A study on natural microorganism contamination on corn and cassava and the effect to pH
and population of microorganism in digestive tract of growing pigs.

Kanda Punsurin1, Uthai Kanto1,2 Sukanya Juttupornpong1 and Arunee Ingkakul1

ABSTRACT

To note that every samples of cassava chips and pellets contains Lactobacillus spp. and yeast while no corn samples were contaminated with the microorganisms. Both corn and cassava samples were found no fungus contamination. Microorganism contamination in the feed ingredient.
have affected microbial contamination in the diets. Corn diet contained mainly *E. coli* but no *Lactobacillus spp.* and yeast while cassava diets contained not only *E. coli* but also *Lactobacillus spp.* and yeast which may provide beneficial effects to the health of the animals.

The effects of diets containing corn, cassava chips and cassava pellets on pH, total bacterial count, *E. coli*, *Lactobacillus spp.* and yeast were studied using 12 growing pig fitted with T-cannular at terminal ileum. The animals were divided into 3 groups (treatments) of 4 animals each. The animals were fed with corn diet (diet 1) until, 40 kg BW and the components of digesta at terminal ileum were analysed. The animal in Treatment 2 and 3 were then switched to Diet 2 and 3 which containing cassava chips and pellets as basal feed ingredient, respectively, while animals in Treatment 1 were still on corn diet. Samples of digesta at terminal ileum were collected and analysed for the parameters at 45 kg BW. The results of the study have indicated that cassava diets have significantly (p<0.01) lower pH, total bacterial count and *E. coli*, but significantly (p<0.01) higher content of *Lactobacillus spp.* and yeast than those on corn diet. The results have confirmed the beneficial effects of cassava diets on animal health improvement reported by farmer who have employed cassava in animal diets.