

**THE EFFECT OF FEEDING RUMEN BYPASS FAT
INCORPORATED FEED ON THE GROWTH OF
FATTENING GOATS**

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ABSTRACT

Fattening goats need high quality feed with different nutrients to achieve maximum profit potential. Goats had received relatively little scientific attention compared with sheep and cattle. Energy deficiency in rations is the main problem in fattening goat production systems in underdeveloped areas. A locally produced rumen bypass fat was suggested to alleviate these energy deficiencies in goat rations. Fourteen multiparous, crossbred goats (Jamunapari × Saanen × Indigenous) with 10 ± 0.5 kg average body weight were used for the experiment. Goats were divided in to two groups considering the provision of a forage-based ration (Control) and a forage & bypass fat (3% Bypass Fat) mixed ration (Treatment). Bypass fat utilized in the study was composed as a calcium salt of coconut parin oil. Goats were fed for 5 weeks during the months of April to June. The experiment was on a randomized complete block design with two treatments (i.e., forage-based diet alone and forage & bypass fat mixed diet) and the age was considered in blocking the animals. Individual body weight (BW), height, heart Girth (HTG), body diagonal length (BDL), rump height (RPH) were recorded. Ration samples were collected and analyzed for dry matter, ash, crude protein, crude fat and crude fiber content. Goats fed with bypass fat had recorded significantly higher ($P < 0.05$) weight gain compared to goats did not receive a bypass fat-based ration. Bypass fat feeding did not indicate any significant ($P > 0.05$) effect on height, HTG, BDL and RPH of the experimental goats. Hence, this study has indicated that bypass fat feeing could enhance the body weight of fattening goats. Further studies are recommended to assess the feeding of different amounts of bypass fat to fattening goats during different physiological stages of the goats.

Key words: By pas fat, Drought season, Body Diagonal Length, Heart Girth; Rump Heigh