



SOUTHEAST ASIA BOTANIC GARDENS -  
SEABG NETWORK

Promoting and linking botanic gardens throughout  
Southeast Asia



## 6<sup>th</sup> SOUTHEAST ASIA BOTANIC GARDENS (SEABG) NETWORK CONFERENCE

Bidoup-Nui Ba, Vietnam

24 – 28 April 2017

### CONFERENCE SUMMARY

#### **Background**

The Southeast Asia Botanic Gardens (SEABG) network was set up in 2004 to acknowledge, support and promote the work of botanic gardens in the region. SEABG countries include Brunei, Cambodia, China (tropical southern provinces), Hong Kong, Indonesia, Japan (tropical Okinawa prefecture), Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand, Timor Leste and Vietnam.

Generally hosted by a botanic garden in the region, the SEABG network convenes usually every two years. The network conference is held in two parts, a business meeting focusing on issues of function, structure and governance, and a capacity building session on a topic of major concern and common interest within the network.

Co-organized by BGCI and generously hosted by Bidoup-Nuiba National Park the 6<sup>th</sup> SEABG Network Conference was convened 24-28 April 2017. The business meeting was guided by the 4 step action plan developed at the 5<sup>th</sup> SEABG conference with focus on the following areas: i) coordination at the national level; ii) updating of the SEABG working practices document; iii) communications and internet visibility; and iv) fundraising. The associated capacity building workshop was entitled 'Methods for *ex situ* conservation for exceptional species' and consisted of presentation and practical sessions.

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## Welcoming Addresses

Dr. Pham S - Vice Chairman, Lamdong Provincial People's Committee

Dr. Van Ngoc Do - Vice Director, Bidoup NuiBa National Park

Joachim Gratzfeld - Director of Regional Programmes, Botanic Gardens Conservation International

Jean Linsky - Southeast Asia Botanic Garden Network Coordinator, BGCI

## Business Meeting

i) Coordination at the national level

Addressing the communication of SEABG activity within national networks, encouraging the update or new entry of GardenSearch/PlantSearch Information; encouraging BGCI membership.

Jean Linsky (Botanic Gardens Conservation International)

*'GardenSearch and PlantSearch: Resources for ex situ conservation in the SEABG Network'*

An introductory presentation on the databases of BGCI, GardenSearch and PlantSearch and how SEABG countries can contribute and also use these resources. The basic steps of creating registering as a garden editor, creating a garden profile and uploading a plant list were covered. The ThreatSearch database, for accessing regional and global conservation assessments for plant species was introduced. The presence of SEABG countries on both GardenSearch and PlantSearch was assessed and garden record count (301) as well as plant species record count (39,931) were presented. The value and importance of BGCI membership was discussed and an example of how PlantSearch might be used to assess the *ex situ* conservation status of species within the Dipterocarpaceae presented.

Nura Abdul Karim (Singapore Botanic Garden)

*'Singapore Botanic Gardens: A Case Study of Using BGCI's Databases - GardenSearch, PlantSearch, ThreatSearch, GlobalTreeSearch'*

An example of the use of BGCI's databases within Singapore Botanic Garden. Potential uses of information from the databases by botanic gardens, specific examples of SBG's use of the databases and the necessity of botanic garden ownership and regular maintenance of the garden profile/ plant list were addressed.

### National Networks

A small group discussion session on the nature of national botanic garden networks was held to address the following questions for each SEABG country:

- 1) Is there a national botanic garden network in your country?
- 2) If so, what is it called/ is there a website/ number of members?
- 3) Which botanic garden is currently chairing it/ who is the current contact as chair?
- 4) How often does it convene?

5) If there is no network, are there currently plans to form one?/ is there a contact for people planning a network?

The resulting information will be used to update the Asian Networks webpage (<https://www.bgci.org/where-we-work/asianetworks/>) of the BGCI website to share current national botanic garden networks in the Asia region and to understand the status of national botanic garden networks within the SEABG network.

ii) Updating the SEABG Working Practices document

A review of the SEABG Network Working Practices document, developed in 2015, by the attending participants was led by Joachim Gratzfeld. The following amendments were discussed and have been made in the 2017 update:

- Section 1.2 - The hosting of the 6<sup>th</sup> conference by Bidoup-Nuiba National Park and the announcement of the forthcoming 2019 meeting hosted by Queen Sirikit Botanic Garden, Thailand.
- Section 1.3 - The creation of the 2017 Action Plan.
- Section 3.4 - The addition of institutions from Bangladesh, The Solomon Islands and Sri Lanka as network associates
- Section 4.1.2 - Updated links to the new SEABG Google Group.
- Annex 2 - The addition of the 2017 Action Plan
- Appendix - The addition of the list of delegates to the 6<sup>th</sup> SEABG conference

The updated document will be circulated to the current SEABG membership for comments.

iii) Communications and internet visibility

Addressing issues of network communications via email, websites and social media.

Website:

The establishment of a SEABG Network webpage in association with the BGCI - 'Where we work - Asia' site (<https://www.bgci.org/where-we-work/asia/>) was presented by Jean Linsky in order to present membership, activities and news of the network. The relevant pages will include a page dedicated to the network itself and one to the biannual SEABG Network conference. The pages will incorporate network photos, a participating organization list with links to organizational websites, a national representatives 2017 list (with the contact information of 1 or 2 representatives from each SEABG and associate country) as well as the incorporation of relevant documents from the 6<sup>th</sup> SEABG conference. Amendments will be made to the past projects section of the current SEA page and links to useful resources and to SEABG social media page(s) will be added.

Google Group/Newsletter:

The Google Group email list serve, created in 2009 was abandoned and a new Google Group associated with the network email [seabgnet@gmail.com](mailto:seabgnet@gmail.com) was created to serve as a conduit of information sharing within the group and from the secretariat to the network. SEABG members were encouraged to accept the invitation to join the group and after the conference all delegates were sent an invitation to join. As of writing there are 67 members of the SEABG Network Google Group. The potential for using the google group list to host a recurring network newsletter was discussed and a request was made to submit content for the first issue by mid-May and the drafting of the 1<sup>st</sup> issue for June was scheduled. Delegates are asked to send items for the newsletter to Jean at any time.

Logo:

The SEABG network is in need of a logo for its website and social media pages. A current, temporary logo has been used on the SEABG Facebook page and the possibility of the creation of a new logo was discussed. The elements desired for a new logo were discussed and a deadline for submission of design ideas was made for June.

#### iv) Fundraising

In continuation of the mandate of the network conference to address the four points of the action plan, a session was held to discuss fundraising opportunities and the development of a network-wide proposal. Previous meetings of the SEABG network steering committee in Taiwan (September 2016) led to the identification of the Dipterocarpaceae family as a target group for future conservation projects. As the Darwin Initiative has been identified as a possible source of funding for such a project a work session was held to develop project proposals for implementing practical conservation activities within the network. The conference participants were divided into four subgroups to create a project outline with the following sections: 1) Goal; 2) Specific Objectives; 3) Outcomes; 4) Activities; 5) Possible partners and 6) Potential funding sources. The results of the work of each subgroup were presented to the conference as a whole and priorities for project activities and partners was discussed. The outcomes of the project proposal session will be compiled and used for future funding proposals by the group.

#### Other business

In addition to the main business of the conference, items of any other business were called from the conference delegates. The SEABG network has been asked to present nominations for the 2017 Marsh Awards for Education in Botanic Gardens and International Plant Conservation. The awards were discussed amongst the conference delegates and a request for potential nominees was put out.

Additionally, the Silent Forest Campaign an initiative to address the Asian Bird Crisis by the European Association of Zoos and Aquaria (EAZA) was presented and discussion of the potential for the involvement of Southeast Asian botanic gardens was discussed.

## Training Workshop (April 25<sup>th</sup>-26<sup>th</sup>, 2017)

'Methods for *Ex situ* conservation of exceptional species'

The 2017 SEABG training session in association with the network conference consisted of lectures and practical demonstrations/discussions of *ex situ* techniques for 'exceptional species'. The following sessions were held during the conference. For more information and to request powerpoint presentations please contact [jean.linsky@bgci.org](mailto:jean.linsky@bgci.org).

Dr. Saw Leng Guan (Penang Botanic Gardens)

*'Introduction to regionally threatened, exceptional species - The Malaysian example'*

- Background on Malaysian flora
- Projects that document the Flora of Malaysia
- Conservation assessment projects in Malaysia
- Studies on the most threatened species
- Management tools for threatened species

Dr. Chai-Shian Kua (The Morton Arboretum)

*'Fagaceae - The other recalcitrant species'*

- The Morton Arboretum and its programs
- Historical and current Fagaceae biogeography and diversity in SEA
- Seed biology
- Grafting as a conservation tool

*'Biology, Life History, Reproductive strategies and Genetic/Genomic Diversity'*

Dr. Valerie Pence (Center for Conservation and Research of Endangered Wildlife, Cincinnati Zoo & Botanical Garden)

*'In Vitro Methods and Cryopreservation for Long-term Preservation'*

### Lecture

- Alternative tissues for *ex situ* conservation
- Principles/potential of:
  - in vitro for collecting, propagating and preserving plant tissues
  - cryopreservation as a tool for conserving plant tissues
- Conserving diversity

### Demonstration

- Cryopreservation of short-lived seeds, spores and pollen
- Excised zygotic embryo axis cryopreservation

- In vitro collecting
- Cryopreservation of in vitro cultures; encapsulation dehydration; droplet vitrification

Dr. Chad Husby (Fairchild Tropical Botanical Garden)

*'Methods of Ex situ conservation: Genetically Representative Living Collections, challenges and possibilities'*

Principles of Plant Conservation

- genetic diversity: measures of genetic diversity, functional genetic diversity
- genotypes vs. phenotypes
- breeding systems
- population separation
- genetic bottlenecks, inbreeding depression

Strategies for capturing genetic diversity for conservation

- Sampling principles
- Case Studies: Palms in Florida; Cycads in Belize

Coordinating conservation biology and horticulture

- Propagation strategies
- Applied research
- backing-up collections
- managing for the future

Case study of a successful multinational program for threatened trees: International Conifer Conservation Programme of the Royal Botanic Gardens Edinburgh

### Field Trip

The conference concluded with a half day field trip into Bidoup-Nuiba National Park and a half day trip into Da Lat to experience the ecological and cultural surrounds of the national park.

### Closing

The Southeast Asia Botanic Garden Network would like to thank Bidoup-Nuiba National Park for their excellent hosting of the 6<sup>th</sup> SEABG Network Conference.

The SEABG network is also happy to announce the decision for the hosting of the next two SEABG conferences:

2019: Queen Sirikit Botanic Garden, Chiang Mai, Thailand

2021: Makiling Botanic Garden, Los Baños, Philippines

For more information on the Southeast Asia Botanic Garden (SEABG) Network contact Jean Linsky (SEABG Network Coordinator), [jean.linsky@bgci.org](mailto:jean.linsky@bgci.org) or visit <https://www.bgci.org/where-we-work/southeastasia/>.