

**Asymmetry in *Podarcis bocagei* and *P. carbonelli*: a preliminary study**

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Developmental stability can be assessed in an indirect but simple way by identification and measurement of the type and degree of asymmetry displayed by individuals in a population. The overall developmental stability of an individual results from the combined action of natural and sexual selection, that tend to increase developmental stability, and the maintenance of plasticity to adapt to new environments or biological stresses, that tends to decrease developmental stability. So, developmental stability expressed in terms of asymmetry can be considered a life history trait. Even minor asymmetries which are supposed to be adaptively neutral have the potential to evolve in to functional directional asymmetry.

Asymmetry studies had revealed that this character is important to several lizard species as it affects several aspects of their life such as mate choice, escape performance, and interspecific aggressive interactions. Therefore asymmetry has critical implications on individual survival, as it can affect individual behaviour and alter the overall organism fitness.

In this study we aim to identify the presence of asymmetry expressed by two species of *Podarcis* lizards (*P. bocagei* and *P. carbonelli*) present in the north-west of the Iberian Peninsula, exploring its occurrence in allopatric and sympatric populations. We studied both meristic and linear biometric traits because of their potential to distinguish between embryogenetic and ontogenetic events, respectively. We analyse our findings in the context of the most recent ecological and biogeographical knowledge of this two closely related species.

