

NEW DATA FOR THE VERTICAL DISTRIBUTION OF THE SMOOTH NEWT (*LISSOTRITON VULGARIS*) (AMPHIBIA, SALAMANDRIDAE) IN BULGARIA

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ABSTRACT

The highest record of smooth newt *Lissotriton vulgaris* (Linnaeus, 1758) from Bulgaria is reported. Two specimens were recorded in Vitosha Mt. at 1854 m a. s. l. The new locality moves the vertical border of the species distribution with 400 m a.s.l. A review and a comparison with the other uppermost localities in the other mountains in Bulgaria were also done. This record represents one of the highest record for the nominate subspecies, according to the available data.

Keywords: Bulgaria, highest record, *Lissotriton vulgaris*

Introduction

The smooth newt *Lissotriton vulgaris* have a wide range in Bulgaria and Europe and can be observed from the sea level to the middle mountains zone [1]. According to the published data the smooth newt upper limit of the vertical distribution in Bulgaria is 1550 m [6]. The highest record for the nominate subspecies was cited by Fischer [3] from Tyrolean Alps at 2150 m a.s.l.

Materials and methods

During the field researches in 2007 and 2008 the smooth newts were observed in place Platoto in the uppermost part of Vitosha Mountain. Species was found in a small puddle at 1854 m a.s.l. near the road from pic Kamen del to pic Cherni Vrah. The locality's coordinates are 42°33,067'N and 23°16,813E. One female specimen was found on 07.07.2007 by one of us (A.G.) (**Fig. 1**), next year on 06.07.2008 one male was observed in the same place by the botanist Georgi Kinev. Both specimens were in water.



Fig. 1. *Lissotriton vulgaris* female specimen from Platoto place, Vitosha Mt.

Results and Discussion

The present known localities above 1000 m a.s.l. was found

in Western Balkan range, Osogovo Mt., Vitosha Mt., Liulin Mt., Lozenska Mt., Rila Mt., Western Rhodopi Mt. and

Sredna Gora Mt. (**Table 1**). The new locality moves the vertical border of the species distribution with 400 m a.s.l.

This record is one of highest for the nominat subspecies.

TABLE 1

The uppermost known published and new found localities of *Lissotriton vulgaris* in Bulgaria above 1000 m a.s.l.

PUBLISHED			
Original description	UTM 10	Altitude	Authors
Artificial pond above Boyana, Vitosha Mt.	FN82	1050	Buresch & Zonkow [2]
March Karleva dupka, Lozenska Mt.	GN01	1054	Stoyneva & Michev [6]
Polovrazhko March, Lozenska Mt.	GN01	1050	B.N. obs. 1993-1994
Boyana lake, Vitosha Mt.	FN82	1060	27.05.05. (N.Tz. obs.), Stoyneva & Michev [6], 07.06.08 (B.N. obs.)
Dam Kliuch 2, Western Balkan range.	FN96	1139	Stoyneva & Michev [6]
Dam Kliuch 1, Western Balkan range.	FN96	1154	Stoyneva & Michev [6]
Small pond 1,5 km south to pic Dupevitsa, Liulin Mt.	FN72	1160	B.N. obs. 1985-1990
Place Dendrariuma, Vitosha Mt.	FN82	1200	M. Landurov obs. 2003
March near Boikovo, Western Rhodopi Mt.	LG05	1220	Petrov et al. [5]
Kopitoto, Vitosha Mt.	FN82	1300	Buresch & Zonkow [2]
Bogdan, Sredna Gora Mt.	KH92	1300	Naumov [4]
Near Petrohan, Western Balkan range.	FN77	1300	Stoyneva & Michev [6]
Lake Panichishte.	FM88	1350	Stoyneva & Michev [6]
Artificial pond near hut Parshevitsa.	GN07	1375	Tzankov & Stoyanov [7]
1,5 km from hut Osogovo in direction to Kiustendil.	FM37	1440	Veselonov [8]
Petrohan.	FN77	1440	Stoyneva & Michev [6]
Osogovo.	FM37	1440-1550	Stoyneva & Michev [6]
Platoto, Vitosha Mt.	FN81	1854	This study

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