**Effect of Supplementation Active Vitamin D3 (Sangrovit D3) on Performances and Egg Quality in The Late Stage Production of Laying Hens**

**K. Soisuwan1/\*, N. Chauychuwong1/, Yongyuth Theapparat2/ Jareporn Cheachetton3/ and A. Airlang1/**

1/ Department of Animal Science, Faculty of Agriculture, Rajamagala University of Technology Srivijaya, Thungsong, Nakhon Si Thammarat, Thailand 80110

2/ Department of Biochemistry, Faculty of Pharmacy, Prince of Songkhla University, Songkhla, Thailang, 90110

3/ Department of Food Science, Faculty of Agroindustry, Rajamagala University of Technology Srivijaya, Thungsong, Nakhon Si Thammarat, Thailand 80110

**Abstract**

This experiment was conducted to investigate the effect of supplementation active vitamin D3 (Sangrovit D3) on performances and egg quality in the late stage production of laying hens. A total of 360 Isa brown laying hens, 60 week of age will be allocated into three treatment groups (10 replicates of 12 hens each) which composed of treatment 1 (non-supplementation active vitamin D3 ; control group, basal diet), treatment 2 (control group plus 150 g active vitamin D3/ton feed) and treatment 3 (control group plus 300 g active vitamin D3/ton feed). All birds will be provided *ad libitum* access feed and water for 12 weeks. There was no significant difference in egg production performances and internal egg quality among the dietary treatments (P>0.05). However, it was also found that supplementation active vitamin D3 significantly had higher (P<0.05) eggshell percentage when compared with control group while body weight gain, carcass percentage, serum calcium, serum phosphorus, calcium in tibia bone, phosphorus in tibia bone also with cholesterol in egg yolk had no significantly different (P>0.05) between dietary treatments. In conclusion, the optimum level of supplementation active vitamin D3 at the level of 150 g per ton feed significantly improved (P<0.05) eggshell quality in term of eggshell percentage of laying hens in the late phase of production.

**Key words :** active vitamin D3, egg production performance, egg quality,

late stage egg production