Overview

- Eucalyptus development in Thailand
- Utilization of eucalyptus wood
- Mass propagation of eucalyptus
- Planting and management
  - Site preparation
  - Planting method
  - Weeding and maintenance
  - Felling methods and stump management
  - Pests and diseases
- Conclusions
Saline soil in NE Thailand

Total area of Thailand is about 51.2 mil.ha, 20% is low productive/problem land which is usually used to grow eucalyptus.
Old *E. camaldulensis* plantation since 1980 – 1990

Seed sources from Petford, Gibb river, Katherine, Australia
Severe damaged from eucalyptus gall wasp in 2004

Over 50,000 ha was damaged from gall wasp in early and sapling stage caused a halt of eucalyptus planting.
Hybrid and clones development against gall wasp
Gain trial of new clones for biomass energy

4 main species are used for improvement/breeding program; *camaldulensis, urophylla, pellita, brassiana*. 
Utilization of eucalyptus wood

Regenerated Cellulose
Shoot cutting is currently used for seedling mass propagation, 10-50 million seedlings/year
Eucalyptus planting in dry season, on rice paddy bun
Eucalyptus with rice and cassava model
Weeding methods

Man power

Mower backpack

Mower with small tractor
Fire impact and fire protection
Felling methods
Eucalyptus chip mill/paper mill/power plant
Stump and coppices management
Utilization of eucalyptus wood

Traditional charcoal kiln

0.34-2.8 USD/pole
Pests and diseases

- Gall wasp
- Leaf folders
- Termite
- Fungus group
Nowadays, eucalyptus play an important role in pulp and paper industry in Thailand. Eucalyptus woodchip is exported to Japan, Taiwan and China, export value is more than 300 million USD annually.

There are big paper and trader companies in Thailand, doing whole supply chain from genetic improvement, seedling production, plantation and extension to farmers (contract farming).

Most of plantations are located in NE and E, shoot cutting is used for mass propagation seedling, 2x3 m is the most popular spacing which will provide 125 GT/ha in 5 years rotation.

Management techniques relies on manpower which is high cost and becomes trouble in current situation with lack of labor. Therefore good silvicultural practice with mechanization is needed.

Eucalyptus plantation is increase regards to positive market and policy of biomass and bio-refinery especially bio-power in the country and regional markets.
Thank You

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