

Sutisa Majarune 2010: Dietary Supplementation of Chelate Minerals on Reproductive Performance of Sows. Master of Science (Animal Production), Major Field: Animal Production, Department of Animal Science. Thesis Advisor: Associate Professor Srisuwan Chomchai, M.S. 88 pages.

The experiments were conducted in order to investigate the effects of dietary supplementation chelate mineral on reproductive performance of sows. In the first experiment one hundred fifty-two Large white and Landrace crossbred sows were divided into 2 dietary treatment groups. Each group consisted of 76 sows. The dietary treatments were (1) basal diet (Control group), (2) basal diet + Chelate mineral 2 one month before farrowing + Chelate mineral 3 during lactation period and + Chelate mineral 1 form weaned to service. In the second experiment, the sows from the first experiment were continuously used in the same treatment. The dietary treatments were (1) basal diet (Control group), (2) basal diet + Chelate mineral 1 from weaned to one month before farrowing + Chelate mineral 2 one month before farrowing + Chelate mineral 3 during lactation period and + Chelate mineral 1 form weaned to service. The results found that there were significantly difference ( $P < 0.05$ ) between control and treatment group in piglets birth weight, weaning weight, number of piglets weaned, pre-weaning mortality, weaned to service interval and hemoglobin concentration of newborn piglets.

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Thesis Advisor's signature