

**B-11: Enrichment planting trials for conversion of the buffer zone pine plantations around Sinharaja to productive mixed plantations**

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Four species that produce non-timber products were planted in 15 year old *Pinus caribaea* plantations. Treatment included 3 line thinnings of 2 consecutive rows of Pinus, 5 consecutive rows of Pinus and a control where no thinning was done. The treatment was repeated thrice. The experiment was located in the buffer zone plantation at the north western entrance of the Sinharaja MAB forest. Starting in June 1992, seedling survival and growth was monitored for 1 year of *Coffea arabica*, *Elletaria cardamomum* (domesticated), *Cinnamomum verum* and *Piper nigrum*.

After 1 year *C. arabica* showed the best survival (100%), followed by *E. cardamomum* (75%), *C. verum* (75%) and *P. nigrum* (60%). *Elletaria cardamomum* showed greatest growth in the widest strip thinnings and this was significantly taller than the other 4 species. In understorey conditions, all 4 species had significantly less growth increment than the thinned treatments.

Results suggest the importance of having guidelines for the introduction of non-timber producing species in pine plantations of the wet zone of Sri Lanka.

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