

On the Gastropod Species Diversity of the "Izgoryaloto Gyune" Nature Reserve (Western Rhodopes, Bulgaria)

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Abstract. In the "Izgoryaloto Gyune" reserve (Bulgaria, West Rhodopes) there are a total of 24 known species of snails after present study. Two species (*Pomatias elegans* and *Ceciloides janii*) which occurrence in the West Rhodopes was considered as doubtful were registered on the territory of this protected area. Thirteen species were of conservation status: eleven species of all registered are included in the IUCN Red List for 2011 and two in the Bulgarian Biodiversity Act.

Key Words: malacofauna, protected area, Bulgaria.

Introduction

The malacofauna of the Bulgarian nature reserves is not well known. There is only one report of the species *Pomatias rivularis* (Eichwald, 1829) found in the "Izgoryaloto Gyune" Reserve in the paper of IRIKOV & MOLLOV (2006). Authors summarize all the literature available and represent a lot of new information on the terrestrial gastropod fauna in the West Rhodopes where the reserve is situated. It is placed on the slopes of the mountain along the Vacha River near Krichim town. The main habitats of the reserve are broad leaf forests on calcareous terrains.

In this short communication I report some finds of terrestrial and freshwater snail species registered during a project study on the biodiversity of the reserve in a relation to its future management plan.

Material and Methods

The material was collected on 06.09.2013. The snails were collected by hand or a sieve from various localities in the

reserve in broad leaf forest dominated mainly by *Carpinus orientalis*, *Quercus* sp., and *Fagus sylvatica*. The localities coordinates were derived by a GPS.

Species were determined mainly by DAMJANOV & LIKHAREV (1975), WELTER-SCHULTES (2012), and a reference shell collection.

The conservation statute is according CUTTELOD *et al.* (2011), WELTER-SCHULTES (2012), and the Bulgarian Biodiversity Act (State Gazette, 2002).

Results

Class Gastropoda
Family Hydrobiidae

1. *Grossuana* cf. *angeltsekovi* Glöer & Georgiev, 2009: found in a shallow karst spring, N42.02281 E24.46898.

Family Pomatiasidae

2. *Pomatias rivularis* (Eichwald, 1829): Literature data: IRIKOV & MOLLOV (2006),

UTM-grid 10x10 km KG85: „28.VIII.2004, leg. D. Georgiev“. Not found during present study.

3. *Pomatias elegans* (Müller, 1774): Literature data: IRIKOV & MOLLOV (2006) consider that this species is not known for sure to occur in the West Rhodopes: “This species was reported for the Rhodopes Mountain in general by DAMJANOV & LIKHAREV (1975), and later it was cited by HUBENOV (In: DELCHEV *et al.*, 1993). Unfortunately, so far there are no documented data for the actual presence of this species in the Western Rhodopes, so we assume that this is an invalid taxon for this part of the mountain“. Present study proves that *P. elegans* is part of the land malacofauna of the West Rhodopes. The species was registered in great numbers the following localities: N42.03336 E24.47000, N42.03321 E24.46963, N42.03166 E24.46860, N42.02913 E24.47189, N42.02281 E24.46898.

Family Aciculidae

4. *Platyla similis* (Reinhardt, 1880): Locality N42.02256 E24.46946.

Family Vertiginidae

5. *Vertigo* sp.: Locality N42.02256 E24.46946.

6. *Truncatellina claustralis* (Gredler, 1856): Locality N42.02283 E24.47037, N42.02256 E24.46946.

7. *Truncatellina cylindrica* (J. Ferussac, 1807): Locality N42.03327 E24.47071.

Family Orculidae

8. *Pagodulina subdola* (Gredler, 1856): Locality N42.02256 E24.46946, N42.02281 E24.46898.

Family Valloniidae

9. *Acanthinula aculeata* (Müller, 1774): Locality N42.02256 E24.46946.

Family Enidae

10. *Chondrula microtragus* (Rossmässler, 1839): Locality N42.03327 E24.47071, N42.02685 E24.47028.

11. *Zebrina detrita* (Müller, 1774): Locality N42.03356 E24.47053, N42.03327 E24.47071, N42.03336 E24.47000, N42.03321 E24.46963, N42.02913 E24.47189, N42.02685 E24.47028, N42.02283 E24.47037.

Family Clausiliidae

12. *Alinda biplicata* (Montagu, 1803): Locality N42.03166 E24.46860.

Family Ferussaciidae

13. *Cecilioides janii* (De Betta & Martinati, 1855): Literature data: IRIKOV & MOLLOV (2006) considered that this species does not occur in the West Rhodopes: “This species is reported by DAMJANOV & LIKHAREV (1975) for the north part of the Rhodopes Mountain. As a result of our study and because of the absence of any other literary sources we think that this is an invalid taxon for the Rhodopes Mountain.”

The species was found during present study. Locality coordinates N42.02283 E24.47037.

Family Euconulidae

14. *Euconulus fulvus* (Müller, 1774): Locality N42.02283 E24.47037, N42.02256 E24.46946.

Family Zonitidae

15. *Oxychilus glaber* (Westerlund, 1881): Locality N42.03166 E24.46860, N42.02283 E24.47037, N42.02281 E24.46898

16. *Vitrea neglecta* Damjanov & Pinter, 1969: Locality N42.03336 E24.47000.

17. *Vitrea contracta* (Westerlund, 1871): Locality N42.03321 E24.46963, N42.02256 E24.46946.

Family Helicidae

18. *Cattania rumelica* (Rossmässler, 1838): Locality N42.03336 E24.47000, N42.03321 E24.46963, N42.03166 E24.46860, N42.02283 E24.47037, N42.02256 E24.46946, N42.02281 E24.46898.

19. *Cepaea vindobonensis* (Ferussac, 1821): Locality N42.03321 E24.46963.

20. *Helix albescens* Rossmässler, 1839: Locality N42.03356 E24.47053, N42.03327 E24.47071, N42.02913 E24.47189, N42.02685 E24.47028, N42.02256 E24.46946.

21. *Helix lucorum* Linnaeus, 1758: Locality N42.02283 E24.47037.

Family Helicodontidae

22. *Lindholmiola girva* (Frivaldsky, 1835): Locality N42.03321 E24.46963, N42.03166 E24.46860.

Family Hygromiidae

23. *Xerolenta obvia* (Menke, 1828): Locality N42.03356 E24.47053, N42.03327 E24.47071, N42.02685 E24.47028.

24. *Euomphalia strigella* (Draparnaud, 1801) Locality N42.03336 E24.47000, N42.03321 E24.46963, N42.02913 E24.47189.

Conservation status of the species. In The IUCN Red List for 2011 in the category LC were included 11 species from all registered in the reserve: *Grossuana angeltsekovi*, *Platyla similis*, *Acanthinula aculeata*, *Chondrula microtragus*, *Cattania rumelica*, *Cepaea vindobonensis*, *Helix albescens*, *Helix lucorum*, *Lindholmiola girva*, *Xerolenta obvia*, *Euomphalia strigella* (CUTTELOD *et al.*, 2011).

In the Bulgarian Biodiversity act (State Gazette, 2002), Annex 4 there were two

species included: *Helix lucorum* and *Helix pomatia*.

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