PODARCI PITYUSENSIS: THE SURVIVAL OF THE HYBRID POPULATION OF DAO GRAN

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In 1930 the herpetologist Martin Eisentraut introduced at Dau Gran, a minute islet close to the Port of Ibiza, 28 individuals of Podarcis pityusensis from two well differentiated subspecies: eight large melanic males and twenty green females of normal body size.

In different occasions the survival of a limited number of lizards in the islet was verified: in 1935 six specimens were collected, while their description from the author of the experiment and Prof. Böhme was published in 1981. Subsequent observations were done in 1978 and 1982. In 1998 we captured three specimens from the five still surviving at the islet and we made some morphological observations included in this communication. Later, the specimens were again released in the islet. The most noticeable trait of the hybrids is the body size increment, particularly in the case of the female studied. The coloration of individuals is intermediate from the coloration described in the two original populations, with some melanistic traits.

The genetical interest of the experiment is obvious and it could be convenient to carry out periodical and detailed observations on the morphological traits of these lizards. But we would like also to highlight the ecological interest of this population, without doubt the smallest of known populations of Podarcis and that lives in a very hostile environment.

The ecological conditions of survival of this minute and artificial population are extreme: the biodiversity is very limited and, probably, the carrying capacity of Dau Gran is lesser than ten individuals. We present data of the local bioma, and we discuss the hypothesis that the main natural selection factor in such insular conditions is intraspecific, combined with competition and predation. An indirect proof of this situation is the high proportion of damaged toes and tails in modern hybrids.

In addition, we present the available information on the survival of other non-hybrid populations introduced by the same author at other Pityusic islets.