

Initial development of eucalyptus clones with potential for use in ICLF systems

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Introduction

For the success of integrated crop-livestock-forestry systems, it is necessary to select the most suitable tree species and cultivars, looking for the highest potential for synergy among system's components. However, research on the subject for the State of Mato Grosso do Sul has been incipient. The objective was to evaluate the initial development of eucalyptus clones with potential for use in crop-livestock-forestry systems under different soil and climate conditions in Mato Grosso do Sul.

Material and Methods

A trial was started in 2011 combining three locations (Campo Grande (MS), São Gabriel do Oeste (MS) and Ribas do Rio Pardo (MS)), using a randomized block experimental design. Treatments were the different eucalyptus genotypes classified as multipurpose, *i.e*: 1277 (*E. camaldulensis* x *E. grandis*), I-144 (*E. urophyla*), I-224 (*E. urophyla* x *E. grandis*), GG100 (*E. urophyla* x *E. grandis*), H13 (*E. urophyla* x *E. grandis*), H77 (*E. urophyla* x *E. grandis*), Urocam VM2 (*E. urophyla* x *E. camaldulensis*) and *Corymbia citriodora*. Tree growth were evaluated following the methodology proposed by Porfírio-da-Silva et al. (2009) and for stem straightness, bifurcation and roundness the scales proposed by Malinovsky et al. (2006) were used.

Results and Conclusions

Fig. 1. Mean height, diameter at breast height (DAP), straightness and bifurcation (RET and BIF) and roundness of the stem (Cilin), of eucalyptus trees 30 months after planting in the municipalities of Campo Grande (CG), São Gabriel do Oeste (SGO) and Ribas do Rio Pardo (RRP).



In Fig. 1 it can be noticed that the GG100, H13 and I144 clones showed the best potential in Campo Grande. In São Gabriel do Oeste, wood yield was similar for eucalyptus clones, the citriodora had the lowest yield. In Ribas do Rio Pardo, GG100, H13, H77 and I144 clones were considered the most promising.

References cited

Porfírio-da-Silva et al. (2009) – Embrapa Florestas, Colombo, PR. 48p. Malinovski et al. (2006) –Floresta, v.36, n.2

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