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## THE FIRST RECORD FROM UKRAINE OF THE SPIDER *MONAESSES ISRAELIENSIS* (ARANEI, THOMISIDAE) FROM THE CRIMEA

M. M. Fedoriak<sup>1\*</sup>, M. M. Kovblyuk<sup>2</sup> & Z. A. Kastrygina<sup>2</sup>

<sup>1</sup>Yuriy Fedkovych Chernivtsi National University, Kotsyubynsky st., 2, Chernivtsi, 58012 Ukraine

<sup>2</sup>V. I. Vernadsky Taurida National University (after russian occupation — so-called 'Crimean federal university'), Yaltinskaya st., 4, Simferopol 95007, Crimea, the part of Ukraine, temporarily occupied by russia

<sup>1\*</sup>Corresponding author

<sup>1</sup>E-mail: m.m.fedoriak@gmail.com

<sup>2</sup>E-mail: mkovblyuk@gmail.com, zoiac\_21@mail.ru

M. M. Fedoriak (<https://orcid.org/0000-0002-6200-1012>)

M. M. Kovblyuk (<https://orcid.org/0000-0002-4192-3077>)

Z. A. Kastrygina (<https://orcid.org/0009-0002-7312-0882>)

urn:lsid:zoobank.org:pub:27F728E0-18C2-41B6-B9C1-D83785C32328

**The First Record from Ukraine of the Spider *Monaesses israeliensis* (Aranei, Thomisidae) from the Crimea.** Fedoriak, M. M., Kovblyuk, M. M. & Kastrygina, Z. A. — *Monaesses israeliensis* Levy, 1973 is recorded from Cape Aya, Crimean Peninsula. This is also the first record of this species in Ukraine. Comments on the geographical distribution and diagnostic illustrations of this species are given.

Key words: spiders, new record, Cape Aya, Crimea, Ukraine.

### Introduction

To date, a list of spiders of the Crimea numbers 573 species (Kovblyuk & Kastrygina, 2015; Nadolny, 2020; Yanul, Terekhova, Polchaninova, 2022). In total 171 genera and 2172 species have been identified in Thomisidae across the world (WSC, 2023) and about 13 genera and 42 species are known from the Crimea (Kovblyuk & Kastrygina, 2015).

While conducting a fieldwork by the group of students supervised by M. Fedoriak and O. Iaroshynska during the summer field course in June 2011, an additional species of the spiders and genus was found in

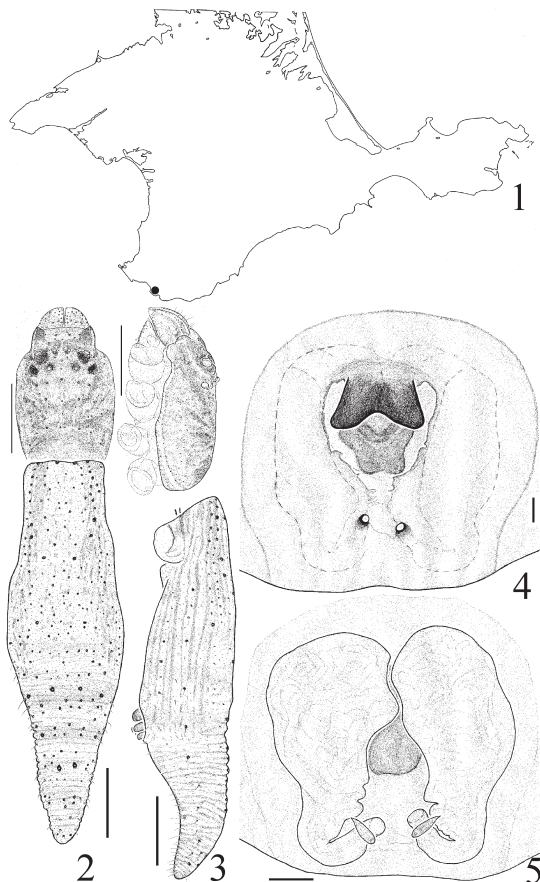
the Cape Aya in the Crimea. The goal of this paper is provide information of this new interesting faunistical record.

### Material and Methods

The Cape Aya is a part of the geographical region of the Crimean South Coast. The Mediterranean climate there is typical for dry subtropics. The area of Cape Aya is exposed to intensive recreation, including the reserved territory. The areas used for tourism and recreation are significantly altered, and in some places natural communities are destroyed. However, in areas that are inaccessible and inconvenient for tourists, the unique communities are preserved and are worthy of study. The Cape Aya is one of the least spider-sampled regions in the Crimean Peninsula.

It is located on the far west of the southern coast of the Crimea (44°30' N, 33°40' W) within the Balaklava District of Sevastopol (fig. 1), the total area exceeds 1,000 ha. The study site is located above the Turkish Lawn at the base of the rock walls of Mount Kush-Kaya (660 m). Studied habitats are characterized by juniper (*Juniperus excelsa*) woodlands with the pubescent oak (*Quercus pubescens*) and strawberry tree (*Arbutus andrachne*), Stankevich pine (*Pinus stankeviczii*), butcher's broom (*Ruscus ponticus*) and pistachio (*Pistacia mutica*).

Material was collected by using various methods (hand collecting, pitfall traps, sweeping with a net, and beating). The spiders were identified and are deposited in Maria M. Fedoriak's collection (MMF) at the Department of Ecology and Biomonitoring of Yuriy Fedkovych Chernivtsi National University. The specimens of *Monaeses israeliensis* Levy, 1973 due to the logistical difficulties of wartime are temporarily deposited in the National Arachnological Collection in V. I. Vernadsky Taurida National University, Simferopol, Ukraine.



Figs 1–5. *Monaeses israeliensis*: 1 — collecting locality in the Crimea; 2 — female general appearance, dorsal; 3 — same, lateral; 4 — epigyne, ventral; 5 — same, dorsal. Scale bars are equal to 1 mm (2–3), 0.1 mm (4–5).

### Results

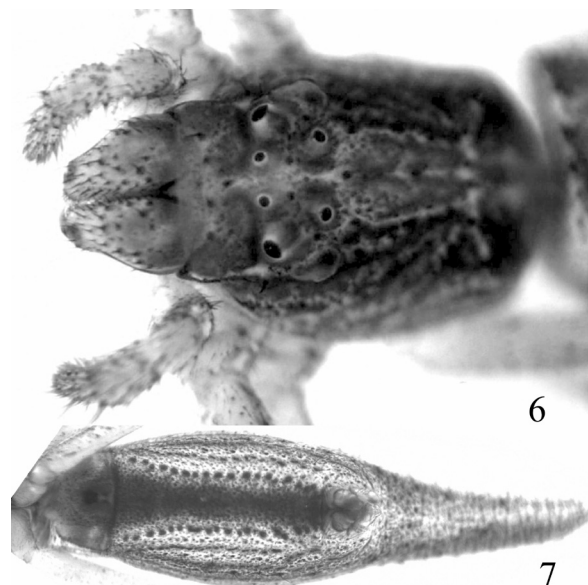
#### Family Thomisidae

#### Genus *Monaeses* Thorell, 1869

Type species: *Monastes paradoxus* Lucas, 1846

In total a genus is represented by 27 species; 13 species are known from the Oriental, 9 — from the Afrotropical, 2 — from the Australasian Region and 2 (*Monaeses israeliensis* and *M. paradoxus*) — from the Palaearctic Regions. However, ten species are known only from a single sex (five from females and five from males) and four species have been described from a juvenile specimen (WSC, 2023). Therefore, the genus is poorly studied; it has not been revised at a global scale; some non-Palaearctic species are possibly misassigned to the genus.

Diagnosis. The genus *Monaeses* is close to *Tmarus* Simon, 1875, but differs in the elongated carapace (as long as wide in *Tmarus*), and in a long and slender abdomen with the posterior part very elongated, extending far beyond the spinnerets (angular in *Tmarus*). Caudal



Figs 6–7. A female of *Monaeses israeliensis*: 6 — prosoma, dorsal; 7 — abdomen, ventral.

extension covered with numerous folds. Legs very long; pairs I and II longer than III and IV.

### *Monaeses israeliensis* Levy, 1973 (figs 1–7)

*Monaeses israeliensis* Levy, 1973: 111, figs 8–11 (♂, ♀);

*Monaeses israeliensis*: Levy, 1985: 20, figs 15–18 (♂, ♀);

*Monaeses israeliensis*: Naumova et al., 2021: 240, figs 22A–G (♂, ♀).

For complete list of taxonomic references see WSC (2023).

Material examined. **Ukraine**: Crimea, Cape Aya, Turkish Lawn, near the cafe, net sweeping, 20.06.2011, 3 ♀ (MMF2313); Turkish Lawn, grass, stones, litter, hand collecting, 20.06.2011, 1 ♀ (MMF2314).

**Diagnosis.** In general appearance *Monaeses israeliensis* is similar to *M. paradoxus*, but differs by the structure of the copulatory organs.

**Distribution.** Bulgaria, Greece, Caucasus (Krasnodar Region, Kabardinka Vil. and Gelendzhik), Israel, Lebanon, Turkey, China (Xinjiang), India, Iran, Kazakhstan (Mangyshlak (Maňgystau) Peninsula), Kyrgyzstan, Turkmenistan (Logunov et al., 2012; Mikhailov, 2013; Ponomarev et al., 2014; Yuan et al., 2019; WSC, 2023). Ukraine (Crimea) (**first record**).

**Notes.** This is the first record of both genus and species *Monaeses israeliensis* in Ukraine. Cape Aya is one of the two northernmost known localities of the species (another is Kabardinka Village in the Krasnodar Region).

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## References

- Kovblyuk, M. M. & Kastrygina, Z. A. 2015. Updated catalogue of the spiders (Arachnida, Aranei) of the Crimea. *Ukrainska Entomofaunistyka*, 6, 1–81.
- Levy, G. 1973. Crab-spiders of six genera from Israel (Araneae: Thomisidae). *Israel Journal of Zoology*, 22, 107–141.
- Levy, G. 1985. Araneae: Thomisidae. In: *Fauna Palaestina, Arachnida II*. Israel Academy of Sciences and Humanities, Jerusalem, 1–115.
- Logunov, D. V., Gromov, A. V. & Timokhanov, V. A. 2012. *Spiders of Kazakhstan*. Siri Scientific Press, Manchester, UK, 1–232.
- Mikhailov, K. G. 2013. The spiders (Arachnida: Aranei) of Russia and adjacent countries: a non-annotated checklist. *Arthropoda Selecta. Supplement No. 3*. KMK Scientific Press Ltd, Moscow, 1–262.
- Nadolny, A. A. 2020. New data on the species composition of spiders (Arachnida: Aranei) in Tarkhankut Peninsula, Crimea. *Proceedings of T. I. Vyazemsky Karadag scientific station*, 3 (15), 29–60 [In Russian].
- Naumova, M., Blagoev, G. & Deltchev, C. 2021. Fifty spider species new to the Bulgarian fauna, with a review of some dubious species (Arachnida: Araneae). *Zootaxa*, 4984 (1), 228–257. <https://doi.org/10.11646/zootaxa.4984.1.18>
- Ponomarev, A. V., Shapovalov, M. I. & Ivliev, P. P. 2014. New data on fauna of spiders (Aranei) in the South of the European part of Russia. *The Bulletin of the Adyghe State University*, 2 (137), 54–60 [In Russian].
- WSC. 2023. World Spider Catalog. Version 24.0. Natural History Museum Bern, online at <http://wsc.nmbe.ch> (accessed on 09.04.2023). <https://doi.org/10.24436/2>
- Yanul, V., Terkhova, V. & Polchaninova, N. 2022. New data on the rare spider species (Arachnida, Araneae) from Kyiv Region (Ukraine). *Zoodiversity*, 56 (3), 181–188. <https://doi.org/10.15407/zoo2022.03.181>
- Yuan, T., Niu, C. L., Ye, X. Y. & Zhang, Z. S. 2019. A newly recorded crab-spider *Monaeses israeliensis* (Thomisidae) from Xinjiang, China. *Acta Arachnologica Sinica*, 28 (2), 106–108. <https://doi.org/10.3969/j.issn.1005-9628.2019.02.004>

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