568-10 Voluntary Intake and Apparent Digestibility of Pearl Millet Silages.

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Abstract:

Pearl millet is a crop successfully used to produce food for ruminants. Farmers have been using it for silage making. However, evaluation of nutritional parameters such as voluntary intake, apparent digestibility and metabolizable energy of pearl millet silages are scarce. Voluntary intake and apparent digestibility of three pearl millet genotypes silages (BRS-1501, NPM-1 e CMS-3) were determined using adult sheep. Cultivars were harvested at 100 days of growing and ensiled in 200 liters capacity metal containers. Silages were offered 60 days after ensiling, assuring at least 20% of orts**.** The statistical design was a completely randomized with three treatments and six replicates. Silages were similar (P>0.05) to dry matter voluntary intake, dry matter apparent digestibility, metabolizable energy intake and crude protein voluntary intake. Dry matter voluntary intakes, measured in grams per metabolic weight (g/MW) ranged from 42.12 g/MW/day (BRS-1501) to 44.22 g/MW/day (NPM-1). Dry matter apparent digestibilities were: 49.87 % to CMS-3, 47.55% to BRS-1501 and 45.83 % to NPM-1. Average metabolizable energy intake was 86.37 Kcal/MW/day. Crude protein voluntary intakes ranged from 4.74 g/MW/day to NPM-1 silage to 5.04 g/MW/day to CMS-3 genotype. Average crude protein digestibility was 57.92%, highlighting the good quality of this nutrient in these silages. The highest (P<0.05) crude protein apparent digestibility (62.54 %) was observed to CMS-3 genotype. The findings of this work suggested that pearl millet silages can be used as a feed option for ruminants.

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