

**To camouflage or to not to camouflage?  
A behavioral study on microhabitat selection by anurans**

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**Abstract:** Anurans are one order of amphibians well known for displaying a wide range of behaviors against predation. Likewise, active escape is one of the most common strategies, and it might be used by all anuran species. Most studies suggest that the choice of strategy by the anurans depends on the predator senses and not on the animal's choice. However, little is known about the different choice of strategies. In this study, we want to determine what strategies to avoid detection two species of toads use while being in a threatening environment. Our main question is if these two species of toads have any preference of leaf color to use as a background, and if size of individuals of the species also affect your leaf color choice for the background. Two species of toad were used in this experiment: *Rhinella castaneotica* and *Amazophrynella bokermanni*. Toad individuals were captured in nature and brought to lab. We set a box with leaves of different colors in the bottom, and recorded toad's behavior. Leaves color was significantly different between species, with *R. castaneotica* positively selecting for brown leaves, and *A. bokermanni* not having any preferred choice of substrate color. Species were not informative for the choice of position in the leaf, with both species selecting more for the top position. The position choice was significantly dependent on the color of the leaves, with more positions recorded on top for brown leaves. The fact that *A. bokermanni* did not show a pattern in the choice of leaves, may be related to the individuals of this species do not need no camouflage to defend against predation. Our findings suggested that the two species show different strategies to avoid being detected, probably due to their different morphology, but not their size.