

## **P10 - Polymorphic microsatellite loci and genotypic diversity in clonally reproduced parthenogenetic lizards *Darevskia unisexualis***

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Parthenogenetic lizard species represent ideal model organisms for studying the genetic and ecological basis of hybridogeneous speciation and evolution of genetic diversity. Caucasian rock lizard species of Lacertidae family were the first in which parthenogenesis was discovered. The lacertid genus *Darevskia* is of particular significance because parthenogenesis has arisen several times within the group. It includes 24 bisexual species and 7 parthenogenetic, diploid species of hybrid origin. *D. unisexualis* is one of the seven clonally reproduced species of the genus *Darevskia* that originated from the interspecific hybridization *D. valentini* and *D. raddei*. In this study, we genotyping 68 specimens of *D. unisexualis* from five Armenian populations, using four genomic loci containing microsatellites. Monolocus PCR allowed to reveal that the studied loci are polymorphic and represented by several allelic variants in studied populations. All individuals of *D. unisexualis* were heterozygous at the four loci and contained two alleles that differed from each other in length and structure of the microsatellite clusters and in single nucleotide variants in fixed positions of the flanking regions. Using allelic combinations of four loci individual genotypes were obtained for all 68 *D. unisexualis*. We detected 11 genotypes (presumed clones) that differed in their frequencies and population distribution. Among them three clones were abundant and geographically restricted in one or two populations. One clone was widespread but less abundant. All other clones represented typical rare clones that represented by a few individuals. The origin of clonal diversity in parthenogenetic *D. unisexualis* is discussed. The work was supported by the Russian Foundation of Scientific Researches (grant No 17-04-00396).