

## INFLUENCE OF EXTRUDED RAPESEEDS AND FABA BEANS MIXTURE ON PRODUCTIVITY AND PRODUCTION QUALITY OF DAIRY COWS

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**Abstract.** The study was conducted to evaluate the influence of extruded rapeseeds (30 %) and faba beans (70 %) mixture on productivity, product quality and composition of dairy cows. For this purpose, a total of 46 Holstein Lithuanian Black-and-White dairy cows of II-IV lactation were selected. Indicators of milk quantity, quality and composition were determined during control milking. It means fats, proteins, lactose and urea were investigated with the “LactoScope FTIR” instrument (FT1.0. 2001; Delta Instruments, the Netherlands) using the method of absorption of infrared radiation medial region rays. The results of this study showed that the mixture of extruded rapeseeds and fodder beans did not have essential influence on the milk quality of dairy cows. However, milk yield during the whole experiment increased by 3 kg per day. i. e. 15.25 % ( $P<0.05$ ) for the control group. Meanwhile the trial group had an increase on average of 2.33 kg per day or 11.36 % ( $P>0.05$ ). The results revealed that cows of the control group produced 7.74 % more milk compared to the cows from the trial group during the whole experiment. Adding extruded fodder beans to compound feed for the control group, protein content increased and milk fat content decreased. Milk fat content dropped by 0.26 % for the control group cows and increased by 0.69 % ( $P<0.05$ ) for the trial group cows. Protein content increased by 0.19 % in the control group, and for the trial group the increase was 0.33 % ( $P<0.01$ ). Protein content for the trial group cows at the end of the experiment was 0.15 % higher compared to the control group.

**Keywords:** Dairy cow, extruded soybeans, rapeseeds and faba beans mixture, milk, productivity