

THE IMPACT OF A LOCAL PRODUCT ON THE FUNCTIONAL STATE OF LIVER OF PREGNANT AND LACTATING RABBITS

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At present, in animal husbandry, technogenic stress factors pose a threat to animal health and welfare, leading to immunity weakness, and obviously to decrease of animal health resistance potential. In order to prevent or alleviate technogenic stress factors, strengthening health in animals, including pregnant ones, the development of new safe remedies both for animals, as well as for humans intensifies. The biologically active compounds, which increase the body resistance and improve the animal health and product quality, are considered prospective and are largely accepted. Among the products obtained from cyanobacteria, a particular interest presents the BioR remedy, extracted from *Spirulina platensis* biomass (Rudic V., 2007). Its high pharmacological effectiveness is highlighted in several papers. At the same time, there is no data regarding the use of this product for health improvement and resistance increase in pregnant rabbits, this fact limiting the usage of this product in animal husbandry.

The aim of this work was the study the influence of different BioR doses on liver functional status in pregnant and lactating rabbits. The studies were conducted on 4 groups of pregnant and lactating rabbits, 3 of which received BioR in doses of (1; 1,5; 2,0 ml/head). The control group received saline 0,9%. Blood was collected for laboratory investigations from 5 animals of each group, at the 14th day of gestation, and at the 7th and 45th day after parturition. The investigations have demonstrated that BioR intensifies the metabolic processes in the body, and especially in liver. Thus, in practically all groups and at all terms of investigation, BioR induced an increase in serum of total bilirubin and direct bilirubin fraction level. While, the indirect bilirubin level decreased, more obvious in experimental group 2, treated with optimal doses of BioR (1,5 ml/head). At the same time, total alkaline phosphatase level was higher in the groups treated with BioR than in the control group. At the end of the study, the situation changed diametrically opposed, similar tendencies being observed regarding thermolabile and thermostable alkaline phosphatase fractions.

The obtained data were confirmed by a higher level of serum pseudocholinesterase in all experimental groups, and at all study stages, which confirms the strengthening of the proteosynthetic liver function in rabbits treated with BioR.