



# **Inventory and Assessment of Superior Mother Trees of Mangrove Species in Pagbilao Mangrove Experimental Forest (PMEF) , Quezon, Philippines**

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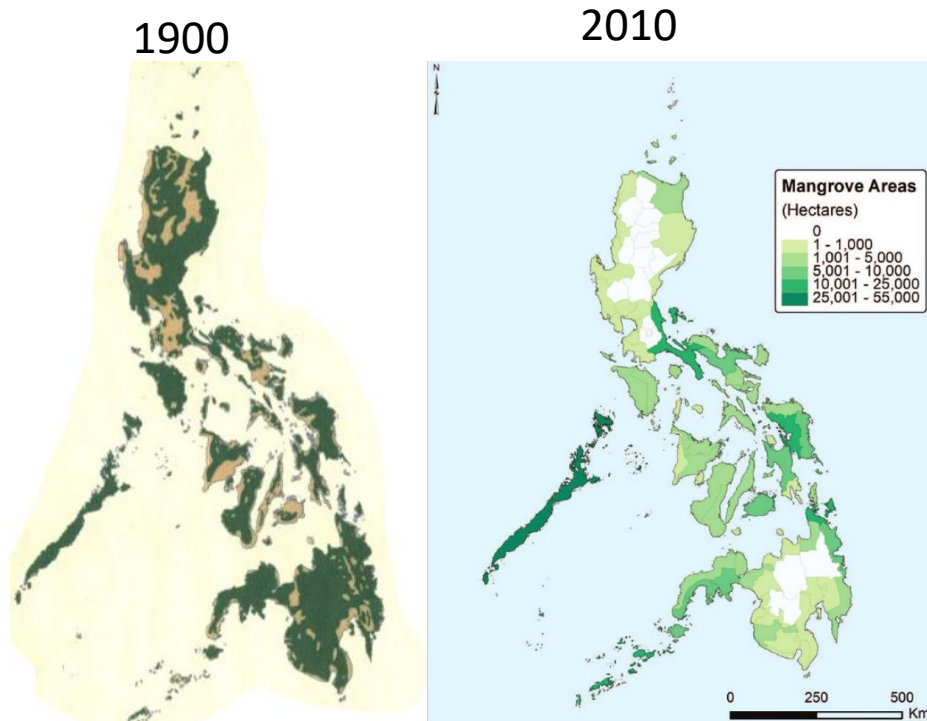
**Urban and Biodiversity Research and Extension Center**  
Ecosystems Research and Development Bureau  
Department of Environment and Natural Resources



# Why we do it?

- Mangrove forests are declining at an alarming rate

➤ *Almost 70% of the mangroves in the Philippines have been destroyed since 1920s*



- There is a need to reforest the denuded mangrove area to sustain its productivity and genetic resources

## *IUCN status*

- 2 near threatened species

Lythraceae | *Sonneratia ovata* Backer

Primulaceae | *Aegiceras floridum* Roem. and Schult.

- 1 endangered species

Malvaceae | *Camptostemon philippinensis* (Vidal) Becc.

- We need high-quality planting materials



# How did we do it?

- Each mangrove stand was assessed using the criteria developed by the DENR- ERDB.



- An inventory survey was conducted in the 145-ha Mangrove Experimental Forest

29 true mangrove & 19 associate species



Scoring system

- 3-Good
- 2-Fair
- 1- Unacceptable

- Identified Superior Mother Trees are geo-tagged and label



# RESULT

□ A total of 115 Individual Plus Trees(s)/Mother Trees were established

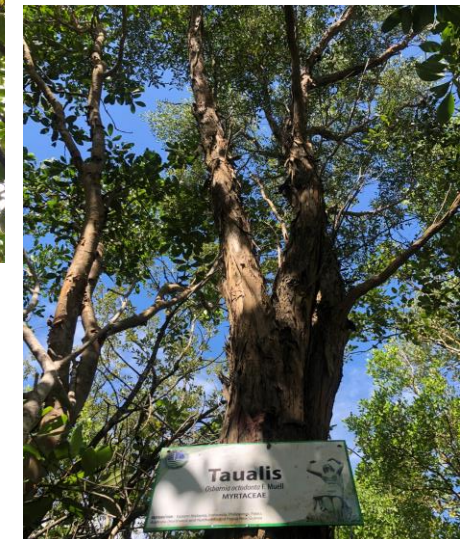
13 families

24 species

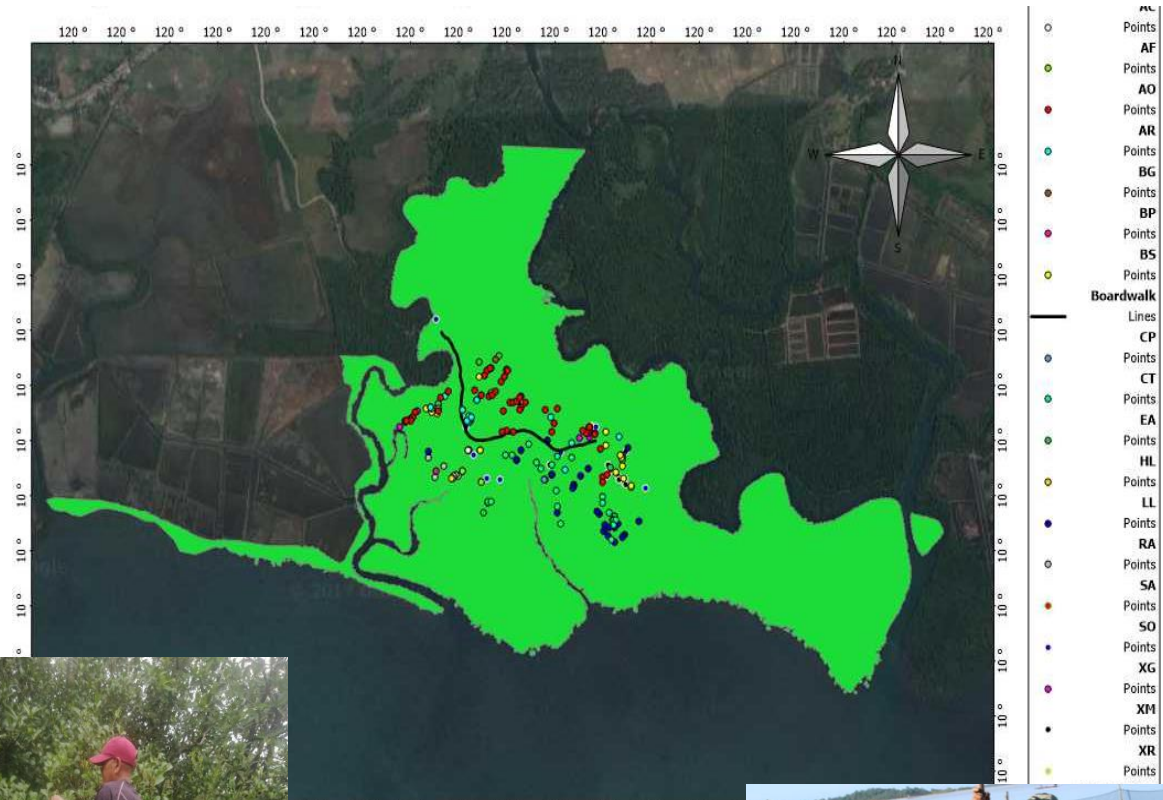
115 individuals

## List of Established IPTs

1. Api-Api (*Avicennia officinalis* L.)
2. Bungalon (*Avicennia Marina* (Forssk) Vierh)
3. Pi-api (*Avicennia marina* Var. *Rumphiana* (Hallier f) Bakh
4. Langarai (*Bruguiera parviflora* (Roxb.) Wight & Arn, ex Griff.)
5. Busain (*Bruguiera gymnorrhiza* (L.) Lam.)
6. Pototan (*Bruguiera sexangula* (Luor) Poir.)
7. Bakauan lalaki (*Rhizophora apiculata* blume)
8. Bakauan babae (*Rhizophora mucronate* Lam.)
9. Bakauan bato/bangkau (*Rhizophora styloza* Griff.)
10. Tangal (*Ceriops tagal* (perr.) C.B Rob)
11. Malatangal (*Ceriops decandra*)
12. Tabigi (*Xylocarpus granatum* J. Koenig)
13. Piagau (*Xylocarpus moluccensis* ) Lam M. Roem)
14. Kulasi (*Lumnitzera racemose*)
15. Tabau ( *Lumnitzera littorea* (Jack Voigt L.)
16. Pagatpat (*Sonneratia alba* Sm)
17. Pagatpat baye (*Sonneratia ovata* backer)
18. Saging-saging (*Aegiceras corniculatum* (L.) Banco)
19. Tinduk-tindukan (*Aegiceras floridum* Roem. & Schult)
20. Dungon Late (*Heritiera littoralis* Aiton)
21. Taulis (*Osbornia octodonta* F. Muell)
22. Gapas-gapas (*Camptostemon philippinenses* S. Vidal Becc.)
23. Nilad (*Scyphiphora ydrophyllaceae* C.F. Gaertn)
24. Buta-buta (*Excoecaria agallocha* L.)



# Geo-tagged Mangrove IPTs



Established IPTs serve now as sources of germplasm of the 24 mangrove species

Pagatpat baye (*Sonneratia ovata* backer) seeds



3,000 quality planting stocks production per quarter



Monitor and assess regularly



Planting materials use in plantation establishment and enrichment planting

# THANK YOU FOR LISTENING!



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