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Evaluation of clones of Eucalyptus planted in an experimental plot for Forest Landscape Restoration in Paraguay

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The adoption of strategies involving the combination of *Eucalyptus* plantations with native species emerges as an effective alternative to mitigate the issues of deforestation, degradation, and fragmentation affecting native forests. Eucalyptus, in this context, presents itself as a species that offers a rapid economic return, making it an appealing resource for private landowners aiming to carry out land restoration processes. The aim of this study was to compare the growth in diameter at breast height, diameter at collar height, crown coverage area, and height of the Eucalyptus urophylla S.T. Blake × Eucalyptus grandis W. Hill (clone i144) and Eucalyptus urophylla S.T. Blake × Eucalyptus camaldulensis Dehnh. (Clone vm01) hybrids. The study was conducted in the district of Hernandarias, Alto Paraná Department, Paraguay. It was structured into 5 blocks and 2 treatments randomly distributed. Both treatments were selected for this study, with the first treatment consisting of a strip of eucalyptus for timber purposes, and the second treatment serving energy purposes. The design of each experimental unit comprised two major strips, one for conservation and the other for production. The focus of the study was on the second strip, which included 32 trees per experimental unit on treatment 1, and the second treatment, with 44 trees, covering an area of 1080 m² per unit. The parameters evaluated for this study were as follows: diameter at collar height (DAC), total height (Ht), Diameter at breast height (DAP), and crown coverage area (ACP) over a 24-month plantation period. Statistically, no significant differences were found in the analyzed variables; on average, it was determined that the means were 1167.3 cm, 11 cm, 3.9 m², 132.3 cm for Ht, DAP, ACP, and DAC, respectively.

Keywords: forest, landscape, restoration

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