



SOME ENDANGERED COLEOPTERA SPECIES OF ALBANIA

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SYNOPSIS

Key words:
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In this paper 23 Albanian Coleoptera species, endangered in their habitats, which have also their endangered categories at the national level based on the Red List of IUCN (International Union for the Protection of Nature) are presented. These data are a result of a several-year monitoring, based on expeditions carried out in different areas of the country.

INTRODUCTION

Coleoptera are the group of insects with a high diversity. For this reason this group of insects requires constant monitoring and attention, especially the endangered species on different levels.

Furthermore, the region of Albania has a great variety of forms of relief (mountains, valleys, fields, hills, lakes, etc). This favors the existence of a high diversity of Coleoptera species. Two 'red books' (MISJA,1997; MISJA, 2006) which include endangered and threatened species were published .

The following data for each type of the endangered Coleoptera species are given: the scientific name, and the status according to IUCN the Red List, the habitat, the chorology, the risk reasons and the protection.

These data were published with the intention to help all decision makers and academic/scientific workers in their observation of threatened Coleoptera categories.

MATERIALS AND METHODS

The material was collected during the period March-September 2004-2009 at several localities: Kukes, Shkodra, Tirana, Durres, Elbasan, Pogradec, Korça, Vlora,

Saranda. (Fig.1). The collection is made with entomological nets (as addressed in Misja 1997, 2005).



Figure 1: Map of Albania. Localities for each of 23 Coleoptera species collected. In the Legend at the bottom of the map total number of species collected in each of localities and the reference number (as in the text) for the collected species are given.

After that the material was stored and processed. For each threatened type the status, the type of habitat, chorology and the locality was determined. Determination of habitats and the chorology is according to PAPANISTO (2001).

RESULTS AND DISCUSSION

Below is the list of 23 endangered insect species collected in different regions of Albania. These species belong to different categories VU, LR, CR, EN as shown on figures 2 and 3.

Endangered species belong to different families; Cicindellidae, Carabidae, Hydrophilidae, Lucanidae, Scarabidae, Meloidae, Cerambycidae (Fig. 3).

1. ***Cicindela germanica*** (Insecta, Coleoptera, Cicindelidae)

Status: VU (A1b).

Habitat: coastal sand.

Chorology: Eurasian.

Locality: Durrës.

2. ***Calosoma sycophanta*** (Insecta, Coleoptera, Carabidae)

Status: EN (A1b).

Habitat: deciduous forests.

Chorology: Holarctic.

Localities: Tirana, Korça, Shkodër, Vlora.

3. ***Calosoma inquisitor*** (Insecta, Coleoptera, Carabidae)

Status: VU (A1b).

Habitat: prefers oak forests.

Chorology: Palaeartic

Locality: Tirana (Dajt).

4. ***Carabus coriaceus*** (Insecta, Coleoptera, Carabidae)

Status: VU (A1b).

Habitat: meadows.

Chorology: Palaeartic.

Localities: Tirana (Dajt Bot. Garden), Vlorë (Borsh), Bogë (M.Madhe).

5. ***Carabus auronitens*** (Insecta, Coleoptera, Carabidae)

Status: VU (A1b).

Habitat: Forests, hills, mountain areas.

Chorology: European.

Locality: Saranda (Ksamil).

6. ***Carabus granulatus*** (Insect, Coleoptera, Carabidae)

Status: VU (A1b).

Habitat: Found usually spread on meadows, high mountains.

Chorology: Palaearctic.

Localities: Vlora, Tirana (Botanical garden).

7. ***Hydrous piceus*** (Insecta, Coleoptera, Hydrophilidae)

Status: VU(A1b).

Habitat: Near the water basins and vegetation.

Chorology: Palaearctic.

Localities: Vlora, Shkodra. Commonly found in mountainous areas of low generation leafy trees.

8. ***Dorcus parallelopipedus*** (Insecta, Coleoptera, Lucanidae)

Status: VU (A1b).

Habitat: Prefers forest habitats.

Chorology: Palaearctic.

Localities: Vlora, Tirana (Dajt), Lushnja (Divjake), Malesi e Madhe (Reç, Rrapsh).

9. ***Lucanus cervus*** (Insecta, Coleoptera, Lucanidae)

Status: LR (Ic).

Habitat: prefers oak forests, gardens, parks.

Chorology: Palaearctic.

Localities: Tirana (Vora, Botanical Garden, Dajt, Ibe), Vlora, Saranda, Maliq, Malesia e Madhe, Qafe-Shtama, Zalle Dardhe.

10. ***Polyphylla fullo*** (Insecta, Coleoptera, Scarabaeidae)

Status: CR.

Habitat: deciduous forests.

Chorology: European.

Localities: Tirana (Tirana, Krraba), Vlora (Vlora, Mali i Cikes), Durresi(Golem)

11. ***Potasia aeruginosa*** (Insecta, Coleoptera, Scarabaeidae)

Status: VU(A1b).

Habitat: Meadows with inflorescence/blooming trees.

Chorology: European.

Localities: Vlora, Lezha (Shengjin).

12. ***Geotrupes vernalis*** (Insecta, Coleoptera, Scarabaeidae)

Status: VU(A1b).

Habitat: Spreads throughout the mountainous alpine areas, woody areas, also found in meadows.

Chorology: Eurosiberian.

Localities: Tirana (Tirana, Shkalle Priske, Bize, Dajt), Qafe-Molle, Vlore (Borsh), Tepelene, Korçe (Pylli i fazanit)

13. **Potasia cuprea** (Insect, Coleoptera, Scarabaeidae)

Status: VU(A1b).

Habitat: The larvae feed on wood pieces.

Chorology: European.

Localities: Tirana (Dajt, Qafe-Molle), Vlora (Dukat, Llogara).

14. **Osmoderma eremita** (Insecta, Coleoptera, Scarabaeidae)

Status: CR.

Habitat: Old forests, meadows and parks with old trees. Rare in beech forests.

Chorology: Palaearctic.

Localities: Qafe-Molle, Qafe Shtame, Theth, Skrapar (Maja e Policanit).

15. **Gnorimus nobilis** (Insecta, Coleoptera, Scarabaeidae)

Status: CR.

Habitat: Commonly found in mountainous areas of low generation leafy trees.

Chorology: European.

Localities: Tepelena (Uji i ftohte Tepelene), Tirane (Q.Kerrabe), Berat (Tomorr).

16. **Oryctes nasicornis** (Insecta, Coleoptera, Scarabaeidae)

Status: LR(nt).

Habitat: Forest-field environment.

Chorology: Palaearctic.

Localities: Tirana (M.Dajtit, Tirana), Vlora (Vlore, Jonufer).

17. **Gymnopleurus mopsus** (Insecta, Coleoptera, Scarabaeidae)

Status: EN.

Habitat: Open areas with pastures.

Chorology: Euro-siberian.

Localities: Durrës (Golem), Tirana (Ibe), Malesia e Madhe (Koplik, Boge), Sevaster, Vlore (Himare).

18. **Meloe proscarabeus** (Insecta, Coleoptera, Meloidae)

Status: VU (A1b)-

Habitat: Found during spring on outdoor plants.

Chorology: Palaearctic.

Localities: Shkodra, Lushnja, Durrës (Sukth), Tirana (Dajt, Sauk), Vlora.

19. ***Purpuricenens kaehleri*** (Insecta, Coleoptera, Cerambycidae)

Status: VU (A1b).

Habitat: Forest areas, shrubs.

Chorology: Euro-anatolic.

Localities: Vlora (Borsh), Elbasan (Shkumbin), Tirana (Kerrabe, Sauk, Tirane, Dajt), Tropoje (B.Curri), Berati (Poliçan/Tomorr).

20. ***Morimus asper funereus*** (Insecta, Coleoptera, Cerambycidae)

Status: LR(nt).

Habitat: Broad leafy forests.

Chorology: European.

Localities: Kukës (Lume M.Gjallices), Dibra (Lure), Tirane (Bize).

21. ***Cerambyx cerdo*** (Insecta, Coleoptera, Cerambycidae)

Status: EN.

Habitat: Meadows with old trees, parks.

Chorology: European.

Localities: Tirana (Shkalle Priske, Tirane, Mali me Gropa, Livadhi i Selites), Kruja (Qafe Molle), Zallë Dardha, Librazhd, Korçë (Mali i Thate, Fshat Maliq), Vlora (Jonufer, Llogara), Saranda (Butrint).

22. ***Aromia moschata*** (Insecta, Coleoptera, Cerambycidae)

Status: VU(A1b).

Habitat: fields with old trees.

Chorology: European.

Localities: Tirana (Vore, Tirane, Shkalle Priske, Lumi i Tiranes), Durrës (Shijak, Durrës), Kavaja (Golem, Shkëmbi i Kavajës), Vlorë, Malesia e Madhe (Rapsh, Reç), Peshkopia (Lure).

23. ***Rosalia alpina*** (Insecta, Coleoptera, Cerambycidae)

Status: CR.

Habitat: The area of beech and conifers.

Chorology: Palearctic

Localities: Tirana (Shkalle Priske, Bize), Pukë (Lure), Tropoja (Lugina e Valbones), Saranda, Berat (Tomorr), Kruja (Mali i Krujes), Lushnje (Divjake), Durrës.

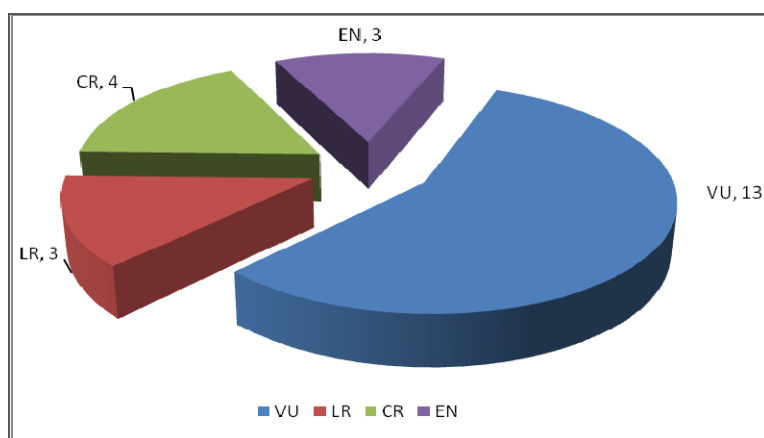


Figure 2: Number of species according to categories.

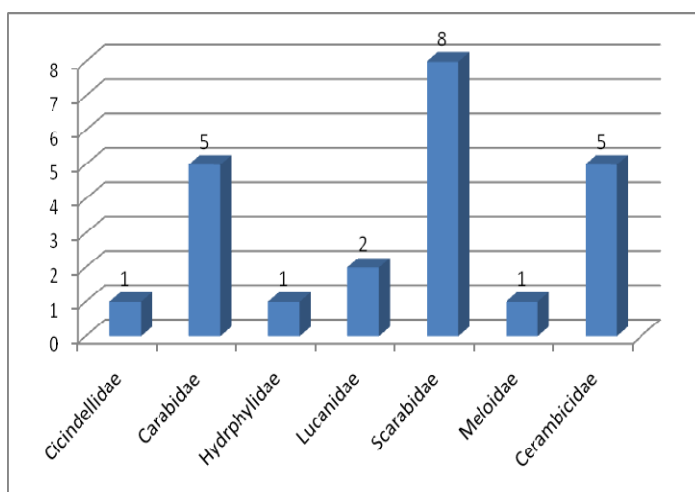


Figure 3: Number of species according to families.

CONCLUSIONS

Through this study we put in lime 23 types of insects found in different areas of Albania as it was mentioned above, they are endangered in different levels. There are 4 species or 17.30% of threatened fauna belonging to CR (Critically Endangered), 3 species or 13.40% of threatened fauna belonging to EN (Endangered category), 13 species or 48.10% of threatened fauna belonging to VU (Vulnerable category), 3 species or 13.40% of threatened fauna belonging to LR (Near threatened category).

Families with the greatest number of endangered species are: Scarabidae (8 species), Carabidae (5 species), Cerambycidae (5 species).

It is of high importance to highlight the main causes of their endangerment which are the destruction of their habitats, the collection before egg emplacement, chemical –organic contamination of waters (for water insects) etc. To prevent these risks we should take measures for the protection and preservation of the habitats, to avoid commercial collecting. Meanwhile, we should conduct detailed ecological researches and monitor endangered species and their habitats.

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