

Microsatellite instability in parthenogenetic rock lizard *Darevskia unisexualis*

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Caucasian rock lizards of the genus *Darevskia* are truly parthenogenetic, all-female, diploid species derived by the hybridization of different bisexual species, and characterized by a certain degree of clonal diversity.

Recently a polymorphic locus containing a (GATA)_n microsatellite (designated Du281) was isolated from a genomic library of *D. unisexualis*. PCR analysis revealed 6 allelic variants of Du 281 in populations of *D. unisexualis*.

To understand the molecular mechanisms underlying allelic variability of this locus we analyzed parthenogenetic families of *D. unisexualis* using a set of primers found for Du281. In total we screened DNA samples of 217 lizards representing 49 families. In 4 families all offspring were mutant for Du281 locus. The observed changes were caused by deletion/insertion of one monomer, which fits well the stepwise mutation model of microsatellites.

Our results directly show that microsatellite mutations make a significant contribution to the population variability in parthenogenetic lizards of the genus *Darevskia*.