

Regeneration of *Carapa guianensis* (Aublet.) Seedlings in Two Forest Types in Rio Branco, Acre, Brazil

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Extractive use of *Carapa guianensis* (andiroba), a multi-use species, provides an alternative for sustainable resource use. The objective of this study was to investigate the mortality of seedlings and saplings of *Carapa guianensis*, comparing two forest types (upland and occasionally inundated forest) at Embrapa's experimental forest reserve in Acre, Brazil. We established 400 m x 400 m plots within areas classified as upland and occasionally inundated forest. Within each plot, we nested 32 sub-plots measuring 10 m x 10 m. In March 2008, we inventoried all andiroba seedlings (height  $\leq$  1.5 m) and saplings (height  $>$  1.5 m and dbh  $<$  10 cm). Sub-plots will be visited monthly for 18 months to record survival. We found 360 individuals in occasionally inundated forest and 46 in upland. Data reflect respective seed production in these two areas. We counted more than twice as many seeds in occasionally inundated forest. However, we observed high levels of seedling mortality in the occasionally inundated forest; after one month, 52% of individuals (189) died compared to 1 seedling in upland forest. After 2 months, 63% of seedlings (230) had died in occasionally inundated forest and only 2 had died in upland forest. A fungus was observed on the majority of dead seedlings in occasionally inundated forest. We found more saplings than seedlings in the upland forest. Monthly inventories are occurring, but as a preliminary conclusion, more seedlings were observed in the occasionally inundated forest, but this environment also has higher mortality.

Key words: *Carapa guianensis*, regeneration, forest types

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