World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Performance of Growing Rahaji Bulls Fed Diets Containing Similar Concentrates and Different Crop Residues in a Semi-Arid Environment

Authors: Husaini Sama

Abstract : The study was conducted, in a 120 - day's trial, to monitor the performance of growing Rahaji bulls fed different crop residues. There were four experimental treatments, each containing three (3) bull-calves. The first three (experimental) diets were prepared with rice straw, millet stalks and a combination of the two in equal proportions. These 3 diets were supplemented with concentrates. Treatments 1, 2 and 3 consisted of rice straw, millet stalk and combination of rice straw and millet stalk in equal ratio, respectively as basal feeds, while, Treatment 4 (containing standard diet of cow pea haulms, rice straw and wheat offal) served as control to compare with the other treatments. Data on feed intake and livability was collected on daily basis and that of live weight gain and feed conversion ratio were collected fortnightly, but data on apparent nutrient retention trial was collected towards the end of the experiment. Water was offered ad libitum. Records obtained were subjected to statistical analysis using SPSS (1988) software package in accordance with a Completely Randomized Design (CRD). Results obtained indicated that feed intake was significantly higher (P<0.05) for calves on treatments 3 and 4 compared to those on treatments 1 and 2. The study observed that it was cheaper to formulate diets 2 and 3 than the other 2 diets. The control diet (T4) was observed to be relatively more expensive than the other 3 formulated diets. It was concluded from the findings that, concentrate containing combination of rice straw and cereal stalks was economical and satisfactory for feeding growing Rahaji bulls in this ecological zone (Semi-arid environment).

Keywords: rahaji bulls, crop residues, concentrates, semi-arid environment

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020