

Napaporn Pueaksee 2009: Effect of Dietary Cassava Leaves Meal on Immunological Response and Performance of Weaned Pigs. Master of Science (Animal Nutrition and Feed Technology), Major Field: Animal Nutrition and Feed Technology, Department of Animal Science. Thesis Advisor: Associate Professor Uthai Kanto, M.S. 75 pages.

Effects of dietary cassava leaves meal on immunity development and performance of weaned pigs were studied utilizing complete randomized experimental design (CRD). A total of 128 three-way crossbred (LW X LR X D) weaned pigs aged 28 days were randomly divided into 16 groups of 8 animal each which is kept in a 2x2 meter metal battery pen where feed and water were provided *ad libitum*. Each group of the animals was randomly fed one of the experimental diets as follows for 35 days. Diet 1, 2, 3 and 4: The broken rice-soybean meal diets that containing dried cassava leaf meal at 0, 2.5, 5 or 7.5 % in the diet, respectively. Every experimental diet was formulated according to nutrient requirement of weaned pigs recommended by NRC (1998). Results of the study showed that there was no significant difference in blood lymphocyte proliferation among the pigs fed experimental diet at day 1, 3 and 6 after the swine fever vaccination ($P>0.05$). There were no significant differences in humoral immune responses against SF vaccination and total antioxidant capacity in blood among the animals fed experimental diet at 0, 7 and 21 day after feeding of the diets. Results of the study have shown that weaned pigs fed different experimental diets had significant differences in total blood glutathione (tGSH) at 7 and 21 day after feeding of the diet ($P<0.05$). Increasing of dietary levels of cassava leaves meal significantly increased blood level of tGSH of the weaned pigs. There were no significant difference in blood level of reduced glutathione (GSH), oxidized glutathione (GSSG) and GSH/GSSG among weaned pigs fed the experimental diets at 0, 7 and 21 days after feeding of the diets. There were no significant difference in weight gained, feed intake and ADG among the pigs fed the experimental diets. Pigs on Diet 3 which containing 5% cassava leaves meal had significant better FCR ($P<0.05$) than those on the control diet (Diet 1).

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Thesis Advisor's signature

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