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

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

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



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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

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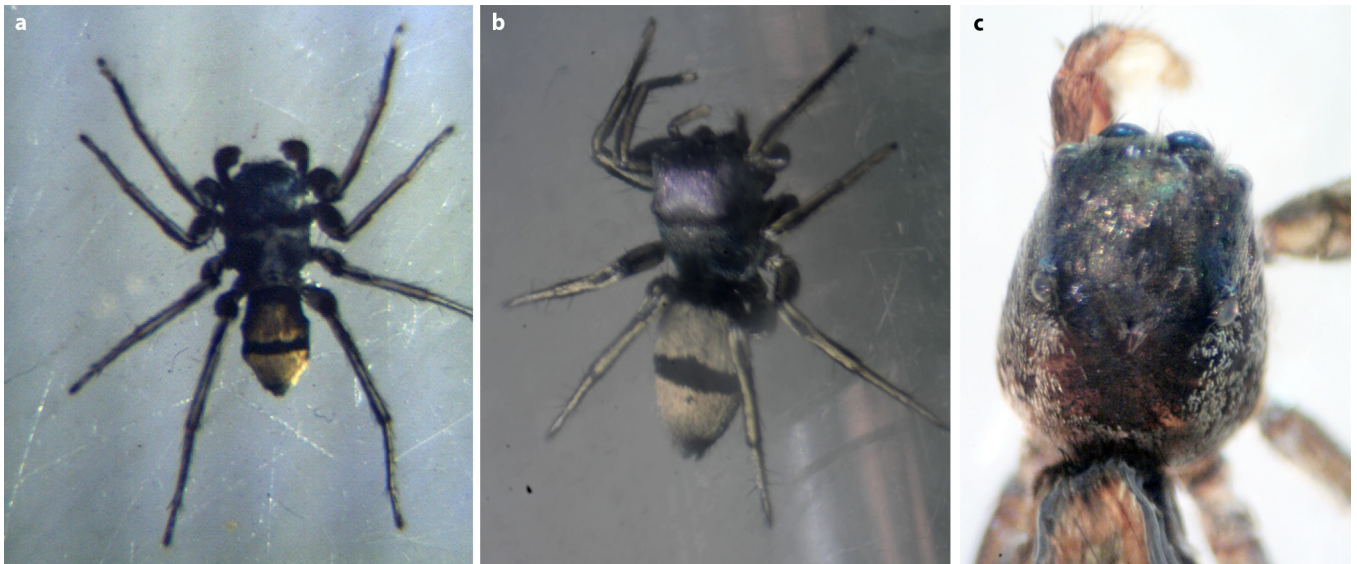
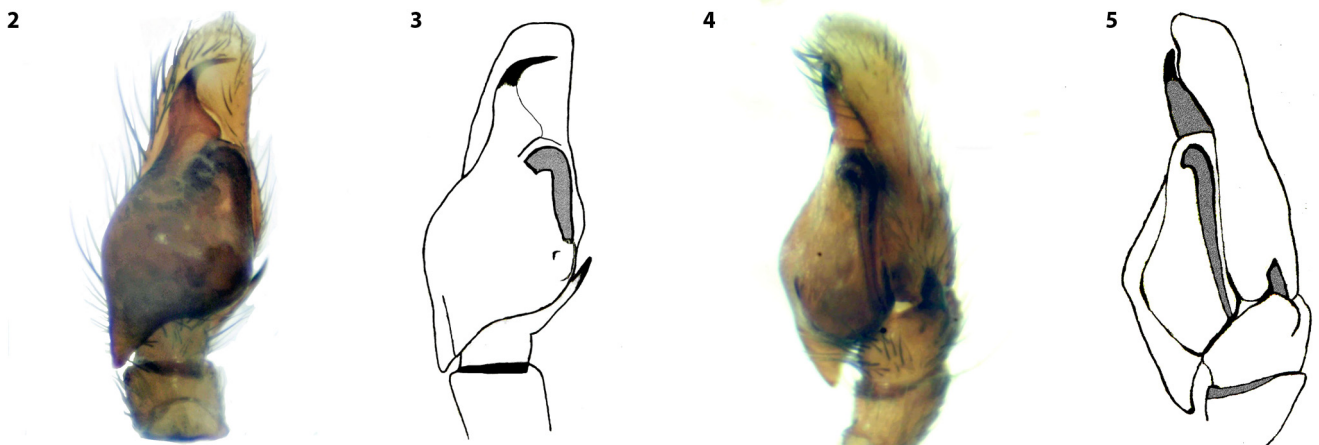


Fig. 1: *Mexcala monstrata*, habitus of a living spider. **a.** adult male; **b.** subadult male; **c.** prosoma of a preserved male



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).

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