

Age differences in the leukocyte blood composition of the common viper *Vipera berus* (Reptilia: Serpentes: Viperidae)

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Abstract. The results of our comparative analysis of parameters of the leukocyte blood system of underyearlings and mature specimens of the common viper *Vipera berus* are presented. The material was the blood of 36 females and 26 males caught in the Middle Volga basin, and 13 underyearlings born in captivity from 4 females of this sample. *V. b. berus* underyearlings differed: from the females by a lower content of heterophils and azurophils, an increased content of eosinophils and basophils, an increase in the leukocyte shift index, a decrease in the lymphocyte–granulocytic index, the index of the of heterophil–eosinophil ratio, the index of the lymphocyte–eosinophil ratio; from the males by a reduced content of heterophils, an increased content of eosinophils and basophils, an increase in the leukocyte shift index, the index of the heterophil–eosinophil ratio, and the index of the lymphocyte–eosinophil ratio. In general, the adaptive response of the blood system of underyearlings indicated the later activation of lymphocytes as an effector link and the imbalance of the immune response due to the lack of a resource of immunocompetent cells (agranulocytes) compared with the indices of adults from natural populations.

Keywords: *Vipera berus*, blood formula, leukocyte indices, peripheral blood

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