



Conference Abstract

Low (COI) differentiation between the *Carabus hungaricus* populations in the Carpathian basin

Bérces Sándor[‡], David Fülöp[§], Miklós Bozsó^l, Zsolt Péntzes[¶]

[‡] Duna-Ipoly National Park, Budapest, Hungary

[§] MTA ATK NÖVI, Budapest, Hungary

^l Plant Health and Molecular Biology Laboratory, National Food Chain Safety Office, Directorate of Plant Protection, Soil Conservation and Agri-environment, Budapest, Hungary

[¶] University of Szeged, Department of Ecology, Szeged, Hungary

Corresponding author: Bérces Sándor (bercess@gmail.com)

Received: 04 Sep 2019 | Published: 05 Sep 2019

Citation: Sándor B, Fülöp D, Bozsó M, Péntzes Z (2019) Low (COI) differentiation between the *Carabus hungaricus* populations in the Carpathian basin. ARPHA Conference Abstracts 2: e46302. <https://doi.org/10.3897/aca.2.e46302>

Abstract

The main goal of our study was to analyse the differences between *Carabus hungaricus* populations in different regions in the Carpathian basin, and to clear the taxonomic rank of the three subspecies living in the area. We performed analyses of mitochondrial genes (COI) to analyse regional isolation besides taxonomic questions. Extensive sampling was performed spatially, focusing also on the different habitat types hosting *C. hungaricus* populations. Low differences were found based on mitochondrial genes (COI) between populations living in the Carpathian basin. Neither spatial nor habitat based differences were significant. Some difference were found in the COI sequences from Deliblato sands (Serbia), while significant difference in the COI sequences was found when analysing specimen from the Crimea. The question arises: was there a refugia for *Carabus hungaricus* within the Carpathian basin in the Ice Ages? To answer this question further research is needed.

Keywords

Carabus hungaricus, COI, Carpathian basin

Presenting author

Bérces Sándor