

Ex situ Genetic Conservation of *Lophopetalum multinervium*



ITTO Project
PD 106/01 Rev, 1(F)

Introduction

The tropical rain forest harbors enormous biological diversity essential for the planet ecosystem. Unsustainable practices of forest utilization have caused serious biological, ecological and socio-economical impacts on the natural resources. To prevent permanent losses conservation of genetic resources is urgently needed.

Lophopetalum multinervium, an economically important part of the rain forest ecosystem has been heavily logged. The species that is naturally occur in parts of Sumatera and Kalimantan is considered in serious loss of genetic diversity due to excessive logging. The species has been selected as a model for *ex situ* conservation under the ITTO Project PD 16/96 Rev. 3 (F) and PD 106/01 Rev.1 (F).

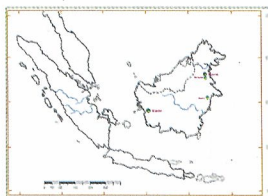
The Project was designed to address the issue of conserving genetic resources of two ecologically distinct sites namely well drained and swampy sites that dominate the landscape of tropical rain forest of Indonesia. One model species for each site was selected for the conservation and breeding works, namely *Shorea leprosula* and *Lophopetalum multinervium* respectively.

Over the period of the two projects, which started from 1998 to 2005, a total of 4 populations of *Lophopetalum multinervium* have been surveyed. A total of wildlings and seedlings raised were 24800 plants. Subsequently, those plants have been established in conservation plots in 2 locations in West Kalimantan (Mandor and Segedong).

The *ex situ* conservation plot of *Lophopetalum multinervium* is strategically important as this is the only genetic conservation plot exist in the country. The populations of the species is fast disappearing due to conservations of *Lophopetalum multinervium* forest to agric use.

Collection of genetic materials

Seeds and or wildlings for the conservation plots were collected from natural populations across Kalimantan. In case when seeds were not available, wildlings were collected.



Seed and wildlings collections

Pimping
Rawa



Seputuk

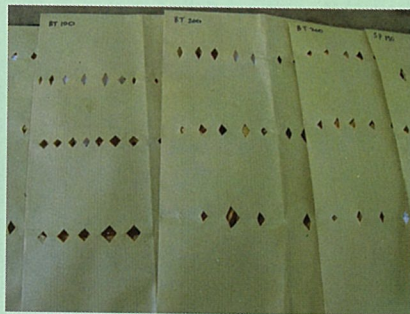


Betayau



Berau

Packing



Transportation of wildlings and seeds



Raising the seeds



Soaking in water



Media treatment



Arrangement of seeds in seed bed



Nursery maintenance



Locations of *Ex situ* Conservation Plot

A total of 70 ha *ex situ* conservations plot has been established in mandor (2003) and Segedong (2005) in West Kalimantan



Increasing Genetic Diversity of *Shorea leprosula* and
Lophopetalum multinervium for breeding and genetic improvement

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Growth Performance

