

NUTRIENT DIGESTIBILITY AND NITROGEN BALANCE IN FATTENING PIGS FED DIETS CONTAINING YELLOW LUPINE SEEDS AND ENZYMES

Maria Stanek, Cezary Purwin, Stefan Florek

*Department of Animal Nutrition and Feed Management, Faculty of Animal Bioengineering,
University of Warmia and Mazury in Olsztyn, 10-719 Olsztyn, Ul. Oczapowskiego 5*

Summary. The results obtained show that partial substitution of yellow lupine seeds in the amount of 11.5% for soybean meal in diets for pigs had a positive effect on the digestibility of all nutrients. Enzyme supplementation of a diet containing 11.5% of yellow lupine seeds had no influence on nutrient digestibility. A higher yellow lupine content (18%) of the diets caused a decrease in the digestibility of crude fiber, N-free extractives and gross energy. A higher yellow lupine content of the diets required enzyme supplementation, which affected positively the digestibility of crude protein, crude fiber and N-free extractives.

Adding 18% of yellow lupine seeds to diets for fatteners had a negative effect on nitrogen balance. Partial substitution of yellow lupine seeds for soybean meal resulted in a high nutritive value of the diets. Enzyme supplementation of the diet with a higher lupine content had a considerable effect on the level of metabolizable energy.

Keywords: pigs, yellow lupine, enzymes, digestibility, nitrogen balance.