

Foreword

To achieve our vision of making Singapore a City in Nature, we will need to protect our nature reserves, establish nature parks, restore habitats in our gardens and parks, conserve our native species and strengthen ecological connectivity – all of which require making decisions based on the best available data.

This work requires a comprehensive up-to-date inventory of the plant species we have in Singapore. This may sound like a simple task, but in the 200 years that researchers have been writing about the plants of Singapore, over 7500 names have been used in almost 50,000 literature citations.

This new *Flora of Singapore: Checklist and bibliography* is a commendable achievement in clarifying that of the 7500 plant names, some 2654 are the current names of native plant species and around 579 are the current names of introduced species or of species of uncertain origin. The native plant diversity includes some 2205 flowering plants, eight gymnosperms, 175 ferns and lycophytes, and 266 mosses and liverworts.

The team behind this publication has been able to put together the huge body of information on the plant diversity of Singapore with the help of online resources and the collective expertise of over 100 people from 21 countries who have contributed to this work.

This checklist and bibliography includes the many new records of native and introduced species that have been discovered in various habitats in recent years. Species not listed here will continue to be found and published, each one an exciting new discovery and a precious part of Singapore's natural heritage. This checklist with its extensive bibliography will also be a valuable resource for NParks' ongoing *Flora of Singapore* project, in which the plant diversity of Singapore will be described and illustrated over 14 volumes.

Continuous plant surveys in our natural habitats also enable us to better understand the health of our native species and apply international standards to assess their conservation needs or to consider reintroduction of extinct species. Singapore lost much of its forest cover and other habitats in the nineteenth century, along with many plant species that once grew there. These species are known due to the collections and publications of the early botanists who worked in Singapore, most prolifically Henry Ridley, the first Director of Singapore Botanic Gardens. Through surveys by researchers, some species that were once thought lost continue to be rediscovered.

One such example is the orchid *Hetaeria oblongifolia* which was rediscovered in Singapore in 2020. Similarly, more than 100 plant species once thought to be extinct in Singapore have been rediscovered in the last ten years. In addition, species have been reintroduced, such as the tree species *Ochrosia oppositifolia*, which was first collected in Singapore by the intrepid explorer Nathaniel Wallich in 1822. The species was not seen in Singapore again until reintroduced trees were planted in the restored habitats of Coney Island a few years ago.

The plant depicted on the cover is a species of Bat Lily, *Tacca cristata*. Research on Singapore's plant diversity began when botanist William Jack came here in 1819 with Sir Stamford Raffles. Jack collected a specimen of *Tacca cristata* in Singapore and published it as a new species in 1820, one of the first species to be described from Singapore.

The *Flora of Singapore*, including this checklist and bibliography, helps set the baseline for what we know of the plant diversity of Singapore now. Future generations of people interested in Singapore's natural heritage can build on these solid foundations.

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