

First record of *Monaeses israeliensis* Levy, 1973 (Araneae: Thomisidae) from India

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Abstract

The thomisid spider *Monaeses israeliensis* Levy, 1973 is recorded for the first time from India. Female of the newly recorded spider species is described and illustrated.

Keywords: *Thomisidae*, *Monaeses israeliensis*, India, New record.

Received: 21 December 2019; Revised: 28 December 2020; Online: 31 December 2020

Introduction

The little-known crab spider genus *Monaeses* Thorell, 1869 is an old world genus and consists of 27 species of which only 4 species were reported so far from India (Sebastian and Peter 2009; WSC, 2020). Tikader (1963) described the first *Monaeses* species from India, subsequently three other species were described by Tikader (1980) and Gajbe and Rane (1992).

During the faunistic survey conducted to Southern Western Ghats of Wayanad districts, Kerala, we could collect the specimen of *Monaeses israeliensis* Levy, 1973. Search of literature revealed that the species has not been reported earlier from India (Levy, 1973; Bayram *et al.*, 2007; Sebastian and Peter, 2009; Kiany *et al.*, 2017; Yuan *et al.*, 2019; WSC, 2020) and hence the present finding forms a new record. Distribution of the genus was found to be confined to Western, Central & Northern India (Tikader, 1963; Tikader, 1980; Gajbe and Rane, 1992). Here we report the range extension of the genus to Southern India. A detailed description and illustrations of the newly recorded species *Monaeses israeliensis* Levy, representative of a lesser known genus *Monaeses* Thorell has been provided here in the light of present context of world spider taxonomy.

Materials and Methods

The present specimen was collected by bush beating and was examined under Leica M205A stereo zoom binocular micro-

scope and images captured with the camera model Leica DFC 500 and processed using extended focus montage LAS software (version 3.8.0). The measurements indicated in the text are in millimeters. Leg measurements are given as: Total length (femur, patella + tibia, metatarsus, tarsus). The terminology used in the text mainly follows Ono (1988) and Tang and Li (2010).

Abbreviations used: CL= Cephalothorax length, CW= Cephalothorax width, AL= Abdominal length, AW= Abdominal width, TL= Total length, AME= Anterior median eyes, ALE= Anterior lateral eyes, PME= Posterior median eyes, PLE= Posterior lateral eyes; WSC= World Spider Catalog.

The specimen is deposited in the National Zoological Collections of Zoological Survey of India, Western Ghat Regional Centre, Kozhikode.

Taxonomy

Monaeses Thorell, 1869

Type species: *Monaeses paradoxus* (Lucas, 1846)

Diagnosis: For diagnostic features and description, see Ono (1988).

Monaeses israeliensis Levy, 1973

Monaeses israeliensis Levy, 1973, Israel Journal of Zoology 22: 107-141.

Monaeses israeliensis Levy, 1985, Israel Academy of Sciences and Humanities, Jerusalem: 115pp.

Monaeses israeliensis Bayram *et al.*, 2007, Munis Entomology and Zoology 2: 129-136.

Monaeses israeliensis Kiany *et al.*, 2017, Arachnologische Mitteilungen 53: 1-8.

Monaeses israeliensis Yuan *et al.*, 2019, Acta Arachnologica Sinica 28(2): 106-108.

Description:

Female: CL- 1.81, CW- 1.52, AL- 5.84, AW- 1.32, TL- 7.65.

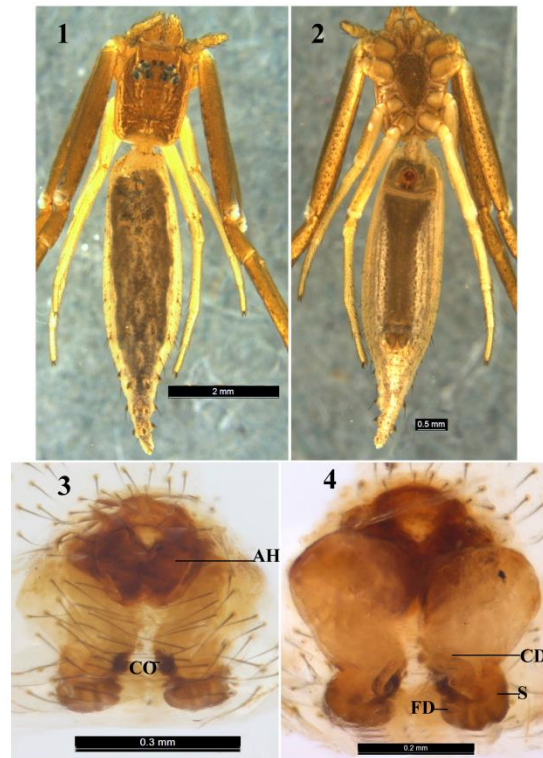
Cephalothorax (fig. 1) brownish grey, longer than wide, lateral margins almost parallel and narrowing in front, cephalic region elevated with cervical furrows, clothed with short stout setae. Eyes 8, black, ringed with white, arranged in two recurved rows, anterior row more recurved than posterior, eyes situated on the white tubercles, lateral tubercles larger than median, eye diameter: ALE>PLE>PME>AME, ocular quad trapezoid. Inter ocular distance: AME-AME=0.12, ALE-AME=0.21, ALE-ALE=0.52, PME-PME= 0.34, PLE-PME=0.32, PLE-PLE=0.63, ALE-PLE=0.34, AME-PME=0.26. Clypeus colour same as cephalothorax, wider than long, anterior margin concave, clothed with setae.

Chelicerae yellow, hairy, margins devoid of any tooth, dorsally clothed with setae, fangs yellow brown, small and broad. Maxillae and labium yellow, with scattered setae, apically scopulate, maxillae longer than wide and labium rhomboidal. Sternum brownish grey, oval, with setae (fig. 2).

Leg I & II brownish grey, leg II & IV yellowish white, metatarsi I & II with 5 pairs of short prolateral spines and metatarsi III & IV with 2 pairs of prolateral and 3 pairs of retrolateral short spines, tarsal claw 2, each with 5 teeth. Leg measurements: I 9.55 (2.69, 3.38, 2.35, 1.13); II 9.09 (2.89, 3.31, 2.01, 0.88); III 5.03 (1.04, 1.60, 1.9, 0.49); IV 6.61 (1.80, 1.94, 2.20, 0.67). Leg formula 1243.

Abdomen (figs. 1 and 2) grey with border yellowish white, slender, extending beyond the spinnerets and ends with a short tail, margin clothed with setae, each lateral side of the abdomen with 7 white longitudinal parallel lines extending from apical end to spinnerets; venter with a median grey band extending from epigastric furrow to base of spinneret, with conspicuous folds and bristles; anterior spinnerets grey, close, posterior spinnerets white, wide, hairy.

Epigynum-Internal genitalia (figs. 3 and 4): Epigynum with strongly sclerotised anterior hood, rhomboidal in appearance, copulatory opening distinct and semicircular; spermathecae twisted and convoluted, copulatory ducts wider and longer than spermatheca, fertilization ducts distinct.



Figures 1–4. *Monaeses israeliensis* Levy female: **1.** Dorsal view; **2.** Ventral view; **3.** Epigynum, ventral view; **4.** Internal genitalia, dorsal view (Abbreviations used: S: Spermatheca, CD: Copulatory Duct, FD: Fertilization Duct, CO: Copulatory Opening, AH: Anterior Hood).

Material examined: 1♀ (Reg. No. ZSI/WGRC/IR.INV.13466), **India:** Kerala, Wayanad district, Sultan Bathery (11°40'17"N & 76°22'07"E, 863m), 27/ix/2016, Coll. P.M. Sureshan.

Distribution: Greece, Turkey, Israel, Lebanon, Iran, Central Asia, China, **India (New record).**

Remarks: The internal genitalia of the recorded species has shown greater resemblance to the illustrations of Levi (1973).

Acknowledgements

The authors are grateful to Dr. Kailash

Chandra, Director, Zoological Survey of India for his encouragement, moral support and providing necessary facilities to carry out the work. The authors also thank Principal Chief Conservator of Forest, Kerala Forest and Wildlife Department for necessary support.

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