

Pattaratom Pureesri 2010: Efficacy of Crude Extract of Condensed Tannin from Cassava Leaves (*Manihot esculenta*) in Suppression of Faecal Strongylid Egg Counts Growth and Haematological Parameter of Meat Sheep. Master of Science (Agriculture), Major Field: Animal Science, Department of Animal Science. Thesis Advisor: Associate Professor Somkiert Prasanpanich, Ph.D. 81 pages.

Study on efficacy of cassava hay in suppression of faecal strongylid egg counts were divided into 3 experiments. The first experiment was to compare 4 varieties of cassava leaves viz. Rayong 5, Rayong 9, Kasetsart 50 and Huaybong 60 on nutritional composition and tannin content. Each variety was sorted into 3 parts; leaves, twig and whole cassava twig with leaves, where the results showed that CP, NDF, ADF and tannin concentrations were significantly different among all parts ( $p<0.01$ ). The second one was studied on an anthelmintic activity of tannin extracts from cassava leaves by measuring the mobility and mortality rate of L3 of strongylid nematodes after 3, 6, 9, 12 and 24 hours of incubation with different extract levels of 0, 75, 150 and 300 mg. The results showed that mortality rate of L3 had an interaction in higher concentration with time after incubation in every hour. Such mortality rate was significantly higher than those among treatments and the highest concentration group had most mortality rate ( $p<0.01$ ).

The last experiment was to study efficiency of condensed tannin from cassava hay on growth, haematological parameter and faecal gastrointestinal strongylids eggs in sheep. Twenty female crossbreed Dorper x Native sheep, aged average 1 year old, were divided into 4 treatments. The animals in treatment 1 were fed Ruzi hay and meal concentrate while in treatment 2 were fed Ruzi hay with meal concentrate plus ivermectin application. In treatments 3 and 4, animals were fed 50 and 100% cassava hay to replace Ruzi hay without ivermectin application. The results showed that feed intake, ADG, BUN, MON, NEU and BAS in all treatments were not significantly different, while BG, PCV, RBC, HB, WBC, EOS, PP and albumin in treatment 1 were significantly different ( $p<0.05$ ). MDA in treatment 2 was significantly different ( $p<0.05$ ) among all treatments. EPG in all treatments was not significantly different in the first 3 weeks but EPG in treatments 3 and 4 during 12-16 weeks of the experiment were significantly lower than treatment 1 ( $p<0.05$ ). However, EPG in treatments 2, 3 and 4 during 14-16 weeks of experiment were not significantly different.

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Thesis Advisor's signature