THE INFLUENCE OF PEA AND BEAN MEAL ON PERFORMANCE, MEAT YIELD AND MEAT QUALITY IN PIGS

Stasys Juknevicius, Jolanta Stankeviciute, Ana Zilinskienė, Stanislovas Budvytis
Lithuanian University of Agriculture, Studentų st. 11, LT-53361, Akademija, Kaunas, Lithuania; tel. +370 37752361; e-mail: stasys.juknevicius@lzuu.lt

Summary. In order to determine the potential influence of pea and bean meal supplementation on the performance, meat yield and meat quality of the 1st generation of Lithuanian Whites and Pietren pig breeds. Fifty pigs were divided by stratified random sampling into 5 groups (Group 1-5) each of 10 pigs. Group 1 (control) was fed a barley flour diet. Four experimental groups were fed a diets formulated with different amounts of barley flour (85 %, 80 %, 75 % and 70%) and pea meal (15 %, 20 %, 25% and 30%) mixture in Groups 2, 3, 4 and 5, respectively. All diets were supplemented with minerals and vitamins. The highest one day make-weight was established in the 5th group, which constituted 20, 47 % increase as compared with the 1st control group. By using 30 % of bean supplement, muscle content increased by 4, 91 % while flitch decreased by 4, 76 % in comparison with the control group. Ration of 15 % and 25 % of pea supplement resulted in lower indices, but they were higher than those of meat yield, obtained from the control group. The supplements of pea and bean flour meal had a positive impact on the morphological structure of meat, the quality of the longest back muscle and the sensoral indices. The meat of the 3rd experimental group was rated best according to taste criteria and consistence.

Key words: pea and bean meal, pig weight increase and meat yield, qualities of meat.