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Forage availability and nutritional value of paiaguás-grass and piatã-grass for lamb finishing systems

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Introduction

The *Brachiaria* spp has great adaptability to the most varied environmental conditions, with elevated forage productivity, although limited in nutritional value. When used in integrated crop-livestock (ICL) systems or managed to provide leaf blades production, provide suitable conditions for lambs finishing, a high nutritional demand animal category.

Material and Methods

The experiment was conducted at Embrapa´s Midwest Regional Center of Goats and Sheep, Terenos – Mato Grosso do Sul. Grazing system under evaluation were: Piatã-grass and Paiaguás-grass pastures stablished in succession to sorghum and soybean crops (LCS-Livestock-Crop System) in 2013 and 2014, respectively; Piatã-grass as five months stockpiled pasture (STOCK). The forages were evaluated every 14 days between July and October, separated into leaf blades/stem/dead material components, dried at 65° C and analyzed by NIRS. Weaned Pantanal locally adapted lambs were used under continuous grazing.

Results and Conclusions

The average leaf blades component in forage available during the grazing period was greater for LCS, 1.0 t DM.ha^{-1} and 1.8 t DM.ha^{-1} compared to STOCK, 0.9 DM.ha^{-1} t and 1.1 t DM.ha^{-1}, in 2013 and 2014 years, respectively. There were system effect and year effect, for Piatã-grass in STOCK system for nutritional value, higher in year 1 and lower in year 2. Nutritional values were found superior in ICL system to Paiaguás-grass (Table 1).

Table 1. Chemical composition (%) of forage available to lamb grazing during the dry season.

Systems		CP	NDF	ADF	IVDOM	Lig S	Lig P	Pulp	Sílica
LCS	Piatã (2013)	6.81 c	75.69 d	38.68 c	54.98 c	3.82 b	8.53 c	28.25 d	3.58 c
	Paiaguás (2014)	10.47 a	73.16 a	35.42 a	59.42 a	3.88 c	7.19 a	25.91 a	2.42 a
STOCK	Piatã (2013)	7.43 b	75.53 c	36.75 b	56.14 b	3.66 a	7.87 b	27.21 b	2.72 b
	Piatã (2014)	5.78 d	75.23 b	39.53 d	46.93 d	3.88 c	8.98 d	27.48 c	3.83 d

Distinct letters in the column differ by Tukey-Kramer test (P <0.01).

Silva et al. (2014) argue that the nutritional value depends on the chemical composition and digestibility of forage. Forage leaf blade availability should be plentiful during the grazing period for satisfactory animals weight gain. Lamb total body weight gain was greater (P <0.05), in LCS (13.22 kg) compared to STOCK system (11.25 kg) in average for the two years study. In the LCS system leaf blade supply was higher, providing a better performance. The nutritional value changed from year to year to Piatã-grass due to the initial conditions of grazing, but the nutritional value of Paiaguás-grass was superior.

References cited

Silva et al. (2014). Engorda de cordeiros a pasto. In: CONGRESSO BRASILEIRO DE ZOOTECNIA, 24, Vitória, 2014. **Anais...**, Vitória: SBZ, 2014. CD-ROM.