



RESEARCH ARTICLE.....

# Effect of formaldehyde treated concentrate, urea and soybean meal on compound growth rate of milk yield and correlation studies in lactating cows

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**ABSTRACT.....** Present investigation entitled “effect of formaldehyde treated concentrate, urea and soybean meal on compound growth rate of milk yield and correlation studies in lactating cows” was undertaken at Department of Animal Husbandry and Dairy Science, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola. Feeding of 1.5 per cent formaldehyde treated 70:30 sugras : SBM concentrate mixture with 2 per cent added urea diet to lactating cows ( $T_3$ ) was evaluated in relation to sugras untreated ration ( $T_1$ ). It was observed that intakes in cows were non-significantly influenced by the parameters except water intake as out of the five animals only 2 animals showed significant impact due to DMI and TDNI and none of the animals due to DCPI. The values were 0.30, 0.74, 0.30 and 0.28 per cent per week for DMI, DCPI, TDNI and TWI, respectively. This reflected in an increase of 1.14 per cent in milk yield/week in cows. It was noticed that DCPI had a greater influence on milk yield of cows in all the groups except  $T_5$  group as the correlation values were positive and significant, being  $r = 0.770, 0.764$  and  $0.921$  of high magnitude in  $T_1, T_2$  and  $T_3$  groups, respectively and  $0.588$  of medium order in  $T_4$  group while it was positive but non-significant ( $r = 0.431$ ) in  $T_5$  group. The correlation values observed for maximum and minimum ambient temperature were positive non-significant, being  $r = 0.186$  and  $0.137, 0.243$  and  $0.074, 0.324$  and  $0.081, 0.230$  and  $0.067$  and  $0.250$  and  $0.094$  in  $T_1, T_2, T_3, T_4$  and  $T_5$  treatments, respectively. In contrast correlation coefficient values between RHI and daily milk yield were negative non-significant in  $T_1, T_2$  and  $T_4$  treatments, being  $r = -0.481, -0.546$  and  $-0.424$ , respectively while the association was negative significant in  $T_3$  ( $r = -0.642$ ) and in  $T_5$  ( $r = -0.778$ ).

**KEY WORDS.....** Formaldehyde, Sugras, Urea, Soybean meal, DMI, DCP, Milk yield, Compound growth rate, Correlation studies

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