

Digestibility in Yankasa Rams Fed *Brachiaria ruziziensis* - *Centrosema pascuorum* Hay Mixtures with Concentrate

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Abstract : This study investigated the digestibility of *Brachiaria ruziziensis* and *Centrosema pascuorum* hay mixtures at varying proportions in Yankasa rams. Twelve Yankasa rams with average initial weight 10.25 ± 0.1 kg were assigned to three dietary treatments of *B. ruziziensis* and *C. pascuorum* hay at different mixtures (75BR:25CP, 50BR:50CP and 25BR:75CP, respectively) in a Completely Randomized Design (CRD) for a period of 14 days. Concentrate diet was given to the experimental animals as supplement at fixed proportion, while the forage mixture (basal diet) was fed at 3% body weight. Animals on 50BR:50CP had better nutrient digestibility (crude protein, acid and neutral detergent fibre, ether extract and nitrogen free extract) than other treatment diets, except in dry matter digestibility (87.35%) which compared with 87.54% obtained in 25BR:75CP treatment diet and also organic matter digestibility. All parameters taken on nitrogen balance with the exception of nitrogen retained were significantly higher ($P < 0.05$) in animals fed 25BR:75CP diet, but were statistically similar with values obtained for animals on 50BR:50CP diet. From results obtained in this study, it is concluded that mixture of 25%BR75%CP gave the best nutrient digestibility and nitrogen balance in Yankasa rams. It is therefore recommended that *B. ruziziensis* and *C. pascuorum* should be fed at 50:50 mixture ratio for enhanced animal growth and performance in Nigeria.

Keywords : *B. ruziziensis*, *C. pascuorum*, digestibility, rams, Yankasa

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