

**INFLUENCE OF GRASS TO CONCENTRATE RATIO TO MUN LEVEL,  
PROGESTERONE LEVEL AND PREGNANCY STATUS IN FRIESIAN  
HOLSTEIN**

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**ABSTRACT**

This study was conducted to know the influence of grass to concentrate ratio to MUN level, progesterone level and pregnancy status in Friesian Holstein. A total of 18 dairy cows were randomly selected from the population. The cows were grouped based on feed and MUN and pregnancy. Milk samples collection was carried out once on the seventh day after estrus (D7) and tested with the Barthelot method for measuring urea nitrogen levels. Blood samples were taken three times at estrus (D0), seven days after estrus (D7), and twenty-two days after estrus (D22), and were tested using Immuno-Sorbent Assay (ELISA). Pregnancy examination was carried out at D90 after artificial insemination through rectal palpation. Analysis of feed data (grass and concentrate), protein intake and MUN were tested by t-test. Based on grass to concentrate ratio, progesterone level and MUN level showed no significant difference ( $p>0.05$ ) but it showed significantly different on milk yield ( $p<0,05$ ). Based on pregnancy status, progesterone level at D22 showed significantly different whereas at D0 and D7 showed insignificantly different. MUN level and grass to concentrate level also showed significantly different. It can be concluded that the ratio of grass and concentrate did not increase MUN level, progesterone level and pregnancy rate.

**Keywords :** Grass to concentrate ratio, MUN, progesterone, pregnancy level, Friesian Holstein.