



First record of *Aegyptobia anvillea* (Acari: Trombidiformes) from Iran, with new host plant for Tetranychoida in Iran

Dariusht Bastani-Rad^{1*} | Malihe Latifi¹ | Sayed Mosayeb Mahdavi² | Isa Esfandiarpour-Boroujeni³

1. Department of Plant Protection, College of Agriculture, Vali-e-Asr University of Rafsanjan, Rafsanjan, Iran; E-mails: dariusht_bastanirad@outlook.com, m.latifi@vrn.ac.ir
 2. Department of Plant Protection, Faculty of Agriculture, University of Tabriz, Iran; E-mails: Mahdavi.mosayeb@tabrizu.ac.ir, mahdavi.mosayeb@outlook.com
 3. Department of Soil Sciences, Faculty of Agriculture, Vali-e-Asr University of Rafsanjan, Rafsanjan, Iran; E-mail: esfandiarpour@vrn.ac.ir

* Correspondence



dariusht_bastanirad@outlook.com

Received:

01 August, 2025

Accepted:

07 October, 2026

Published:

15 October, 2026

Subject Editor:

P. Lotfollahi



CITE:

Bastani-Rad, D., Latifi, M., Mahdavi S.M. & Esfandiarpour-Boroujeni, I. (2026) First record of *Aegyptobia anvillea* (Acari: Trombidiformes) from Iran, with new host plant for Tetranychoida in Iran. *Persian Journal of Acarology*, 15(4): 50412.

<https://doi.org/10.22073/pja.150412>

The family Tenuipalpidae Berlese, 1913, commonly known as flat mites. Up to now, 86 species belonging to 14 genera of Tenuipalpidae are recorded from Iran. *Aegyptobia* Sayed, 1950 is one the largest genera of Tenuipalpidae comprising 108 species, of which 19 species are recorded from Iran (Mahdavi and Asadi 2023; Mahdavi *et al.* 2025). In this paper, *Aegyptobia anvillea* Kamran & Alatawi, 2016, is newly recorded from Iran on *Anvillea garcinii* DC. (Asteraceae) (Fig. 1). This is the second record of *A. anvillea* worldwide and the first report of the genus *Anvillea* as a new host plant for Tetranychoida in Iran. The species was originally described from Saudi Arabia, on *A. garcinii*. Leaves and sheaths of *A. garcinii* were collected and brought to the research laboratory. A dipping-washing-filtering method was used to remove the mites (Boller 1984). The solution was filtered through a 400 mesh sieve and retained mites were washed with 70% ethanol into a Petri dish, then collected individually under a stereomicroscope and mounted in Hoyer's medium. Mites were identified using an Olympus® BX43 phase-contrast compound microscope. Measurements were taken by means of a Dino-Eye® digital imaging system and are given in micrometers (µm).

Family Tenuipalpidae Berlese, 1913

Genus *Aegyptobia* Sayed, 1950

Type-species: *Aegyptobia tragardhi* Sayed, 1950: 1019.

Aegyptobia anvillea Kamran & Alatawi, 2016 (Fig. 2)

Six females, *ex. Anvillea garcinii* DC. (Asteraceae) in Bahram-e-Goor Protected Area, Fars Province, Iran 29° 20' 35" N, 54° 46' 92" E, altitude 1738 m a.s.l., on 10 May 2024, coll. D. Bastani-Rad.

Diagnosis (supplemented from Kamran *et al.* 2016). Spermatheca (Fig. 2a) with an elongate, highly coiled, fine membranous duct terminating in a narrow, elongate vesicle, length 8. Opisthosoma with three pairs of pores (Fig. 2b).

This is the second report of *A. anvillea* for the world and the first report from Iran. The original description and the Iranian specimens have no distinct structural differences except pores (three pairs of opisthosomal pores present in Iranian specimens vs. absent in Arabian specimens) (Fig. 2b). However, pores in tenuipalpid mites may be difficult to observe because they can be obscured by the waxy surface



covering and dense reticulate ornamentation, as well as by specimen condition and microscopic observation. Therefore, the difference in the presence or visibility of opisthosomal pores should be interpreted cautiously and should not, by itself, be considered sufficient to separate the Iranian specimens from *A. anvillea*. No other consistent morphological differences were observed. Considering the overall morphological agreement and the shared host plant, the Iranian specimens are identified as *A. anvillea*.



Figure 1. Host plant, *Anvillea garcinii* DC. (Asteraceae).

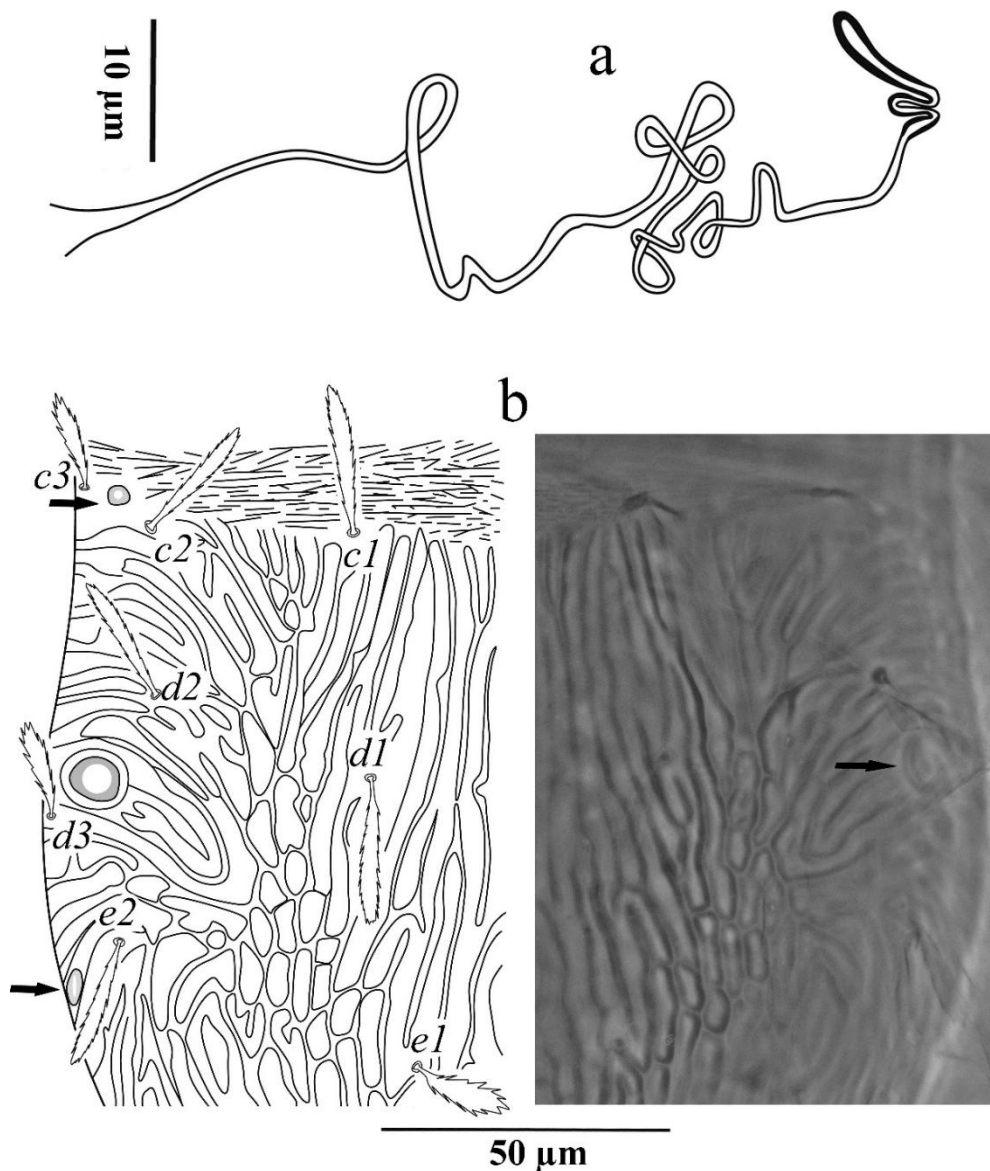


Figure 2. *Aegyptobia anvillea* (female) – **a.** Spermatheca; **b.** Pores on opisthosoma.

Author contributions: Methodology: D.B.R., S.M.M., M.L., I.E.B; Sampling, collection and preparation of specimens: D.B.R.; Analyses and data curation: D.B.R., S.M.M.; Illustration and photography: D.B.R.; writing – original draft preparation: D.B.R.; writing – revisions and editing: S.M.M., I.E.B., M.L.; supervision: M.L.; funding acquisition: M.L. All authors have read and agreed to the published version of the manuscript.

Funding: The research was funded by the Vali-e-Asr University of Rafsanjan, Rafsanjan, Iran.

Data availability: VUR—Collection of the Acarology Laboratory, Vali-e-Asr University of Rafsanjan, Kerman, Iran. Specimens are available under request.

Ethics approval: This study only included arthropod material, and all required ethical guidelines for the treatment and use of animals were strictly adhered to in accordance with international, national, and institutional regulations. No human participants were involved in any studies conducted by the authors for this article.

Consent for publication: NA.

Conflict of interest: The authors declare no conflict of interest.

Generative AI statement: The authors declare that no generative AI was used in the creation of this manuscript.

REFERENCES

- Berlese, A. (1913) *Acarotheca Italica*. *Tipografia di M. Ricci, Firenze, Italy*.
- Boller, E.E. (1984) Eine einfache ausschwemm-methode zur erschellen erfassung von raummilben, trips und anderen kleinarthropoden im weinbau. *Schweizer Zeitschrift für Obst- und Weinbau*, 120: 249–255.
- Kamran, M., Mushtaq, H.M.S. & Alatawi, F.J. (2016) The genus *Aegyptobia* Sayed (Acari: Trombidiformes: Tenuipalpidae) from Saudi Arabia: five new species and a key to the world species. *International Journal of Acarology*, 43(2): 91–111. <https://doi.org/10.1080/01647954.2016.1233999>
- Mahdavi, S.M. & Asadi, M. (2023) New records of Tetranychoida (Acari: Trombidiformes) from Iran with description of a new species of the genus *Aegyptobia* Sayed. *Systematic and Applied Acarology*, 28(2): 173–184. <https://doi.org/10.11158/saa.28.2.2>
- Mahdavi, S.M., Asadi, M. & Modarres, S.A. (2025) A catalog of superfamily Tetranychoida (Acari: Trombidiformes) from Iran. *Acarologia*, 65(2): 602–646. <https://doi.org/10.24349/3wta-5ato>
- Sayed, M.T. (1950) On the taxonomy of tetranychid and allied genera. A new family and two new sub-families in Acarina. *Proceedings of the 8th International Congress of Entomology, Stockholm, Sweden*, pp. 1012–1017.