

## Mountain-slope and ruderal weevil complexes in Eastern Turkey (Coleoptera, Curculionoidea)

B.A. Korotyaev<sup>1</sup>, L. Gültekin<sup>2</sup>, V.I. Dorofeyev<sup>3</sup>

[Коротяев Б.А.<sup>1</sup>, Гюльтекин Л.<sup>2</sup>, Дорофеев В.И.<sup>3</sup> Горно-склоновые и рудеральные комплексы долгоносиков (Coleoptera, Curculionoidea) в Восточной Турции]

<sup>1</sup>Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia. E-mail: baris@zin.ru

<sup>2</sup>Atatürk University, Erzurum, Turkey. E-mail: lgultekin@gmail.com

<sup>3</sup>V.L. Komarov Botanical Institute, Russian Academy of Sciences, St. Petersburg, Russia. E-mail: vdorofeyev@yandex.ru

Detritus and clay-soiled slopes in the mountain regions of Anatolia and Transcaucasia harbour some very specific plant complexes with specialized consortia of weevils from the family Urodontidae and subfamilies Ceutorhynchinae, Baridinae and Lixinae of the Curculionidae (Korotyaev, Gültekin, 2003). Biennial plants, e.g. species of *Hesperis* L. (Brassicaceae), form a large part of these plant communities. The density of these plants changes dramatically from year to year, sometimes by an order of magnitude, and in the extreme years they can disappear completely. Some of them spread equally aggressively on the follow fields, and in the both types of habitats they are infested by the same specialized weevils of the subfamily Ceutorhynchinae. In the follow fields, the weevils infest both the dense populations of ruderal plants and the isolated hosts growing dozens of metres apart. It seems that these well-flying small weevils associated with the cenophobic plants are present in the air plankton in numbers sufficient to locate and infest even small patches of rapidly spreading hosts with highly variable population densities.

One characteristic example of such weevils is an endemic Anatolian *Coeliastes rustemi* Korotyaev, Gültekin et Colonnelli, developing on *Wiedemannia multifida* (L.) Boiss. (Lamiaceae) on steppe slopes subject to intense grazing, in follow fields, and in the thin barley field margins. As a rather extreme example of the described pattern, another ruderal consort, also endemic, *Bruchela densata* Reitt. (Urodontidae), infests *Boreava orientalis* Jaub. et Spach (Brassicaceae) in the thinned crops but has not been found on this plant in the native vegetation on mountain slopes. Ranges of many weevils and plants of the ruderal complexes considered are restricted to Anatolia and the adjacent regions.

The study of B. Korotyaev was supported by the grant No. 10–04–00539 of the Russian Foundation for Basic Research.