

Adaptive blood reactions of *Testudo graeca nikolskii* Ckhikvadze et Tuniyev, 1986 (Testudinidae, Reptilia)

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Abstract. In order to check the health of individuals of the Mediterranean tortoise *Nikolskii Testudo graeca nikolskii* Ckhikvadze et Tuniyev, 1986 (22 individuals: 6 males and 16 females) collected in the vicinity of Anapa (Krasnodar region of Russia), a haematological approach was used to assess adaptive blood reactions. Intraerythrocytic parasites *Haemogregarina* spp. (Adeleorina, Coccidia) were detected in blood smears of 54.5% of turtles. Female were more prone to infection with hemogregarines than males, as evidenced by higher invasion index, mean invasion intensity and proportion of infected cells. Individual stages of hemoparasite development (gametocytes and trophozoites) were found in blood erythrocytes with equal frequency. No differences were found in the leukocyte composition of the blood between infected and healthy female and male. Lymphocytes predominated in the leukogram of turtles. The dependence of the increase in the number of eosinophils in the peripheral blood of turtles on the content of trophozoites in erythrocytes was revealed. Parasitic forms of *Haemogregarina* spp. affected the host's immune response and it is necessary to identify possible harmful long-term consequences of infection for *T. g. nikolskii* Ckhikvadze et Tuniyev, 1986 from Krasnodar region.

Keywords: turtles, peripheral blood, leukocytal index, WBC (white blood cells), hemoparasites

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