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A new record of ***Neophyllobius*** Berlese (Actinedida: Camerobiidae) for the fauna of Turkey

Kamil KOÇ*

Summary

Male of ***Neophyllobius atriplicis*** Bolland collected from citrus orchards of İzmir province, is described for the first time and the female redescribed. The species is new record for the fauna of Turkey.

Key words: ***Neophyllobius,*** Acari, Camerobiidae, new records, Turkey

Anahtar sözcükler: ***Neophyllobius***, Acari, Camerobiidae, yeni kayıt, Türkiye

Introduction

The genus ***Neophyllobius*** Berlese (Actinedida: Camerobiidae) was described by Berlese (1886), with ***Neophyllobius elegans*** Berlese, 1867 as type species. This genus is the largest in the family Camerobiidae (Bolland, 1991 Koç & Ayyıldız, 1996). ***Neophyllobius*** Berlese (1886) are known to feed on first-instar nymphs (crawler) of armoured scale insects (Homoptera: Diaspididae) and on various plant-inhabiting mites (Meyer, 1962; Gerson, 1971; Gerson & Smiley, 1990; Koç & Ayyıldız, 1996; Toit et al., 1998).

So far, three species of ***Neophyllobius*** are known from Turkey: ***N. turcicus*** Koç & Ayyıldız, 1996, ***N. communis*** Gerson, 1968 and ***N. ayyildizi*** sp. nov. (Actinedida: Camerobiidae) (Koç & Ayyıldız, 1996; Koç, 1999; Koç & Madanlar, in press). In this paper, male of ***N. atriplicis*** Bolland, 1991 is described and the female redescribed.

* Department of Biology, Faculty of Arts and Sciences, Celal Bayar University, Muradiye, Manisa, Türkiye
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Material and Methods

Mites were collected in İzmir province from orange and mandarina leaves, using brushes. The mites were preserved in 70 % ethanol, then removed by a fine tipped brush, and placed in Hoyer's medium.

All measurements are given in micrometers. The setal nomenclature used follows Lindquist's (1985) systems as applied by Toit et al. (1998). Specimens are deposited in CBZM (Zoological Museum of Celal Bayar University, Manisa, Turkey).

Results

Neophyllobius Berlese, 1886

Type species: ***Neophyllobius elegans*** Berlese, 1886

Neophyllobius atriplicis Bolland, 1991 (Fig. 1)

Female: Length of idiosoma (including gnathosoma) 300; width 221; leg I 373; leg II 337; leg III 368; leg IV 389.

Gnathosoma (Fig. 1 B): Infracapitulum with 1 pair of smooth setae (*m*) and 2 pairs of adoral setae. Peritremes not clearly visible. Pedipalp setation: trochanter 0; femur 2; genu 1; tibia 3+1 and sword-like seta; tarsus 2+2 eupathidia and 1 solenidion.

Dorsum (Fig. 1 A): Striae fine on prodorsum and around setal bases of opisthosoma, otherwise coarse; with 15 pairs of long, serrate setae and set on tubercles. Length of dorsal body setae as follows: prodorsal setae v_1=sc_1=*pdx*=53, v_2=49, and sc_2=47; opisthosomal setae c_1=d_1=d_2=e_1=53, c_2=68, e_2= 47, f_1=62, f_2=h_1=32, h_2=26; 2 pairs of eyes located lateral sides of setae sc_2. All dorsomedian (*mc* according to Gerson, 1968) setae reach bases of the next dorsomedian setae.

Venter (Fig. 1 B): With one pair of long, smooth setae on small platelets between coxa III and IV, one pair of aggenital setae anterior to genital opening, 2 pairs of genital setae and 3 pairs of closely set pseudoanal setae posterior to genital opening.

Legs (Figs. 1 C-F): Setae (solenidia in parentheses) on leg I-IV as follows: coxae 3-1-1-1, trochanters 1-1-1-1, femora 4-3-2-2, genua 1-1-1-1, tibiae 9(+1)-8(+1)-8(+1)-7(+1), tarsi 9(+1)-9(+1)-7-7.

Male (Fig. 2)

Dimensions: Length of idiosoma (including gnathosoma) 321; width 210; Length of legs (from bases trochanter to tip of claw): leg I 412; leg II 381; leg III 412; leg IV 473.

Gnathosoma (Fig. 2 B): Infracapitulum with 1 pair of smooth setae (*m*) and 2 pairs of adoral setae. Palpus similar to that of female.

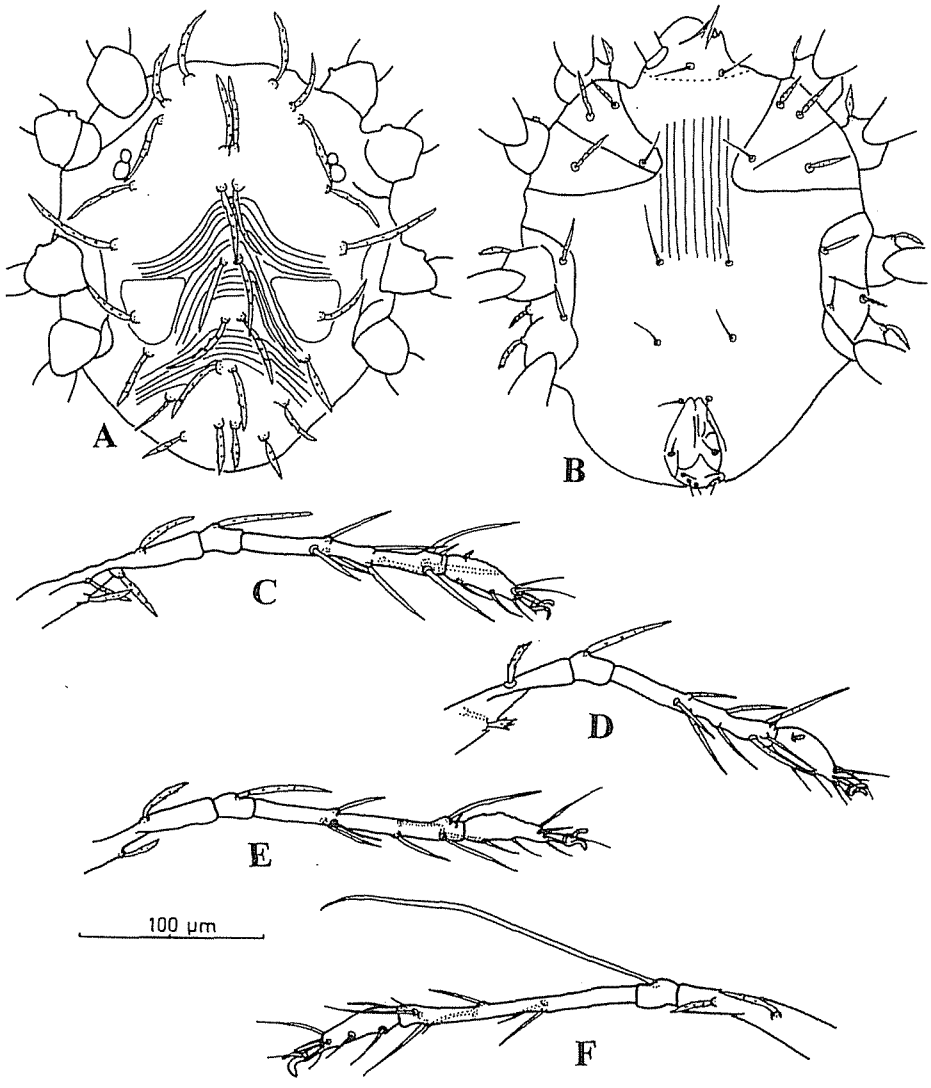

Figure 1. ***Neophyllobius atriplicis***, Female: A) Dorsum of idiosoma, B) Ventral of idiosoma, C) Leg I, D) Leg II, E) Leg III, F) Leg IV.

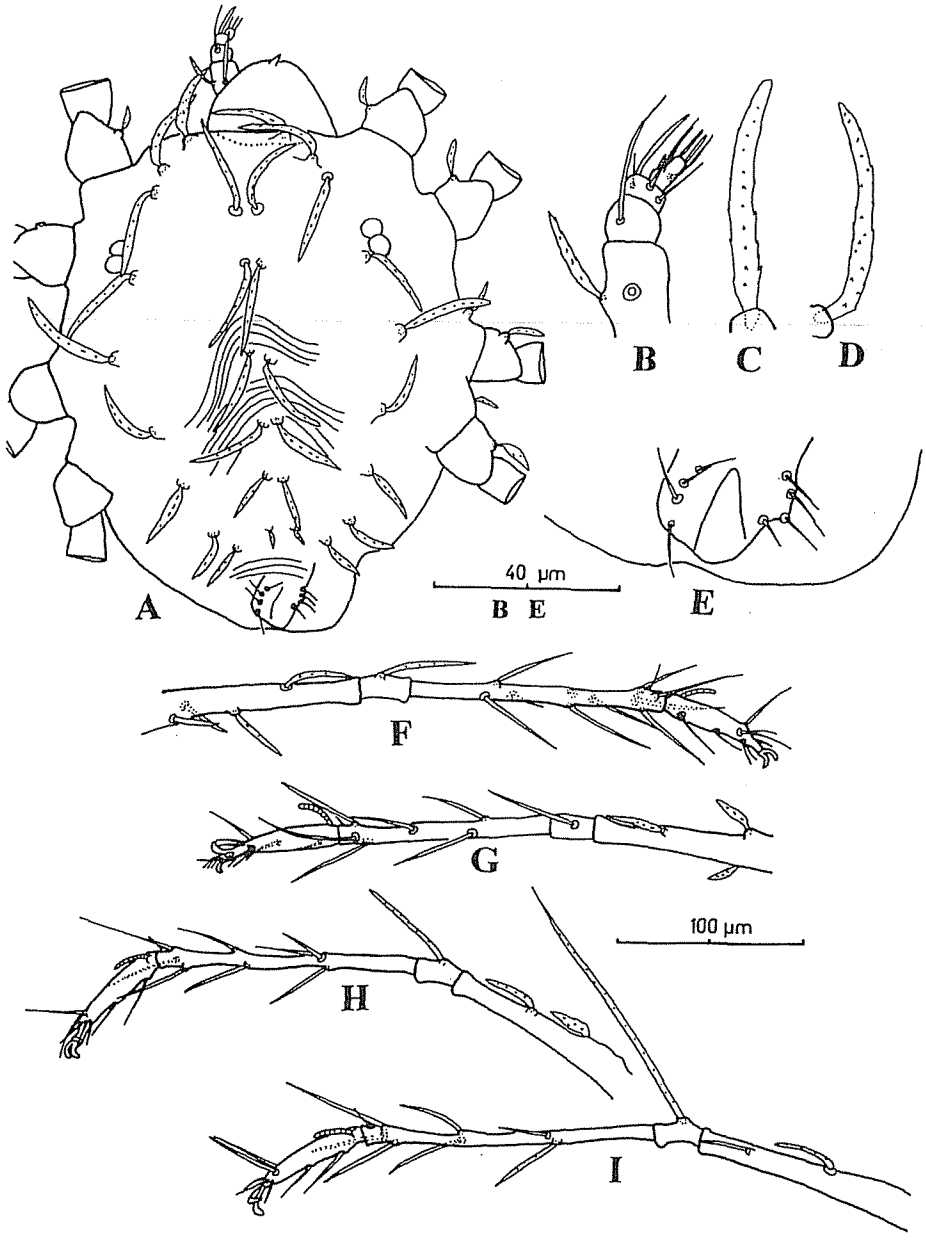

Figure 2. ***Neophyllobius atriplicis***, Male: A) Dorsum of idiosoma, B) Palpus, C) Seta c_2, D) Seta d_1, E) Anal region, F) Leg I, G) Leg II, H) Leg III, I) Leg IV.

Dorsum (Fig. 2 A, C-E): Striation pattern of dorsum similar to that female but dorsal body setae shorter and their lengths as follows: prodorsal setae v_1=sc_1=53, v_2=pdx=sc_2=57; opisthosomal setae c_1=d_1=e_1=53, c_2=63, d_2=e_2=42, f_1=32, f_2=26, h_1=16, h_2=21; eyes present.

Venter: With one pair of seta, one pair of aggenital seta, anal opening with 3 pairs of pseudoanal setae, genital opening and setae absent.

Legs (Figs. 2 F-I): Setae (solenidia in parentheses) on leg I-IV as follows: coxae 3-1-1-1, trochanters 1-1-1-1, femora 4-3-2-2, genua 1-1-1-1, tibiae 9(+1)-8(+1)-8(+1)-7(+1), tarsi 8(+1)-8(+1)-7(+1)-7(+1).

Material Examined: Turkey, İzmir: Menderes, 17.12.1989, on mandarina leaves, 1♀; Torbalı, 9.10.1989, on orange leaves, 1♂, coll. N. Madanlar.

Remarks

Neophyllobius atriplicis was collected on salt bush litter, ***Atriplex canescens*** in Colorado (U.S.A.) (Bolland, 1991). The orange and mandarina leaves on which we found the species of ***N. atriplicis*** were also heavily infested with red scale, ***Aonidiella*** sp. (Hom.: Diaspididae) female from Turkey is somewhat smaller compared to those Colorado measured by Bolland (1991): body length 300 against 365 and body width 221 against 295. These differences in the dimension are considered in the variations limits. The Turkish material resembles the Colorado specimen in the other features.

Özet

Türkiye faunası için yeni bir *Neophyllobius* Berlese (Actinedida: Camerobiidae) türü

İzmir ilindeki turunçgil bahçelerinden toplanan ve Türkiye faunası için yeni kayıt olan ***Neophyllobius atriplicis*** Bolland, 1991'in erkeği ilk defa tanımlanmış ve dişisinin tanımı incelenen örnekler üzerinden gözden geçirilmiştir.

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