EFFECT OF THE YEAST CULTURE FEED ADDITIVE ON PRODUCTIVITY AND EGG QUALITY OF LAYING QUAILS

Ramunė Čepulienė, Diana Gudavičiūtė, Vytautas Semaška, Rasa Bobinienė, Inga Kepalienė,
Danius Vencius, Vytautas Sirvydis
Vilnius Pedagogical University
Studentų str. 39, Vilnius LT-08106, Lithuania.Tel: +370 5 275 13 43, e-mail: ramune.cepuliene@vpu.lt

Summary. It is known that mananooligosaccharides contained in the cell walls of yeast have certain prebiotic characteristics, therefore, yeast cultures have been used as prebiotic feed additives.

Objective of performed study were to investigate the effect of the novel feed additive Diamond V XPls Yeast Culture on productivity and egg quality of laying quails.

Investigations with laying quails *Coturnix coturnix japonica* were carried out at the Research Laboratory of Biological Diversity and Technologies of Vilnius Pedagogical University, Lithuania, and under field conditions on the quail farm of JSC „Vilniaus Paukštynas"

For the trial the quails were divided into 3 groups with 2 replicates in each group. The quails of the trial groups 2 and 3 received the feed additive from the age of 6 weeks throughout the entire production period till 28 weeks of age. In the trial group 2 the dose of Diamond V XPls was 0.2%, and in the trial group 3 it was 0.4% from the weight of feed.

Addition of Diamond V XPls Yeast Culture to the feed of layer quails had positive influence on various parameters of productivity of laying quails and quality parameters of quail eggs. Most important parameter influencing economical results of layer quail farming is average egg production per quail and intensity of lay during the production cycle. The feed additive Diamond V XPls Yeast Culture had influenced sustainability of egg production keeping the production at high level during the period of 20–28 weeks of age, while in the control group egg production started decreasing already at 20 weeks of age. This resulted in significantly higher total number of eggs received in the trial groups. Intensity of lay in group 3 was higher by 15.35 % and average egg production per quail was higher by 4.62 eggs in comparison with the control group. There was some positive influence on various parameters of eggs quality.

Keywords: prebiotics, yeast culture, laying performance, egg quality, quails.