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Dikerogammarus istanbulensis sp. n., a new amphipod species (Amphipoda: Gammaridae) from Turkey with a key for the genus

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Abstract

A new amphipod species, *Dikerogammarus istanbulensis* **sp. nov.**, is described. Specimens were collected from a reservoir, near Silivri district, İstanbul province, Turkey. The new species is similar to *Dikerogammarus bispinosus* Martynov, 1925 except for the presence of setae on inner surface of basal segment of pereopod 7 in both sexes and absence of long setae on the ventral side of second peduncle segment of antenna 1. In addition, epimeral plate 2 has many setae along the ventral margin in both sexes. A detailed morphological description and illustrations of the new species are given. Differences between the new species and related species are discussed. An identification key for the genus *Dikerogammarus* is presented.

Key words: Fresh waters, Amphipoda, new species, Ponto-Caspian, Silivri, Balkans

Introduction

Dikerogammarus Stebbing, 1899 is an amphipod crustacean genus belonging to the Ponto-Caspian faunistic complex. The members of the genus are naturally distributed in the Black Sea, the Sea of Azov and the Caspian Sea and their rivers (Barnard & Barnard, 1983).

The characteristic features of the genus *Dikerogammarus* can be listed as: 1) having well developed dorsal elevations (humps) on the first and second urosomal segments, 2) having more or less broadened basal segments of the pereopod 7 in both sexes and 3) having *Gammarus*-type antenna 1 (A1), which is longer than antenna 2 (A2), with slender peduncle segments and prolonged flagellar segments and 4) having enlarged ganthopod 2 of male with palm identical to that of gnathopod 1 (mid-palmar spines absent) (Stock, 1968; Barnard & Barnard, 1983).

Almost all of the representatives of the genus show these characteristic features except for *D. fluviatilis* Martynov, 1919 and *D. aralychensis* (Birstein, 1932). The former one, *D. fluviatilis*, does not have well developed dorsal elevations on the first and second urosomal segments (Cârâuşu, 1943; Cârâuşu *et al.*, 1955), similar to the representatives of the genus *Akerogammarus* (Barnard & Barnard, 1983). The typical characteristics of the members of the genus *Akerogammarus* were defined as: weakly humped and strongly spinose urosomites, slender body and subquadrate lateral cephalic lobes. Hence the species is transitional by this character between the genera of *Dikerogammarus* and *Akerogammarus* (Barnard & Barnard, 1983). *D. aralychensis* has *Gammarus*-like gnathopod 1 (sloping palm and mid-palmar spines) and is similar to the representatives of *Turcogammarus* (Barnard & Barnard, 1983).

The genus includes nine species: *D. aralychensis* (Birstein, 1932), *D. balatonicus* Ponyi, 1955, *D. bispinosus* Martynov, 1925, *D. caspius* (Pallas, 1771), *D. fluviatilis* Martynov, 1919, *D. gruberi* Mateus & Mateus, 1990, *D. haemobaphes* (Eichwald, 1841), *D. oskari* Birstein, 1945 and *D. villosus* (Sowinsky, 1849). To date, *D. haemobaphes* and *D. gruberi* were reported from inland-waters of Turkey. The previous one was found from the Sapanca and Terkos lakes, while the latter one only from Lake Sapanca (Jazdzewski, 1980; Mateus & Mateus, 1990). In the present study a new *Dikerogammarus* species from the Thrace region of Turkey in Southeastern Europe is described.

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