Short communication

The first report of *Kakothrips dentatus* (Thysanoptera: Thripidae) from Turkey

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In a molecular phylogenetic study based on 5299 bp from five genetic loci, the family Thripidae has been recovered as monophyletic. However, the subfamily Thripinae is paraphyletic and requires further study to understand its internal relationships (Buckman et al., 2013). A series of ‘genus-groups’ including *Frankliniella* genus-group has been proposed in Thripinae (Mound & Palmer, 1981). *Kakothrips* Williams has been allocated to this genus-group (Mound, 2002). *Kakothrips* consists of 8 species, mostly recorded from Europe (ThripsWiki, 2018). Up to now, two species of *Kakothrips*, *K. priesneri* Pelikan and *K. robustus* (Uzel) (as *K. robustus* (Westwood)) have been recorded from Turkey (Tunc & Hastenpflug-Vesmanis, 2016). In this paper the third species of the genus is reported from this country.

Thrips specimens discussed in this paper were macerated in 2% NaOH solution for 12 hours. The specimens were then mounted onto slides in Canada balsam using the protocol described by Mound & Kibby (1998). The observations on structure were made using an Olympus BX51 phase-contrast microscope. Photomicrographs and measurements were made using this microscope with DP27 digital camera and cellSens software. The slide is deposited in the Plant Protection Department of Selcuk University, Konya, Turkey.

*Kakothrips dentatus* Knechtel

*Kakothrips dentatus* Knechtel, 1939: 322.
Prometheothrips ungulatus Sawenko, 1941: 370.

The species is originally described from Romania (K. dentatus) (Knechtel, 1939) and Russia (P. ungulatus) (Sawenko, 1941), but now distributed around Europe including Georgia, Crimea, Romania, Bulgaria, Greece, Poland and Czech Republic (zur Strassen, 1996, 2003) as well as Iran (Mirab-balou & Chen, 2011). This is the first record of the species in Turkey.


Diagnosis. Female macroptera. Body brown, antennal segment III yellow, IV yellow in basal half (Fig. 2), tarsi yellow, forewing as well as clavus uniformly dusky (Fig. 5).

Head almost as long as broad, not projecting in front of eyes, three pairs of ocellar setae present, pair III as long as inter-ocular distance, arising between posterior ocelli; five pairs of postocular setae present, pair IV is the longest (Fig. 1). Antennae 8–segmented, segments III–IV each with forked sense cone, VIII a little longer than VII (Fig. 2). Pronotum wider than long, with 5 pairs of major setae, anteromarginal setae as long as anteroangulars (Fig. 1). Metanotum with longitudinal lines, two pairs of anteromarginal setae present, the inner pair is longer, campaniform sensilla present (Fig. 3). Fore wing with 2 complete rows of veinal setae (Fig. 5). Fore tarsus with triangular tooth at the base of pulvillus (Fig. 4). Abdominal tergites IV–VIII with a pair of weakly developed ctenidia, on VIII anterolateral to spiracle, tergite VIII with complete posteromarginal comb of microtrichia and one pair of campaniform sensilla (Fig. 6), tergite IX with two pairs of campaniform sensilla (Fig. 6), tergite X with incomplete median split. Stermites without discal setae, VII with posteromarginal setal pair S1 arising in front of margin (Fig. 7).


Comment: The genus Kakothrips is closely related to Frankliniella. However in contrast to the species in Frankliniella, all species have a tooth on the fore tarsal pulvillus, and the S1 setae on sternite VII of females arise in front of the sternite margin. According to the key by zur Strassen (2003), K. dentatus, K. dolosus Berzosa and K. acanthus Berzosa share in the position of fore tarsus tooth which is placed at the base of pulvillus instead of at apex of pulvillus. However K. dentatus is distinguished from both by the color of third antennal segment (yellow in K. dentatus while this is brown or yellow brownish in K. dolosus and K. acanthus). Moreover, K. acanthus and K. dentatus differ from each other in the length of pronotal anteroangular setae which is almost as long as anteromarginal setae in the latter while pronotal anteroangular is longer than anteromarginal setae in K. acanthus (Berzosa, 1994). In K. dolosus postocular setae S2 and S4 are long but in K. dentatus only S4 is long.

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**Figs 6-7.** 6. Abdominal tergites VIII-X, 7. Abdominal sternites VI and VII.
References


