



## **First record of *Mexcala monstrata* (Araneae: Salticidae) from Egypt**

Authors: Abdel-Sattar Metwally, Mohammad Mohafez, Mohamed El-Danasory & , and Amr El-Gendy

Source: Arachnologische Mitteilungen: Arachnology Letters, 58(1) : 4-5

Published By: Arachnologische Gesellschaft e.V.

URL: <https://doi.org/10.30963/aramit5802>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-o-use](https://www.bioone.org/terms-o-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## First record of *Mexcala monstrata* (Araneae: Salticidae) from Egypt

Abdel-Sattar Metwally, Mohammad Mohafez, Mohamed El-Danasory & Amr El-Gendy



doi: 10.30963/aramit5802

**Abstract.** The jumping spider *Mexcala monstrata* Wesolowska & van Harten, 1994 is recorded for the first time from Egypt and Africa. The record is based only on male specimens. It is the second species of the genus *Mexcala* in Egypt after *Mexcala nigrocyanea* (Simon, 1886) known from the Siwa Oasis.

**Keywords:** Africa, jumping spiders, taxonomy

**Zusammenfassung. Erstnachweis von *Mexcala monstrata* (Araneae: Salticidae) in Ägypten.** Die Springspinne *Mexcala monstrata* Wesolowska & van Harten, 1994 wird erstmals für Ägypten und Afrika nachgewiesen. Es wurden nur Männchen erfasst. Es ist der zweite Nachweis einer *Mexcala*-Art in Ägypten nach *Mexcala nigrocyanea* (Simon, 1886), die von der Oase Siwa bekannt ist.

The family Salticidae Blackwall, 1841 is the species-richest spider family containing 6108 species in 636 genera (World Spider Catalog 2019). In Egypt, 74 species from 33 genera are recorded (El-Hennawy 2017). The genus *Mexcala* was established by Peckham & Peckham (1902) for *M. rufa* Peckham & Peckham, 1902 from South Africa. Later, they included *M. elegans* Peckham & Peckham, 1903 from Zimbabwe (Peckham & Peckham 1903) and the third species *M. agilis* Lawrence, 1928 was described from Namibia (Lawrence 1928). From all of them only males were described. Currently, the genus *Mexcala* includes 21 species, recorded from Africa, the southern part of the Arabian Peninsula and Iran. Of these, only *Mexcala nigrocyanea* (Simon, 1886) is known from Egypt from the Siwa Oasis (El-Hennawy 2017). *Mexcala monstrata* Wesolowska & van Harten, 1994 is hitherto known only from Yemen (Wesolowska 2009, World Spider Catalog 2019). *Mexcala monstrata* was described from a single adult female (Wesolowska & van Harten 1994). Wesolowska & van Harten (2007) first described the male and redescribed the female from Yemen. Wesolowska (2009) provided a revision of the genus *Mexcala*. The aim of the present paper is to report newly found specimens of *M. monstrata* from Egypt.

### Material and methods

The specimens in this paper are part of the Ph.D. thesis collection by Amr El-Gendy. All specimens were collected by hand aspirator, are preserved in 75% ethanol and deposited at the Faculty of Agriculture, Al-Azhar University, Egypt. For study an OPTIKA SZM-2 Stereomicroscope was used. Digital photographs were taken using a ToupCam S3CMOS Microscope camera.

The identification of *M. monstrata* is based on the descriptions, drawings and photographs in Wesolowska & van Harten (1994, 2007) and Wesolowska (2009). One male pedipalp was removed for study. Terminology follows Jocqué & Dippenaar-Schoeman (2006). Length of prosoma, legs and opisthosoma were measured (Tabs 1-2). All measurements are given in millimetres.

### Taxonomy

Family Salticidae Blackwall, 1841

Genus *Mexcala* Peckham & Peckham, 1902

*Mexcala monstrata* Wesolowska & van Harten, 1994 (Figs 1-5)

**Specimens examined.** EGYPT, Menoufiya, El-Sadat City, Al-Azhar University, Farm of Faculty of Agriculture, Orchards of peach and pomegranate (30.42028°N, 30.54296°E, 29 m a.s.l.), 20. Nov. 2016: 1 ♂, 25. Dec. 2016: 1 subadult ♂ (died before moulted to adult), 15. Jun. 2017: 1 ♂, 12. Mar. 2017: 1 ♂, leg. A. El-Gendy.

**Description of male.** General appearance as in Fig. 1a slender spider with long legs. Prosoma pear-shaped, widest posteriorly, coloured dark brown, clothed with delicate short brilliant hairs as in Fig. 1c. Opisthosoma elongated, pointed posteriorly, orange with a brown anterior margin and a narrow transverse band halfway along its length, sometimes opisthosoma blackish at posterior margin (Fig. 1). Spinnerets orange-brownish. Legs thin and very long, legs IV longest, femora brown, tarsi whitish-yellow, remaining segments orange with brown lines along lateral surfaces. Palpal organ as in Figs 2-5, and measurements as in Tabs 1-2.

### Distribution

*Mexcala monstrata* was known only from Yemen (Wesolowska 2009, World Spider Catalog 2019). This is the first record of the species for Egypt and for Africa. Twenty of the 21 species

**Tab. 1:** Measurements of *Mexcala monstrata*

TL = total length, PL = prosoma length, PW = prosoma width, OL = opisthosoma length, OW = opisthosoma width

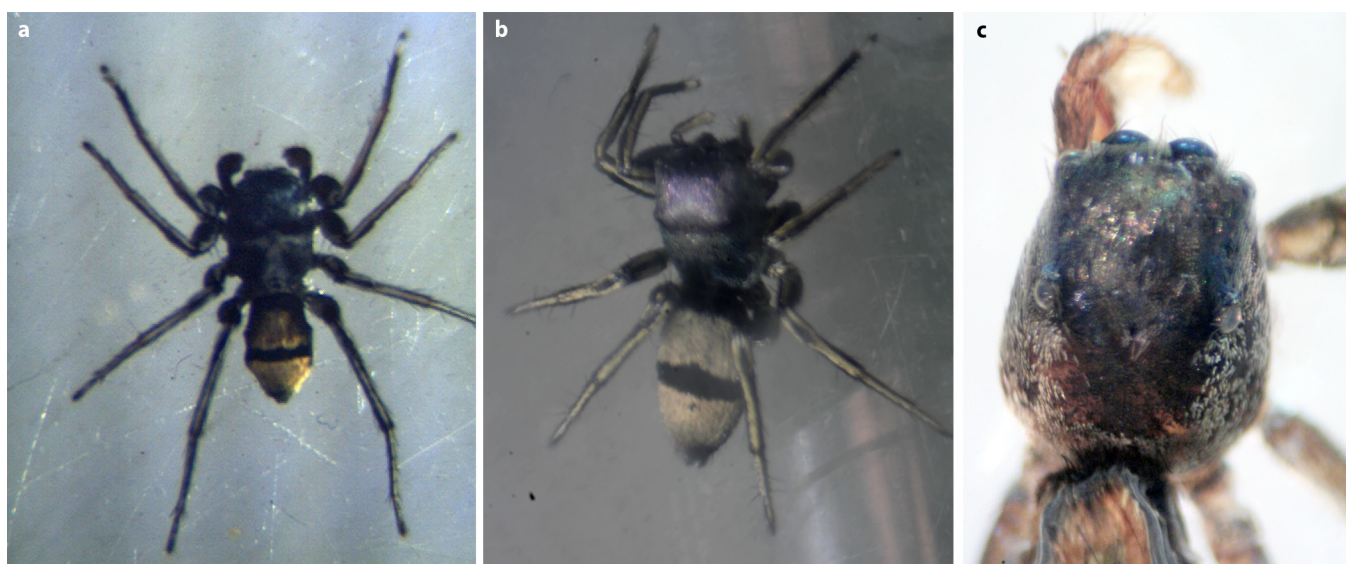
	TL	PL	PW	OL	OW
MAX	5.22	2.82	1.91	2.40	1.99
MIN	4.58	2.46	1.63	2.13	1.74

**Tab. 2:** Measurements of leg segments of *Mexcala monstrata* Wesolowska & van Harten, 1994

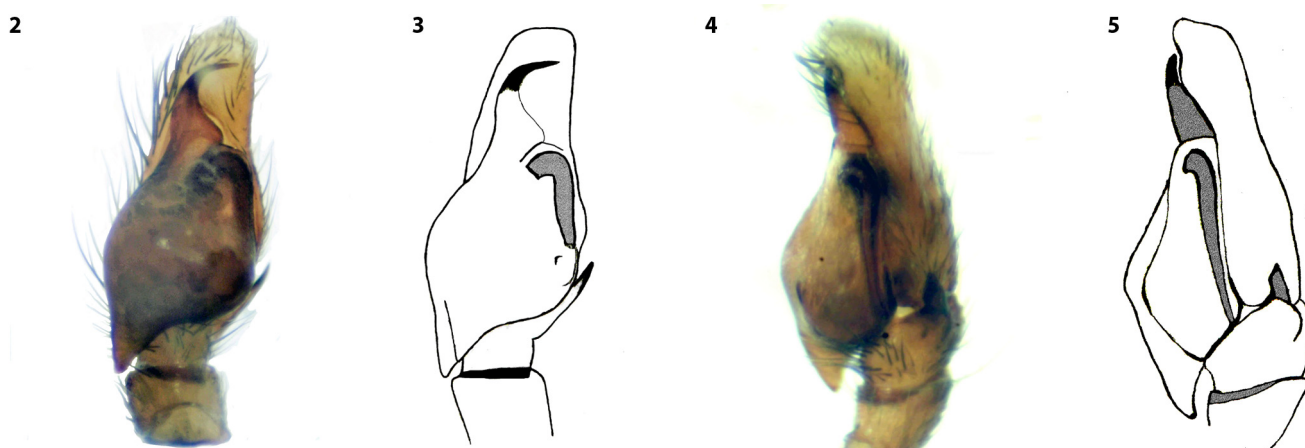
Leg	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total length
I	1.52	0.74	1.15	1.00	0.51	4.92
II	1.39	0.68	1.02	0.91	0.58	4.58
III	1.43	0.63	1.07	1.19	0.67	4.99
IV	2.28	2.23	0.86	0.94	0.70	7.01

Abdel-Sattar METWALLY, Mohammad MOHAFAZ, Mohamed EL-DANASORY, Amr EL-GENDY, Department of Agricultural Zoology and Nematology, Faculty of Agriculture, Al-Azhar University, Nasr City, P.O Box 11751, Cairo, Egypt; E-mail: metwally844@gmail.com; d.mohamedmohafez@yahoo.com; dr\_ma\_danasory@yahoo.com; amr.abdrabou@azhar.edu.eg

submitted 16.1.2019, accepted 26.3.2019, online 18.6.2019



**Fig. 1:** *Mexcala monstrata*, habitus of a living spider. **a.** adult male; **b.** subadult male; **c.** prosoma of a preserved male



**Figs 2-5:** *Mexcala monstrata*, pedipalp. **2, 3.** ventral view; **4, 5.** lateral view

of *Mexcala* are known from Africa now (Wesołowska 2009, World Spider Catalog 2019) – and the last one (*Mexcala far-sensis* Logunov, 2001, described from Iran) is misplaced in the genus according to Wesołowska (2009: 185).

#### Acknowledgements

The authors sincerely thank Hisham K. El-Hennawy, Egyptian arachnologist (editor of SERKET “The Arachnological Bulletin of the Middle East and North Africa”) for great help in this work, encouragement and support, for his help in determining spiders and helpful comments on an earlier version of the manuscript. We would like to thank Petr Dolejš (editor of the Arachnologische Mitteilungen), Wanda Wesołowska and Dmitri Logunov (reviewers) for their valuable comments and corrections that improved the paper.

#### References

Dippenaar-Schoeman AS & Jocqué R 2006 Spider families of the world. Royal Museum for Central Africa, Tervuren. 336 pp.  
 El-Hennawy HK 2017 A list of Egyptian spiders (revised in 2017). – Serket 15: 167-183

Lawrence RF 1928 Contributions to a knowledge of the fauna of South-West Africa VII. Arachnida (Part 2). – Annals of the South African Museum 25: 217-312  
 Peckham GW & Peckham EG 1902 Some new genera and species of Attidae from South Africa. – Psyche 9 (312): 330-335 – doi: [10.1155/1902/13502](https://doi.org/10.1155/1902/13502)  
 Peckham GW & Peckham EG 1903 New species of the family Attidae from South Africa, with notes on the distribution of the genera found in the Ethiopian region. – Transactions of the Wisconsin Academy of Sciences, Arts and Letters 14: 173-278  
 Wesołowska W 2009 A revision of the spider genus *Mexcala* Peckham et Peckham, 1902 (Araneae: Salticidae). – Genus 20: 149-186  
 Wesołowska W & Harten A van 1994 The jumping spiders (Salticidae, Araneae) of Yemen. Yemeni-German Plant Protection Project, Sana'a. 86 pp.  
 Wesołowska W & Harten A van 2007 Additions to the knowledge of jumping spiders (Araneae: Salticidae) of Yemen. – Fauna of Arabia 23: 189-269  
 World Spider Catalog 2019 World spider catalog. Version 19.5. Natural History Museum, Bern. – Internet: <http://wsc.nmbe.ch> (3. Jan. 2019) – doi: [10.24436/2](https://doi.org/10.24436/2)