

**IDENTIFICATION OF BLOOD UREA NITROGEN (BUN)
AND INSULIN-LIKE GROWTH FACTOR-1 (IGF-1)
LEVELS BASED-ON CALVING INTERVAL AND
MILK PRODUCTION OF *FRIESIAN
HOLSTEIN* COW**

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ABSTRACT

The aim of this study was to examine BUN and IGF-1 levels in dairy cows based on different calving intervals and milk production as well as the correlation between BUN levels and milk production in *Friesian Holstein* cows. Samples selection were done gradually from 100, 50 to 18 dairy cows based on equality of parameters as control. The data of reproduction efficiency is based on recording card, while data of reproduction status and milk production are obtained from direct measurements. Blood sample were collected simultaneously with artificial insemination (D0), 7th day (D + 7) and 22nd day (D + 22) thereafter. The pregnancy examination was performed by rectal palpation technique three months after insemination. The results showed that BUN and IGF-1 levels in groups 1, group 2, and group 3 were not significantly different ($p > 0.05$). The BUN levels in the pregnant cows group was lower ($p < 0.05$) in H0, H + 7 and H + 22 than in the non-pregnant group with $BUN \geq 18$ mg/dl. IGF-1 levels in the pregnant group were higher ($p < 0.05$) in H0, H + 7 and H + 22 than in the non-pregnant group with $BUN \geq 18$ mg/dl and ≤ 18 mg/dl.

Key words : MUN, IGF-1, Friesian Holstein