

Abstract

The objectives of this study were (i) studying for management practices to increase bamboo productivity and quality, and (ii) developing methods of rattan product processing.

The results showed that (i.i) there were 23 species of bamboo had been planted and utilized in 7 highland areas. (i.ii) The growth rate of bamboo cultivated by seeding was highest in Pai Leang (*Bambusa multiplex* (Lour.) Raeusch.) with average maximum trunk 17.5 mm per month whereas the maximum tillering was found in Pai Hok (*Dendrocalamus brandisii* (Munro) Kurz.) with 1.96 tillers per month. (i.iii) The cultivation management by thinning, water and fertilizer applications resulted in better growth of Pai Yok (*Bambusa oldhamii* Munro.), Pai Bong Wan (*B. cf. burmanica* Gamble.) and Pai Sang Mon (*D. sericeus* var. *latifolius* A. Camus.) by mean of average maximum trunk were 5.8, 4.6 and 7.5 mm per month, respectively. The average maximum tillering of those species were 0.62, 0.44 and 0.46 tillers per month, respectively. (i.iv) The dried bamboo shoots was the most appropriated processing by peeling, washing, sliced into strips, blanching in boiling water for 5 minutes and drying. Dried bamboo shoot was yellow, odorless, and no moisture. (ii.i) The 5 species of native rattan were suitable for shoot production and 9 species of native rattan were suitable for cane production in highland. (ii.ii) The post harvest handling of rattan cane in 3 species namely, Wai Nam Khao (*Calamus floribundus* Griff.), Wai Faad (*Daemonorops tabacina* Becc.), and Wai Sai Kai (*C. kerrianus* Becc.) after storage for 4 months (April), the management by drying and peel off the skin had lowest moisture content by 2.9, 0 and 0, respectively, whereas the highest moisture content was found in non-drying and not peel off the skin after preservation for 7 months (July) by mean of 18.8, 17.3 and 14.4, respectively. (ii.iii) The process of rattan product development including design forming products, modeled products, product creation, and tie-decorated with rattan skin strips. Both products are available from the master and the more free-form itself.