MORPHOLOGICAL AND BIOCHEMICAL PARAMETERS OF THE BLOOD OF THE UKRAINIAN BLACK-AND-WHITE DAIRY BREEDS HEIFERS AND THEIR CONNECTION WITH MILK PRODUCTIVITY

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In recent decades, intensive search for auxiliary biological tests has been carried out to enable acceleration and improvement of accuracy of zootechnical techniques and methods of assessing the constitution, productive and breeding qualities of cows. In this respect study of such interior features, which could easily be evaluate on any stage of animal ontogenesis is of considerable interest. These requirements are fully consistent with blood. Within view of the above, the purpose of our work was to study morphological and biochemical indices of blood of cows of Ukrainian Black-and-White dairy breed in different periods of lactation and to establish their connection with milk productivity. Studies have been conducted in Sokal Branch of the LLC "Milk Rivers", Lviv district with heifers. Dairy productivity, morphological and biochemical indices of blood of test animals were investigated in the second, fifth and eighth months of the lactation period. It was also found the connections between the indicators of blood of the heifers and their diet, the fat content of milk and the amount of milk fat. It is established that the milk yields of test-heifers on the second month of lactation was 781, the fifth – 655 and the eighth – 510 kg, the fat content of milk – 3,52; 3,71 and 3,89 %, and the amount of milk fat – 27,5; 24,7 and 19,8 kg.

The results of our studies indicate that the morphological and biochemical parameters of the blood of test animals undergone certain changes during lactation. From the second to the eighth month the amount of erythrocytes, the amount of hemoglobin in the blood and α-globulins in the serum of blood increased, and the content of total protein and globulins – declined. Between morphological and biochemical parameters of blood and indicators of milk yields of heifers was found connections with different strengths and directions. The most significant positive connections have been established between the total protein content of serum and yields, fat content and protein content in milk, albumin concentration, reserve alkalinity and the content of fat and protein in milk, and the negative – between the

diet and the content of glucose in the blood on the second month of the lactation period.

Keywords: BREED, HEIFERS, MORPHOLOGICAL AND BIOCHEMICAL BLOOD INDICES, PROTEIN FACTIONS, DAIRY PRODUCTIVITY, CORRELATION COEFFICIENT.