

Thesis Title The Substitution of Deallerginized
Castor Meal to Soybean Meal as
Protein Supplement for Growing-Swine
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ABSTRACT

Castor meal is a byproduct from extracted castor oil process, which has protein content about 37 percent. Currently it is feasible to remove the toxin and the allergen and used as animal feed. This study has the objective to use detoxified and deallerginized castor meal substitute for soybean meal as protein supplement for growing - finishing pigs.

The experiments were setted for studying about the effects of using the four different levels of detoxified and deallerginized castor meal in pig diet. The four different levels were 0, 8, 12 and 16 percent respectively. Two feeding experiments are conducted.

The experiment 1 was determined to start with 4-week-old pigs which was about 6 kg weight. The time of experiment was 6 weeks. Hence, the final weight of pig at the end of the experiment were about 20 kg. The experiment 2 was on the growing - finishing pigs which were 3.5-month-old about 34 kg weight. The experimental time was 3 months, the weight became about 90 kgs. Each experiment consisted of triple crossbred pigs, 20 castrated males and 20 females.

The result of two experiments were similar in the apparent of growth rate, feed intake and feed conversion ratio of the pig that fed with 0, 8 and 12 percent of castor meal which the different test were not statistically significant. But the above three groups were better than the group fed with 16 percent detoxified and deallerginized castor meal in experiment 1. ($\alpha=0.05$) In experiment 2 the growth rate and feed conversion ratio of pigs were fed with 16 percent detoxified and deallerginized castor meal, there were not shown the significant difference from the other groups. However, it was the same to show that the trend of its value was lower than the others. About the healthy of pigs, there have no sign of unusual. In the economical aspect, involving the cost of feed per increasing weight of two experimental pigs, there were only 8 and 12 percent of castor meal level in the pig feed which were worthwhile

from swines growth. The carcass analysis was shown that the carcass characteristics among the 4 groups of pig were not statistically different. Except the liver weight was little increased when added castor meal in diet. The results indicated that using detoxified and deallerginized castor meal in swine diets in the level of 12 percent by approximately, could be safely without any adverse effects.