



## Growth of the *Eucalyptus urograndis*, *Schizolobium parahyba* var. *amazonicum*, *Tectona grandis* and *Ochroma pyramidale* on integration crop-livestock-forest systems in the Amazon Biome

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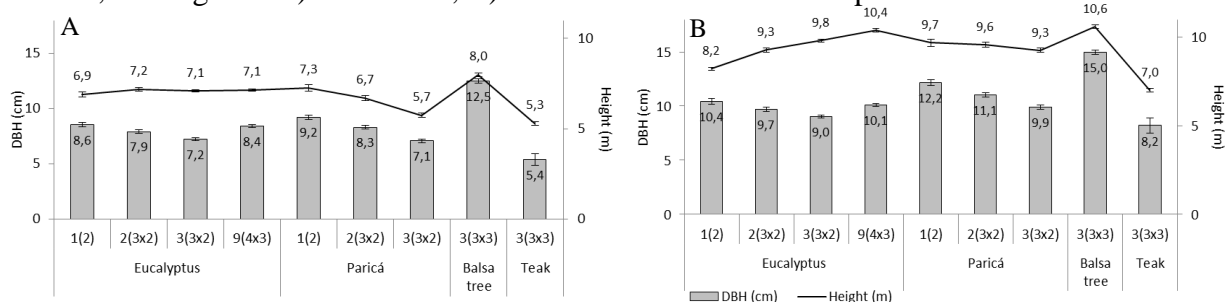
**Introduction** The forestry component directly affects the quality of the integrated system. In the Amazon Biome little is known about the consequences of the use of native and exotic tree species in integrated systems. The objective of this study was to evaluate the growth in diameter and height eucalyptus (hybrid *Eucalyptus urograndis*), paricá (*Schizolobium parahyba* var. *amazonicum*), teak (*Tectona grandis*) and balsa tree (*Ochroma pyramidale*), seeking to supply information about the use of these species in crop-livestock-forest integration (ICLF) systems.

### Material and Methods

The experiment was conducted in a ICLF system, in the forest-crop phase, in the Technology Reference Unit of the Embrapa, located in Gamada Farm in Nova Canaã do Norte-MT. Were measured the diameter at breast height (DBH) and total height at 19 and 25 months after planting. The treatments with eucalyptus and paricá were distributed in single, double and triple lines, teak and the balsa tree in triple line and treatment with eucalyptus pure stand in 9 lines. The average of DBH and height of each species were compared using the standard error of the mean.

### Results and Conclusions

Fig. 1. Averages of the height and diameter at breast height (DBH) of eucalyptus, paricá, balsa tree and teak, with age of: A) 19 months; B) 25 months. Vertical bars represent the mean standard error.



Of the four forest species evaluated eucalyptus and paricá had high potential for use in ICLF systems by the rapid initial growth in diameter and height (Fig. 1) and the morphology of the crown, there has been a decrease in the DBH with the increased number of lines, except in pure stand (at greater spacing between trees), for height, there not have a defined trend. Teak (Fig. 1) showed advantages for use in consortium with agricultural species, by slow growth and low shading until to 25 months. The balsa tree (Fig. 1) in the triple line arrangement was not considered suitable for use in integrated, by the broad development of the crown (4,5 m to 25 months).

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