

## W-22 Digitisation of herbarium and other biodiversity collections

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**Duration:** 90 minutes

**Target audience:** Staff of botanic gardens and other institutions involved in herbarium and other preserved biodiversity collections.

**Objectives:** The workshop will allow anyone involved with biodiversity collections to understand different approaches to digitisation of collections objects (2D as well as 3D) at different budget points, and to further discuss about potential collaborations on topics arising from digitisation of biodiversity collections such as automated approaches to label transcriptions, deep data mining, AI approaches to plant ID, etc.

**Abstract:** Natural history collections aim to document the diversity of life on Earth and are the basis for the correct application of taxon names of all living and fossil organisms. Herbaria serve as priceless resources for varied research including plant taxonomy, conservation and ecology. In recent years they have provided essential data for the study of climate change and applied research such as pharmacology, phytochemistry and horticulture.

The size and distribution of these collections often do not correspond with the biodiversity richness of the region, with the largest historical collections frequently deposited outside the countries of origin, reflecting past colonial interests in the study of biodiversity.

The digitisation of biodiversity collections has significantly advanced and accelerated in the past 25 years and not only unlocks vast potential for research, but also serves as an equaliser through providing access to these collections and their metadata to anyone with an internet connection.

This workshop will explore various approaches to digitisation of herbarium collections, covering large and small collections, and different digitisation set-ups including those applicable to institutions with limited funding resources. A portable set-up used for digitising 3D objects will be showcased by Lee Kong Chian NHM.

The workshop will include following sections:

1. Welcome & a brief introduction; relevance of digitisation of 2D and 3D objects to herbarium collections (presented by SING; 5 min)
2. Presentations by E, HYO and CANB featuring different approaches to digitisation of their collections (15 min each)
3. Presentation by LKCNHM about digitisation of 3D biodiversity objects (15 min)
4. Preparing to digitise (presented by SING; 5 mins)

5. Q&A on digitisation by workshop participants (moderated by SING; 20 mins)