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## A New Addition to the Malacofauna of Georgia – *Eobania Vermiculata* is Replenishing its Range

Levan Mumladze<sup>1,2</sup>, Nika Paposhvili<sup>1</sup>

<sup>1</sup>Institute of Ecology, Ilia State University, Cholokashvili ave.3/4, 0165, Tbilisi, Georgia

<sup>2</sup>Invertebrate Research Center, Agladze st. 26, 0119, Tbilisi, Georgia

**Abstract:** Here we report a new finding of invasive *Eobania vermiculata* in Georgian Black Sea coast. A possible invasion pathway and possible treats are discussed.

**Key words:** *Eobania vermiculata*; Invasion; Terrestrial snail

Chocolate band snail (*Eobania vermiculata* (Muller, 1774)) (in Georgian - ყავისფერზოლიანი ლოკოკონა) originally having circum Mediterranean distribution is now highly invasive species which already spread in many European countries [1], Saudi-Arabia [2,3], Japan [4], South Africa [5] and USA [6]. *E. vermiculata* is also known to occur in south-east Ukraine (Crimea) and Black Sea coast of Russia (Sochi and Tuapse) [7]. The species is also widespread in all the Black Sea coast of Turkey [8] and recently was reported from the capital of Azerbaijan (Baku) ([http://www.caucasus-snails.uni-hamburg.de/CaucasianLandSnails-Dateien/Eobania\\_vermiculata.html](http://www.caucasus-snails.uni-hamburg.de/CaucasianLandSnails-Dateien/Eobania_vermiculata.html)). From Georgia the species has never been recorded although were expected to occur based on its current distribution. Here we report a new finding of *E. vermiculata* in the Black Sea coast of western Georgia. A numerous population of *E. vermiculata* was observed near Ganmukhuri (N42.39947, E41.55535) in 16<sup>th</sup> of April (and again in June) of 2016 (fig. 1). The area where the population was found is newly constructed seaside boulevard and it seems that the species is introduced with the building materials traded from Turkey. However, exact ways of introduction is currently unknown. The shell characteristics is typical reported in basic literature [1, 9]. In particular, shell is whitish-yellowish with four brownish bands (an exceptional individual with dark brown bands is shown in fig. 2). An umbilicus and inner side of aperture margins is white with ear-like lobe on umbilicus near the collumela. Umbilicus is completely closed; shell height is 20mm ( $\pm 1.5sd$ ), width – 28mm ( $\pm 2sd$ ), number of whorls – 4.5-5.

Up to now only 6 (or 7) species of helicidae was represented in Georgia [10, 11] (<http://www.caucasus-snails.uni-hamburg.de/CaucasianLandSnails-Dateien/Checklist.html>) and *E. vermiculata* is a new addition to this list. Except the Turkish snail (*Helix lucorum* Linnaeus, 1758) neither of the species belonging to helicidae are known to be a serious pest in Georgia. Even the Turkish snail does not have strong negative effect on local agriculture and horticulture.

Only few undocumented evidences are exist when populations of Turkish snail grew up enough to be able to partly damage wine yards in eastern Georgia [12] (Personal observation). Unfortunately, there is no any study where snails as pests or their effects are specifically evaluated in Georgia. The pest status of a new invader, *E. vermiculata* is not well understood worldwide [5] however assumed as a significant treat in some areas in its distributional range [5,6]. At present, there is no possibility to estimate either the potential treat of *E. vermiculata* or the potential rate of its invasion in other areas of Georgia. However, it is important to monitor the



Figure 1. A location of population of *Eobania vermiculata* in western Georgia near Black Sea.



Figure 2. A specimen of *Eobania vermiculata* from Georgia (Photo - N. paposhvili).

already established population and to assess the trend of further spread of this alien species.

### Acknowledgment

We would like to thank Prof. B. Hausdorf for checking our identification and L. Ninua for providing additional material from same locality.

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## ***Eobania vermiculata* - ახალი ინვაზიური სახეობა საქართველოში**

ლევან მუმლაძე<sup>1,2</sup>, ნიკა პაპოშვილი<sup>2</sup>

### რეზიუმე

წინამდებარე ნაშრომში მოცემულია ინფორმაცია ახალი, ინვაზიური სახეობის მოლუსკის (*Eobania vermiculata*) საქართველოში პოვნის შესახებ. ასევე მოკლედ მიმოხილულია აღნიშნული სახეობის გავრცელების პოტენციური გზები და მის ინვაზიასთან დკავშირებული საფრთხეები.