



CONSERVATION STATUS OF THREATENED KASTRATI'S ENTOMOPHAUNA

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INTRODUCTION

The broken limestone has given Kastrat a rare natural beauty like dense forests, alpine pastures, clear waters, and wonderful panoramic views that attract visitors. The largest area of the region is covered by hills and low mountains, giving the region a typical appearance of the Northern Highlands. The altitude above sea level varies significantly, starting from about 40-50 meters in the lower parts (like the Bajza area) to over 1500 meters in the higher parts of the mountainous relief (like the Veleçik mountain). These hills and mountains consist of limestone rocks, which are typical for the karst areas of the Albanian Alps. In Kastrat, we find caves, karst holes, and small sinkholes created by the erosion and weathering of the limestones, making the area of interest for speleologists and adventurous tourists.

Climate in this area is characterized by a Mediterranean climate with continental influences that have a profound impact on the ecosystems and biodiversity of the area. An integral part of this biodiversity is also the entomofauna. The endangered insects analyzed in this work are representatives of the orders Coleoptera and Lepidoptera, collected at the study stations in the area. The results show that continuous monitoring of these endangered species (especially those threatened with extinction or critically endangered) is a decisive factor for preserving their threat status and consequently, the natural values of the biodiversity in this area.

MATERIAL AND METHODS

The material was collected during the period of March-September 2024, in the Bajze-Kastrat area.

This area provides the opportunity for a variety of flat-faced and butterfly forms. They were carefully collected. For each species captured, notes were kept regarding habitat identification, chorology, and locality. For determining the type of habitat and the chorology of the species, I referred to Paparisto-2001. (The determination of flat-faced and butterflies was done according to recognized methods.)

After the determination of the material, consulting was done, regarding the analyzed species.



Regions of Malësia e Madhe, including Kastrat

RESULTS AND ANALYSIS OF THE RESULTS

SOME ENDANGERED SPECIES OF THE KASTRATI AREA.

Example:

1. *Carabus coriaceus*- (Insecta, Coleoptera , F.Carabidae).Status VU.
Identification: Its dimensions vary from 30-40 mm. This carabid is a good flyer and runner. Bioecology : Lives as a predator. On the back part of the body, there is a green spot. Flies from April to August. Habitat: Green meadows. Chorology: Balkan-Anatolian type .

1. Analysis of study results

21 endangered species identified during the expeditions conducted in this area were analyzed. Referring to the endangered categories according to the IUCN, the 21 species belong respectively to:

Category EN – 3 species

Category LR – 2 species

Category CR – 2 species

Category VU – 13 species

2. Correlation analysis between the number of species and the family to which they belong. The species analyzed belong to 9 different families, respectively:

Family Carabidae – 1 species

Family Scarabidae – 2 species

Family Lucanidae – 2 species

Family Cerambycidae – 3 species

Family Hesperidae – 2 species

Family Papilionidae – 3 species

Family Pieridae – 1 species

Family Lucanidae – 6 species

Family Nymphalidae – 2 species

3. Analysis of the correlation between the number of species and the chorology to which they belong

The analyzed species belong to 6 different groups:

Balkan-Anatolian – 1 species

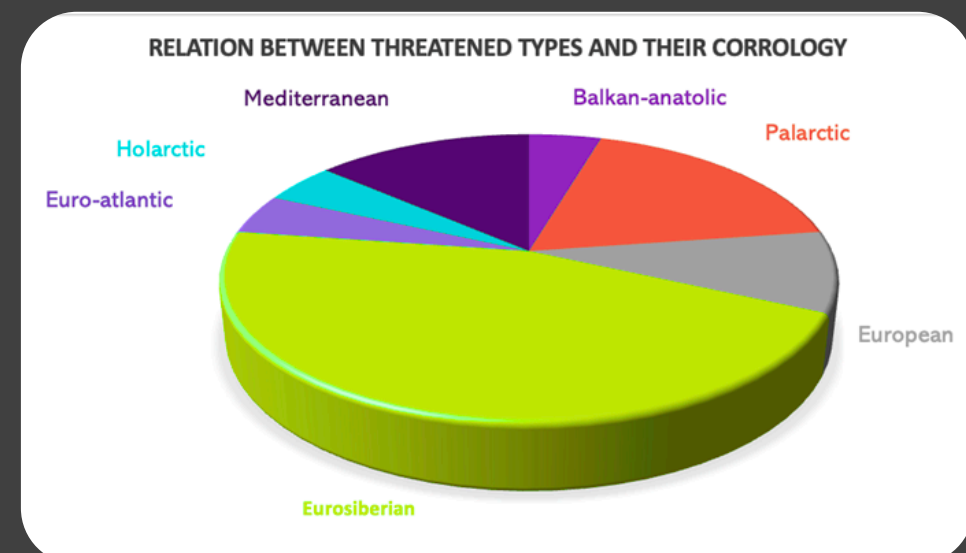
Palaearctic – 4 species

European – 2 species

Eurosiberian – 10 species

Holarctic – 1 species

Mediterranean-1 species



RESULTS AND ANALYSIS OF THE RESULTS

- The species under consideration belong to 4 risk categories based on IUCN classification. Specifically: 3 species are categorized as EN2 species are categorized as LR2 species are categorized as CR13 species are categorized as VU
- Continuous monitoring of them plays an important role in preserving species diversity for this area.
- Special care should be taken especially for endangered species, those of category CR: *Parnassius apollo* & *Polymates eroides*
- Among the 21 species studied, the family represented by the largest number of endangered species is the Lucanidae family, represented by 6 species

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