## POSTERS



## PHYLOGEOGRAPHY OF THE HORVATH'S ROCK LIZARD, *Iberolacerta horvathi*, ACROSS THE ALPINE-DINARIC MOUNTAIN RANGE

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The Horvath's rock lizard, Iberolacerta horvathi, is occurring from 200 to 2000 m a.s.l. on the eastern Alps (NE Italy, S Austria, NW Slovenia) and the northern Dinaric Mountains (central and S Slovenia and NW Croatia). This species is the only representative of Iberolacerta outside Iberian Peninsula and currently shows a discontinuous occupational range. We collected tissue samples and extracted total genomic DNA of 110 samples from 23 localities across its entire distributional range. We grouped localities into three main geographical areas: northwestern (NW), central and southeastern (SE). For all samples we amplified a fragment of the mtDNA cytochrome b (Cytb) gene whereas a fragment of the nuclear melanocortin 1 receptor (MC1R) gene was amplified for a subset of 53 samples. Despite the relatively narrow geographical scale, the Cytb haplotype network indicated a high number of unique haplotypes present in each area (6 in the NW and 14 in the central and SE). In NW and in central area we detected two shared haplotypes: a) the widely distributed H5, and b) the H21, shared by only two populations. On the contrary, SE populations did not share any Cytb haplotype with other areas. The nuclear haplotype network analysis gave similar results, where multiple private alleles occurred in each area (4 in NW and central, and 3 in SE) and a widespread haplotype shared across the three areas. Results suggest that current distributional fragmentation is partially mirrored by the phylogeographic history of the species, with private alleles occurring in each of the main geographic areas, indicating limited gene flow among populations at least in the recent past. Knowledge of genetic structure of this endemic species provides essential information to orient activities to ensure its future conservation.

47