

Chalermpron Rupsung 2011: Analysis of Sustainable Utilization of *Lepironia articulata* Yields in Khuan Khaeng Swamp Forest Area, Kumpae Village, Cha-uat District, Nakhon Si Thammarat Province. Master of Science (Forest Resource Management), Major Field: Forest Resource Management, Department of Forest Management. Thesis Advisor: Mr. Pasuta Sunthornhao, Ph.D. 94 pages.

Objectives of this study were to determine the relationship between socioeconomic factors and demand for *Lepironia articulata* as well as the productivity potential of *Lepironia articulata* in Khuan Khaeng Swamp Forest, Kumpae Village, Cha-uat District, Nakhon Si Thammarat Province. The data was collected by interviewing the relevant key informants coupled with forest inventory by establishing temporary sample plots with the size of 40x40 meters. The using statistical methods for the hypothesis test were correlation test. Finally, in order to assess the *Lepironia articulata* productivity potential, the comparison between its demand and supply was carried out.

Results of the study indicated that there were only two socioeconomic factors namely the quantity of household use and quantity of sale were significantly related to the demand for *Lepironia articulata*. The annual supply and demand for the product were 1,130,554.43 and 14,782.26 kilogram respectively. thus, this visualized that the supply of *Lepironia articulata* was much higher than the demand. Hence, in order to sustain the *Lepironia articulata* forest area the appropriate management plan should be immediately formulated. Furthermore, the new design of *Lepironia articulata* products as well as the effective marketing strategy with intensive practise will be needed for sustaining all natural forest resources in this swamp forest.

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Thesis Advisor's signature