THE ACTIVITY OF ANTIOXIDANT SYSTEM ENZYMES IN YOUNG CATTLE OF UKRAINIAN BEEF BREED UNDER THE INFLUENCE OF MICROELEMENTS

The research results related to the morphological changes in blood indices and in the activity of antioxidant system enzymes in young cattle, as well as while adding microelements in the form of copper sulfate, cobalt chloride and manganese sulfate to the diet testify to the increase number of erythrocytes and hemoglobin level increased under the influence of mineral compounds.

The data obtained show that cobalt had the strongest impact on the morphological parameters of blood of cattle. One can also observe a considerable effect of microelements on the superoxide dismutase, catalase and peroxidase activity.

Copper and manganese prove most efficient as to their effects on the activity of antioxidant enzymes. The above changes in the number of erythrocytes, hemoglobin content and the activity of antioxidant enzymes stipulated by the fact that the copper, cobalt and manganese have a stimulating effect on the hematopoietic processes of the body and form a part of antioxidant enzymes.

Key words: erythrocytes, hemoglobin, antioxidant system, superoxide dismutase, catalase, peroxidase, copper, manganese, cobalt.