

Singapore Botanic Garden

This was an
AWESOME field
trip. We have got
an AWESOME
experience! :)

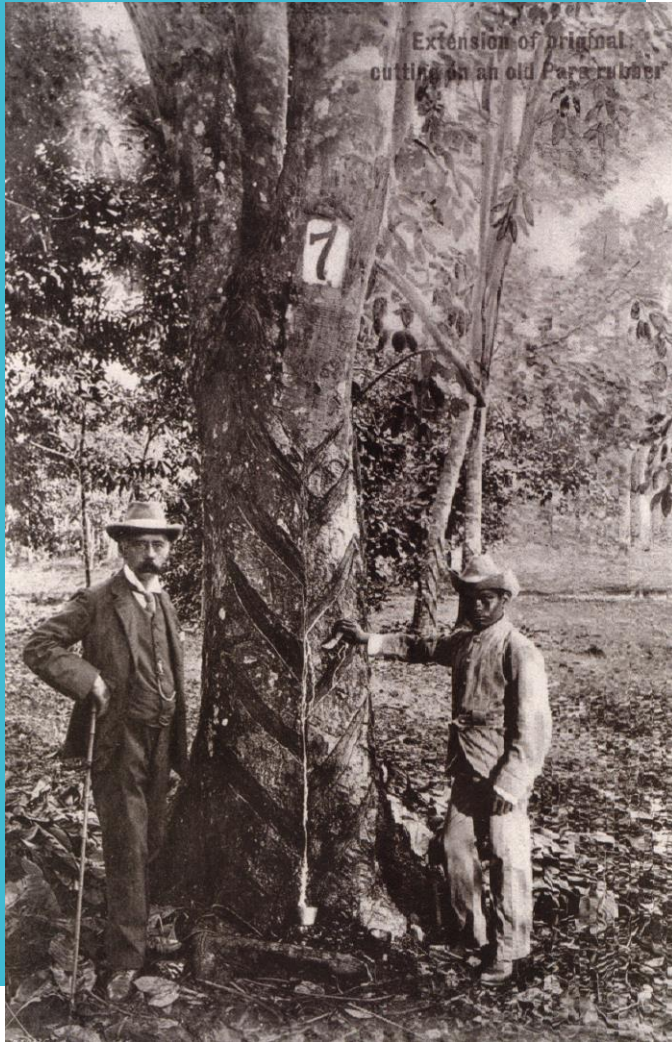
Group 3 – 36. But Tsin Lam, Veronica
37. Chan Yuk Yi, Yola
38. Cheung Hoi Yan, Goretti
39. Lee Hoi Ting, Ivy
40. Ng Yan Yu, Renee

Basic Information

- Singapore's first UNESCO World Heritage Site
- Established by 1859
- Important rubber and orchid research centre



Role of Botanic Garden



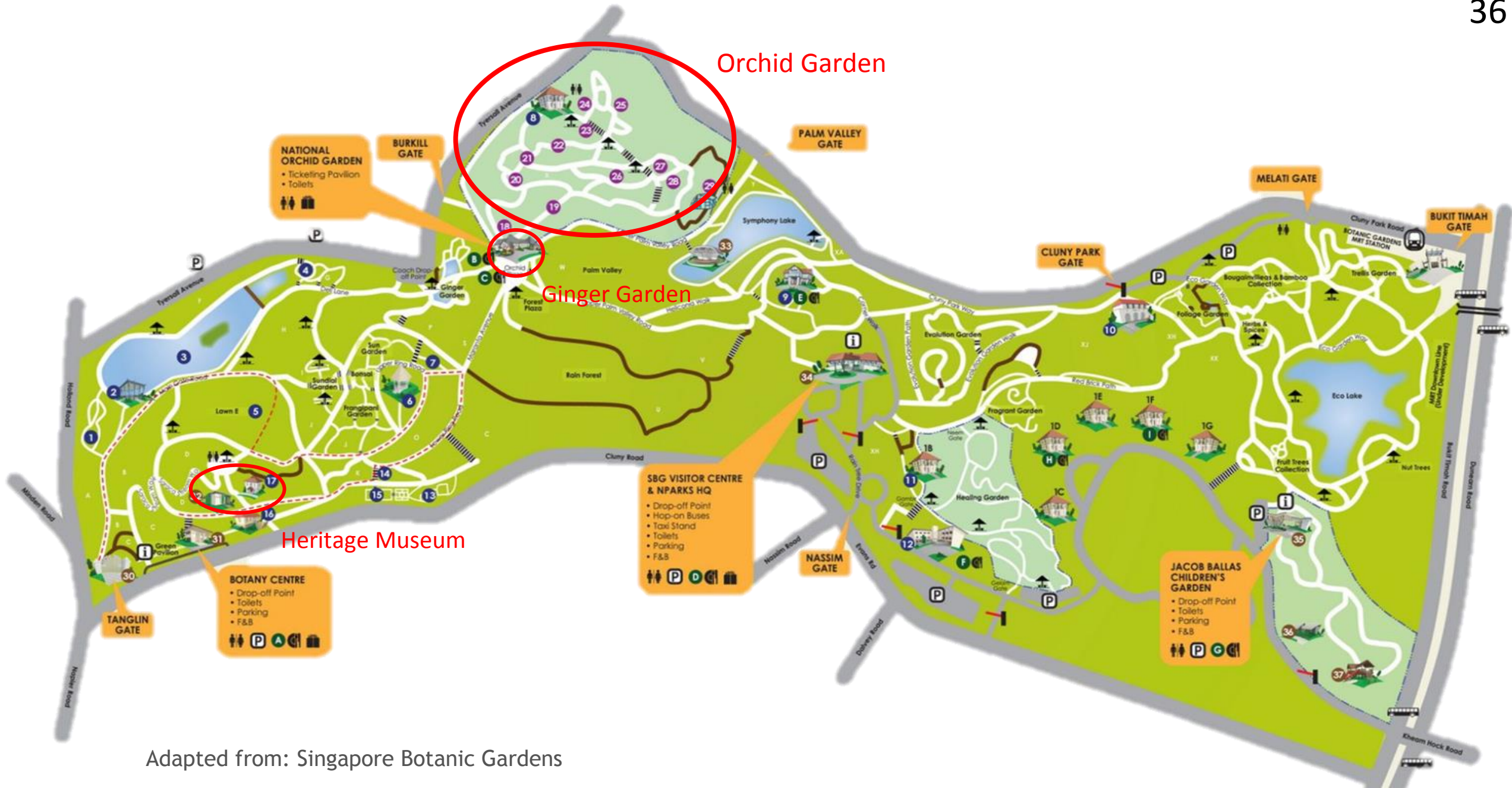
Past:

- Foster agricultural development
- Head the research of rubber cultivation

Nowadays:

- Important resource centre for plant research and conservation in South East Asia



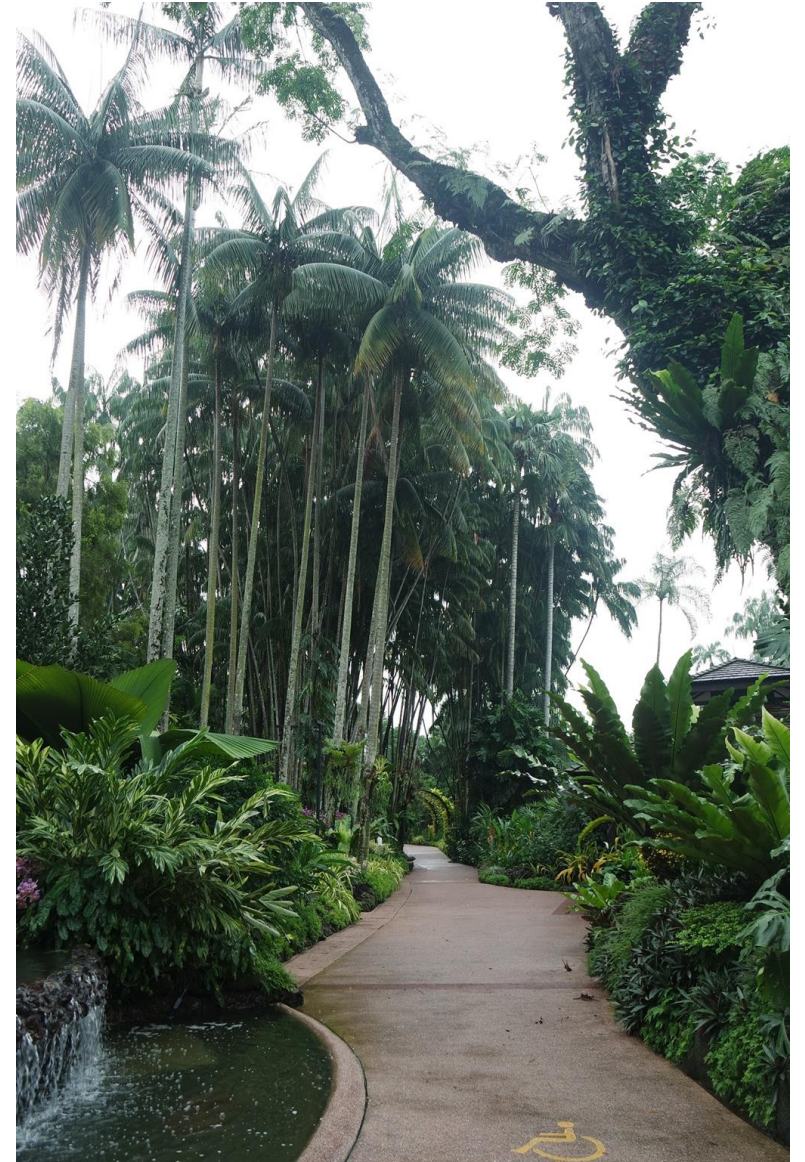


Adapted from: Singapore Botanic Gardens

National Orchid Garden

National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- VIP Orchid Garden



Tan Hoon Siang Mist House

National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- VIP Orchid Garden



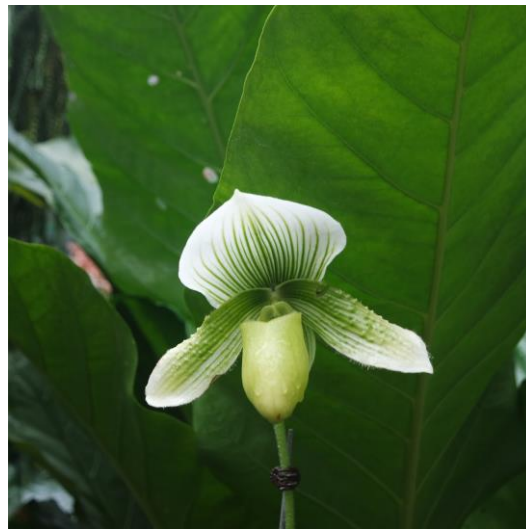
The Mist House

Rare orchid cultivars from the Gardens' extensive collection are displayed in this mist house. These award-winning specimens are set amidst a lush setting of tropical foliage and cultural artifacts from centres of orchid distribution around the world.

National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- VIP Orchid Garden

- Misting
- Scented Orchids Corner



Cool House

National Orchid Garden

- Tan Hoon Siang Mist House
- **Cool House**
- VIP Orchid Garden



National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- VIP Orchid Garden

- montane tropical forest
- cool air, torrent, mist



VIP Orchid Garden

National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- VIP Orchid Garden



National Orchid Garden

- Tan Hoon Siang Mist House
- Cool House
- **VIP Orchid Garden**



Other Facilities

1) Educational Display

- Boards/ Signage
- Botany Centre

2) Heritage

- Holtum Hall
- Prisoner-of-War Brick Steps
- Bandstand

3) Attraction

Other Facilities

1) Educational Display

- Boards/ Signage

- Botany Centre

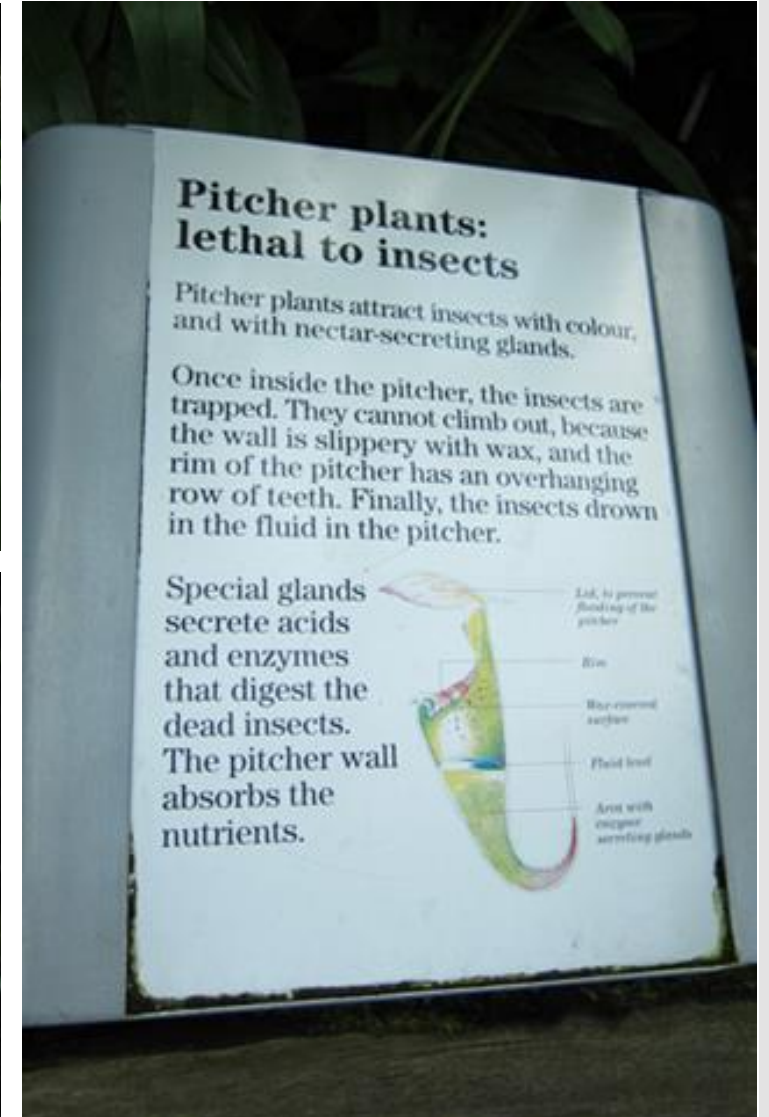
2) Heritage

- Holttum Hall

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Other Facilities

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2) Heritage

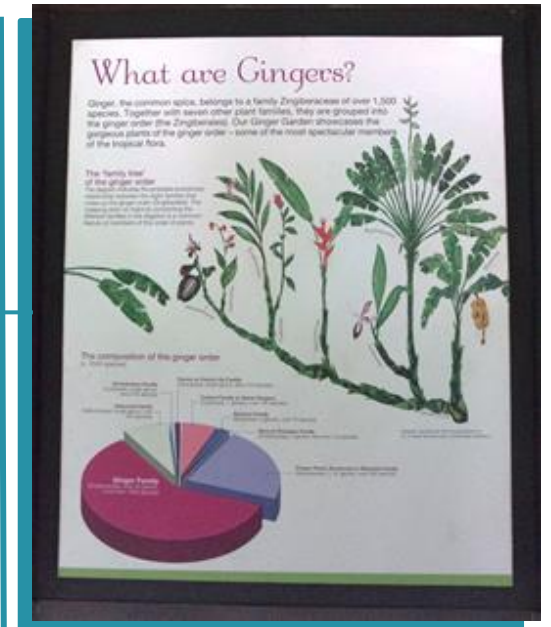
- Holttum Hall

- Prisoner-of-War Brick Steps

- Bandstand

3) Attraction

- Well-planned



Other Facilities

1) Educational Display

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- **Botany Centre**

2) Heritage

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- Prisoner-of-War Brick Steps
- Bandstand

3) Attraction

Library of Botany and Horticulture

>40,000 Rare books and journals displays...

Orchid Breeding & Conservation Biotechnology Laboratory



Other Facilities

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2) Heritage

- **Holtum Hall**
- Prisoner-of-War Brick Steps
- Bandstand

3) Attraction



Adapted from: <http://www.littledayout.com/2013/12/03/singapore-botanic-gardens-sbg-heritage-museum-and-cdl-green-gallery/>

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3) Attraction

Golden Shower Arches



The Shaw Foundation
Symphony Stage



By Walter Lim -

<https://www.flickr.com/photos/coolinsights/4893367947/>, CC BY 2.0,

<https://commons.wikimedia.org/w/index.php?curid=44075910>

Other Facilities

1) Educational Display

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Brief Summary



How does Singapore Botanic Garden protect the biodiversity?

- 1) Regulation
- 2) Public Education
- 3) Scientific Research

Regulation

1) Regulation

2) Public Education

- Notice
- Activities
- Heritage Museum
- Library

3) Scientific Research

- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG

- limit the effect of human activities



**NO MOTORISED
VEHICLES**



**NO CYCLING, SKATEBOARDING,
SKATING, OR SCOOTERING**



**NO FLYING OF KITES AND
NO PLAYING OF FRISBEES
OR BALL GAMES**



**NO PLUCKING
OF PLANTS**



**NO FEEDING
OF BIRDS**

1) Regulation

2) Public Education

- Notice
- Activities
- Heritage Museum
- Library

3) Scientific Research

- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG

- Notice about species



Public Education

1) Regulation

2) Public Education

- Notice
- **Activities**
- Heritage Museum
- Library

3) Scientific Research

- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG



Outdoor guided tour



Workshop in creating miniature garden



Race Against Time - Science Behind a Botanic Garden Tour

Start Date :Saturday, 25 June 2016
End Date :Saturday, 25 June 2016
Time :10am - 10.45am
Venue :Visitor Services Counter, Tanglin Gate
Contact :6471 7138

Garden tour

1) Regulation

2) Public Education

- Notice
- Activities
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- Laboratory
- Herbarium

4) Comparison: HKZBG

Heritage Museum



Adapted from: <http://visitcitysingapore.com/singaporebotanicgardens/>

<http://www.littledayout.com/2013/12/03/singapore-botanic-gardens-sbg-heritage-museum-and-cdl-green-gallery/>

Public Education

1) Regulation

2) Public Education

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4) Comparison: HKZBG



Displayed Artefacts

Public Education

1) Regulation

2) Public Education

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- Laboratory
- Herbarium

4) Comparison: HKZBG

1912-1925
HENRY BURKILL
DIRECTOR
Developed taxonomic study, making the Gardens independent of the Royal Botanic Gardens at Kew and Calcutta.

1925-1949
ERIC HOLTUM
DIRECTOR
Initiated the orchid breeding programme which eventually resulted in a thriving orchid industry. Revamped the Gardens' horticultural collections and displays.

1929-1945
E.J.H. CORNER
ASSISTANT DIRECTOR
Specialised in mycology, the study of fungi. Proposed the "Durian Theory" - a hypothesis about the evolution of angiosperms (flowering plants).

1942-1945
KWAN KORIBA
DIRECTOR
Studied effects of climate on plants, especially Malayan trees, which resulted in the scientific paper *Periodicity of Tree-growth in the Tropics*.

Public Education

1) Regulation

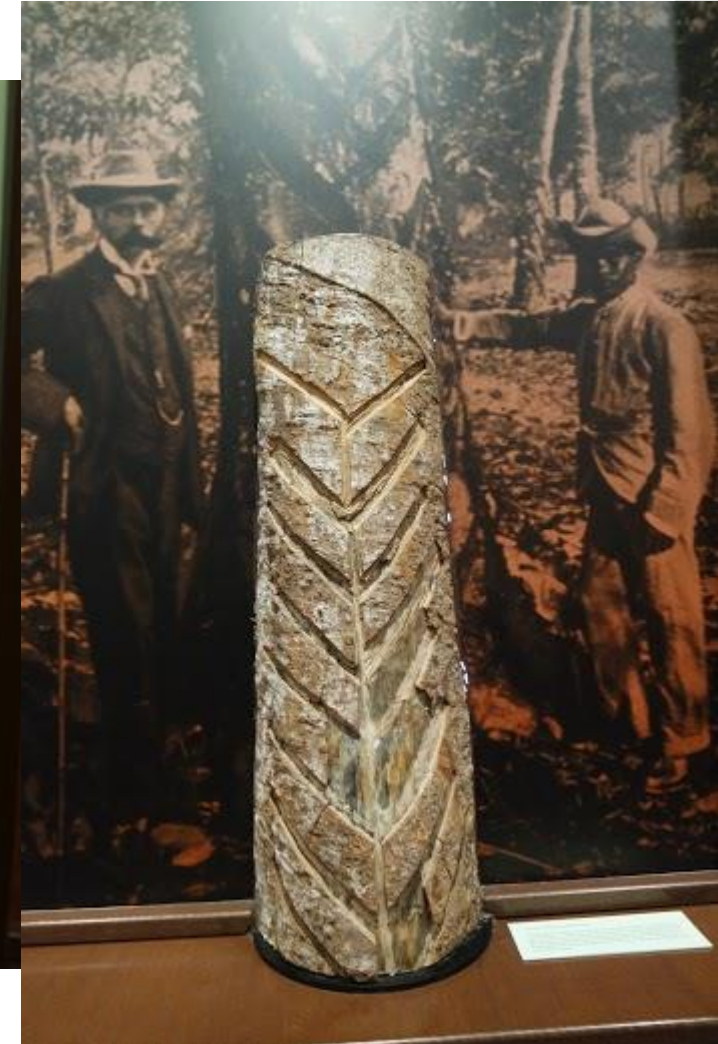
2) Public Education

- Notice
- Activities
- Heritage Museum
- Library

3) Scientific Research

- Library
- Laboratory
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4) Comparison: HKZBG



Public Reference Library of Botany & Horticulture

1) Regulation

2) Public Education

- Notice
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- Heritage Museum
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3) Scientific Research

- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG



Adapted from: <http://www.las.org.sg/wp/bulletin/category/events/>
https://www.google.com.hk/search?q=singapore+botanic+gardens+library&espv=2&biw=1366&bih=643&source=Inms&tbm=isch&sa=X&ved=0ahUKEwiPI7my07rNAhUIExoKHUQ1C6wQ_AUIBygC&dpr=1#imgsrc=EdqIM5UqkIGwQM%3A

1) Regulation

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- Laboratory
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4) Comparison: HKZBG

Staff Library of Botany & Horticulture

only for researchers in Botanic Garden

- > 30,000 journals, books, international scientific journals, references & botanic reprints

1) Regulation

2) Public Education

- Notice
- Activities
- Heritage Museum
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3) Scientific Research

- Library
- **Laboratory**
- Herbarium

4) Comparison: HKZBG

The Orchid Breeding and Conservation Biotechnology Laboratory

- orchid hybridization, seed germination & native orchid conservation
- producing novel orchid hybrids & endangered native orchid

1) Regulation

2) Public Education

- Notice
- Activities
- Heritage Museum
- Library

3) Scientific Research

- Library
- **Laboratory**
- Herbarium

4) Comparison: HKZBG

The Orchid Breeding and Conservation Biotechnology Laboratory



- Controlled temperature, humidity, lighting and CO₂ concentration
- Sterilized air

1) Regulation

2) Public Education

- Notice
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- Heritage Museum
- Library

3) Scientific Research

- Library
- **Laboratory**
- Herbarium

4) Comparison: HKZBG

The Orchid Breeding and Conservation Biotechnology Laboratory



Scientific Research

38

1) Regulation

2) Public Education

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- Activities
- Heritage Museum
- Library

3) Scientific Research

- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG

Herbarium

- ~700,000 herbarium specimens, dating back as 1790
- from the Malesian region and adjacent areas



Old herbarium collections

Scientific Research

1) Regulation

2) Public Education

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- Library
- Laboratory
- Herbarium

4) Comparison: HKZBG

Brief Comparison

Singapore Botanic Garden	Hong Kong Zoological and Botanic Garden
Research & Education	Education & Leisure Service
✓ science research ✓ library ✓ interactive activities	□ science research □ library □ interactive activities

Compare Singapore with Hong Kong --- Area

Singapore	Hong Kong
82 hectares	5.6 hectares
recreation and research	entertainment and education
Other advantage: mobile apps Disadvantage: Self-discipline oriented	Other advantage: Outdoor Learning Activities Disadvantage: Promotion

Singapore Botanic Gardens
VS
Hong Kong Zoological and Botanical Gardens



Number of species?

- ~900 in HKZBG
- Thousands in SBG
- Rain forest

Awesome
!

Comparison with Hong Kong --- Purpose / Role

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Singapore Botanic Gardens
VS
Hong Kong Zoological and Botanical Gardens



SBG:

- Herbarium
- Laboratories
- Library
- Publications

HKZBG:

- Ornamental plants
- Children's playground

Comparison with Hong Kong

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Singapore Botanic Gardens

VS

Hong Kong Zoological and Botanical Gardens

Mobile applications by SBG:

- SBG Navigator
- Heritage Museum App



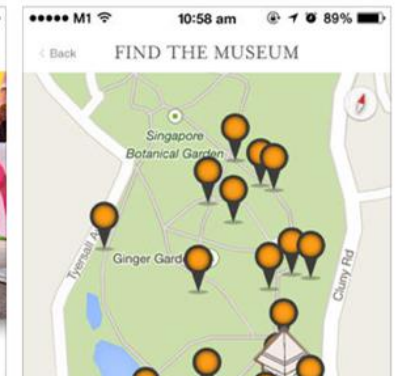
Singapore Botanic Gardens Heritage M...
Codigo Pte Ltd

GET



Singapore Botanic Gardens Navigator
iAPPS PTE LTD

GET



Comparison with Hong Kong

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Singapore Botanic Gardens

VS

Hong Kong Zoological and Botanical Gardens



Damage made on the branch of a plant branch of a tree



Comparison with Hong Kong

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Singapore Botanic Gardens
VS

Hong Kong Zoological and Botanical Gardens

Outdoor learning activities → education for the junior

Lack of promotion and fewer planning on development
→ not a popular tourist destination

Less competitive??!

Reference

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https://www.sbg.org.sg/index.php?option=com_content&view=featured&Itemid=361 [Accessed 23 Jun. 2016].
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<http://www.littledayout.com/2013/12/03/singapore-botanic-gardens-sbg-heritage-museum-and-cdl-green-gallery/> [Accessed 23 Jun. 2016].
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A group of five young women are standing in a lush garden. The garden is filled with various plants, including tall purple flowers and clusters of yellow and white flowers in the foreground. The background is a dense wall of green foliage and trees. A large, stylized orange text overlay reads "Thank you".

Thank you

Thank You!
We feel awesome!