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A NEW SPECIES OF *NEOPHYLLOBIUS* BERLESE
(ACARI: CAMEROBIIDAE)
FROM TURKEY

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(Accepté Décembre 2000)

**Summary:** A new *Neophyllobius* species from Turkey, viz. *Neophyllobius ayyildizi*, is described and illustrated.

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

Two species of this genus were known from Turkey, until now: *N. turcicus* and *N. communis* (Koç & Ayyildiz, 1996; Koç, 1999). This paper, a continuation of our study of Camerobiidae in Turkey, and comprises the description of the female and protynymph of a new species.

**Material and Methods**

Mites were collected in Izmir 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 Hoyér’s medium.

In the following description, all measurements are given in micrometers (µm). The setal nomenclature used follows Lindquist’s (1985) system as applied by Torr et al. (1998). Type material is deposited in CBZM (Zoological Museum of Celal Bayar University, Manisa, Turkey).

**The genus Neophyllobius** Berlese, 1886

Type species: *Neophyllobius elegans* Berlese, 1886. p. 31.

*Neophyllobius ayyildizi* sp. nov.

**Female.** — Dimensions minimal and maximal values (holotype length). Length of idiosoma (including gnathosoma) 300-352 (352); width 221-263

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Fig. 1. — Neophyllobius ayylidi sp. nov. Female. — A. — Dorsum of idiosoma. B. — Seta $c_2$. C. — Seta $f_1$. D. — Leg I. E. — Tarsus I. F. — Leg III. G. — Leg IV. H. — Leg II.
Fig. 2. *Neophylobius ayyildizi* sp. nov. Female. A. Ventral of idiosoma. B. Palpus. Protonymph. C. Ventral of idiosoma.
Fig. 3. — *Neophyllobius ayyildizi* sp. nov. Protonymph. — A. — Dorsum of idiosoma. B. — Seta d₁. C. — Seta c₂. D. — Leg I. E. — Leg II. F. — Leg III. G. — Leg IV. H. — Palpus.
Genu I setae not whip-like...

Genn I setae whip-like.

Dorsomedian setae c1 and d1 surpassing base of f1.

Lig (Fig. 3 D-G).—Setation (solenidia in parentheses): coxae 3-1-2-0, trochanters 1-1-1-1, femora 3-2-1-1, genua 1-1-1-1, tibiae 5(+1)-5(+1)-5(+1)-3(+1), tarsi 8(+1)-7(+1)-6-4.


Diagnosis: N. ayyildizi may be readily distinguished from other species of the genus by presence genu I, III and IV setae whip-like, and genu II setae not whip-like. The new taxon is close to Neophyllobius armeniaca Bolland, 1991; all dorsomedian (dpx, c1, d1, e1, f1 and h1) setae reach the bases of the next dorsomedian setae, the seta of genu II is not whip-like. It differs from N. armeniaca by the following characters:

1. d1 is longer than c1 (d1 is shorter than c1 in N. armeniaca).
2. f1 is shorter than d1 (f1 is longer than d1 in N. armeniaca).
3. Genu II seta does not reach to the proximal row of tibial setae (it reaches that row in N. armeniaca).
4. The distal setae on femur IV reach only the genual border (passes genual border in N. armeniaca).
5. The proximal seta on femur IV reaches bases of the distal setae (does not reach the bases of the distal setae in N. armeniaca).

Key to the Turkish species of Neophyllobius

2. Genu I setae whip-like.............................. 2
3. Dorsomedian setae c1 and d1 surpassing base of f1.......................... turcicus Koç & Ayyildiz, 1996
4. Dorsomedian setae c1 and d1 not reaching base of f1.......................... ayyildizi sp. nov.
REMARKS


The orange and mandarina leaves on which we found the species of *N. ayyildizi* were also heavily infested with red scale, *Aonidiella* sp.

Etymology: This species is dedicated to Prof. Dr. Nusret Ayyildiz, Acarologist at Erciyes University, Turkey, my teacher and colleague.

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REFERENCES