

## Second record and new locality of the Bulgarian endemic species *Insignia macrostoma* Angelov, 1972 (Gastropoda: Hydrobiidae) – more than 40 years after its description

DILIAN GEORGIEV

Department of Ecology and Environmental Conservation, University of Plovdiv, Tzar Assen Str. 24, BG-4000 Plovdiv, Bulgaria,  
e-mail: diliangeorgiev@abv.bg

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One shell of *Insignia macrostoma* Angelov, 1972 without an operculum was found on 10 Dec 2011 in cave river deposits of the Toplya cave, Bulgaria, Stara Planina Mts., near the village of Golyama Zhelyazna. It is the second finding of this species after more than 40 years and a new locality.

### Introduction

Bulgaria as a part of the Balkans is a hot spot of biodiversity and an area inhabited by many endemic snails especially those of the hydrobiids (ANGELOV 2000, HUBENOV 2005, GEORGIEV & GLÖER 2011, GEORGIEV 2011, 2012). The central and western part of the Stara Planina mountain chain with its large area of northwards foothills (so-called Pre-Balkan) with many caves and plateaus is one of areas characteristic of the cave gastropod species radiation.

From the same area – the north slope of central Stara Planina, at Teteven town district, from a cave spring at the old village of Polaten (now included in Teteven area), amazing hydrobiid snail was described by ANGELOV (1972). Only empty shells were found, but their morphology was unique and let the author to describe a new species and a new genus – *Insignia* Angelov, 1972.

More than 40 years from this description the species was not found in the region. In this short note I report its finding in a new locality situated in the same mountain massif where the type locality is situated, but about 20 km far to the north-east direction.

### Material and methods

Shells were collected on 10 Dec 2011 from caves at Stara Planina mountain area by sieving subterranean river deposits by 1×1 and 2×2 mm mesh width sieves. The material from the sieve of finer mesh size was then brought to the laboratory and dried. Afterwards it was again put into water and the floating shells were collected by a strainer or sieve 1×1 mm and a small brush.

The measurements of the shell were carried out by means of CETI stereo microscope and an eye-piece micrometer; the photographs were made with camera system with a digital adapter. The material is stored in the collection of the author.

### Results

Genus *Insignia* Angelov, 1972

*Insignia macrostoma* Angelov, 1972

**Type locality.** Local endemic described from a spring at Polaten district, Teteven town, Stara Planina, Bulgaria (the exact type locality is not known).

**Description.** Shell very small, egg shaped, with very blunt and wide apex. Whorls are 3–3.5 divided by deep suture. Shell surface is smooth, glanced, without radial sculpture. The aperture is with thick lip. The umbilicus is usually slit-like. Anatomy and operculum are not known. Shell height: 1.20–1.30 mm, shell width: 0.70–0.75 mm, aperture height and width: 0.50 mm (ANGELOV 1972).

### New data:

**Material examined:** a single shell without an operculum (Fig. 1), 10 Dec 2011, Toplya cave, Bulgaria, Stara Planina Mt., near village of Golyama Zhelyazna, 42°56'49.8" N 24°29'20.8" E, 465 m a.s.l., Dilian Georgiev leg.

**Shell measurements:** Shell height: 1.20 mm, shell width: 0.69 mm, aperture height: 0.50 mm, aperture width: 0.53 mm, last whorl height: 0.86 mm.

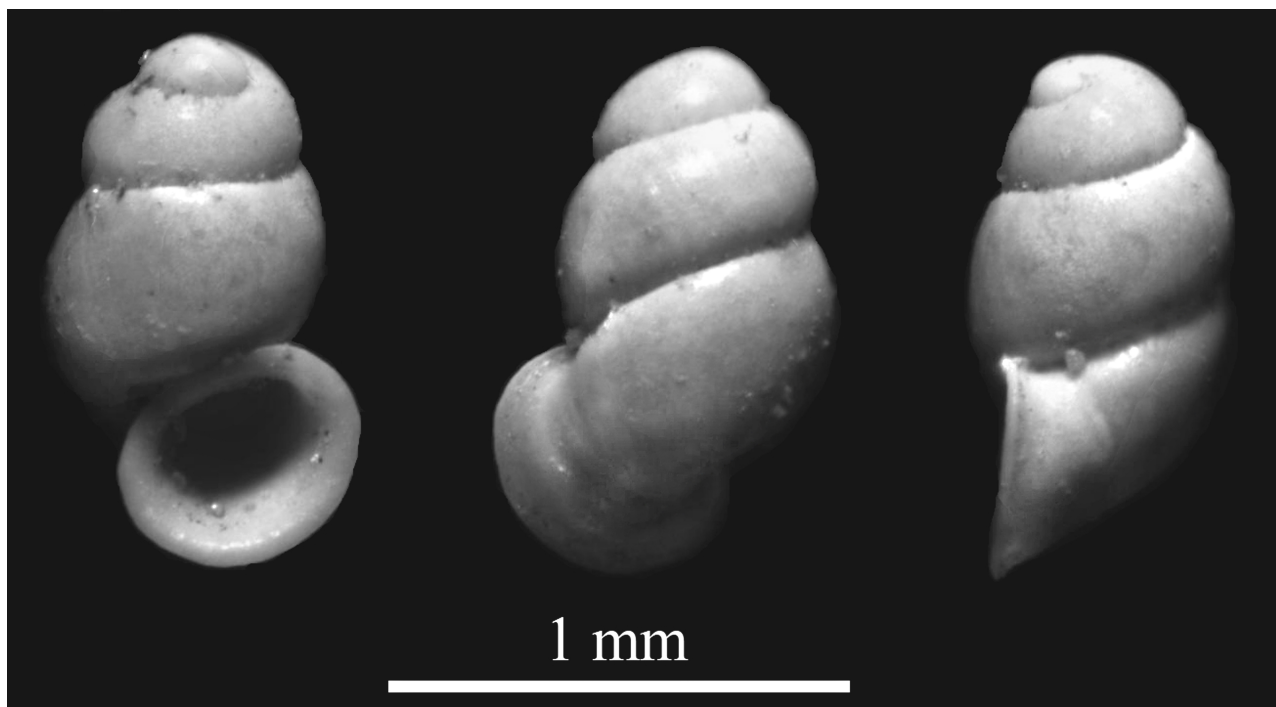
**Remark:** The species was searched but not found in other four water caves at the Teteven area: (1) Rushovata (Gradeshniskata) cave near the village of Gradeshnitsa, (2) Vlaevskata cave, (3) a nearby spring close to Polaten district, and (4) Benkovskata cave near the village of Cherni Vit. However the species occurrence in these caves cannot be excluded because the species is difficult to find and it is possibly very rare.

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**Fig. 1.** The shell of *Insignia macrostoma* found in the river deposits of Toplya cave near the village of Golyama Zhelyazna.