EFFECT OF NON-PROTEIN NITROGEN, BY-PASS PROTEIN AND FODDER LEGUMES ON INTAKE, DIGESTIBILITY AND GROWTH PARAMETERS OF BUFFALOES

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The role of supplements of tree legumes and non-protein nitrogen on feed intake, rumen function and growth of buffaloes has been studied. Two invivo digestibility studies and three nylon bag studies have been conducted using four rumen fistulated male buffaloes. Dry matter intake and dry matter digestibility were increased by the urea ammonia treatment compared to urea supplementation. Inclusion of tree fodder legumes in the diet increased the in vivo dry matter digestibility of both untreated and treated straw but increment was much higher for untreated straw. Supplementation of legumes also increased the invivo nitrogen digestibility of the diet of buffaloes. In addition, a trend towards an increase in feed intake with legume supplementation was also observed. According to nylon bag studies, Erythrina lithosperma seemed to be the best by-pass protein out of the tree fodder legumes tested in the study. Inclusion of legumes in the diet increased the dry matter and the nitrogen degradation rate of feedstuffs. In addition to invivo digestibility and nylon bag studies, a growth trial of buffaloe calves was also conducted. Weight gain of males were superior to that of females on a grazing pasture. Inclusion of fodder legumes increased the weight gain of females when compared to grazing alone.

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