

**Mealy Bug Attack on Introduced Species
Rain Tree (*Albizia saman* (Jacq.) F.
Muell.) and Control in Myanmar**

Wai Wai Than

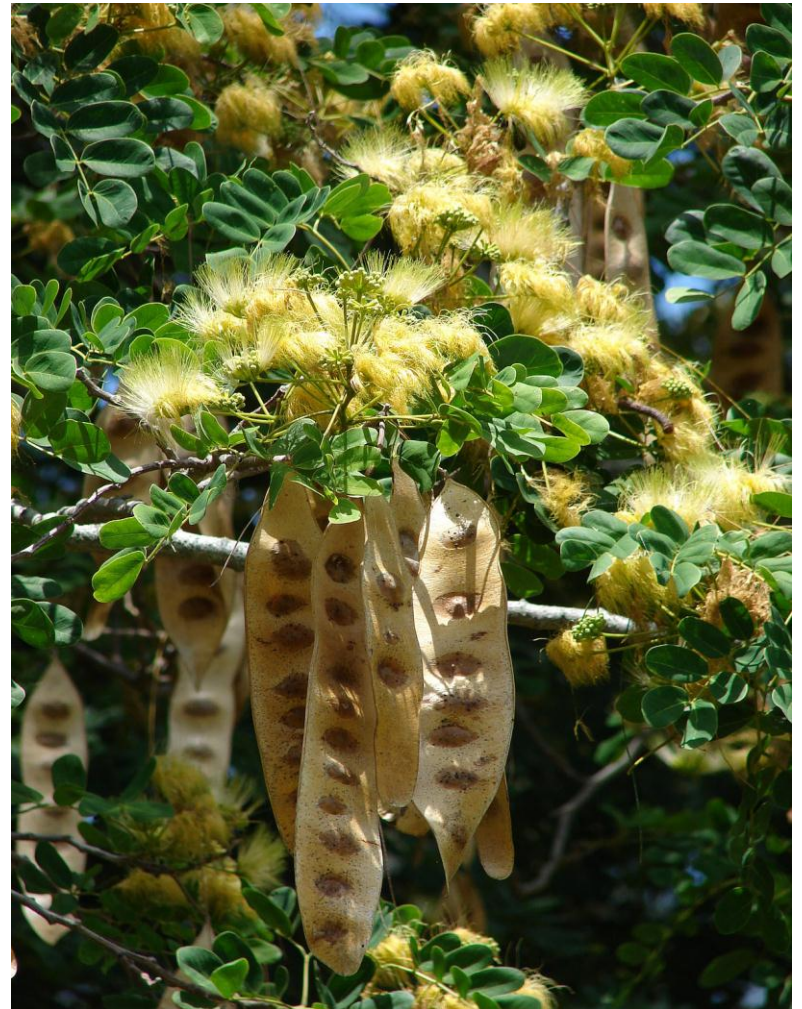
APFISN (2005~2017)

MYANMAR

Introduction

- Scientific Name:
Albizia lebbek(L.) Benth.
Mimosaceae
- Myanmar native species ;
- Myanmar name-Kokko

FRI. 2003. A checklist of the Trees, Shrubs,
Herbs and Climbers of Myanmar.



Albizia saman (Jacq.) F. Muell.

syn. Samanea saman (Jacq.) Merr .

Common Name: Rain Tree

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- Family - Mimosaceae ;
Fabaceae
- Native - Central & South
America
- Introduced - Hawaii, Asia, S E
Asia
- Purpose : Road side tree,
Shade

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Attack & Symptoms

- Mealy Bug attack in the dry season
- Mealy Bug can be found on the petiole and leaves
- Whitish & Pinkish waxy wool
- Second infection- sooty mould
- Leaf Yellowing
- Leaf Defoliation
- Branch Drying and Dieback



Mealy bugs

- Insect in the family Pseudococcidae
- Mealy bugs are often found in clusters on petioles and leaves.
- Pests as they feed on plant juices and also act as a vector for several plant diseases.
- Excrete a sweet solution which encourages the growth of fungus sooty mould
- Reduces photosynthesis further weakening the tree.
- In Asia including Myanmar, mango mealy bug is a serious problem considered as a major threat in the export of Mango.

Dieback of Rain Trees in Yangon





Causes

- Climate Change- Temperature Rising,
Low Rain Fall, Drought

- Road Side Tree

City

Population, Motor vehicle, Rubbish



Air Pollution, Soil Pollution, Water Pollution

- May be a prone of mealy bug, susceptible
- Transport from where to where and dispersion by wind
- Planting by spacing along road side that roots touching each other would be transmission of infestation.

Control

- Selected 9 trees from 3 sites as an example testing
- Avoid Strong Toxic insecticide for traveller & Pedestrian
- **Pressure Pump** for spraying the canopy (Neem Oil + Water + Detergent powder)
- **16 gallon containers 2** for mixture (Water and Insecticide; Neem oil +water)
- **Mask, Gloves, Tools, Workers**

Treatments

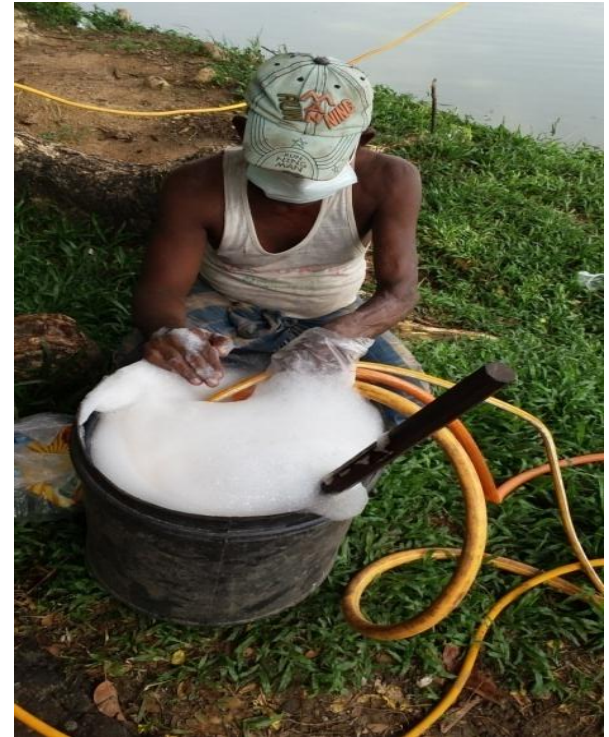
May, 2017

Treatment 1.

1. Water 10 gallons +
Neem Oil 100cc
2. Water 6 gallons +
Detergent powder
200gm

Plus 1 & 2

Spraying the leaves by
using pressure pump



Treatment 2

1. Digging the holes around the base of tree
 2. Water 10 gallons + systemic insecticide 100 cc (Fertera or Cyclone or Danadin or Chlorocyrifos)
 3. Water 6 gallons + Detergent powder 200gm
Plus 2 & 3
- Pouring the mixture into the holes

Should be applied early summer and in the summer prior infection, 2 times



Challenges

- Very big and high trees
Girth about 12 ft
- Ht. 70 ft
- Branching
- Thick Canopy
- Danger for climbing and spraying
- Blocking often the pipe of pressure pump
- Labors
- Pedestrian
- Small tree can be applied easily
- Need to check again after treatment 6 months later

Approach

Should be studied and researched-

- Soil pollution
 - Air Pollution
 - Water pollution
 - Meteorological Conditions (rf , temp, humidity, etc.)
 - Better Biocontrol than applying the pesticides.
 - Controls need to minimize impact on non-target organisms.
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- More research is needed to work out exactly how this approach could be used to control it and to help ensure survives for future generations.

References

- FRI. 2003. A checklist of the Trees, Shrubs, Herbs and Climbers of Myanmar. Department of Systematic Biology & Botany, National Museum of Natural History. Washington DC. USA. Smithsonian Institution.
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You can visit the site: www.gbif.org.

GRIIS :The Global Register of Introduced and Invasive Species

- Shyama Pagad

Program Officer

IUCN , NZ

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Species Specialist Group

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2015-2017 -2 years arrangement

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2017.

CHECKLIST DATASET | REGISTERED 28 SEPTEMB...

GRIIS Checklist of Introduced and Invasive Species - Myanmar

Published by [Invasive Species Specialist Group ISSG](#)

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DATASET TAXONOMY PROJECT STATS

The Global Register of Introduced and Invasive Species (GRIIS)

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