

Some weevils from Orsha-Balagan, Abkhazia (Georgia) (Coleoptera: Curculionidae: Entiminae, Hyperinae, Molytinae)

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Abstract: Eight species of Curculionidae (Coleoptera) are recorded for the first time from the surroundings of the Krubera-Voronja cave (Orsha-Balagan valley, Abkhazia), at more than 2000 m of altitude.

Key words: Coleoptera, Curculionidae, *Otiorhynchus*, *Plinthus*, *Nastus*, *Donus*, Arabika massif, Abkhazia, Georgia.

Algunos gorgojos de Orsha-Balagan, Abkhazia (Georgia) (Coleoptera: Curculionidae: Entiminae, Hyperinae, Molytinae)

Resumen: Se citan por primera vez ocho especies de Curculionidae (Coleoptera) de las inmediaciones de la cueva Krubera-Voronja (Orsha-Balagan valley, Abkhazia), a más de 2000 m de altitud.

Palabras clave: Coleoptera, Curculionidae, *Otiorhynchus*, *Plinthus*, *Nastus*, *Donus*, macizo de Arabika, Abkhazia, Georgia.

Introduction

An Ibero-Russian expedition to the Krubera-Voronja cave, the world's deepest known cave, was organized by the CAVEX Team during the summer of 2010. The cave is located in Abkhazia, in the Arabika Massif of the Gagra Range (Western Caucasus). The main biological objective of this expedition was the inside of the cave, where in fact, many interesting findings were made (Jordana *et al.* 2012; Sendra & Reboleira, 2012). However, the surrounding of the cave, the Orshabalagan valley (also cited as Orto-Balagan valley), located at more than 2000 m asl, was also sampled, and several weevils were collected and are presented here. They were sampled from 27/vii/2010 to 5/viii/2010, searching under stones or on the soil. The specimens are deposited in collection of the first author.

Results and discussion

Nine species were collected, although one of them could not be identified to species (Table I). All of them are endemic to the Caucasus. None of them had been previously recorded from the Orshabalagan valley. Two groups of species can be made according to their distribution.

a) Species widely distributed in the Caucasus: *Otiorhynchus tatarchani*, *Nastus fausti* and *Donus circassicola*. All these three species were described in the 19th century by Reitter and their biology is better known. Two of them, *O. tatarchani* and *N. fausti* develop in larval stage as endophagous herbivores of *Heracleum mantegazzianum* Sommier and Levier (Apiaceae), which is native to the Caucasus.

b) Species or subspecies with a narrow distribution. There are five species: *Otiorhynchus laminatus* (fig. 1), *O. schapovalovi*, *O. swaneticus adelaidae*, *Plinthus voriseki scabrior* and *P. starcki medeae*. They were all described recently (except *O. swaneticus adelaidae*) and very few specimens have been studied till now. Our results add more information on phenology of adults, low scale distribution and abundance. For instance, *O. swaneticus adelaidae* was included recently (2011) in the red list of animals plants and fungi of the Republic of Adygea. It seems, however, than in our sampling zone it is not rare.

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References: ARZANOV G. Yu, & G. E. DAVIDIAN 1996. Review of the genus *Nastus* Schoenherr (Coleoptera, Curculionidae) of the fauna of Crimea, European Russia and the Caucasus. *Entomological Review*, 75:134-153. • DAVIDIAN G.E. & V.YU. SAVITSKY 2006. Review of the weevil subgenera *Namertanus* Reitter and *Troglonamertanus* subgen. n., genus *Otiorhynchus* Germar (Coleoptera: Curculionidae), from the Caucasus. *Proceeding of the Russian Entomological Society St. Petersburg*, 77: 48-84. • JORDANA R., R. BAQUERO, A.S.P.S. REBOLEIRA & A. SENDRA, 2012. Reviews of the genera *Schaefferia* Absolon, 1900, *Deuteraphorura* Absolon, 1901, *Plutomurus* Yosii, 1956 and the *Anurida* Laboulbène, 1865 species group without eyes, with the description of four new species of cave springtails (Collembola) from Krubera-Voronya cave, Arabika Massif, Abkhazia. *Terrestrial Arthropod Reviews*, 5(1): 35-85. • REITTER, E. 1889. Coleopteren aus Circassien, gesammelt von Hans Leder im Jahre 1887. X Theil. Nachträge. *Wiener Entomologische Zeitung*, 8(2): 63-70. • SAVITSKY V. Yu. & G. E. DAVIDIAN 2007. New Data on the Taxonomy, Distribution, and Ecology of the Weevil Genus *Otiorhynchus* Germar (Coleoptera, Curculionidae). *Entomological Review*, 87(5): 571-597. • SENDRA, A. & A.S.P.S. REBOLEIRA (In press). The world's deepest subterranean community - Krubera-Voronya cave (Western Caucasus). *International Journal of Speleology*, 41(2). • SKUHROVEC, J. & R. BOROVEC 2007. Revision of *Donus caucasicus* group (Hyperinae: Hyperini). *Snudebiller*, 8: 154-175.



Fig 1. *Otiorhynchus laminatus* Davidian & Savitsky, 2006

logical Society St. Petersburg, 77: 48-84. • JORDANA R., R. BAQUERO, A.S.P.S. REBOLEIRA & A. SENDRA, 2012. Reviews of the genera *Schaefferia* Absolon, 1900, *Deuteraphorura* Absolon, 1901, *Plutomurus* Yosii, 1956 and the *Anurida* Laboulbène, 1865 species group without eyes, with the description of four new species of cave springtails (Collembola) from Krubera-Voronya cave, Arabika Massif, Abkhazia. *Terrestrial Arthropod Reviews*, 5(1): 35-85. • REITTER, E. 1889. Coleopteren aus Circassien, gesammelt von Hans Leder im Jahre 1887. X Theil. Nachträge. *Wiener Entomologische Zeitung*, 8(2): 63-70. • SAVITSKY V. Yu. & G. E. DAVIDIAN 2007. New Data on the Taxonomy, Distribution, and Ecology of the Weevil Genus *Otiorhynchus* Germar (Coleoptera, Curculionidae). *Entomological Review*, 87(5): 571-597. • SENDRA, A. & A.S.P.S. REBOLEIRA (In press). The world's deepest subterranean community - Krubera-Voronya cave (Western Caucasus). *International Journal of Speleology*, 41(2). • SKUHROVEC, J. & R. BOROVEC 2007. Revision of *Donus caucasicus* group (Hyperinae: Hyperini). *Snudebiller*, 8: 154-175.

Table I. Species collected in Orsho-Balagan.

1. *Otiorhynchus (Eprahenus) swaneticus adelaideae* Reitter, 1889

INDIVIDUALS: 7 ♂, 8 ♀.

DISTRIBUTION: Mt. Fischt Georgia, Krasnodar Kray (Adygea Republic).

BIOLOGY: Subalpine-alpine zones.

REFERENCES: Reitter, 1889.

2. *O. (Namertanus) laminatus* Davidian & Savitsky, 2006

INDIVIDUALS: 1 ♂, 1 ♀.

DISTRIBUTION: Gagra Mounts and Aishha pass, Krasnodar kray (Sochi).

BIOLOGY: Mainly subalpine, collected in *Thymus* sp.

REFERENCES: Davidian & Savitsky, 2006.

3. *O. (Pocugosetus) schapovalovi* Davidian & Yunakov, 2002

INDIVIDUALS: 3 ♂, 4 ♀.

DISTRIBUTION: Gagra Mounts.

BIOLOGY: Subalpine and alpine, on karstic zones.

REFERENCES: Savitsky & Davidian, 2007.

4. *O. (Vedopranus) tatarchani* Reitter, 1882

INDIVIDUALS: 1 ♀.

DISTRIBUTION: Widely distributed in W. and Central Caucasus.

BIOLOGY: Upper forest, subalpine and alpine Feeds on *Heracleum mantegazzianum*.

REFERENCES: Savitsky & Davidian, 2007.

5. *O. (Pliadonus) sp. pr. dentitibia* Reitter, 1888

INDIVIDUALS: 1 ♀.

6. *Nastus (Neonastus) fausti* Reitter, 1888

INDIVIDUALS: 1 ♀.

DISTRIBUTION: N Caucasus, including N Osetia and E- including Gelendzhik (Krasnodar Kray) and Gagra Mounts.

BIOLOGY: Feeds on *Heracleum mantegazzianum*.

REFERENCES: Arzanov & Davidyan, 1996.

7. *Plinthus (Caucasoplinthus) voriseki scabrior* Meregalli, 1985

INDIVIDUALS: 1 ♂.

DISTRIBUTION: Gagra Mounts. Nominotypical subspecies in Krasnodar kray.

BIOLOGY: Unknown.

REFERENCES: Meregalli, 1985.

8. *P. (C.) starcki medeae* Meregalli, 1985

INDIVIDUALS: 1 ♂.

DISTRIBUTION: Gagra Mounts. Nominotypical subspecies in Krasnodar kray.

BIOLOGY: Unknown.

REFERENCES: Meregalli, 1985.

9. *Donus circassiculus* (Reitter, 1888)

INDIVIDUALS: 1 ♂, 1 ♀.

DISTRIBUTION: Caucasus: Armenia, Georgia, Russia.

BIOLOGY: Typical alpine species, often collected above 2000 m, sweeping *Geranium* in the interface of forest and high altitude meadow.

REFERENCES: Skuhrovec & Borovec, 2007.