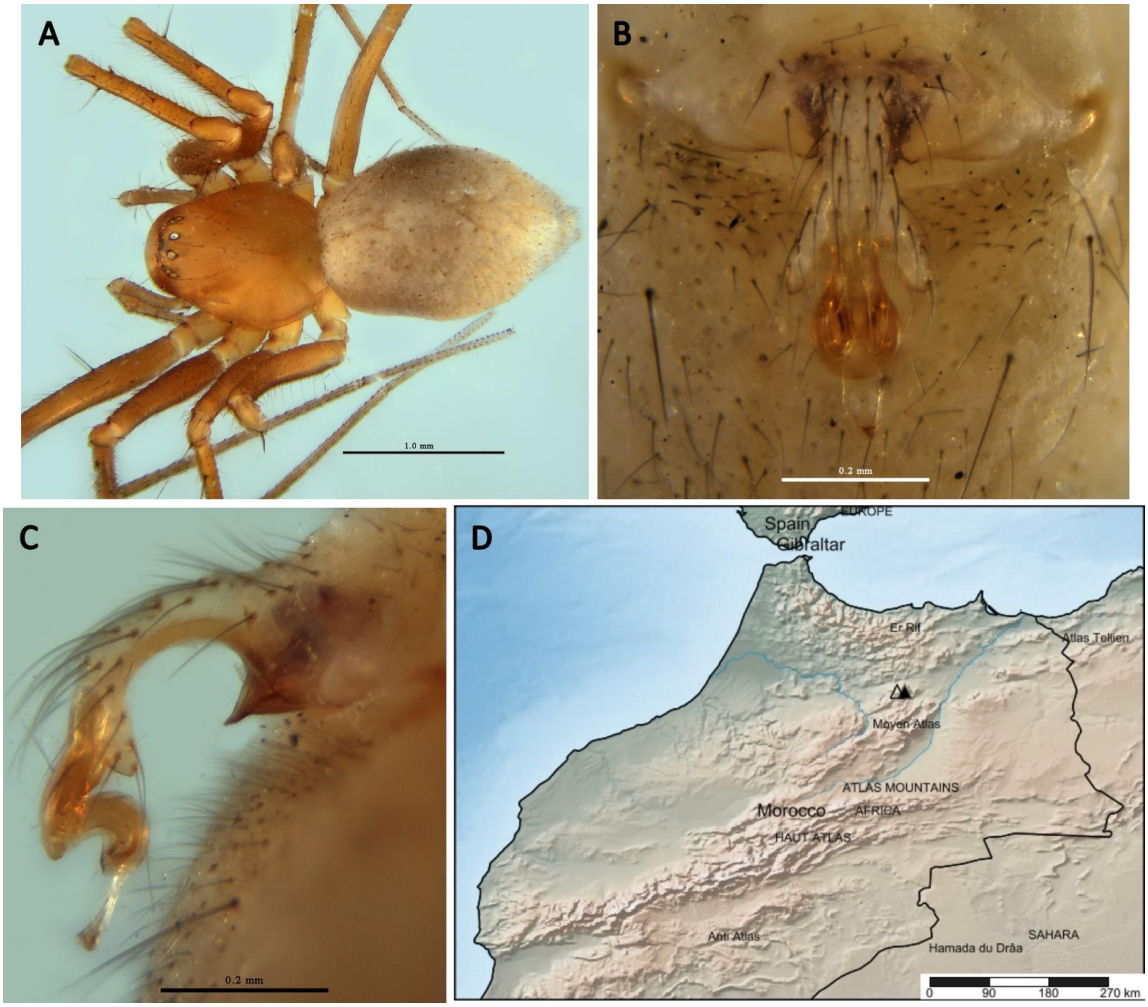

Figure 48: *Lepthyphantes imazigheni*, female (ref. MOR_0923). **A.** Dorsal view. **B.** Epigyne, ventral view. **C.** idem, lateral view **D.** Distribution map of the species; open triangle = loc. typ.; solid triangle = new record. Photos © P. Oger. Scale bars: A = 1.0 mm; B-C = 0.2 mm.

Lepthyphantes noeli **Barrientos & Brañas, 2024**

(Fig. 49A-E)

Identification

BARRIENTOS et al. (2024): p. 7, fig. 5; p. 8, Pl. 2.

Previous citation

BARRIENTOS et al. (2024, ♀ descr.).

New record

MOROCCO • 1♀, 1 juv.; Oujda, Beni Snassen, "Jlida 2" cave; 34.86475°N, 4.01167°W; 539 m a.s.l.; 12 Aug. 2023; S. Moutaouakil leg.; cave, by hand; det. J. A. Barrientos; ref. MOR_0920; 1♀ deposited in SMF. Remark: abdomen and vulva separated.

Comments

Lepthyphantes noeli is another endemic species to Morocco. To date, only the female is known from 2 specimens recorded from the "Jlida" cave (Takerkoust) (BARRIENTOS et al., 2024). Another female was recently found in the same cave (loc. typ.); the figures 43A-E present several additional illustrations of this species.

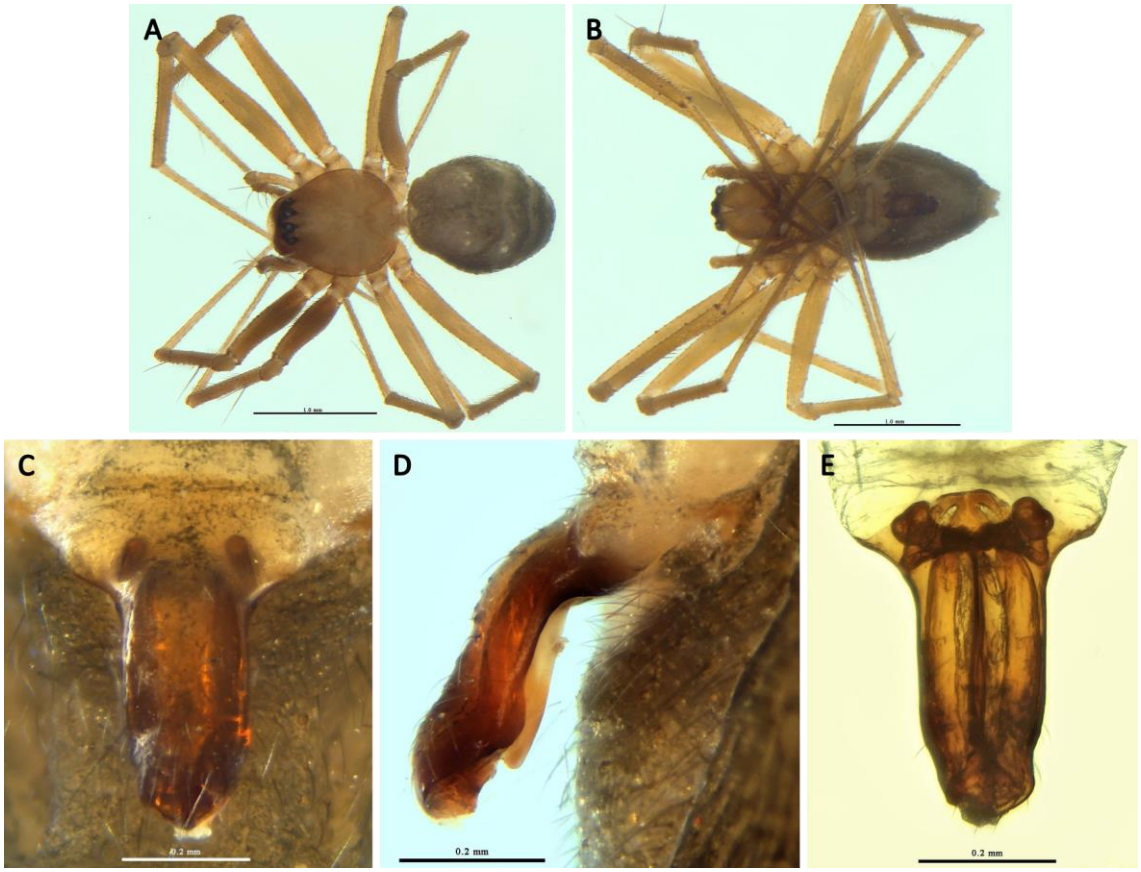

Figure 49: *Lepthyphantes noeli*, female (ref. MOR_0920). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne, ventral view. **D.** Idem, lateral view. **E.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A = 1.0 mm; B-E = 0.2 mm.

Mansuphantes Saaristo & Tanasevitch, 1996

Mansuphantes sp.

(Fig. 50A-F)

Identification

PANTINI & MAZZOLENI (2007): p. 19, fig. 5c-e.

Material examined

MOROCCO • 1♀; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, sieving; ref. MOR_1096.

Comments

One specimen was found in a mixed forest of Cedar and Holm Oak, by sieving the litter. It seems to fit the genital characters of the genus *Mansuphantes* after SAARISTO & TANASEVITCH (1996) i.e. 2 dorsal spines on Ti I-IV, TmI 0.16-0,23 (specimen from Morocco 0.23), 1 sub-basal dorsal spine on Mt I-III or I-IV (specimen from Morocco I-IV), no trichobothria on Mt IV; more or less oval proscape with narrow proximal part; total length 1.70-2.20 (specimen from Morocco 2.30). The genital structure appears to be close to *Mansuphantes rectilamellus* (Deltshev, 1988) (PANTINI & MAZZOLENI 2022). However, the authors provide no precise description of the female.

So far, the only known localities of the species are in Italy, North Macedonia and Bulgaria. *M. rectilemallus* was only recorded from the Balkans in open environments (alpine grassland). A

survey of the male from Ifrane National Park is necessary to verify its relationship with *M. rectilamellus* and the existence or otherwise of a new species. The genus would be new to Morocco (BENHALIMA & BOSMANS 2024).

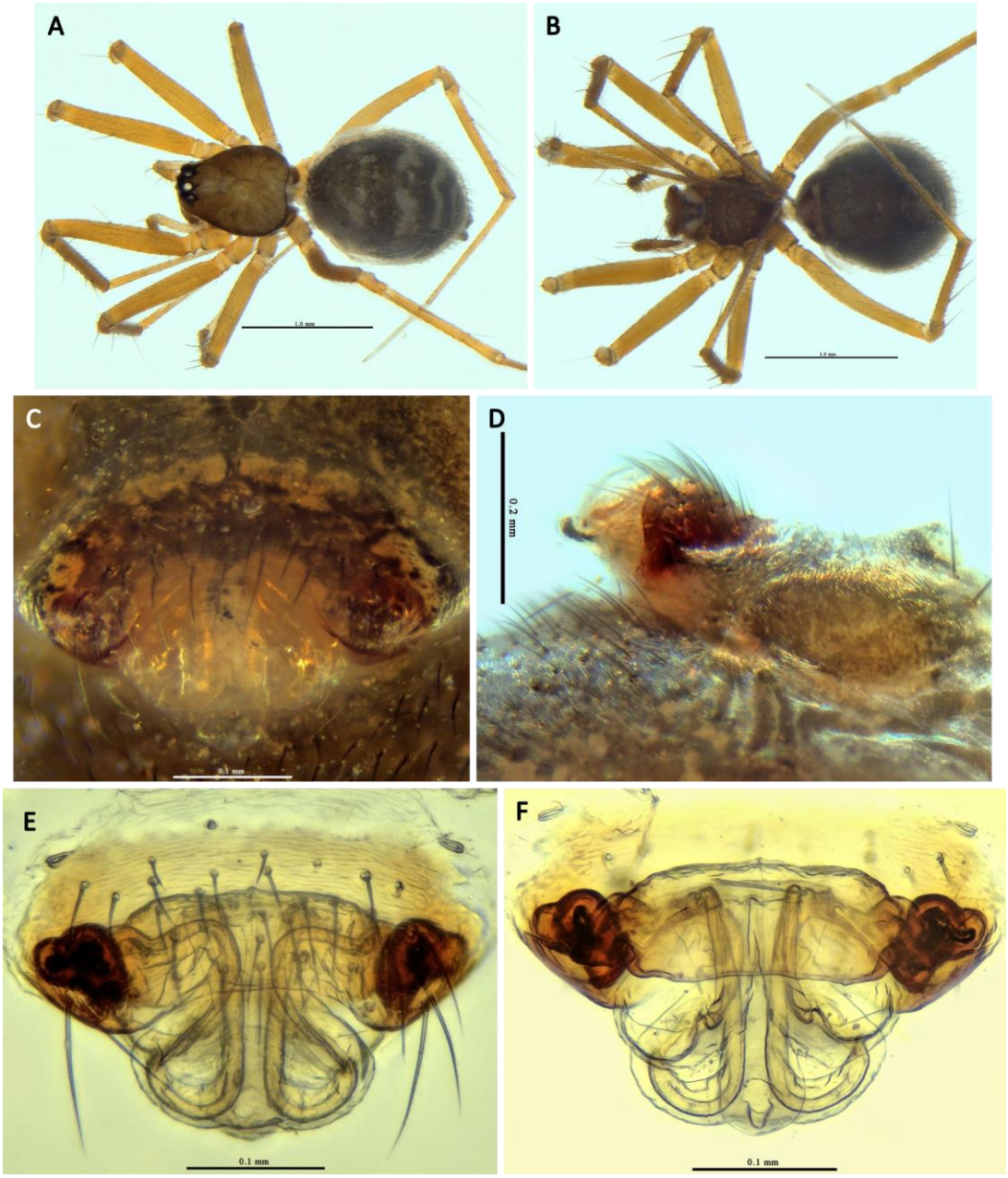

Figure 50: *Mansuphantes* sp., female (ref. MOR_1096). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne, ventral view. **D.** Idem, lateral view. **E.** Vulva, ventral view. **F.** Idem, dorsal view. Photos © P. Oger. Scale bars: A-B = 1.0 mm; C, E-F = 0.1 mm; D = 0.2 mm.

Megalepthyphantes Wunderlich, 1994

Megalepthyphantes salam Lecigne sp. nov.

https://zoobank.org/NomenclaturalActs/E8CD1A3E-14AB-4DA6-B90A-E2E174E37051

(Figs 51A-K, 52A-F)

Diagnosis

Megalepthyphantes salam **sp. nov.** is characterized by the structure of the lamella characteristica, as well as by the crescent-shaped posterior median plate of the epigyne, which distinguishes it from all other species (see Comments).

Etymology

In these troubled times, the name of this new species carries a message of hope; it comes from the Arabic word "salam", which means "peace".

Comments

The genus *Megalepthyphantes* Wunderlich, 1994 currently comprises 19 species, of which only 1 (*Megalepthyphantes brignolii* Tanasevitch, 2014) was recorded from Morocco (WSC 2025).

Material examined

Holotype
MOROCCO • 1♂; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; on the ground in the herbaceous vegetation at the edge of the first entrance (vertical), by hand; ref. MOR_0907. Remark: left pedipalp detached.

Paratypes
MOROCCO • 2♀♀; same as holotype. Remark: abdomen and vulva of one female separated; abdomen of the second specimen detached.

Description

Male holotype (Figs 51A-G, 52A-C)

Measurements. Total length 3.80; carapace length 1.60, width 1.25, CL/CW 1.28; sternum length 0.77, width 0.78; clypeus height 0.32; chelicerae length 0.63; Fe I length 3.10, Ti I length 3.15; Mt I length 3.05.

Color (from specimen in alcohol) (Fig. 51A). Carapace: eyes outlined with a black areola; marginal stripes of fine black pigmentation, narrower from the cephalic region, inner edges irregular; black median stripe widened until PME, fovea darker; a few short radiating setae. Chelicerae yellow with grey veiling. Sternum dark grey. Legs yellow conspicuously black-ringed. Abdomen cream, a blackish dorsal pattern consisting of 2 connected pairs of spots, highlighted by a few small white dots, 4 transverse black stripes behind; venter overall blackish except for a median area and a triangular blotch in front of spinnerets, lighter.

Chelicerae. Cheliceral inner margin with 4 teeth, the 3 distal ones smaller and closer together; cheliceral outer margin armed with 3 teeth, the middle one the strongest. Sternum as long as wide.

Eyes measurements. AME 0.050.

Leg spination. Fe I, 1 prolateral spine; Pa I-IV, 1 dorsal spine; Ti I, position of first dorsal spine 0.27, position of second dorsal spine 0.76, 1 prolateral and 1 retrolateral spines, Ti II 1 retrolateral spine; Mt I, 1 dorsal spine in position 0.16, 1 prolateral and 1 retrolateral spines, position of trichobothrium 0.13, Mt II, 1 dorsal, 1 prolateral and 1 retrolateral spines.

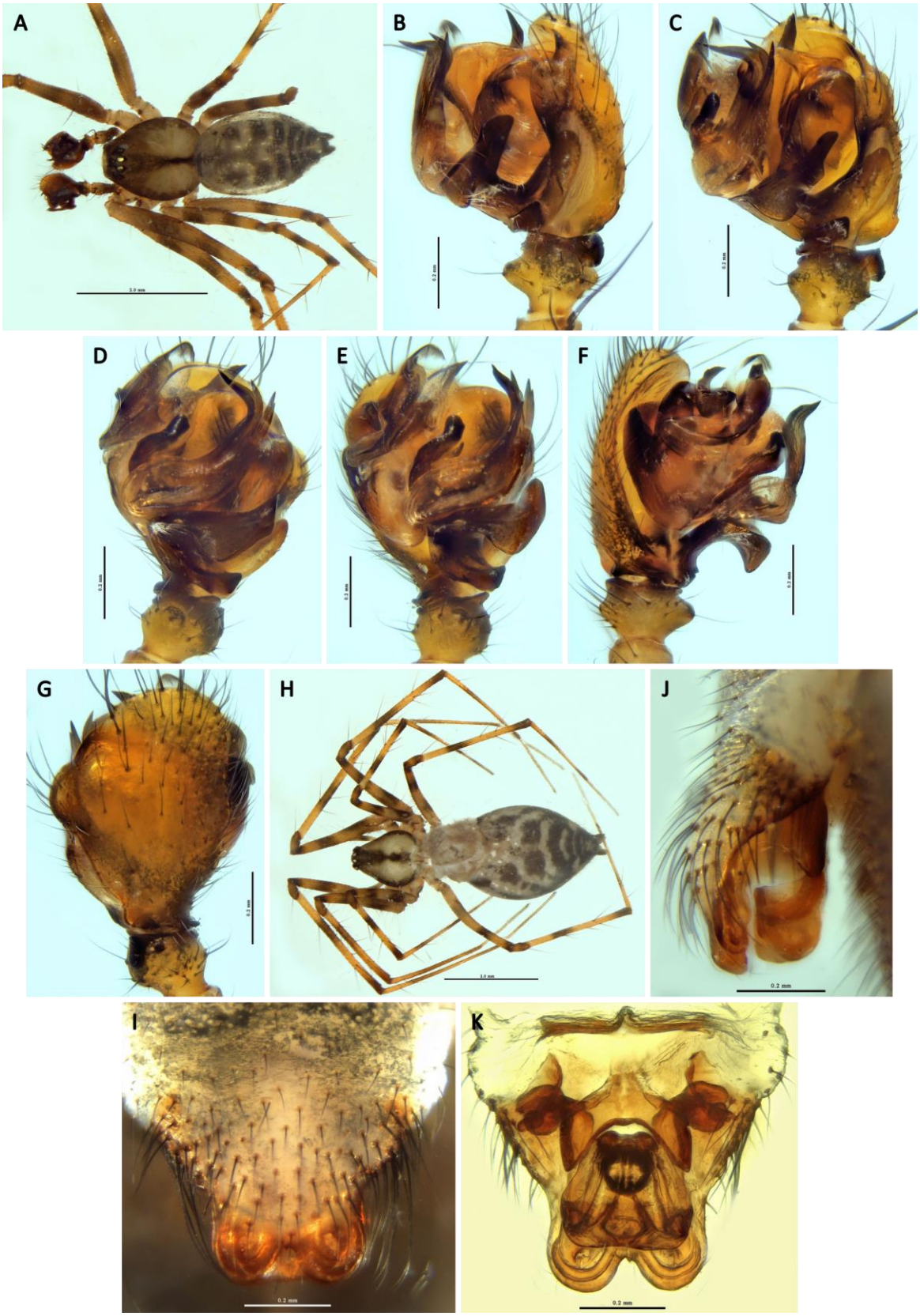

Figure 51: *Megalepthyphantes salam* **sp. nov. A–G.** Male holotype (ref. MOR_0907). **. H–K.** Female paratype (same ref.). **A.** Dorsal view. **B.** Palp, postero-retrolateral view. **C.** Idem, ventro-retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Idem, prolateral view. **G.** Idem, dorsal view. **H.** Dorsal view. **I.** Epigyne, ventral view. **J.** Idem, lateral view. **K.** Vulva, postero-dorsal view. Photos. © P. Oger. Scale bars: A, H = 2.0 mm; B-G, I-K = 0.2 mm.

Palp (Figs 51B-G, 52A-C). Patella with 1 long curved seta. Tibia with a ventral rounded bulg (Fig. 52B, dotted arrow) and a truncated antero-dorsal apophysis (Fig. 52A, dotted arrow). Cymbium with a discrete postero-dorsal protuberance. Paracymbium H-shaped, slightly higher than wide; folded from anterior (Fig. 52A, APo) to apical pocket; proximal part with 10 thin short to medium setae; posterior pocket transformed into a truncated outgrowth directed outwards (Fig. 52A, PPo). Lamella characteristica curved, apical part with 3 spikes, the strongest bent at 90°, poinNng ventro-prolaterally (Fig. 52A-B, LC). Embolus sigmoid (Fig. 52C, see E).

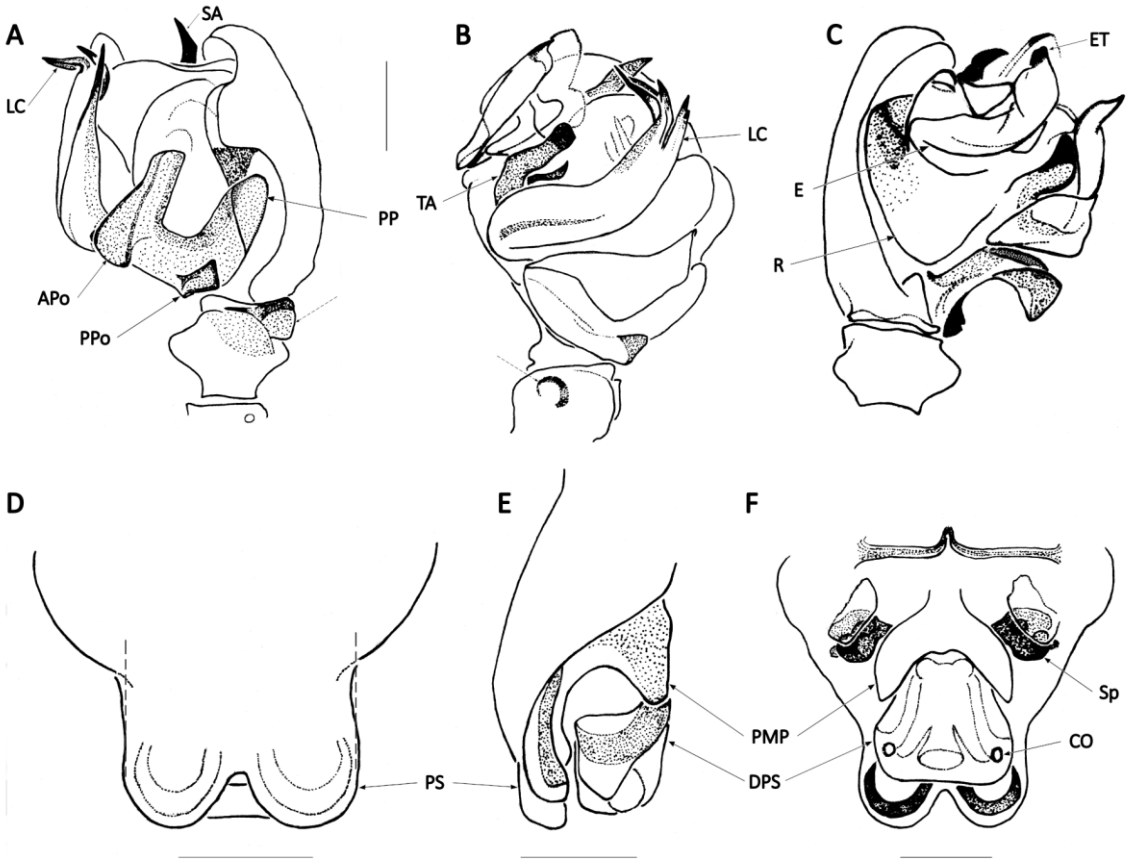

Figure 52: *Megalepthyphantes salam* **sp. nov. A–C.** Male holotype (ref. MOR_0907). **. D–F.** Female paratype (same ref.). **A.** Palp, postero-retrolateral view (dotted arrow: bulg). **B.** Idem, ventral view (dotted arrow: truncated antero-dorsal tibial apophysis). **C.** Idem, prolateral view. **D.** Epigyne, ventral view (dotted lines: sub-parallel margins of the proscape). **E.** Idem, lateral view. **F.** Vulva, postero-dorsal view. Abbreviations: APo: anterior pocket of paracymbium; CO: copulatory opening; DPS: distal part of scape; E: embolus; ET: embolic tooth; LC: lamella characteristica; PMP: posterior median plate; PP: proximal part of paracymbium; PPo: posterior pocket of paracymbium ; Ps: proscape; R: radix; SA: supratregular apophysis; Sp: spermatheca; TA: terminal apophysis. Scale bars: A-F = 0.2 mm.

Female paratype (Figs 51H-K, 52D-F):

Measurements. Total length 4.00; carapace length 1.50, width 1.18, CL/CW 1.28; sternum length 0.78, width 0.78; clypeus height 0.26; chelicerae length 0.65; Fe I length 2.80, Ti I length 3.00; Mt I length 2.74.

Color (from specimen in alcohol) (Fig. 51H). As in male.

For the rest, as in male but cheliceral inner margin with 5 teeth.

Leg spination. Tibial spine formula 2222, for the rest, as in male but Ti I, position of first dorsal spine 0.29, position of second dorsal spine 0.73; Mt I, 1 dorsal spine in position 0.17, position of trichobothrium 0.12; trichobothrium on Mt IV absent.

Epigyne/Vulva (Figs 51I-K, 52D-F). Proscape much wider than long, lateral margins sub-parallel (Fig. 52D, dotted lines), with a deep notch apically, posterior part of scape visible in the incision. Posterior median plate crescent-shaped, tips pointing backwards (Fig. 52F, PMP).

Variation

Measurements (min.–max.). Female (n=2): total length 3.90–4.00; carapace length 1.33–1.50, width 1.07–1.18, CL/CW 1.25–1.28; sternum length 0.73–0.78, width 0.73–0.78; clypeus height 0.23–0.26; chelicerae length 0.60–0.65; Fe I length 2.63–2.80, Ti I length 2.75–3.00; Mt I length 2.50–2.74.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (province of Ifrane, Aïn Louh (Aïn Leuh), Ifri Ouska cave) in the Middle Atlas Mountains, in low vegetation at the entrance to a cave.

Tapinocyba Simon, 1884

***Tapinocyba ifrane* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/58FB1942-5246-47D4-9EFE-92D90116D619

(Fig. 53A-F)

Diagnosis

Tapinocyba ifrane **sp. nov.** most resembles *Tapinocyba algirica* Bosmans, 2007, but is distinguished by its tibial apophysis protruding dorsally, pointed, ratio tibia width/length 1.26 (vs. no apophysis as such, tibia just dorsally elongated, ratio tibia width/length 0.74) (cf. Fig. 53F, TA and Fig. 53E vs. BOSMANS, 2007: p. 159, fig. 154 and fig. 155).

Etymology

The name refers to the Ifrane National Park, where the species was discovered, to emphasize the remarkable biodiversity of its old-growth forest.

Material examined

Holotype
MOROCCO • 1♂; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, sieving; ref. MOR_1095. Remark: left pedipalp detached.

Further material examined
ALGERIA • *Tapinocyba algirica* Bosmans, 2007, male, paratype, Wilaya Setif, Djebel Babor, Bosmans leg., ref. AR 14650 (MNHNP); based on photographs.

Description

Male holotype (Figs. 53A-F)
Measurements. Total length 1.35; carapace length 0.61, width 0.46 CL/CW 1.32; sternum length 0.37, width 0.37; clypeus height 0.11; chelicerae length 0.25; palpal tibia length 0.16, width 0.18; Ti I length 0.31; Ti II length 0.27; Mt I length 0.22.
Color (from specimen in alcohol) (Fig. 53A). Carapace yellow suffused with grey, legs and sternum pale yellow, chelicerae barely darker. Abdomen pale grey.
Carapace. Small, rounded sulcus immediately behind and above the PLE, situated in a groove. PME separated by 1.3 times their diameter. Hairless except for a median row of 3 long, forward-

pointing setae extending in the back of the cephalic part, and a few short, curved setae in eye area. Cheliceral inner margin with 4 teeth distally decreasing in size; cheliceral outer margin armed with 5 teeth, the subdistal one, the largest. Sternum as long as wide.
Eyes measurements. AME 0.025; PME 0.037.
Legs. Patella I-IV with a small posterior outgrowth.
Leg spination. Tibial spine formula 1111, Ti I, position of dorsal spine 0.08, Ti II, position of dorsal spine 0.07; Mt I-III with a dorsal trichobothrium, Mt I position of trichobothrium 0.46.
Palp (Fig. 53B-F). Tibial apophysis consisting of a regular dorsal narrowing of the tibia, tip slightly curved, pointed forwards (Fig. 53F, TA), a series of 7 long setae along its retrolateral margin, 2 dorsal trichobothria; paracymbium with 3 basal hairs; embolic division with a small pointed sclerotized tooth (Fig. 53F, dotted arrow); embolus pointed forwards (Fig. 53F, see E); embolic membrane present; tegulum protruding ventrally (Fig. 53F, T); protegulum large (Fig. 53F, PT).

Female
Unknown.

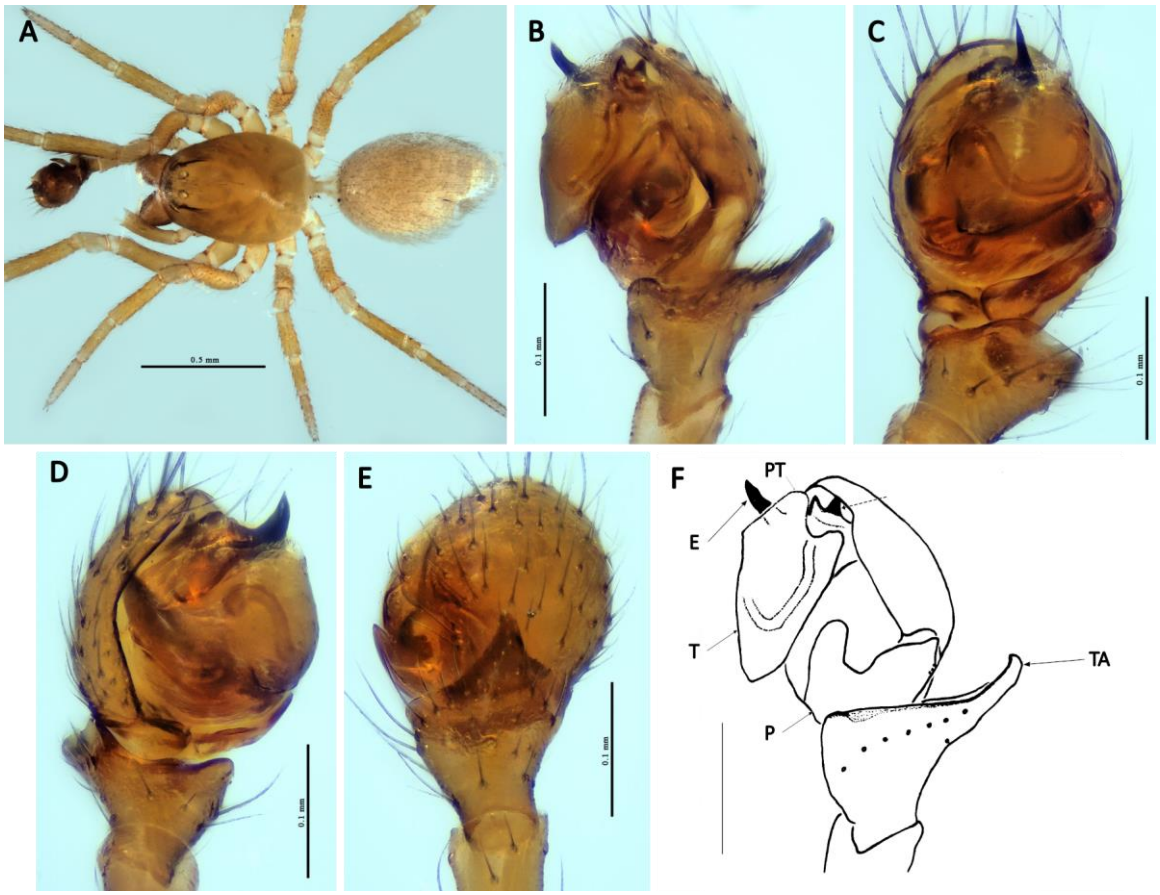

Figure 53: *Tapinocyba ifrane* **sp. nov.**, male holotype (ref. MOR_1095). **A.** Dorsal view. **B, F.** Palp, retrolateral view (dotted arrow: sclerotized tooth of the embolic division). **C.** Idem, ventral view. **D.** ventro-prolateral view. **E.** Idem, dorsal view. Photos © P. Oger. Abbreviations: E: embolus; P: paracymbium; PT: protegulum; T: tegulum; TA: tibial apophysis. Scale bars: A = 0.5 mm; B-F = 0.1 mm.

Trichoncus Simon, 1884

Trichoncus cf. *uncinatus* Denis, 1965

(Fig. 54A-H)

Identification

DENIS (1965): p. 448, figs 33-36. Type material not available (BOSMANS 2007).

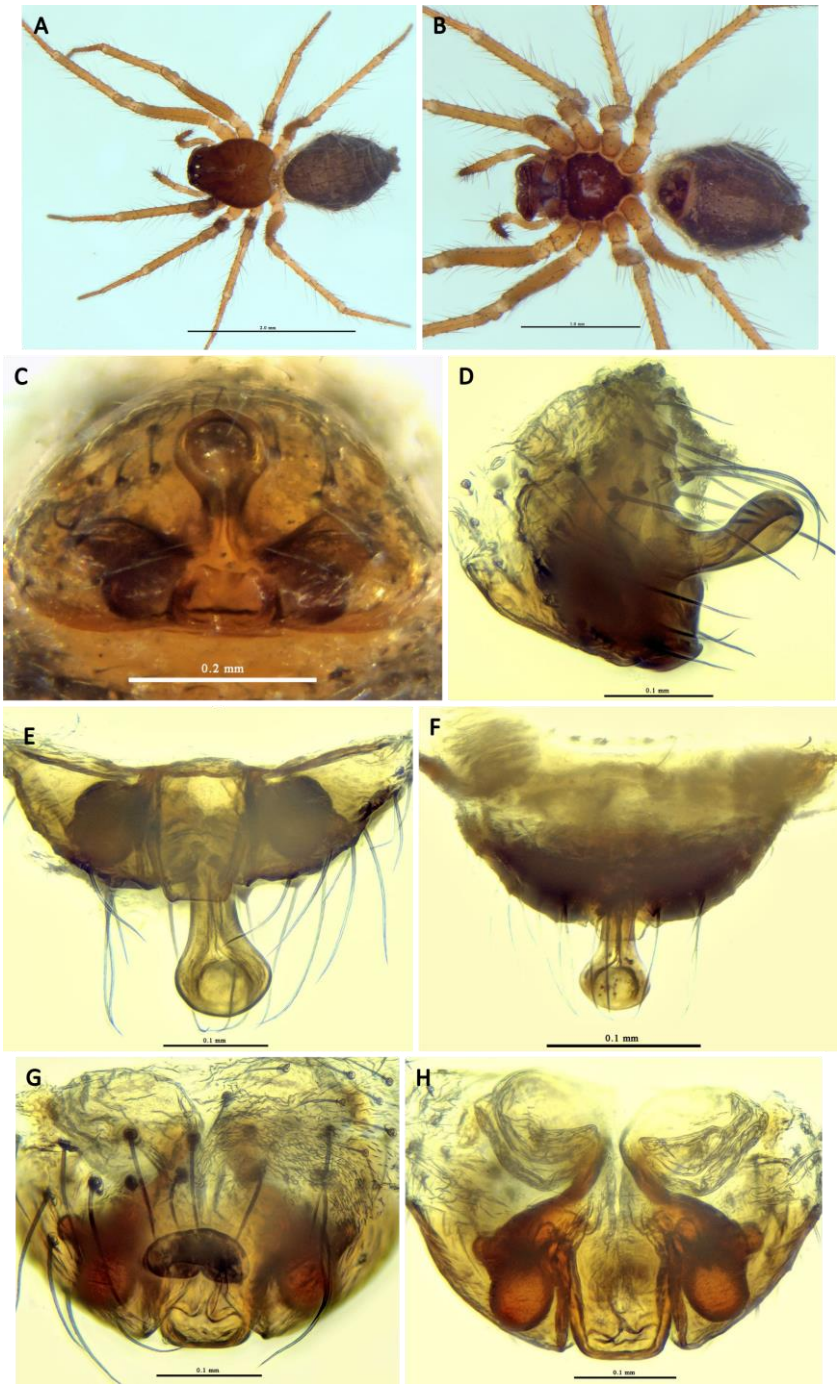

Figure 54: *Trichoncus* cf. *uncinatus,* female (ref. MOR_1178). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne, ventral view. **D.** Idem, lateral view. **E.** Idem, aboral view. **F.** Idem, anterior view. **G.** Vulva, ventral view. **H.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A = 2.0 mm; B = 1 mm; C = 0.2 mm; D-H = 0.1 mm.

First record

MOROCCO • 1♀; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand; ref. MOR_1178, deposited in SMF.

Comments

Trichoncus uncinatus was described and is known, with certainty, to date only from one locality in Algeria. BOSMANS (2007) reported the possible presence of the species in two other Algerian localities, from *Pinus halepensis* and *Cedrus atlan2ca* forests. Records are sCll scarce; however, the species seems to show an affinity for wooded areas, including the litter of deciduous forests (*Quercus ilex*), based on its location in the Moroccan Middle Atlas (1950 m a.s.l.). In the absence of comparative material (paratypes not available), the specimen is provisionally assigned to *T. uncinatus* aLer the descripCon and drawings of Denis (1965). The specimen captured from Timhadit presents the following features: spinal formula (spine on Cbiae I-IV) 1-1-1-1; TmI 0.33; TmIV absent; total length 2.45; epigyne and vulva: see Fig. 54C-H. The female of *T. uncinatus* was never found again since its discovery in the type locality (Algeria, Blida, Gorges de l'Oued Chiffa). The species is new to Morocco (BENHALIMA & BOSMANS 2024).

Family Liocranidae Simon, 1897

***Apostenus* Westring, 1851**

***Apostenus humilis* Simon, 1932**

(Fig. 55A-C)

Identification

BOSSELAERS (2009): p. 40, fig. 1C-E.

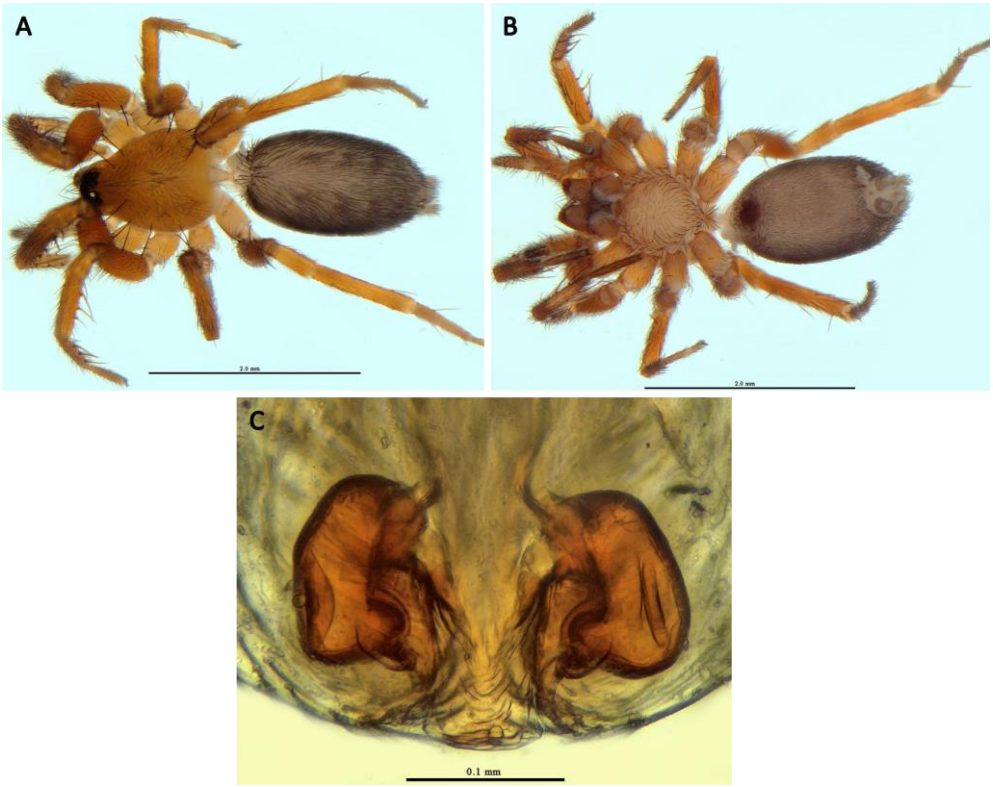

Figure 55: *Apostenus humilis*, female (ref. MOR_1147). **A.** Dorsal view. **B.** Ventral view. **C.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A-B = 2.0 mm; C = 0.1 mm.

First record

MOROCCO • 1♀; Azrou, Ifrane National Park; 33.36074°N, 5.22081°W; 1837 m a.s.l.; 13 Nov. 2023; S. Moutaouakil leg.; *Cedrus* forest, litter, sieving; det. S. Lecigne, J. Bosselaers; ref. MOR_1147.

Comments

Apostenus humilis has a fairly restricted range; it is currently recorded in France (Pyrénées-Orientales) and the Iberian Peninsula. Its ecology remains poorly understood. Its recent discovery in the Ifrane National Park represents the first record for Africa and Morocco (WSC 2025).

***Apostenus maroccanus* Bosmans, 1999**

(Fig. 56A-E)

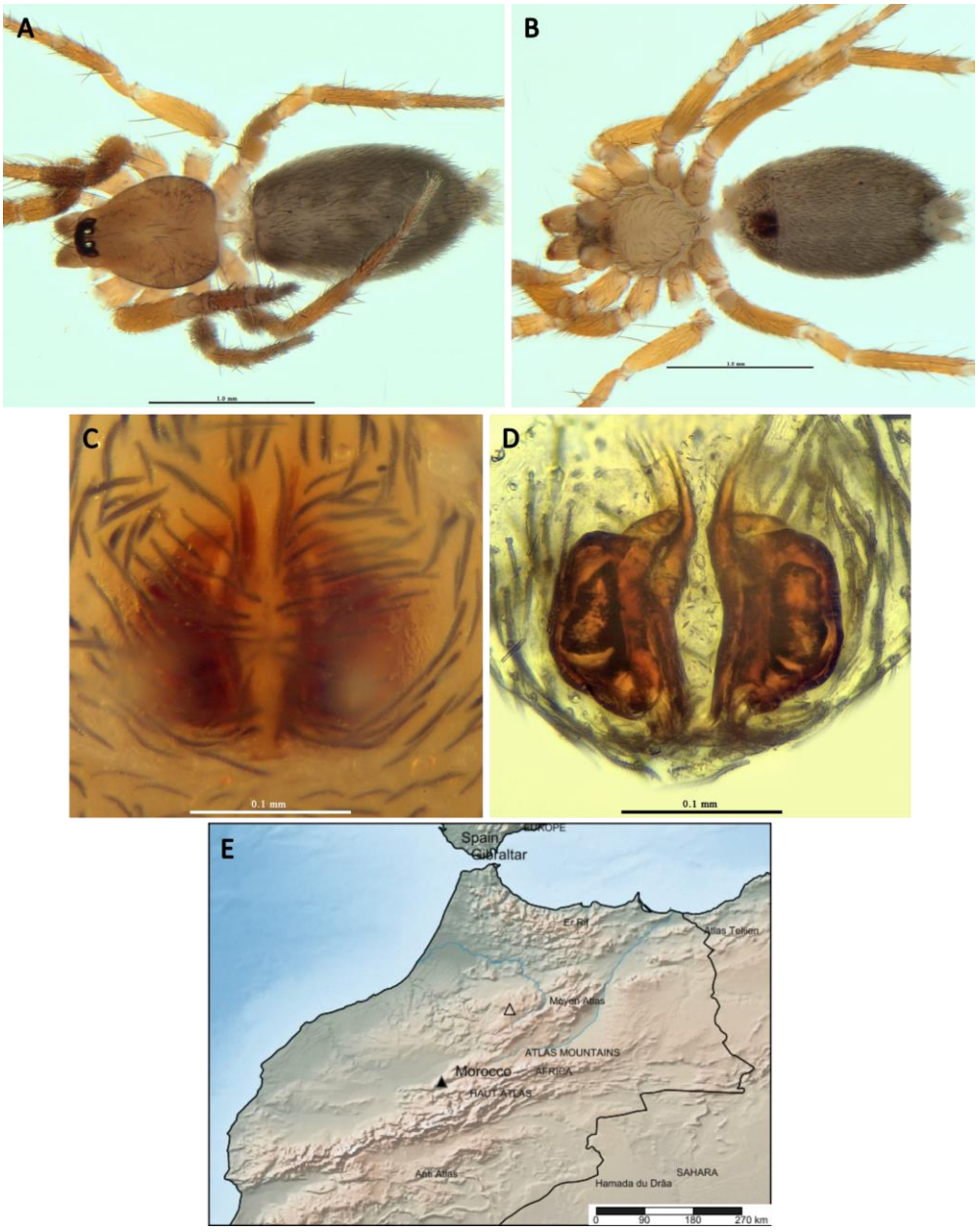

Figure 56: *Apostenus maroccanus*, female (ref. MOR_0885). **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne. **D.** Vulva, dorsal view. **E.** Current status of records; open triangle = loc. typ.; solid triangle = new record. Photos © P. Oger. Scale bars: A-B = 1.0 mm; C-D = 0.1 mm.

Identification
BOSMANS (1999): p. 32, figs 27-28.

First record
MOROCCO • 1♀; Tagleft; 32.26916°N, 6.25973°W; 1730 m a.s.l.; 11 Nov. 2023; S. Lecigne, S. Moutaouakil, B. Lips leg.; high altitude stony lawn, under stones, by hand; det. S. Lecigne, J. Bosselaers; ref. MOR_0885.

Comments
Apostenus maroccanus is endemic to Morocco. Until now it was known only from the type locality (Azrou, Ifrane, 1450 m a.s.l.) in litter and under stones in *Quercus ilex* forest (BOSMANS 1999). Its discovery on a high altitude dry and stony grassland (Tagleft, 1730 m a.s.l.) in the High Atlas Mountains extends its ecological amplitude and its range. It is the second known location of the species since its description.
Figure 56E shows the distribution map of *Apostenus maroccanus*, established on the basis of available data (approximation of the historical record).

Family Oecobiidae Blackwall,1862
***Oecobius* Lucas, 1846**

***Oecobius chassieri* Lecigne & Moutaouakil sp. nov.**
https://zoobank.org/NomenclaturalActs/9AE60777-8356-4256-BC39-E3A1BAB479D0
(Figs 57A-I, 58A-C)

Diagnosis

The new species is characterized by its cave-dwelling lifestyle; it shows typical troglobiont features, i.e. reduced number of eyes (PME missing, structure of ALE modified), pale leg and body coloration. Its male can also be easily distinguished by the shape of the tegular apophysis; its female by the epigynal plate bearing the posterior copulatory openings.

Etymology

This new species is named in honor of Michel Chassieri, for his long-time involvement (since 1970) in cave exploration in northern Morocco.

Material examined

Holotype
MOROCCO • 1♂; Errachidia, Aziza cave; 32.02977°N, 3.78809°W; 1063 m a.s.l.; 8 Oct. 2022; S. Moutaouakil leg.; cave, by hand; ref. MOR_0282. Remark: left pedipalp detached.

Paratypes
MOROCCO • 3♀♀; same as holotype. Remark: abdomen and vulva of one female separated.

Further material examined
MOROCCO • 4 juv.; same as holotype. 1♀; same as holotype; ref. MOR_0285. 1♀; same as holotype; 28 Feb. 2022; ref. MOR_0311.

Description

Male holotype (Figs 57A-E, 58A-B)
Measurements. total length 1.67; carapace length 0.55, width 0.80 CL/CW 0.69; chelicerae length 0.22; palpal femur length 0.38; bulb length 0.256, width 0.172.

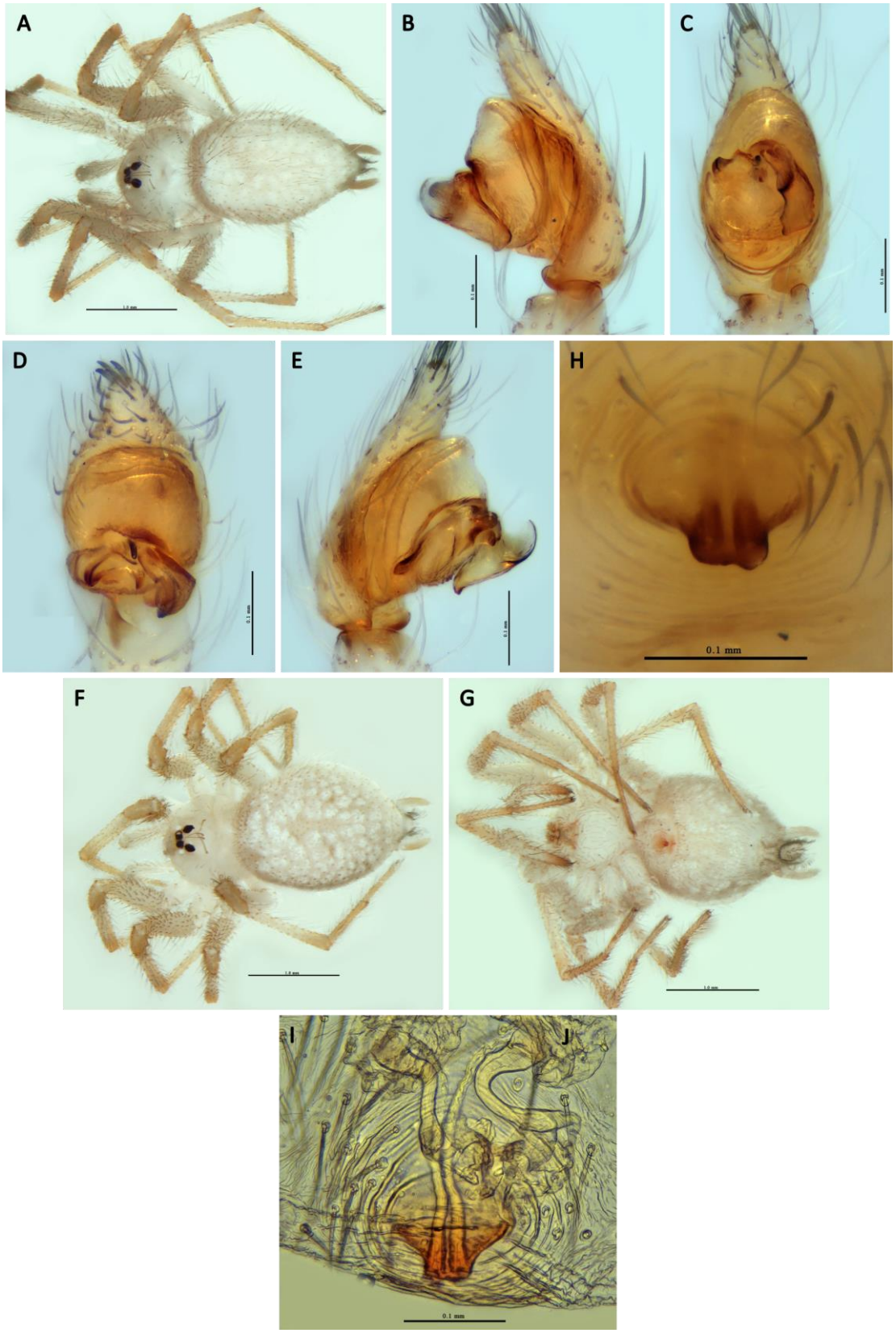

Figure 57: *Oecobius chassieri* **sp. nov. A–E.** Male holotype (ref. MOR_0282). **F-G.** Female paratype (ref. MOR_0311). **H-I.** Female paratype (ref. MOR_0282). **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, ventro-anterior view. **E.** Idem, prolateral view. **F.** Dorsal view. **G.** Ventral view. **H.** Epigyne. **I.** Vulva, dorsal view. Photos © P. Oger. Scale bars: A, F-G = 1.0 mm; B-E, H-I = 0.1 mm.

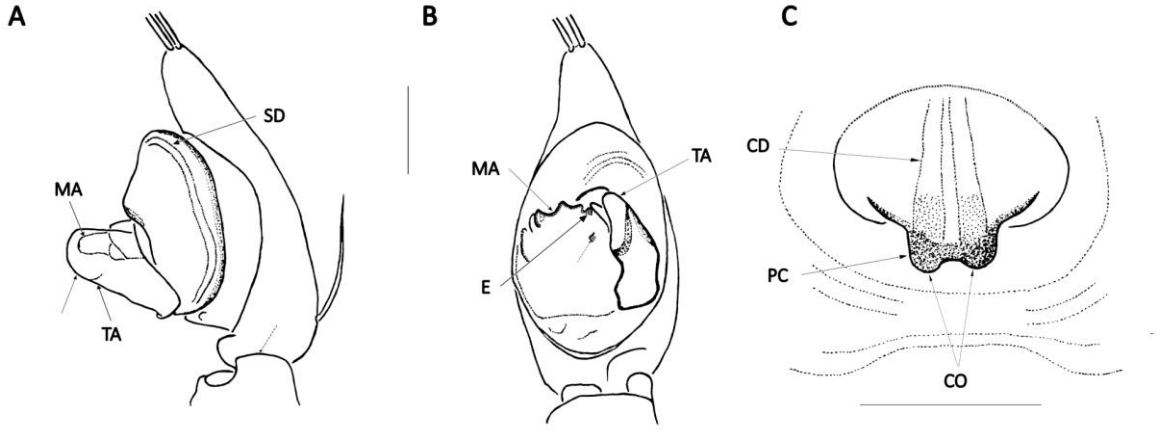

Figure 58: *Oecobius chassieri* **sp. nov. A–B.** Male holotype (ref. MOR_0282). **C.** Female paratype (same reference). **A.** Palp, retrolateral view (black arrow: rounded membranous part of TA; dotted arrow: lamellar extension of palpal tibia). **B.** Idem, ventral view (dotted arrow: tooth-like extension of the tegulum). **C.** Epigyne. Abbreviations: CD: copulatory duct; CO: copulatory opening; E: embolus; MA: marginal apophysis; PC: plate with copulatory openings; SD: sperm duct; TA: tegular apophysis. Scale bars: A-C = 0.1 mm.

Color (from specimen in alcohol) (Fig. 57A). Carapace, sternum and chelicerae whitish; eyes outlined with a black areola, except ALE. Legs: coxae and femora whitish, other segments pale yellow. Abdomen whitish mottled with small dorsal guanine patches.
Carapace. Heart-shaped, 1.45 times wider than long. Hairless, except a few medium setae on the margins, 3 long bristles behind the PME and 5-6 others pointing forwards in eye area.
Abdomen. Evenly covered with long setae.
Eyes. PME almost completely absent, marked only by a very tiny, inconspicuous silver dot; ALE-ALE 0.056, PLE 0.038, PLE-PLE 0.147.
Palp (Figs 57B-E, 58A-B). Antero-retrolateral margin of 9bia with small lamellar extension (Fig. 58A, dotted arrow); bulb subtriangular in retrolateral view; cymbium 9p with 2-3 spines; bulb ovate, 1.49 times longer than wide; sperm duct encircling tegulum not forming any loops from retrolateral to prolateral side (Figs 57B-D, 58A, SD); embolus short and small, located in the median of bulb in ventral view and bent ventrally (Figs 57D, 58B, see E); anterolateral part of tegular apophysis rounded, membranous and translucent (Fig. 58A-B, TA, black arrow); marginal apophysis in 2 parts, lateral part gutter-shaped in ventro-retrolateral view, anterior part truncated (Fig. 58A-B, MA); tegulum with an additional tooth-like extension (Fig. 58B, dotted arrow).

Female paratype (Figs 57H-I, 58C)
Measurements. Total length 2.72; carapace length 0.95, width 1.08 CL/CW 0.88; chelicerae length 0.35; palpal femur length 0.45.
Color, carapace and *abdomen*. As in male.
Eyes. PME completely absent; ALE-ALE 0.059, PLE 0.059, PLE-PLE 0.163.
Epigyne/Vulva (Figs 57H-I, 58C). Epigyne without process and scape. Copulatory openings (Fig. 58C, CO) located in posterior side of a narrow-sclerotized plate (Fig. 58C, PC); copulatory ducts visible in ventral view (Fig. 58C, CD), pointing to 12 o'clock; spermathecae membranous, located in anterior side.

Variation

Measurements (min.–max. (average)). Female (n=5): total length 2.57–2.75 (2.67); carapace length 0.87–0.95 (0.92), width 1.06–1.17 (1.10), CL/CW 0.79–0.88 (0.84); chelicerae length 0.33–0.36 (0.35); ALE-ALE 0.059–0.063 (0.062), PLE 0.047–0.063 (0.055); PLE-PLE 0.159–0.175 (0.168).

Distribution and habitat

Troglobiont species, endemic to Morocco, only known from the type locality in the Moroccan Eastern High Atlas Mountains (province of Errachidia, Tazouguert, Aziza cave).

***Oecobius machadoi* Wunderlich, 1995**

(Fig. 59A-G)

Identification

LE PÉRU (2011): p. 325, fig. 565.

First records

MOROCCO • 1♂, 1♀; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; in a hotel park, on the outside wall of a building, by hand; det. S. Lecigne, P. Oger; ref. MOR_0741. 1♂; Marrakech; 31.63501°N, 7.99832°W; 459 m a.s.l.; 20 Apr. 2023; S. Moutaouakil leg.; city centre, on the outside wall of a building, by hand; det. S. Lecigne; ref. MOR_1436

Comments

Oecobius machadoi is known from numerous localities in Portugal and southern Spain (LE PÉRU 2011). There is very few information about its ecology; MACHADO (1949) specifies that it inhabits arid and sunny places under stones. Specimens from Morocco found on the walls of a house tend to reveal a certain ecological adaptability. This possible anthropic or synanthropic character is also present in other species of this genus (e.g. *O. cellariorum* (Dugès, 1836), *O. maculatus* Simon, 1870, *O. navus* Blackwall, 1859). The species is new to Africa.

Family Pholcidae C. L. Koch, 1850

***Micropholcus* Deeleman-Reinhold & Prinsen, 1987**

***Micropholcus khenifra* Huber, Lecigne & Lips 2024**

(Figs 60A-L, 61A-E)

Identification

HUBER & MENG (2024): p. 168-170, figs 68-71.

Diagnosis

Small species, easily distinguished from congeners by its distinctive procursus (Fig. 61A-B, P); also by shapes of embolus and putative uncus (Fig. 61A-B, see E, U), male cheliceral armature (Fig. 60B), and female genitalia (Fig. 61C-D).

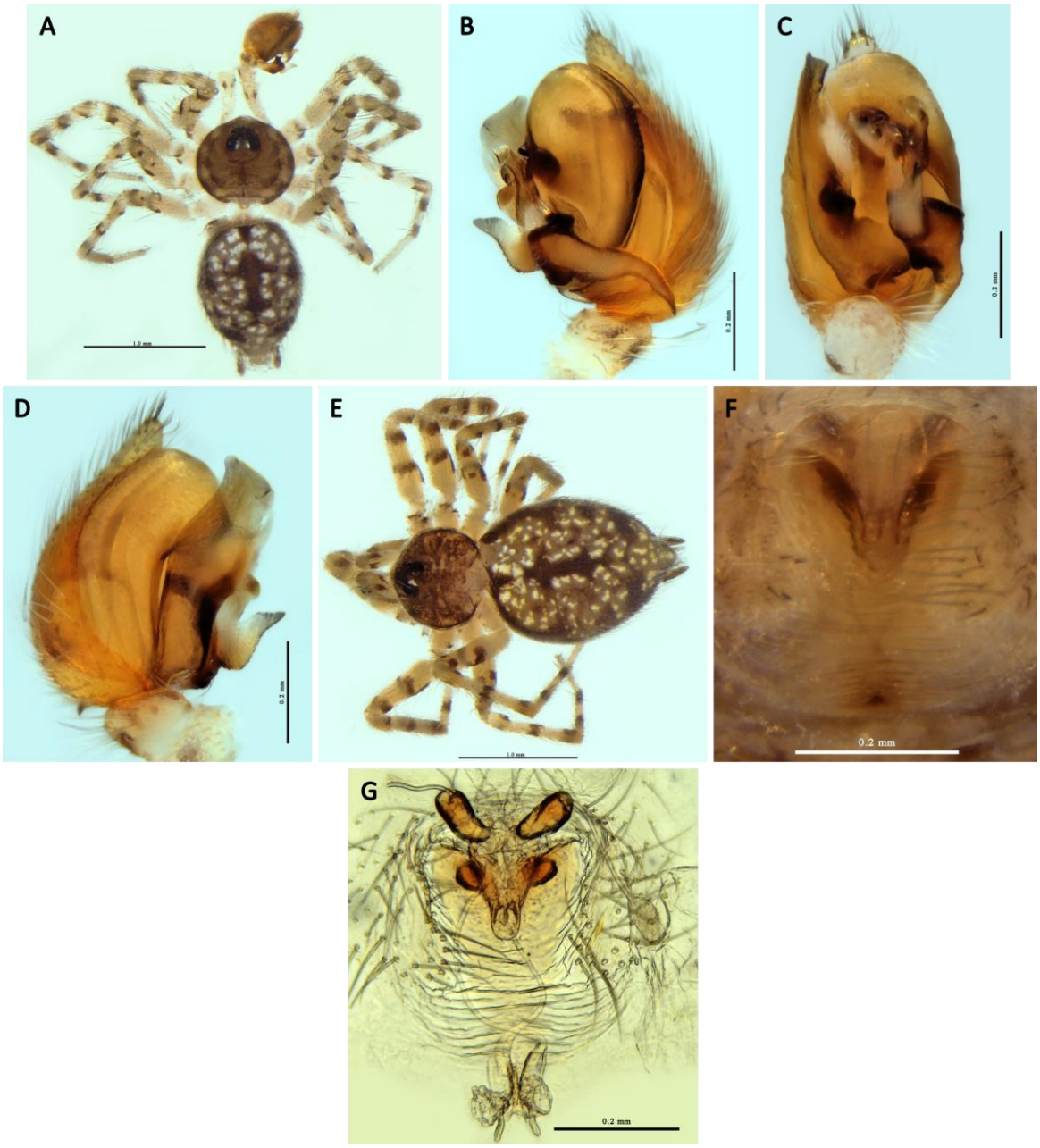

Figure 59: *Oecobius machadoi*. **A.** Male, dorsal view. **B.** Idem, palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, prolateral view. **E.** Female, dorsal view. **F.** Idem, epigyne. **G.** Idem, vulva, dorsal view. © P. Oger. Scale bars: A, E = 1.0 mm; B-D, F-G = 0.2 mm.

Previous citation

HUBER & MENG (2024).

Material examined

MOROCCO • 1♂, 1♀, 4 juv.; Beni Ayat, "La Perle de Beni Ayat" cave; 32.16140°N, 6.64220°W; 1387 m a.s.l.; 10 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_0875. Remark: left male pedipalp detached; abdomen and vulva of female separated; 1♂ and 1♀ deposited in SMF. 1♀; Beni Mellal; 32.32076°N, 6.34252°W; 678 m a.s.l.; 10 Nov. 2023; S. Lecigne leg.; rocky slope, under a stone, by hand; ref. MOR_1075.

Description

Male (Figs 60A-H, 61A-B)

Measurements. Total length 3.60; carapace length 1.30, width 1.27, CL/CW 1.03; sternum length 0.61, width 0.85.

Color (from specimen in alcohol; possibly recently molted) (Fig. 60A). Carapace pale yellow, central thoracic area with large but indistinct greyish mark except a median line, lighter; eyes outlined with a black areola; sternum and chelicerae pale yellow; legs pale yellow except patellae and basal part of tibiae, greyish. Abdomen whitish mottled with small dorsal guanine dots.

Carapace. Ocular area slightly elevated, with few hairs; no thoracic furrow; clypeus basally slightly convex. Chelicerae: a pair of distal, subtriangular internal protrusions pointed forwards with an additional spine-shaped tooth on their inner margin, a second pair of distal protrusions, tooth-like, on inner margin, pointed apically; an additional, translucent, blunt outgrowth on the superolateral side (Fig. 60B). Legs without spines. Abdomen evenly covered with medium setae.

Eyes measurements. AME 0.031, AME-AME 0.025, PME 0.100, PME-PME 0.106.

Palp (Figs 60C-H, 61A-B). Coxa unmodified. Trochanter with small retrolateral and tiny, inconspicuous ventral apophyse. Femur with a basal triangular outgrowth. Genital bulb with distinctive putative uncus and slightly sclerotized embolus. Procursus complex, with a broad, undulating blade shape, terminally pointed, strongly sclerotized, also with a tapering spine-like structure (Fig. 61B, dotted arrow).

Female (Figs 60I-L, 61C-D)

Measurements. Total length 4.10; carapace length 1.30, width 1.37, CL/CW 0.95; sternum length 0.70, width 0.86.

Color (from specimen in alcohol) (Fig. 60I). As in male but carapace and chelicerae yellow; legs yellow except patellae and basal part of tibiae, greyish. Abdomen pale cream mottled with tiny dorsal guanine dots.

Chelicerae. Only presence of the pair of distal tooth-like protrusions on inner margin.

Eyes measurements. AME 0.031, AME-AME 0.050, PME 0.100, PME-PME 0.138.

Epigyne/Vulva (Figs 60J-L, 61C-D). Epigyne, a domed genital plate, about 1.16 times wider than long; barely sclerotized, with posterior small knob; antero-lateral sclerotized internal structures visible through cuticle (Fig. 60J). Anterior margin of internal genitalia, a transverse sclerotized structure running across the entire width; internally, another bilateral arch-shaped sclerotized structure (Fig. 61D, dotted arrows); pore plates oval (Fig. 61D, PP).

Variation

Measurements (min.–max.). Female (n=2): total length 3.50–4.10; carapace length 1.17–1.30, width 1.17–1.37, CL/CW 0.95–1.00; AME 0.031–0.038, AME-AME 0.031–0.050, PME 0.100–0.106.

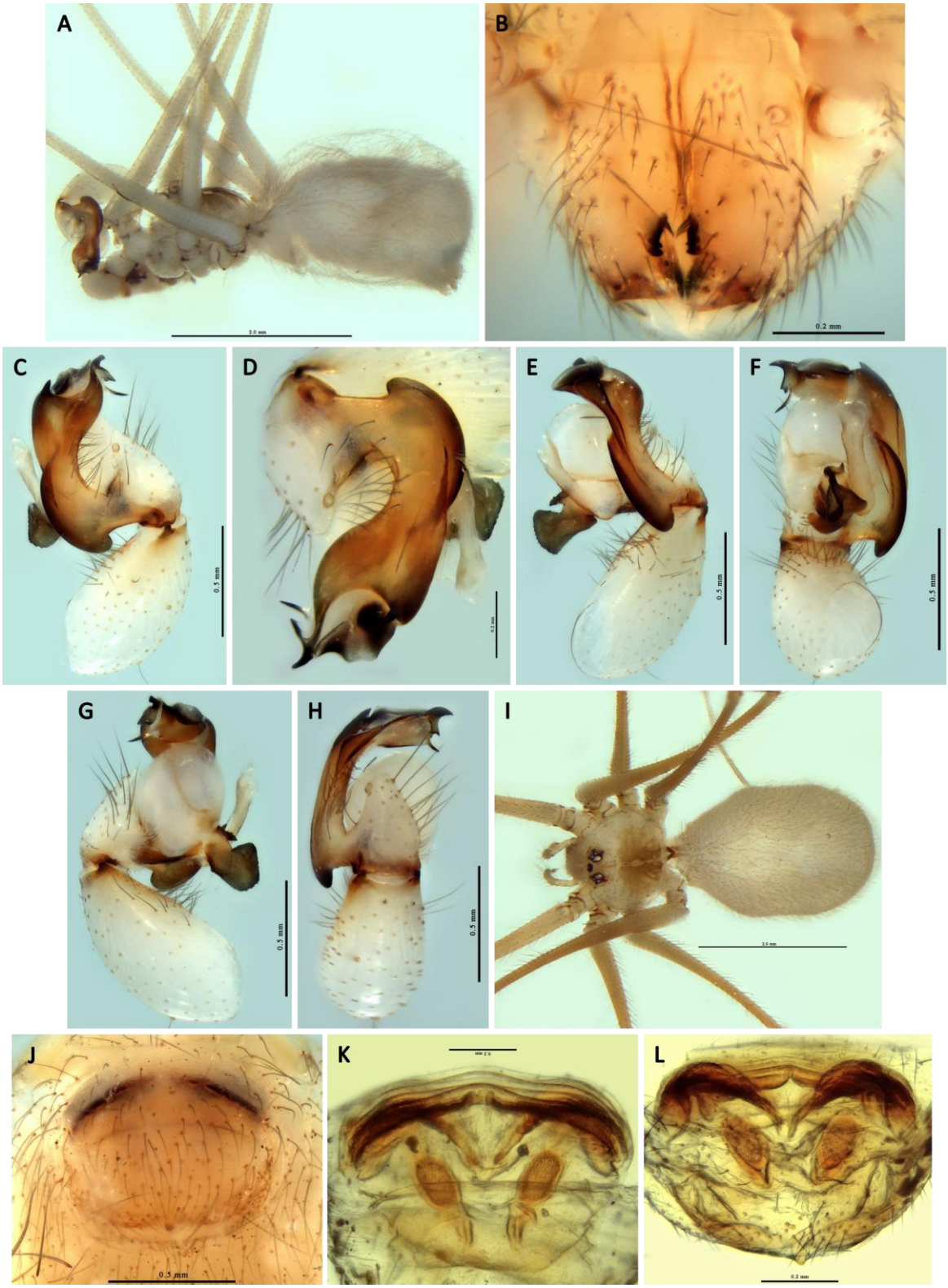

Figure 60: *Micropholcus khenifra*. **A–H.** Male (ref. MOR_0875). **I-K.** Female (same ref.). **L.** Female (ref. MOR_1075). **A.** Lateral view. **B.** Chelicerae, frontal view. **C.** Palp, retrolateral view. **D.** Palp, procursus, retrolateral view. **E.** Palp, ventro-retrolateral view. **F.** Idem, ventral view. **G.** Idem, ventro-prolateral view. **H.** Idem, dorsal view. **I.** Dorsal view. **J.** Epigyne. **K.** Vulva, ventral view. **L.** Idem, dorsal view. Photos © P. Oger. Scale bars: A, I = 2.0 mm; B, D, K-L = 0.2 mm; C, E-H, J = 0.5 mm.

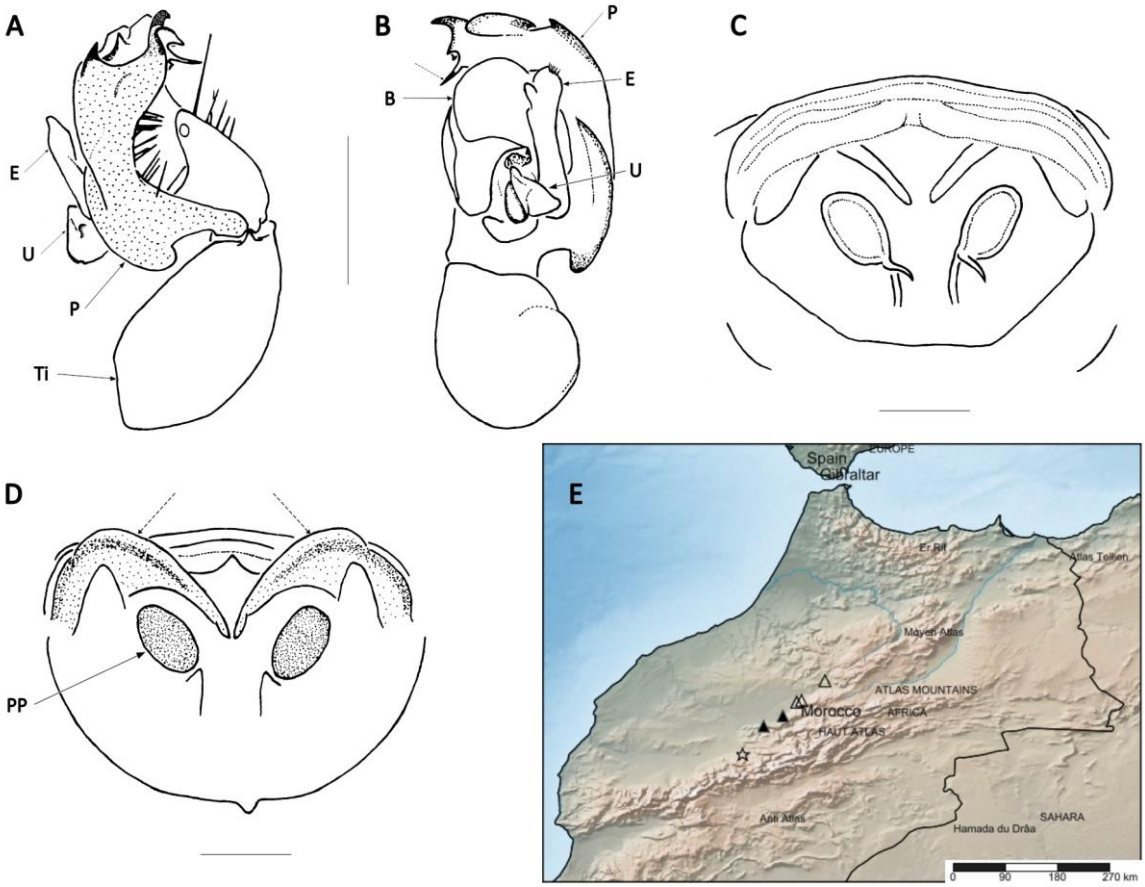

Figure 61: *Micropholcus khenifra*. **A–B.** Male (ref. MOR_0875). **C.** Female (same ref.). **D.** Female (ref. MOR_1075). **A.** Palp, retrolateral view. **B.** Idem, ventral view (dotted arrow: tapering apical process of procursus). **C.** Vulva, ventral view. **D.** Idem, dorsal view (dotted arrows: internal arch-shaped sclerotized structure). **E.** Distribution map of the species; open star = loc. typ.; open triangles = other citations; solid triangles = new records (see Distribution). Abbreviations: B: bulb; E: embolus; P: procursus; PP: pore plate; Ti: tibia; U: putative uncus. Scale bars: A-B = 0.5 mm; C-D = 0.2 mm.

Distribution and habitat

Endemic to Morocco. To date, the species is only known from several localities all in Béni Mellal-Khénifra Region. We add two nearby localities, at most about 30 km apart (Beni Ayat, province of Azilal and Beni Mellal, eponymous province), on the mid-western edge of the Moroccan High Atlas Mountains (Fig. 61E), where it was found both underground and under a stone on a rocky slope. These habitats are consistent with the observations of HUBER & MENG (2024).

Micropholcus tegulifer Barrientos, 2019

(Fig. 62A-I)

Identification

BARRIENTOS in BARRIENTOS et al. (2019): p. 7, figs 7-12.

Previous citations

BARRIENTOS in BARRIENTOS et al. (2019)

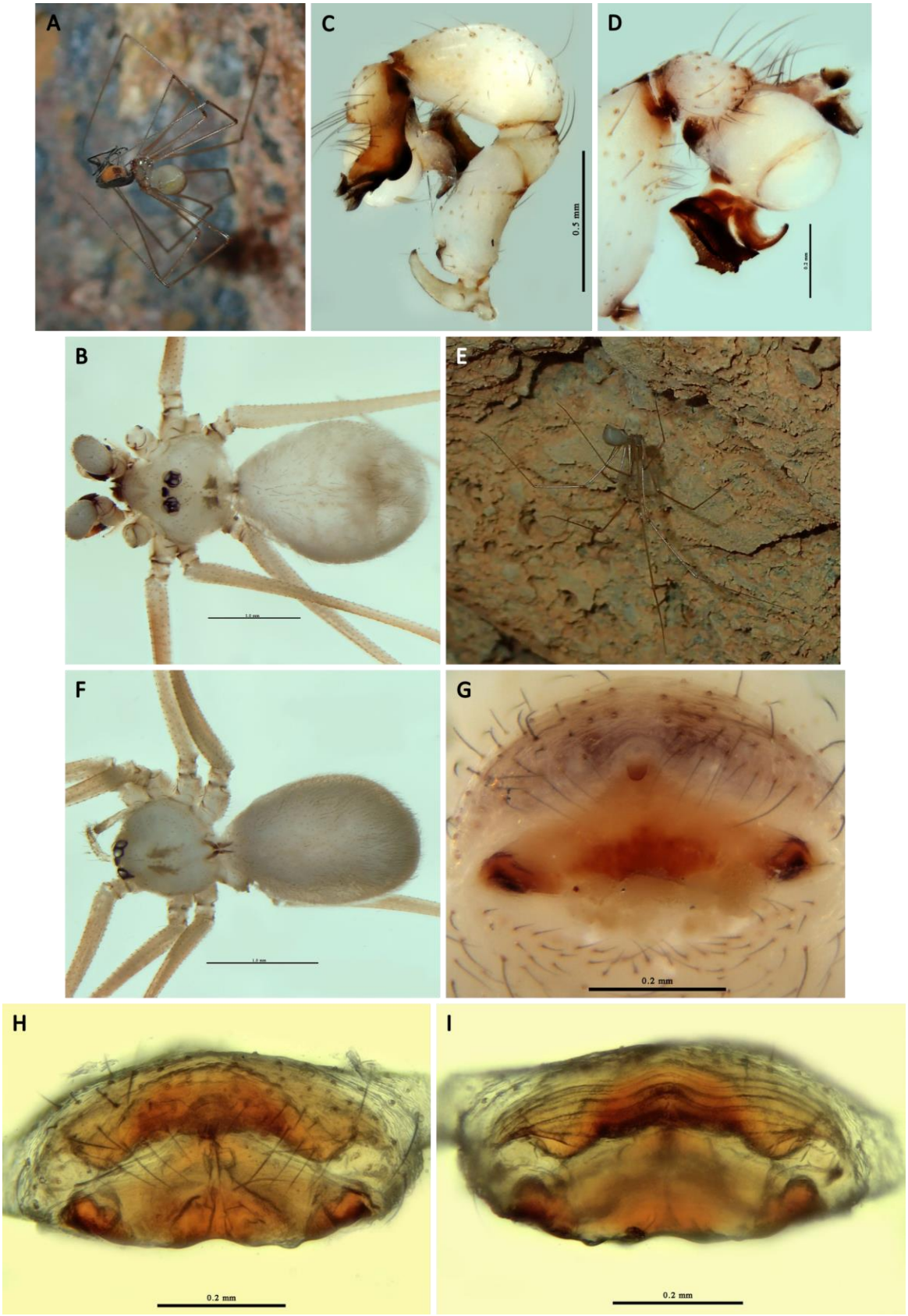

Figure 62: *Micropholcus tegulifer*. **A.** Male, ventral view. **B.** Idem, dorsal view. **C.** Idem, palp, retrolateral view. **D.** Idem, antero-prolateral view. **E.** Female, lateral view. **F.** Idem, dorsal view. **G.** Idem, epigyne. **H.** Idem, vulva, ventral view. **I.** Idem, vulva, dorsal view. © A, E J. Lips; B-D, F-I P. Oger. Scale bars: B, F = 1.0 mm; C-D, G-I = 0.2 mm.

New record
MOROCCO • 4♂♂, 7♀♀, 6 juv.; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.05100°W; 11 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; det. P. Oger; ref. MOR_0881.

Comments
Micropholcus tegulifer is a troglophile species endemic to Morocco, recently described from the Ifri Bouyzem cave in the Taghlef locality (BARRIENTOS et al. 2019). The discovery of a population in the Ait Sidi Moha cave represents the second known station of the species. It is located in the same locality, about 3 km north-west of the locus typicus.

Family Phrurolithidae Banks, 1892
***Phrurolithus* C. L. Koch, 1839**

***Phrurolithus sandrae* Lecigne sp. nov.**
https://zoobank.org/NomenclaturalActs/74CABE8E-43B6-4CF5-A743-80814EC0BC42
(Fig. 63A-H)

Diagnosis

Phrurolithus sandrae **sp. nov.** differs from European and Mediterranean species of *Phrurolithus* by both the size and shape of the ventro-retrolateral tibial apophysis (Fig. 63H, RTAv) and the subterminal apophysis (Fig. 63G-H, SA).

Etymology

The name of this species refers to Sandra, the sister of the first author, to whom he wishes to express his deepest affection.

Material examined

Holotype
MOROCCO • 1♂; Imlil; 31.12864°N, 7.91906°W; 1878 m a.s.l.; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0766. Remark: left pedipalp and left leg II detached.

Further material examined
MOROCCO • 5 juv.; same as holotype.

Description

Male holotype (Fig. 63B-H)
Measurements. total length 2.42; carapace length 1.11, width 0.88, CL/CW 1.25; sternum length 0.67, width 0.57; clypeus under ALE 0.12; AME 0.04, ALE 0.05, PLE 0.05, AME-AME 0.06, PME-PLE 0.06.
Color (from specimen in alcohol) (Fig. 63A). Carapace and chelicerae brown with gray pattern; sternum brown suffused with dark grey. Legs: pedipalps, femora I-IV, coxae and trochanters I dark brown, dorsal part of coxae and trochanters II, coxae and trochanters III-IV pale yellow, patellae, tibiae and metatarsi I-IV pale brown, tarsi I-IV pale yellow. Abdomen black with shiny scutum covering 95% of the abdomen, 2 dorsal white spots anteriorly, 3 transverse ones posteriorly, a white dot above the spinnerets as well as on the anal tubercle.
Chelicerae. One spine frontally; inner cheliceral margin with 2 tiny teeth.

Leg spination. Femur I with 1 ventro-prolateral subdistal spine; tibia I with 5 pairs of ventral spines; tibia II with 4-5 biseriate ventral spines; metatarsus I-II with 3-4 biseriate ventral spines; legs III-IV spineless.

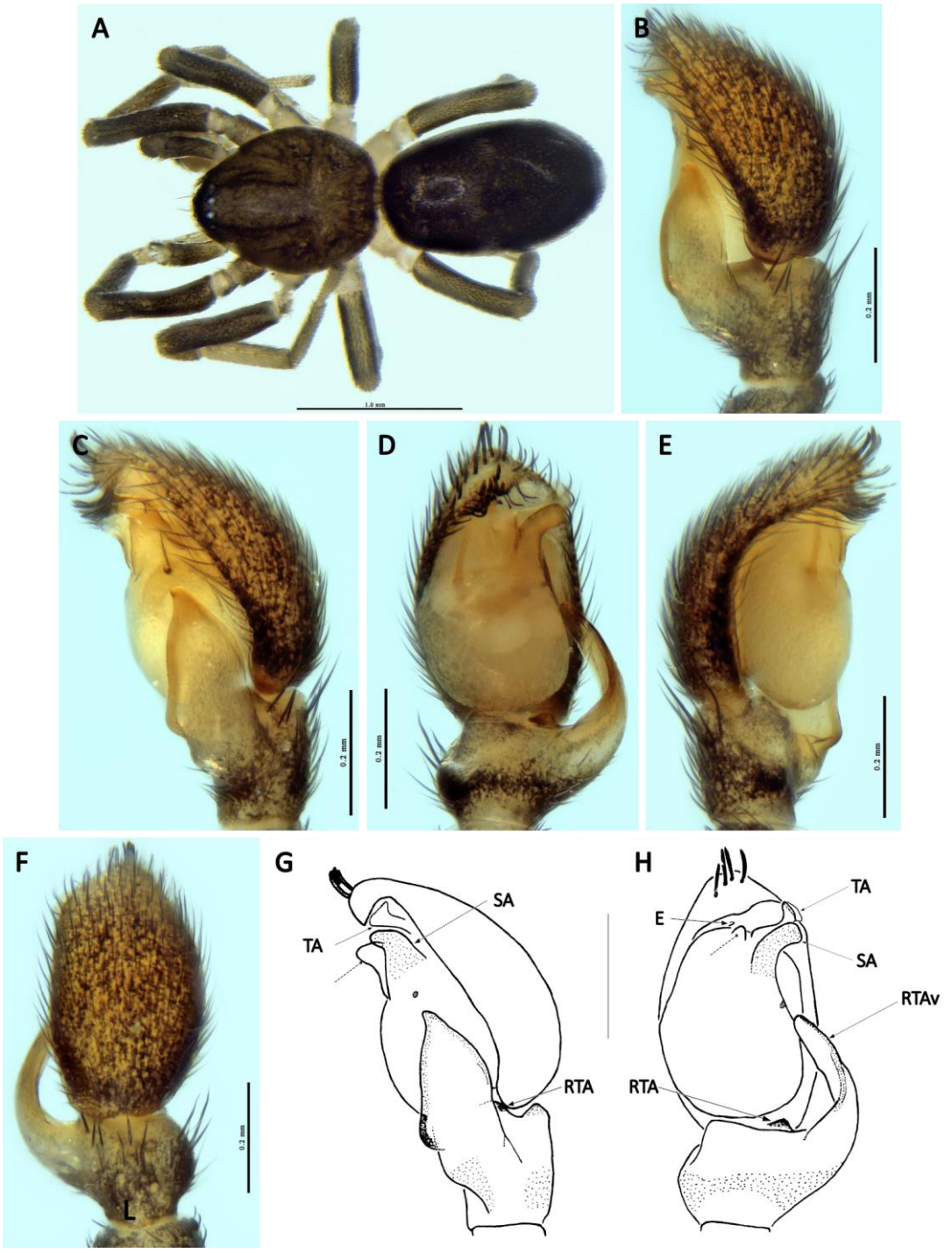

Figure 63: *Phrurolithus sandrae* **sp. nov.**, male holotype (ref. MOR_0766). **A.** Dorsal view. **B.** Palp, dorso-retrolateral view. **C, G.** Idem, retrolateral view (dotted arrow: additional tegular apophysis). **D, H.** Idem, ventral view (dotted arrow: additional tegular apophysis). **E.** Idem, ventro-prolateral view. **F.** Idem, dorsal view. Abbreviations: E = embolus; RTA: retrolateral tibial apophysis; RTAv: ventro-retrolateral tibial apophysis; SA: subterminal apophysis; TA: terminal apophysis. Photos © P. Oger. Scale bars: A = 1.0 mm; B-H = 0.2 mm.

Palp (Fig. 63B-H). Femur with a ventral median bulg. Ventro-retrolateral tibial apophysis wide, curved inwards (Fig. 63H, RTAv), tip not reaching half the cymbium (about 0.44 of the length of the cymbium). Retrolateral tibial apophysis discrete, small, truncated (Fig. 63G-H, RTA). Subterminal apophysis with large base, finger-like, bent outwards, tip rounded (Fig. 63G-H, SA). Terminal apophysis pointing outwards, tip enlarged, partially translucent, ending behind the subterminal apophysis (Fig. 63G-H, TA). Embolus inconspicuous, tiny tooth-like, partially hidden by an additional rounded tegular apophysis (Fig. 63G-H, dotted arrow), tip hardly sclerotized, pointing ventrally and forwards (Fig. 63H, E).

Female
Unknown.

Variation

Leg spination: tibia I with 4 -6 biseriate ventral spines.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (village of Imlil, province of Al Haouz, Moroccan High Atlas Mountains), on a wooded slope near the Toubkal National Park.

Family Salticidae Blackwall, 1841
***Menemerus* Simon, 1868**

***Menemerus guttatus* Wesołowska, 1999**
(Fig. 64A-J)

Identification
Wesolowska (1999): p. 295, figs 142-147.

Previous citation
Wesolowska (1999).

New record
MOROCCO • 1♂, 2♀♀; Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; pebble bank along a lake, by hand; det. S. Lecigne, P. Oger; ref. MOR_1233.

Comments
Menemerus guttatus is endemic to the Moroccan High Atlas Mountains (Wesolowska 1999). Its observation on the banks of the Lalla Takerkoust lake is the second mention of the species since its discovery in 1977 in Asni. The recent record is located about 21 km northwest of the type locality (approximate location after Wesolowska (1999); see distribution map of the species, Fig. 64J). The very few records indicate the presence of adult specimens of both sexes from early February to May, at altitudes of 665 to 1300 m a.s.l., in the presence of water (lake, gravel river).

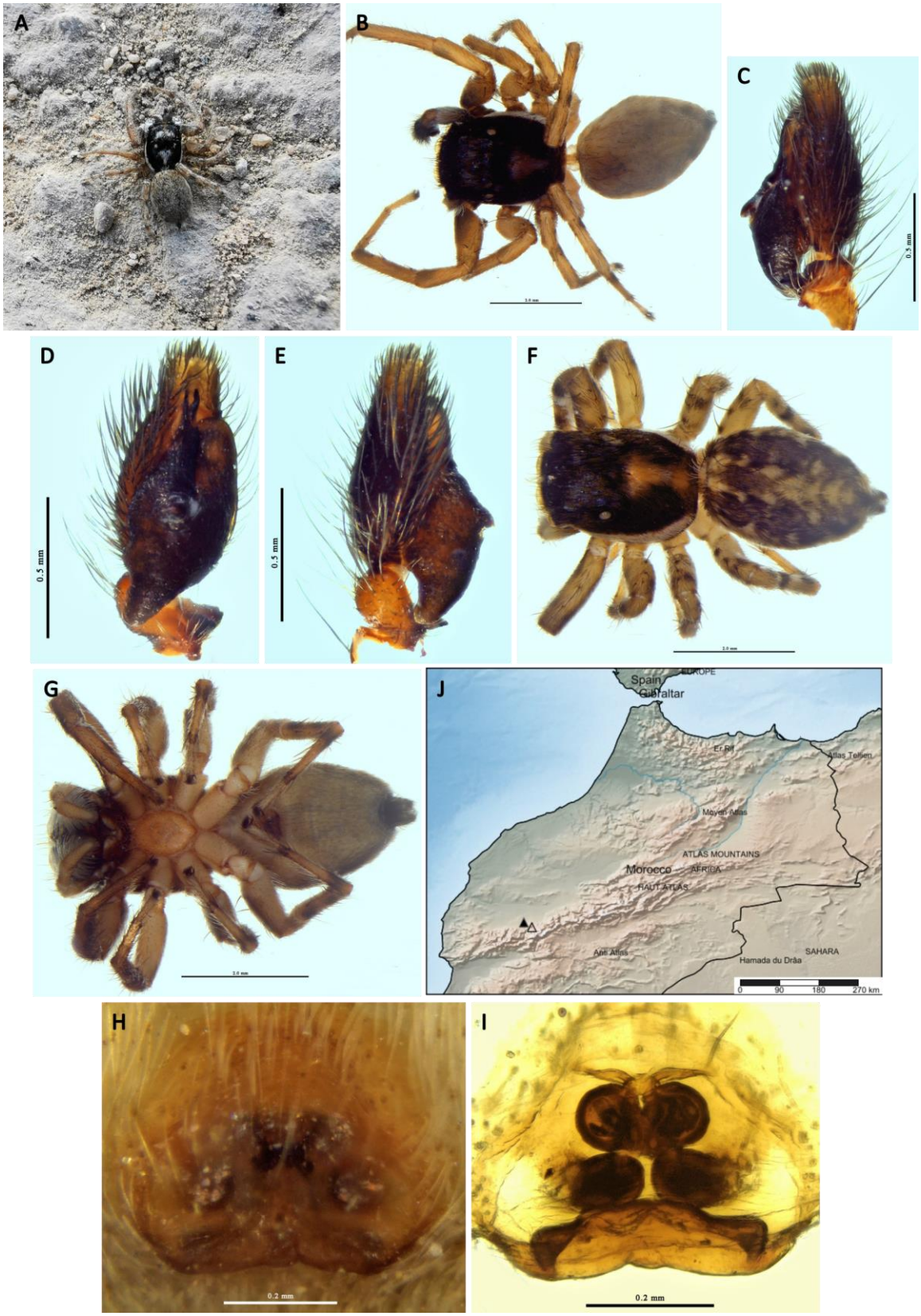

Figure 64: *Menemerus guttatus* (ref. MOR_1233). **A-B.** Male, dorsal view. **C.** Idem, palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, prolateral view. **F.** Female, dorsal view. **G.** Idem, ventral view. **H.** Epigyne. **I.** Vulva, dorsal view. **J.** Distribution map of the species; open triangle = loc. typ.; solid triangle = new record. © A S. Lecigne; B-I P. Oger. Scale bars: B, F-G = 2.0 mm; C-E = 0.5 mm; H-I = 0.2 mm.

Pellenes Simon, 1876

Pellenes geniculatus (Simon, 1868)

(Fig. 65A-G)

Identification

METZNER (1999): p. 248, fig. 94A-E.

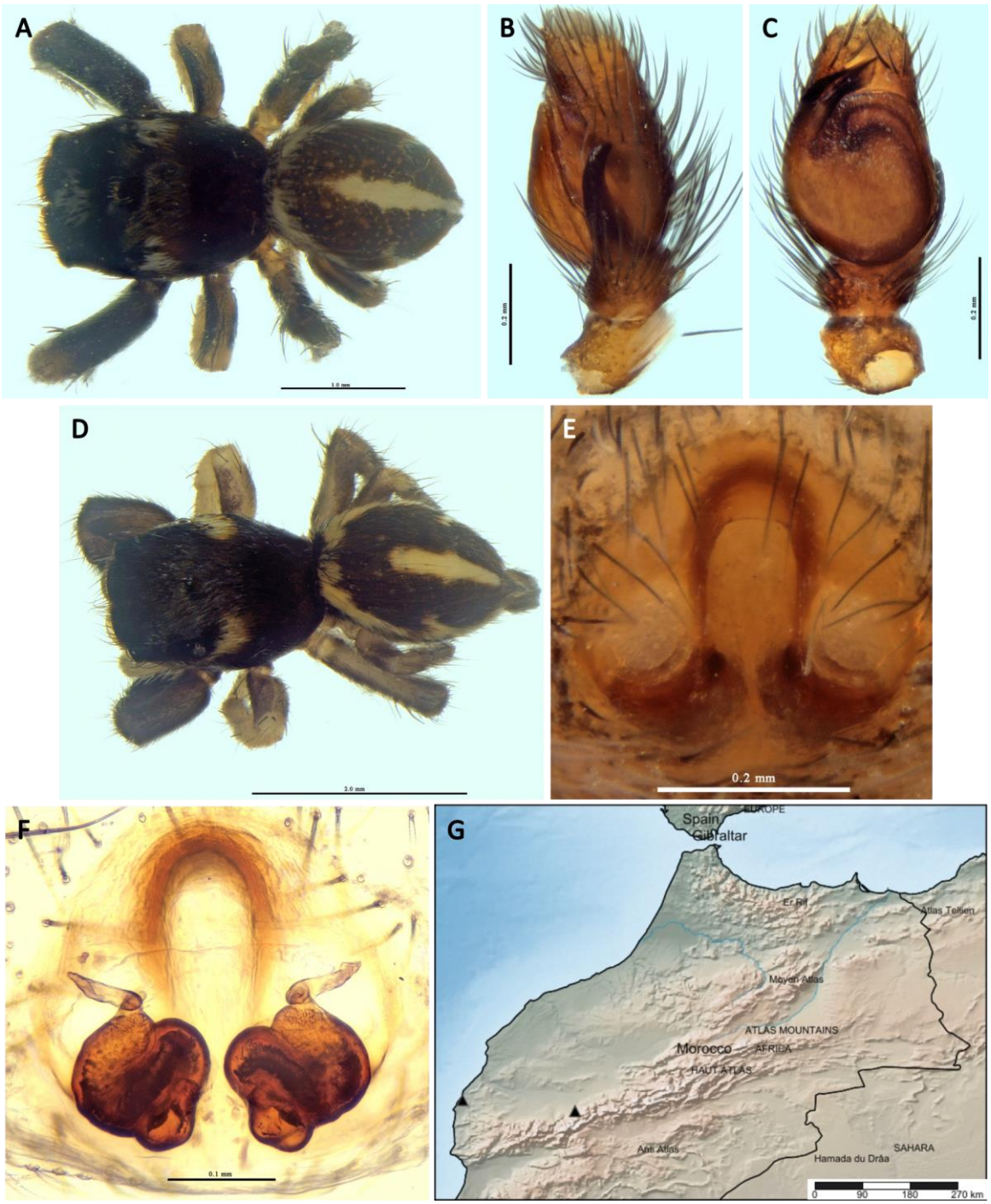

Figure 65: *Pellenes geniculatus*. **A.** Male (ref. MOR_0493), dorsal view. **B.** Idem, palp, retrolateral view. **C.** Idem, ventral view. **D.** Female (ref. MOR_0398), dorsal view. **E.** Idem, epigyne. **F.** Idem, vulva, dorsal view. **G.** Distribution map of the species; solid triangle = records from Morocco. © P. Oger. Scale bars: A = 1.0 mm; B-C, E = 0.2 mm; D = 2.0 mm; F = 0.1 mm.

First records
MOROCCO • 1♂, 1 juv.; Ourika, Laagrab; 31.37373°N, 7.76613°W; 987 m a.s.l.; 23 Nov. 2020; S. Moutaouakil leg.; forest, by quadrat; ref. MOR_0492. 1♂; Essaouira; 31.56295°N, 9.68836°W; 162m a.s.l.; 11 Dec. 2020; S. Moutaouakil leg.; wooded sandy coastal dune, by quadrat; det. S. Lecigne, Y. Montardi; ref. MOR_0493. 1♀; Ourika, Laagrab; 31.37447°N, 7.76518°W; 969 m a.s.l.; 25 Feb. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger, Y. Montardi; ref. MOR_0398.

Comments
Pellenes geniculatus is widespread in southern Europe, the Middle East and Central Asia. In Africa, the species is recorded from Tanzania, Namibia and more recently from South Africa and Lesotho (WESOŁOWSKA & HADDAD 2014). The recent observations in Morocco are the first in North Africa (Fig. 65G).

***Pellenes maderianus* Kulczyński, 1905**
(Fig. 66A-F)

Identification
LOGUNOV et al. (1999): p. 123, figs 121-123.

First record
MOROCCO • 1♂; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand.; det. S. Lecigne, D. Logunov; ref. MOR_0709.

Comments
Pellenes maderianus was removed from the synonymy with *Pellenes epularis* (O. Pickard-Cambridge, 1872) (CANTARELLA & ALICATA 2002) and was so far considered as endemic to Madeira. Its recent discovery in a high-altitude grassland (Oukaïmeden plateau) represents the first record of the species in Africa (Fig. 66F).

Family Zodariidae Thorell, 1881
***Zodarion* Walckenaer, 1826**

***Zodarion azrouense* Bosmans & Benhalima, 2020**
(Fig. 67A-F)

Identification
BENHALIMA & BOSMANS (2020): p. 109, figs 94-97. See also comments.

Previous citation
BENHALIMA & BOSMANS (2020).

New record
MOROCCO • 1♀; Azrou; 33.30247°N, 5.22469°W; 13 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; lawn on basalt field, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_1168. Remark: abdomen damaged, separated as well as vulva; left leg IV detached.

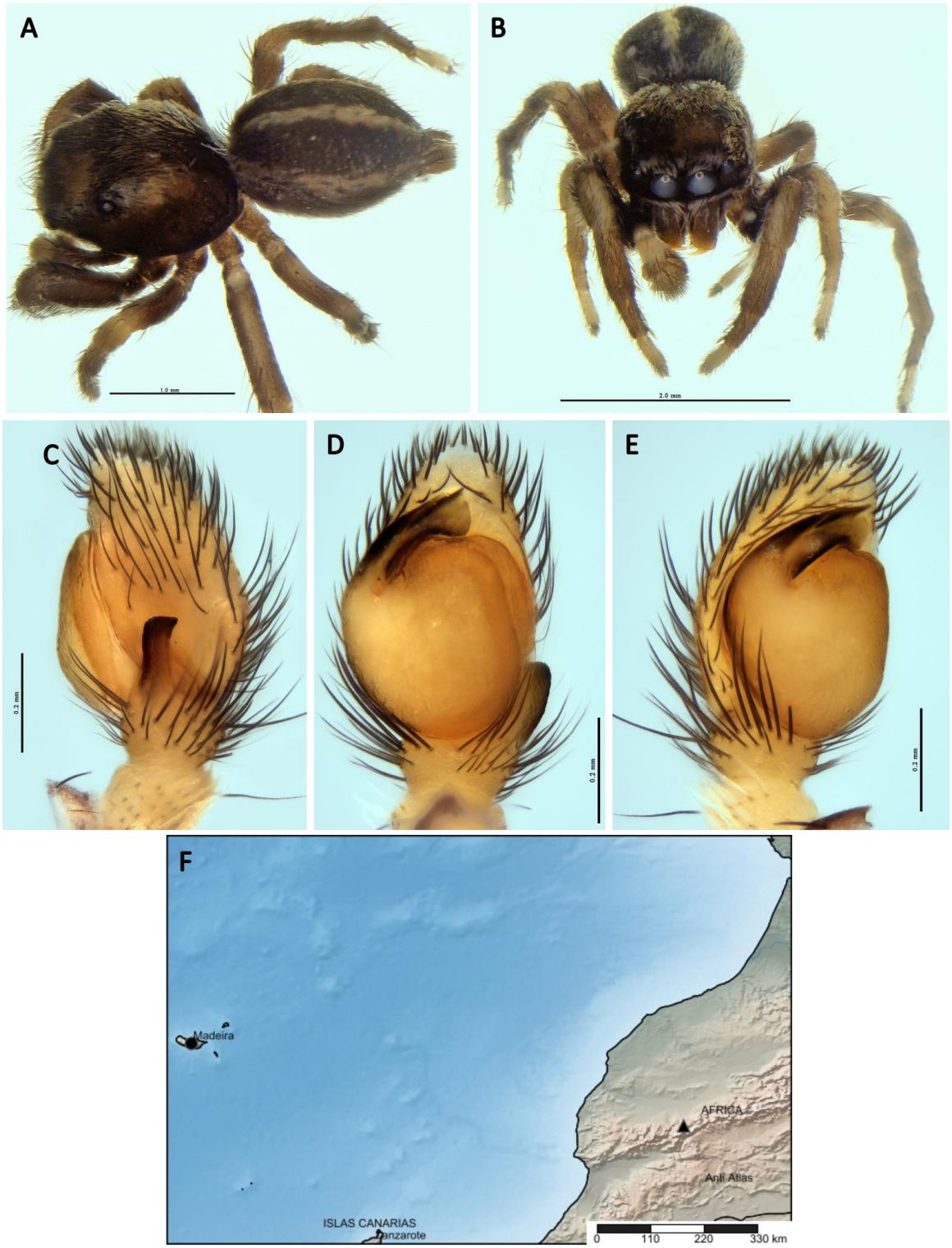

Figure 66: *Pellenes maderianus*, male (ref. MOR_0709). **A.** Dorsal view. **B.** Antero-dorsal view. **C.** Palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Distribution map of the species; solid circle = previous record; solid triangle = new record. © P. Oger. Scale bars: A = 1.0 mm; B = 2 mm; C-E = 0.2 mm.

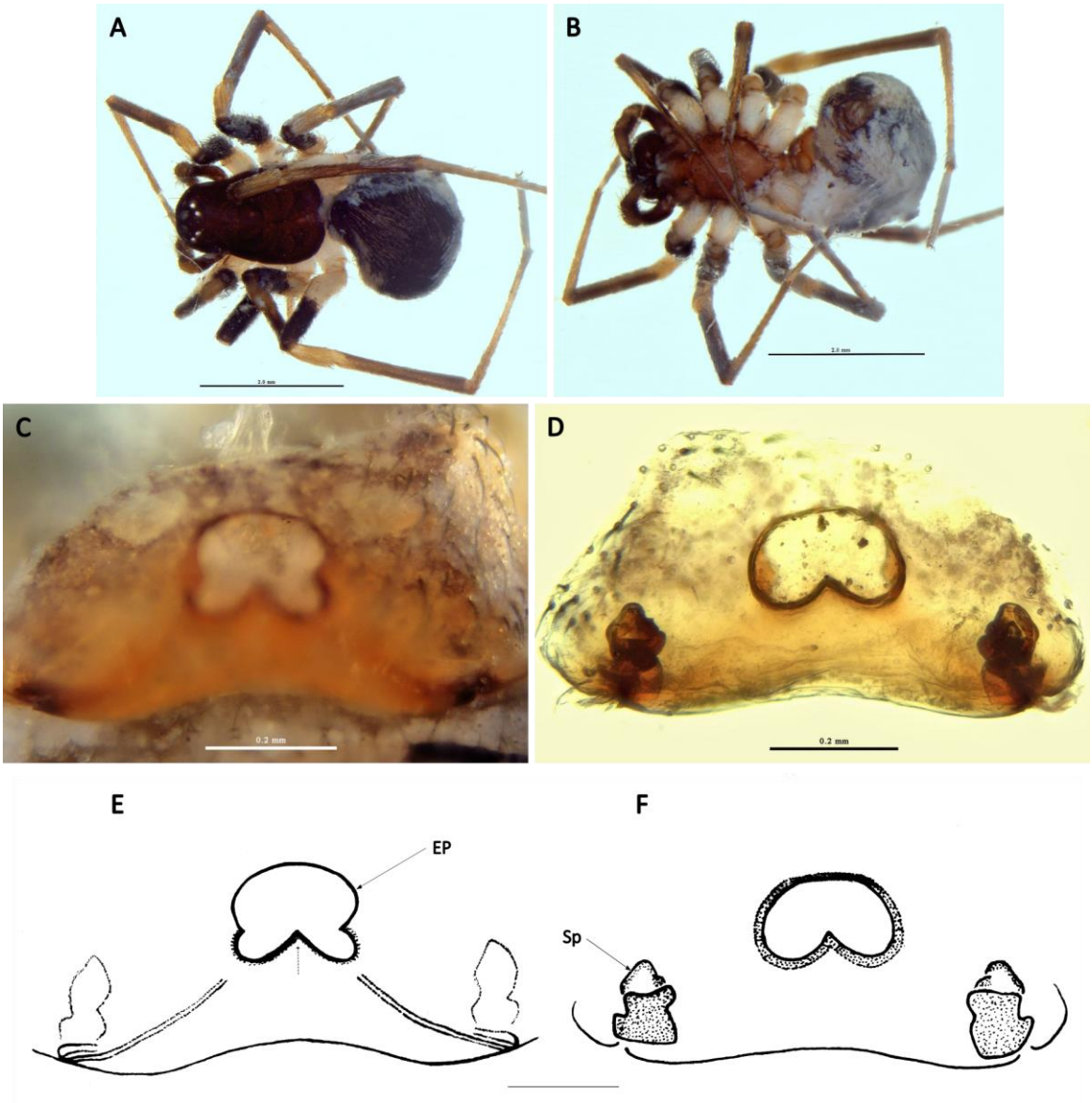

Figure 67: *Zodarion azrouense*, female (ref. MOR_1168). **A.** Dorsal view. **B.** Ventral view. **C, E.** Vulva, postero-ventral view (dotted arrow: postero-median triangular process). **D, F.** Idem, postero-dorsal view. Abbreviations: EP: epigynal pit; Sp: spermatheca. Photos © P. Oger. Scale bars: A = 2.0 mm; B-F = 0.2 mm.

Comments

Z. azrouense belongs to the *mostafai* group of *Zodarion* species (after BENHALIMA & BOSMANS 2020). Genital and somatic characters are consistent with the specimen recorded. However, its spermathecae (Fig. 67F) are located behind the pit of the genital plate (vs. at the height of the pit of the genital plate for the paratype; BENHALIMA & BOSMANS 2020: p. 109, figs 96-97); this could be a probable difference in sight angles. Further details of this specimen recorded near the type locality are given in the description below.

Description

Female (Fig. 67A-F)

Measurements. total length 4.20; carapace length 2.04, width 1.38, CL/CW 1.48; sternum length 1.07, width 0.83; clypeus under ALE 0.19; AME 0.13, ALE 0.09, PME 0.08, AME-AME 0.07, PME-PME 0.22.

Color (from specimen in alcohol) (Fig. 67A-B). Carapace dark brown, thoracic part barely clearer. Chelicerae dark brown. Sternum pale brown. Pedipalps: femora dark brown, other segments pale brown suffused with dark pattern. Legs: coxae whitish, femora I-II black, femora III-IV black with respectively distal third and distal half whitish, tibiae I brown, other segments pale brown. Abdomen black; venter, oblique long blotch on sides and postero-median dorsal spot, whitish.

Epigyne/Vulva (Fig. 67C-F). Rounded genital opening, 1.25 wider than long, compressed posterolaterally (Fig. 67E, EP), away from the posterior margin of the genital plate by 0.52 its height; postero-median triangular process present (Fig. 67E, dotted arrow); spermathecae in a lateral position, near the posterior margin of the genital plate, separated by about 5.5 diameters.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Azrou, province of Ifrane) in the Moroccan Middle Atlas.

***Zodarion camillae* Lecigne sp. nov.**

https://zoobank.org/NomenclaturalActs/788E415F-FA53-4A7A-8B78-494B085E62BB

(Fig. 68A-G)

Diagnosis

The new species can be distinguished from its congeners by the size and shape of its median apophysis. It also differs from the 2 representatives of the *italicum* group in Morocco, i.e. *Zodarion isabellinum* (Simon, 1870) and *Z. pallidum* Denis, 1952, in the shape of the tibial apophysis and in particular its tip (lateral view), straight in the new species (vs. bent ventrally in *Z. isabellinum*; curved dorsally in *Z. pallidum*) (cf. Fig. 68F, RTA vs. BENHALIMA & BOSMANS 2020: p. 98, figs. 15, 19).

Etymology

The species is named for Camille, the eldest daughter of the first author, in memory of walks disturbed by a “few” unexpected surveys.

Material examined

Holotype
MOROCCO • 1♂; Zaouiat ben Iffou, Tnine Lgharbia; 32.63807°N, 8.94409°W; 125 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; scattered calcicole lawn (lapiaz), in dried plant debris at the foot of *Eucalyptus* regrowth, by hand; ref. MOR_1016. Remark: left pedipalp detached.

Paratype
MOROCCO • 1♂; same as holotype.

Comments

Regarding the conformation of the male palp, *Zodarion camillae* **sp. nov.** features the characters of the *italicum* group after BENHALIMA & BOSMANS (2020) i.e. “tibial apophysis short, …, as wide or wider than long; median apophysis with basal part broader than triangular distal part; embolus without

subterminal tooth, basal part often with ridges.". The new species is the third representative of the *italicum* group of *Zodarion* species in Morocco (BENHALIMA & BOSMANS 2020).

Description

Male holotype (Fig. 68A-G)

Measurement. Total length 2.47; carapace length 1.18, width 0.93, CL/CW 1.27; sternum length 0.67, width 0.67; AME 0.10, PME 0.05, AME-AME 0.05, PME-PME 0.18.

Color (from specimen in alcohol) (Fig. 68A). Carapace dark brown. Chelicerae brown. Sternum brown-burgundy. Pedipalps: femora dark brown-burgundy, other segments yellow. Legs: coxae and trochanters I-II brown-burgundy, coxae and trochanters III-IV whitish suffused with brown-burgundy, femora black brown-burgundy, femora IV with distal third clearer, patellae and tarsi yellow, femora and metatarsi pale brown. Abdomen black; venter, oblique blotch on sides and postero-median dorsal spot whitish.

Palp (Fig. 68B-G). Tibial apophysis short, base with sub-horizontal rounded lobe (better visible in ventral view, Fig. 68C, G), distal third bent at about 70°, pointed antero-laterally; median apophysis extending over almost the anterior half of the bulb (i.e. 0.47 times the height of the bulb), hook-shaped, unevenly curved (ventral view, Fig. 68G, MA), with narrow pointed distal part (Fig. 68F, MA); embolus with straight, flat and rounded tip (Fig. 68F-G, E), accompanied by a discrete embolic membrane.

Female

Unknown.

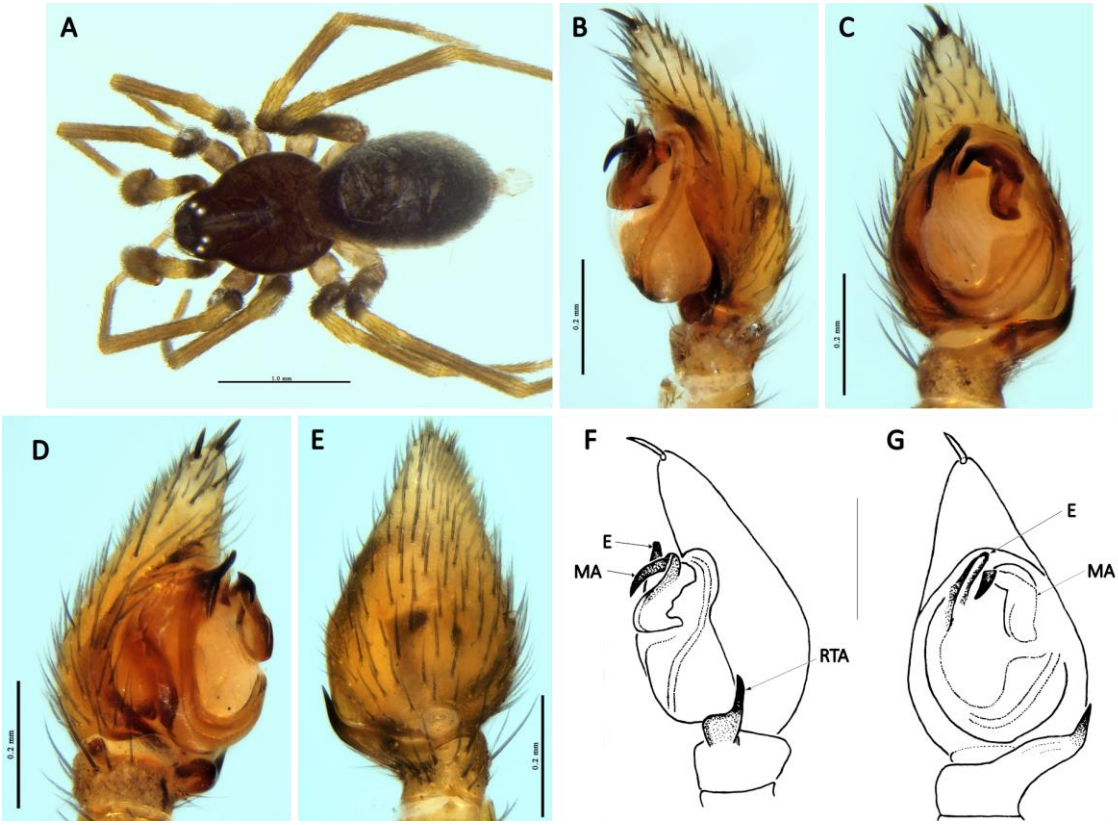

Figure 68: *Zodarion camillae* **sp. nov.**, male holotype (ref. MOR_1016). **A.** Dorsal view. **B, F.** Palp, retrolateral view. **C, G.** Idem, ventral view. **D.** Idem, prolateral view. **E.** Idem, dorsal view. Abbreviations: E: embolus; MA: median apophysis; RTA: retrolateral tibial apophysis. Photos © P. Oger. Scale bars: A = 1 mm; B-G = 0.2 mm.

Variation

Measurements (min.–max.). Male (n=2): total length 2.47–2.53; carapace length 1.18–1.26, width 0.93–0.98, CL/CW 1.27–1.29.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (province of Sidi Bennour, Zaouiat ben Iffou, Tnine Lgharbia), in a surface karstic rock formation of the inner coastal area.

***Zodarion ghamizii* Lecigne & Moutaouakil sp. nov.**

https://zoobank.org/NomenclaturalActs/4C952BD8-7BB5-4CE7-B833-D1C090DF5416

(Fig. 69A-I)

Diagnosis

The male of *Zodarion ghamizii* **sp. nov.** most resembles *Zodarion maghrebense* Bosmans & Benhalima, 2020 but can be distinguished mainly by the tegular base in the shape of a parallelepiped in the new species (vs. protruding) (cf. Fig. 69I, dotted arrow vs. BENHALIMA & BOSMANS 2020: p. 100, figs 39-40).

Etymology

This new species is named in honour of Professor Mohamed Ghamizi (Director of the Marrakech Natural History Museum; Cadi Ayyad University), for his research and ongoing commitment to improve knowledge and preserve biodiversity.

Material examined

Holotype
MOROCCO • 1♂; Marrakech, palmeraie; 31.66775°N, 7.88725°W; 449 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid area, in debris of a dead palm tree on the ground, by hand; ref. MOR_0746. Remark: left pedipalp detached.

Further material examined
MOROCCO • 1 juv.; same as holotype.

Comments

Regarding the conformation of the male palp, *Zodarion ghamizii* **sp. nov.** features the characters of the *elegans* group after BENHALIMA & BOSMANS (2020) i.e. tibial apophysis 2-3 times longer than wide, terminally recurved and with at least one lobe; median apophysis flat and compact, with medio-lateral incision; embolus oblique and straight. *Zodarion ghamizii* **sp. nov.** is the fourth representative of the *elegans* group of *Zodarion* species in Morocco (BENHALIMA & BOSMANS 2020), with *Zodarion maculatum* (Simon, 1870), *Z. maghrebense* Bosmans & Benhalima, 2020 and *Zodarion valentii* Bosmans, Loverre & Adante, 2019.

Description

Male holotype (Fig. 69A-I)
Measurements. Total length 3.65; carapace length 1.81, width 1.45, CL/CW 1.25; sternum length 1.00, width 0.87; clypeus under ALE 0.19; AME 0.14, ALE 0.09, PME 0.09, AME-AME 0.10, PME-PME 0.26; chelicerae length 0.63.
Color (from specimen in alcohol) (Fig. 69A-B). Carapace mostly dark brown-black, rear outline diffuse, marginal bands blackish not reaching the rear of the prosoma, the rest yellow. Chelicerae brown. Sternum yellow, front with a black “curtain” mark. Pedipalps: femora with dark brown

dorsal pattern. Legs: coxae and trochanters yellow, femora I-II black, proximal part yellow, femora III-IV yellow with respectively distal half to distal third dark blackish brown, tibiae I brown, rest pale brown. Abdomen black; sides, venter and postero-median dorsal spot pale yellow to whitish. *Palp* (Fig. 69D-I). Tibial apophysis 3 times as long as wide (from lateral view), distal part curved outwards, tip enlarged, bicorn-shaped, the 2 blunt protrusions of about equal length, one directed anteriorly, the other posteriorly (Figs 69H-I, RTA); tegular base stretched posteriorly, in the shape of a parallelepiped (Fig. 69I, dotted arrow); median apophysis compact, strongly sclerotized, retrolaterally flat, distal part in a shape of a wide teeth (Fig. 69I, MAd); embolus with 2 branches, one with tip flattened, the other hook-shaped and directed anteriorly (Fig. 69H, see E).

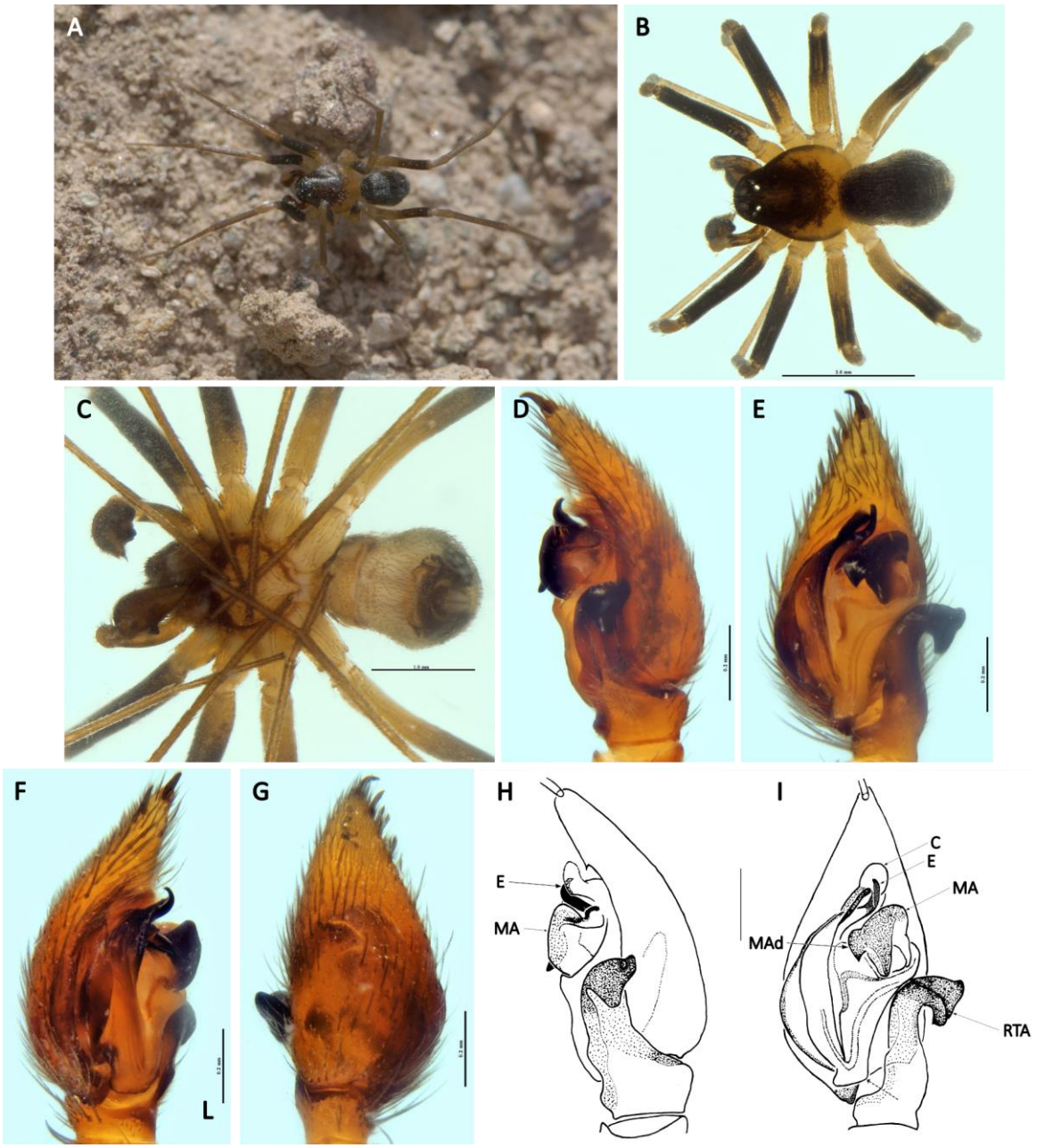

Figure 69: *Zodarion ghamizii* **sp. nov.**, male holotype (ref. MOR_746). **A-B.** Dorsal view. **C.** Ventral view. **D, H.** Palp, retrolateral view. **E, I.** Idem, ventral view (dotted arrow: parallelepipedic tegular base). **F.** Idem, prolateral view. **G.** Idem, dorsal view. Abbreviations: C: conductor; E: embolus; MA: median apophysis; MAd: distal part of median apophysis; RTA: retrolateral tibial apophysis. Photos © A S. Lecigne; B-I P. Oger. Scale bars: B = 2.0 mm; C = 1 mm; D-I = 0.2 mm.

Female
Unknown.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (Marrakech, "La Palmeraie"), in arid and bare area, on the ground in dry plant debris.

***Zodarion legrouni* Lecigne & Lips sp. nov.**
https://zoobank.org/NomenclaturalActs/17CB2CC8-23F6-4527-8848-4F7833206570
(Fig. 70A-G)

Diagnosis

The new species is closely related to *Zodarion isabellinum* (Simon, 1870) but comparison with our material (two males from Spain, Estepona) shows they are not the same species. *Zodarion legrouni* **sp. nov.** can be dis?nguished from *Z. isabellinum* firstly by the shape of its median apophysis, bearing in the new species a high-translucent extension on its upper part, evenly rounded distally (vs. no extension in *Z. isabellinum*) (cf. Fig. 70G, dotted arrow vs. Benhalima & Bosmans 2020: p. 96, 98, figs 3, 16 and fig. 70I, *Z. isabellinum*, specimen from Spain, coll. S. Lecigne); also by the shape of its ?bial apophysis, with no small basal tooth (lateral view) and moderately widened at its base (ventral view) (vs. presence of a small addi?onal basal tooth and base with a clearly visible translucent widening) (cf. Fig. 70F-G, RTA vs. Benhalima & Bosmans 2020: p. 98, figs 15-16 and Fig. 70H, dotted arrow and Fig. 94I, dotted arrow, *Z. isabellinum*, specimen from Spain, coll. S. Lecigne).

Etymology

The species is named for Karim and Afaf Legroun for their commitment to cooperation between Morocco and Djibouti and for their friendship with the third author.

Material examined

Holotype
MOROCCO • 1♂; Bab Taza, Azilane, Talassemtane National Park; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; S. Lecigne leg.; mixed forest of *Pinus* and *Qercus ilex*; at night, by hand; ref. MOR_1403. Remark: left pedipalp detached.

Comments

Regarding the conformation of the male palp, *Zodarion legrouni* **sp. nov.** features the characters of the *italicum* group after Benhalima & Bosmans (2020) (see comments *Zodarion camillae* **sp. nov.**).

Description

Male holotype (Fig. 70A-G)
Measurements. Total length 2.57; carapace length 1.16, width 0.76, CL/CW 1.53; sternum length 0.67, width 0.58; AME 0.06, PME 0.05, AME-AME 0.04, PME-PME 0.09.
Color (from specimen in alcohol) (Fig. 70A). Carapace yellow, veiled with brown. Chelicerae yellowish orange. Legs and sternum yellow. Abdomen dark grey with burgundy tones; venter, sides and discreet postero-median dorsal spot whitish.
Palp (Fig. 70B-G). Basal part of tibial apophysis widened outwards (better visible in dorsal view, Fig. 70E), its ventral side concave (Fig. 70F, RTA), distal part pointed, hardly inclined forwards. Median apophysis with slender base; median part folded ventrally and surmounted by a high

extension, evenly rounded distally (Fig. 70G, dotted arrow).; distal part sclerotized, sharply pointed (Fig. 70C, G, MA). Embolus relatively short and narrow, shaped like a barely curved spine, arising at the 11 o'clock position (Fig. 70G, see E).

Female

Unknown.

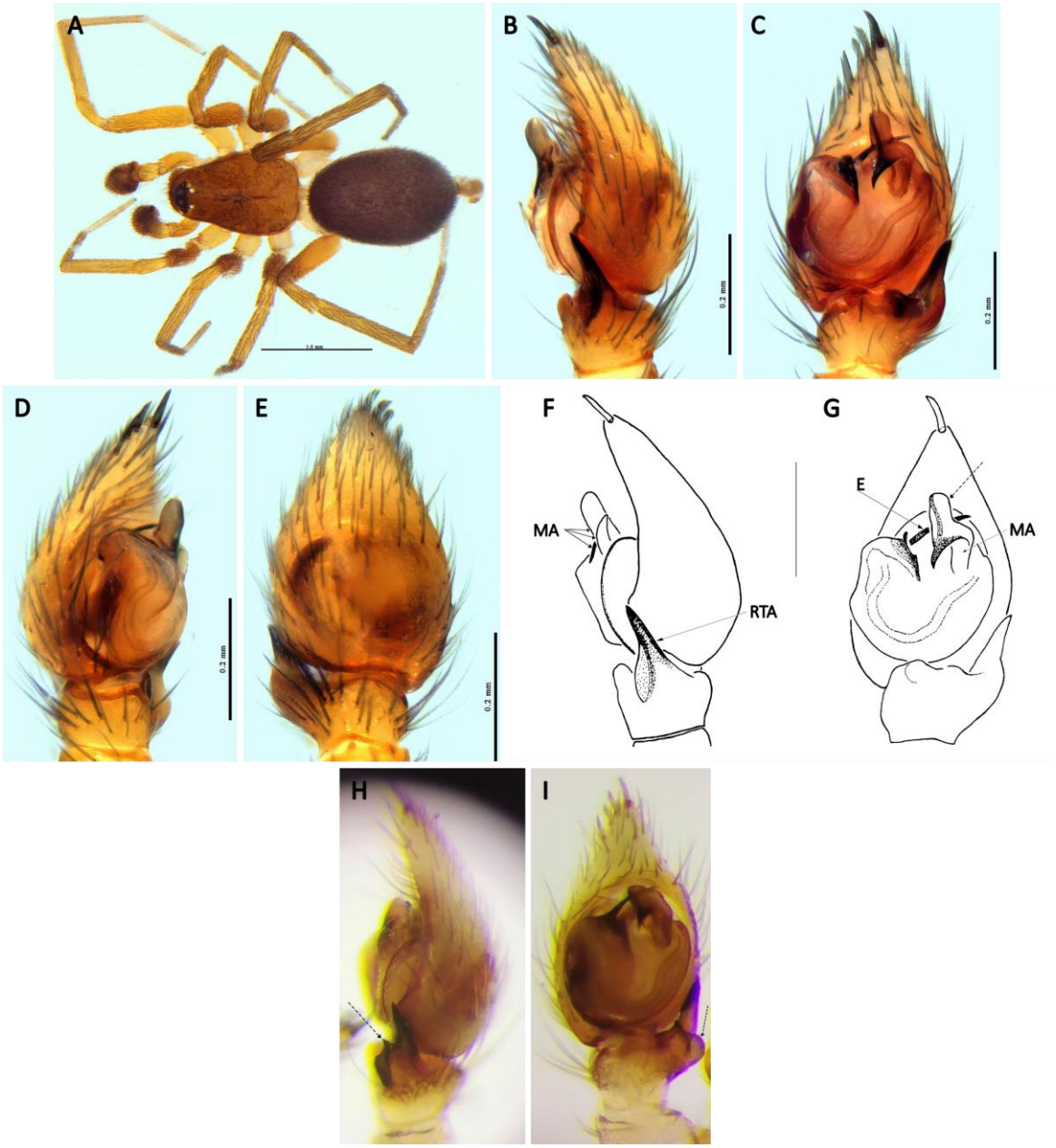

Figure 70: A-G. *Zodarion legrouni* **sp. nov.**, male holotype (ref. MOR_1403). **A.** Dorsal view. **B, F.** Palp, dorso-retrolateral view. **C, G.** Idem, ventral view (dotted arrow: anterior extension of the median apophysis). **D.** Idem, ventro-prolateral view. **E.** Idem, dorsal view. **H-I.** *Zodarion isabellinum*, male (specimen from Spain, coll. S. Lecigne). **H.** Palp, dorso-retrolateral view (dotted arrow: small additional basal tooth of the RTA). **I.** Idem, ventral view (dotted arrow: basal widening of the RTA). Abbreviations: E: embolus; MA: median apophysis; RTA: retrolateral tibial apophysis. Photos © H-I S. Lecigne; A-E P. Oger. Scale bars: A = 1 mm; B-G = 0.2 mm.

Distribution and habitat

Endemic to Morocco. Only known from the type locality (province of Chefchaouen, Talassemtane National Park, Bab Taza), in leaf litter of mixed forest of *Pinus* and *Qercus ilex*).

Key

We complete the identification key for males to the *Zodarion* species of the Moroccan region (BENHALIMA & BOSMANS 2020) by including the 3 new species described above. Figure numbers in italics refer to the publication by BENHALIMA & BOSMANS (2020). Added text is in bold.

Males (unknown in *Z. trianguliferum*)
1 Tibial apophysis equal to or shorter than the 6bia's diameter (*figs 3, 9, 15, 19*) 2
- Tibial apophysis much longer than the tibia's diameter (*figs 32–33, 37–38, 42–43, 72–73, 76–77, 80–81, 84–85, 88–89, 92–93*) 3
2 Distal part of embolus needle-like (*fig. 16*); **tip of RTA slightly inclined ventrally (*fig. 15*)** **2bis**
- Embolus gradually narrowing (**Fig. 68G**; *fig. 20*); **tip of RTA straight or bent dorsally (Fig. 68F; *fig. 19*)** **2ter**
2bis Median apophysis with no extension on its upper part (Fig. 70I; *fig. 16*); RTA with an additional small basal tooth (Fig. 70H; *fig. 15*) ..... *Z. isabellinum*
- **Median apophysis bearing an extension on its upper part (Fig. 70G, dotted arrow; *fig. 16*); RTA with no additional small basal tooth (Fig. 70F; *fig. 15*)**..... ***Z. legrouni* sp. nov.**
2ter Median apophysis small (*figs 10, 20*)*;* **tip of RTA bent dorsally (*figs 9, 19)*** ..... *Z. pallidum*
- Median apophysis large (Fig. 62C-G); tip of RTA straight (Fig. 68B-F) ..... ***Z. camillae* sp. nov.**
3 Embolus terminally with two teeth (*figs 29–30, 34–36, 39–41*) 4
- Embolus terminally with one tooth (*figs 70–71, 74–75, 78–79, 82–83, 86–87, 90–91*) 6
4 Tibial apophysis with oblique retrolateral groove (*figs 32–33*) ..... *Z. valentii*
- Tibial apophysis without oblique retrolateral groove (*figs 37–38, 42–43*) 5
5 Tibial apophysis elongated, with median blunt tooth (*figs 37–38*) ..... *Z. maculatum*
- Tibial apophysis shorter, with recurved tip (*figs 42–43*) **5bis**
5bis Tegular base protruding (*figs 39-40*) ..... *Z. maghrebense*
- Tegular base in the shape of a parallelepiped (Fig. 69I, dotted arrow) ..... ***Z. ghamizii* sp. nov.**
6 Tibial apophysis narrow from its base (*Figs 72–73, 76–77, 92–93*) 7
- Tibial apophysis wide (*Figs 80–81, 84–85, 88–89*) 9
7 Distal part of tibial apophysis well developed, bent in dorso-lateral direction (*Figs 92–93*) ..... *Z. wesolowskae*
- Distal part of tibial apophysis small (*Figs 72–73, 76–77*) 8
8 Tibial apophysis gradually narrowing, with recurved tip (*Figs 76–77*) ..... *Z. ericorum*
- Tibial apophysis terminally widened into a spoonlike tip (*Figs 72–73*) ..... *Z. azrouense*
9 Tibial apophysis truncate terminally, tip slightly recurved (*Figs 88–89*) ..... *Z. ogeri*
- Tibial apophysis rounded terminally, tip distinctly recurved (*Figs 80–81, 84–85*) 10
10 Tibial apophysis less elongated, with wide recurved tip (*Figs 78–79*) ..... *Z. jeanclaudeledouxi*
- Tibial apophysis elongated, with small recurved tip (*Figs 82–83*) ..... *Z. mostafai*

Discussion

The biospeleological expeditions carried out between 2018 and 2024 (see also LECIGNE et al. 2023, first note) in 33 caves, mainly in the Moroccan Atlas and the Rif Mountains (Fig. 2), as well as surveys in several other terrestrial ecosystems (Fig. 3), yielded a record of 225 species. Among them: i) 24 species (about 11%) are new to science, including 8 species considered to be troglophile or troglobiont, ii) 51 other species are new to the fauna of Morocco, 12 of which are also new to Africa, increasing by about 14% the number of species currently known from Morocco (i.e. 549 species; BENHALIMA & BOSMANS 2024), iii) 44 species are considered endemic to Morocco (about 19% of species recorded or newly described), iv) 2 genera are mentioned for the first time to Morocco i.e. *Cyrtauchenius* and *Cesonia*, the latter also being new to Africa; a third has yet to be confirmed (*Mansuphantes*)

Many other records could not be included in the present paper (usually requiring additional or comparative material (e.g. the unknown female of *Lepthyphantes younnesi* Barrientos & Gerace, 2024, a probably unknown male of *Oonops* Templeton, 1835, unknown females of *Micropholcus* Deeleman-Reinhold & Prinsen, 1987, several specimens of *Alopecosa* Simon, 1885 and *Dysdera* Latreille, 1804 etc.), or complementary opinions (e.g. several agelenid specimens from different geographical areas seam not to be related to any known genus) will be the subject of forthcoming notes. The present paper complements previous works (e.g. LECIGNE et al. 2023) and clearly highlights the considerable contribution of biospeleological expeditions to improve our knowledge of the subterranean fauna (see also for instance BARRIENTOS et al. 2019, 2020, 2024). These facts illustrate once again that knowledge of spiders in Morocco is still very patchy. By way of comparison, Algeria currently records 893 spider species (BELADJAL et al. 2025), Portugal 901, Spain 1427, Sardinia and Corsica 551 and 571 respectively (NENTWIG et al. 2025).

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Appendix 1. Species list and figures

Table A1: *Species list as a result of the surveys. The species are presented in the alphabetical order of family and genus. The name of the locality, number, sex, degree of maturity, geographical coordinates, habitat of the species and date of record are also specified. The marked species and genus are those which are new to Africa (A) (after WSC 2025), to Morocco (M) (after BENHALIMA & BOSMANS 2024) and to science (S). The species endemic to Morocco are marked (*).*

Family: Species		Number, gender, location, habitat, date
Agelenidae		
Eratigena africana (Lucas, 1986) **comb. nov.**	M	See in the text (Figs 4-5).
Eratigena boussalhami* Lecigne **sp. nov.	S	See in the text (Fig. 6).
Eratigena chefchaouen* Lecigne & Bosmans **sp. nov.	S	See in the text (Fig. 7).
Lycosoides coarctata (Dufour, 1831)		3♀♀, 12 juv.; Imlil; 31.128639°N, 7.919058°W; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded slope, under a stone, by hand; ref. MOR_0764. 1♀, 1 juv.; idem; 31.13097°N, 7.91835°W; pebble bank along a torrent, by hand; ref. MOR_0769. 1♂, 7 juv.; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand. 2♀♀; Demnate; 31.78943°N, 7.03916°W; 753 m a.s.l.; 30 Jan. 2024; S. Lecigne leg.; olive grove, under a stone, by hand. 2♀♀, 1 juv.; Ouzoud; 32.01283°N, 6.71874°W; 794 m a.s.l.; 30 Jan. 2024; S. Lecigne leg.; anthropized rocky slope in an urban area, under a stone, by hand. 1♀; Takerkouste, Lalla Taberkouste lake; 32.01283°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; rocky slope near a lake, under a stone, by hand. Comments: 2 records (involving 3 females) from Oukaïmeden on March 19, 2021 were mistakenly assigned to *Lycosoides crassivulva* (Denis, 1954) (BOSMANS et al. 2022). Recent examination of the specimens confirms their identification as *L. coarctata*.
Lycosoides flavomaculata Lucas, 1846		4♂♂, 2♀♀, 8 juv.; Ahfir, between Abrouz and Beni Drar, close to N17 motorway; 34.91456°N, 2.03832°W; 542 m a.s.l.; 6 Feb. 2025; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded slope, under stones, by hand; ref. MOR_1065. Comments: identification after BOSMANS et al. 2022 (male only) and LEVY 1996.
Lycosoides instabilis (Denis, 1954)		1♀; Essaouira; 31.46758°N, 9.75723°W; 24 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; det. S. Lecigne, P. Oger. 1♀; idem; 31.38373°N, 9.77983°W; 58 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; same habitat, by hand; det. S. Lecigne, P. Oger. 2♀♀, idem; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; same habitat, by hand (Fig. 71A). 1♀; Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand (Fig. 71B-D); 1♂, 2♀♀, 3 juv.; idem; 32.58990°N, 9.21719 °W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; seafront, under stones and in sparse vegetation, by hand. 2♂♂, 1♀, 1 juv.; Beddouza, Kasbat Ayir; 32.55619°N, 9.25161°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; calcicole fallow (lawn), beside crops, under stones, near the entrance to Ghar Goran cave, by hand. 1♂, 2♀♀, 3 juv.; Laakarta, Kasbat Ayir; 32.64970°N, 9.13077°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand. 1♀; Sidi Addi, Ifrane National Park; 33.32214°N, 5.22978°W; 1876 m a.s.l.; 12 Nov. 2023; S. Moutaouakil leg.; *Cedrus* forest, by hand. 2♀♀; Aïn Louh; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S.

Family: Species		Number, gender, location, habitat, date
		Moutaouakil, J. Lips, B. Lips leg.; surroundings of the Ifri Ouska cave entrance, under stones, by hand. 1♂, 1♀, 2 juv.; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand.
Lycosoides taghzout* Lecigne **sp. nov.	S	See in the text (Figs 8-9).
Lycosoides toubkal* Lecigne **sp. nov.	S	See in the text (Figs 10-11).
Lycosoides variegata (Simon, 1870)		1♀; Azgour; 31.20650°N, 8.24773°W; 1113 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 2♀♀; Essaouira, Tlat Lhenchan; 31.67003°N, 9.34885°W; 391 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 2♂♂; Beni Mellal; 32.32244°N, 6.34455°W; 614 m a.s.l.; 10 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; in an inn's park pool and in a chalet, by hand. 1♀; Laghoualem, Cercle de Rommani, near the entrance to Hordaïfa cave; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne leg.; under a stone, by hand; ref. MOR_0997. 2♀♀; Oualidia, Cercle de Zemamra, Takkout cave; 32.72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; entrance of a cave, by hand; ref. MOR_0855. Comments: identification after Murphy & Murphy 1978 and Blauwe de 1980.
Tegenaria azilaneensis* Lecigne **sp. nov.	S	See in the text (Fig. 12).
Tegenaria domestica (Clerck, 1757)		1♂; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in leaf litter; at night by hand; det. S. Lecigne; ref. MOR_1349 (Fig. 99E). Comments: the record from Talassemtane National Park is the third citation of the species for Morocco (see Simon 1909: Tanger, "Mogador").
Tegenaria pagana C. L. Koch, 1840		1♂, 1♀, 17 juv.; Taza, Ifri N'ifis; 34.07844°N, 4.01938°W; 1373 m a.s.l.; 3 Aug. 2023; S. Moutaouakil leg.; cave, by hand. 1♀, 16 juv.; Taza, Sidi M'jber cave; 34.14422°N, 4.02403°W; 1261 m a.s.l.; 9 Aug. 2023; S. Moutaouakil leg.; cave, by hand (Fig. 71F-G). 1♂, 4♀♀, 14 juv.; Oualidia, Takkout cave; 32.72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 2♂♂, 1♀, 1 juv.; Beddouza, Kasbat Ayir, Goran cave; 32.55619°N, 9.25161°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand (Fig. 71E). 3♂♂, 5♀♀, 10 juv.; Chemaia, Laghoualem, Karkar cave; 32.18394°N, 8.68841°W; 9 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand.
Textrix denisi* Lecigne **sp. nov.	S	See in the text (Fig. 13).
Amaurobiidae		
Amaurobius barbarus Simon, 1911		1♀, 2 juv.; Taza, Tazekka National Park, Bab Boudir, Ghar Zrek cave; 34.08089°N, 4.11817°W; 1424 m a.s.l.; 31 Jul. 2023; S. Moutaouakil leg.; cave, by hand; det. P. Oger (Fig. 71H-I); ref. MOR_0916.
Anyphaenidae		
Anyphaena numida Simon, 1897		1♀; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, by hand; det. S. Lecigne, P. Oger (Fig. 71J-K).
Araneidae		
Araniella cucurbitina (Clerck, 1757)		1♀; Chefchaouen, Azilane, Talassemtane National Park; 35.18054°N, 5.20225°W; 1306 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; mixed oak and pine forest, in the branches, beating; det. S. Lecigne; ref. MOR_1298.
Argiope lobata (Pallas, 1772)		1♀; Bni Selmane, Khemis Louta; 35,20308°N, 4,99314°W; 16 Aug. 2022; F. Bertrand, P. Maréchal leg.; on the terrace of a house, by hand.
Cyclosa insulana (Costa, 1834)		3♀♀, 5 juv.; Skhirate-Temara; 33.95248°N, 6.92578°W; 19 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; coastal wasteland in low vegetation, by hand; det. S. Lecigne, P. Oger; ref. MOR_0945. This is the second

Family: Species		Number, gender, location, habitat, date
		citation of the species for Morocco since Denis (1956) (Fig. 71L-M).
Cyrtophora citricola (Forsskål, 1775)		1♀, 1 juv.; Taberkouste, Lalla Taberkouste lake; 31,34630°N, 8,14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; stony slope, in a thorny shrub, by hand.
Larinia lineata (Lucas, 1846)		1♀; Aghlef, Ouirine oued; 32.30074°N, 6.05100°W; 1830 m a.s.l.; 11 Nov. 2023; S. Lecigne leg.; wadi bank, in low vegetation, beating (Fig. 72A-B).
Larinioides sclopetarius (Clerck, 1757)		3 ♀♀, 8 juv.; Imlil, Chamharouch; 31,09722°N, 7.91186°W; 2452 m a.s.l.; 19 Sep. 2021; S. Moutaouakil leg.; near a small waterfall, by hand; ref. MOR_0641. Comments: *L. sclopetarius* is common and widely distributed, from Europe to China and Korea and was introduced to North America (WSC 2025). Its finding in the vicinity of Mount Toubkal is the second citation of the species for Morocco and the second record from Imlil since Jocqué (1977) (Fig. 72C-E).
Leviellus kochi (Thorell, 1870)		1♀; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, on a tree trunk; at night by hand; det. S. Lecigne; ref. MOR_1347 (Fig. 99D). 2♂♂; same locality; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; same habitat; at night by hand; det. S. Lecigne; ref. MOR_1382.
Mangora acalypha (Walckenaer, 1802)		4 juv.; Bab Taza, Talassemtane National Park; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; J. Lips; mixed pine and holm oak forest, in the branches; at night by beating. 1♂; Talambote, Talassemtane National Park; 35.19502°N, 5.17884°W; 777 m a.s.l.; 8 Aug. 2024; S. Lecigne leg.; river bank, in the branches of a shrub, beating.
Neoscona subfusca (C. L. Koch, 1837)		1♂, 1♀; Marrakech; 31.66774°N, 7.88765°W; 26 Mar. 2023; S. Lecigne leg.; arid wasteland, in the branches of a shrub by a roadside, beating. 1♀, Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; stony slope, in a thorny shrub, by hand.
Zilla diodia (Walckenaer, 1802)		1♂; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, beating. 1 juv.; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; mixed *Cedrus* and *Quercus ilex* forest, in branches, beating. 1 juv.; same locality, Afenourir lake; 33.28010°N, 5.25354°W; 1800 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; meso-hygrophilous grassland on a dry lake, under stones, by hand. 2 juv.; Azrou, Ifrane National Park; 33.66074°N, 5.22208°W; 1837 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips leg.; *Cedrus* forest, in branches, beating.
Zygiella x-notata (Clerck, 1757)		7♀♀; Sidi El Makhfi, Ifran National Park, near Ifri Ou Berred; 33.26218°N, 5.24590°W; 1853 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; in branches of *Juniper*, at night by hand.
Cheiracanthiidae		
Cheiracanthium furculatum Karsch, 1879		See in the text (Fig. 10A-C).
Corinnidae		
Castianeira badia (Simon, 1877)	A	1♂, 1♀, 2 juv.; Bab Taza, Talassemtane National Park; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; S. Lecigne leg.; mixed forest of pine and holm oak, in a thick litter of pine needles; at night, by hand; det. S. Lecigne; ref. MOR_1412 (Fig. 100A-G). Comments: *Castianeira badia* and *C. munieri* (Simon, 1877) are very closely related species. The bulb of the male recorded in the bab Taza forest shows wide internal canals; the vulva of the female does not show a depigmented basal area but a membranous structure in the median basal region between the two spermathecae. According to Camargo & Ferrández 1984, the most obvious

Family: Species		Number, gender, location, habitat, date
		difference between the two species is the shape and size of the dorsal scutum of males, which occupies the entire opisthosoma and has a rounded posterior margin in *C. munieri*, whereas it occupies only 2/3 of the opisthosoma and has a straight posterior margin in *C. badia*. On the basis of these criteria, we assign the specimen sampled in Talassemtane National Park to *C. badia*. The species is new to Africa.
Cyrtaucheniidae		
Cyrtauchenius sp.	M	1♂; Amezmiz, Azgour; 31.18904°N, 8.26655°W; 1687 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, dead, by hand; ref. MOR_1217. 1♂; Azrou, Ifrane National Park; 33.36074°N, 5.22081°W; 1837 m a.s.l.; 13 Nov. 2023; S. Moutaouakil leg.; *Cedrus* forest, litter, sieving; ref. MOR_1153 (Fig. 95J-M). Comments: to date, there are fourteen species, thirteen of which are known only from Algeria; for five of them, the male is unknown (WSC 2025). Some descriptions are sketchy, with no diagnosis nor representation of the genitalia. A revision of the genus is probably necessary to name these two specimens, which belong to two different species (i.e. conformation of the bulb; number of promarginal teeth on chelicerae…). The genus is new to Morocco.
Dictynidae		
Brigittea civica (Lucas, 1848)	M	1 juv.; Rabat; 31.64062°N, 6.83586°W; 26 m a.s.l.; 3 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; on the outside wall of a building in an urban area, by hand; ref. MOR_0942. 1♀; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in branches, beating; det. S. Lecigne, P. Oger; ref. MOR_1119. Comments: *Brigittea civica* was found both in a anthropogenic habitat (the wall of a building in Rabat town centre) and in a natural environment (branches in a mature forest). The species is new to Morocco (Fig. 72F-G).
Marilynia bicolor (Simon, 1870)		1♀; Chefchaouen, Talambote, Talassemtane National Park; 35.18342°N, 5.19653°W; 1238 m a.s.l.; 9 Aug. 2024; S. Lecigne leg.; shrubby grassland, beating; det. S. Lecigne; ref. MOR_1282 (Fig. 97I-J). Comments: the record from Talassemtane National Park is the second citation of the species for Morocco (see SIMON 1870).
Dysderidae		
Dysdera andreae* Lecigne **sp. nov.	S	See in the text (Figs 15-16).
**Dysdera caeca* Ribera, 1993		See in the text (Figs 17-19).
Dysdera guennouni* Lecigne **sp. nov.	S	See in the text (Fig. 20).
Dysdera mariae* Lecigne **sp. nov.	S	See in the text (Figs 21-22).
**Dysdera seclusa* Denis, 1961		See in the text (Figs 23-24).
**Dysdera tenuistylus* Denis, 1961		See in the text (Figs 25-26).
Rhode scutiventris Simon, 1882		1♂, 1♀, 15 juv.; Azilane, Talassemtane National Park, Kehf Bab Taghza; 35.17993°N, 5.19949°W; 1320 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_1322 (Fig. 98A-D). 2♂♂, 2 juv.; same locality, Kehf Del Oued N'Ghir 3; 35.18415°N, 5.19614°W; 1227 m a.s.l.; 12 Aug. 2024; S. Lecigne, P. Lips leg.; cave, by hand; ref. MOR_1362. 3♂♂, 1♀; Chefchaouen, Bab Taza, Talassemtane national Park, Ghar Gharnaji (kehf el Ouad N'ghir); 35.18532°N, 5.19473°W; 1257 m a.s.l.; 13 Aug. 2024; S. Lecigne, S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1399.
Eresidae		
Eresus almaghrib* Szűts, Lecigne & Moutaouakil **sp. nov.	S	See in the text (Fig. 27).
Eresus gharbi* Szűts, Lecigne & Moutaouakil **sp. nov.	S	See in the text (Fig. 28).
Stegodyphus cf. *nathistmus* Kraus &		See in the text (Fig. 29).

Family: Species		Number, gender, location, habitat, date
Kraus, 1989		
Gnaphosidae		
Cesonia sp.	A	1 juv.; Marrakech, Palmeraie; 31.66775°N, 7.88725°W; 449 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid area, in the debris of a dead palm tree on the ground, by hand; ref. MOR_0747 (Fig. 72H). Comments: an immature specimen of gnaphosid with somatic features (pattern with 3 dark longitudinal bands covering the entire length, separated by 2 intervening light bands; PME closer to PLE than to each other) fitting the characters of the genus *Cesonia* after CHATZAKI et al. (2002) was discovered in an arid anthropogenic wasteland in the vicinity of Marrakech. We also tentatively assigned the specimen to *Cesonia*. The vast majority of *Cesonia* species was described from the American continent; CHATZAKI et al. (2002) mentioned a new species from Europe. The present record it the first for the genus from the African continent.
Drassodes luteomicans (Simon, 1878)	M	2♀♀; Takerkouste, Lalla Taberkouste lake; 32.01283°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; rocky slope near a lake, under stones, by hand; det. S. Lecigne, P. Oger; ref. MOR_1231. The species is new to Morocco (Fig. 72K-L).
Drassodes lutescens (C. L. Koch, 1839)		1♂; Asni, Tamadout; 31.19287°N, 7.96830°W; 1824 m a.s.l.; 17 Mar. 2021; S. Moutaouakil leg.; forest, by hand. 1♀; Azgour; 31.17193°N, 8.27277°W; 1675 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 1♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; K. Lecigne leg.; wooded sandy coastal dune, by hand. Laakarta, Kasbat Ayir; 32.64970°N, 9.13077°W; 8 Nov. 2023; B. Lips leg.; sand dune, under stones, by hand. 1♀; Oukaïmeden; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne leg.; high altitude lawn, under a stone, by hand. 1♂, 1 juv.; same locality; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand. 1♂, 2 juv.; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand. 2♂♂, 1♀; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand.
**Echemus escalerai* Simon, 1909		See in the text (Figs 30, 103); male as *Echemus* cf. *escalerai* Simon, 1909.
Gnaphosa alacris Simon, 1878		1♀; Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand; ref. MOR_0528 (Fig. 72M-N).
Gnaphosa afnourir* Lecigne **sp. nov.	S	See in the text (Fig. 31).
Haplodrassus dalmatensis(L. Koch, 1866)		1♂, 1 juv.; Oukaïmeden; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand; ref. MOR_1428.
Haplodrassus dentifer Bosmans & Abrous, 2018		See in the text (Fig. 32).
Haplodrassus lyndae Abrous & Bosmans, 2018		See in the text (Fig. 33).
Haplodrassus omissus (O. Pickard-Cambridge, 1872)		1♂, 1♀; Marrakech, Palmeraie; 31.66741°N, 7.66741°W; 452 m a.s.l.; 28 Janv. to 2 Feb. 2024; S. Lecigne leg.; arid anthropized area with sparse vegetation, pitfall; det. S. Lecigne, P. Oger; ref. MOR_ 1240 (Fig. 73A-D).
Haplodrassus signifer (C. L. Koch, 1839)		1♂ ,2 juv.; Oukaïmeden; 31. 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand; det. P. Oger, S. Lecigne; ref. MOR_0825(Fig. 73F-H).
Marinarozelotes fuscipes (L. Koch, 1866)	M	1♂; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 27 Mar. 2023; S. Lecigne leg.; in a hotel park, on bare ground, by hand; ref. MOR_0742; det. S. Lecigne, P. Oger. The species is new to Morocco (Fig. 73I-J).
Micaria corvina Simon, 1878	M	See in the text (Fig. 34).

Family: Species		Number, gender, location, habitat, date
Nomisia amizmiz* Lecigne **sp. nov.	S	See in the text (Figs 35-36).
Nomisia aussereri (L. Koch, 1872)		2♀♀; Amezmiz, Azgour; 31.17193°N, 8.27277°W; 1675 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand (Fig. 73K). 1♀ ,1 juv.; Idem; 31.18904°N, 8.26655°W; 1687 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand. 2♀♀; Idem; 31.16837°N, 8.27631°W; 1682 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand. 1♀; Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand. 1♀; El Kelâa des Sraghna, Sehb Imjnoun; 32.08023°N, 7.74147 °W; 410 m a.s.l.; 7 Nov. 2020; S. Moutaouakil leg.; by hand. 1♀; Essaouira; 31,38733°N, 9,77983°W; 58 m a.s.l.; 19 Janv. 2022; S. Moutaouakil; wooded sandy coastal dune, by hand. 1♀; Marrakech, Palmeraie; 31.66763°N, 7.88475°W; 449 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid area, by hand. 8♀♀, 13 juv.; Tagleft; 32.26916°N, 6.25973°W; 1730 m a.s.l.; 11 Nov. 2023; S. Lecigne, S. Moutaouakil, B. Lips leg.; high altitude stony lawn, under stones, by hand. 1♀; Takerkouste, Lalla Taberkouste lake; 32.01283°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; rocky slope near a lake, under a stone, by hand.
Nomisia castanea Dalmas, 1921	M	See in the text (Fig. 37).
Nomisia exornata (C. L. Koch, 1839)		1♂; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand. 2♂♂, 1♀; same locality; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne; ref. MOR_1426.
Pterotricha schaefferi (Audouin, 1826)	M	See in the text (Fig. 38).
Scotophaeus dolanskyi Lissner, 2017	A	1♂; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka, 35.17569°N, 5.19816°W; 1263 m a.s.l.; 7 Aug. 2024; S. Moutaouakil leg.; in a building; by hand; det. S. Lecigne, P. Oger, ref. MOR_1247 (Fig. 97A-E). Comments: The species, recently described, was previously known only from Spain and Portugal (WSC 2025) where it was observed in natural habitats (i.e. forest steppe/maquis, Santiago valley, P. N. de Cabañeros). Its record in a dwelling in the Talassemtane National Park may be accidental or may indicate anthropogenic behaviour of the species. Its ecological range remains to be assessed. The species is new to Africa.
Scotophaeus nanoides Wunderlich, 2011	A	1♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand; ref. MOR_0786; det. P. Oger. Remark: specimen sub-adult raised to maturity. Comments: the species was first discovered in Portugal (Wunderlich 2011); its discovery on the West Moroccan coast is also the first record in Africa. (Fig. 73L-P).
Scotophaeus validus (Lucas, 1846)		1♀; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne, J. Lips leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand; ref. MOR_1176.
Setaphis carmeli (O. Pickard-Cambridge, 1872)		1♂; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand; det. S. Lecigne, P. Oger; ref. MOR_0697. (Fig. 74A-C).
Setaphis mollis (O. Pickard-Cambridge, 1874)	M	See in the text (Fig. 39).
Turkozelotes africanus Lecigne **sp. nov.**	S	See in the text (Fig. 40).
Zelotes erythrocephalus (Lucas, 1846)	M	See in the text (Fig. 41).
Zelotes laetus (O. Pickard-Cambridge, 1872)	M	1♂; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; det. S. Lecigne, P. Oger; ref. MOR_0525. The species is new to Morocco (Fig. 74D-F).
Zelotes pediculatus Marinaro, 1967		1♀; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand; det. S. Lecigne, P. Oger; ref. MOR_0698 (Fig. 74G-H).
Zelotes scrutatus (O. Pickard-		1♂; Marrakech, Palmeraie; 31.66651°N, 7.88377°W; 450 m a.s.l.; 28

Family: Species		Number, gender, location, habitat, date
Cambridge, 1872)		Janv. to 2 Feb. 2024; S. Lecigne leg.; arid anthropized area with sparse vegetation, pitfall; ref. MOR_ 0840. 1♂; idem; 31.66774°N, 7.88765°W; idem; ref. MOR_ 0841 (Fig. 74I-K).
Zelotes lapiazi* Lecigne **sp. nov.	S	See in the text (Fig. 42).
Zelotes pediculatus Marinaro, 1968		1♀; Afaska, Talassemtane National Park; 35.16416°N, 5.18712°W; 1236 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; mixed forest of pine and holm oak, in leaf litter, by hand; det. S. Lecigne, P. Oger; ref. MOR_1333 (Fig. 99A-C). 1♀; Bab Taza, Talassemtane National Park,; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips leg.; same habitat; at night by hand; det. S. Lecigne; ref. MOR_1352.
Zelotes spadix (L. Koch, 1866)		2♀♀; Ain Karma, Oued Rommane; 34.08528°N, 5.67763°W; 181 m a.s.l.; 14 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; arable wasteland, under a piece of dead wood on the ground, by hand; ref. MOR_ 1187 (Fig. 74L).
Zelotes tenuis (L. Koch, 1866)		1♀; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips leg.; mixed forest of pine and holm oak, in leaf litter; at night by hand; det. S. Lecigne; ref. MOR_1353 (Fig. 98L).
Zelotes tragicus (O. Pickard-Cambridge, 1872)	M	1♀, 3 juv.; Beddouza, Kasbat Ayir; 32.58990°N, 9.21719 °W; 6 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; seafront, under stones and in sparse vegetation, by hand; ref. MOR_ 1052. 1♂; Essaouira, Tlat Lhenchan; 31.67560°N, 9.35822°W; 442 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; forest, by hand; ref. MOR_ 0377. The species is new to Morocco (Fig. 74M-P).
Hahniidae		
Hahnia nava (Blackwall, 1841)	A	1♀; Oukaïmeden; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand.; ref. MOR_0828. Comments: *H. nava* is common and widely distributed, from Europe to Japan. Its discovery on the Oukaïmeden plateau is the first record of the species in Africa (Fig. 75A-C).
Iberina candida (Simon, 1875)	M	1♂; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, sieving; ref. MOR_1094; det. S. Lecigne, P. Oger. The species is new to Morocco (Fig. 75D-F; bulb expanded).
Hersillidae		
Hersiliola simoni (O. Pickard-Cambridge, 1872)		2♂♂; Laattaouya, Sehb Lmesjoun; 32.05554°N, 7.74860°W; 412 m a.s.l.; 27 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger; ref. MOR_0475 & MOR_0476 (Fig. 75G-J). Comments: The two specimens show the genital characters of *H. simoni* i.e. position of the embolic base and embolus forming a single loop. However, two slight variations should be noted: position of the embolic base at around 11.30 o'clock (10.30 o'clock according to Marusik & Fet 2009); median tegular apophysis in a central position (closer to the antero-retrolateral margin according to Marusik & Fet 2009, Fig. 6.2 p. 91 or Levy 2003, Fig. 53 p. 26). Levy (2003) also reports slight variations in shape and thickness of fang-shaped median tegular apophysis.
Tama edwardsi (Lucas, 1846)		1 juv.; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; forest, by hand; ref. MOR_0429. 1 juv.; idem; 31.20650°N, 8.24773°W; 1113 m a.s.l.; idem; ref. MOR_0439. Idem; 17 Jan. 2022; ref. MOR_0664. 1♀; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; ct; at night by hand. 1♀; same locality; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; J. Lips; mixed pine and holm oak forest, in the branches; at night by beating. 1 juv.; Mesfioua-Zat, Tamal forest; 31.41503°N, 7.54139°W; 1185 m a.s.l.; 16 Sep. 2022; S. Moutaouakil leg.; forest, by hand; ref.

Family: Species		Number, gender, location, habitat, date
		MOR_0605. 1♀; Tagleft; 32.26916°N, 6.25973°W; 1730 m a.s.l.; 11 Nov. 2023; S. Moutaouakil leg.; high altitude stony grassland, on a rock, by hand; det. S. Lecigne, P. Oger; ref. MOR_0886 (Fig. 75K-M).
Linyphiidae		
Acartauchenius mutabilis (Denis, 1967)		1♂, 1♀; Essaouira, Tlat Lhenchan; 31.67560°N, 9.35822°W; 442 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; forest, by hand; det. R. Bosmans; ref. MOR_ 0378 (Fig. 76A-E, G-J). 1♂, idem; 31.67003°N, 9.34885°W; 391 m a.s.l.; idem; ref. MOR_ 0379. 1♀, idem; 31.64062°N, 9.34538°W; 391 m a.s.l.; idem; ref. MOR_ 0386. 1♂; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand; ref. MOR_0784. 1♂, 4 juv.; Marrakech, Palmeraie; 31.66775°N, 7.88725°W; 449 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; anthropized arid area, under a plastic tarpaulin, by hand; ref. MOR_0753 (Fig. 76F). 1♀; Marrakech, Palmeraie; 31.66741°N, 7.66741°W; 452 m a.s.l.; 26 Mar. to 1 Apr. 2023; S. Lecigne leg.; anthropized arid area with sparse vegetation, pitfall; ref. MOR_ 0838. 1♀; Marrakech, Palmeraie; 31.66643°N, 7.89096°W; 449 m a.s.l.; 28 Jan. 2024; S. Lecigne leg.; anthropized arid area, under a stone, by hand; ref. MOR_1189.
Agyneta pseudorurestris Wunderlich, 1980	M	1♀; Azilal, Laabid; 32.08255°N, 7.0501°W; 349 m a.s.l.; 9 May 2021; S. Moutaouakil; near a stream, by hand; ref. MOR_0715. 1♀; Oukaïmeden; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand; det. R. Bosmans; ref. MOR_ 0835. 1♂, 1♀; same locality; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne; ref. MOR_1422. The species is new to Morocco (Fig. 76K-L).
Araeoncus humilis (Blackwall, 1841)		1♂; Imddahen; 32.14008°N, 7.02647°W; 9 May 2021; S. Moutaouakil leg.; near a stream, by hand; ref. MOR_ 0720.
Bathyphantes gracilis (Blackwall, 1841)	M	1♀; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; in a hotel park, ballooning, by hand; ref. MOR_0738. The species is new to Morocco (Fig. 76M).
Canariphantes naili (Bosmans & Bouragba, 1992)	M	See in the text (Fig. 43).
Centromerus cinctus (Simon, 1884)	M	1♂, 1♀; Laghoualem, Cercle de Rommani, Hordaïfa cave; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; det. P. Oger, S. Lecigne; ref. MOR_ 0844 (Fig. 77A-J). 3♀♀, 3 juv., idem; MOR_ 0853. Comments: *Centromerus cinctus* is cited, with certainty, only from a few rare localities in France (Corsica), Algeria and Tunisia (WSC 2025), under stones in wet grassland and open maquis (Bosmans, 2006b). Its discovery in the Hordaïfa cave is the first record of the species in an subterranean environment. The species is new to Morocco.
Centromerus prudens (O. Pickard-Cambridge, 1873)		2♀♀, 38 juv.; Afaska, Talassemtane National Park, Kehf del Hamam; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; cave, by hand; det. S. Lecigne; ref. MOR_ 1339. 3♂♂, 4♀♀; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; in line with the chasm, by hand. 1♀; Azilane, Talassemtane National Park, Kehf Mourâa Taghza; 35.18046°N, 5.20083°W; 1298 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; cave, by hand; det. S. Lecigne; ref. MOR_ 1311. 1♀; same locality, Ghar Gahrnaji; 35.18532°N, 5.19473°W; 1257 m a.s.l.; 13 Aug. 2024; S. Lecigne, S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_ 1401.
Diplocephalus bosmansi* Lecigne **sp. nov.	S	See in the text (Fig. 44).
Diplocephalus graecus (O. Pickard-Cambridge, 1873)		1♂; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65715°N, 7.00779°W; 5 Nov. 2023; S. Lecigne leg.;

Family: Species		Number, gender, location, habitat, date
		stony slope, under a stone, by hand. 1♀; Boulaouane, Oued Oum Rbia; 32.85946°N, 8.04434°W; 7 Nov. 2023; S. Lecigne leg.; on the bank of a wadi, under a pebble, by hand. 1♂; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Moutaouakil, J.-P. Dégletagne leg.; shrubby rocky slope of a former olive grove, under a stone, at night by hand.
Erigone dentosa O. Pickard-Cambridge, 1894	A	1♀; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand; det. P. Oger, S. Lecigne; ref. MOR_ 0702. 1♀; Ain Louh, Afenourir lake; 33.28010°N, 5.25354°W; 1800 m a.s.l.; 13 Nov. 2023; S. Moutaouakil leg.; meso-hygrophilous grassland on a dry lake, under stones, by hand; det. S. Lecigne, P. Oger; ref. MOR_ 1163. 1♂; Imddahen; 32.14008°N, 7.02647°W; 360 m a.s.l.; 9 May 2021; S. Moutaouakil leg.; near a stream, by hand; det. S. Lecigne, P. Oger; ref. MOR_ 0721. Comments: *E. dentosa* of North and Central American origin continues to expand after being introduced to Europe and established (Nentwig et al. 2025). These observations show that the species is already widely distributed, from the southern Atlantic coast of Morocco to the High Atlas Mountains (up to 2600 m). They also represent the first records of the species in Africa (Figs 77K-N, 104).
Frontinellina frutetorum (C. L. Koch, 1835)		1♀; Bab Taza, Talassemtane National Park; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; J. Lips leg.; edge of a mixed forest of pine and holm oak; at night, beating; det. S. Lecigne; ref. MOR_1412.
Gonatium dayense Simon, 1884	M	1♀; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger; ref. MOR_0659. Comments: *G. dayense* was first described from Algeria and is also present in Spain. The species is new to Morocco (Fig. 78A-C). It was found from 250 to 1670 m a.s.l. About its ecology (see Bosmans 2007).
Gongylidiellum vivum (O. Pickard-Cambridge, 1875)	M	1♂, 1♀; Afaska, Talassemtane National Park, Kehf del Hamam; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_ 1338 (Fig. 97N). The species is new to Morocco.
Lepthyphantes* s. lat. *brahimi* Lecigne & Moutaouakil **sp. nov.	S	See in the text (Fig. 45).
**Lepthyphantes biospeleologorum* Barrientos, 2020		See in the text (Figs 46-47).
**Lepthyphantes imazigheni* Barrientos, 2020		See in the text (Fig. 48).
**Lepthyphantes noeli* Barrientos & Brañas, 2024		See in the text (Fig. 49).
Lepthyphantes minutus (Blackwall, 1833)	M	7♂♂, 13♀♀; Sidi Addi, Ifrane National Park; 33.32214°N, 5.22978°W; 1876 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; *Cedrus* forest, at the base of trunks, at night by hand; ref. MOR_1123. The species is new to Morocco (Fig. 78D).
Lepthyphantes pieltaini Machado, 1940		1♀; Afaska, Talassemtane National Park, Kehf Fouk Anser Afaska; 35.16007°N, 5.18846°W; 1340 m a.s.l.; 15 Aug. 2024; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1470.
**Lepthyphantes soumiae* Barrientos, 2021		5♀♀; Afaska, Talassemtane National Park, Kehf Tafriass; 35.16972°N, 5.18078°W; 1170 m a.s.l.; 14 Aug. 2024; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1484. 3♂♂, 19♀♀, 38 juv.; Afaska, Talassemtane National Park, Kehf del Hamam; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne, B. Lips leg.; cave, by hand; det. S. Lecigne; ref. MOR_1337. 1♀; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1292. 5♀♀, 1 juv.; same locality, Kehf Mourâa Taghza; 35.18046°N, 5.20083°W; 1298 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; cave, by hand; det. S. Lecigne; ref. MOR_1309.

Family: Species		Number, gender, location, habitat, date
		3♂♂, 12♀♀, 23 juv.; same locality, Ghar Gahrnaji; 35.18532°N, 5.19473°W; 1257 m a.s.l.; 13 Aug. 2024; S. Lecigne, S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1396 (Fig. 99H-J). 3♀♀, 2 juv.; same locality, Ghar Hayout; 35.17319°N, 5.19264°W; 1172 m a.s.l.; 6 Aug. 2024; S. Moutaouakil, E. Lips leg.; cave, by hand; det. S. Lecigne; ref. MOR_1414. 1♀, 5 juv.; Chefchaouen, Bab Taza, Talassemtane national Park, Ghar Gharnaji (kehf el Ouad N'ghir; loc. typ.); 35.18536°N, 5.19475°W; 1256 m a.s.l.; 14 Aug. 2023; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_0937 (Fig. 78E-H).
Lepthyphantes taza Tanasevitch, 2014		2♂♂, 9 juv.; Taza, Bouhlou, Chaâra cave; 33.95677°N, 4.24582°W; 1215 m a.s.l.; 2 Aug. 2023; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_ 0936 (Fig. 78I-N).
Lessertia barbara (Simon, 1884)		3♂♂, 15♀♀, 4 juv.; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_ 0902. 1♀; Imlil; 31.128639°N, 7.919058°W; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded slope, under a stone, by hand; ref. MOR_0763. 24♂♂, 41♀♀, 9 juv.; Sidi El Makhfi, Ifrane national Park, Ifri Ou Berred; 33.26218°N, 5.24590°W; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_ 0900. 5♀♀, 6 juv.; Taza, Bouhlou, Chaâra cave; 33.95677°N, 4.24582°W; 1215 m a.s.l.; 2 Aug. 2023; S. Moutaouakil leg.; cave, by hand; ref. MOR_ 0935. 1♂, 2♀♀; Taza, Tazekka National Park, Ghar Admam; 33.95676°N, 4.15088°W; 1281 m a.s.l.; 31 Jul. 2023; S. Moutaouakil leg.; cave, by hand; ref. MOR_ 0941 (Fig. 79A-C). Comments: the observation of a specimen on the rocky slopes of Imlil is the only one we have recorded outside a cave environment (present surveys; Lecigne et al. 2023). This confirms its mainly troglophilic character (Bosmans 2007; Mammola et al. 2022).
Linyphia tenuipalpis Simon, 1884	M	1♀; Chefchaouen, Azilane, Talassemtane National Park, Kehf Mourâa Taghza; 35.18046°N, 5.20083°W; 1298 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; entrance of a cave, by hand; det. S. Lecigne; ref. MOR_1306. 7♂♂, 14♀♀, 7 juv.; Chefchaouen, Talambote, Talassemtane National Park; 35.18342°N, 5.19653°W; 1238 m a.s.l.; 9 Aug. 2024; S. Lecigne leg.; shrubby grassland, beating; det. S. Lecigne; ref. MOR_1297 (Fig. 97F-H). 1♀; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in leaf litter; at night by hand; det. S. Lecigne; ref. MOR_1348. The species is new to Morocco.
Mansuphantes sp.	M	See in the text (Fig. 50).
Megalepthyphantes salam* Lecigne **sp. nov.	S	See in the text (Figs 51-52).
Mermessus denticulatus (Banks, 1898)	M	1♂; Marrakech; 31.64942°N, 8.01080°W; 25 Apr. 2022; S. Moutaouakil leg.; in a house, by hand; det. S. Lecigne, P. Oger; ref. MOR_0586. 1♀; Ouzoud; 32.01610 °N, 6.72107°W; 692 m a.s.l.; 30 Jan. 2024; S. Lecigne leg.; beside a stream, in a tuft of grass, by hand; det. P. Oger, S. Lecigne; ref. MOR_1204 (Fig. 79D-J). Comments: *M. denticulatus* of North American origin continues to expand after being introduced to Europe and established; in North Africa, the species is already recorded from Egypt and Tunisia (WSC 2025); it is new to Morocco.
Ostearius melanopygius (O. Pickard-Cambridge, 1880)		1♂, 4♀♀; Oualidia, Takkout cave; 32.72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand.
Palliduphantes banderolatus Barrientos, 2020		14♂♂, 19♀♀, 16 juv.; Chemaia, Laghoualem, Karkar cave; 32.18394°N, 8.68841°W; 9 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_0863 & MOR_0867. Comments: See Lecigne et al. 2023.

Family: Species		Number, gender, location, habitat, date
Palliduphantes cadiziensis (Wunderlich, 1980)		4♂♂, 10♀♀, 6 juv.; Laghoualem, Hordaïfa; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_0849 & MOR_0852. Comments: to date, the species is only known from Portugal, Spain, Gibraltar and Morocco (WSC 2025). BOSMANS (2006a) reports the presence of the species in Morocco at two locations, always in low herbs close to water. The record from Hordaïfa (wet cave) is the second of the species in a subterranean environment (see BRIGNOLI 1978) (Figs 80A-N, 107).
Pelecopsis inedita (O. Pickard-Cambridge, 1875)		1♂, 1♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand; ref. MOR_0794 (Fig. 92L-M).
Scotargus pilosus Simon, 1913		1♀; Afaska, Talassemtane National Park, Kehf Fouk Anser Afaska; 35.16007°N, 5.18846°W; 1340 m a.s.l.; 15 Aug. 2024; S. Moutaouakil leg.; cave, by hand; det. S. Lecigne; ref. MOR_1472.
Sintula furcifer (Simon, 1912)		1♀; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0654 (Fig. 92N-O).
Tapinocyba ifrane* Lecigne **sp. nov.	S	See in the text (Fig. 53).
Tenuiphantes tenuis (Blackwall, 1852)		1♂; Afaska, Talassemtane National Park, Kehf Fouk Anser Afaska; 35.16007°N, 5.18846°W; 1340 m a.s.l.; 15 Aug. 2024; B. Lips leg.; cave, by hand. 1♂, 1♀, 1 juv.; Azilane, Talassemtane National Park, Kehf Mourâa Taghza; 35.18046°N, 5.20083°W; 1298 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; cave, by hand. 1♂; same locality, Kehf Bab Taghza; 35.17993°N, 5.19949°W; 1320 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; cave, by hand. 2♂♂, 3♀♀, 3 juv.; same locality, Kehf Del Oued N'Ghir 4; 35.18373°N, 5.19609°W; 1223 m a.s.l.; 12 Aug. 2024; S. Lecigne, E. Lips leg.; cave, by hand. 1♂, 8♀♀, 2 juv.; Sidi El Makhfi, Ifrane National Park, Ifri Ou Berred; 33.26218°N, 5.24590°W; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 1♂, 1♀; Talambote, Talassemtane National Park; 35.19502°N, 5.17884°W; 777 m a.s.l.; 8 Aug. 2024; S. Lecigne leg.; river bank, in the branches of a shrub, beating. 1♀; Talambote, Azilane, Talassemtane National Park; 35.18342°N, 5.19653°W, 1238 m a.s.l.; 9 Aug. 2024; S. Lecigne leg.; shrubby meadow, beating. 1♂; same locality, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Moutaouakil leg.; cave, by hand.
Trichoncus cf. *uncinatus* Denis, 1965	M	See in the text (Fig. 54).
Trichopterna cito (O. Pickard-Cambridge, 1873)	A	1♀; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65715°N, 7.00779°W; 161 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; stony slope, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_ 0966. Comments: *T. cito* is widespread, from Europe to South Siberia) and Kazakhstan (WSC 2025). The present observation on the rocky and shrubby slopes near Kehf El Baroud in a xero-thermophilous habitat is consistent with the known ecology of the species; it is the first record in Africa (WSC 2025) (Fig. 79K-L).
Walckenaeria erythrina (Simon, 1884)		1♂, 2♀♀; Azgour; 31.17193°N, 8.27277°W; 1675 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0632 (Fig. 81A-K). 3♀♀; Oukaïmeden; 31.24248°N, 7.81473°W; 2089 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0692. 1♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0822.
Liocranidae		
Apostenus humilis Simon, 1932	A	See in the text (Fig. 55).
**Apostenus maroccanus* Bosmans, 1999		See in the text (Fig. 56).
Mesiotelus mauritanicus Simon, 1909		1♂; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.05100°W; 11 Nov. 2023; S. Lecigne leg.; cave, by hand. 1♂; Azgour; 31.20650°N,

Family: Species		Number, gender, location, habitat, date
		8.24773°W; 1113 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; forest, by hand. 3♂♂; Asni, Tamadout; 31.19287°N, 7.96830°W; 1824 m a.s.l.; 17 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger, R. Bosmans (Fig. 81L-O). 1♂, 1♀; Amezmiz, Azgour; 31.18904°N, 8.26655°W; 1687 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand. 1♂, 1 juv.; Azgour; 31.17193°N, 8.27277°W; 1675 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 1♂; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; forest, by hand. 2♂♂, 1 juv.; Azgour; 31.20650°N, 8.24773°W; 1113 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 1♀; Essaouira; 31.56295°N, 9.68836°W; 162m a.s.l.; 6 Mar. 2021; S. Moutaouakil leg.; wooded sandy coastal dune, by hand. 4♂♂, 5♀♀; Essaouira, Tlat Lhenchan; 31.67003°N, 9.34885°W; 391 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; forest, by hand. 1♀; Laghoualem, Hordaïfa; 33.44062°N, 6.68773°W; 1884 m a.s.l.; 6 Nov. 2023; S. Moutaouakil leg.; cave, by hand. 1♂; Ourika, Laagrab; 31.37447°N, 7.76518°W; 969 m a.s.l.; 23 Nov. 2020; S. Moutaouakil leg.; forest, by hand. 1♂; Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; stony slope, by hand.
Scotina celans (Blackwall, 1841)	M	2♂♂; Azrou, Ifrane National Park; 33.36074°N, 5.22081°W; 1837 m a.s.l.; 13 Nov. 2023; S. Moutaouakil leg.; *Cedrus* forest, litter, sieving; ref. MOR_1146. The species is new to Morocco (Fig. 82A-B).
Lycosidae		
Arctosa cinerea (Fabricius, 1777)		1♂; Tifelt, Bouregreg; 33.82486°N, 6.46528°W; 21 May 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand; ref. MOR_0611.
Arctosa lacustris (Simon, 1876)		1♀; Ouirgane, Tizi Oussem; 31.11803°N, 7.97586°W; 1774 m a.s.l.; 20 Jun. 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand; ref. MOR_0601.
Arctosa perita (Latreille, 1799)		1♀, 1 Juv; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0819.
Arctosa similis Schenkel, 1938		1♀; Ouirgane, Tizi Oussem; 31.11803°N, 7.97586°W; 20 Jun. 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand; ref. MOR_0599 (Fig. 82D). 1♀, 1 Juv; Tahannaout, Oued Ghighaya; 31.31457°N, 7.95847°W; 979 m a.s.l.; 2 Feb. 2024; S. Lecigne, S. Moutaouakil leg.; pebble bank on the edge of a wadi, by hand; ref. MOR_1235. 2♂♂; Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; pebble bank on the edge of a lake, by hand; ref. MOR_1223 (Fig. 82C). 1♂; Tifelt, Bouregreg; 33.82486°N, 6.46528°W; 21 May 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand; ref. MOR_0610.
Hogna ferox (Lucas, 1838)		1♀; Ain Karma, Oued Rommane; 34.08528°N, 5.67763°W; 181 m a.s.l.; 14 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; arable wasteland, under a piece of dead wood on the ground, by hand; ref. MOR_ 1180 (Fig. 82F). 1♀, 3 Juv; Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand; det. P. Oger; ref. MOR_ 0530. 1♀; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; in a hotel park, on bare ground, by hand; det. S. Lecigne, P. Oger; ref. MOR_0737 (Fig. 82E, G-H).
Hogna radiata (Latreille, 1817)		1♂; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka; 35.17569°N, 5.19816°W; 1263 m a.s.l.; 7 Aug. 2024; J. Lips; dry grassland, by hand. 1♂, 1♀; same locality; 11 Aug. 2024; S. Lecigne, P. Lips; forest road; at night by hand. 1♀; same locality; 35.17393°N, 5.20312°W; 1307 m a.s.l.; 8 to 13 Aug. 2024; S. Lecigne, E. Lips leg.; pine forest; pitfall. 1♀; same locality; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; J. Lips; mixed pine and holm oak forest, in the branches; at night by beating.

Family: Species		Number, gender, location, habitat, date
Lycosa fasciiventris Dufour, 1835		2♂♂; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, on the ground; at night by hand; det. S. Lecigne, P. Oger; ref. MOR_1344 (Fig. 98I). 1♀; same locality; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; dry lawn, by hand; det. S. Lecigne; ref. MOR_1378. 1♀; Chefchaouen, Talambote, Talassemtane National Park; 35.19131°N, 5.17711°W; 10 Aug. 2024; S. Moutaouakil leg.; rural path, on the ground at night, by hand; det. S. Lecigne; ref. MOR_1328.
Pardosa gefsana Roewer, 1959		1♂, 1♀, 9 juv.; Boulaouane, Oued Oum Rbia; 32.85946°N, 8.04434°W; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; on the bank of a wadi, under a pebble, by hand; det. S. Lecigne, O. Villepoux; ref. MOR_1005. 3♂♂, 1♀, 3 juv.; Essaouira; 31.46522°N, 9.75814°W; 19 Jan. 2022; S. Moutaouakil leg.; on the banks of a wadi, by hand; det. S. Lecigne, P. Oger; ref. MOR_0550 (Fig. 82B-E, G-J). 1♂, 1♀; Tahannaout, Oued Ghighaya; 31.31457°N, 7.95847°W; 979 m a.s.l.; 2 Feb. 2024; S. Lecigne, S. Moutaouakil leg.; pebble bank on the edge of a wadi, by hand; ref. MOR_1239 (Fig. 82A, F).
Pardosa morosa (L. Koch, 1870)	A	4♂♂, 5♀♀, 1 juv.; Imlil; 31.13097°N, 7.91835°W; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; pebble bank along a torrent, by hand; det. P. Oger, O. Villepoux; ref. MOR_0770. 1♀; Ouirgane, Tizi Oussem; 31.11803°N, 7.97586°W; 1774 m a.s.l.; 20 Jun. 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand; det. O. Villepoux; ref. MOR_0600. Comments: *P. morosa* is widespread, from Europe to Central Asia, Iraq and Iran (WSC 2025). Its presence on the banks of a torrent from the Toubkal Mountain is the first record of the species in Africa (Fig. 82I-O).
Pardosa proxima (C. L. Koch, 1847)		1♀; Azilal, Bzou spring; 32.08031°N, 7.04874°W; 470 m a.s.l.; 8 May 2021; S. Moutaouakil leg.; near a spring, by hand. 3♂♂, 2♀♀; Imlil; 31.12876°N, 7.91776°W; 28 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wetland at the edge of a cultivated area, by hand. 2♀♀, 1 juv.; Khenifra, Lac Miami; 32.89980°N, 5.37725°W; 23 Apr. 2021; S. Moutaouakil leg.; near a lake, by hand. 1♀; Marrakech, Faculty of Sciences; 31.64936°N, 8.01522°W; 11 Jun. 2021; S. Moutaouakil leg.; urban park, by hand. 1♀; Ouirgane, Tizi Oussem; 31.11803°N, 7.97586°W; 20 Jun. 2021; S. Moutaouakil leg.; on the banks of a wadi, by hand. 1♂, 1 juv.; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May 2022; S. Moutaouakil leg.; high altitude lawn, along a stream, by hand. 2♂♂, 1♀, 1 juv.; idem; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; same habitat, by hand. 1♂; same locality; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand.
Trochosa hispanica Simon, 1870		1♀; Boulaouane, Oued Oum Rbia; 32.85946°N, 8.04434°W; 97 m a.s.l.; 7 Nov. 2023; J. Lips leg.; on the bank of a wadi, under a pebble, by hand; det. S. Lecigne, O. Villepoux; ref. MOR_1000.
Wadicosa fidelis (O. Pickard-Cambridge, 1872)		1♂; El Haouz, N'fis river; 31.40882°N, 8.12342°W; 573 m a.s.l.; 29 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger, R. Bosmans; ref. MOR_0481. 1♂, 3 juv.; Essaouira; 31.46522°N, 9.75814°W; 19 Jan. 2022; S. Moutaouakil leg.; on the banks of a wadi, by hand; det. S. Lecigne, P. Oger; ref. MOR_0549 (Fig. 83L). 7♂♂, 1♀, 2 juv.; Tahannaout, Oued Ghighaya; 31.31457°N, 7.95847°W; 979 m a.s.l.; 2 Feb. 2024; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; pebble bank on the edge of a wadi, by hand; ref. MOR_1237 (Fig. 83K). 8♂♂, 2♀♀, 3 juv.;Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; pebble bank on the edge of a lake, by hand; ref. MOR_1222.
Mimetidae		

Family: Species		Number, gender, location, habitat, date
Mimetus laevigatus (Keyserling, 1863)		1♂, 1 juv.; Essaouira; 31.47036°N, 9.75758°W; 23 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, in shrub branches, beating; ref. MOR_0801. 1♂; idem; 31.38373°N, 9.77983°W; 58 m a.s.l.; idem; ref. MOR_0789.
Oecobiidae		
Oecobius chassieri* Lecigne & Moutaouakil **sp. nov.	S	See in the text (Figs 57-58).
Oecobius machadoi Wunderlich, 1995	A	See in the text (Fig. 59).
Oecobius maculatus Simon, 1870		1♀; Chefchaouen, Talambote, Talassemtane National Park, outside area of Kehf Bradâa; 35.19496°N, 5.18005°W; 843 m a.s.l.; 8 Aug. 2024; S. Lecigne, P. Lips leg.; under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_1261.
Oecobius navus Blackwall, 1859		1♀, 1 juv.; Oualidia; 32.73202°N, 9.03819°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; on the outside wall of a building, by hand; ref. MOR_0741.
Uroctea durandi (Latreille, 1809)	M	1 juv.; Azrou; 33.30247°N, 5.22469°W; 13 Nov. 2023; S. Moutaouakil leg.; lawn on basalt field, under a stone, by hand; ref. MOR_1165. 1♀; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand; ref. MOR_1179. The species is new to Morocco (Fig. 83M-O).
Oonopidae		
Silhouettella loricatula (Roewer, 1942)		1♀; Azrou; 33.30247°N, 5.22469°W; 13 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; lawn on basalt field, under a stone, by hand; det. S. Lecigne, A. Henrard; ref. MOR_1169 (Fig. 84A-B). 1♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne leg.; wooded sandy coastal dune, by hand; ref. MOR_0780. 1♂, 1♀; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Moutaouakil, J.-P. Dégletagne leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_0906.
Philodromidae		
Philodromus fuscolimbatus Lucas, 1846		4♀♀, 2 juv.; Chefchaouen, Azilane, Talassemtane National Park; 35.18054°N, 5.20225°W; 1306 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; mixed oak and pine forest, in the branches, beating; det. P. Oger, S. Lecigne; ref. MOR_1299 (Fig. 97K).
Pulchellodromus bistigma (Simon, 1870)		1♀; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka, 35.17569°N, 5.19816°W; 1263 m a.s.l.; 7 Aug. 2024; J. Lips leg.; dry grassland; by hand; det. S. Lecigne, ref. MOR_1248.
Thanatus fabricii (Audouin, 1826)	M	1♀; Marrakech, "La Palmeraie"; 31.66843°N, 7.88422°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid area, on the ground under the branches of a shrub, by hand; ref. MOR_0758 (Fig. 84C-D). Comments: *Thanatus fabricii* is recorded from the Canary Islands and the Iberian Peninsula to Central Asia and from Algeria to South Africa (WSC 2025). Logunov (2011) specifies that this is a psammophilous species that seems to co-occur with *T. fornicatus* (Clerck, 1757) in the same habitats. The latter is recorded from Egypt to Pakistan and was recently added to the fauna of Algeria (Benhacene et al. 2023). *T. fabricii* is new to Morocco.
Thanatus setiger (O. Pickard-Cambridge, 1872)	M	1♀; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 11 Aug. 2021; S. Moutaouakil leg.; in a building, by hand; ref. MOR_0616 (Fig. 84J-L). 1♂; Marrakech, "La Palmeraie"; 31.66643°N, 7.89096°W; 449 m a.s.l.; 28 Jan. 2024; S. Lecigne leg.; anthropized arid area, under a stone, by hand; ref. MOR_1191 (Fig. 84E-I). Comments: To date, *Thanatus setiger* was only known from north-east Africa to the Middle East and Iran (WSC 2025). The recent observations considerably extend its range westwards; so far it was only recorded in Marrakech and its close vicinity. The species is new to Morocco.

Family: Species		Number, gender, location, habitat, date
Pholcidae		
Holocnemus caudatus (Dufour, 1820)		1♀; Beni Ayat, "La Perle de Beni Ayat" cave; 32.16140°N, 6.64220°W; 10 Nov. 2023; J. Lips leg.; cave, by hand; det. S. Lecigne, P. Oger; ref. MOR_0877 (Fig. 84M-P). 1♂; Ourika, Laagrab; 31.38277°N, 7.73788°W; 1067 m a.s.l.; 20 Nov. 2020; S. Moutaouakil leg.; forest, by hand; ref. MOR_0345.
Holocnemus reini (C. Koch, 1873)		7♂♂, 3♀♀, 1 juv.; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.05100°W; 11 Nov. 2023; S. Lecigne leg.; cave, by hand (Fig. 85A-B). 1♂; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Lecigne leg.; cave, by hand. 3♂♂,1♀; same locality, Kehf Bab Taghza; 35.17993°N, 5.19949°W; 1320 m a.s.l.; 10 Aug. 2024; J. Lips leg.; cave, by hand. 1♂,1♀; same locality, Kehf Del Oued N'Ghir 3; 35.18415°N, 5.19614°W; 1227 m a.s.l.; 12 Aug. 2024; P. Lips leg.; cave, by hand. 1♂, 1♀; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka; 35.17569°N, 5.19816°W; 1263 m a.s.l.; 7 Aug. 2024; S. Moutaouakil; on the ceiling of a house; by hand. 1♂, 1♀; same locality; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; forest; at night by hand. 1♀, 1 juv.; same locality, Ghar Hayout; 35.17319°N, 5.19264°W; 1172 m a.s.l.; 6 Aug. 2024; S. Lips leg.; cave, by hand. 1♀, 9 juv.; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65854°N, 7.00694°W; 5 Nov. 2023; S. Lecigne leg.; stony slope, under a stone, by hand; ref. MOR_0952. 1♀; idem; 33.65715°N, 7.00779°W; 5 Nov. 2023; S. Lecigne leg.; same habitat, by hand; ref. MOR_ 0962. 3♂♂; Beni Ayat, "La Perle de Beni Ayat" cave; 32.16140°N, 6.64220°W; 10 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, A. Boussalham leg.; cave, by hand; ref. MOR_0876. 2♀♀, 6 juv.; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_0969. 1♂, 4♀♀, 1 juv.; Talambote, Talassemtane National Park, 35.191313°N, 5.177115°W; 10 Aug. 2024; S. Moutaouakil; on a country road; by hand.
Maghreba gharbija Huber, 2022		1♀, 1 juv.; Essaouira; 31.47036°N, 9.75758°W; 23 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_0800 (Fig. 85C-G).
**Micropholcus ghar* Huber, 2024		1♂; Taza, Tazekka National Park, Ghar Admam; 34.02779°N, 4.15088°W; 1281 m a.s.l.; 1 Nov. 2018; J. Lips leg.; cave, by hand; ref. MOR_ 0001 (Fig. 100H-L). Comments: we confirm the supposition of Huber & Meng attributing the male found in Ghar Admam cave to *M. ghar*, recently described by B. Huber (Huber & Meng 2024: p. 167). This record is the third known locality of the species, which is endemic to Morocco.
**Micropholcus khenifra* Huber, Lecigne & Lips 2024		See in the text (Figs 60-61).
**Micropholcus tegulifer* Barrientos, 2019		See in the text (Fig. 62).
Pholcus phalangioides (Fuesslin, 1775)		5♂♂, 2♀♀, 9 juv.; Beddouza, Kasbat Ayir, Ghar Goran; 32.55619°N, 9.25161°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 2♂♂, 2♀♀, 5 juv.; Chemaia, Laghoualem, Karkar cave; 32.18394°N, 8.68841°W; 9 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand.
Phrurolithidae		
Liophrurillus flavitarsis (Lucas, 1846)	M	3 juv.; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, sieving; ref. MOR_1089. 4 juv.; Azrou, Ifrane National Park; 33.36074°N, 5.22081°W; 1837 m a.s.l.; 13 Nov. 2023; S. Moutaouakil leg.; *Cedrus* forest, litter, sieving;

Family: Species		Number, gender, location, habitat, date
		ref. MOR_1144 (Fig. 85). 1 juv.; Laghoualem, Hordaïfa; 33.44062°N, 6.68773°W; 1884 m a.s.l.; 6 Nov. 2023; S. Moutaouakil leg.; cave, by hand. The species is new to Morocco.
Phrurolithus nigrinus (Simon, 1878)	A	1♀; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May. 2022; S. Moutaouakil leg.; high altitude grassland, near a stream, by hand; det. S. Lecigne, P. Oger; ref. MOR_0699. Comments: the currently known distribution of *P. nigrinus* concerns central and southern Europe (WSC 2025). Its discovery in an alpine lawn in the Moroccan High Atlas Mountains constitutes the first record of the species from Africa (Fig. 85I-K).
Phrurolithus sandrae* Lecigne **sp. nov.	S	See in the text (Fig. 63).
Prodidomidae		
Prodidomus amaranthinus (Lucas, 1846)		1♀; Boulaouane, Oued Oum Rbia; 32.85946°N, 8.04434°W; 7 Nov. 2023; S. Lecigne leg.; on the bank of a wadi, under a pebble, by hand; ref. MOR_1002. 1♂; Ourika, Laagrab; 31.37447°N, 7.76518°W; 969 m a.s.l.; 23 Nov. 2020; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger; ref. MOR_0356 (Fig. 86A-F).
Salticidae		
Aelurillus basseleti (Lucas, 1846)		1♂; Taberkouste, Lalla Taberkouste lake; 31.34630°N, 8.14359°W; 665 m a.s.l.; 1 Feb. 2024; S. Lecigne, E. Lecigne leg.; stony slope, by hand; det. S. Lecigne, P. Oger; ref. MOR_1234 (Fig. 86G-O).
Aelurillus blandus (Simon, 1871)	A	2♂♂; Beddouza, Kasbat Ayir; 32.55619°N, 9.25161°W; 39 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; calcicole fallow (lawn), beside crops, under stones, near the entrance of Ghar Goran cave, by hand; det. P. Oger; ref. MOR_1047. 1♂; Marrakech, Palmeraie; 31.66643°N, 7.89096°W; 449 m a.s.l.; 28 Janv. to 2 Feb. 2024; S. Lecigne leg.; arid anthropized area with sparse vegetation, pitfall; det. P. Oger, G. Azarkina; ref. MOR_0839. Comments: *Aelurillus blandus* shows a disjunct distribution (Iberian Peninsula and Greece, Crete included) (WSC 2025). Its discovery as far as the Moroccan Atlantic coast clearly extends its range to the south-west; these observations also constitute the first records of the species in Africa (Figs 87A-F, 102).
Aelurillus luctuosus (Lucas, 1846)		3♀♀, 5 juv.; Amezmiz, Azgour; 31.18426°N, 8.26919°W; 1653 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; sunny shrubby rocky slope, under a stone, by hand; ref. MOR_1207. 1♂; Beddouza, Kasbat Ayir; 32.58990°N, 9.21719 °W; 8 Nov. 2023; S. Lecigne leg.; seafront, under stones and in sparse vegetation, by hand; det. P. Oger; ref. MOR_1060. 1♀; El Kelâa des Sraghna, Sehb Lmjnoun; 32.05554°N, 7.74860°W; 412 m a.s.l.; 7 Nov. 2020; S. Moutaouakil leg.; semi-arid area, by hand; det. P. Oger, G. Azarkina; ref. MOR_0503 (Fig. 87H-P). 1♂; Amezmiz, Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 13 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, P. Oger; ref. MOR_0647. 1♂, 1 juv.; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand; det. P. Oger; ref. MOR_0785 (Fig. 87G). 1♀; Oualidia, Cercle de Zemamra; 32.72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; J. Lips leg.; lapiaz, under a stone, by hand; det. P. Oger; ref. MOR_1030.
Chalcoscirtus infimus (Simon, 1868)		1♂; Laattaouya, Sehb Lmesjoun; 32.05554°N, 7.74860°W; 412 m a.s.l.; 27 Mar. 2021; S. Moutaouakil leg.; forest, by hand; ref. MOR_0480. 1♀; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; in a hotel park, on a wall, by hand; ref. MOR_0740 (Fig. 88A). 1♂; Oukaïmeden; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand; ref. MOR_1432.
Cyrba algerina (Lucas, 1846)		1♀, 3 juv.; Essaouira; 31.47036°N, 9.75758°W; 23 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, under a stone, by hand; ref. MOR_0796.
Euophrys gambosa (Simon, 1868)		1♂, 1 juv.; Essaouira; 31.49993°N, 9.73073°W; 79 m a.s.l.; 6 Mar.

Family: Species		Number, gender, location, habitat, date
		2021; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; det. P. Oger; ref. MOR_0408. 1♂; Essaouira, Tlat Lhenchan; 31.64062°N, 9.34538°W; 455 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; forest, coastal area, by hand; det. S. Lecigne, P. Oger, Y. Montardi; ref. MOR_0385 (Fig. 88B-H). 1♂; Marrakech, Palmeraie; 31.66643°N, 7.89096°W; 449 m a.s.l.; 31 Jan. 2024; S. Lecigne leg.; anthropized arid area, under a stone, by hand; ref. MOR_1196. 1♂; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0814. These are the second citations of the species for Morocco since Simon (1876).
Euophrys rufibarbis (Simon, 1868)		1♀; Oukaïmeden; 31.24248°N, 7.81473°W; 2089 m a.s.l.; 10 May 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0695. 2♀♀; Safi; 18 May 2022; A. El Rharras leg.; by hand; ref. MOR_0730.
Evarcha jucunda (Lucas, 1846)		1♂, 1♀, 1 juv.; Chefchaouen, Azilane, Talassemtane National Park; 35.18054°N, 5.20225°W; 1306 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; mixed oak and pine forest, in the branches, beating; det. S. Lecigne; ref. MOR_1300.
Habrocestum ornaticeps (Simon, 1868)		1♂; Chefchaouen, Talambote, Talassemtane National Park; 35.19502°N, 5.17884°W; 777 m a.s.l.; 8 Aug. 2024; S. Lecigne leg.; river bank, on a pebble, by hand; det. S. Lecigne; ref. MOR_1274 (Fig. 96J-L). 1♀; Bab Taza, Talassemtane National Park, Azilane; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in leaf litter; at night by hand; det. S. Lecigne; ref. MOR_1356 (Fig. 96M). 1♂; same locality; 35.17482°N, 5.20205°W; 1307 m a.s.l.; 8 to 13 Aug. 2024; S. Lecigne, E. Lips; pines forest; pitfall; det. S. Lecigne; ref. MOR_1394.
Hasarius adansoni (Audouin, 1826)		1♂; Tanger, Kasbah; 35.78915°N, 5.81327°W; 65 m a.s.l.; 15 Aug. 2024; S. Lecigne leg.; urban rampart, by hand; ref. MOR_1413.
Heliophanus machaerodus Simon, 1909		1♀, 3 juv.; Beddouza, Kasbat Ayir; 32.55619°N, 9.25161°W; 39 m a.s.l.; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; calcicole fallow (lawn), beside crops, under stones, near the entrance to Ghar Goran cave, by hand; ref. MOR_1046, deposited in SMF. 1♀; Oukaïmeden; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand; det. S. Lecigne, P. Oger, G. Azerkina, D. Logunov; ref. MOR_0836 (Fig. 88I-K). Comments: *Heliophanus machaerodus* is only known from North Africa (Morocco, Algeria and Tunisia) (WSC 2025). In Morocco, there are currently only two records ("Mogador" and an unknown locality) (Wesołowska 1986); we add two new localities to its known range (in a calcicole grassland bordering a cultivated area not far from the coast, and in a high-altitude grassland; always under stones) (Fig. 106).
Icius hamatus (C. L. Koch, 1846)		1♀; Azilal, Bzou spring; 32.08031°N, 7.04874°W; 470 m a.s.l.; 8 May 2021; S. Moutaouakil leg.; near a spring, by hand; det. S. Lecigne; ref. MOR_0718. 2♂♂; Marrakech, Faculty of Sciences; 31.64936°N, 8.01522°W; 11 Oct. 2022; S. Moutaouakil leg.; urban park, by hand. 1♀; Marrakech; 31.64942°N, 8.01080°W; 26 Nov. 2022; S. Moutaouakil leg.; in a house, by hand. 1♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand.
**Menemerus guttatus* Wesołowska, 1999		See in the text (Fig. 64).
Menemerus semilimbatus (Hahn, 1829)		1♂, 1♀; Labehalil, Oued Rommane; 34.08658°N, 5.67662°W; 188 m a.s.l.; 14 Nov. 2023; J. Lips leg.; stony wasteland, by hand; ref. MOR_1492.
Pellenes geniculatus (Simon, 1868)	M	See in the text (Fig. 65).
Pellenes maderianus Kulczyński, 1905	A	See in the text (Fig. 66).
Phlegra bresnieri (Lucas, 1846)		1♂; Oukaïmeden; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr

Family: Species		Number, gender, location, habitat, date
		2023; S. Moutaouakil leg.; forest, by hand; ref. MOR_1431. 1♂; Skhirate-Temara; 33.95248°N, 6.92578°W; 19 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; coastal wasteland in low vegetation, by hand; ref. MOR_0944.
Plexippus paykulli (Audouin, 1826)		1♀; Imddahen; 32.14008°N, 7.02647°W; 9 May 2021; S. Moutaouakil leg.; near a stream, by hand; ref. MOR_ 0719. 1♂; Marrakech, Faculty of Sciences; 31.64936°N, 8.01522°W; 5 Jun. 2021; S. Moutaouakil leg.; urban park, by hand; ref. MOR_ 0595. 1♂; idem; 4 May 2022; idem; ref. MOR_ 0592. 1♂; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 18 Feb. 2021; S. Moutaouakil leg.; in a building, by hand; ref. MOR_0578. 1♂; same locality; 27 Jun. 2022; same habitat; det. S. Lecigne, P. Oger; ref. MOR_0584 (Fig. 88L-M). 1♂; same locality; 10 Jul. 2024; same habitat; det. S. Lecigne; ref. MOR_1434.
Salticus confusus Lucas, 1846	M	1♂, 2 juv.; Essaouira; 31.47036°N, 9.75758°W; 23 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, in shrub branches, beating; ref. MOR_0804. The species is new to Morocco.
Salticus propinquus Lucas, 1846		2♂♂, 1♀, 3 juv.; Essaouira, Tlat Lhenchan; 31.64062°N, 9.34538°W; 455 m a.s.l.; 10 Dec. 2020; S. Moutaouakil leg.; forest, coastal area, by quadrat; ref. MOR_0486 (Fig. 88N-O). 1♀; idem; 31.63997°N, 9.42285°W; 442 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; forest, by hand; ref. MOR_0389.
Scytodidae		
Scytodes annulipes Simon, 1907	M	1♂, 9 juv.; Agadir, Tamri Basin, "Grotte des Chauves-souris"; 30.61289°N, 9.46712°W; 780 m a.s.l.; 29 Dec. 2019; S. Moutaouakil leg.; cave, by hand; det. P. Oger, S. Lecigne; ref. MOR_0260. Comments: to date, *Scytodes annulipes* was only known from Algeria, Libya and Tunisia, where it mainly inhabits natural wooded environments (open *Cedrus atlanticus* forest; *Pinus* forest; *Quercus ilex* forest) or man-made environments (palm yard, *Eucalyptus* and *Pinus* plantations, gardens), but also under stones in salt marshes, grassland, ruins, wadi banks, *Juniperus* maquis etc. Its discovery in the 'Grotte des Chauves-souris' is the first observation oft he species in an underground environment.. On its distribution, see VAN KEER & BOSMANS 2014. The species is new to Morocco (Fig. 101A-D).
Scytodes univittata Simon, 1882	M	1♂; Marrakech; 31.64942°N, 8.01080°W; 438 m a.s.l.; 2 Sept. 2022; S. Moutaouakil leg.; in a house, by hand; det. S. Lecigne, P. Oger; ref. MOR_0585 (Fig. 89A-E). The species is new to Morocco.
Scytodes velutina Heineken & Lowe, 1832		1♂, 1♀; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in leaf litter; at night by hand. 1♂, 2♀♀, 6 juv.; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65854°N, 7.00694°W; 5 Nov. 2023; S. Lecigne leg.; in dried palm branches, against a rock, beating. 1♂; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 24 May 2022; S. Moutaouakil leg.; in a building, by hand. Safi; 18 May 2022; A. El Rharras leg.; by hand.
Segestriidae		
**Ariadna maroccana* Wunderlich, 2011		1♂; Azilane, Talassemtane National Park; 35.18532°N, 5.19473°W; 1257 m a.s.l.; 13 Aug. 2024; S. Lecigne leg.; rocky path beside hedges, on a stone, by hand; ref. MOR_1400 (Fig. 99K-M).
Ariadna sp.		2♀♀, 1 juv.; Laakarta, Kasbat Ayir; 32.64970°N, 9.13077°W; 8 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; sand dune, under stones, by hand; ref. MOR_1041 (Fig. 89F-H). Comments: The genus *Ariadna* is currently represented by two species in Morocco: *A. insidiatrix* Audouin,1826 and *A. maroccana* Wunderlich, 2011 (male only). Although there is considerable intraspecific variability in the number of leg bristles (Wunderlich 2011), our specimens most closely resemble *A. insidiatrix* (Le Péru 2011) in respect of the

Family: Species	Number, gender, location, habitat, date
	number of ventral spines on metatarsi I (6-7, 7-7 or even 7-8) and tibiae I (4 pairs or 4-5) and the vulva (Fig. 89H; BRIGNOLI 1976, p. 37, figs 2, 6). The two species seem to occupy the same habitats (under stones in coastal areas).
Segestria florentina (Rossi, 1790)	1 juv.; Azgour; 31.18904°N, 8.26655°W; 1687 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand. 3♀♀; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in tree trunks; at night by hand. 2 juv.; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand. 1♀, 1 juv.; idem; 19 Janv. 2022; S. Moutaouakil leg.; same habitat, by hand. 2♀♀; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand.
Sicariidae	
Loxosceles rufescens (Dufour, 1820)	1♂; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 28 Jan. 2021; S. Moutaouakil leg.; in a building, by hand. 1♂; Marrakech, Palmeraie; 31.66667°N, 7.88419°W; 450 m a.s.l.; 26 Mar. to 1 Apr. 2023; S. Lecigne leg.; arid anthropized area with sparse vegetation, pitfall.
Sparassidae	
**Eusparassus fritschi* (C. Koch, 1873)	1♂; Tamadoute; 31.19287°N, 7.96830°W; 1824 m a.s.l.; 12 Apr. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_ 0674 (Fig. 89J-L). 1♂; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0805 (Fig. 89I). 1♀, 1 juv.; Safi; 18 May 2022; A. El Rharras leg.; by hand; ref. MOR_ 0722 (Fig. 89M-N). Comments: *Eusparassus fritschi* is one of the eight members of the *dufouri* species group. The species is endemic to Morocco, mainly distributed in the Atlas Mountains, up to 2330 m a.s.l. We add three new localities; Figure 105 shows its current distribution (approximate location according to MORADMAND 2013, including the more recent observation in the Safi area). About its taxonomy and description: see MORADMAND 2013.
Tetragnathidae	
Meta bourneti Simon, 1922	1♂, 1♀, 1 juv.; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 1♀, 1 juv.; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; S. Lecigne, S. Moutaouakil leg.; cave, by hand. 1♂, 12 juv.; same locality, Kehf Del Oued N'Ghir 4; 35.18373°N, 5.19609°W; 1223 m a.s.l.; 12 Aug. 2024; S. Lecigne, J. Lips, E. Lips leg.; cave, by hand. 14 juv.; same locality, Ghar Gahrnaji; 35.18532°N, 5.19473°W; 1257 m a.s.l.; 13 Aug. 2024; S. Lecigne, S. Moutaouakil, B. Lips leg.; cave, by hand. 1♂, 2 juv.; same locality, Ghar Hayout; 35.17319°N, 5.19264°W; 1172 m a.s.l.; 6 Aug. 2024; S. Moutaouakil, J. Lips leg.; cave, by hand. 1 juv.; Beni Ayat, "La Perle de Beni Ayat" cave; 32.16140°N, 6.64220°W; 10 Nov. 2023; B. Lips leg.; cave, by hand. 1♂, 2♀♀, 4 juv.; Chefchaouen, Talassemtane National Park, Kehf Bradâa; 35.19462°N, 5.17974°W; 846 m a.s.l.; 16 Aug. 2023; S. Moutaouakil leg.; cave, by hand. 1♀, 1 juv.; Taza, Ifri N'ifis; 34.07844°N, 4.01938°W; 1373 m a.s.l.; 3 Aug. 2023; S. Moutaouakil leg.; cave, by hand.
Metellina merianae (Scopoli, 1763)	3 juv.; Chefchaouen, Azilane, Talassemtane National Park, Tinioune cave; 35.17017°N, 5.20494°W; 1390 m a.s.l.; 5 Aug. 2024; S. Moutaouakil, J. Lips leg.; cave, by hand. 4 juv.; same locality, Kehf Mourâa Taghza; 35.18046°N, 5.20083°W; 1298 m a.s.l.; 10 Aug.

Family: Species		Number, gender, location, habitat, date
		2024; S. Lecigne, J. Lips leg.; cave, by hand. 1♀; same locality, Kehf Del Oued N'Ghir 3; 35.18415°N, 5.19614°W; 1227 m a.s.l.; 12 Aug. 2024; J. Lips leg.; cave, by hand. 1 juv.; same locality, Kehf Del Oued N'Ghir 4; 35.18373°N, 5.19609°W; 1223 m a.s.l.; 12 Aug. 2024; S. Lecigne, E. Lips leg.; cave, by hand. 11 juv.; Laghoualem, Hordaïfa; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 1♀; Talambote, Talassemtane National Park, Kehf Bradâa; 35.19496°N, 5.18005°W, 843 m a.s.l.; 8 Aug. 2024; S. Lecigne, P. Lips leg.; cave, by hand. 1♂, 1♀; same locality; 35.19502°N, 5.17884°W; 777 m a.s.l.; 8 Aug. 2024; S. Lecigne leg.; river bank, in the vegetation against a shaded rock face, beating.
Metellina segmentata (Clerck, 1757)		1♂, 5♀♀, 7 juv.; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_ 0904. Comments: *M. segmentata* is widespread, from Europe to Japan and Canada, where it was introduced (WSC 2025). In Africa, it is currently only known from Morocco. Its observation in the Ifri Ouska cave may be surprising; the species is not known to be troglophilic nor trogloxenic. It was recorded in the first few metres near the entrance (Fig. 90A-B).
Tetragnatha nitens (Audouin, 1826)		1♀; Azilal, Bzou spring; 32.08031°N, 7.04874°W; 470 m a.s.l.; 8 May 2021; S. Moutaouakil leg.; near a spring, by hand; det. S. Lecigne, P. Oger; ref. MOR_0716 (Fig. 90C-E).
Theraphosidae		
**Ischnocolus elongatus* (Simon, 1873)		1♂, Ourika, Laagrab; 31.37373°N, 7.76613°W; 987 m a.s.l.; 23 Nov. 2020; S. Moutaouakil leg.; forest, by hand; det. J. Korba; ref. MOR_0352 (Fig. 90F-I). 2♀♀; Labehalil, Oued Rommane; 34.08528°N, 5.67763°W; 181 m a.s.l.; 14 Nov. 2023; S. Lecigne, S. Moutaouakil leg.; bare earth slope at the edge of arable land, close to grassy wasteland and a stream, 11 burrows / 4m²; depth 18 to 20cm, by hand; ref. MOR_ 1181 (Fig. 90J-M).
Ischnocolus valentinus (Dufour, 1820)		1♀; Oukaïmeden; 31.24293°N, 7.81693°W; 2047 m a.s.l.; 19 Mar. 2021; S. Moutaouakil leg.; forest, by hand; det. S. Lecigne, J. Korba; ref. MOR_0462 (Fig. 90N-O).
Theridiidae		
Enoplognatha diversa (Blackwall, 1859)		3♂♂; Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_0535 (Fig. 91A-C). 2♂♂, 1♀, 8 juv.; Oukaïmeden; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand; ref. MOR_0829.
Enoplognatha franzi Wunderlich, 1995		2♀♀; Essaouira, Tlat Lhenchan; 31.67560°N, 9.35822°W; 442 m a.s.l.; 24 Dec. 2020; S. Moutaouakil leg.; forest, by hand; ref. MOR_ 0376. 1♀; idem; 31.67003°N, 9.34885°W; 391 m a.s.l.; idem; ref. MOR_ 0381. 1♀; idem; det. R. Bosmans; ref. MOR_ 0382 (Fig. 91D-H). 1♀; idem; 31.63997°N, 9.42285°W; 442 m a.s.l.; idem; ref. MOR_0390.
Episinus algiricus Lucas, 1846	M	1♀; Bab Taza, Talassemtane National Park; 35.17351°N, 5.20349°W; 1310 m a.s.l.; 11 Aug. 2024; S. Lecigne, P. Lips; mixed forest of pine and holm oak, in leaf litter; at night by hand; det. S. Lecigne; ref. MOR_1357 (Fig. 99F-G). 1♀; same locality; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; forest edge; at night by hand; det. S. Lecigne; ref. MOR_1388. 1♀; same locality; 35.17347°N, 5.20361°W; 1311 m a.s.l.; 13 Aug. 2024; S. Lecigne leg.; mixed forest of pine and holm oak; at night by hand; det. S. Lecigne; ref. MOR_1404. The species is new to Morocco.
Euryopis episinoides (Walckenaer, 1847)		1♀; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 1 May 2021; S. Moutaouakil leg.; in a building, by hand. 2♀♀; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand.

Family: Species		Number, gender, location, habitat, date
Kochiura aulica (C. L. Koch, 1838)		1♂; Marrakech, "La Palmeraie"; 31.66843°N, 7.88422°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; arid area, in the branches of a shrub, beating. 2 juv.; Rabat; 34.02051°N, 6.83586°W; 26 m a.s.l.; 3 Nov. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; on the outside wall of a building in urban area, by hand.
Lasaeola convexa (Blackwall, 1870)		3♂♂; Bab Taza, Talassemtane National Park; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; mixed forest of pine and holm oak; at night by hand; det. S. Lecigne, P. Oger; ref. MOR_1391.
Lasaeola testaceomarginata Simon, 1881		1♂; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, beating; det. S. Lecigne, P. Oger; ref. MOR_ 0791 (Fig. 91I-L).
Latrodectus dahli Levi, 1959		1♀; Marrakech; 31.64942°N, 8.01080°W; 20 Apr. 2021; S. Moutaouakil leg.; in a house, by hand; det. P. Oger, S. Lecigne; ref. MOR_ 0591 (Fig. 91M-O).
Paidiscura dromedaria (Simon, 1880)		1♀; Beddouza, Kasbat Ayir; 32.58990°N, 9.21719 °W; 6 m a.s.l.; 8 Nov. 2023; S. Lecigne leg.; seafront, under stones and in sparse vegetation, by hand. 1♂, 2♀♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, by hand.
Parasteatoda tepidariorum (C. L. Koch, 1841)	M	1♀; Skhirate-Temara; 33.95248°N, 6.92578°W; 19 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; coastal wasteland in low vegetation, by hand; det. S. Lecigne, P. Oger; ref. MOR_0948 (Fig. 91P). The species is new to Morocco.
Phoroncidia paradoxa (Lucas, 1846)	M	1♂; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in branches, beating; det. S. Lecigne, P. Oger; ref. MOR_1120. The species is new to Morocco (Fig. 92A-D).
Platnickina nigropunctata (Lucas, 1846)		1♀; Essaouira; 31.47036°N, 9.75758°W; 23 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, in shrub branches, beating; ref. MOR_0802.
Ruborridion musivum (Simon, 1873)		1♂; Essaouira; 31.46758°N, 9.75723°W; 24 m a.s.l.; 6 Mar. 2021; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; det. P. Oger, R. Bosmans; ref. MOR_0413 (Fig. 92E-I).
Simitidion lacuna Wunderlich, 1992		3♀♀; Essaouira; 31.38373°N, 9.77983°W; 58 m a.s.l.; 29 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; wooded sandy coastal dune, beating; det. S. Lecigne, P. Oger; ref. MOR_ 0791 (Fig. 92J-K).
Steatoda albomaculata (De Geer, 1778)		2♀♀; Afaska, Talassemtane National Park; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; bare ground at the base of a rock face, under a stone, by hand. 1♀; Azilane, Talassemtane National Park; 35.18373°N, 5.19609°W; 1223 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; arid wasteland, under a stone, by hand. 2♀♀; Bab Taza, Talassemtane National Park, 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; dry grassland, under stones; at night by hand. 1♂; Oukaïmeden; 31.19616°N, 7.88083°W; 2292 m a.s.l.; 12 Apr 2023; S. Moutaouakil leg.; forest, by hand; 1 juv.; Tagleft; 32.26916°N, 6.25973°W; 1730 m a.s.l.; 11 Nov. 2023; S. Lecigne, S. Moutaouakil, B. Lips leg.; high altitude stony lawn, under stones, by hand.
Steatoda grossa (C. L. Koch, 1838)		2♀♀, 14 juv.; Chemaia, Laghoualem, Karkar cave; 32.18394°N, 8.68841°W; 9 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 2♂♂, 3♀♀, 8 juv.; Oualidia, Takkout cave; 32.72367°N, 8.98612°W; 96 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand. 1♀; Oualidia; 32.73202°N, 9.03819°W; 8 Nov. 2023; S. Lecigne leg.; seafront, under a stone in a garden, by hand.
**Steatoda ifricola* Lecigne, Lips, Moutaouakil & Oger, 2020		4♂♂, 16♀♀, 9 juv.; Aghlef, Taghzout Ait Sidi Moha cave; 32.30074°N, 6.05100°W; 11 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_ 0879. 1 juv.; Beni Mellal,

Family: Species	Number, gender, location, habitat, date
	Zemmour cave; 32.50956°N, 6.10354°W; 5 Aug. 2023; S. Moutaouakil; cave, by hand; ref. MOR_ 0931. 3 juv.; Ben Slimane, Sidi Yahya Zaer, Kehf El Baroud; 33.65715°N, 7.00779°W; 5 Nov. 2023; S. Moutaouakil leg.; cave, by hand. 3♂♂, 13♀♀, 10 juv.; Laghoualem, Hordaïfa; 33.44062°N, 6.68773°W; 6 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_0842, MOR_1437, MOR_1452, MOR_1453, MOR_1456. 1♂; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_0813 (Fig. 93A-C). 1♀, 17 juv.; Taza, Ifri N'ifis; 34.07844°N, 4.01938°W; 1373 m a.s.l.; 3 Aug. 2023; S. Moutaouakil leg.; cave, by hand; ref. MOR_0926. 3♂♂, 1♀, 4 juv.; Zegzel, "Grotte du Chameau" (Tasrrakkout, Zegzel); 34.83831°N, 2.35611°W; 457 m a.s.l.; 11 Aug. 2023; S. Moutaouakil leg.; cave, by hand; ref. MOR_0913. Comments: *Steatoda ifricola* was recently described from observations in three caves near Agadir (Lecigne et al. 2020). Lecigne et al (2023) added a new observation of the species in an underground environment (Sidi M'jber cave) in Taza, extending its range considerably (Moroccan Atlas Mountains). Recent observations confirm that the species is widely distributed even in the Orientale region (Zegzel) (Fig. 108). It is probably also present in Algeria, where it may be sought, particularly in the caves of the Tellian Atlas. The species is troglophilous; it should be noted that it was once found outside a cave, i.e. under a stone on a wooded slope at altitude.
**Steatoda koeni* Van Keer 2024	2♂♂, 7♀♀, 11 juv.; Aïn Louh, Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; cave, by hand; ref. MOR_0905 (Fig. 93D, F, K-N). 1♂, 1♀, 1 juv.; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand; det. J. van Keer, P. Oger; ref. MOR_1172 & MOR_1173 (Fig. 93E, G-J). Comments: *Steatoda koeni* is a Moroccan endemic species just recently described (Van Keer et al 2024) from the province of Ifrane (Azrou). We also discovered this species in *Quercus ilex* forest about 12 km from the type locality, as well as in a nearby cave. To date, the species seems to be restricted to a small area south of Azrou in the Moroccan Middle Atlas, at altitudes between 1800 m and 1950 m a.s.l. Figure 109 shows the location of the three known records of the species up to date (loc. typ. situated approximately).
Steatoda latifasciata (Simon, 1873)	1♀; Aïn Louh, surroundings of Ifri Ouska cave; 33.30243°N, 5.18625°W; 1867 m a.s.l.; 13 Nov. 2023; S. Lecigne leg.; scattered xeric grassland, under boulders, by hand; det. S. Lecigne, J. van Keer, ref. MOR_1171 (Fig. 94A-D).
Steatoda nobilis (Thorell, 1875)	1♀, 2 juv.; Bab Taza, Talassemtane National Park, Azilane gite, path to Jebel Tissouka; 35.17569°N, 5.19816°W; 1263 m a.s.l.; 7 Aug. 2024; S. Lecigne, P. Lips; on the outside wall of a building. 1 juv.; same locality; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; forest edge; at night by hand. 1♀; Oualidia; 32.73202°N, 9.03819°W; 8 Nov. 2023; S. Moutaouakil leg.; on the outside wall of a building, by hand. 1 juv.; Sidi Addi, Ifrane National Park; 33.32214°N, 5.22978°W; 1876 m a.s.l.; 12 Nov. 2023; S. Lecigne leg.; *Cedrus* forest, at the base of a trunk, at night by hand. 1 juv.; Skhirate-Temara; 33.95248°N, 6.92578°W; 19 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; line of palm trees beside a coastal road, under dried bark, by hand.
Steatoda paykulliana (Walckenaer, 1806)	1♂ sub. (*Steatoda* cf. *paykulliana*); Cap Beddouza; 32.56655°N, 9.24708 °W; 23 Jan. 2022; S. Moutaouakil leg.; sandy coastal slope, under a stone, by hand. 1♂, 3 juv.; Labehalil, Oued Rommane;

Family: Species		Number, gender, location, habitat, date
		34.08658°N, 5.67662°W, 188 m a.s.l.; 14 Nov. 2023; J. Lips leg.; stony wasteland, under a stone, by hand; ref. MOR_1491.
Steatoda triangulosa (Walckenaer, 1802)		1♀; Marrakech, Marrakech Natural History Museum; 31.65133°N, 8.00261°W; 10 Feb. 2022; S. Moutaouakil leg.; in a building, by hand. 1♀; idem; 4 Oct. 2022. 1 juv.; Marrakech, Palmeraie; 31.66163°N, 7.89212°W; 450 m a.s.l.; 26 Mar. 2023; S. Lecigne leg.; in a building, by hand.
Theridion wiehlei Schenkel, 1938	M	1♀; Talambote, Talassemtane National Park, 35.17552°N, 5.15312°W; 1339 m a.s.l.; 7 Aug. 2024; S. Lecigne, S. Moutaouakil, J. Lips; under a piece of wood by the side of a rocky mountain path; by hand; det. S. Lecigne, P. Oger, ref. MOR_1246 (Fig. 96I). Comments: this mediterranean species, already reported in Africa (Algeria) (Benhacene et al. 2023), is new to Morocco. About the distribution of the species and the relationship with *Theridion negebense* Levy & Amitai, 1982, see Breitling 2020.
Thomisidae		
Bassaniodes bufo (Dufour, 1820)		1♀; Demnate; 31.78943°N, 7.03916°W; 753 m a.s.l.; 30 Jan. 2024; S. Lecigne leg.; olive grove, under a stone, by hand; ref. MOR_1198 (Fig. 94E).
Bassaniodes lalandei (Audouin, 1826)		1♂; Oukaïmeden; 31.22789°N, 7.82222°W; 2330 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; rocky undergrowth on a slope, under a stone, by hand; ref. MOR_1035.
Ozyptila judaea Levy, 1975	M	2♂♂; Afaska, Talassemtane National Park; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; base of a rock face, under a stone (bare, thermophilic stony area), by hand; det. S. Lecigne, P. Oger; ref. MOR_1331 (Fig. 98E-H). Comments: to date, *Ozyptila judaea* was only known from Central and southern Israel (sand dunes; Judean Hills…) and Egypt (Sinai Mountains) (Levy 1991; WSC 2025). The recent observations considerably extend its range westwards. The species is new to Morocco.
Tmarus staintoni (O. Pickard-Cambridge, 1873)	M	3 juv. (one ♂ raised to maturity); Amezmiz, Azgour; 31.18904°N, 8.26655°W; 1687 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; rocky slope, in dead shrub branches, beating; ref. MOR_1209 (Fig. 94F-H). The genus and the species are new to Morocco.
Xysticus kochi Thorell, 1872		1♂; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May 2022; S. Moutaouakil leg.; high altitude lawn, along a stream, by hand; ref. MOR_0707 (Fig. 94I-J). 1♂; idem; 31.20603°N, 7.85575°W; 2600 m a.s.l.; 31 Mar. 2023; S. Lecigne, S. Moutaouakil, K. Lecigne leg.; high altitude lawn, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_0824. Comments: *X. kochi* is widespread, from Europe to Central Asia (WSC 2025). Its presence on the alpine lawn of Oukaïmeden constitutes the second citations of the species for Morocco since Simon (1932).
Xysticus nubilus Simon, 1875		1♂; Oukaïmeden; 31.20572°N, 7.85467°W; 2600 m a.s.l.; 10 May 2022; S. Moutaouakil leg.; high altitude lawn, along a stream, by hand; det. S. Lecigne, P. Oger; ref. MOR_0708 (Fig. 94K-L).
Xysticus tortuosus Simon, 1932		1♀; Chefchaouen, Azilane, Talassemtane National Park; 35.18054°N, 5.20225°W; 1306 m a.s.l.; 10 Aug. 2024; S. Lecigne leg.; mixed oak and pine forest, under a stone, by hand; det. P. Oger, S. Lecigne; ref. MOR_1301 (Fig. 97L-M). Comments: the record from Talassemtane National Park is the second citation of the species for Morocco (see Simon 1932).
Uloboridae		
Hyptiotes flavidus (Blackwall, 1862)	M	2♂♂, 6♀♀; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, in branches, at night by hand; det. S. Lecigne, P. Oger; ref. MOR_0984 (Fig. 94M-P). The species is new to Morocco.
Uloborus plumipes Lucas, 1846		1♀; Bab Taza, Talassemtane National Park, 35.18018°N, 5.19600°W;

Family: Species		Number, gender, location, habitat, date
		1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; forest edge; at night by hand. 1 juv.; Beni Mellal; 32.32076°N, 6.34252°W; 678 m a.s.l.; 10 Nov. 2023; S. Lecigne leg.; rocky slope, by hand; ref. MOR_1071. 1♀; Essaouira; 31.46758°N, 9.75723°W; 24 m a.s.l.; 19 Jan. 2022; S. Moutaouakil leg.; wooded sandy coastal dune, by hand; ref. MOR_0560 (Fig. 95A, C). 1 juv.; Laghoualem, Cercle de Rommani, Hordaïfa cave; 33.44062°N, 6.68773°W; 6 Nov. 2023; J. Lips leg.; cave, by hand; ref. MOR_ 0850 (Fig. 95B). 7 juv.; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips, J.-P. Dégletagne, L. Barriguand leg.; shrubby, rocky slope of a former olive grove, in branches, at night by hand; ref. MOR_0978. 2♀♀; Talambote, Talassemtane National Park, Kehf Bradâa; 35.19496°N, 5.18005°W, 843 m a.s.l.; 8 Aug. 2024; S. Lecigne, P. Lips leg.; cave, by hand. 1♂, 6♀♀, 4 juv.; Zegzel, "Grotte du Chameau" (Tasrrakkout, Zegzel); 34.83831°N, 2.35611°W; 457 m a.s.l.; 11 Aug. 2023; S. Moutaouakil leg.; cave, by hand; ref. MOR_0914. These are the second citations of the species for Morocco since Denis (1956).
Uloborus walckenaerius Latreille, 1806		1♀; Talambote, Azilane, Talassemtane National Park; 35.18342°N, 5.19653°W, 1238 m a.s.l.; 9 Aug. 2024; S. Lecigne leg.; shrubby meadow, beating.
Zodariidae		
Amphiledorus histrionicus (Simon, 1885)	M	1♂; Ben Slimane, Sidi Yahya Zaer, near the entrance to Kehf El Baroud cave; 33.65715°N, 7.00779°W; 161 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; stony slope, under a stone, by hand; det. S. Lecigne, P. Oger; ref. MOR_0964, deposited in SMF (Fig. 95D-G). The species is new to Morocco.
Selamia reticulata (Simon, 1870)		1♀; Amezmiz, Azgour; 31.17193°N, 8.27277°W; 1675 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0361 (Fig. 95H-I). 1♀; idem; 31.16837°N, 8.27631°W; 1682 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand; ref. MOR_1213. 1♀; Azgour; 31.19565°N, 8.25028°W; 1670 m a.s.l.; 17 Jan. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0644. 1♀; Idem, Tamadout; 31.20088°N, 7.97729°W; 1575 m a.s.l.; 12 Jun. 2022; S. Moutaouakil leg.; forest, by hand; ref. MOR_0675.
* *Zodarion azrouense* Bosmans & Benhalima, 2020		See in the text (Fig. 67).
Zodarion camillae* Lecigne **sp. nov.	S	See in the text (Fig. 68).
Zodarion ghamizii* Lecigne & Moutaouakil **sp. nov.	S	See in the text (Fig. 69).
Zodarion legrouni* Lecigne & Lips **sp. nov.	S	See in the text (Fig. 70).
Zodarion maghrebense Bosmans & Benhalima, 2020		1♀; Afaska, Talassemtane National Park; 35.16712°N, 5.18601°W; 1237 m a.s.l.; 11 Aug. 2024; S. Lecigne leg.; bare rocky ground at the base of rock faces, under leaves of *Verbascum* sp., by hand; det. S. Lecigne, P. Oger; ref. MOR_1332 (Fig. 98J-K). 5♂♂, 2♀♀; Bab Taza, Talassemtane National Park; 35.18018°N, 5.19600°W; 1260 m a.s.l.; 12 Aug. 2024; S. Lecigne leg.; dry lawn, at night by hand; det. S. Lecigne; ref. MOR_1398.
Zoropsidae		
Zoropsis bilineata Dahl, 1901		1♀; Azgour; 31.16837°N, 8.27631°W; 1682 m a.s.l.; 1 Feb. 2024; S. Lecigne leg.; shrubby rocky slope, under a stone, by hand; ref. MOR_1218 (Fig. 96D). 1♂; Boulaouane, Oued Oum Rbia; 32.85946°N, 8.04434°W; 97 m a.s.l.; 7 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; on the bank of a wadi, under a pebble, by hand; det. S. Lecigne, B. Thaler-Knoflach; ref. MOR_1001 (Fig. 96A-C). 1♀; Mesfioua-Zat, Timzilite river; 31.49219°N, 7.53897°W; 906 m a.s.l.; 7 Oct. 2022; N. Fetnassi leg.; along a river, beaked trap; det. S. Lecigne, P. Oger; ref. MOR_0511 (Fig. 96E-F).

Family: Species	Number, gender, location, habitat, date
Zoropsis media Simon, 1878	1♀; Aïn Louh, Ifrane National Park; 33.25659°N, 5.34221°W; 1697 m a.s.l.; 12 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; mixed *Cedrus* and *Quercus ilex* forest, in leaf litter, sieving; ref. MOR_1104 (Fig. 96G-H). 1♀; Azilane, Talassemtane National Park, Kehf del Oued en Naker; 35.18524°N, 5.19442°W; 1255 m a.s.l.; 9 Aug. 2024; B. Lips leg.; cave, by hand. 6♂♂, 4♀♀, 1 juv.; Timhadit; 33.35496°N, 5.14346°W; 1951 m a.s.l.; 13 Nov. 2023; S. Lecigne, S. Moutaouakil, J. Lips, B. Lips leg.; forest edge of *Quercus ilex*, under stones and in leaf litter, at night by hand; ref. MOR_1174.
Zoropsis spinimana (Dufour, 1820)	1♀; Skhirate-Temara, near Oued Cherrat; 33.81464°N, 7.10829°W; 32 m a.s.l.; 5 Nov. 2023; S. Lecigne leg.; shrubby, rocky slope of a former olive grove, under a stone, at night by hand; ref. MOR_0973.

Figures for either new to Morocco or rarely recorded species

Many of the species mentioned in the table above are illustrated in the following plates. Most of these species are either new to Africa or to Morocco or are rarely recorded. Figures 102-109 show the distribution maps of several species.

Figure 71: A-D. *Lycosoides instabilis*, female. **A-B.** Dorsal view. **C.** Epigyne. **D.** Vulva, dorsal view. **E-G.** *Tegenaria pagana*, female. **E.** Dorsal view. **F.** Epigyne. **G.** Vulva, dorsal view. **H-I.** *Amaurobius barbarus*, female. **H.** Epigyne. **I.** Vulva, ventral view. **J-K.** *Anyphaena numida*, female. **J.** Epigyne. **K.** Vulva, dorsal view. **L-M.** *Cyclosa insulana*, female. **L.** Dorsal view. **M.** Epigyne. Photos © A S. Lecigne; B-D, F-M P. Oger; E J. Lips. Scale bars: B = 3.0 mm; L = 2 mm; C, H = 0.5 mm; D, F-G, I-K, M = 0.2 mm.

Figure 72: A-B. *Larinia lineata*, female. **A.** Dorsal view. **B.** Epigyne. **C-E.** *Larinioides sclopetarius*, female. **C.** Dorsal view. **D.** Epigyne. **E.** Vulva, dorsal view. **F-G.** *Brigittea civica*, female. **F.** Epigyne. **G.** Vulva, dorsal view. **H.** *Cesonia* sp., juv., dorsal view. **I-L.** *Drassodes luteomicans*, female. **I.** Dorsal view. **J.** Ventral view. **K.** Epigyne. **L.** Vulva, dorsal view. **M-N.** *Gnaphosa alacris*, female. **M.** Dorsal view. **N.** Epigyne. Photos © A-B, H S. Lecigne; C-N P. Oger. Scale bars: C, I-J = 3.0 mm; M = 2 mm; D-E = 0.5 mm; F, K-L, N = 0.2 mm; G = 0.1 mm.

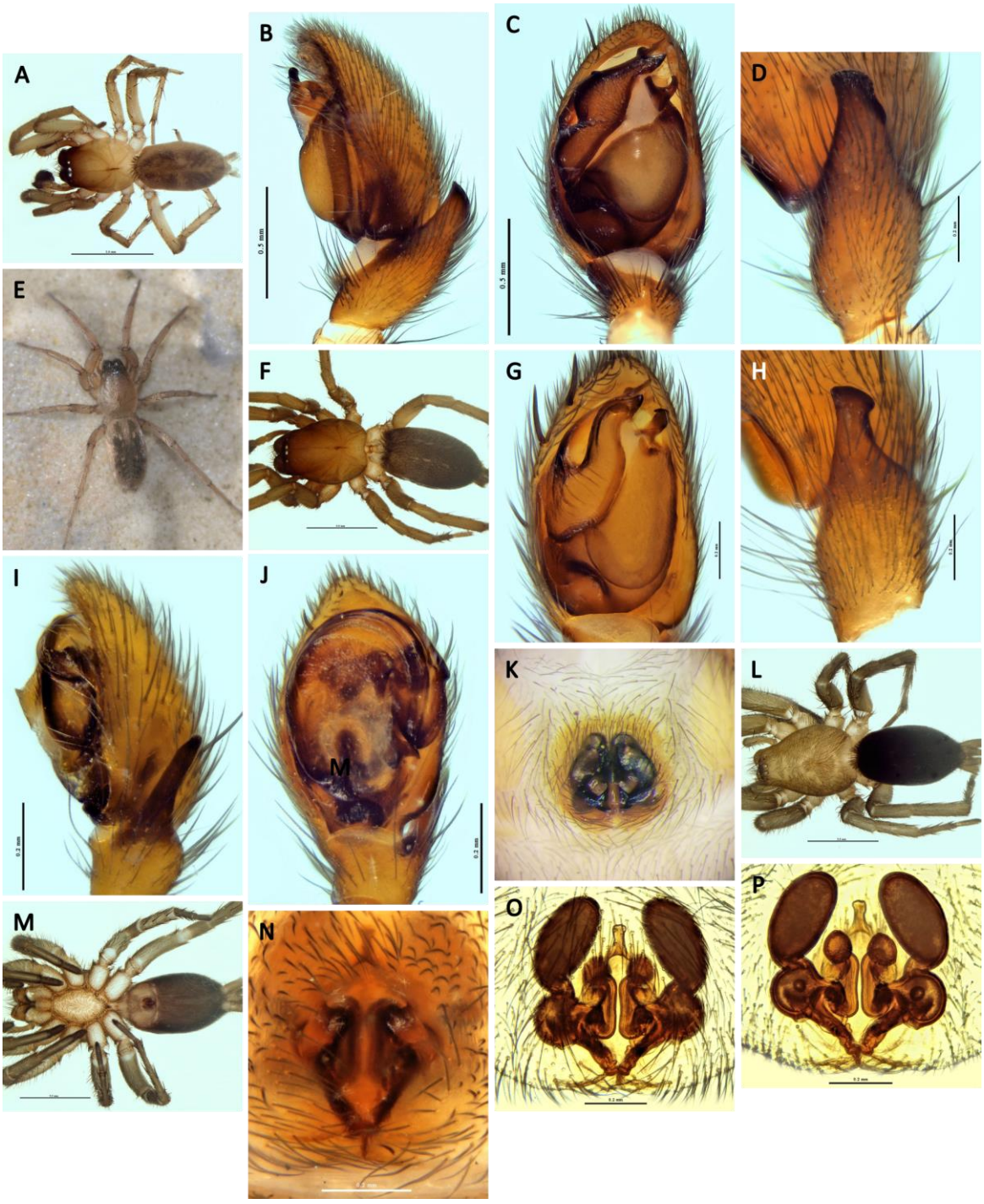


Figure 73: A-D. *Haplodrassus omissus*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Tibial apophysis, dorsal view. **E.** *Haplodrassus omissus*, female, dorsal view. **F-H.** *Haplodrassus signifer*, male. **F.** Dorsal view. **G.** Palp, retrolateral view. **H.** Retrolateral tibial apophysis. **I-J.** *Marinarozelotes fuscipes*, male. **I.** Palp, retrolateral view. **J.** Idem, ventral view. **K.** *Nomisia aussereri*, female, epigyne. **L-P.** *Scotophaeus nanoides*, female. **L.** Dorsal view. **M.** Ventral view. **N.** Epigyne. **O.** Vulva, ventral view. **P.** Vulva, dorsal view. Photos © E, K S. Lecigne; A-D, F-J, L-P P. Oger. Scale bars: A, F, L-M = 3.0 mm; B-C = 0.5 mm; D, G-J, N-O = 0.2 mm.

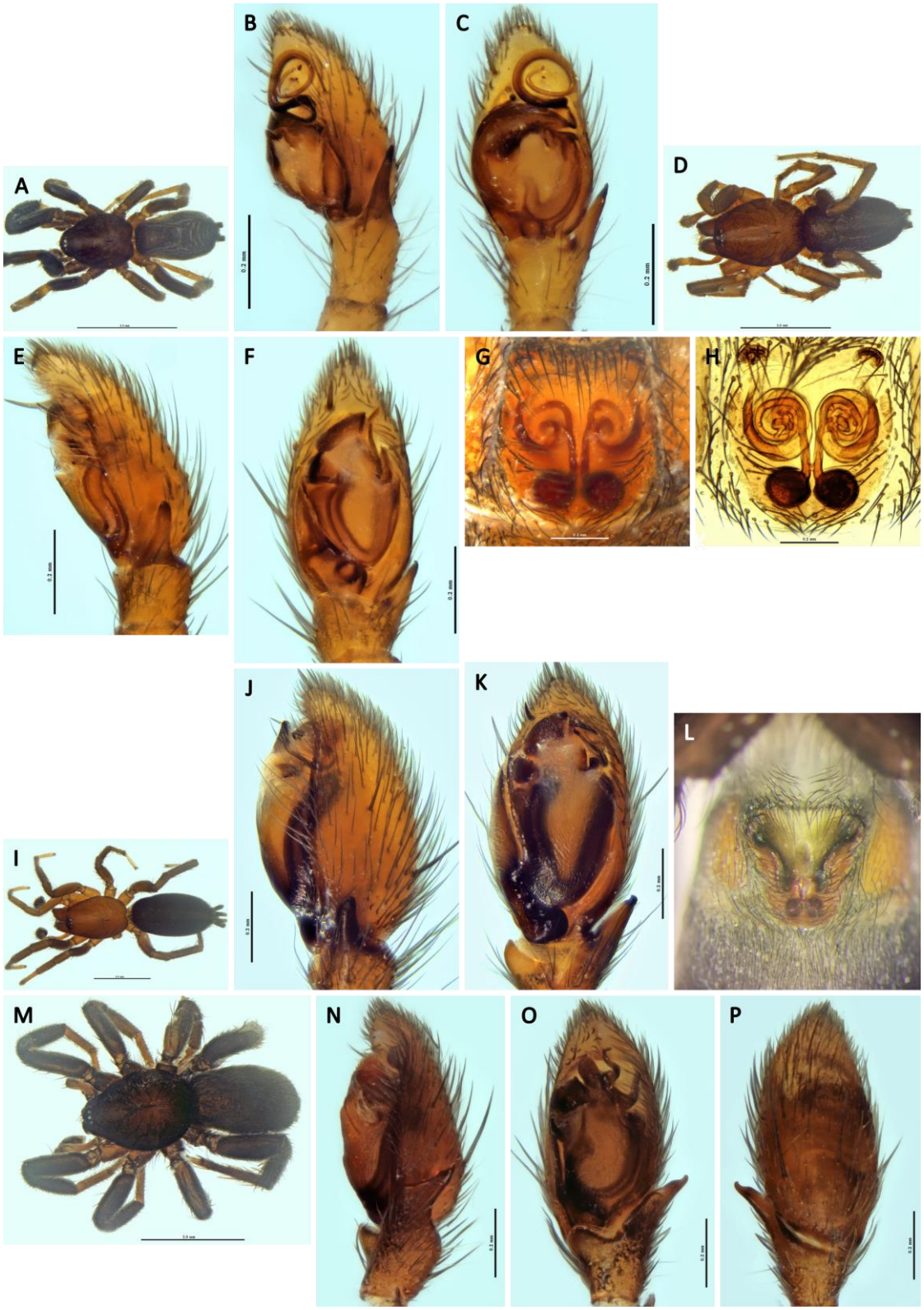


Figure 74: A-C. *Setaphis carmeli*, male. **A.** Dorsal view. **B.** Palp, ventro-retrolateral view. **C.** Idem, ventral view. **D-F.** *Zelotes laetus*, male. **D.** Dorsal view. **E.** Palp, retrolateral view. **F.** Idem, ventral view. **G-H.** *Zelotes pediculatus*, female. **G.** Epigyne. **H.** Vulva, ventral view. **I-K.** *Zelotes scrutatus*, male. **I.** Dorsal view. **J.** Palp, retrolateral view. **K.** Idem, ventral view. **L.** *Zelotes spadix*, female, epigyne. **M-P.** *Zelotes tragicus*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, dorsal view. Photos © L S. Lecigne; A-K, M-P P. Oger. Scale bars: A, D, I, M = 2 mm; B-C, E-H, J-K, N-P = 0.2 mm.

Figure 75: A-C. *Hahnia nava*, female. **A.** Dorsal view. **B.** Epigyne. **C.** Vulva, dorsal view. **D-F.** *Iberina candida*, male. **D.** Dorsal view. **E.** Palp, retrolateral view. **F.** Idem, ventral view. **G-J.** *Hersiliola simoni*, male. **G.** Dorsal view. **H.** Palp, retrolateral view. **I.** Idem, ventral view. **J.** Idem, ventro-prolateral view. **K-M.** *Tama edwardsi*, female. **K.** Dorsal view. **L.** Ventral view. **M.** Vulva, dorsal view. Photos © P. Oger. Scale bars: G, K-L = 2 mm; A = 1 mm; D, H-I = 0.5 mm; J = 0.2 mm; B-C, E-F, M = 0.1 mm.

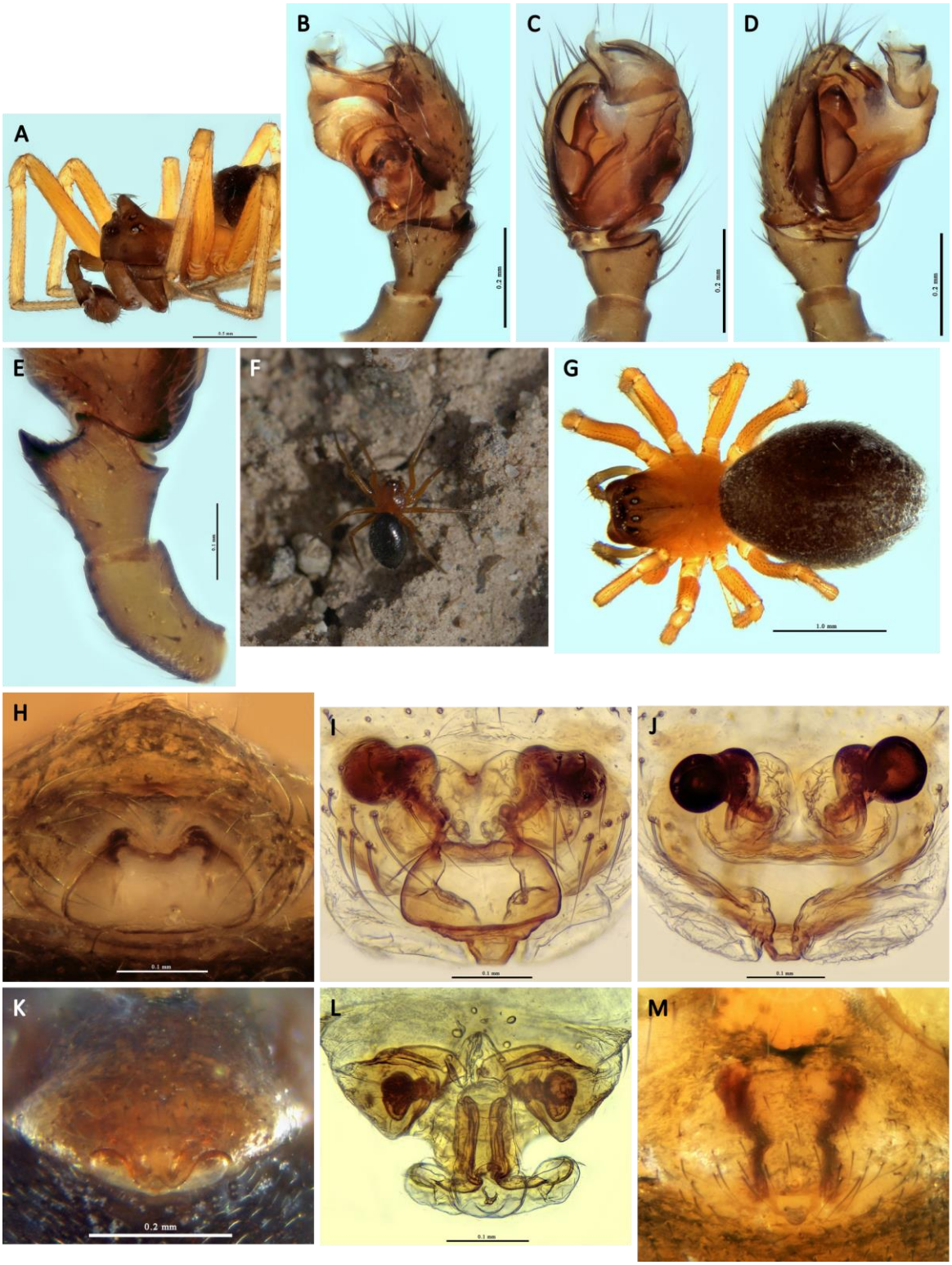


Figure 76: A-J. *Acartauchenius mutabilis.* **A.** Male, retro-frontal view. **B.** Male, palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, prolateral view. **E.** Tibial apophysis, dorsal view. **F-G.** Female, dorsal view. **H.** Epigyne. **I.** Vulva, ventral view. **J.** Idem, dorsal view. **K-L.** *Agyneta pseudorurestris*, female. **K.** Epigyne. **L.** Vulva, dorsal view. **M.** *Bathyphantes gracilis*, female, epigyne. Photos © F S. Lecigne; A-E, G-M P. Oger. Scale bars: G = 1 mm; A = 0.5 mm; B-D, K = 0.2 mm; E, H-J, L = 0.1 mm.

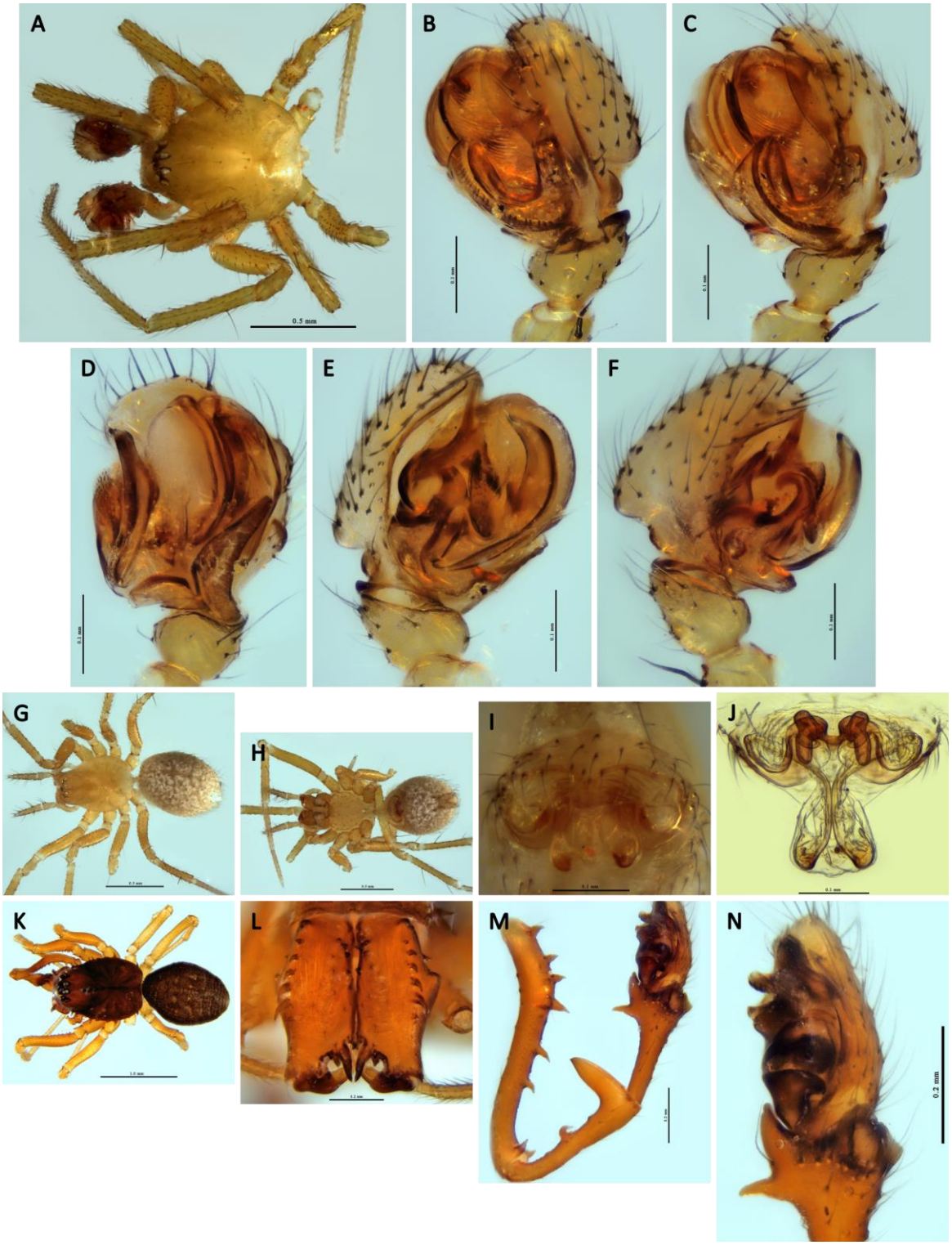


Figure 77: A-J. *Centromerus cinctus.* **A.** Male, prosoma, dorsal view. **B.** Male, palp, dorso-retrolateral view. **C.** Male, palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, ventro-prolateral view. **F.** Idem, prolateral view. **G.** Female, dorsal view. **H.** Idem, ventral view. **I.** Epigyne. **J.** Vulva, dorsal view. **K-N.** *Erigone dentosa*, male. **K.** Dorsal view. **L.** Chelicerae, frontal view. **M-N.** Palp, retrolateral view. Photos © P. Oger. Scale bars: K = 1 mm; A, G-H = 0.5 mm; L-M = 0.2 mm; B-F, I-J = 0.1 mm.

Figure 78: A-C. *Gonatium dayense*, female. **A.** Dorsal view. **B.** Epigyne. **C.** Vulva, dorsal view. **D.** *Lepthyphantes minutus*, male, palp, retrolateral view. **E-H.** *Lepthyphantes soumiae*, female. **E.** Dorsal view. **F.** Ventral view. **G.** Epigyne, ventral view. **H.** Idem, lateral view. **I-N.** *Lepthyphantes taza*, male. **I.** Dorsal view. **J.** Palp, retrolateral view. **K.** Idem, ventro-retrolateral view. **L.** Idem, ventral view. **M.** Idem, ventro-prolateral view. **N.** Idem, prolateral view. Photos © D S. Lecigne; A-C, E-N P. Oger. Scale bars: E = 2 mm; A, F, I = 1 mm; B, G-H, J-N = 0.2 mm; C = 0.1 mm.

Figure 79: A-C. *Lessertia barbara.* **A.** Male, dorsal view. **B.** Female, ventral view, epigyne. **C.** Idem, cocoons. **D-J.** *Mermessus denticulatus*, female. **D.** Dorsal view. **E.** Ventral view. **F.** Lateral view. **G.** Frontal view. **H.** Epigyne, ventral view. **I.** Epigyne, posterior view. **J.** Vulva, dorsal view. **K-L.** *Trichopterna cito*, female. **K.** Dorsal view. **L.** Epigyne. Photos © A S. Moutaouakil; B B. Lips; C J. Lips; D-L P. Oger. Scale bars: D, F = 2 mm; E = 1 mm; G, K = 0.5 mm; H-J, L = 0.1 mm.

Figure 80: A-N. *Palliduphantes cadiziensis.* **A.** Male, dorsal view. **B.** Male, palp, postero-retrolateral view. **C.** Idem, postero-ventro-retrolateral view. **D.** Idem, postero-ventral view. **E.** Idem, postero-ventro-prolateral view. **F.** Idem, postero-prolateral view. **G-H.** Female, dorsal view. **I-J.** Idem, ventral view. **K.** Epigyne, ventral view. **L.** Idem, lateral view. **M.** Idem, posterior view. **N.** Vulva, dorsal view. Photos © G, I J. Lips; A-F, H, J-N P. Oger. Scale bars: B, H = 1 mm; J = 0.5 mm; C-F, K-N = 0.1 mm.

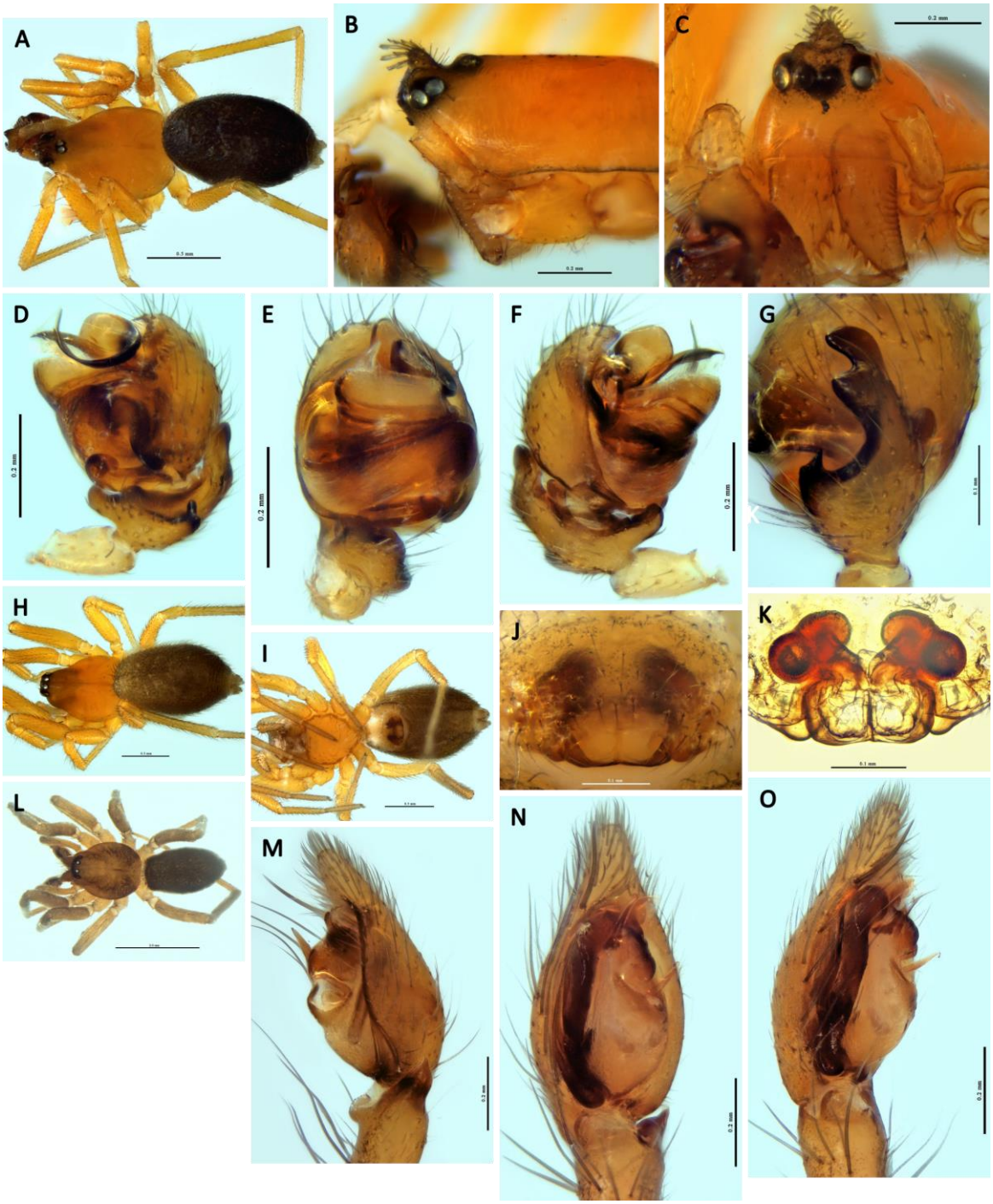


Figure 81: A-N. *Walckenaeria erythrina*. **A.** Male, dorsal view. **B.** Male, prosoma, lateral view. **C.** Idem, frontal view. **D.** Male, palp, retrolateral view. **E.** Idem, ventral view. **F.** Idem, prolateral view. **G.** Idem, tibial apophysis, dorsal view. **H.** Female, dorsal view. **I.** Idem, ventral view. **J.** Epigyne. **K.** Vulva, dorsal view. **L-O.** *Mesiotelus mauritanicus.* **L.** Male, dorsal view. **M.** Male, palp, retrolateral view. **N.** Idem, ventral view. **O.** Idem, prolateral view. Photos © P. Oger. Scale bars: L = 2 mm; A, H-I = 0.5 mm; B-F, M-O = 0.2 mm; G, J-K = 0.1 mm.

Figure 82: A-B. *Scotina celans*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C-D.** *Arctosa similis*, female. **C.** Dorsal view. **D.** Epigyne. **E-H.** *Hogna ferox*, female. **E-F.** Female, dorsal view. **G.** Epigyne. **H.** Vulva, dorsal view. **I-O.** *Pardosa morosa*. **I.** Male, dorsal view. **J.** Male, palp, retrolateral view. **K.** Idem, ventral view. **L.** Idem, prolateral view. **M.** Female, dorsal view. **N.** Vulva, ventral view. **O.** Idem, dorsal view. Photos © A-F S. Lecigne; G-O P. Oger. Scale bars: I = 3 mm; M = 2 mm; G-H, J = 0.5 mm; K-L, N-O = 0.2 mm.

Figure 83: A-J. *Pardosa gefsana.* **A-B.** Male, dorsal view. **C.** Male, palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, prolateral view. **F-G.** Female, dorsal view. **H.** Idem, ventral view. **I.** Epigyne. **J.** Vulva, dorsal view. **K-L.** *Wadicosa fidelis*, male. **K.** Dorsal view. **L.** Palp, ventral view. **M-O.** *Uroctea durandi*, female. **M.** Dorsal view. **N.** Ventral view. **O.** Epigyne. Photos © A, F, K, M-O S. Lecigne; B-E, G-J, L P. Oger. Scale bars: B, G-H = 3 mm; C-E, L = 0.5 mm; I-J = 0.2 mm.

Figure 84: A-B. *Silhouettella loricatula*, female. **A.** Dorsal view. **B.** Vulva, dorsal view. **C-D.** *Thanatus fabricii*, female. **C.** Dorsal view. **D.** Vulva, dorsal view. **E-L.** *Thanatus setiger*. **E.** Male, dorsal view. **F.** Idem, ventral view. **G.** Palp, retrolateral view. **H.** Idem, ventral view. **I.** Idem, prolateral view. **J.** Female, dorsal view. **K.** Epigyne. **L.** Vulva, dorsal view. **M-P.** *Holocnemus caudatus*, female. **M.** Dorsal view. **N.** Abdomen, ventral view. . **O.** Epigyne. **P.** Vulva, dorsal view. Photos © C-D S. Lecigne; A-B, E-P P. Oger. Scale bars: E-F, J, M-N = 2 mm; A, O-P = 0.5 mm; G-I, K = 0.2 mm; B, L = 0.1 mm.

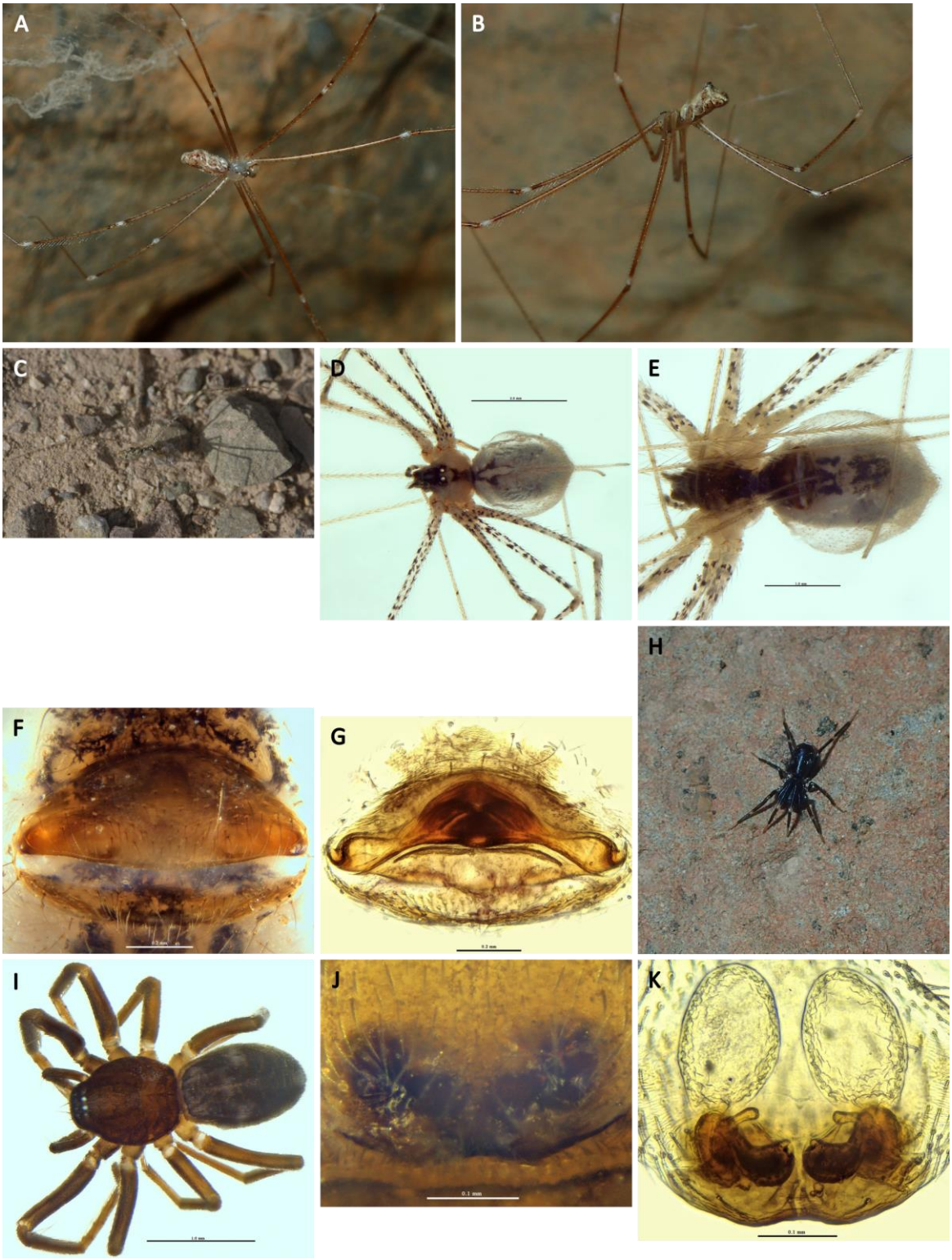


Figure 85: A-B. *Holocnemus reini*, male. **A.** Dorsal view. **B.** Lateral view. **C-G.** *Maghreba gharbija*, female. **C-D.** Dorsal view. **E.** Ventral view. **F.** Epigyne. **G.** Vulva, dorsal view. **H.** *Liophrurillus flavitarsis*, juv., dorsal view. **I-K.** *Phrurolithus nigrinus*, female. **I.** Dorsal view. **J.** Epigyne. **K.** Vulva, dorsal view. Photos © A-B, H J. Lips; C S. Lecigne; D-G, I-K P. Oger. Scale bars: I = 1 mm; D = 2 mm; E = 1 mm; F-G = 0.2 mm; J-K = 0.1 mm.

Figure 86: A-F. *Prodidomus amaranthinus*, male. **A.** Dorsal view. **B.** Ventral view. **C.** Palp, retrolateral view. **D.** Idem, ventral view. **E.** Idem, prolateral view. **F.** Idem, tibial apophysis, retrolateral view. **G-O.** *Aelurillus basseleti*, male. **G-H.** Dorsal view. **I.** Frontal view. **J.** Palp, retrolateral view. **K.** Idem, ventral view. **L.** Idem, prolateral view. **M.** Embolic division, dorsal view. **N.** Idem, ventro-prolateral view. Photos © G S. Lecigne; A-F, H-N P. Oger. Scale bars: H = 2 mm; A-B = 1 mm; I = 0.5 mm; C-E, J-L = 0.2 mm; F = 0.1 mm.

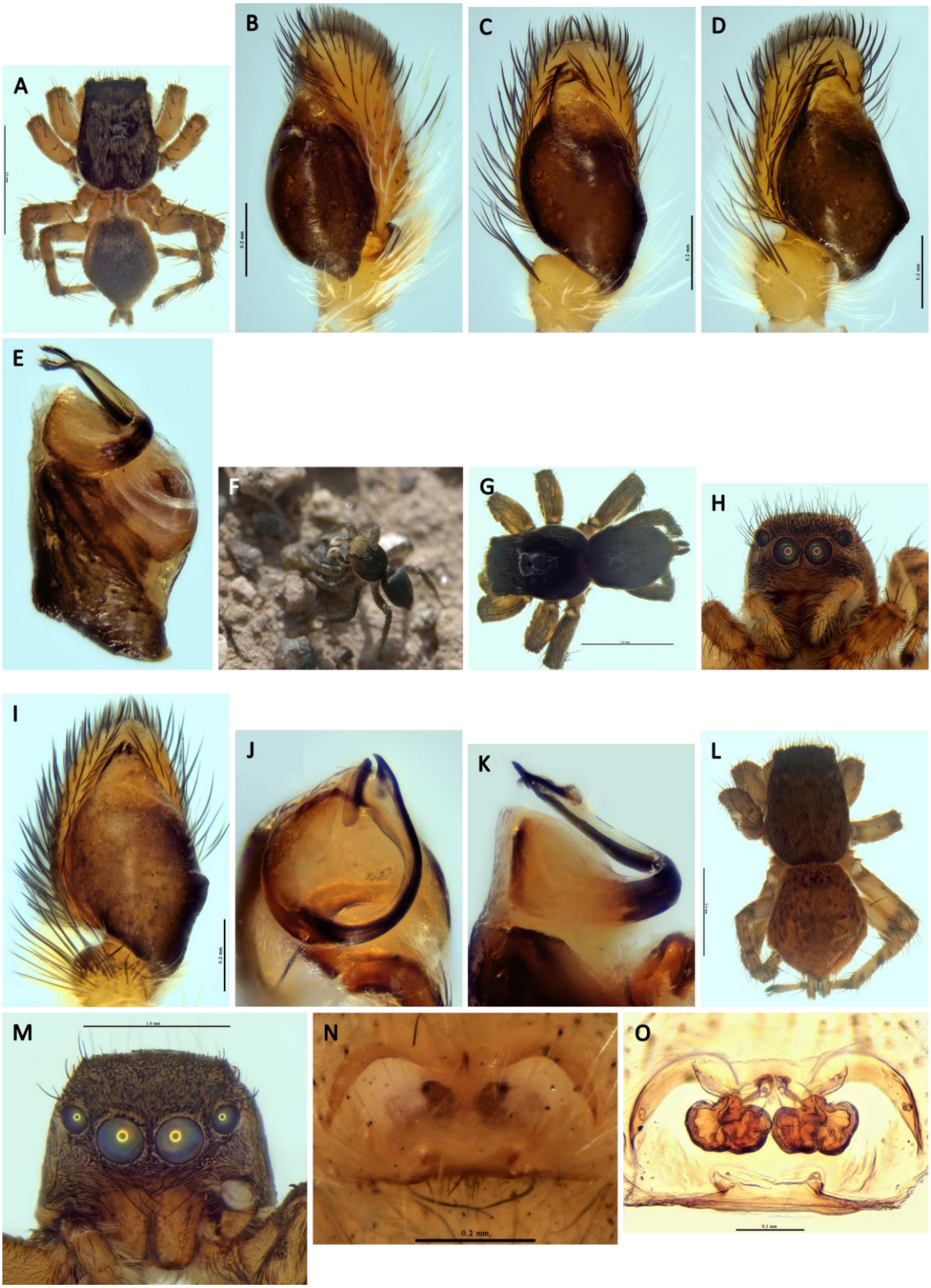


Figure 87: A-F. *Aelurillus blandus*, male. **A.** Dorsal view. **B.** Palp, ventro-retrolateral view. **C.** Idem, ventral view. **D.** Idem, ventro-prolateral view. **E.** Embolic division, dorso-retrolateral view. **F-P.** *Aelurillus luctuosus.* **F-G.** Male, dorsal view. **H.** Idem, frontal view. **I.** Palp, ventral view. **J.** Embolic division, anterior view. **K** Idem, retrolateral view. **L.** Female, dorsal view. **M.** Idem, frontal view. **N.** Epigyne. **O.** Vulva, dorsal view. Photos © F S. Lecigne; A-E, G-O P. Oger. Scale bars: A, H, M = 2 mm; N = 1 mm; B-D, J, O = 0.2 mm; P = 0.1 mm.

Figure 88: A. *Chalcoscirtus infimus*, female, vulva, dorsal view. **B-H.** *Euophrys gambosa*, male. **B.** Dorsal view. **C.** Ventral view. **D.** Frontal view. **E.** Male, palp, retrolateral view. **F.** Idem, ventral view. **G.** Idem, ventro-prolateral view. **H.** Idem, tibial apophysis, retrolateral view. **I-K.** *Heliophanus machaerodus*, female. **I.** Dorsal view. **J.** Epigyne. **K.** Vulva, dorsal view. **L-M.** *Plexippus paykulli*, male. **L.** Dorsal view. **M.** Male, palp, retrolateral view. **N-O**. *Salticus propinquus*, male. **N.** Palp, retrolateral view. **O.** Idem, ventro-prolateral view. Photos © N-O S. Lecigne; A-M P. Oger. Scale bars: L = 3 mm; I = 2 mm; B-C = 1 mm; D, M = 0.5 mm; E-G, J = 0.2 mm, A, K = 0.1 mm.

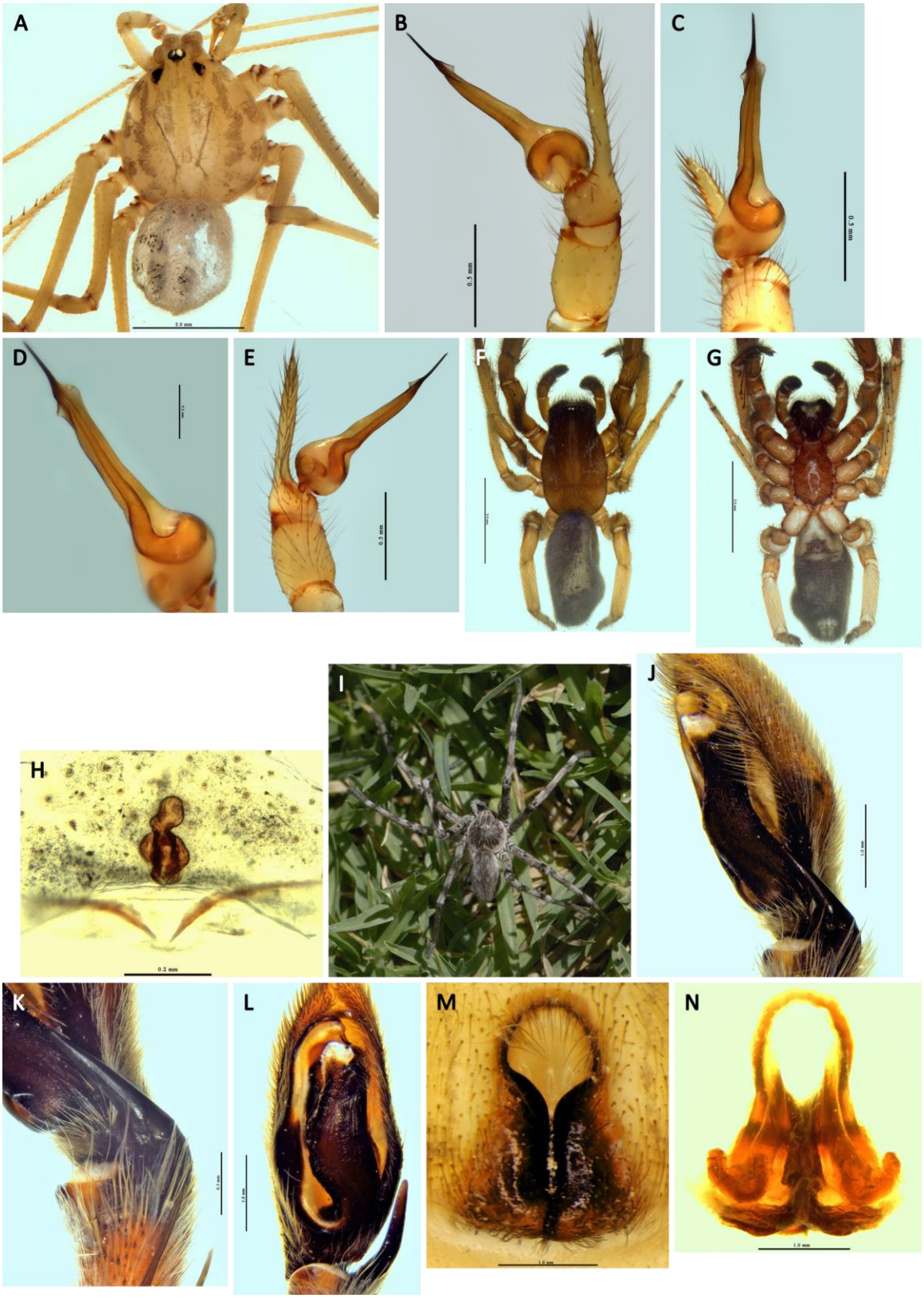


Figure 89: A-E. *Scytodes univittata*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Bulb, ventral view. **E.** Palp, ventro-prolateral view. **F-H.** *Ariadna* sp., female. **F.** Dorsal view. **G.** Ventral view. **H.** Vulva, dorsal view. **I-N.** *Eusparassus fritschi.* **I.** Male, dorsal view. **J.** Male, palp, retrolateral view. **K.** Idem, tibial apophysis, retrolateral view. **L.** palp, ventral view. **M.** Female, epigyne. **N.** Idem, vulva, dorsal view. Photos © I S. Lecigne; A-H, J-N P. Oger. Scale bars: F-G = 3 mm; A = 2 mm; J, L-N = 1 mm; B-C, E, K = 0.5 mm; D, H = 0.2 mm.

Figure 90: A-B. *Metellina segmentata.* **A.** Male, palp, ventral view. **B.** Female, vulva, dorsal view. **C-E.** *Tetragnatha nitens.* **C.** Male, chelicera, ventral view. **D.** Female, dorsal view. **E.** Idem, vulva, dorsal view. **F-M.** *Ischnocolus elongatus.* **F.** Male, labium. **G.** Idem, palp, retrolateral view. **H.** Idem, ventral view. **I.** Idem, prolateral view. **J-K.** Female, dorsal view. **L.** Idem, burrow. **M.** Vulva, dorsal view. **N-O.** *Ischnocolus valentinus*, female. **N.** Labium. **O.** Vulva, dorsal view. Photos © J, L S. Moutaouakil; A-I, K, M-O P. Oger. Scale bars: D, K = 3 mm; F, N = 2 mm; G-I, M = 1 mm; C, O = 0.5 mm; A-B, E = 0.2 mm.

Figure 91: A-C. *Enoplognatha diversa*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Chelicera, ventral view. **D-H.** *Enoplognatha franzi*, female. **D.** Dorsal view. **E.** Ventral view. **F.** Epigyne. **G.** Vulva, ventral view. **H.** Idem, dorsal view. **I-L.** *Lasaeola testaceomarginata*, male. **I.** Dorsal view. **J.** Palp, retrolateral view. **K.** Idem, ventral view. **L.** Idem, prolateral view. **M-O.** *Latrodectus dahli*, female. **M.** Prosoma, dorsal view. **N.** Epigyne. **O.** Vulva, dorsal view. **P.** *Parasteatoda tepidariorum*, female, epigyne. Photos © P. Oger. Scale bars: A, D-E = 2 mm; N = 1 mm; C, I, O = 0.5 mm; F, P = 0.2 mm; B, G-H, J-L = 0.1 mm.

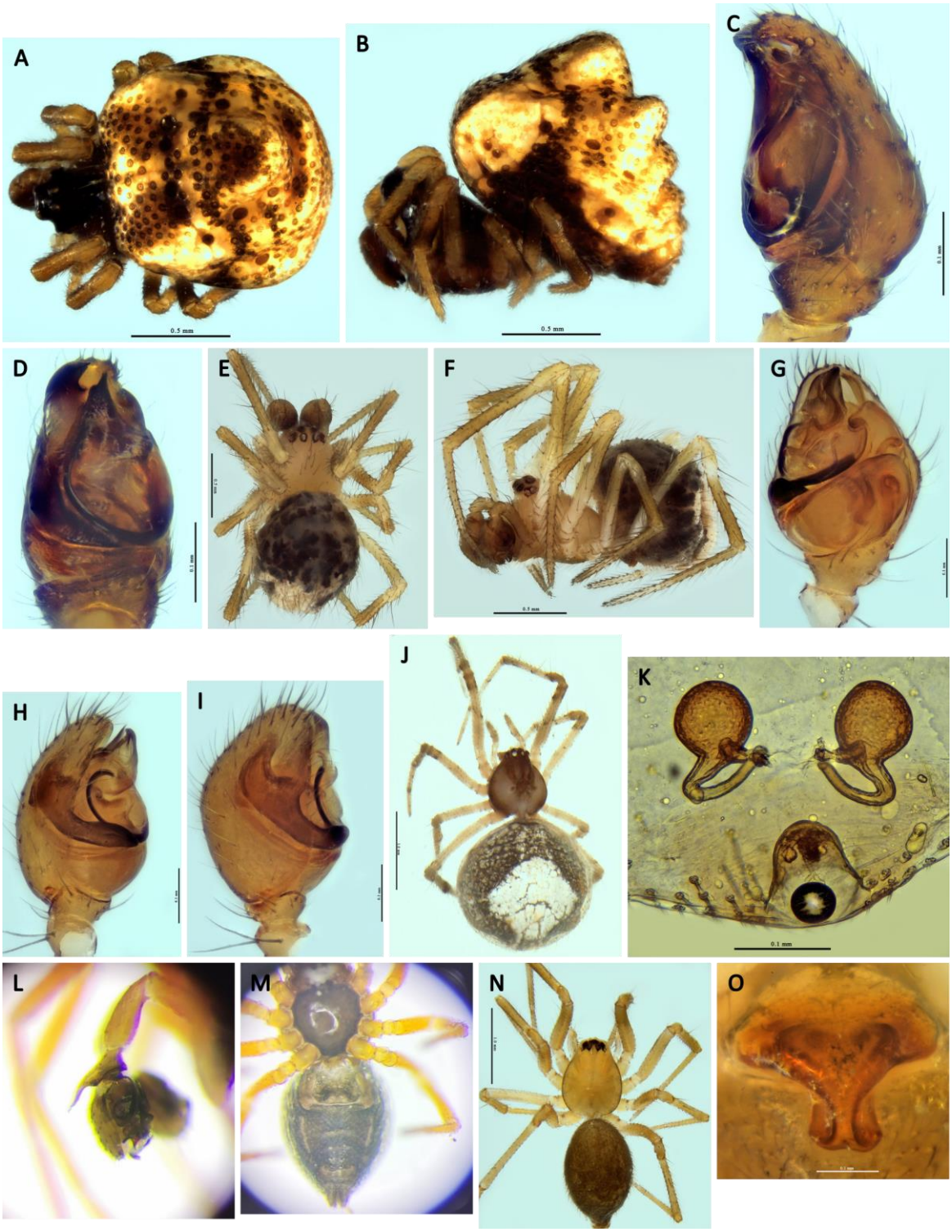


Figure 92: A-D. *Phoroncidia paradoxa*, male. **A.** Dorsal view. **B.** Lateral view. **C.** Palp, ventro-retrolateral view. **D.** Idem, ventral view. **E-I.** *Ruborridion musivum*, male. **E.** Dorsal view. **F.** Lateral view. **G.** Palp, ventral view. **H.** Idem, prolateral view **I.** Idem, dorso-prolateral view. **J-K.** *Simitidion lacuna*, female. **J.** Dorsal view. **K.** Vulva, dorsal view. **L-M.** *Pelecopsis inedita.* **L.** Male, palp, retrolateral view. **M.** Female, ventral view, epigyne. **N-O.** *Sintula furcifer*, female. **N.** Dorsal view. **O.** Epigyne. Photos © L-M S. Lecigne; A-K, N-O P. Oger. Scale bars: J, N = 1 mm; A-B, E-F = 0.5 mm; C-D, G-I, K, O = 0.1 mm.

Figure 93: A-C. *Steatoda ifricola*, male. **A-B.** Dorsal view. **C.** Palp, retrolateral view. **D-N.** *Steatoda koeni.* **D.** Male, dorsal view. **E.** Idem, ventral view. **F.** Male, palp, retrolateral view. **G.** Idem, ventro-retrolateral view. **H.** Idem, ventral view. **I.** Idem, ventro-prolateral view. **J-K.** Female, dorsal view. **L.** Idem, ventral view. **M.** Epigyne. **N.** Vulva, dorsal view. Photos © A-C S. Lecigne; D-N P. Oger. Scale bars: K = 3 mm; D-E, J, L = 2 mm; F-I, M-N = 0.2 mm.

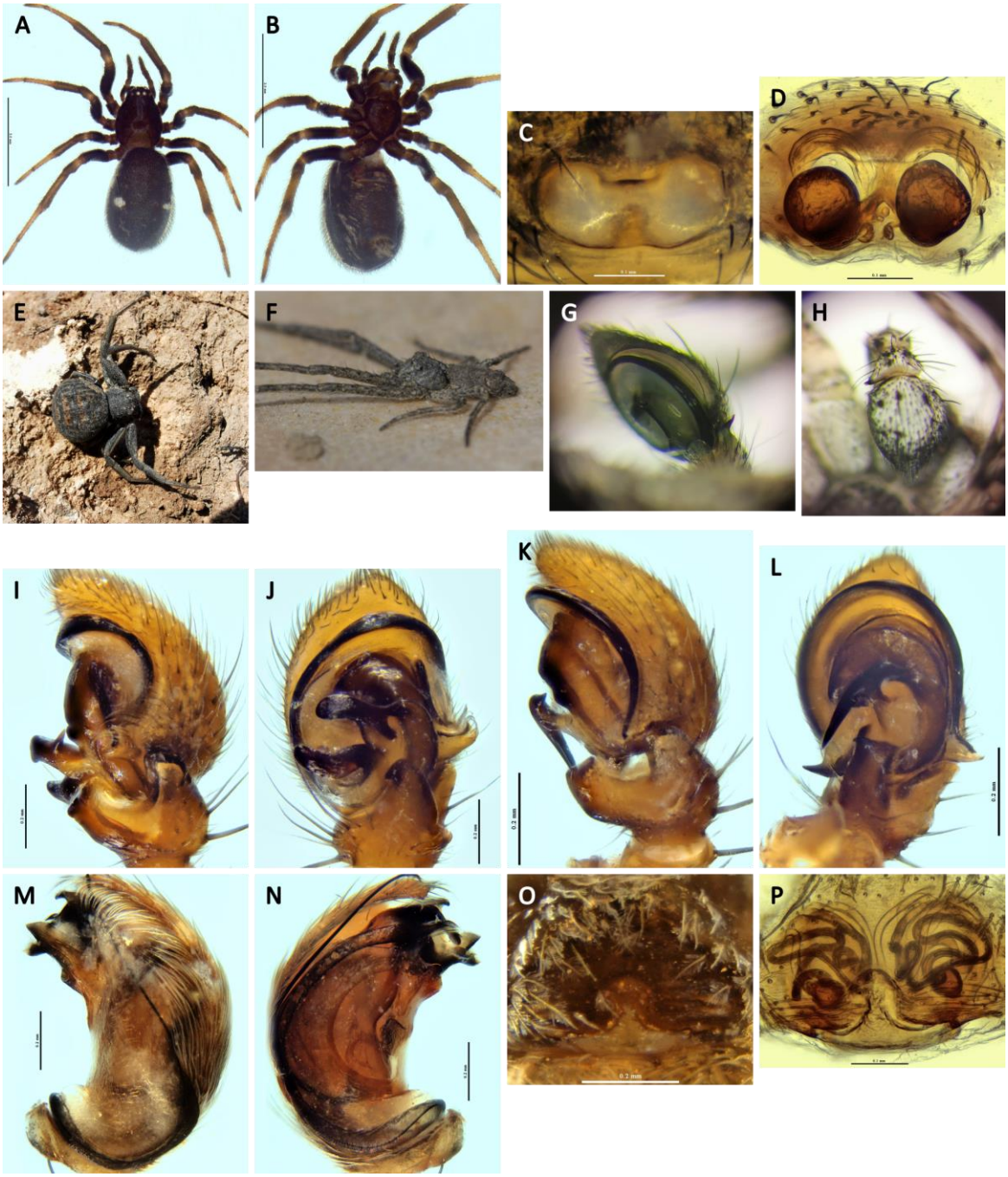


Figure 94: A-D. *Steatoda latifasciata*, female. **A.** Dorsal view. **B.** Ventral view. **C.** Epigyne. **D.** Vulva, dorsal view. **E.** *Bassaniodes bufo*, female, dorsal view. **F-H.** *Tmarus staintoni*, male. **F.** Lateral view. **G.** Palp, ventro-retrolateral view. **H.** Idem, dorsal view. **I-J.** *Xysticus kochi*, male. **I.** Palp, retrolateral view. **J.** Idem, ventral view. **K-L.** *Xysticus nubilus*, male. **K.** Palp, retrolateral view. **L.** Idem, ventral view. **M-P.** *Hyptiotes flavidus.* **M.** Male, palp, retrolateral view. **N.** Idem, prolateral view. **O.** Female, epigyne. **P.** Idem, vulva, ventral view. Photos © E-H S. Lecigne; A-D, I-P P. Oger. Scale bars: A-B = 2 mm; I-O = 0.2 mm; C-D, P = 0.1 mm.

Figure 95: A-C. *Uloborus plumipes*, female. **A-B.** Lateral view. **C.** Ventral view, epigyne. **D-G.** *Amphiledorus histrionicus*, male. **D.** Dorsal view. **E.** Palp, retrolateral view. **F.** Idem, ventral view. **G.** Idem, ventro-prolateral view. **H-I.** *Selamia reticulata*, female. **H.** Dorsal view. **I.** Epigyne. **J-M.** *Cyrtauchenius* sp., male. **J.** Dorsal view. **K.** Prosoma, dorsal view. **L.** Palp, retrolateral view. **M.** Bulb, retrolateral view. Photos © A, C, H-I S. Lecigne; B J. Lips; J S. Moutaouakil; D-G, K-M P. Oger. Scale bars: D, L = 2 mm; E, M = 0.5 mm; F-G = 0.2 mm.

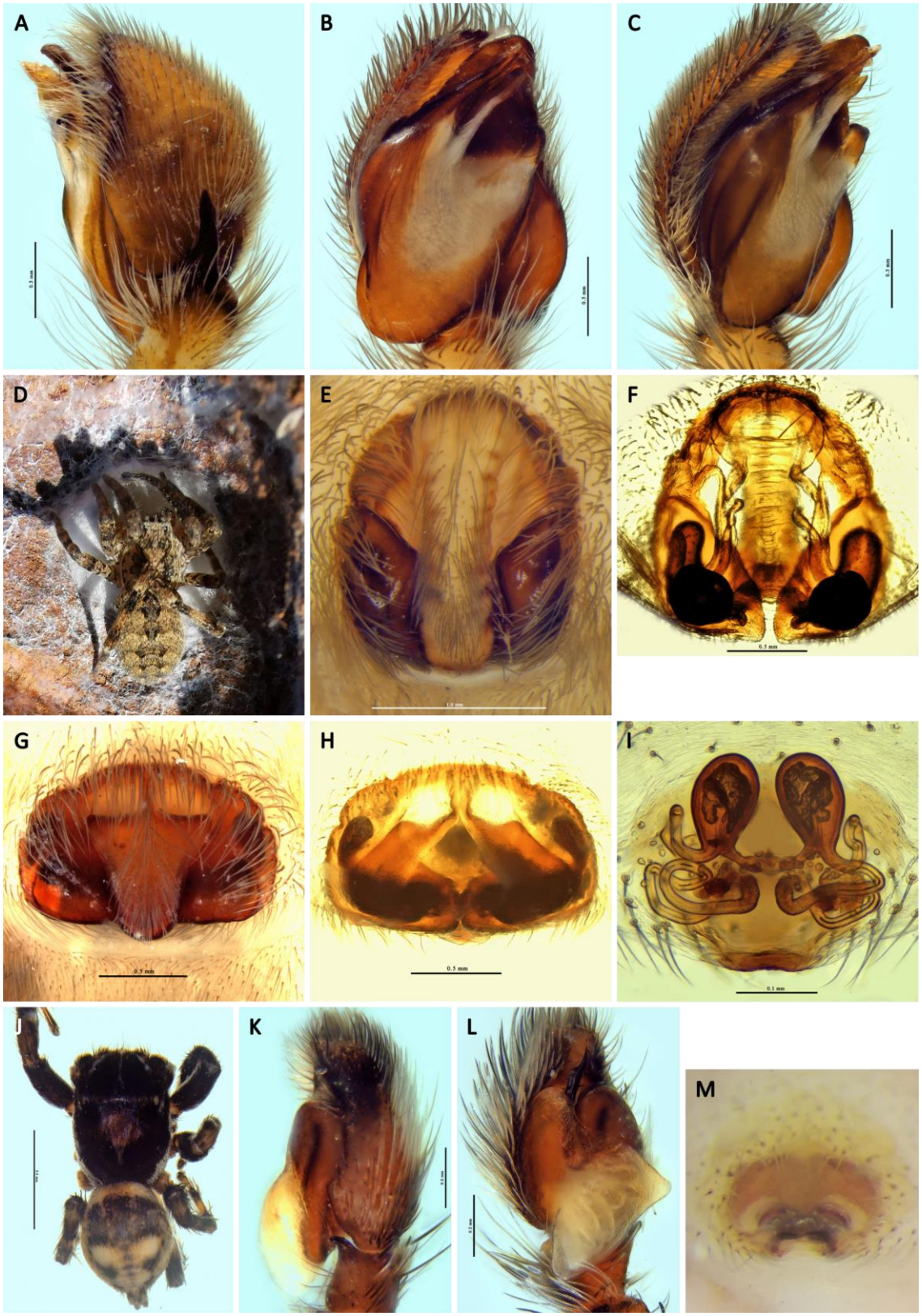


Figure 96: A-F. *Zoropsis bilineata.* **A.** Male, palp, retrolateral view. **B.** Idem, ventral view. **C.** Idem, prolateral view. **D.** Female, dorsal view. **E.** Epigyne. **F.** Vulva, dorsal view. **G-H.** *Zoropsis media*, female. **G.** Epigyne. **H.** Vulva, dorsal view. **I.** *Theridion wiehlei*, female, vulva, dorsal view. **J-M.** *Habrocestum ornaticeps.* **J.** Male, dorsal view. **K.** Idem, palp, retrolateral view. **L.** Idem, ventro-prolateral view. **M.** Female, epigyne. Photos © D, M S. Lecigne; A-C, E-L P. Oger. Scale bars: J = 2 mm; E = 1 mm; A-C, F-H = 0.5 mm; K-L = 0.2 mm; I = 0.1 mm.

Figure 97: A-E. *Scotophaeus dolanskyi*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, ventral view. **D.** Idem, dorsal view. **E.** Tibial apophysis, retrolateral view. **F-H.** *Linyphia tenuipalpis.* **F.** Male, palp, retrolateral view. **G.** Idem, ventral view. **H.** Female, epigyne. **I-J.** *Marilynia bicolor*, female. **I.** Dorsal view. **J.** Epigyne. **K.** *Philodromus fuscolimbatus*, female, vulva, dorsal view. **L-M.** *Xysticus tortuosus*, female. **L.** Dorsal view. **M.** Vulva, dorsal view. **N.** *Gongylidiellum vivum*, female, epigyne. Photos © I-J S. Lecigne; A-H, K-N P. Oger. Scale bars: A, L = 3 mm; B-D = 0.5 mm; F-H, K, M = 0.2 mm; N = 0.1 mm.

Figure 98: A-D. *Rhode scutiventris.* **A.** Male, dorsal view. **B.** Idem, ventral view. **C.** Palp, ventro-retrolateral view. **D.** Female, vulva, dorsal view. **E-H.** *Ozyptila judaea*, male. **E.** Dorsal view. **F.** Ventral view. **G.** Palp, ventro-retrolateral view. **H.** Idem, ventral view. **I.** *Lycosa fasciiventris*, male, palp, ventral view. **J-K.** *Zodarion maghrebense*, female. **J.** Dorsal view. **K.** Epigyne. **L.** *Zelotes tenuis*, female, epigyne. Photos © L S. Lecigne; A-K P. Oger. Scale bars: E-F = 3 mm; A-B, J = 2 mm; I = 0.5 mm; C, G-H, K = 0.2 mm; D = 0.1 mm.

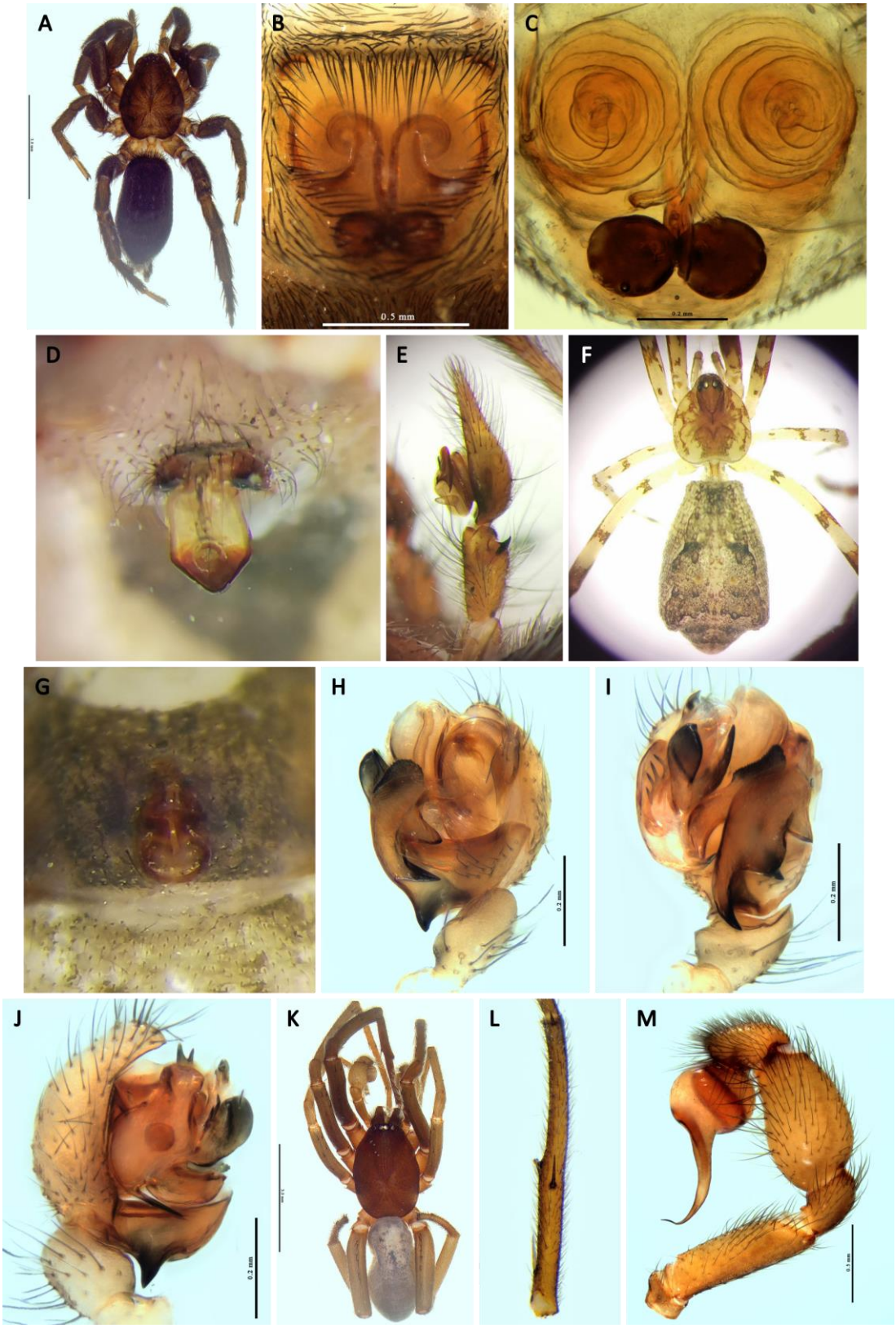
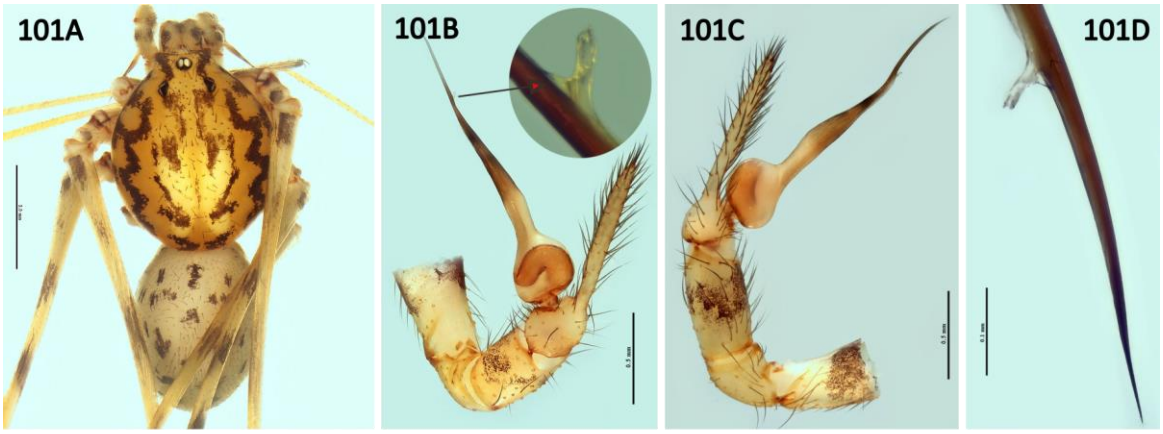
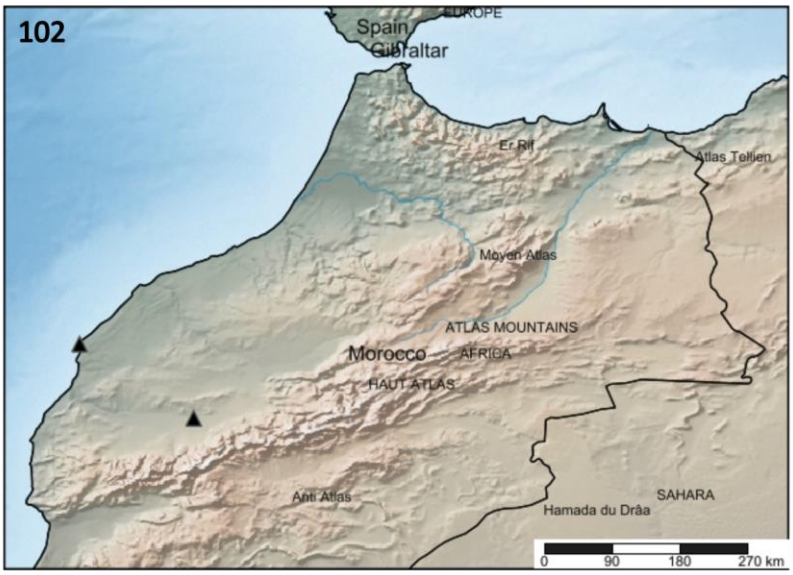
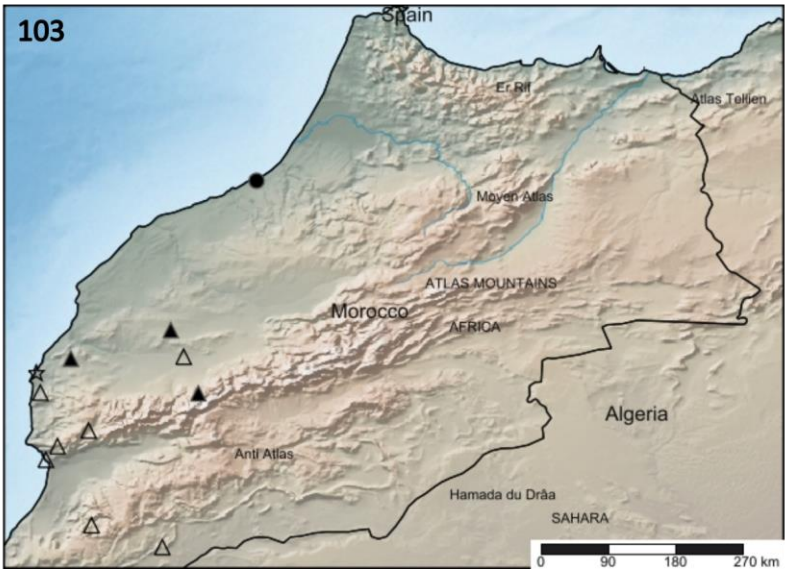


Figure 99: A-C. *Zelotes pediculatus*, female. **A.** Dorsal view. **B.** Epigyne. **C.** Vulva, dorsal view. **D.** *Leviellus kochi*, female, epigyne. **E.** *Tegenaria domestica*, male, palp, retrolateral view. **F-G.** *Episinus algiricus*, female. **F.** Dorsal view. **G.** Epigyne. **H-J.** *Lepthyphantes soumiae*, male, palp. **H.** Retrolateral view. **I.** Ventral view. **J.** Prolateral view. **K-M.** *Ariadna maroccana*, male. **K.** Dorsal view. **L.** Metatarsus I, ventro-retrolateral view. **M.** Palp, retrolateral view. Photos © D-G S. Lecigne; A-C, H-M P. Oger. Scale bars: A, K = 3 mm; B, M = 0.5 mm; C, H-J = 0.2 mm.

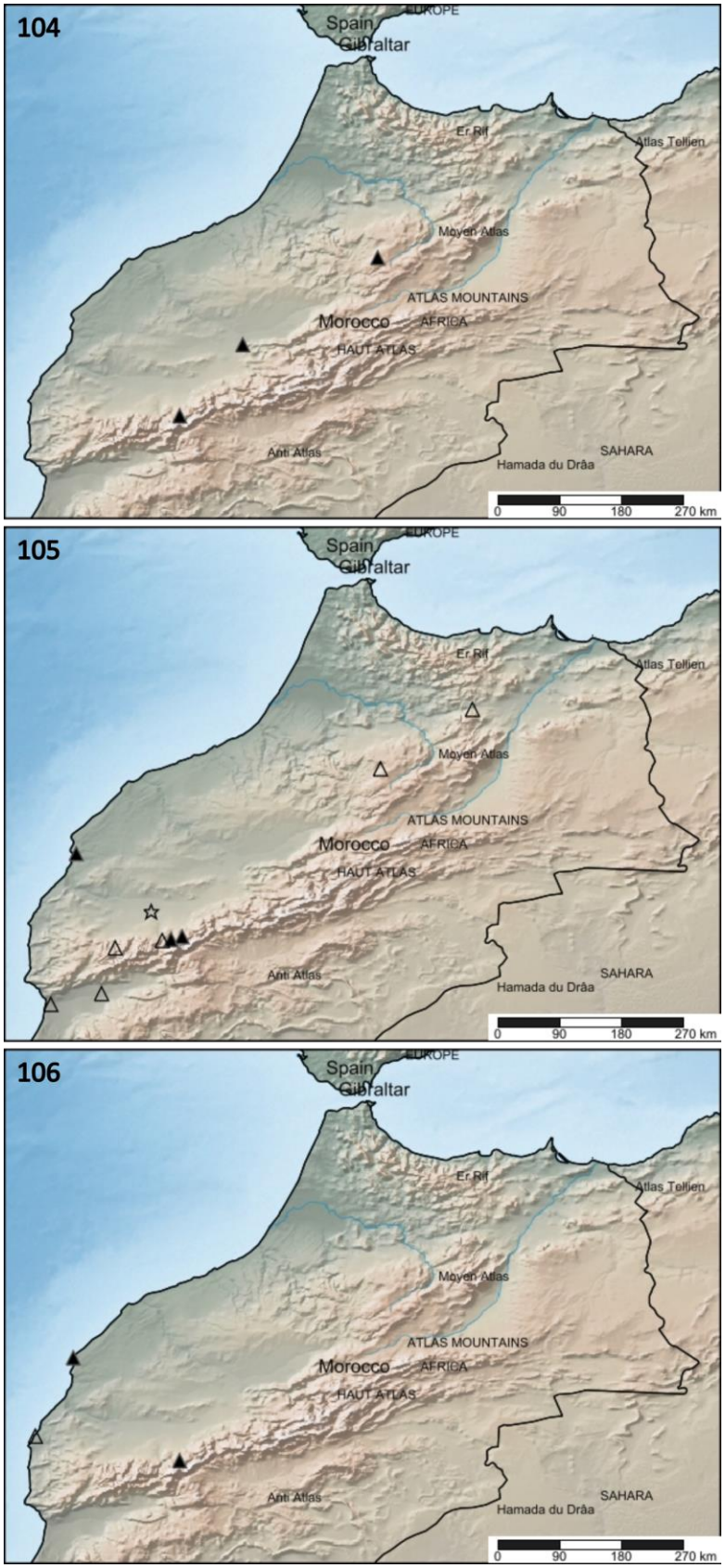
Figure 100: A-G. *Castianeira badia.* **A.** Male, dorsal view. **B.** Idem, ventral view. **C.** Idem, palp, ventral view (bulb expanded, turned 90° outwards). **D.** Female, dorsal view. **E** Idem, ventral view. **F.** Idem, epigyne. **G.** Idem, vulva, dorsal view. **H-L.** *Micropholcus ghar*, male. **H.** Dorsal view. **I.** Frontal view. **J.** Palp, retrolateral view. **K.** Idem, anterior view. **L.** Prolateral view. Photos © A-B, D S. Lecigne; C, E-L P. Oger. Scale bars: E = 3 mm; H = 1 mm; C, F-G, I-L = 0.5 mm.



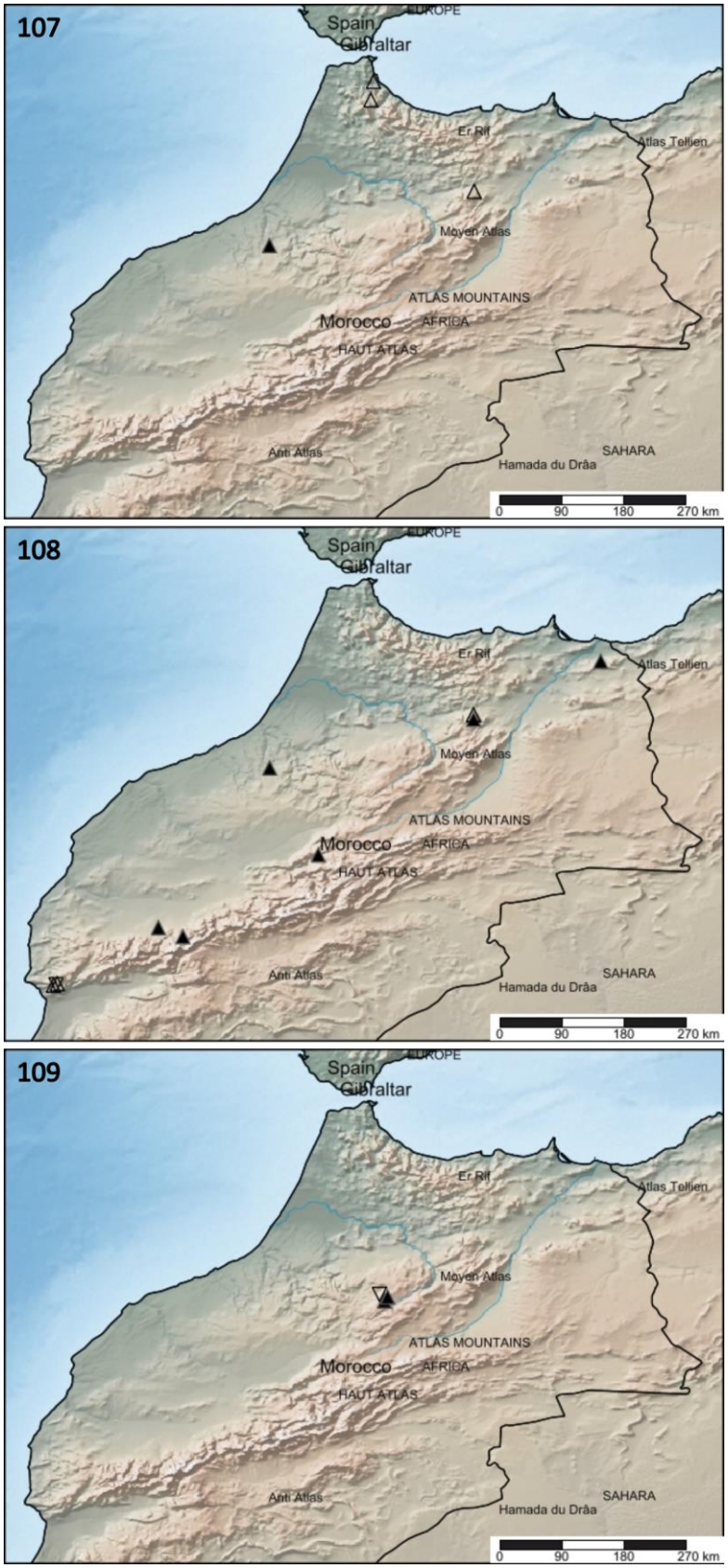




Figures 101-103: 101A-D. *Scytodes annulipes*, male. **A.** Dorsal view. **B.** Palp, retrolateral view. **C.** Idem, prolateral view. **D.** Idem, tip of the stylus. **102:** *Aelurillus blandus.* Distribution map of the species; first records in Morocco (source: Shorthouse 2010). **103:** *Echemus escalerai.* Distribution map of the species; open star = loc. typ.; open triangles = citations for Morocco; solid triangles = new female records; solid circle = first male record (*Echemus* cf. *escalerai*) (source: Shorthouse 2010). Photos © 95A-D P. Oger. Scale bars: A = 2 mm; B-C = 0.5 mm; D = 0.1 mm.



Figures 104-106: Collecting localities of several new or endemic species from Morocco; open star = loc. typ.; open triangles = citations for Morocco; solid triangles = first or new records. **104.** *Erigone dentosa*. **105.** *Eusparassus fritschi*. **106.** *Heliophanus machaerodus* (source: SHORTHOUSE 2010).



Figures 107-109: Collecting localities of several new or endemic species from Morocco; inverse open triangle = loc. typ.; open triangles = citations for Morocco; solid triangles = new records. **107.** *Palliduphantes cadiziensis*. **108.** *Steatoda ifricola*. **109.** *Steatoda koeni* (source: SHORTHOUSE 2010).