

Abstract

This work summarizes the current knowledge about the coloration of the lizards – the mechanism of colour creation, to color (pigments and structural colors) and hormonal influence on the body colour. It deals with the possible functions of the coloration (antipredator, social, thermoregulation) and its creation. Further it is an overview of the works about juvenile coloration that deal with hypotheses about the function which the juvenile coloration in lizards performs. There are also mechanisms of juvenile coloration and influencing factors mentioned. The thesis includes an experimental part dealing with various coloration characters of juvenile and adult *Eublepharidae*. We chose several characters: striped tail of the juveniles, striped body of the juveniles, light stripe on the head of the juveniles, striped tail of the adults, striped body of the adults, light stripe on the head of the adults. On several phylogenetic trees we evaluated whether these are the derived characters. After comparing the trees it turned out that in the case of juvenile coloration it is probably an ancestral character. In the case of adult pattern we have not reached a clear conclusion.

Key words: juvenile coloration, ontogenetic color change, lizards