

Abstract

The aim of this thesis was to examine the effects of multimodal sensory inputs during predator detection by the leopard gecko, *Eublepharis macularius*, as compared to individual unimodal cues. Throughout the process we further validated the use of shed snakeskin as a chemical stimulus eliciting antipredator reactions. We also tested differences in reactivity between three ontogenetic stages of leopard geckos, namely juveniles, subadults and adults. We found that combined multimodal cues elicited significant antipredator response only when containing a chemical stimulus. Furthermore, we discerned no significant effect of visual or acoustic cues on the scope and intensity of antipredator reaction, therefore suggesting that chemical cues play a dominant role in this context. Ontogenetic stages significantly differed in their reactivity. On average, juveniles and subadults were shown to be more reactive than adults, with subadults displaying the highest degree of reactivity. Geckos in all experiments showed no significant amount of antipredator reaction in response to HDPE (high-density polyethylene), confirming the validity of its use as a control stimulus.

Key words

antipredator behavior, multimodality, predator detection, squamate reptiles, leopard gecko