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Species Trials for Biomass Plantations in Hawaii: a first appraisal

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Fast-growing trees producing high-density wood are required to justify from an economic standpoint short rotation biomass plantations. Nine species trials were established on five sub-tropical sites on the island of Hawaii. Survival and growth of 27 introduced species and the native *Acacia koa* were appraised at one or more locations, for periods from 24 to 60 months. Performance varied greatly, within, and between all species tested. *Eucalyptus saligna* and *E. grandis* usually proved to be the species best adapted to well drained sites. Most failures and unsatisfactory performances related to harsh site conditions, such as low soil fertility, droughts, and high winds.

Retrieval Terms: *Eucalyptus*, *Albizia*, *Acacia*, species trials, biomass, subtropical, Polynesia, Hawaii.