

P7 - Tail autotomy and social status in the Aegean wall lizard (*Podarcis erhardii*)

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Many lizard species use tail autotomy as a defensive mechanism against attempted predation. However, tail loss incurs severe costs associated with reduced survival, locomotor performance and reproductive success. There is strong evidence indicating that tail autotomy leads to loss of social status as well. Here we aimed to evaluate the social behaviour of the insectivorous lacertid *Podarcis erhardii* and to examine whether tail loss affects male social status in this species. In the laboratory, adult male lizards were grouped in pairs of same sized individuals (length and weight) in order to eliminate possible effects of body size on social rank. Encounters of 15 minutes were staged for each pair in a neutral arena equipped with a video camera. Agonistic behaviours were recorded and scored for each lizard, giving positive points for behaviours asserting dominance and negative ones for submissive behaviours. Therefore, the lizard with the highest score was identified as the dominant of the pair. Furthermore, the score of the subordinate individual was subtracted from that of the dominant one, resulting in a difference called social disparity. Subsequently, autotomy was induced only to the dominant lizard of each pair and the encounters were repeated two weeks later, once the tail stub was fully healed. New scores and social disparities were thus computed. According to our results, social disparity significantly decreased after the dominant lizards were autotomised. Moreover, all observed behaviours became scarcer, leading to lower individual scores for most pairs. Our findings suggest that tail loss affects male interactions and social hierarchy in *P. erhardii* lizards.