# Establishment for Improving Productivity of Cattle by Fecal Steroid and Milk Urea Nitrogen Analysis



**Cited in:**

J. Biomed Lab Sci 8(4): 235-244, 2002

Establishment for Improving Productivity of Cattle by Fecal Steroid and Milk Urea Nitrogen Analysis

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## Abstract

This study was carried out to determine the blood and milk progesterone by enzyme-linked immunosorbent assay (ELISA), and milk urea nitrogen (MUN) in cows. MUN and protein concentration were determined using automated infared procedures. The optimum conditions of ELISA system was investigated including the first and second antibody titres, bound percent, and enzyme conjugate and also the factors on MUN and protein concentration by sampling procedures and addition of preservatives. Progesterone antibodies did not react to pregnenlone, testosterone, estrone, estradiol-17β, aldosterone, cortisol, corticosterone and 11 α-dehydroxycortisone (DOC), but reacted with only progesterone. The intra and inter-assay coefficient of variation 4.5%, 6.1-9.4% when used of bovine serum. The morning, MUN concentration (17.6±2.8 ㎎/100 ㎖) in the 13 herds was similar to that of evening MUN concentration of the lactating cows from the same herd. A significant relationship between moning and evening milk samples of upper parameters was found r = 0.93. Difference in MUN concentration with sampling procedures and using of preservatives were investigated.

## Reference

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