Abstract

Agonistic interactions throughout the animal kingdom can inflict various costs upon involved animals (decreased fitness, higher risk of predation etc.). To prevent such losses, many species have developed different morphological and behavioural adaptations to display their fighting ability. These adaptations allow animals better assessment of different costs and benefits associated with fighting. Assessment can be divided into two main categories based on the amount of information, that opponents take into account. Self-assessment assumes that rivals consider only their competitive ability and the potential benefits of winning a fight. During mutual-assessment competitors are also capable of considering possible differences in their apabilities and either escalate the fight or back down.

My thesis is literary research of this topic in squamate reptiles. The assessment was characterized in several families of Squamata. Additionally, it evaluates the most important traits, that determine a potential winner and introduces different behavioural models of assessment. Used literature suggests that the most reliable predictor of fighting success within these families is the body size, and that mutual-assessment seems to be more prevalent.

Keywords: assessment, RHP, aggression, agonistic interactions, Squamata, ritualization, game theory