

# **BLOOD INDEXES AND THEIR CORRELATION WITH THE WEIGHT AND LINEAR GROWTH RATE OF OBROSHINSKY GRAY AND OBROSHINSKY WHITE NATURAL GROUPS GEESE**

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Our research were conducted on obroshinsky grey and obroshinsky white natural groups geese in the conditions of the state enterprise "DG Miklashevske" of the Institute of Agriculture in the Carpathian region NAAS. Morphological and biochemical indexes of blood of females and male geese from both natural groups were studied at the age of 60, 90, 120 and 150 days.

It has been established that geese sex and their genetic affinities has a significant influence on studied indexes. In particular male geese of both natural groups have higher concentration of hemoglobin and the content of erythrocytes in blood and the content of total protein in serum than female geese in all studied age periods. Female geese of both natural groups dominated my males in color index and activity of aminotransferases in most cases. However, it should be noted that the difference between the above indicators of females and males was small and unreliable.

We have investigated the interspecific differences of researched indexes between natural groups of geese. Morphological indices of obroshinsky grey natural group geese dominated over obroshinsky white natural group geese in the 60-90- and 150-day-old aged geese, but this difference was unreliable. But in the age of 120 days female and male obroshinsky white natural group geese has higher concentration of hemoglobin and the content of erythrocytes in blood at 11.73 (P <0.05), 0.28 and 39 g / l and 0, 38 T / L, than female and male obroshinsky grey natural group geese respectively. The color index was slightly higher in obroshinsky grey natural group geese throughout the studied period.

In the age of 60-, 120- and 150-days obroshinsky grey natural group geese have higher than obroshinsky white natural group geese activity of reamination enzymes and a higher content of total protein in serum (except for the content of total protein in blood serum in the age of 120- and 150 days). In the age of 90 days, according to these

indicators, the advantage was on the side of obroshinsky grey natural group geese. It should be noted that in most cases in 60 and 90 aged geese the difference between studied indicators was reliable ( $P < 0.05$ ).

In all studied groups of geese, the highest amount of erythrocytes and hemoglobin concentration were observed in 60-day aged geese. The lowest activity of enzymes in blood transamination was observed in 150 days aged geese, and the highest activity was observed in 90 days aged geese. The content of total protein in serum in both natural groups geese were increased with the age of geese (with the exception of 90-days aged females and males of obroshinsky white natural group geese).

There were observed different forces and directions correlations between the biochemical parameters of blood, live weight and body measurements of the geese of both natural groups. However mostly the correlation were negative, that is common for the birds and is its specific feature.

**Keywords:** GEESE, OBROSHINSKY GRAY NATURAL GROUP, OBROSHINSKY WHITE NATURAL GROUP, FEMALES, MALES, MORPHOLOGICAL AND BIOCHEMICAL BLOOD INDICES, LIVE WEIGHT, BODY MEASUREMENTS, CORRELATION COEFFICIENTS.