

Evolutionary history of the Forest Dormouse (*Dryomys nitedula*)

Anissa El Mojahid[‡], Nedko Nedyalkov[§], Christos Astaras[|], Rimvydas Juškaitis[¶], Ramona-Andreea Bivoleanu^{#,□}, Eva Ladurner[«], Gaetano Aloise[»], Valeriy V. Stakheev[^], Johan Michaux[‡], Alice Mouton[‡]

[‡] Conservation genetic lab/InBioS, University of Liege, Liege, Belgium

[§] National Museum of Natural History, Sofia, Bulgaria

[|] Forest Research Institute, ELGO-DIMITRA, Thessaloniki, Greece

[¶] Nature Research Centre, Akademijos 2, Vilnius, Lithuania

[#] University of Bucharest, Faculty of Biology, Splaiul Independentei 91-95, Bucharest, R-050095, Romania

[□] Institute of Biology Bucharest of Romanian Academy, 296 Splaiul Independentei, 060031 Bucharest, P.O. Box 56-53, Romania

[«] Museum of Nature South Tyrol, Via Bottai 1, Bolzano, Italy

[»] Università della Calabria, Rende (Cosenza), Italy

[^] The Southern Scientific Centre of the Russian Academy of Sciences, Rostov-on-Don, Russia

Corresponding author: Nedko Nedyalkov (nedko@nmnhs.com), Christos Astaras (christos.astaras@fri.gr), Rimvydas Juškaitis (rjuskaitis@gmail.com), Ramona-Andreea Bivoleanu (r.a.bivoleanu@gmail.com), Eva Ladurner (esm.ladurner@gmail.com), Gaetano Aloise (gaetano.aloise@unical.it), Valeriy V. Stakheev (stvaleriy@yandex.ru), Johan Michaux (johan.michaux@uliege.be), Alice Mouton (alicemoutonresearch@gmail.com)

Abstract

The Forest Dormouse, *Dryomys nitedula*, has a wide geographic distribution, from Switzerland in the west, through eastern and southern Europe, Asia Minor and the Caucasus, to central Russia, central Asia and Mongolia in the east. Previous phylogenetic studies revealed highly divergent lineages in some part of the distribution, suggesting that the history of the species might be complex and a revision of the taxonomy might be warranted. In order to clarify the status of the subspecies identified in previous studies, we increased the current Genbank dataset (n=106) by analyzing >150 samples from Italy, Hungary, Lithuania, the Czech Republic, Russia, Bulgaria, Romania, Austria, and Greece. Preliminary phylogenetic analyses, based on cytochrome *b*, show the presence of five super lineages with two highly divergent lineages in Iran and Russia. These preliminary results will be completed by additional samples from Mongolia and Afghanistan. This study should help shed light on the evolutionary history of this species across its distribution.

Keywords

Genetic, Gliridae, Forest Dormouse, Evolutionary history, Cytochrome *b*

Presenting author

Anissa El Mojahid

Presented at

Oral presentation at the 11th International Dormice Conference 2022

Conflicts of interest