

## **ORAL COMMUNICATIONS**

## MOLECULAR SYSTEMATICS AND SPECIES DELIMITATION OF *Podarcis cretensis*, *P. levendis* AND *P. peloponnesiacus* OF THE SOUTH AEGEAN REGION

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- # Equal contribution

In recent years, there have been numerous studies focusing on the systematics of the wall lizards of the genus *Podarcis*, uncovering several cases of cryptic diversity, such as the cases of the Cretan (southern Aegean) and Pori (islet between Crete and Peloponnisos) wall-lizards that were recently recognized as distinct species (*P. cretensis* and *P. levendis*, respectively). In this study, nucleotide sequences from five genes (two mitochondrial – 16S rRNA & cytb and three nuclear – MC1R, pod15b & pod55) were used to infer intra- and inter- phylogenetic relationships of *P. cretensis*, *P. levendis*, and *P. peloponnesiacus* through Bayesian Inference and Maximum Likelihood approaches using *P. erhardii* as outgroup. Moreover, the boundaries of the putative species were evaluated by employing several species delimitation methods, aiming to 'determine' the exact number of species and their phylogenetic status. The phylogenetic analyses revealed that all the examined species are monophyletic. Among them *P. levendis*, although without statistical support, appear to be more closely related to *P. peloponnesiacus*. The Cretan species is further subdivided into three major groups of lineages with distinct geographic distributions whereas *P. peloponnesiacus* into two. The above results combined with the analyses of species delimitation stress the need for a taxonomic reconsideration of the studied taxa both at the species and subspecies level.

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