DIFFERENCES IN BEHAVIOUR OF TWO LACERTIDS IN COMPETITIVE RELATIONSHIP: P.siculus AND P.melisellensis

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Competition between species can lead to ecological and evolutionary differentiation of species. The Italian wall lizard (*Podarcis siculus*) is a generalist species with broad ecological tolerance and frequently excludes other small lizards. The areals of *Podarcis siculus* and *Podarcis melisellensis* sometimes overlap and when that happens *P. siculus* overpowers *P. melisellensis*. In order to better understand the behaviour of both species and to explore whether differentiation in behaviour can explain dominant-subordinate interaction between these two species, we tested 28 individuals of each species, of both sexes, in open field and radial maze. Both experiments lasted 15 to 23 minutes and were repeated 3 times in order to habituate the lizards to the new environment. Lizards' performance in novel and familiar habitat (after habituation) was measured and analysed for potential dispersal and explorative behaviour, cautiousness, risk to predation and food consumption. We hypothesized that *P. siculus*, as a dominant competitor, would show greater dispersal and explorative behaviour, be more cautious and less prone to predation and would consume more food. As expected, *P. siculus* showed greater dispersal and explorative behaviour in both open field and radial maze and ate more food. Also, *P. siculus* was more cautious and less prone to predation. These results show that different behaviour can help competitors persevere and outcompete other individuals in ecologically competitive relationships.