The Effect of Concentrate Supplementation on Growth of Steers Grazing Natural Pastures

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Abstract

Thirty-six Boran steers were allotted into three weight groups Low (L). Medium (M) and High (H) and randomly assigned to three levels of supplementation: 0, 2 and 4 kg per head per day. Supplement A and B were given during the green season (Phase I) and dry season (Phase II), respectively. For each season, supplementation lasted for 6 months. The amount of forage on offer and its crude protein content decreased (P<0.05) from 6.000 to 2,000 kg dry matter per hectare and 6.5 to 3.0%, respectively. Dry matter content approached 98% and a shift towards the less palatable pasture species emerged in Phase II. Average daily live weight gains ranged from 0.29 to 0.54 and 0.12 to 0.38 kg in Phase I and II. respectively. Supplemented steers gained at a higher (P<0.05) rate than those unsupplemented. Rate of weight gain by the animals on 2 and 4 kg of supplemental feed was similar in both Phase I and II. Overall, the supplemented steers gained weight at a faster rate (P<0.05) than the unsupplemented group. However no significant (P>0.05) difference was exhibited between weight groups. The results suggest that supplementation at 2kg per head per day may be the most economical at Lanet which is situated in Ecozone IV (dry woodland).