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To cite this article: Majid Moradmand, Omid Mirshamsi Kakhki & Vladimir Hula (2015) New records of the huntsman spider genus *Olios* (Araneae: Sparassidae) from Iran, Iraq and Afghanistan, *Zoology in the Middle East*, 61:1, 76-80, DOI: [10.1080/09397140.2014.985505](https://doi.org/10.1080/09397140.2014.985505)

To link to this article: <http://dx.doi.org/10.1080/09397140.2014.985505>



Published online: 08 Dec 2014.



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New records of the huntsman spider genus *Olios* (Araneae: Sparassidae) from Iran, Iraq and Afghanistan

Majid Moradmand^{*a}, Omid Mirshamsi Kakhki^{b,c} and Vladimir Hula^d

^aDepartment of Biology, Faculty of Science, University of Isfahan, Isfahan, Iran. ^bDepartment of Biology, Faculty of Science, Ferdowsi University of Mashhad, Mashhad, Iran. ^cResearch Department of Zoological Innovations (RDZI), Institute of Applied Zoology, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran. ^dDepartment of Zoology, Fishery, Hydrobiology and Apiculture, Mendel University, Brno, Czech Republic.

(Received 1 June 2014; accepted 2 November 2014; first published online 8 December 2014)

Two species of the spider genus *Olios* are recorded for the first time from the Middle East, namely *O. sericeus* (Kroneberg, 1875) from Afghanistan and Iran, and *O. iranii* (Pocock, 1901) from Iraq. Previously recorded species of *Olios* are shown to be misidentifications. A comparative diagnosis is provided for these two newly recorded-species.

Keywords: Taxonomy, diagnosis, *Olios sericeus* (Kroneberg, 1875), *Olios iranii* (Pocock, 1901), Middle East, spider fauna.

Introduction

The genus *Olios* Walckenaer, 1837 consists of small to very large huntsman spiders and has a worldwide distribution. With 253 nominal species, it is the most species-rich genus of the family Sparassidae. The genus includes nearly one-fourth of the currently described species within the family, which comprises a total number of 1142 species (World Spider Catalogue, 2014). Molecular phylogenetics revealed that *Olios* is not a monophyletic taxon (Moradmand, Schönhofer & Jäger, 2014) and it is assumed that “true” *Olios* species do not occur in the Neotropical and Nearctic ecozones (Rheims 2010; Moradmand, Schönhofer & Jäger 2014). To date no taxonomic revision has been made and only a few species have been properly described. Two species are known from Europe, the type species *Olios argelasius* (Walckenaer, 1805) from the western Mediterranean and *O. suavis* (O. Pickard-Cambridg, 1876) from the southern and eastern Mediterranean region (Jäger, McCowan, & Russell-Smith, 2011). So far as Middle Eastern sparassids are concerned, several species have been transferred, especially from *Olios* to the genus *Eusparassus* Simon, 1903 and vice versa (Moradmand & Jäger 2012; Moradmand 2013). Further east in Pakistan and India several more nominal species are known (Pocock, 1901; Gravely, 1931; Sethi & Tikader, 1988) and recently some new species have been described from Southeast Asia (Jäger, 2012).

In this study, we record the genus *Olios* for the first time from Afghanistan, Iraq and Iran, including *O. sericeus* (Kroneberg, 1875) from Iran and Afghanistan and *O. iranii* (Pocock, 1901) from the border between Iraq and Iran, a coastal region near the Persian Gulf.

Collection abbreviations: MIZ: Museum and Institute of Zoology, Warsaw, Poland; – MMB: Moravian Museum, Brno, Czech Republic; – NHM: Natural History Museum, London, United

*Corresponding author. Email: moradmand.arachnids@gmail.com

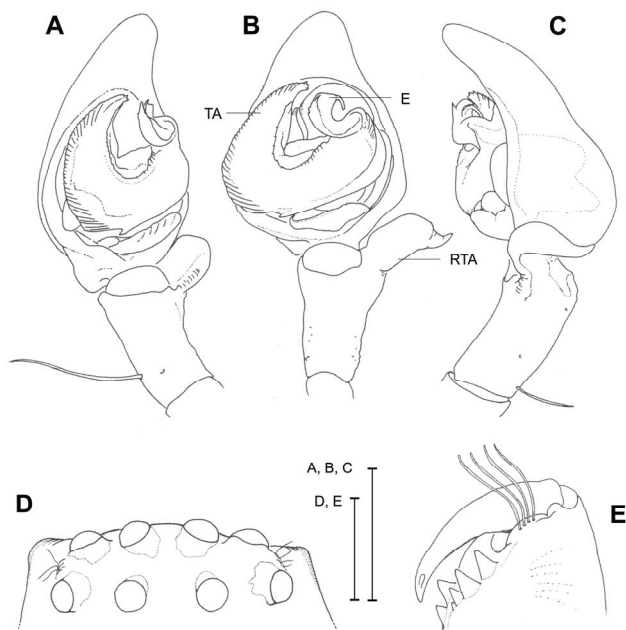


Figure 1. *Olios sericeus* (Kroneberg, 1875), male from Iran: Isfahan (ZMI) (A–C) left palp: (A) prolateral, (B) ventral, (C) retrolateral; (D) eye arrangement, dorsal; (E) left chelicerae, ventral. Scale bars: 1 mm. Abbreviations: E — embolus, RTA — retrolateral tibial apophysis, TA — tegular apophysis.

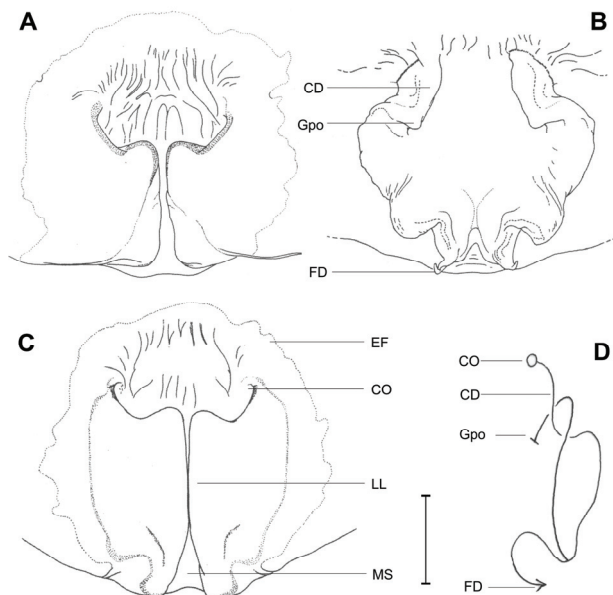


Figure 2. *Olios sericeus* (Kroneberg, 1875), female from Iran: Mashhad (ZMI) (A) epigyne, ventral, (B) vulva, dorsal, (C) variation of epigyne, ventral, (D) a schematic course of the internal duct system, ventral. Scale bar: 1 mm. Abbreviations: CD — copulatory duct, CO — copulatory opening, EF — epigynal field, FD — fertilization duct, GPO — glandular pores, LL — lateral lobes, MS — median septum.

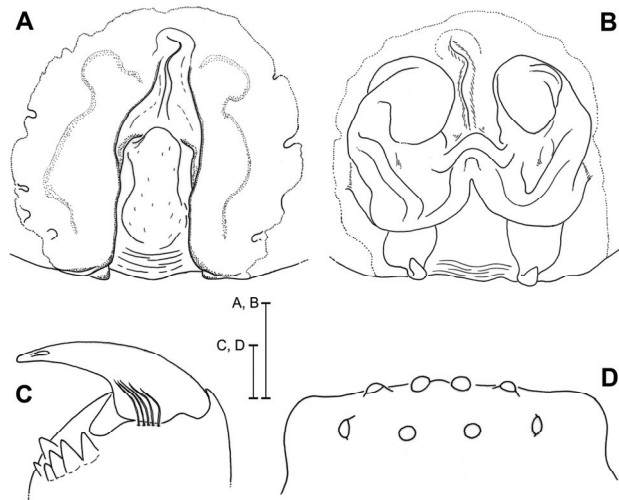


Figure 3. *Olios iranii* (Pocock, 1901), female from Iraq: Al-Faw (NHM) (A) epigyne, ventral; (B) vulva, dorsal; (C) left chelicerae, ventral; (D) eye arrangement, dorsal. Scale bars: 1 mm.

Kingdom; – SMF: Research Institute Senckenberg, Frankfurt a.M., Germany; – SZMN: Siberian Zoological Museum, Novosibirsk, Russia; – ZMI: Zoological Museum, University of Isfahan, Isfahan, Iran; – ZMUM: Zoological Museum, University of Moscow, Russia.

Results

Olios sericeus (Kroneberg, 1875) (Figures 1A-E, 2A-C)

Sparassus sericeus Kroneberg 1875: 28, pl. 3, fig. 19 (syntypes, male and female, from Uzbekistan, ZMUM, not examined).

Olios sericeus; Simon 1880: 298 (transfer).

Olios xerxes (Pocock, 1901) – Mirshamsi 2005: 61 (misidentification).

Olios sericeus; Jäger & Otto 2007: 20–24, figs. 1–16 (redescription and new record from the Caucasus).

Material: AFGHANISTAN: 11♂, 18♀, 7 juv., *Herat Province: Bala Murghab*: 5♂, 13♀, 3 juv., 27.iv.1964, O. Jakeš leg.; 4♂, 3♀, 4 juv. (MMB), 18.ix.1964, 470 m altitude, O. Jakeš leg. (MMB); *Kataghan Province: Kunduz*: 1♂, 17.iv.1966, 400 m a.s.l., J. Šimek leg.; 1♀, 5 juv. (MMB), 16.iii.1966, 450 m a.s.l., J. Šimek leg. (MMB); *Kataghan Province: Baghlan*: 1♂, 1♀, 16–17.v.1967, 750 m a.s.l., D. Povolný leg. (MMB). – IRAN: 3♂, 9♀, 2 juv., *Isfahan Province: Isfahan*: 1♂, 28.xi.1997, M. Manian leg. (ZMI); 2♀, 15.v.2010, M. Marhabaie leg. (ZMI); *Khorasan Province: Mashhad*: 2♂, 5♀, 2 juv., ix.1998, O. Mirshamsi leg.; *Khorasan Province: Kalate-Naderi*: 1♀, ix.1997, O. Mirshamsi leg.; 1♀, ix. 1996, O. Mirshamsi leg. (ZMI). – GEORGIA: 1♀, Caucasus (SMF56201). – KAZAKHSTAN: 1♂, *Almati* (SMF56202). – TAJIKISTAN: 6♂, 3♀, 4 juv., Khatlon Azea, x.1988 (SZMN). – UZBEKISTAN: 1♂, 1♀, 1 juvenile, *Samarkand* (MIZ2129).

Comparative diagnosis. A medium-sized *Olios* species, males are easily distinguishable from other congeners by an enlarged and prominent tegular apophysis (TA), a small curved embolus (E), and a single RTA extended prolaterally (Figure 1). The female epigyne can be distinguished from that of *O. iranii* (Figure 3) by the shape of the lateral lobes (LL) which have a hump-like projection at anterior half and the anterior margin of LL not fused together (Figure 2).

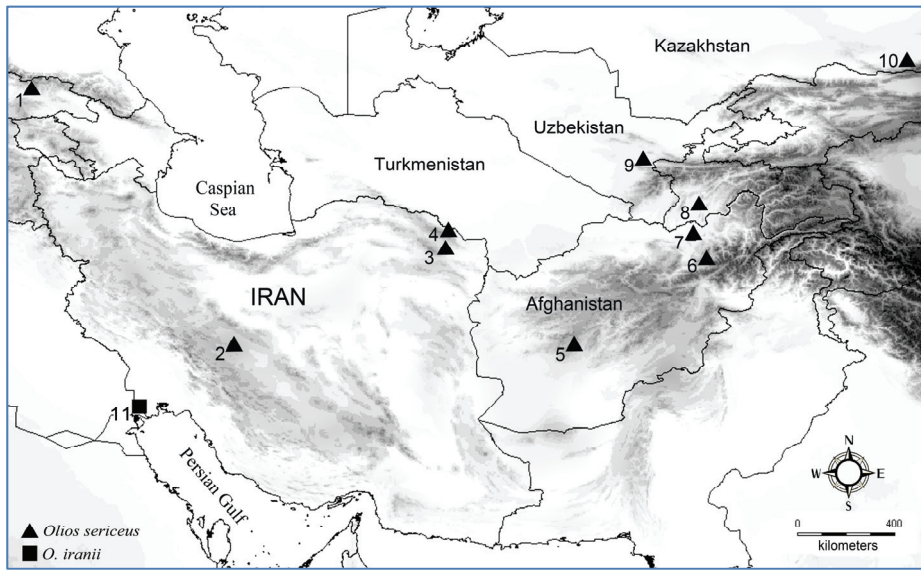


Figure 4. Distribution map of the two recorded *Olios* species.

Note. This species was recorded from Central Asia (original description, for details see Jäger & Otto, 2007) and the Caucasus (Jäger & Otto, 2007). New material obtained from north eastern and central Iran as well as a rich collection from Afghanistan (MMB) extends its distribution range into the Middle East, where it is here recorded for the first time. As *O. sericeus* is a synanthropic species and frequently found (in this study: Mashhad and Isfahan), it is worthwhile mentioning these records as well as giving further illustrations to identify the species.

***Olios iranii* (Pocock, 1901) (Figures 3A-D)**

Sparassus iranii Pocock 1901: 492. (description of female from Poona, India, syntypes, NHM, examined)

Olios iranii (Pocock) – Gravely 1931: 242, figs. 5C, 6D (first description of male, transfer). – Sethi & Tikader 1988: 33, figs. 146–151.

Material: IRAQ: 1♀, *Al Faw Peninsula*: Faw, “Label: Fao, Persian Gulf” (NHM). Compared material. Syntypes: 2♀, INDIA: Poona, sub *Sparassus iranii* Pocock (NHM 99.9.21.519-20).

Note. Pocock (1901) did not illustrate his new species. Using new material, Gravely (1931) sketchily drew the female epigyne, described the male for the first time and placed the species in *Olios*. Interestingly, in the list of localities he noted that he examined a specimen from “Nasariyeh, Mesopotamia” which is most probably Nasiriyah to the southeast of Baghdad, Iraq. This record was not mentioned in Sethi & Tikader (1988) in their revision on Indian Sparassidae, probably because Iraq was too far from the original type locality (India and Pakistan). A female of *O. iranii* found in the collection of the NHM confirms its occurrence in its most western distribution range in Iraq. According to this, the species is most likely occur in the intervening area (Iran), but no material has been found to date.

Acknowledgements and Funding

We are grateful to Dr Peter Jäger for his comments on the manuscript. We would like to thank the following collection curators for their assistances: J. Altmann and P. Jäger (SMF), G. Azarkina (SZMN), P. Baňář (MMB), J. Beccaloni (NHM) and D. Mierzwa (MIZ). We are grateful to the anonymous referees for their constructive comments.

MM thanks SYNTHESYS (Synthesis of Systematic Resources) for providing European Union-funded Integrated Activities grant to visit the NHM. Part of this research is supported by the grants of the Ministry of Education, Youth and Sport of the Czech Republic no. LA10036/MSMT.

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