

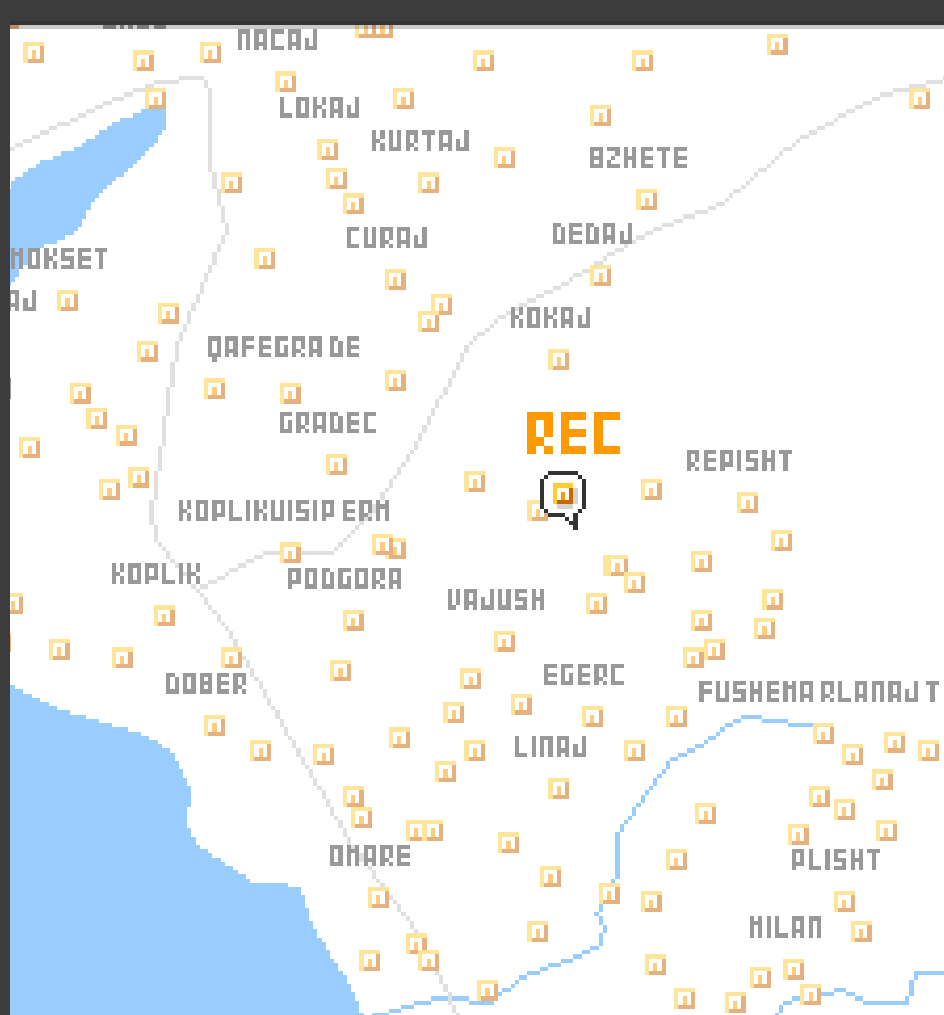
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Introduction

Coleoptera represent a diverse group of insects that require continuous monitoring to ensure the preservation of their diversity, especially for endangered species. The Rec-Rapsh area is a region that provides the conditions for a great diversity of Coleoptera. In this study, we have focused on 20 endangered Coleoptera species according to the categories defined by the IUCN. For each of these endangered species, we have provided information on their endangerment categories, habitat, chorology, causes of endangerment and proposed protection measures. A special mention should be made for CR category insects, such as *Polyphylla fullo*, *Osmoderma eremita*, *Gnorinus nobilis* and *Rosalia alpina*. By implementing these measures and continuously monitoring the populations of these endangered species, it is hoped that their risk of extinction can be mitigated and their diversity preserved in the Rec-Rapsh area

Material and Methods

Coleoptera of this area have been monitored for 3 years, from 2019-2022. After their collection, the determination was made according to known methods. Once determined, it consulted with Misja et al, and finally is determined his status. For each threatened type is risk status, bio-ecology of habitat, and chorology where is met. A correlation between endangered species with their endangered category according to IUCN was found. Correlation of these endangered species with their families and with chorology.



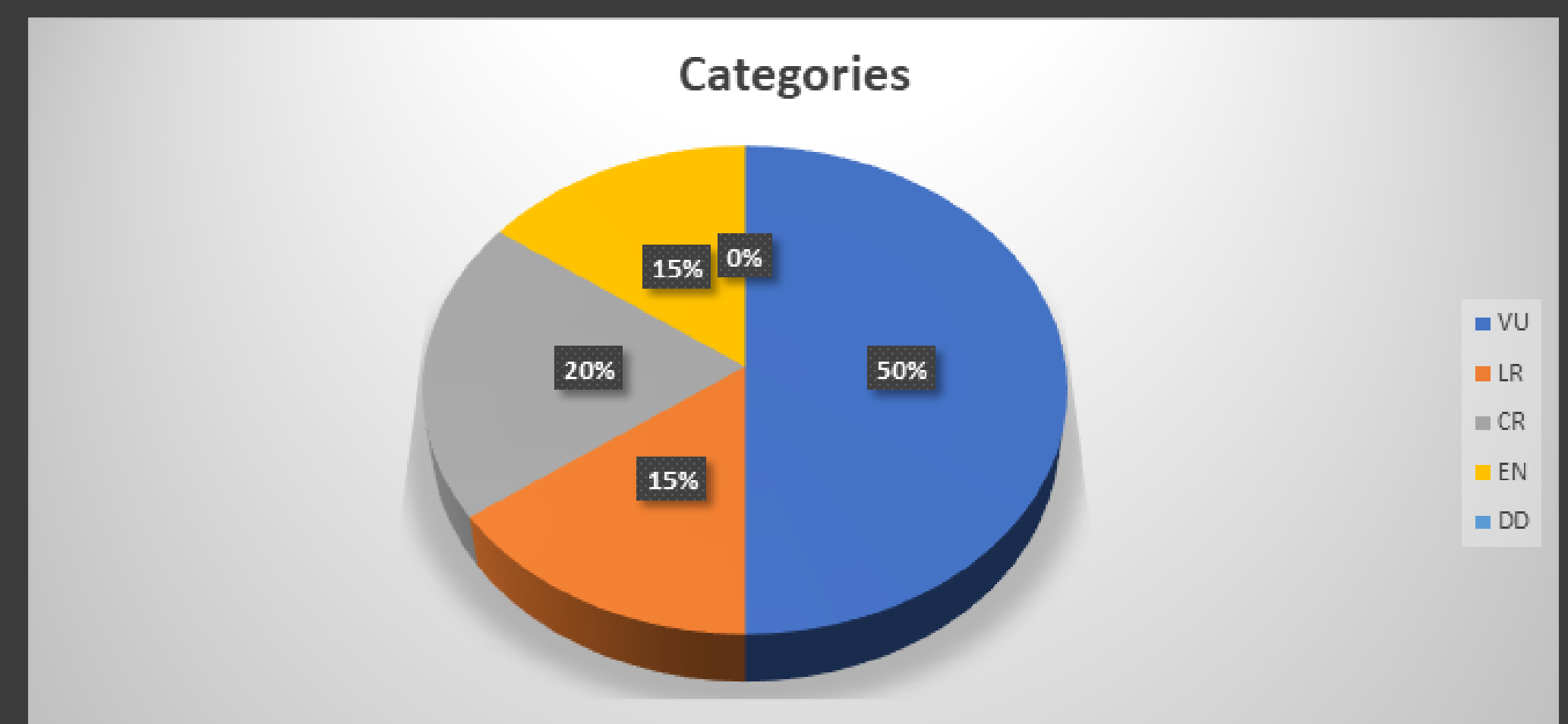
Results and discussion

20 endangered species have been identified which belong to different IUCN categories.

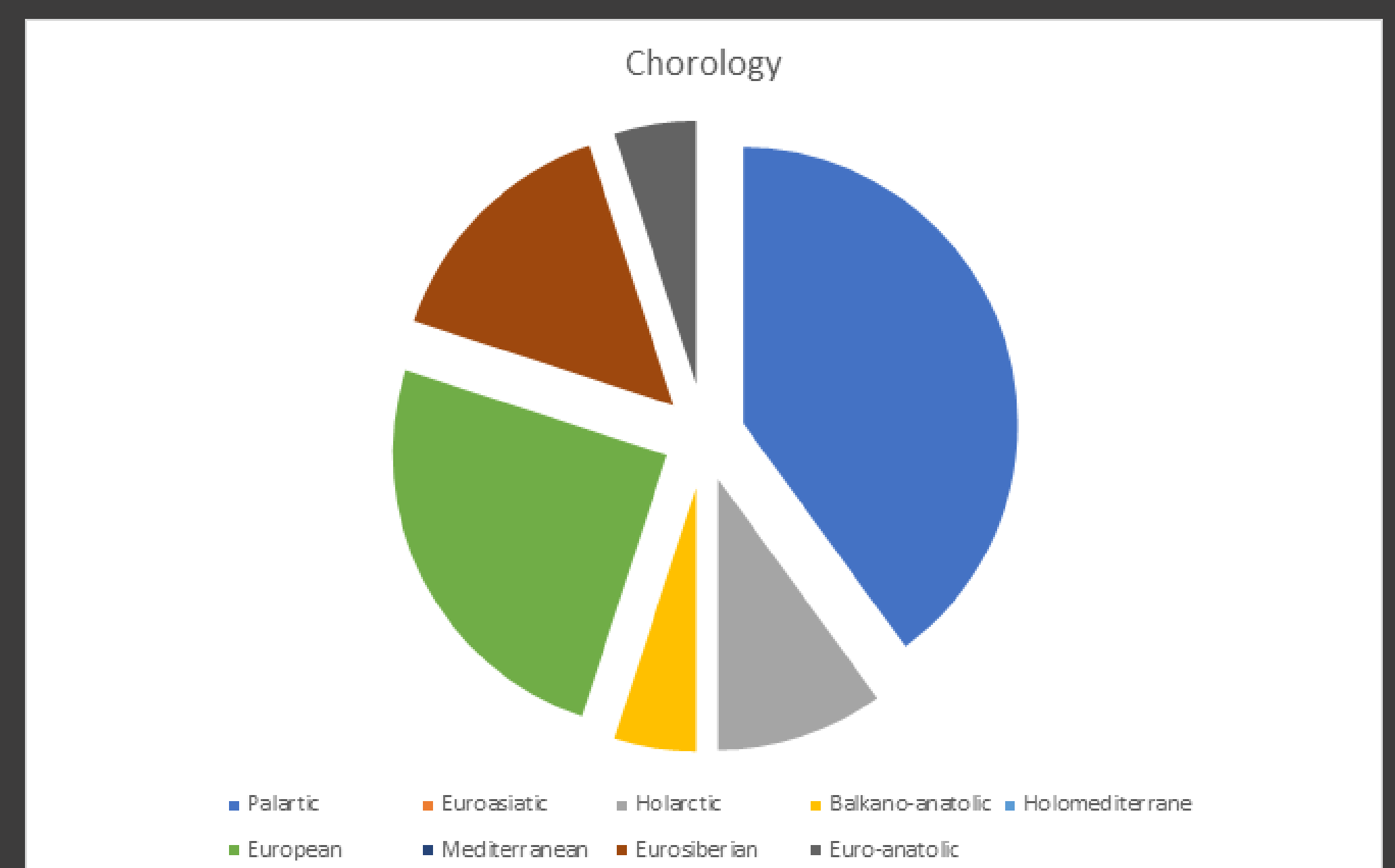
- 10 species belong to category VU and make up 50% of the species.
- 4 species belong to the CR category and constitute 20% of the collected species
- 3 species belongs to category LR and constitutes 15% of the collected species
- 3 species belongs to EN (endangered species) and it again constitutes

The introduction of this information aims at existing everyone who works on preservation and conservation of endangered species in order for them to be able to make the right decision based on academic / scientific standards in the process of observation and relevant category classification.

1. *Calosoma sycophanta* (Insecta,Coleoptera,F.Carabidae)
Status EN
Habitat. Meets in broadleaf forests .
Choreology : Holarctic Type
Bioecology The insects arenatural enemies of the caterpillars of some forest-damaging butterflies. Flight period May-August
2. *Calosoma inquisitor* (Insecta ColeopteraF.Carabidae)
Status VU
Habitat :Preferer forests with oak wood.
. Choreology : Holarctic Type
Bioecology : The insects are natural enemies of the caterpillars of some forest-damaging butterflies. Flight periodMay-August



Graphic 1 - Correlation between species based on risk categories



Graphic 3- Relationship between endangered species and their chorology

Conclusions

- The species under consideration belong to 5 risk categories based on the IUCN categorization. Their continuous monitoring plays an important role in preserving the species diversity for this area.
- Special care should be taken especially for endangered species, those of the CR category
- From the 20 species taken in the study, the families represented by the highest number of species are carabidae (5 species) and scarabidae (7 species).
- Examining the relationship between endangered species and the chorology of their distribution, we note that the studied species that are represented more, are the type of Palartic chorology of 8 species and the European with 5 species.

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