

## ABSTRACT

A study was conducted to evaluate the effect on palatability and preference of supplementing Brachiaria (*Brachiaria ruziziensis*) hay and Rhodes (*Chloris gayana*) hay with different levels of Calliandra (*Calliandra calothyrsus*) leaves on Red Maasai Sheep. Nine male sheep averaging one year and weighing ( $22.0 \pm 2.5$  kg) were used in a 3x4 factorial completely randomized design (CRD). Three animals in three replicates, were used to measure feed intake and palatability. Twelve experimental diets were formulated consisting of Brachiaria, Rhodes and a (50:50 mix) of Brachiaria and Rhodes grass hay as the basal diets, supplemented with (0%, 10%, 20% and 30%) of Calliandra leaves. Supplemental rates were used as treatments (T1, T2, T3 and T4) respectively. Treatment one (T1) served as the control. 200g of each diet was offered daily at 8:00am (East African time) with an allowance of 60 minutes feeding time. Results showed that supplementation improved ( $p_{T3>T2>T1}$ ). The study concluded that Brachiaria grass supplemented with 30% Calliandra has a great potential as a forage diet for ruminants in the arid and semi-arid lands.

**Keywords:** Crude protein, diets, dry matter, intake