Forage yield and utilization efficiency of 'Tanzania' guineagrass and 'Guacu' elephantgrass pastures under rotational stocking. (C06-pedreira092226-Oral)

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Abstract:

The potential of animal production systems based on tropical forages is high, although subjected to losses in many steps of the process. Management practices that optimize the utilization of produced herbage will depend on the agronomic characteristics of forage species. The objective of this research was to compare the performance of 'Guacu' elephantgrass (Pennisetum purpureum Schum.) and Tanzania grass (Panicum maximum Jacq.) under rotational stocking, by quantifying agronomic responses related to dry matter accumulation, daily herbage accumulation rates, herbage losses due to grazing, and efficiency of utilization. Treatments were two forage species replicated four times in a completely randomized design. Mean herbage accumulation of Guacu (5420 kg DM/ha per cycle) was higher than that of Tanzania (2800 kg DM/ha per cycle), for totals of 26820 and 13170 kg DM/ha in 214 days of grazing. Guacu also accumulated DM at a higher daily rate (136 versus 88 kg DM/ha of Tanzania). Mean losses of forage due to grazing were 1040 and 880 kg DM/ha for Guacu and Tanzania, respectively, and this resulted in utilization efficiencies of 51.5 and 37.3%. Under these conditions, the mean seasonal stocking rate was 70% higher on Guacu (5.1 cows/ha) than on Tanzania (3 cows/ha) pastures. Guacu requires better management skills than Tanzania and has a more pronounced seasonal growth. In both systems, potential resides in the high pasture carrying capacity, when climate and soil fertility are not limiting.

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