

A study on the blood cells of the Caucasus Frog, *Pelodytes caucasicus*

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Abstract. This study gives detailed information on the size and number of the various blood cells from a sample of the Caucasus Frog, *Pelodytes caucasicus*, based on 10 ♂ and 10 ♀ from Uzungöl (Trabzon province). *P. caucasicus* does not show sexual dimorphism in the number and size of blood cells; the erythrocytes of *P. caucasicus* are smaller than those of the other Turkish anurans, but their number is higher.

Kurzfassung. In dieser Arbeit werden detaillierte Informationen zur Größe und zur Anzahl der verschiedenen Blutzellen des Kaukasischen Schlammtauchers, *Pelodytes caucasicus*, gegeben, von dem 10 ♂ und 10 ♀ aus Uzungöl, Provinz Trabzon, untersucht wurden. Bei der Anzahl und Größe der Blutzellen wurde kein Sexualdimorphismus gefunden; die Erythrozyten von *P. caucasicus* erwiesen sich als kleiner als die von anderen türkischen Anuren, aber ihre Häufigkeit ist größer.

Key words. Anura, blood cell counts, blood cell size, blood smears, erythrocytes, leucocytes, thrombocytes, Turkey.

Introduction

The Caucasus frog, *Pelodytes caucasicus* (Boulenger, 1896), is an endemic species from western Caucasia. In Turkey, it is known only from the eastern Black Sea Region. While there are several works on its distribution and ecology (STEINER 1968, GOLUBEV 1985, TUNIEV 1989, CHUBINISHVILI et al. 1995), no work has been carried out on the haematology of the species.

The majority of the references on the haematology of different anurans deal with blood cell counts and cell sizes. PROSSER & WEINSTEIN (1950) provided information on the haematocrit readings and blood volumes in some *Rana* species, and ROUF (1969) studied several blood parameters in *Rana pipiens*, and provided for the first time photomicrographs of the blood cells. The present work provides the blood cell counts and sizes of *P. caucasicus*, together with their photomicrographs.

Material and methods

The twenty specimens of *Pelodytes caucasicus* (10 ♂, 10 ♀) used in this study were collected from Uzungöl, Trabzon province, at an altitude of 1100 m, during the species' breeding season (22.7.2001). Blood samples of the live specimens were obtained in the laboratory within three days of their capture. The blood samples were taken from etherized frogs by means of ventriculus punctures.