



## ORAL COMMUNICATIONS

### **PARTHENOGENETIC FEMALES MATE IF MALES ARE AROUND. AN ANALYSIS OF COPULATION MARKS IN A *Darevskia* MIXED COMMUNITY**

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Several Caucasian rock lizards of the genus *Darevskia* are well-known to reproduce parthenogenetically and have a hybrid origin. While one or more of these all-female parthenogens may monopolize local lizard communities, they may also occur in syntopy with bisexual members of the genus. In several localities, effective reproduction between bisexual and parthenogenetic *Darevskia* has been reported based on lizard intermediate morphology and karyology (3n, 4n) but frequency of such heterospecific matings is still unknown. In a mixed *Darevskia* community from Kuchak (Armenia) constituted by two parthenogens (*D. armeniaca* and *D. unisexualis*), one bisexual species (*D. valentini*) and their putative backcrosses, we indirectly quantified the reproductive interactions through the inspection of copulation marks in females. A total of 114 adult females were randomly collected, photographed and later inspected for inguinal marks. Females were measured (SVL) and their marks were ranked twice from 0 (no scars) to 3 ( $\geq 3$  scars). The lizard determination and ploidy was ensured by microsatellites analysis. All female types displayed copulation marks with frequencies varying from 61% in the parthenogenetic *D. armeniaca* to 30% in the bisexual *D.*



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*valentini*; remarkably, 7 out of 11 (64%) backcross females also had marks. In the most abundant *D. armeniaca*, the prevalence and intensity of copulation marks increased with size, just as expected for normal female lacertids. These results indicate that copulation of parthenogenetic *Darevskia* in mixed communities with bisexual species is not an isolate event, thus reinforcing previous suggestions of massive reproductive interaction in syntopy. Evolutionary perspectives of this phenomenon are discussed.