

- Semlitsch, R. D. (1987): Paedomorphosis in *Ambystoma talpoideum*: effects of density, food and pond drying. *Ecology*, 68, 994-1002.
- Semlitsch, R. D. Harris R. N., Wilbur H. M. (1990): Paedomorphosis in *Ambystoma talpoideum*: maintenance of population variation and alternative life-history pathways. *Evolution*, 44, 1604-1613.
- Whiteman H. H. (1994): Evolution of facultative paedomorphosis in salamanders. *Quarterly Review of Biology*, 69, 205-221.

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New record on the occurrence of *Dolichophis caspius* (Reptilia: Colubridae) in Romanian Moldavia

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Abstract. *Dolichophis caspius* is a common snake species in Dobrudja (Tulcea and Constanta counties) and in some areas from south-western Romania (Banat region). However, this species has only been cited in 2 localities in the eastern part of Romania (Moldavia) and has not been recorded since 1937. In the Romanian red data book of vertebrates, the Moldavian populations of *Dolichophis caspius* are listed as extinct. The present paper provides evidence that the large whip snake still occurs in the Romanian Moldavia by way of 3 live specimens observed in Galați county in May 2007.

Key Words: *Dolichophis caspius*, large whip snake, Romania, Moldavia, Galați county.

The large whip snake (*Dolichophis caspius* Gmelin, 1779) is known to occur in Asia Minor, the Balkans, Hungary, southern Romania, the Republic of Moldavia, Ukraine, Southern Russia (Caucas) and western Kazakhstan (Szczerbak 1997, Iftime 2005). In Romania, this species

has been previously recorded in numerous localities within Dobrudja (Fuhn & Vancea 1961, Fuhn 1969, Covaciu-Marcov et al 2006a) as well as limited localities from other southern regions of Romania (Covaciu-Marcov et al. 2005, Lazar et al. 2005, Iftime 2005). *Dolichophis caspius*

prefers warm, sunny forest edges, areas with bushes, rocky slopes and ruins (Fuhn & Vancea 1961, Iftime 2005). In the Romanian region of Moldavia this species has only been recorded in two localities within Galați county; Hanu Conachi and Movileni (Băcescu 1937). These same records were later adopted by Fuhn & Vancea (1961). The whip snake has not been recorded in the area since 1937, probably a reflection of the limited herpetological investigations have taken place in Moldavia, and in

the Romanian red data book of vertebrates, Moldavian populations of the large whip snake are listed as extinct (Iftime 2005).

Three *Dolichophis caspius* specimens were found and captured during a herpetological investigation in the vicinity of the “Lower Prut River Floodplain” Natural Park, on the 9th of May, 2007, between 14.00 h. and 15.30 h. All three snakes were captured in an area situated between the localities of Stoicani and Foltești (fig.1; Galați county). Of the three

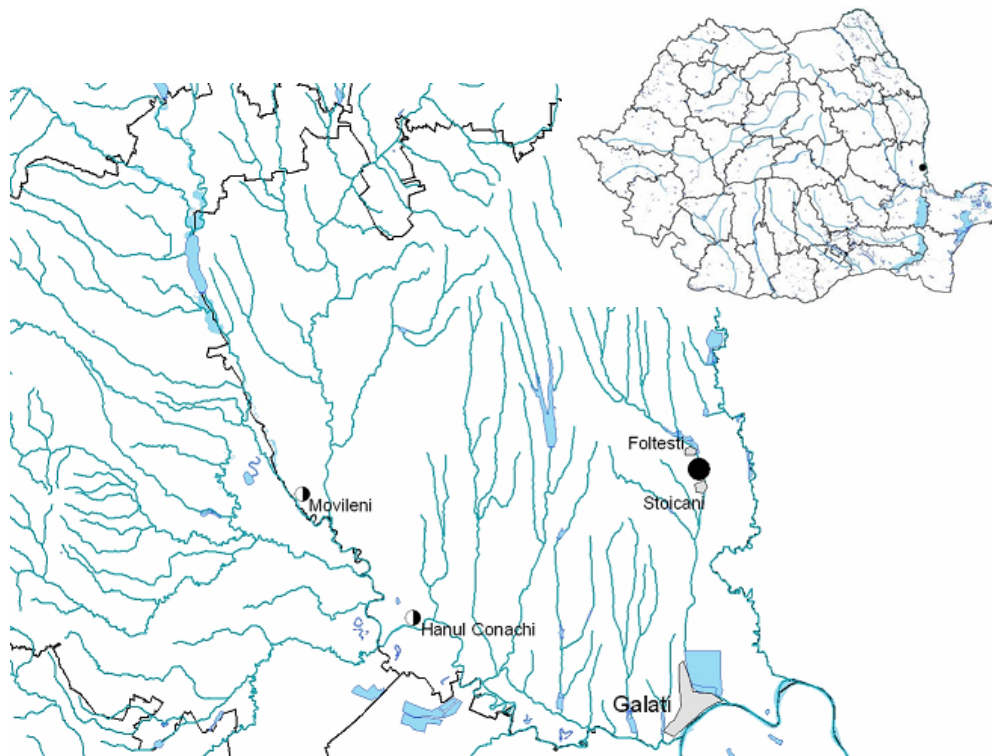


Figure no.1. The location of the area in which *D. caspius* was identified (half filled circles = historic records (Băcescu, 1937), filled circle = current study).



Figure no.2. Adult male *D. caspius* from Galati county



Figure no.3 Habitat of *D. caspius* in Galati county

captured specimens, one was a juvenile male and the other two were both adult males (fig.2). The first two captured whip snakes (one juvenile and one adult) were basking at the edge of the forest and the last adult was hiding under a bush at the time of capture. Photographs and measurements were taken and the scalation of the adult snakes was noted (Table 1). The juvenile specimen was only photographed. All of the three captured snakes were subsequently released in the habitats where they were captured.

Table 1. Morphology and scalation of the two adult whip snakes.

	<i>D. caspius</i> # 1	<i>D. caspius</i> # 2
Snout-vent length (cm)	117	113
Tail length (cm)	34	42.2
Head length (cm)	3.1	3.5
Head width (cm)	2.5	2
Number of dorsal scales at mid-body	19	19
Number of ventral scales	205	196
Anal plate	½	½
Number of sub-caudal scales	96 x 2	103 x 2
Number of labial scales	8/8	8/8
Number of infralabial scales	9/9	9/9

The geographic coordinates of the area were 45°43'24.65''N, 27°56'16.20'' E and the altitude was 55 m. A.S.L. The area is situated at the border between the former Prut river meadow (in the east) and the Corvului Plain (in the west). The small but relatively steep hills of the area are covered by typical steppe vegetation (mostly *Fescuca sp.* and *Stipa sp.*; fig.3). Much of the area is covered by an acacia plantation, grown and managed by the local forestry department. Two other species of reptile (*Lacerta viridis* and *Natrix natrix*) have also been identified in those habitats.

The last previous records of *Dolichophis caspius* in Moldavia date back to 1937 when it was reported from two localities in the lower basin of the Siret river (in Galați county). Only one herpetological study has been conducted in the area since then (Covaciu-Marcov et al 2006b) which did not record the presence of this species in the area. Our data not only reconfirms, after 70 years, the presence of *Dolichophis caspius* in the Romanian region of Moldavia but also indicates, for the first time, the presence of this species in the Prut river basin. The population identified by herein also represents the northernmost population of *Dolichophis caspius* known in Romania.

Since this is now the only definitively known population of the large whip snake in Romanian Moldavia, we recommend that the area should be included in the "Lower Prut River Floodplain" Natural Park, in order to protect and conserve the population. Also, we are planning on further surveys within Galați county, with the aim of possibly identifying more *Dolichophis caspius* populations and assessing their situation in the area.

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References

- Băcescu, M. (1937): Câteva interesante date herpetologice pentru fauna României și unele propuneri de rezervații naturale în legătură cu ele. *Revista științifică "V. Adamachi"* 23 (3): 122-128
- Covaciu-Marcov, S. D., Sas, I., Cicort-Lucaciu, A.Șt., Peter, I., Bogdan, H. (2005): Notes upon the herpetofauna of the county of Caraș-Severin, Romania. *Revue Roumaine de Biologie, serie de Biologie Animale*, 49 (1-2): 47-56.
- Covaciu-Marcov, S.D., Ghira, I., Cicort-Lucaciu, A.Șt., Sas, I., Strugariu, A., Bogdan, H.V. (2006a): Contributions to knowledge regarding the geographical distribution of the herpetofauna of Dobruja, Romania. *North-Western Journal of Zoology* 2 (2): 88-125.
- Covaciu-Marcov, S.D., Sas, I., Cicort-Lucaciu, A.Șt., Bogdan, H., Groza, M. (2006b): Contribuții la cunoașterea compoziției și răspândirii geografice a herpetofaunei Moldovei dintre Siret și Prut. *Muzeul Olteniei Craiova. Oltenia. Studii și comunicări. Științele Naturii*. 22: 131-136.
- Fuhn, I.E., Vancea, Șt. (1961): "Fauna R.P.R.", vol. XIV, Fascicola II, Reptilia. Editura Academiei R.P.R., București: 1-352.
- Fuhn, I.E. (1969): Broaște, șerpi, șopârle. Ed. Științifică, București. (in romanian)
- Iftime, Al. (2005): Reptilia. In: Botnariuc, Tatole (eds.) *Cartea Roșie a Vertebratelor din România*, Ed. Acad. Române
- Lazăr, V., Covaciu-Marcov, S.D., Sas, I., Pusta, C., Kovacs, E.H. (2005): The herpetofauna in the district of Dolj (Romania). *Analele Științifice ale Universității "Al. I. Cuza" Iași, s. Biologie animală*, 51: 151-158
- Szczerbak, N.N. (1997): *Coluber caspius*, Gmelin 1789. In: Gasc J. P., (ed.). *Atlas of Amphibians and Reptiles in Europe*, pp. 328-329. Museum National D'Histoire Naturelle, Paris.

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