

Does tail autotomy affect the sprint performance of lacertids? Preliminary results from the Greek members of the genus *Podarcis*

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Tail autotomy, the voluntary shedding of the tail, is an effective anti-predator mechanism that many lizard species employ as a last resort: when all other defences have failed, lizards shed their tail and escape while the predator is distracted by the thrashing tail. Although successful as a strategy, tail autotomy has its cost on the fitness of the animal. Tail loss may result in a reduced social position within the population, affecting mate selection and territory defence, as well as diminish the ability to respond to future attacks from predators. The impact of tail autotomy on sprint performance, although studied for decades, has given contradicting results. In this ongoing project, we aim to comparatively study the effect of tail autotomy on the sprint performance of all Greek *Podarcis* lizards. The genus is represented by eight species in Greece, with the addition of the recently established *P. siculus*. These species differ on a number of ecological and behavioural characteristics and cover a wide geographic range: from the endemic *P. levendis*, which is confined on two tiny islets, to *P. muralis*, which is distributed throughout most of south and central Europe. We initially measured sprint and climbing speed on a purposely-built racetrack. We subsequently simulated a predatory attack in the laboratory in order to induce autotomy, and then measured sprint and climbing speed again. Our results so far have not revealed a consistent pattern. In five of the species studied, *P. erhardii* and *P. peloponnesiacus* seem to have reduced sprint performance after autotomy, but *P. cretensis*, *P. tauricus* and *P. siculus* appear unaffected.