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## A new species of *Grossuana* Radoman, 1973 (Caenogastropoda: Truncatelloidea) from Corfu Island (Greece)

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### Abstract

Recent investigations of freshwater molluscs in Corfu revealed a new *Grossuana* sp. This species has been compared with all the other *Grossuana* spp. known from Greece so far. In addition to the description a photo of the shell and the penis of the new species are provided.

**Key words:** *Grossuana*, Corfu, new species.

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### Introduction

The freshwater molluscs from the island of Corfu are only poorly known and no hydrobioids could be found formerly (Boettger 1859, 1889, Stephanides 1971, Falniowski *et al.* 2012).

Species of the genus *Grossuana* Radoman, 1973 inhabit mainly springs in the Eastern Balkan Peninsula (Radoman 1983, Szarowska *et al.* 2007, Falniowski *et al.* 2016). Many of these species are only known from their type localities with the highest number of species in Bulgaria (Georgiev *et al.* 2015, Falniowski *et al.* 2016). Only *Grossuana marginata* lives in an island (Euboea, Greece) while all other species have been described from mainland.

Radoman (1983) described the penes of the representatives of the genus *Grossuana* as being “long, with a very prolonged, pointed top and a weak outgrowth on the left side, which is hardly visible in many specimens.”. The variability of the penes of *Grossuana* has been pointed out by Falniowski *et al.* (2012) and Georgiev *et al.* (2015).

### Material and Methods

Live specimens were collected by hand and preserved in 75% ethanol. The empty shells were collected by sieving through 1 x 1 mesh size sieve. The dissections and measurements of the shells were carried out using a stereomicroscope and an eyepiece micrometer considering the criteria of Radoman (1983) and Hershler & Ponder (1984) by both authors. The photographs were taken with a digital camera system. The penis was

photographed under glycerin on a slide with a digital camera (Canon) through a microscope. The opinion of Radoman (1983) that most of the genera differ in their penis morphology was accepted for this paper. The female genitalia have not been investigated.

The type material is stored in the Zoological Museum Hamburg (ZMH).



Figure 1. The type locality (red dot) of *Grossuana durrelli* n. sp.

## Results

### *Grossuana durrelli* n. sp.

**Type materials: Holotype:** shell height 2.3 mm, width 1.5 mm, from type locality (ZMH 87654).

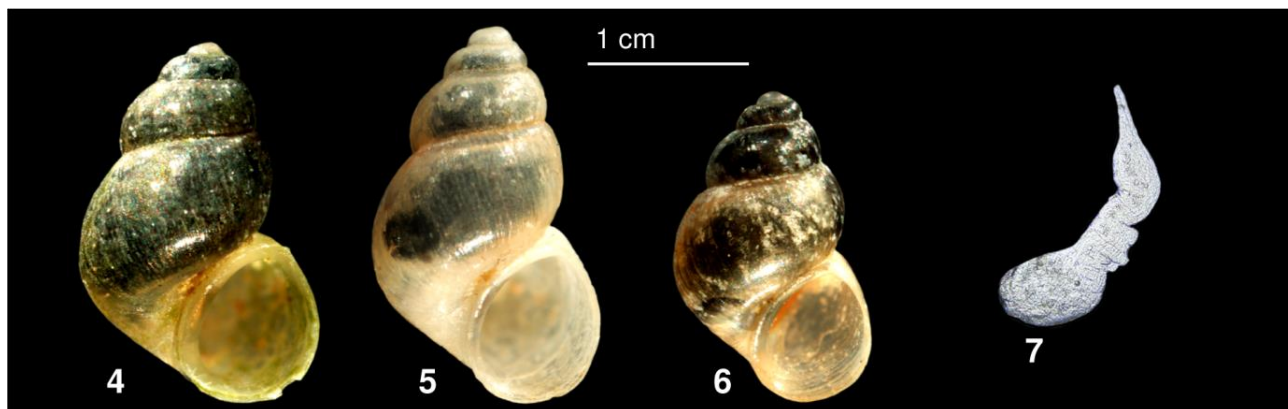
**Paratypes:** 10 specimens in ethanol ((ZMH 87655), 7 specimens in coll. Glöer, 5 specimens in coll. Georgiev.

**Type locality:** Greece, N Corfu Island, Klimatia village, Kato vrisi spring; N 394428,3 E194652.0, 191 m alt., 28.07.2018 Georgiev leg.



Figures 2-3. The type locality of *Grossuana durrelli* n. sp.

**Etymology:** Named in honour to Gelard Durrel (British naturalist, conservationist, zookeeper, writer and television presenter) who used to live on Corfu and inspired the senior author with his books.



**Figures 4-7.** *Grossuana durrelli* n. sp. 4: holotype, 5-6: paratypes, 7: penis.

**Description:** Shell ovoid conical, 4-4.5 slightly convex whorls with a deep suture. Lateral line nearly straight to slightly convex, columellar border thickened, umbilicus closed. Operculum red. Shell height 1.9-2.4 mm, 1.2-1.5 mm width.

Penis with two small outgrowths, hardly visible (fig. 7). Distal part of the penis tapered, basis broad.

**Differentiating features:** In the region of Corfu no *Grossuana* spp. are known yet (Falniowski et al. 2015) thus we compare it with all *Grossuana* spp. from Greece. *G. durrellii* n. sp. has more whorls and is more conical than *G. tembii* Boeters, Glöer & Falniowski 2018, in addition the penis of *G. tembii* has a dark spot at the distal part, *G. durrellii* has not. The *Grossuana* spp. which occur in Macedonia (N Greece) are more globular (Glöer et al. 2018), as well as *G. marginata* (Westerlund, 1881) from Euboea. *G. delphica* is smaller than *G. durrellii* n. sp. and the periostome is not thickened at the columella (Radoman 1983, pl. 2, fig. 31). In 2013 Georgiev found *Grossuana angeltskovi* Glöer & Georgiev, 2009 in N-Greece, but this species is more globular than *G. durrellii* n. sp. and the penis of it has a dark spot.

**Distribution:** Only known from type locality.

**Habitat:** Living specimens were found on small stones, gravel and sand in running water of a ditch just below the spring. The area of the spring is a karst terrain rich on limestone formations (it is close to the Anthropograva Cave).

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