

Santi Udompoka 2006: Effect of the Crude Extract from *Capsicum spp.*

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One hundreds and forty four commercial cross bred. (Lw X Ld X D) with twenty one-day old piglets were used to study the effect of the crude extract of *Capsicum spp.* supplementation on the growth performance and feed utilization of weaning pigs. The animals were divided into 6 groups with 3 replications. Each replication consisted of 8 pigs with equal castrated male and female which were randomly fed the experimental diets as following ; T1 : control diet (without antibiotic and herbal product); control diet supplemented with 110 ppm C.T.C + 120 ppm Halquinol (T2); supplemented with crude extract from *Capsicum spp.* provided 5 10 15 and 20 ppm capsaicin in T3 to T6, respectively. The animal were kept in open house, where feed and water were provided *ad libitum*. The result showed that the average daily weight gain, feed consumption and feed conversion ratio in period 4-7 weeks of age were not significantly different ($P>0.05$) among treatments, whereas the supplementation with antibiotic as growth promoter showed the better growth performance than other groups. In period 7-10 and 4-10 weeks of age, the supplementary with antibiotic as growth promoter provided the same growth performance as group fed 10 ppm capsaicin. However, the supplementation of higher level of crude extract of *Capsicum spp.* (15 and 20 ppm capsaicin) were significantly defected on feed conversion ratio ($P<0.05$) of piglets comparing with the antibiotic as growth promoter. Otherwise, dry matter, protein and energy digestibility including the free radical and neutrophil / lymphocyte ratio were not effected ($P>0.05$). But supplementation of 5 ppm capsaicin from *Capsicum spp.* crude extract could stimulate immune titer against swine fever disease ($P<0.01$). Prolonged administration of crude extract from *Capsicum spp.* for 6 weeks did not affect the liver and kidney tissue.

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Thesis Advisor's signature

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