

Milk Production and Milk Composition of Dairy Cows in Response to Calcium Salt of Palm Oil Fatty Acids Supplementation

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Abstract : The aim of this experiment was to investigate the effect of calcium salt of palm oil fatty acids (Ca-POFA) supplementation on milk production and milk composition of dairy cows. Twenty-four early lactating crossbred Holstein Friesian 87.5% cows (15.4 ± 3.75 kg of milk/d; 93 ± 27 DIM; 369 ± 6 kg of BW), were assigned into 3 treatments in an RCBD. All dairy cows were fed 15.4% CP total mixed ration (TMR). The first group (control) received a basal diet and no supplement. The second group was fed the basal diet supplemented with 150 g/d calcium salt of palm oil fatty acids (Ca-POFA), and the last group was fed the basal diet supplemented with 300 g/d Ca-POFA. The experiment lasted 40 days with the first 10 days is an adaptation period, and measurements were made during the last 30 days in 6 periods with 5-days in each period for milk sample collection. The results found that supplemented calcium salt of palm oil fatty acid had no effect on milk yield, milk composition, milk composition yield, live weight and live weight change. However, Ca-POFA decreased milk protein percentage ($P < 0.05$).

Keywords : calcium salt of palm oil fatty acid, dairy cow, milk composition, milk production

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