

Relative water content in two grass cultivars in crop-livestock system in the State of Tocantins, Brazil.

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Introduction

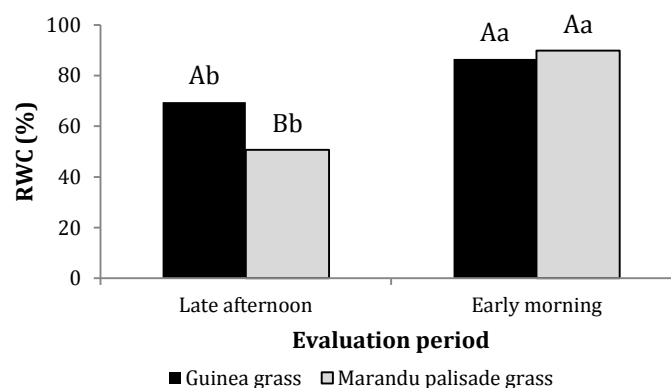
Difficulties in obtaining forage or straw to areas under no-tillage system are related mainly to the low forage production in the off season and the accelerated decomposition of the plant residues. In this presentation, we report the results of two grasses on Integrated Crop-Livestock System in the Tocantins Cerrado.

Material and Methods

The field experiment was installed in an area of native vegetation (11°43'S and 49°04'W, 280 m) at Federal University of Tocantins. Treatments included cut pastures *Brachiaria brizantha* (marandu palisade grass) and *Panicum maximum* (guinea grass) in successive legume/grass sward, in two evaluation periods, in early morning and late afternoon. Leaves samples were taken to 20 tillers per experimental unit and the relative water content of leaves were calculated based in mass of leaves adapted from Barrs and Weatherley (1962).

Results and Conclusions

Fig. 1. Relative Water Content (RWC) in two grass cultivars in successive legume/grass sward in two evaluation periods.



^{Aa} Means followed by the same letters, uppercase in evaluation period and lowercase in cultivars, are not different ($p > 0.05$).

Owing to the lower water loss of guinea grass compared to marandu palisade grass (RWC= 16% and 40%) and higher moisture in leaves of guinea grass than marandu palisade grass (RWC= 70% and 51%), this cultivar may be more tolerant to water stress presented in the dry season.

References cited

Barrs, H. D., Weatherley, P. E. (1962). Aust J Biol Sci.

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