Endemic subterranean and spring snails from the Kamnik- and Savinja Alps

Rajko Slapnik

The Kamnik-Savinja Alps are located in the central northern part of Slovenia. They are representing a typical high mountain „alpine" karst. Geologically it is an area with a considerably differentiated lithological composition where various sequences of middle to upper triassic limestones and dolomites are interbedded with isolated non-calcareous layers. The alpine area is cut by deep valleys forming vast apine ridges and sharp peaks in between. Plateau areas are restricted to individual and isolated lower highlands (Velinka planina, Dleskovska planota, Menina z Dobrovljami).

The alpine karst of this area is characterized by potholes usually terminating in impassable breakdowns. Combinations of stepped potholes and horizontal passages are abundant. The age of the different caves is difficult to determinate. Analyzing the Kamnik Cave the geomorphological levelling in the Pliocene seems to be the upper age limit, although an older age is still possible. Most of the caves and potholes formed along faults are less complex and probably much younger.

Some interesting subterranean and spring snails, endemic in this region are characterized subsequently:

***Zospeum alpestre* (FREYER, 1855)**
1855 *Carychium alpestre* FREYER. Sitzber. Akad. Wiss. Wien, 5, 20.

This species was described from the cave Jama v Dovji grici on the Velika planina mountain. It was found in many caves in the Kamnik and Savinja Alps.

***Zospeum alpestre bolei* SLAPNIK, 1991**
1886 *Zospeum isselianum* POLLONERA (part.)
1974 *Zospeum alpestre isselianum* BOLE (part.)

Typical locality is the cave Tomazevceva zijalka on Podvolovljek in the Savinja Valley. It was also found in some other caves on the Raduha and in the cave Zijalka pod veliko hojko in Veliki Rogatec.

***Belgrandiella peklenscicae* SLAPNIK, 1994**

Belgrandiella peklenscicae is a narrowly endemic species whose shells were found only in alluvia of the Peklenscica. The size of shells is very varied, but all have a characteristically pronounced wavy aperture edge.

***Bythiospeum* (*Paladilhiopsis*) *robicianum trebnikanum* SLAPNIK, 1994**

The subspecies *Bythiospeum* (*Paladilhiopsis*) *robicianum trebnikanum* is currently known only from a spring at Trebnik by Braslovce. BOLE & VELKOVRH (1986: 201) mention a new species *Paladilhiopsis sublesta* sp. n. from „caves and springs in the isolated karst NE from Ljubljana", but they do not mention any specific localities. Since *B. r. trebnikanum* only occurs in the spring of Trebnik, the possibility of them being one and the same species is excluded .

***Lanzaiopsis savinica* BOLE, 1989**

Lanzaiopsis savinica is also a narrowly endemic species. Some specimen were found only in spring Pecovski izvir NW from Luce in Savinja Valley. The other localities are small springs and the cave Zavratnikova jama in the surroundings.

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The alpine snail fauna of the Cretan mountains

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There are three high mountain ranges on Crete that exceed 2000m a.s.l. On the west there is Lefka Ori Mountain, in the center Psiloreitis Mountain, while Dikti Mountain is in the east. The first two reach an altitude of 2450m a.s.l., Dikti Mt. is a little lower reaching 2148m a.s.l.

The land snail fauna of all three mountains is nearly the same above the timberline as far as it concerns the number of species as well as the composition of the land snail fauna. At timberline one can find approximately 10 species while on the peak the number of species decreases to 2-3. The species that are found above timberline are either Cretan endemics, alpine endemics but there are also European alpine species and common west palearctic species.

The presence and the sythesis of this fauna is discussed and compared with the Cretan lowland as well as with other mountains of Greece.

Alpine landsnails of Albania

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The author has been recently in Albania for collecting molluscs. In his lecture he gives an overview of the interesting alpine landsnail fauna of Albanian mountains. Illustrated by color slides the author also tries to convey an impression of the Albanian mountain landscape.