## THE INFLUENCE OF THE ZOOBIOR REMEDY ON SOME PARAMETERS OF ENDOTOXICOSIS AND HISTIDINE DIPEPTIDES IN THE SERUM QUAIL BLOOD

## Rotaru Ana

Technical University of Moldova, Chisinau, Republic of Moldova E-mail: ana.rotaru@sfc.utm.md

The aim of the study was to investigate the effect of the active biological product ZooBioR, obtained by modern technologies from the cyanobacterium Spirulina platensis, on health and especially on the endotoxicosis marker indices and histidine dipeptides in the blood serum of laying quails treated with the ZooBioR remedy. The research was carried out on 4 groups of 50 quails each. Birds from three experimental groups were fed the tested product in different doses (10.0-15.0-20.0 mg of active substance/kg of concentrated feed, and birds from the control group - the ration was without supplement. The quails from all groups benefited from the same conditions, were monitored daily, and for the laboratory examination, random blood was collected from 5 birds at the beginning of the study, and later twice from 5 birds from each group.

The researches carried out showed that the tested product was well tolerated by the birds, also showing changes in some investigated biochemical parameters. Thus, the average mass molecule content in the blood of the quails at the beginning of the study was on average 49.7 u/c, an index that decreased by about 38% at the end of the experiment. In addition, the ZooBioR product induced a clear tendency to decrease these molecules: at the first research stage by 1.6-1.9 times and respectively at the last experimental stage - by 1.1-1.2 times. Another marker of endotoxicosis is the biochemical parameter – necrotic substances whose values at the beginning of the study averaged 7.2 u/c (at this stage the highest level of the investigated parameter was reported). Next, it was established that the remedy tested at the first experimental stage significantly decreased the investigated parameter by 1.4-1.7 times, and at the last experimental stage this decrease is less obvious. It was shown that the dynamics of necrotic substances were identical to substances of average molecular weight in birds from all groups and at all stages of the research. In parallel, and on the contrary, the feeding of the ZooBioR remedy induces an increase in histidine dipeptides in the first stage by - by 15.8-17.4% and an increase of 2.0-8.1%, respectively, compared to the quails in the control groups. In conclusion, the tested product contributes essentially to the decrease of endotoxicosis marker indices and to the increase of histidine dipeptides in the blood serum.

Key words: histidine dipeptides, medium mass molecules, ZooBioR remedy, quails.

