

(P18) **Subtle spectral differences between polychromatic Iberian and Italian populations of *Podarcis muralis***

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Population polychromatism is particularly common in lizards, and much effort has been devoted to study the evolution of this phenomenon. Recently, some lacertid species, which often show population polymorphic ventral colorations, have attracted much attention. *Podarcis muralis* show a long-wavelength based ventral coloration, resulting in several alternative colour morphs: white, yellow and orange, as well as the white-orange and yellow-orange rare intermediate morphs. Here we performed an objective spectrophotometrical analysis with the aim to compare an Iberian (i.e. Eastern Pyrenees) and an Italian (i.e. Po Plain) polychromatic populations. Although the appearance of *P. muralis* coloration is similar in both populations, surprisingly we found a wide level of chromatic differences in the ventral colour morphs, as well as in the ultraviolet (UV) spots located on the outer ventral scales and the brown dorsal coloration. Assuming that different colour surfaces evolve under different selective regimes, we discuss some hypotheses which may account for these spectral differences. Thus, as the variation in the dorsal coloration is mainly explained by crypsis (i.e. background colour matching), the observed variation may be caused by chromatic differences in the natural backgrounds. Differences in chromatic properties of UV spots may be caused by different intensities of intrasexual selection. Finally, population chromatic differences within ventral morphs may be caused by ecological differences between populations, different intersexual selective intensities, different evolutionary histories, or more probably a combination of some of these factors.

Coloration, evolution, *Podarcis muralis*, population polychromatism.