

MAPPING THE PRESUMED RANGE OF THE DAREVSKY'S VIPER

Tadevosyan T.L

Non Governmental Organization for Nature Protection, Yerevan, Republic of Armenia
e-mail: t_tadevo@freenet.am

Darevsky's shield-headed viper (*Vipera (Pelias) darevskii* Vedmederja, Orlov & Tuniyev, 1986). – insufficiently explored species with unclear genesis, actually known only from N-W Armenia and included in IUCN Red List in category CR C2b. In this connection, for basing conservation of the genetic diversity of this viper in situ, and for clearing up the possible ways of its genesis, the detection of its new habitats is necessary.

As the pre-cut stage for resolving this objective, some possible habitats of Darevsky's viper are identified on the topographic map (1:200000), using (ESRI) ArcView GIS v.3.2a software. Identification of the presumed habitats is based on the following criteria of actual habitats: altitude range – 2400-3100 m above sea level; slope exposure - SSW–S–SSE which is equivalent to 45-50° from calibration contour lines of the map; slope steepness – 10-40°, which is equivalent to 7-10 isolines per 10 mm. Taking into account also the hypothesis regarding the genesis of Darevsky's viper as a hybrid resulting from cross-breeding among some representatives of complexes *Vipera urisini* – *renardi* – *eriwanensis* and *Vipera kaznakovi* – *dinniki* – *pontica*, the presumed habitats of Darevsky's viper are situated near the northern border of the range of *V. eriwanensis*.

On the map, there are shown 2 plots of actual distribution of Darevsky's viper according to literature data (Darevsky, 1957; Aghasyan, 1996), 2 plots where this viper was possibly registered according to personal comments of I.S. Darevsky (1996), and 64 plots of possible habitats presumed for the first time. Approximately 104 sq. km of potential habitats are situated in Armenia, (Javakhety Eghnakhagh Okuz and Ortul mountains), 63 sq. km – in Georgia (Javekhety and Eghnakhagh massives, Eldagh, Madatapa, Gilkhidagh, Gharakhach mountains) and 297 sq. km – in Turkey (Eghnakhagh, Aghbaba and Childir massives as well as Ijaret mountain). All mountain massives mentioned above are situated in the limits of Javakhety-Ashotsk physical-geographical region.

The continuation of this project is being planned.