



## ORAL COMMUNICATIONS

### **PATTERN OF COEXISTING OF ENDANGERED PARTHENOGENETIC SPECIES *Darevskia rostombekowi* WITH SYNTOPIC *Darevskia* SPECIES**

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The parthenogenetic species *Darevskia rostombekowi* is listed in the Red Book of Armenia and the IUCN Red List as 'Endangered'. Among the noted threats to this species is competition with syntopic species. Therefore, our main goal was to compare the coexistence patterns among syntopic species. Census was conducted along five different transects (about 1 km long each) during May – September 2015, in two isolated populations. The numbers of counted parthenogenetic lizards of *D. rostombekowi* (40-46%, 23 individuals/ha) and *D. unisexualis* (60-54%, 35 individuals/ha) were not different between among ( $P= 0.87$ ) in Sevan Lake population, but differed ( $P< 0.001$ ) among the three parthenogenetic species [*D. rostombekowi* (30-34%, 6 individuals/ha), *D. dahli* (60-54%, 11 individuals/ha), and *D. armeniaca* (10-12%, 2 individuals/ha)] in the area of coexistence, in the vicinity of Dilijan city. Population density of *D. rostombekowi* from Sevan Lake was significantly higher (t-value = 6.50,  $P< 0.0001$ ) than that in the Dilijan population. Herein, we analyze the temporal and spatial niches of lizards living synoptically to assess the degree of niche differentiation among them. No differences in vegetation density in the microhabitats used by syntopic species have been revealed for both populations. The comparison of daily activities have shown similar bimodal patterns for *D. rostombekowi* and *D. dahli* in Dilijan populations while in Sevan *D. unisexualis* shows a bimodal pattern of daily activity while *D. rostombekowi* a unimodal one. Moreover, it was noted that *D. unisexualis* appeared on the surface before *D. rostombekowi* in the morning and remained active longer. However, the number of *D. rostombekowi* individuals in May, just after hibernation, and in September, before hibernation, was higher than *D. unisexualis*. The lower density of *D. rostombekowi* in Dilijan population may have allowed synchronous activity cycles due to the lack of competition between species, in contrast to Sevan Lake populations.