

## Note on the occurrence of *Darevskia pontica* (Reptilia) north of the Mureş River, in Metaliferi Mountains, western Romania

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**Abstract.** In the spring of 2013 we identified the species *Darevskia pontica* in two localities situated on the southern slope of Metaliferi Mountains, north of the Mureş River. *D. pontica* inhabits forested areas, being present in the open, grassy sectors near some brooks or on some forest roadsides.

**Key words:** *Darevskia pontica*, geographical distribution, northern limit, habitats.

*Darevskia pontica* is in Romania at the northern limit of its range in the Balkan Peninsula (see in: Darevsky 1997, Tuniyev et al. 2011), being distributed in the southern half of the country (Török 2010). Although in the recent years the species has been reported from new regions of Romania (e.g. Ghira 1994, Iftime & Iftime 2006, Covaciu-Marcov et al. 2009a,b, Gherghel et al. 2011, Sos et al. 2012), its distribution in the country is, at present, still poorly known (Sos et al. 2012). The new information has contributed to achieve a unitary image on the species distribution in southern Romania (Gherghel et al. 2011, Sos et al. 2012). According to literature data, the northern limit of the distribution of the species in Romania was in Poiana Ruscă Mountains (see in: Sos et al. 2012). This limit seems plausible, the respective populations being in connection with those from the rest of Banat and Oltenia (see in: Sos et al. 2012), the Mureş River seeming to be a northern barrier of the species' range. Despite this, in the spring of 2013 we found the species north of the Mureş River, in two localities from the southern slope of Metaliferi Mountains, namely Toc and Ilteu (Fig. 1). *D. pontica* (Fig. 2) was identified accidentally in the area.

At present, it seems that these are the northernmost distribution records of the species. The two localities are about 50 km west of Deva and approximately 35 km north of the localities from western Poiana Ruscă Mountains where the species was previously recorded (Ghira 1994, Bogdan et al. 2011). The identification of the species north of the Mureş River not just expands its known distribution area, but also ends the previous speculations concerning its origin in the Poiana Ruscă Mountains (Bogdan et al. 2011). The

insular distribution of the species in western Romania is probable the result of the anthropogenic impact on its habitats, and in particular of deforestations, like in other regions of the country (see in: Gherghel et al. 2011). Identification of the species north of Mureş in two, though neighbouring localities, in natural habitats well represented in the area, proves its native character in the region. Thus, *D. pontica* reached during the warmer period from post-glacial not just to Mureş River (Bogdan et al. 2011), but even went north of it. This crossing probably occurred in the narrowest area of Mureş floodplain, where the Bulzei Hills, still well-wooded, are located in the close vicinity of the Mureş and of the southern flank of Metaliferi Mountains, to the west and east of this area the Mureş passing through lowlands (Posea & Badea 1984). We consider that the above mentioned are supported by the presence north of the Mureş River of another reptile species that is in Romania at the northern limit of its range also, *Vipera ammodytes* (Ghira et al. 2002, Iftime 2005).

*D. pontica* was found at an altitude ranging between 210 m and 243 m. In both cases *D. pontica* was found upstream of localities, near some small-sized brooks, surrounded by slopes covered with compact pedunculate oak, sessile oak and beech forests. The individuals were observed in more open but moist sectors, being present on the edge of some old forest roads or in the grassy areas surrounding streams (Fig. 3). The area inhabited by *D. pontica* at Toc remains relatively natural, though some clearings are carried out here also, but at Ilteu there are coniferous plantations. Thus, at Toc we counted over 15 individuals of *D. pontica* on less than one kilometre length of forest road, while at Ilteu we found a single individual in an

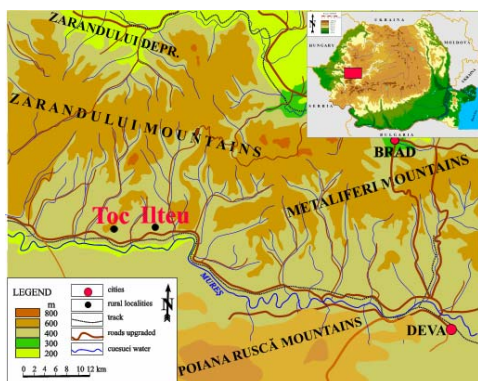


Figure 1. The geographical position of the study area.



Figure 2. *D. pontica* from Iteu.



Figure 3. The *D. pontica* habitats near Iteu (left) and Toc (right).

area without plantations. We did not find any individual in the areas with coniferous plantations. Currently, the anthropogenic impact on the habitats of the species from the two localities is low, but forestry activities which continue even in the present may affect the populations all the more so as these are at the northern limit of the species' range. Also, the surface area occupied by the species north of Mureş is not known, but is probably reduced.

The identification of the species *D. pontica* north of Mureş River in south-western Metaliferi Mountains attests the fact that its distribution in Romania is still poorly known at present (Sos et al. 2012). Establishment of the factors that determine this distribution and its northern limit will be known after a detailed analysis of the south-western area of Metaliferi and Zarandului Mountains, but also of Bulzei Hills. At least the area between Savarsin and Petris has several habitats similar to those in which the species has been identified, which plead for the thorough investigation of the region. Such studies could

clarify how different geographical factors influence the distribution of a species being in Romania at the northern limit of the range.

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