The Southeast Asia Plant Phenology (SEAPP) Network

Introduction

Plant phenology is the study of key events in a plant's life history, especially leaf flush, leaf fall, flowering and fruiting. Recent global climate change has been shown to cause earlier leafing and flowering in temperate regions. This has been shown through the efforts of plant phenological networks such as the Pan European Phenology (PEP) network and USA National Phenology Network (USA-NPN). Tropical plants show greater phenological variation compared with species at higher latitudes, but despite this, phenological studies in the tropics, especially in Southeast Asia, are rare. This new network seeks to provide long-term data to understand tropical plant phenology and the impacts of a changing climate.

Objective

Singapore Botanic Gardens (SBG) together with the Southeast Asia Botanic Gardens (SEABG) Network, Botanic Gardens Conservation International (BGCI), have formed a network among botanical institutions in Southeast Asia to monitor and collect long-term phenology data of selected tree species.

Outcomes and impact

SBG has phenology data going back to the 1930s and recently started a comprehensive phenology monitoring in 2016. Initial analyses have shown that more pronounced dry and wet periods today have resulted in more frequent leaf flushing. From these initial findings, we envision that robust long-term data across Southeast Asia will document additional changing phenological trends. The data will also allow us to test hypotheses at larger spatial scales under today's rapid climate change.

Commitments

The value of the data increases over the long-term, and membership of SEAPP would require organisational commitment. We hope SEAPP monitoring will start within a year from joining the network, with a minimum 25 data points per annum (fortnightly data collection), although 50 data points per annum is recommended. Quarterly uploads of phenology and weather data are expected. SEAPP will hold annual online meetings, with evaluations of SEAPP's progress every five years.

Data management

Data curation will be coordinated by SBG and the BGCI/SEABG office and is freely available to all members of the SEAPP network. Authorship in publications will include members who have contributed data and writing; SEAPP and member institutions will be credited in the acknowledgements.

SEAPP composition

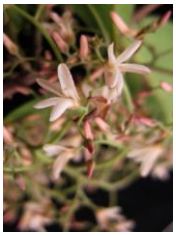
The network initiative was first presented during the 8th SEABG Network Conference and Meeting at the Makiling Botanic Gardens, the Philippines, in July 2023. Subsequently an online technical talk was organised in October 2023. Now, with the up-coming 8th Global Botanic Gardens Congress (8GBGC) to be held in August 2024, we will formally announce the SEAPP network, and would like to extend this invitation to your institute to join us in this exciting collaborative network. At this workshop, we plan to discuss any outstanding issues or doubts on the standardised protocol.

Secretariat:

SBG Coordinators:	Dr Boon-Chuan HO ho_boon_chuan@nparks.gov.sg
	Ms Jolene J.L. LIM jolene_lim@nparks.gov.sg
Data Managers:	Mr Edmund J.J. CHIA (SBG) edmund_chia@nparks.gov.sg
	Dr Kwek Yan CHONG (SBG) chong_kwek_yan@nparks.gov.sg
BGCI Coordinators:	Dr Greetha ARUMUGAM (BGCI/SEABG Network) greetha.arumugam@bgci.org
	David Justin R. PLES (BGCI / SEABG Network) david.ples@bgci.org








16 May 2024