

Prof.Assoc.Dr Ariana Striniqi(Laçej)

University of Shkodra: “Luigj Gurakuqi”,Shkodra,Albania

Abstract

Insects and especially butterflies are under the pressure of ecological factors in their habitats. They try to adapt morphologically and physiologically and if not, they will be eliminated.

The results of this paper are brought after a monitoring of 3 years (2018-2021) and aim to contribute especially to the conservation of endangered species in the Tropoja-Kukes area. This paper presents 29 species, which belong to different categories of risk according to the definitions of IUCN (International Union for the Protection of Nature). 24 species belong to the VU category, to the vulnerable category such as *Carchorodus flocciferus*; 2 species belong to the CR (critically endangered) category such as *Parnassius apollo* and *Polymmatos eroides*; 1 species belongs to the DD category such as *Arabia pronoe*; 1 species belongs to category LR (near threatened species) such as *Pontia Chloridice*; 1 species belongs to EN (endangered species) such as *Pyrgus Armoricanus*.

For each species is given the order, family, bio ecology, habitat, chorology, meeting places, causes of endangerment and protective measures

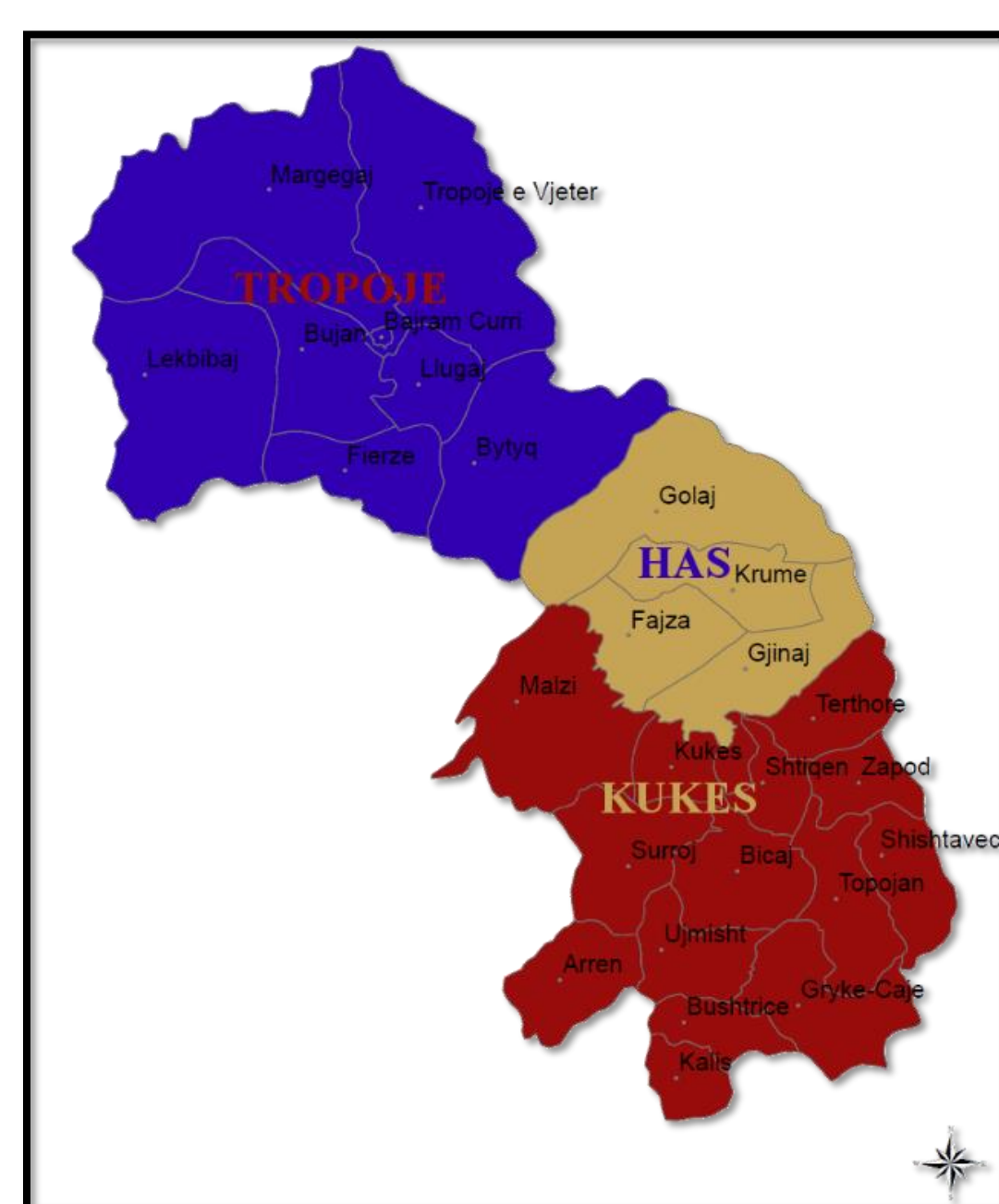
Continuous monitoring and proposals for protection measures will undoubtedly affect the protection and conservation of endangered species.

Some of the proposed protection measures would be the protection and conservation of habitats, the avoidance of collections before spawning, the avoidance of commercial collections.

Objectives

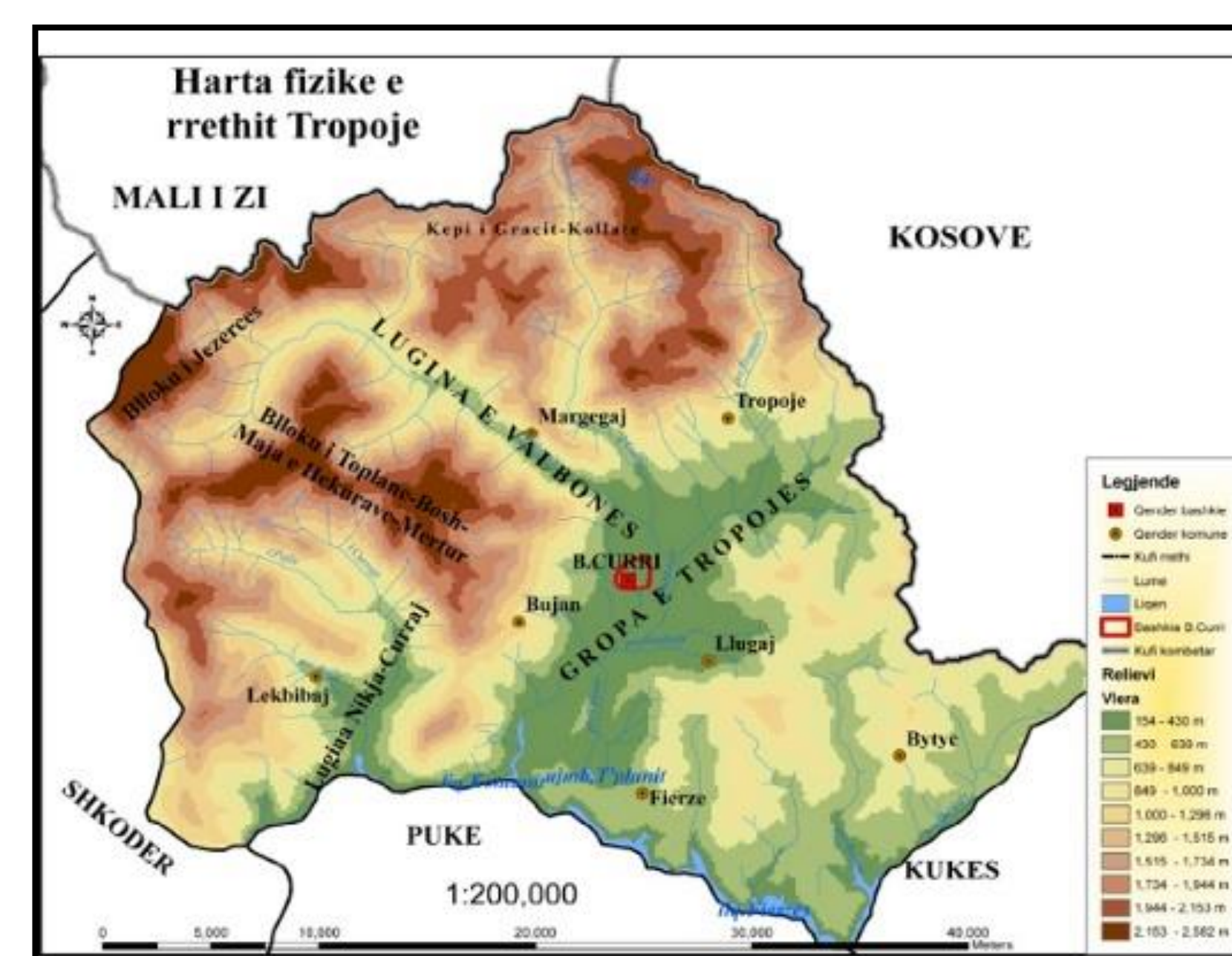
Butterflies represent one of the groups of insects with the greatest diversity. The preservation of this diversity has to do with their continuous monitoring, especially of endangered species. Kukes tropoja area is a mountainous area that creates the conditions for a great diversity of butterflies. In this paper we have focused on 29 endangered species according to the categories defined by the IUCN. For each of these endangered species is provided information on endangerment categories, habitat, chorology, causes of endangerment and protection measures.

- To contribute to the preservation of biodiversity values in the Kukes Tropoja area.
- Determining the causes of endangerment of endangered butterflies in this area and proposing to take protective measures for these endangered species, to call on decision-making authorities to protect especially endangered butterflies in this area of the north-northeastern region. of the Republic of Albania.



Material & Methods

Butterflies of this area have been monitored for 3 years, from 2018-2021. 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.



Results

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

- 24 species belong to category VU and make up 83% of the species.
- 2 species belong to the CR category and constitute 6.8% of the collected species.
- 1 species belongs to the DD category and constitutes 3.4%
- 1 species belongs to category LR and constitutes 3.4%
- 1 species belongs to EN (endangered species) and it again constitutes 3.4%

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. *Erynnis tags* (Insecta Lepidoptera, F.Hesperidae)

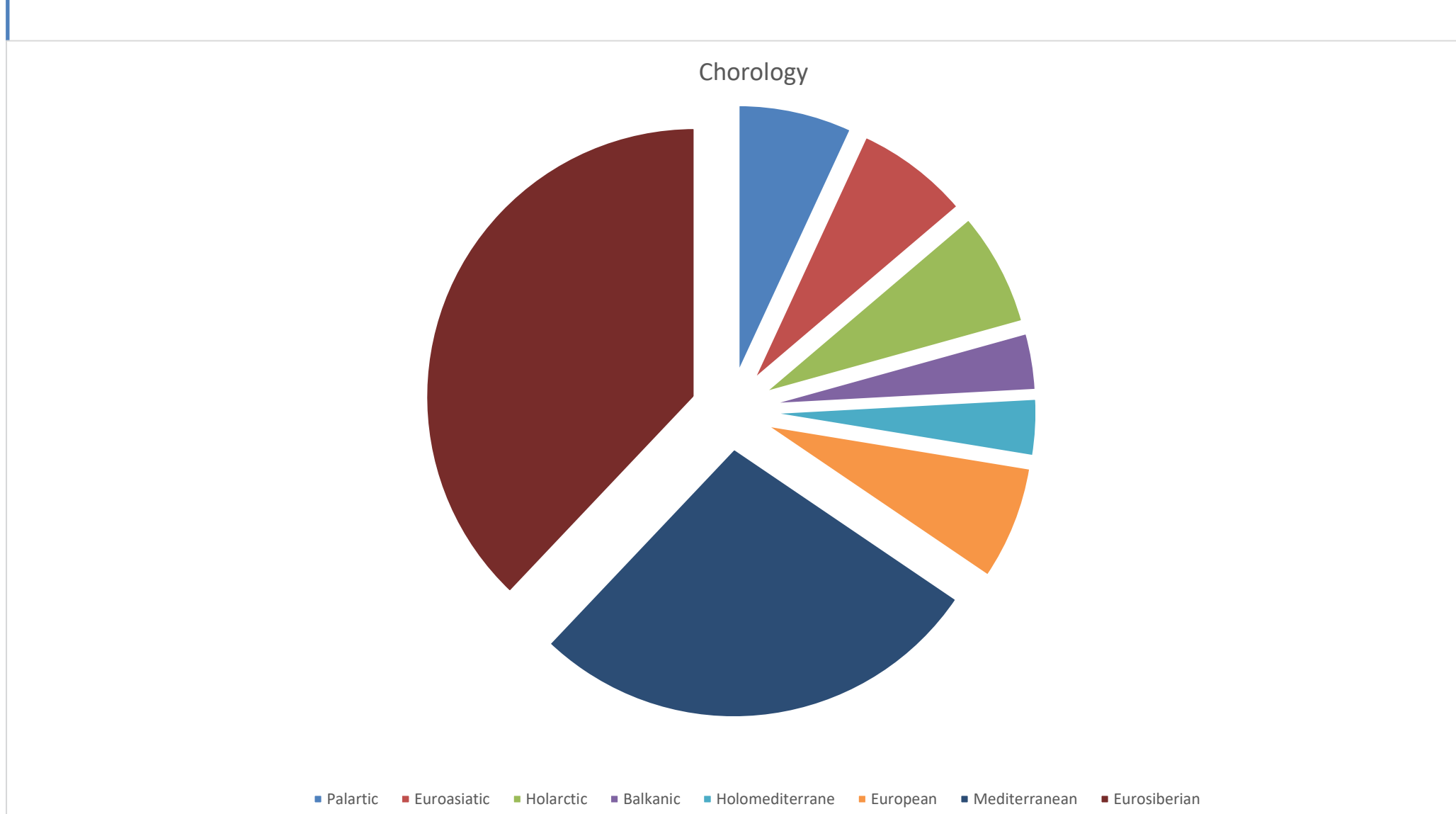
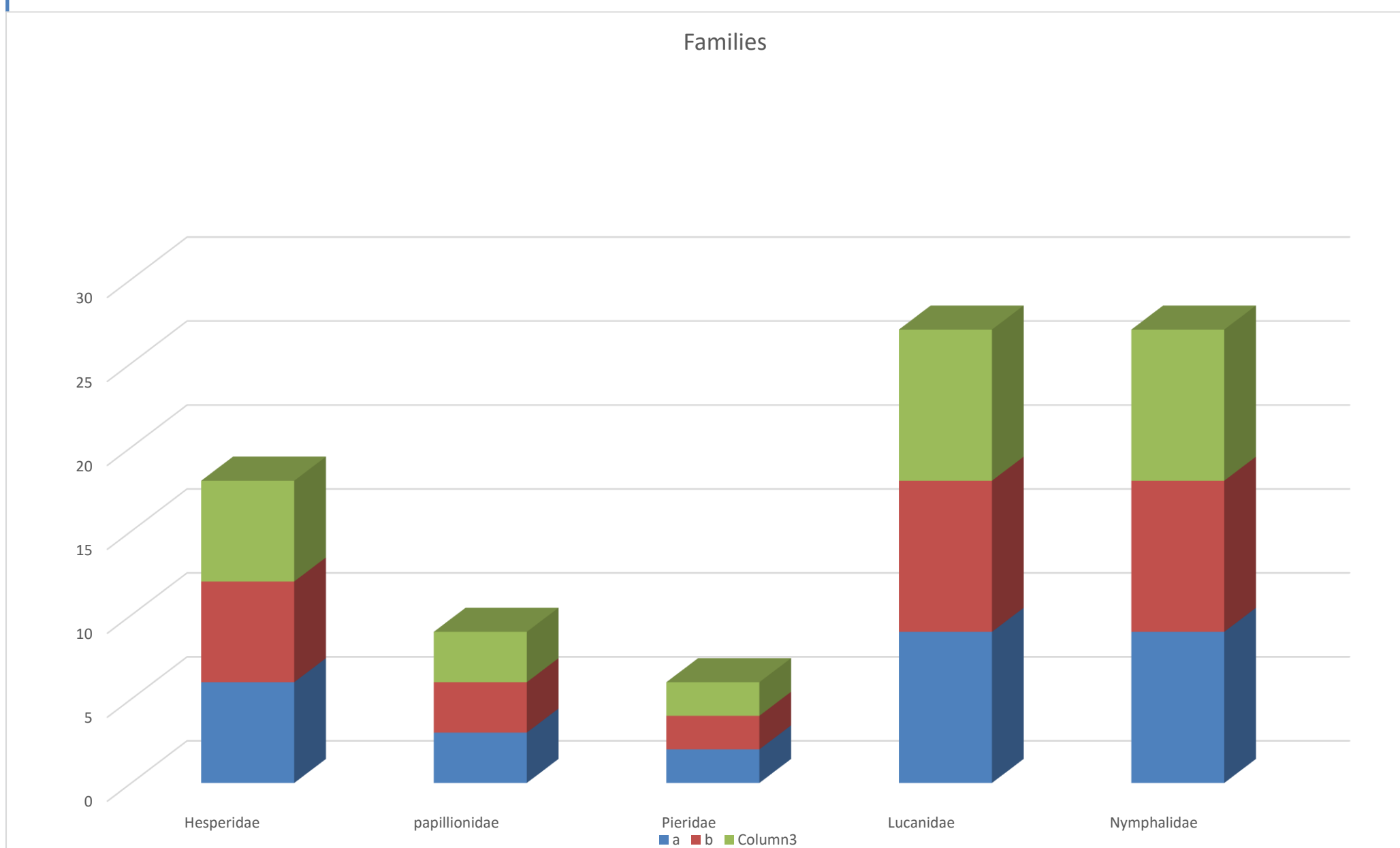
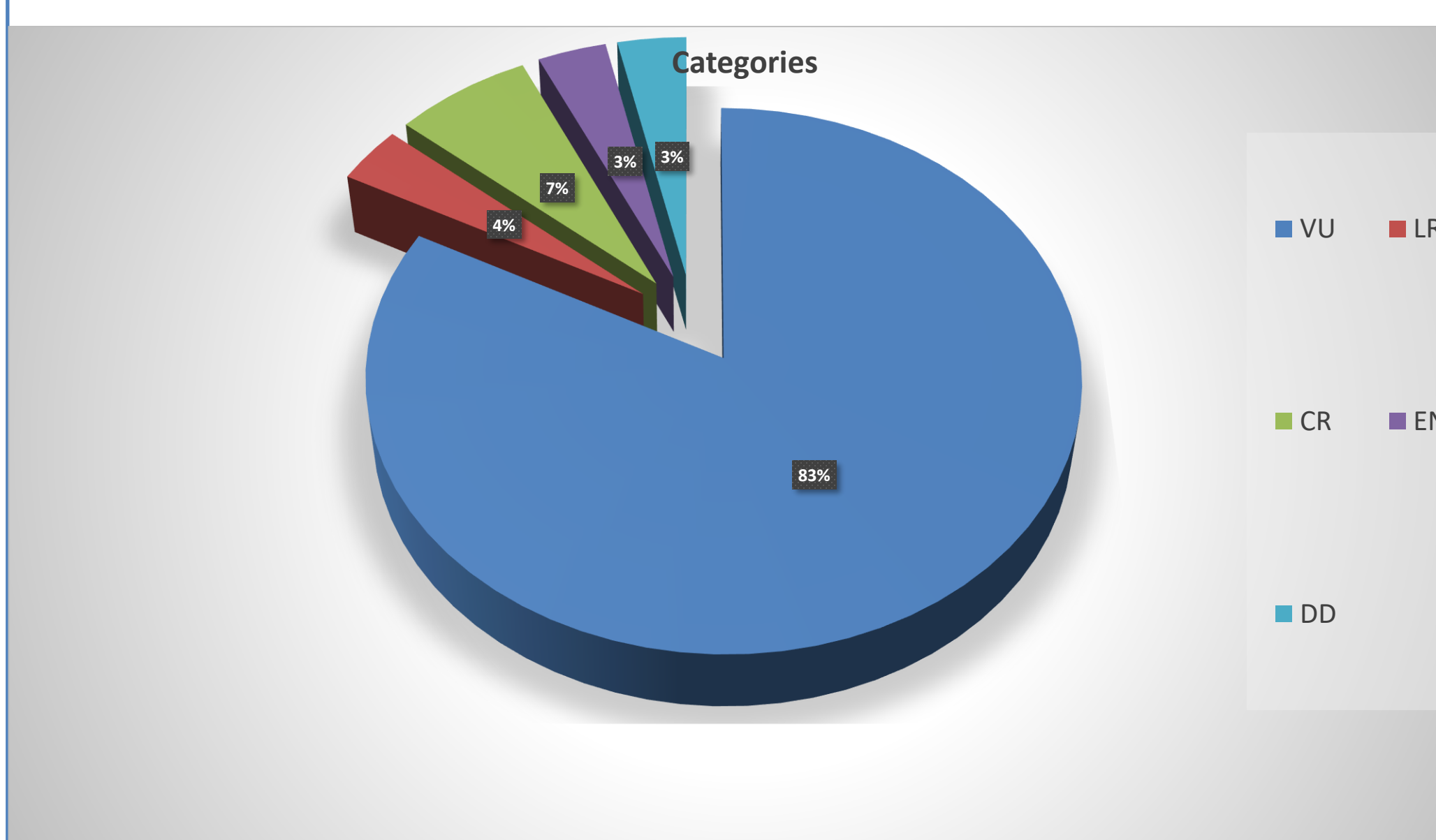
Status VU. Habitat Meets in grassy, limestone environments, up to 1800m altitude Eurosiberian Type Chorology.

2. *Carchorodus alceae* (Insecta Lepidoptera F.Hesperidae)

Status VU Habitat Areas without humidity, heated by the sun and with vegetation. Chorology Palearctic type

3. *Carchorodus flocciferus* (Insecta Lepidoptera, F.Hesperidae)

Status VU Habitat Meets in valleys, most often at altitudes up to 2000m. Chorology Type Eurosiberian.



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 29 species taken in the study, the families represented by the highest number of species are lucanidae and nymphalidae with 9 species each.
- 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 Eurosiberian corology of 11 species and the Mediterranean with 8 species

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