

گزارش کوتاه علمی

Parasitidae

(Acari: Mesostigmata)



(1)

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T. gracilis Karg, 1971

(2, 3)

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T. ambulacralis

Parasitidae

(//)

Oryctes elegans Prell

(//)

(1)

T. gracilis

Parasitinae Pergamasinae

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Pergamasinae

(*T. gracilis*)

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Parasitinae

(Phoretic)

- *T. ambulacralis*

Saprogamasus Willmann, (4)

S. ambulacralis Willmann, 1949

1949

T. gracilis

Trachygamasus Berlese, 1905

A new record of the family Parasitidae (Acari: Mesostigmata) from Iran. N. Mehrzad¹, M. Masnavipour¹, Sh. Kazemi²✉, M. Latifi¹ and M. Ziaaddini¹. 1- Department of Plant Protection, Faculty of Agriculture, Vali-e-Asr University of Rafsanjan, Rafsanjan, Iran; 2- Department of Biodiversity, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran. Corresponding author: shahroozkazemi@yahoo.com ✉.

The cosmopolitan mites of the family Parasitidae, including more than 400 identified species, are free-living predators that feed on eggs and immature stages of the other soil inhabiting microarthropods and nematodes (1). The family includes two subfamilies: Pergamasinae and Parasitinae; Pergamasinae often prefers stable habitats such as forests and grasslands litter, moss and rotting seaweed and so far no phoretic association has been reported between them. Members of the subfamily Parasitinae live in temporal habitats such as dung, compost and nests of small mammals and insects which often disperse during deutonymphal stage usually associated with insects (4). The genus *Saprogamasus* Willmann, 1949 was established by description of *S. ambulacralis* Willmann, 1949 as its type species and separated from the genus *Trachygamasus* Berlese, 1905 by presence of two small, sclerotized jugular platelets, sternal shield with posterior transverse margin, distinct metasternal shields and the fairly sclerotized body and this was followed by few authors, but the former genus has been considered as junior synonym of the latter by most authors and we follow it

(1). Among species of 11 genera of the family Parasitidae reported from Iran, only one species of the genus *Trachygamasus* as *T. gracilis* Karg, 1971 has been recorded from rat carcass (2, 3).

During a survey on edaphic Mesostigmata in North Western Kerman Province and also mesostigmatic mites associated with Coleoptera in Bam region, *T. ambulacralis* was collected and identified in soil and litter in Mani region (5 May 2012) and associated with *Oryctes elegans* Prell in Sekahour region (26 May 2012).

This species is similar to *T. gracilis* and can be distinguished from it by larger body size (700-900 μm), bearing 15-18 pairs of opisthonotal setae, six pairs of pre-anal setae on ventral shield and jugular platelets small and trapezoidal while *T. gracilis* has smaller body size (400-475 μm), 14-15 pairs of opisthonotal setae, seven pairs of pre-anal setae present on ventral shield and jugular platelets bigger and semicircular.

Iranian specimens of *T. ambulacralis* differ from *T. gracilis* by presence of two small and trapezoidal jugular platelets, 18 pairs of opisthonotal setae, six pairs of pre-anal setae and the idiosomal length 688-713 μm .

References: (1) K. H. HYATT, Bull. Br. Mus. Nat. Hist. (Zoology), 38: 237, 1980. (2) SH. KAZEMI and A. RAJAEI, Persian J. Acarol., 2: 63, 2013. (3) SH. KAZEMI *et al.* Persian J. Acarol., 2: 159, 2013. (4) E. E. LINDQUIST *et al.* In: Krantz, G. W. and Walter, D. E. (Eds.). A Manual of Acarology, 2009. Order Mesostigmata. pp. 124, Texas Tech University Press, Lubbock.