

***Oppia nitens* C.L. Koch, 1836, a New Species for the Turkish Fauna (Acari, Oribatida, Oppiidae)**

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Abstract: The characteristic features and the figures for *Oppia nitens* C.L. Koch, 1836, recorded for the first time from Turkey, have been given on the basis of specimens collected from Erzurum province.

Key Words: *Oppia nitens*, Acari, Oribatida, new record, Turkey.

Türkiye Faunası İçin Yeni Bir Tür, *Oppia nitens* C.L. Koch, 1836 (Acari, Oribatida, Oppiidae)

Özet: Türkiye faunası için yeni olan *Oppia nitens*'in tanımı, Erzurum'dan toplanan örnekler üzerinden yeniden yapılarak özgün şekilleri verilmiştir.

Anahtar Sözcükler: *Oppia nitens*, Acari, Oribatida, yeni kayıt, Türkiye.

Introduction

Oppiid mites are the most diverse group among the oribatid mites. Worldwide more than 1600 valid species have so far been described (Schatz, 2002). A large number of species are known from the Holarctic. Information on the oppiid species of Turkey is mainly confined to sporadic data (Ayyıldız, 1988, 1989; Özkan et al., 1994; Dik et al., 1995; Çobanoğlu and Bayram, 1998; Gültekin and Özkan, 1999).

Oppia nitens mentioned in this paper was described by C.L. Koch in 1836. As far as we know the species is distributed in the USA and the Palearctic and Holarctic regions (Woas, 1986; Karppinen and Krivolutsky, 1987; Marshall et al., 1987; Dik et al., 1995; Niedbala and Olszanowski, 1997; Niemi et al., 1997; Subias and Gil-Martin, 1997). To date, there is 1 record for the species of genus *Oppia* C.L. Koch, 1836 from Turkey (Dik et al., 1995). The genus *Oppia* is thus represented by 2 species in Turkey, given in the present work.

Materials and Methods

Mites in soil and litter samples taken from Erzurum province were extracted using a Berlese funnel apparatus. They were fixed and stored in 70% ethanol. Oppiid mites were gathered from the samples under a stereomicroscope, and mounted on slides in modified Hoyer's medium and 35% lactic acid. Drawings were made with the aid of a camera lucida attached to a compound microscope. All measurements are given in micrometers (μm).

Results

Family: Oppiidae Grandjean, 1951

Genus: *Oppia* C.L. Koch, 1836

Type-species: *Oppia nitens* C.L. Koch, 1836

Oppia nitens Koch, 1836

(Figure 1, a-d)

General appearance and dimensions: Length of idiosoma: 509 (467-533); width: 284 (260-320), dark brown. Length of leg I: 327 (320-333), length of leg IV: 422 (400-433).

Prodorsum (Figure 1a, b): Rostum rounded; rostral setae (*ro*) pinnated, weakly inward curved and slightly shorter than the lamellar setae. Interlamellar (*in*) and lamellar setae smooth. Interlamellar setae upright.

Lamellar setae forward curved and nearer to rostral setae than interlamellar setae. Sensillus lanceolate, very weakly S-forming and pinnated at the apical half. Between interlamellar setae 2 pairs of alveolae, pale patches present. Exobothridial setae relatively long and pinnated.

Notogaster (Figure 1a, b): 9 pairs of notogastral setae; setae *c*₂ present. Posterior notogastral setae curved and finely pinnated.

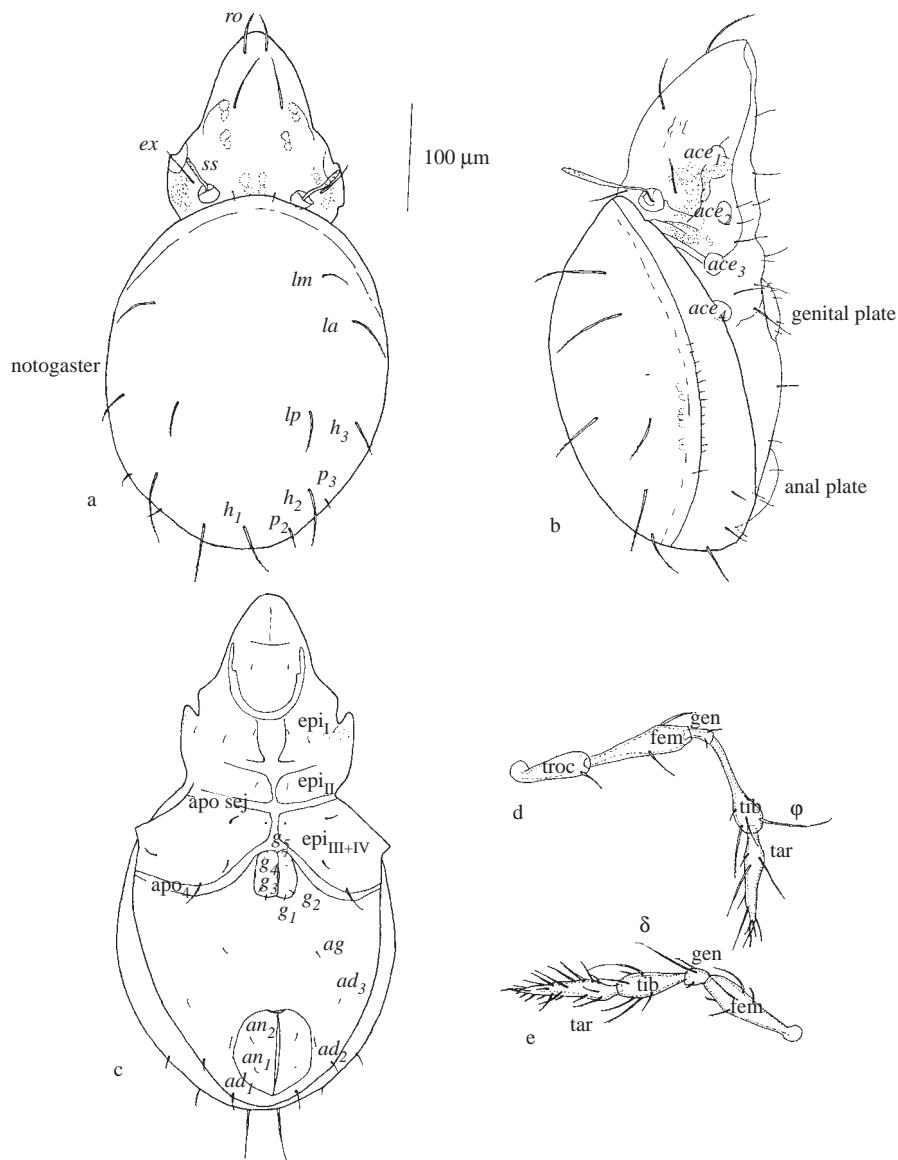


Figure 1. *Oppia nitens*: a. dorsal view, b. lateral view, c. ventral view, d. Leg IV, e. Leg I.

Venter (Figure 1b, c): Epimera I and II clearly distinct. Apodema sejugalis relatively broad and interrupts the apodema by a clear median furrow. Apodema IV in S form. Genital setae smooth, pointedly ending. Pori *iad* in para-anal position.

Legs (Figure 1d): Solenidia of tibia I slightly curved backwards. All tarsi monodactylous.

Material examined: The garden of the Ilica Sugar Factory, Erzurum, Turkey, 24.07.1999, 13 specimens; litter and soil under oak tree; Köprüköy, Erzurum, Turkey, 01.12.1999, 8 specimens, soil under a rock.

Distribution: Holarctic region (Woas, 1986; Karppinen and Krivolutsky, 1987; Marshall et al., 1987; Dik et al., 1995; Niemi et al., 1997; Niedbala and Olszanowski, 1997; Subias and Gil-Martin, 1997).

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Discussion

The body dimensions of *Oppia nitens* have been given as length of idiosoma 510, width of idiosoma 290, length of leg I 350, length of leg IV 480 by Michael (Woas, 1986). They have been given as length of idiosoma 540, width of idiosoma 300, length of leg I 360, length of leg IV 500 by Woas (1986). According to our data, the dimensions are as follows: length of idiosoma 509, width of idiosoma 284, length of leg I 327, length of leg IV 422. In this respect, the dimensions of the specimens found in Turkey are smaller than the previously given dimensions. While the longest and the strongest of the epimeral seta is *4b* in Turkish specimens, that of Woas's specimens is seta *3b*.

The other morphological features of our specimens resemble those of previously known specimens.