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**Habitat Requirements and
Populationstructure of selected
Multipurpose-Tree Species
of Primary Rainforests
as a Basis for Integration
in Landrehabilitation
in the Rainforestation Farming System
on Leyte, The Philippines**

M.Sc.Thesis by Melvin Lippe, 2003

This work was funded by the Father and Son Eiselen
Foundation.

5. Conclusion

Cinnamomum mercadoi Vidal and its regeneration are able to grow in different habitats: in altitudes from 300 to 700 m a.s.l., in almost all relief positions, from low to steep slopes, in primary and secondary forests, successions, at pH levels up to 4,5 and GSC up to 50 %, within exposition south, east and west. Fruits are animal dispersed (assumed), mainly by birds, probably in a high percentage by fruit specialized hornbills, and thus results in a scattered occurrence of trees species and regeneration in the forest, with an exception for Cienda, where a concentration of regeneration was found in areas of high bird densities and especially nest wholes of two hornbill families.

Dillenia megalantha Merr. mother trees were found in altitude levels of around 650 to 800 m a.s.l in Cienda and Canbintan, similar features of the research areas have resulted in the assumption that *Dillenia megalantha* grows within areas of high precipitation of around 3000 mm/a. Within investigated research areas *Dillenia megalantha* tree species were able to inhabit almost all relief positions from river creeks and plain areas, to lower,- middle,- and upper slopes and ridges. Inclination levels varied between 5 to 55°, and shows together with exposition of south, east and west that species is able to grow in topographical different locations, but needs high precipitation levels or good water availability, e.g. provided in river creeks to grow and establish its regeneration.

Investigations has shown that *Cinnamomum mercadoi* growth performance of mother trees in Cienda were fairly better than in Canbintan, but no evidence was found if observation was influenced by different climatic and topographic features of the research areas, or has resulted due to the difference in investigated mother tree locations of primary rainforests stands in Cienda, and Secondary forest and Kainin fields in Canbintan.

Comparison of growth performance of *Dillenia megalantha* mother trees in Cienda and Canbintan found no significant differences in growth performance, and this fact has resulted in the assumption of similar climatic features of the mother tree locations in Cienda and Canbintan.

Regeneration analysis of *Cinnamomum mercadoi* and *Dillenia megalantha* found beside differences in fruit and seed dispersal, a general tendency of regeneration to establish below forest canopy. It is thus assumed, that both species are belonging to climax tree species (Whitmore, 1984, 1995, Whitten 1987, Richards, 1996). Climax

tree species germinate and establish below forest canopy and seedlings are shade-tolerants (Whitmore, 1984, 1995).

In most young B storey trees, which start life as seedlings in the shade, when the first few foliage leaves have been produced, growth is very slow for a long time. It is not until the young tree is "released" by the formation of a gap in its neighbourhood, or if it eventually succeeds in growing tall enough for its crown to be no longer overshadowed by its neighbours, that the growth in height might then be relatively fast for years (Richards, 1996).