



Persian J. Acarol., 2023, Vol. 12., No. 1, pp. 81–89.
https://doi.org/10.22073/pja.v12i1.77609
Journal homepage: <http://www.biotaxa.org/pja>



<http://zoobank.org/urn:lsid:zoobank.org:pub:FF743671-0F7F-428B-B6F8-BD74AC745347>

Article

Eriophyes urmiae sp. nov. (Acari: Eriophyidae) from spurge in Iran

Mojtaba Mohammad-Doustasharaf¹ , Parisa Lotfollahi^{1*}  and Mohammad Bagheri² 

1. Department of Plant Protection, Faculty of Agriculture, Azarbaijan Shahid Madani University, Tabriz, Iran; E-mails: prslotfollahy@yahoo.com, mojtaba.doostar@gmail.com
2. Department of Plant Protection, Faculty of Agriculture, University of Maragheh, Maragheh, Iran; E-mail: mbagheri20022002@yahoo.com

* Corresponding author

ABSTRACT

In order to survey eriophyoid mites of northwest of Urmia County, West Azerbaijan Province, Iran, samplings were done on spurges during summer 2021 and one new species, *Eriophyes urmiae* Lotfollahi & Mohammad-Doustasharaf sp. nov. was found in Qaleh Sardar of Nazluchay Rural District as vagrant on *Euphorbia* sp. (Euphorbiaceae) leaves. This is the fourth eriophyoid mite described on spurges in Iran.

KEY WORDS: Eriophyinae, Euphorbiaceae, female, male, nymph, Urmia, West Azerbaijan.

PAPER INFO.: Received: 16 October 2022, Accepted: 8 November 2022, Published: 15 January 2023

INTRODUCTION

The plant family Euphorbiaceae has 228 plant genera including 16,918 scientific plant names of species rank of which 6,547 are accepted species names. Spurges (genus *Euphorbia*) are a large, diverse and cosmopolitan group in this family with over 2000 species making it one of the largest genera in the world (The World Flora Online 2022). Many spurge species are important as ornamentals, as sources of drugs, or as agricultural weeds and invasive species. Over 80 species of *Euphorbia* are so far reported from Iran that have special importance both in negative and positive respects. Several species are poisonous, antipastoral, weeds or known to suppress the vegetation and some species are rare, endemic or endangered (Pahlevani 2007).

Until now 15 eriophyoid species were collected and described on *Euphorbia* plant species worldwide including three *Aceria*, four *Aculops*, one *Aculus*, one *Aculochetus*, two *Phyllocoptes* and four *Eriophyes*. Among them, three species were described or supplementary described in Iran: 1. *Eriophyes euphorbiae* (Nalepa, 1890) from *E. boissieriana* (Woronow) Prokh. in Esfahlan village, Tabriz region of East Azerbaijan Province, Iran (Lotfollahi *et al.* 2020a); 2. *Aceria cheiradeniae* Lotfollahi, Haddad Irani-Nejad, Khanjani, Moghadam & de Lillo, 2012 from *E. cheiradenia* Boiss. & Hohen in Kandovan, Osku region of East Azerbaijan Province, Iran (Lotfollahi *et al.* 2012); 3. *Aculops seguieranae* Lotfollahi, Irani-Nejad, Khanjani, Moghadam & de Lillo, 2012 from *E. seguierana* Necker in Kandovan, Osku region of East Azerbaijan Province, Iran (Lotfollahi *et al.* 2012). Owing to the ecological importance of spurges, this survey was done on their eriophyoid mites

How to cite: Mohammad-Dostasharaf, M., Lotfollahi, P. & Bagheri, M. (2023) *Eriophyes urmiae* sp. nov. (Acari: Eriophyidae) from spurge in Iran. *Persian Journal of Acarology*, 12(1): 81–89.

in Urmia region and one new species was found and described in this paper.

MATERIAL AND METHODS

In order to survey eriophyoid mites of northwest of Urmia County, samplings were done on spurges during summer 2021. Eriophyoid mites were recovered from the plant material by means of a modified washing method developed by Monfreda *et al.* (2007). The collected specimens were slide mounted according to Mehri-Heyran *et al.* (2020). The terminology and the setal notation in the morphological description of the mite follow mainly Lindquist (1996) and terminology of the internal female genital apparatus follows Chetverikov (2014) and Chetverikov *et al.* (2014).

All morphological measurements were taken by means of a phase contrast microscope Olympus BX53, 1,000 magnification (oil immersion) according to Amrine and Manson (1996) as modified by de Lillo *et al.* (2010), and are given in micrometers. Counting of dorsal, ventral and coxigenital semiannuli follows Lotfollahi *et al.* (2020b). Measurements and means are rounded off to the nearest integer when required except for the characters with very short length. Measurements refer to the length of the morphological trait unless otherwise specified and are given in micrometers. In the female description, the holotype measurements are followed by range values, in parentheses, of the studied population (*i.e.* holotype and paratypes) and for males and immature stages, only the range values are given. The mean values of the paratypes are reported in the few cases in which the measurements of the holotype could not be taken, due to the slide mounting position of the specimens and were marked by an asterisk (*) in the description.

Line drawings were hand-drawn through a *camera lucida* according to de Lillo *et al.* (2010) and the plates were edited with Adobe Photoshop CC 2017. The abbreviations labelling schematic drawings in figures follow mainly Amrine *et al.* (2003).

The genus classification follows Amrine *et al.* (2003) and comparisons were also made with new genera described since that publication.

Host plant names and their synonymies are in accordance with "*The World Flora Online*" (2022). Type materials are deposited at the Acarology Laboratory, Department of Plant Protection, Faculty of Agriculture, Azarbaijan Shahid Madani University, Tabriz, Iran.

RESULTS

Family Eriophyidae Nalepa Subfamily Eriophyinae Nalepa Tribe Eriophyini Nalepa

Eriophyes urmiae Lotfollahi & Mohammad-Doustaresharaf sp. nov.

<http://zoobank.org/urn:lsid:zoobank.org:act:4FDDA65C-B924-47F0-B816-BEA74BD672A6>

Description

Female (Fig. 1) (measured specimens n = 7) – Body vermiform, 192 (192–234, excluding gnathosoma), 64 (58–65) thick, 61 (61–65) wide. **Gnathosoma** projecting obliquely downwards, cheliceral stylets 29 (29–32), palp 26 (23–29), palp coxal setae *ep* 4 (no variation), dorsal palp genual setae *d* 11 (11–13), unbranched. Suboral plate rounded anteriorly, with some dashes in lateral sides. **Prodorsal shield** 37 (37–41) including frontal lobe, 35 (32–39) wide, semicircular; with a short triangular flexible frontal lobe, 6 (5–7), over gnathosomal base. Shield pattern distinct, consisting of short median line on posterior third of prodorsal shield, complete admedian and inner submedian lines, short outer submedian and lateral lines, many dashes on shield lateral sides; median, admedian and first submedian lines composed of connected dashes on their base and lateral lines made by

connected dashes. Tubercles of scapular setae *sc* 7 (7–9) ahead of rear shield margin, 22 (22–25) apart, setae *sc* 25 (25–28), directed forward. **Legs** with all usual segments and setae. Leg I 39 (35–40), trochanter 5 (4–6), femur 10 (9–10), genu 7 (5–7), tibia 9 (7–10), tarsus 9 (8–9), tarsal solenidion ω 10 (10–12), curved down, distally rounded, empodium simple, 9 (8–10), 7-rayed (in few specimens asymmetric 6/7-rayed); femoral setae *bv* 15 (14–17), genual setae *l''* 27 (26–30), paraxial tibial setae *l'* 10 (10–13), located in basal third of tibia, paraxial fastigial tarsal setae *ft'* 22 (20–25), antaxial fastigial tarsal setae *ft''* 30 (28–33), paraxial unguinal tarsal setae *u'* 5 (5–6). Leg II 34 (31–35), trochanter 5 (5–7), femur 9 (8–10), genu 6 (5–6), tibia 7 (6–8), tarsus 9 (8–9), tarsal solenidion ω 10 (9–11), curved down, distally rounded, empodium simple, 9 (9–11), 7-rayed (in few specimens asymmetric 6/7-rayed); femoral setae *bv* 18 (15–19), genual setae *l''* 12 (12–16), paraxial fastigial tarsal setae *ft'* 9 (8–10), antaxial fastigial tarsal setae *ft''* 29 (27–34), paraxial unguinal tarsal setae *u'* 6 (5–6). **Coxisternal region.** Prosternal apodeme 7 (6–8), slightly divided anteriorly, anterior setae on coxisternum I *lb* 13 (10–14), 15 (14–16) apart; proximal setae on coxisternum I *la* 42* (40–43), 10 (10–11) apart; proximal setae on coxisternum II *2a* 53* (50–55), 25 (24–28) apart; 5 (4–6) microtuberculate semiannuli between coxae and genital coverflap plus 3 (2–3) transversal rows of lined granules at the base of the coverflap. Coxae with coarse dashes. **External genitalia** 13 (11–14), 22 (20–23) wide, coverflap with 10 (8–12) longitudinal striae; setae *3a* 52 (52–57), 20 (18–20) apart. **Internal genitalia:** spermathecae circular, oriented posterolaterad; spermathecal tubes relatively short about third of spermathecae diameter; transverse genital apodeme trapezoidal, distally folded. **Opisthosoma** dorsally evenly rounded, with 66 (65–78) dorsal semiannuli, 64 (62–69) ventral semiannuli. **Microtubercles:** triangular with slight circular bumping at base, on posterior margin of dorsal and ventral semiannuli; circular with spine, on lateral sides of annuli; elongated and linear on last 5 (5–6) ventral semiannuli. Setae *c2* 53 (48–57) on ventral semiannulus 11 (10–12), setae *d* 88 (85–90) on ventral semiannulus 22 (22–26); setae *e* 50 (50–56) on ventral semiannulus 39 (37–40); setae *f* 47 (40–47) on ventral semiannulus 59 (57–64); 5 (5–6) annuli posterior to setae *f*. Setae *h2* 111* (108–115) apically very fine, *h1* 2 (2–3).

Male (Fig. 1-GM) (measured specimens n = 3) – Similar in shape and prodorsal shield arrangement to female. Body smaller than female, 169–180, 53–62 wide, 53–62 thick; palp genual setae *d* 10–12; prodorsal shield 32–33, 30–34 wide; setae *sc* 22–27, 21–25 apart. Opisthosoma with 59–64 dorsal semiannuli and 54–63 ventral semiannuli; 4–5 semiannuli between coxae and genitalia, with microtubercles similar to that of female. Setae: *lb* 12–13, *la* 24–32, *2a* 33–40, *c2* 40–42, *d* 74–75, *e* 50–55, *f* 40–43, *h1* 2–3, *h2* 119–124. Male genitalia 17–20 wide, setae *3a* 24–32, 16–19 apart.

Nymph (Fig. 2) (measured specimen n= 1) – Body vermiform, 186 (excluding gnathosoma), 63 wide; palp genual setae *d* 7. Prodorsal shield 29 including frontal lobe, 31 wide, semicircular with a very short circular frontal lobe, 2, over gnathosomal base. Shield pattern distinct, consisting of short median, admedian and inner submedian lines respective to female. Tubercles of *sc* setae 7 ahead of rear shield margin, 21 apart, setae *sc* 22, directed forward. Opisthosoma with 57 dorsal semiannuli and 51 ventral semiannuli with microtubercles similar to female. Setae: *lb* 9, *la* 19, *2a* 28, *c2* 24, *d* 35, *e* 23, *f* 31, *h2* 38, *h1* 2. Setae *3a* 28, 9 apart on semiannulus 4 after coxal region.

Type host plant

Euphorbia sp. (Euphorbiaceae), spurge.

Type locality

Qaleh Sardar, Nazluchay Rural District, Urmia County, West Azerbaijan, Iran (37° 41' 08" N, 44° 55' 21" E), 1,463 m above sea level, coll. M. Mohammad-Doustaresharaf, 27 August 2021.

Type material

Holotype: single female on a microscope slide (Esp-IWA-UA21D-1). Paratypes: 14 females, 3 males and 1 nymph mounted singly on separate microscope slides (Esp-IWA-UA21D-2–19).

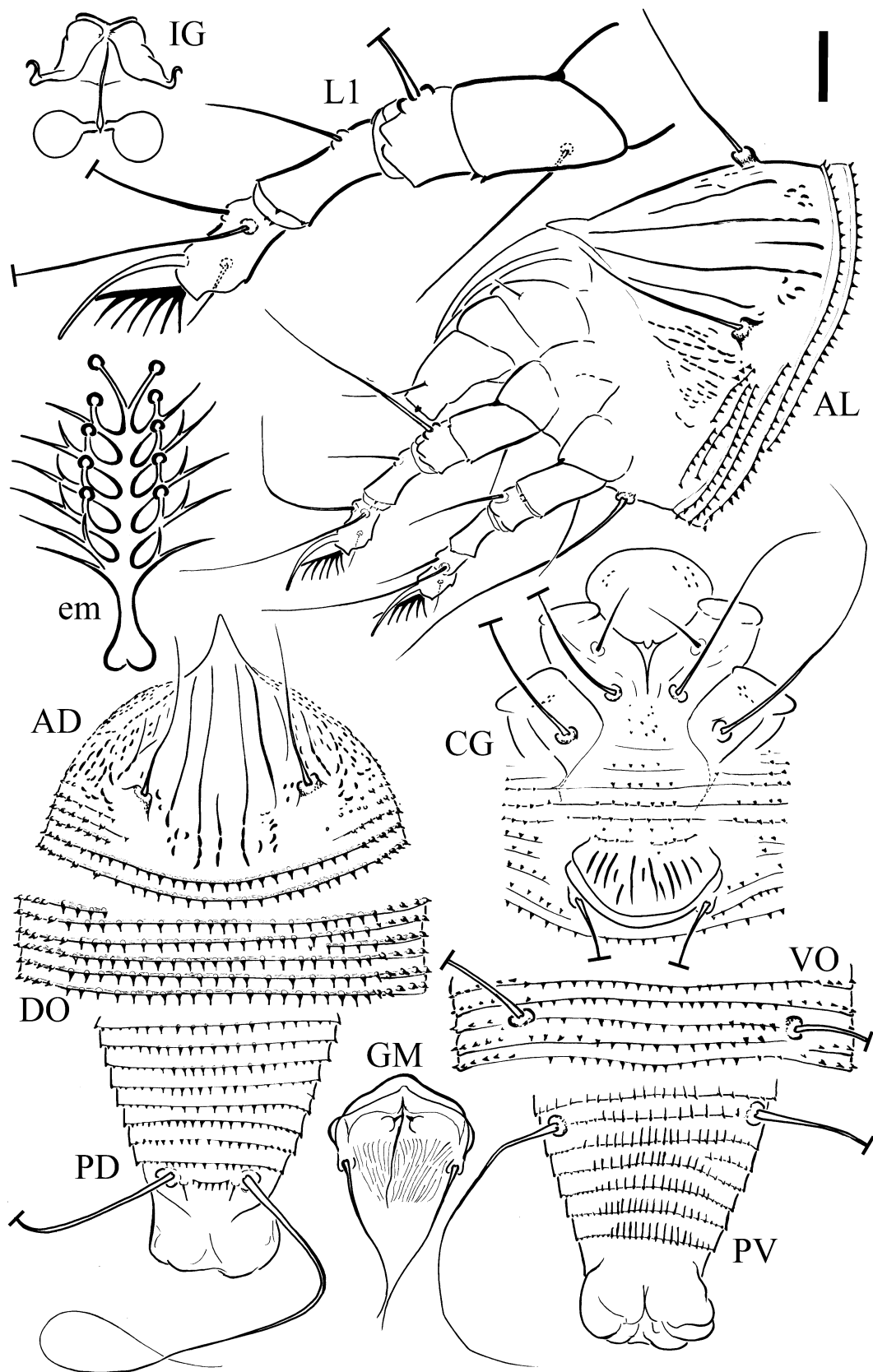


Figure 1. Schematic drawings of *Eriophyes urmiae* Lotfollahi & Mohammad-Doustaresharaf *sp. nov.* – AD. Prodorsal shield; AL. Lateral view of anterior body region; CG. Female coxigenital region; DO. Dorsal view of annuli; em. Empodium; GM. Male genital region; IG. Internal female genitalia; L1. Leg I; PD. Dorsal view of posterior opisthosoma; PV. Ventral view of posterior opisthosoma; VO. Ventral view of annuli. **Scale bar:** 10 μ m for AD, AL, CG, DO, GM, IG, pg, PD, PV, VO; 5 μ m for L1; 2.5 μ m for em.

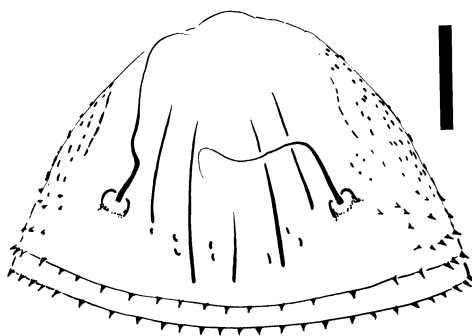


Figure 2. Schematic drawings of *Eriophyes urmiae* Lotfollahi & Mohammad-Doustasharaf **sp. nov.** nymph prodorsal shield. **Scale bar:** 10 μ m.

Other material

Mites preserved in a vial (Esp-IWA-UA21D) of Oudemans' fluid (Walter and Krantz 2009) as extracted from the same sample as the type specimens.

Relation to the host plant

Vagrant on leaves; no apparent damage was observed.

Distribution

This new species is at present recorded only from Urmia region. However, spurges are widely distributed in Iran so future surveys could reveal a wider distribution for this new mite species.

Etymology

This species is named after the region where it was collected.

Differential diagnosis

The new species is not morphologically the same as other *Eriophyes* spp. from Iran as well as the species found on spurges worldwide. The new species was compared to the closer species *E. antiquorum* Amrine & Stasny, 1994 and *E. septemlineatus* Petanović, 1991 and it was also compared to *E. euphorbiae* (Nalepa, 1890), the only *Eriophyes* species associated with *Euphorbia* plants in Iran: ***Eriophyes antiquorum* Amrine & Stasny, 1994 (syn: *Eriophyes euphorbiae* Mohanasundaram, 1983)** - The new species has short median line (Fig. 1-AD) while *E. antiquorum* has complete median line (Fig. 3-A). Coxae of *E. antiquorum* ornamented by several distinct granules, but the new species has scarce dots and short lines on its coxae. In addition, the new species has distinctly longer setae *c2*, *d*, *e*, *f* and *3a* and more empodium rays than them in *E. antiquorum* (Table 1). The new species found as vagrant species on foliage of *Euphorbia* sp., while *E. antiquorum* found inducing rust on tender foliage of *Euphorbia antiquorum* L.

***Eriophyes septemlineatus* Petanović, 1991** - The new species has short median line (Fig. 1-AD) while *E. septemlineatus* has complete median line (Fig. 3-B). Coxae of *E. septemlineatus* are smooth, but the new species has scarce dots and short lines on its coxae. The new species has distinctly longer setae *c2*, *d*, *e*, *f* and *3a* than them in *E. septemlineatus* (Table 1). *Eriophyes septemlineatus* lives in terminal growth points and in inflorescence producing deformations and drying of *Euphorbia nicaeensis* All. ssp. *glareosa* (Pall. ex M.Bieb.) Radcl.-Sm, while the new species is vagrant and no apparent damage was observed on the host plant.

***Eriophyes euphorbiae* (Nalepa, 1890)** - The prodorsal shield of new species ornamented by lines (Fig. 1-AD), whereas the prodorsal shield of *E. euphorbiae* is reticulated (Fig. 3-C). Coxae of *E. euphorbiae* ornamented by distinct dense granules, while the new species has scarce dots and short

lines on its coxae. Empodium rays number of *E. euphorbiae* is less than that in the new species. *Eriophyes euphorbiae* has shorter setae *sc*, *d*, *e*, *f* and *3a* than them in the new species (Table 1). *Eriophyes euphorbiae* makes leaf and shoot tip deformation in *Euphorbia cyparissias* L., while no apparent damage was observed on the host plant of the new species.

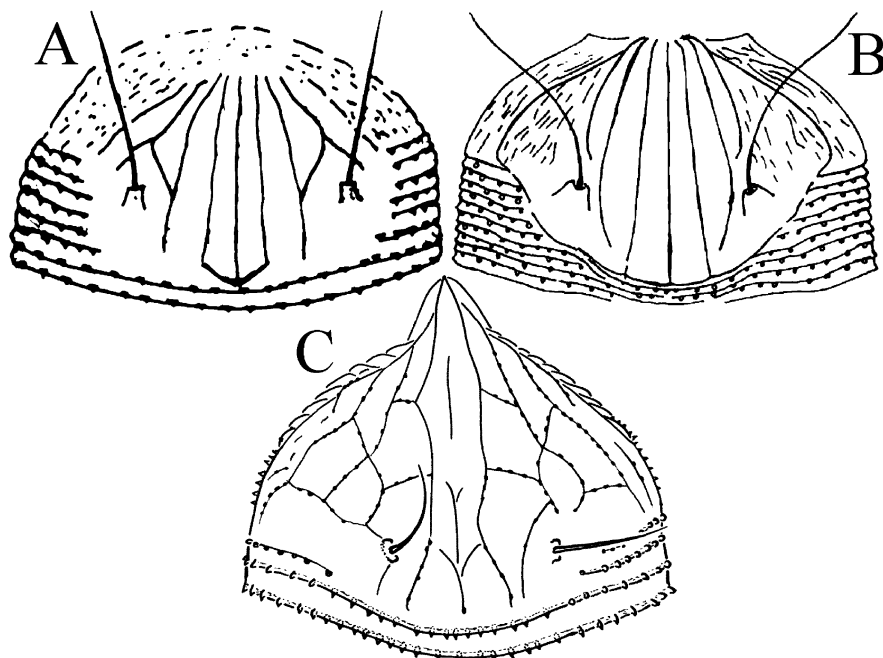


Figure 3. Schematic drawings of the prodorsal shields of: **A.** *Eriophyes antiquorum* Amrine & Stasny, 1994 (from Mohanasundaram 1983); **B.** *Eriophyes septemlineatus* Petanović, 1991 (from Petanović 1991); **C.** *Eriophyes euphorbiae* (Nalepa, 1890) (from Lotfollahi *et al.* 2020a).

Table 1. Gross comparison of some important traits among *Eriophyes antiquorum* Amrine & Stasny, 1994, and *E. septemlineatus* Petanović, 1991, *E. euphorbiae* (Nalepa, 1890) and *E. urmiae* Lotfollahi & Mohammad-Doustaresharaf *sp. nov.*

Characters	<i>E. antiquorum</i> Amrine & Stasny, 1994	<i>E.</i> <i>septemlineatus</i> Petanović, 1991	<i>E. euphorbiae</i> (Nalepa, 1890) (in Lotfollahi <i>et</i> <i>al.</i> 2020a)	<i>E. urmiae</i> Lotfollahi & Mohammad- Doustaresharaf <i>sp.</i> <i>nov.</i>
Dorsal semiannuli number	60	65–68	51–59	66 (65–78)
Ventral semiannuli number	60	65–68	66–72	58 (55–61)
Empodium I rays number	5	7	6	7 (in few specimens asymmetric 6/7)
Setae <i>sc</i> length	20	22	10–12	25 (25–28)
Setae <i>c2</i> length	20	18	50–56	53 (48–57)
Setae <i>d</i> length	55	65	61–70	88 (85–90)
Setae <i>e</i> length	5	23	41–49	50 (50–56)
Setae <i>f</i> length	20	27	25–31	47 (40–47)
Setae <i>3a</i> length	10	15	31–42	52 (52–57)

ACKNOWLEDGEMENTS

This research was partially supported by Azarbaijan Shahid Madani University (Iran) and Iran National Science Foundation (INSF) under grant number 99022087, which are greatly appreciated.

REFERENCES

- Amrine, J.W. Jr. & Manson, D.C.M. (1996) Preparation, mounting and descriptive study of eriophyoid mites. *In: Lindquist E.E., Sabelis, M.W. & Bruin, J. (Eds.), Eriophyoid mites. Their biology, natural enemies and control.* World Crop Pests, Vol. 6, Elsevier Science Publishers, Amsterdam, The Netherlands, pp. 383–396. DOI: [10.1016/S1572-4379\(96\)80023-6](https://doi.org/10.1016/S1572-4379(96)80023-6)
- Amrine, J.W. Jr. & Stasny, T.A. (1994) *Catalog of the Eriophyoidea (Acarina: Prostigmata) of the world.* Indira Publishing House, West Bloomfield, Michigan, USA, 804 pp.
- Amrine, J.W. Jr., Stasny, T.A.H. & Flechtmann, C.H.W. (2003) *Revised keys to world genera of Eriophyoidea (Acari: Prostigmata).* Indira Publishing House, West Bloomfield, Michigan, USA, 244 pp.
- Chetverikov, P.E. (2014) Comparative confocal microscopy of internal genitalia of phytoptine mites (Eriophyoidea, Phytoptidae): new generic diagnoses reflecting host–plant associations. *Experimental and Applied Acarology*, 62: 129–160. DOI: [10.1007/s10493-013-9734-2](https://doi.org/10.1007/s10493-013-9734-2)
- Chetverikov, P.E., Craemer, C., Vishnyakov, A.E. & Sukhareva, S.I. (2014) CLSM anatomy of internal genitalia of *Mackiella reclinata* n. sp. and systematic remarks on eriophyoid mites from the tribe Mackiellini Keifer, 1946 (Eriophyoidea, Phytoptidae). *Zootaxa*, 3860(3): 261–279. DOI: [10.11646/zootaxa.3860.3.5](https://doi.org/10.11646/zootaxa.3860.3.5)
- de Lillo, E., Craemer, C., Amrine, J.W. Jr. & Nuzzaci, G. (2010) Recommended procedures and techniques for morphological studies of Eriophyoidea (Acari: Prostigmata). *Experimental and Applied Acarology*, 51(1–3): 283–307. DOI: [10.1007/S10493-009-9311-x](https://doi.org/10.1007/S10493-009-9311-x)
- Lindquist, E.E. (1996) External anatomy and notation of structures. *In: Lindquist, E.E., Sabelis, M.W. & Bruin, J. (Eds.), Eriophyoid mites. Their biology, natural enemies and control.* World Crop Pests, Vol. 6, Elsevier Science Publishers, Amsterdam, The Netherlands, pp. 3–31. DOI: [10.1016/S1572-4379\(96\)80003-0](https://doi.org/10.1016/S1572-4379(96)80003-0)
- Lotfollahi, P., Chetverikov, P.E., Mehri-Heyran, H. & Saboori, A. (2020a) Description of *Aculops shalchii* sp. nov. and supplementary descriptions of *Eriophyes euphorbiae* and *Aceria rubiae* (Trombidiformes: Eriophyoidea: Eriophyidae) from Iran. *Systematic And Applied Acarology*, 25(11): 2131–2146. DOI: [10.11158/saa.25.11.15](https://doi.org/10.11158/saa.25.11.15)
- Lotfollahi, P., Haddad Irani-Nejad, K., Khanjani, M., Moghadam, M. & de Lillo, E. (2012) Two new eriophyoid mite species (Acari: Prostigmata: Eriophyidae) on *Euphorbia* spp. (Euphorbiaceae) from Iran. *Zootaxa*, 3556: 55–60. DOI: [10.11646/zootaxa.3556.1.3](https://doi.org/10.11646/zootaxa.3556.1.3)
- Lotfollahi, P., Ranjbar Varandi, F., Bahirai, F., Jafari, S. & Shakarami, J. (2020b) Two new *Aceria* species (Acari: Eriophyidae) from Lorestan Province of Iran. *Systematic and Applied Acarology*, 25: 1169–1177. DOI: [10.11158/saa.25.7.1](https://doi.org/10.11158/saa.25.7.1)
- Mehri-Heyran, H., Lotfollahi, P., de Lillo, E. & Azimi, S. (2020) Eriophyoid (Trombidiformes: Eriophyoidea) mite fauna of Miandoab region in Iran with redescription of *Aceria kiefferi* (Nalepa). *Persian Journal of Acarology*, 9(2): 161–171. DOI: [10.22073/pja.v9i2.59382](https://doi.org/10.22073/pja.v9i2.59382)
- Mohanasundaram, M. (1983) Record of new eriophyid mites (Eriophyoidea: Acarina) from south India. *Entomology*, 8(3): 263–268.
- Monfreda, R., Nuzzaci, G. & de Lillo, E. (2007) Detection, extraction, and collection of eriophyoid mites. *Zootaxa*, 1662: 35–43. DOI: [10.11646/zootaxa.1662.1.4](https://doi.org/10.11646/zootaxa.1662.1.4)
- Nalepa, A. (1890) Neue Phytoptiden. *Anzeiger der kaiserlichen Akademie Wissenschaften, Mathematische-naturwissenschaftliche Classe, Wien*, 27(20): 212–213.
- Pahlevani, A.H. (2007) Notes on some species of the genus *Euphorbia* in Iran. *Rostaniha*, 8(2): 89–103.

Petanović, R. (1991) Two new species of eriophyid mites (Acarida: Eriophyoidea) on leafy spurge (*Euphorbia* L.) from Yugoslavia. *Bulletin of the Natural History Museum in Belgrade*, 46: 121–129.

The World Flora Online (2022) World Flora Online. Available from <http://www.worldfloraonline.org/taxon/wfo-0000125895> (Accessed 11 October 2022).

Walter, D.E. & Krantz, G.W. (2009) Collecting, rearing, and preparing specimens. *In*: Krantz, G.W. & Walter, D.E. (Eds.), *A Manual of Acarology*. Third Edition. Texas Tech University Press, Lubbock, Texas, USA, pp. 83–96.

COPYRIGHT



Mohammad-Dostaresharaf *et al.* Persian Journal of Acarology is under a free license. This open-access article is distributed under the terms of the Creative Commons-BY-NC-ND which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author and source are credited.

گونه جدید *Eriophyes urmiae* sp. nov. (Acari: Eriophyidae) از روی فرفیون در ایران

مجتبی محمد دوستار شرف^۱، پرینسا لطف الهی^{۱*} و محمد باقری^۲

۱. گروه گیاهپزشکی، دانشکده کشاورزی، دانشگاه شهید مدنی آذربایجان، تبریز، ایران؛ رایانامه‌ها: mojtaba.doostar@gmail.com،

prslotfollahy@yahoo.com

۲. گروه گیاهپزشکی، دانشکده کشاورزی، دانشگاه مراغه، تبریز، ایران؛ رایانامه: mbagheri20022002@yahoo.com

* نویسنده مسئول

چکیده

به منظور بررسی فون کنه‌های اریوفیوئید شمال غرب ناحیه ارومیه استان آذربایجان غربی ایران، نمونه‌برداری از گیاهان فرفیون در طی تابستان ۱۴۰۰ صورت گرفت و گونه‌ای جدید، *Eriophyes urmiae* Lotfollahi & Mohammad-Doustaresharaf sp. nov. در قلعه سردار بخش نازلوچای به صورت سرگردان روی برگ‌های *Euphorbia* sp. (Euphorbiaceae) پیدا شد. این چهارمین کنه اریوفیوئید توصیف شده از روی فرفیون‌ها در ایران است.

واژگان کلیدی: Eriophyinae, Euphorbiaceae, ماده، نر، پوره، ارومیه، آذربایجان غربی.

اطلاعات مقاله: تاریخ دریافت: ۱۴۰۱/۷/۲۴، تاریخ پذیرش: ۱۴۰۱/۸/۱۷، تاریخ چاپ: ۱۴۰۱/۱۰/۲۵