

Aspects of chromatic polymorphism in green frogs from Gheorghiu pond (Dorohoi, Botoșani county, Romania)

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Ciprian - Radu MÎNDRESCU¹, Gogu GHIORGHITĂ²

¹ Professor, „Grigore Ghica” National College, Dorohoi, Botoșani County, Romania.

² Professor, PhD., Academy of Romanian Scientists, “V. Alecsandri” University, Bacău, Romania, Full Member of Academy of Romanian Scientists, email: g.ghiorghita43@yahoo.com

Abstract.

It was investigated the chromatic polymorphism within a green frog population from Gheorghiu pond (Botoșani County). The population is composed of two species belonging the complex *Rana esculenta*, *Rana ridibunda* (Pall.) and *Rana esculenta* (L.). Using the method of determination of chromatic morphs proposed by Ishcenko (1978) there were identified 7 dorsal morphs and 4 ventral in *Rana ridibunda* (Pall.) and a number of 6 dorsal and 2 ventral morphs in *Rana esculenta* (L.). The analysis of chromatic correlations showed a higher chromatic variability in *Rana ridibunda* (Pall.), species in which there were delimited 18 distinct morphs, comparing to only 6 morphs in *Rana esculenta* (L.).

Key words: *Rana ridibunda*, *Rana esculenta*, chromatic variability

1. Introduction

Skin colour in Amphibians, in the absence of poison glands, ensures the function of camouflage of the animal within the specific habitat. So, principal colours are green and brown, with their different nuances. More, chromatic variability appears prioritary in dorsal region, and the ventral region shows a more reduced chromatic variability. Prevalent aquatic species show some ventral colour variation, function of water transparency or of the abundance of aquatic macrophytes.

Skin colour represents a morphological feature with adaptative character, being determined, on one hand, by the specific pattern of distribution of pigments within skin cells, and, on second hand, by the action of environmental factors. The distribution of pigments is relatively various and that is why there are an important number of morphs, i.e. intrapopulation polymorphism.

External factors implied in the determination of amphibian colour are the light, temperature and moisture, and the receptors for these stimuli are the eyes and external