



<http://dx.doi.org/10.11646/zootaxa.3990.2.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:5EAE7A21-065C-4125-A06F-A865803E6E22>

New species and records of *Neopronematus* (Acari: Iolinidae) from Iran with a key to world species

MARYAM DARBEMAMIEH¹, HAMIDREZA HAJIQANBAR^{1,4},
MOHAMMAD KHANJANI² & ANDRZEJ KAŻMIERSKI³

¹Department of Entomology, Faculty of Agriculture, Tarbiat Modares University, 14115-336, Tehran, Iran.

²Department of Plant Protection, College of Agriculture, Bu Ali-Sina University, Hamedan, Iran

³Department of Animal Morphology, Faculty of Biology, Adam Mickiewicz University, Umultowska 89, 61-614 Poznan, Poland

⁴Corresponding author

Abstract

In this paper, *Neopronematus kamalii* Darbemamieh and Hajiqanbar **sp. nov.** (Acari: Prostigmata: Iolinidae), collected from apricot leaves in Kermanshah province, Iran, is described and illustrated. Also, the following species were collected and identified from Kermanshah province, Iran: *Neopronematus rapidus* (Kuznetsov, 1972), *Neopronematus solani* Łaniecka and Kaźmierski, 2013; *Neopronematus sepasgosariani* Sadeghi, Łaniecka and Kaźmierski, 2012; *Neopronematus lundqvisti* Sadeghi, Łaniecka and Kaźmierski, 2012; and *Neopronematus neglectus* (Kuznetsov, 1972). Some information about the genus, morphologically close species, remarks and a key to *Neopronematus* species of the world are given as well.

Key words: Tydeoidea, Pronematinae, *Neopronematus kamalii*, mite, fauna, Kermanshah, taxonomy

Introduction

The Superfamily Tydeoidea Kramer, 1877 comprises four families: Triophtydeidae André, 1980 (3 genera, 40 species), Ereyneidae Oudemans, 1931 (29 genera, 180 species), Tydeidae Kramer, 1877 (30 genera, 340 species) and Iolinidae Pritchard, 1956 (36 genera, 131 species) (Zhang *et al.* 2011). An additional six new species of Iolinidae were described since 2011, making 131 species in this family (Theron *et al.* 2012; Sadeghi *et al.* 2012; Ripka *et al.* 2013). The ancestral habit of the Tydeoidea is thought to be free-living, in a variety of habitats (André & Fain 2000). Their economic importance is poorly-known, and seemingly lower in comparison with pests such as spider mites, eriophyid mites and tarsonemid mites, or in comparison with beneficial mites such as phytoseiid and stigmatid mites (McMurtry *et al.* 2013; Sadeghi *et al.* 2012). However, tydeoids which live on foliage have an important role in providing alternative food for phytoseiid mites when other prey is unavailable (Flaherty & Hoy 1971; Calvert & Huffaker 1974; Niemczyk & Kaźmierski 2002) or in biological control of plant pathogens (English-Loeb *et al.* 1999).

Pritchard (1956) introduced the family Iolinidae by describing *Iolina nana* Pritchard, 1956, and thought it so unique that he also proposed the superfamily Iolinoidea. This superfamily status was recognized by Price (1972) and Lindquist (1976), with the latter proposing Iolinoidea as a superfamily allied with Cheyletoidea, Raphignathoidea, and Tetranychoidae, grouping them together in a common stock (Eleutherengona, Raphignathae). However, contrary to the preceding authors, Krantz (1978) placed Iolinidae within the Tydeoidea together with the families Tydeidae, Paratydeidae, and Ereyneidae. Both interpretations are found in Kethley (1982). André (1984) placed Iolinidae among the Tydeoidea and close to the Pronematinae, on the basis of a comparative study in ontogeny and organotaxy. The family Iolinidae was later enlarged by André and Fain (2000) to encompass the subfamilies Tydaeolinae, Pronematinae and Iolininae based on a cladistic analysis. The treatment of Iolinidae as a family of Tydeoidea is followed here, as it also is in Walter and Krantz (2009), although the Paratydeidae are no longer considered members of the Tydeoidea and belong to the supercohort Anystides.