

Bryophyte collection and conservation in the Singapore Botanic Gardens

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Bryophytes are non-vascular plants categorised into three main groups: liverworts, mosses, and hornworts. In Singapore, there are about 280 species of native bryophytes, spanning 105 genera across 46 families. Situated just about 140 kilometres above the equator, Singapore experiences a lowland tropical rainforest climate characterised by high temperatures with little annual variation, high humidity, and abundant rainfall. With climate change leading to more frequent and extreme weather conditions that pose a threat to our native bryophytes, the Singapore Botanic Gardens has initiated a project under the Bryophyte Working Group to survey and collect native bryophyte species for *ex situ* conservation. Each collection is assigned with an accession number for tracking purposes, and a dried specimen is kept as a voucher in the herbarium (SING) for species verification. Information accompanying each collection, such as the locality and habitat, are recorded and maintained in the Singapore Botanic Gardens' database. Additionally, a portion of the collection will be showcased in the Garden's Evolution Garden to illustrate the diversity and significant evolutionary development in early land plants.