

Effects of Milk Urea Nitrogen on Reproductive Performance in Dairy Cow

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This study was designed to assess effect of MUN concentration on reproduction performance and monitoring of feeding and fertility management in commercial dairy herd.

The mean of milk yield is 26.48 ± 8.38 kg per day, milk fat $3.80 \pm 0.58\%$, protein $3.13 \pm 0.3\%$ MUN 16.68 ± 5.87 mg/dl and somatic cell $392,000 \pm 77,060$ ml. Milk yield has been shown that negative correlation with fat, protein and somatic cell ($P < 0.01$).

The finding of this study was significant relationship between non-pregnant days and MUN concentration.

MUN is a good tool of measurement to increase fertility efficiency and feeding management.

MUN concentrations were increased by day to day until D-7 by estrous cycle. After D-7, MUN and protein level decreased however the day E-21 after.

MUN concentrations below 12 mg/dl has 201.72 ± 14.87 open days and 2.37 ± 0.27 times AI. MUN level between 12 to 18 has 154.46 ± 11.32 open days and 1.84 ± 0.2 AI times which are lowest level. MUN concentrations over 18 mg/dl has 163.87 ± 12.54 open days and 2.08 ± 0.22 AI times.

MUN concentrations below 12 mg/dl had 201.72 ± 14.87 open days and 2.37 ± 0.27 frequency of AI which are the longest. The most efficient MUN concentrations level was between 12 and 18, which showed shortest open days and frequency of AI.