

INTERNATIONAL INTERNSHIP BOGOR BOTANIC GARDENS, INDONESIA

from 29th January to 09th February 2018



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In English (*headwords only*)

Monday - 29th January 2018

Briefing and also seeing slide show of presentation about the Bogor Botanic Gardens. And then we discussed about our apprenticeship in Germany. Afterwards we inspected some plant products like seeds, fruits, food and the common soil types for potting plants in yard. We also got our label for being officially an intern.

In the final hour visiting the library, we looked through some books of Indonesian plants.

Tuesday - 30th January 2018

We visited the Herbarium and we saw many different conserved plant material like: seeds, fruits, plants and wood. There we could get a chance to know how to press plants for mounting on herbarium. Herbarium itself consists of four part process, that like collecting the plant material, pressing, drying and mounting.

Afterwards we went to the Rare Plant Collection to see some interesting and exotic plants. we also did observe how to do air layering and we could see the *Rafflesia patma* just starting to pop out of the roots, in any case there is lot of rare plants, just like *Kopsia fruticosa*, and *Vatica granulata*.

Wednesday – 31st January 2018

Visiting nursery for collection plants. I saw and learned how they absolutely take care of the collection plants before it will be planted. The new nursery already renovated, looks like more space for many seedling and another collection plants.

And then visiting seed bank, there are lots of seed viz. 108 family, 320 genus and 492 species with total sum of seeds ca. 1,9 Million.

Thursday - 1st February 2018

Seeing the registration process of new collection plants before planting the plants. Learning to get data collection of new collection plants, it necessarily need to gathering and measuring information from a variety of sources to get a accurate and complete database. Labelling the new collection plants is a important part or a must. Therefore it

can help to identify the plant. Things to include on label would be the name of collector, date, plant name, and place where it was found.

Friday - 2nd February 2018

Free time

Monday - 5th February 2018

We saw how the registration for new plants works. By using an online system and doing it manually.

Afterwards we used a software called ArcGIS to place some points onto a map to make coordinated plant maps.

Tuesday - 6th February 2018

On Tuesday we visited the Orchidarium to plant some nice ornamental plants in our own garden bed under thematic garden unit

We arranged the plants like we do in Germany.

Wednesday - 7th February 2018

We visited the Orchid collection and we saw there many different beautiful orchids.

We learned how to attach orchids to a hanging piece of tree fern fiber.

At the same day we visited the tissue culture laboratory where we saw how orchid seeds are cultivated in a culture medium.

We got the chance to try transplanting orchids into a fresh jar with culture medium.

The workspace had to be clean and sterile, so no fungi or disease will contaminate the medium or plants.

We also saw how the acclimatization of the finished orchids worked.

1. The jar will be opened and filled with water
2. Orchids and cultivation medium will be taken out of the jar
3. Cleaning the orchid roots from cultivation medium and dead plant material

4. Potting the orchids into tree fern fiber and charcoal or attach the orchid with peat moss onto tree fern fiber
5. Let the orchid acclimatize in a shaded warm place with high humidity.

Thursday - 8th February 2018

Planting Palms for new collection in front of the LIPI institute with 1st maintenance collection unit.

Visiting to learn how to make compost or what can be composted...

1. Leaves and grass are used for compost.
2. Organic material will be hacked and piled up
3. Adding a special mixture with microbes to fasten up composting, 1 pack for 500kg compost.
4. Fermenting
5. Filtering inorganic material out (max. 2% inorganic material in final product)
6. Adding nitrogen, phosphorous, IAA (Indole-3-acetic acid), Cytokinin, Gibberellin and Biokontrol for improving compost quality
7. Drying and sort by grain size
8. Fill up to product bags in 5kg and 12kg bags or using directly in the Botanic Garden Bogor itself.

Afterwards we used a sonic tomography tool called Picus3 to detect if trees are hollow inside or have a pest inside like termites. It started to rain so we had to move the tool inside and did the testing with a trunk for calibrating the device.

Friday - 9th February 2018

Sport in the morning.

Visiting the Lake at Eco Park Cibinong as a part of Bogor Botanic Gardens. We saw many aquatic plants there and a lot of small trees. Afterwards we visited a private nursery with many Tillandsia and ornamental plants.

The price of single plants are almost the same like in Germany.

behind the scenes:



Herbarium.





Reintroduction.



Nursery.





Seed bank.



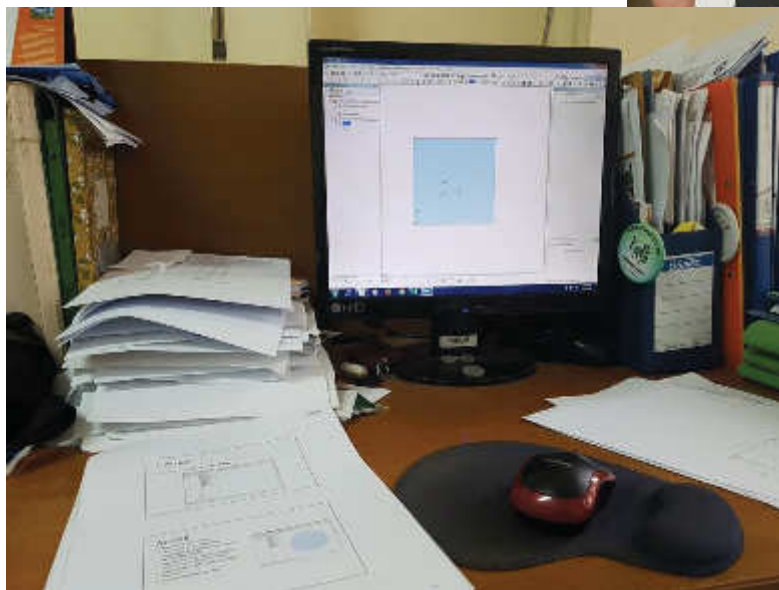
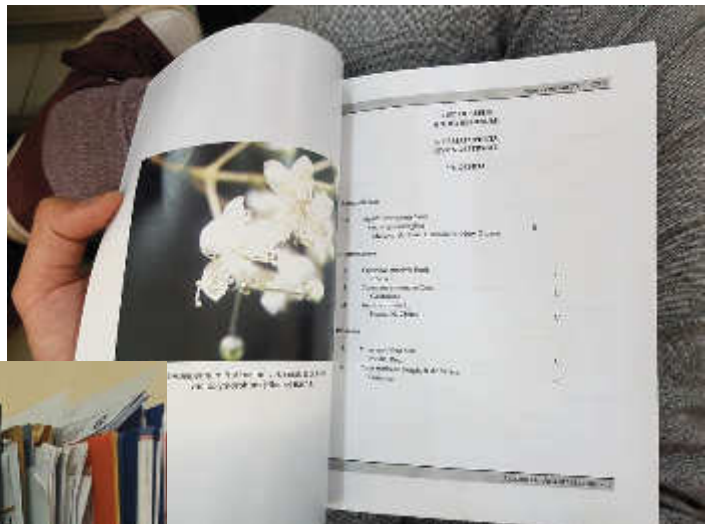
MAP OF INDONESIA
With four Botanical Gardens



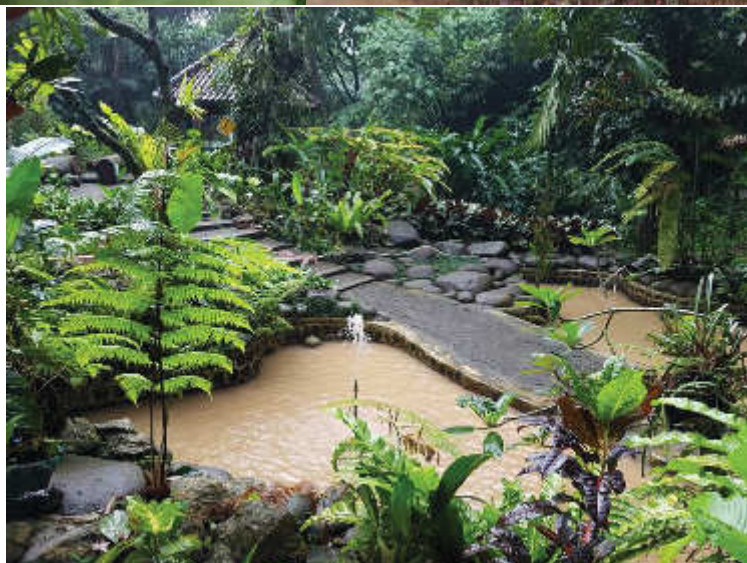
Source of map:
http://www.lib.utexas.edu/maps/middle_east_and_asia/indonesia_adm_2012.jpg

Botanical Gardens of Indonesia

Registration & team.



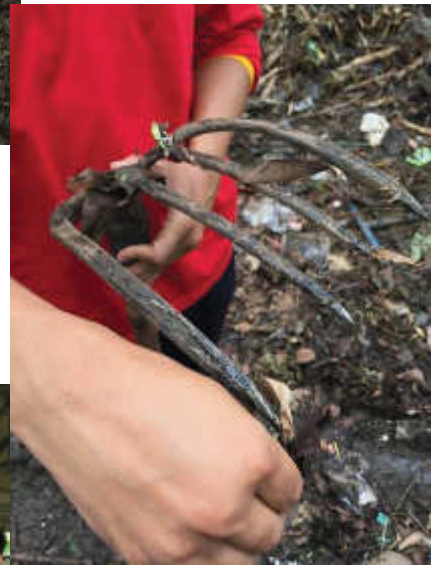
Orchids team.





Laboratory.





Compost.





Orchid House.





*Sonic
Tomograph.*

