



Anterastes davrazensis sp. n. (Orthoptera, Tettigoniidae): morphology, song and 16S rDNA phylogeny

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Abstract

The new species *Anterastes davrazensis* sp. n. (Orthoptera, Tettigoniidae) is described from south-eastern Turkey. Description, diagnosis and relationships of the new species were studied utilizing morphology, male calling songs and 16S rDNA sequence data from all species in the genus. Morphology and song syllable structure indicate *A. davrazensis* sp. n. is related to *A. uludaghensis*. Phylogenetic analyses based on representative haplotypes of 16S rDNA, using *Sureyaella bella*, *Parapholidoptera distincta* and *Bolua turkiyae* as outgroups, also suggested strong support to the relationship of these two species. *A. davrazensis* sp. n. differs from its closest relative *A. uludaghensis* by the higher number of stridulatory pegs and the song, consisting of irregular syllable groups.

Key words: *Anterastes*, *Anterastes davrazensis* sp. n., Anatolia, taxonomy, song, phylogeny

Introduction

The genus *Anterastes* was established in 1882 to include *A. serbicus* by Brunner von Wattenwyl (1882). Karabağ (1951) made the first revision of *Anterastes* listing eight species, all occurring in Anatolia, and *A. serbicus* also in the Balkans. With the description of *A. niger* (Ünal 2000), the species number in the genus rose to nine. In the second revision of the group Çıplak (2004) included 10 species. A recent paper by Kaya & Çıplak (2011) increased the species number to 12 by transferring *Koroglus disparalatus* Ünal, 2002 to *Anterastes* and synonymising its monotypic genus and by describing an additional new species, *A. antecessor*. The recent increase in the species number might be a result of extensive field studies and the application of contemporary and comprehensive taxonomic approaches (Kaya & Çıplak 2011). Curiously, nearly all of the recently described species seem to be restricted to mountain summits in Anatolia: *A. niger* from Çamlıbel Mountain-range between Tokat and Sivas provinces, *A. disparalatus* from the summit of Koroglu Mt. in Bolu province and *A. antecessor* from the summit of Akdağ Mt. between Antalya and Muğla provinces (Çıplak 2004, Ünal 2002, Kaya & Çıplak 2011). The recently described *A. antecessor* and *A. disparalatus*, in addition to the previously known *A. uludaghensis*, occupy the most basal branches in a phylogenetic tree obtained using sequences of 16S rDNA (Kaya & Çıplak 2011). Their restricted distribution and the phylogenetic relationships indicate that these species are possibly relicts of an ancestral stock exhibiting similar ecological preference. One of the authors (DC) occasionally met another population representing a new species again from a summit in south-west Anatolia that has phylogenetic affinities with the primitive species of genus. This study aims to describe this new species and to discuss its relationships and distribution by combining its sequences to that presented in Çıplak *et al.* (2010) and Kaya & Çıplak (2011).