

<http://dx.doi.org/10.11646/zootaxa.4052.3.6>
<http://zoobank.org/urn:lsid:zoobank.org:pub:85FC1AD8-94F0-49FC-9C45-0047E9E8B8D0>

Notes on the distribution and ecology of the genus *Stenelmis* Dufour, 1835 (Coleoptera: Elmidae) in the Caucasus

MAKSIM I. SHAPOVALOV¹, ALEXANDR A. PROKIN²,
DMITRY M. PALATOV³ & ALEXEY V. KOVALEV^{4, 5}

¹Laboratory for Bioecological Monitoring of the Invertebrates of the Republic of Adygeya, Adygea State University, Pervomayskaya 208, Maykop, 385000 Republic of Adygeya, Russia. E-mail: max_bio@rambler.ru

²Laboratory of Ecology of Aquatic Invertebrates, Papanin Institute for Biology of Inland Waters, Russian Academy of Sciences, Borok, Nekouzsky District, 152742 Yaroslavl Oblast, Russia. E-mail: prokina@mail.ru

³Department of Hydrobiology, Faculty of Biology, Lomonosov Moscow State University, Leninskie gory 1-12, 119991 Moscow, Russia. E-mail: triops@yandex.ru

⁴Laboratory of Agricultural Entomology, All-Russian Research Institute of Plant Protection, shosse Podbelskogo 3, Pushkin, 196608 St. Petersburg, Russia.

⁵Laboratory of Insect Systematics, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, 199034 St. Petersburg, Russia. E-mail: melasis313@gmail.com

Abstract

The distribution of the genus *Stenelmis* (Elmidae) of the Caucasus is reviewed based on materials collected by the authors and examined specimens stored in accessible collections. One of the two species present in this region, represented by the subspecies *Stenelmis consobrina consobrina* Dufour, 1835, is recorded for the first time in Krasnodar Krai and possibly in Armenia; *Stenelmis puberula* Reitter, 1887 is recorded for the first time in Russia (Krasnodar Krai and the Republic of Adygea) and Abkhazia.

Key words: Coleoptera, Elmidae, *Stenelmis*, fauna, ecology, new records, Caucasus

Introduction

The genus *Stenelmis* Dufour, 1835 is the most speciose in the family Elmidae. It occurs in the Palaearctic, Afrotropical, Oriental and Nearctic regions and includes over 170 species (Kodada, Jäch 2005). A total of 74 species have been recorded in the Palaearctic, but none of them was recorded in Russia, although the reported distributions of *Stenelmis consobrina consobrina* Dufour, 1835 and *Stenelmis puberula* Reitter, 1887 include ‘Caucasus’ without further details (Jäch *et al.* 2006).

This study reviews the available data on the distribution of the genus *Stenelmis* in the Caucasus, including the North Caucasus, Transcaucasia and adjacent areas of Turkey. Data on new records of species of this genus in the region are provided.

The Caucasus is traditionally understood as the region limited by the Kuma–Manych Depression in the north, borders between Transcaucasian republics and Iran/Turkey in the south, the Black Sea and Sea of Azov in the west, and Caspian Sea in the east. The southern boundary is conventional (the northern, western and eastern ones are natural); therefore, in this study we consider localities of adjacent Turkey as belonging to the Caucasus.

The Caucasus is divided into the North Caucasus and Transcaucasia. The North Caucasus includes Ciscaucasia (which occupies the area from the Kuma–Manych Depression to the foothills of the Greater Caucasus and is subdivided into three parts: Western, Middle and Eastern Ciscaucasia), the southwestern slope of the extreme northwestern Main Caucasus Range and – traditionally – the Black Sea coast of the Caucasus (the Black Sea coast of Russia to the Psou River), although in fact, relative to the Main Caucasus Range, this subregion belongs to Transcaucasia. Transcaucasia includes most of the southern slope of the Greater Caucasus, Colchis Lowland and