

Eleven species are distinguished in the genus *Oxythyrea* Mulsant, 1842 (Coleoptera: Scarabaeidae) nowadays. They are not divided into subspecies. Diversity of the genus is concentrated in the Mediterranean and *Oxythyrea funesta* (Poda, 1761) inhabit a wide area in the western Palearctic Region. It was observed in last decades, that *O. funesta* retreated from central Europe to south and then recolonized it back including new areas in northern regions.

Master thesis is focused on resolving population structure of *O. funesta* and partial phylogeny of the genus *Oxythyrea* using molecular genetic methods. 145 individuals of *O. funesta* and 15 individuals of five other species of the genus *Oxythyrea* appear in analysis. We acquired sequences of mitochondrial genes cytochrome oxidase I (807 bp), cytochrome b (381 bp) and nuclear gene internal transcribed spacer 1 (946 bp) from these specimens.

The results of phylogenetic analysis confirmed so far the only one existing interpretation of relationships within the genus *Oxythyrea* based on morphological data. We also confirmed complicated relationships between *O. funesta* and *O. pantherina*, which also appear in the historical development of their taxonomy. We detected different genetic lineage in Sicily, southern Italy and Tunisia using phylogenetic trees and haplotype networks. Haplotype networks and Tajima D test point to recent demographic expansion of the remaining individuals of *O. funesta*.