Reproductive isolation in Iberian *Podarcis* species complex: An overview

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Prezygotic reproductive isolation in closely related sympatric species remains a central issue in evolutionary biology. An ability to distinguish conspecifics from heterospecifics is important for reducing energy costs of finding potential mates or facing sexual rivals. In some species complexes, features other than morphology may be critical for specific recognition. Here, we describe the results of a series of studies performed with Iberian lizards of the phylogenetically complex genus *Podarcis*, both in the laboratory and in the field. The aim of these experiments was to gather evidence on the possible role of behaviour in preventing interspecific mating in a group with limited morphological variation and high genetic variability. Two case studies are presented: a) specific discrimination based on chemical cues between two syntopic species with a narrow contact zone (*P. bocagei* and *P. carbonelli*), and b) specific discrimination between two syntopic sister species with a wide contact zone (*P. bocagei* and *P. hispanica* "type 1"). The later are the only Iberian members of this genus whose geographical distributions mutually overlap in 50% of their range, suggesting a long period of co-evolution, and making them ideal models for studies of specific recognition.