

## **Creating a diverse tropical plant collection in a cool temperate climate – unique Australian plants, creative displays, and innovative, sustainable infrastructure**

**P. Byron**<sup>\*</sup>, C. Cosgrove, J. McAuliffe, and Z. Knapp

Australian National Botanic Gardens, Canberra, Australia

<sup>\*</sup>Corresponding author email: [Peter.Byron@dcceew.gov.au](mailto:Peter.Byron@dcceew.gov.au)

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In mid-2024, the Australian National Botanic Gardens (ANBG) with support from the Ian Potter Foundation, will open a new tropical conservatory. The Conservatory will showcase some of Australia's most unique native tropical flora, from rainforests, savannahs, canyons, and tropical islands, using novel approaches to plant display including hanging plant 'chandeliers' and plant 'libraries'. In the years leading up to the conservatory opening, ANBG horticulturists have built a spectacular plant collection including many species that are unique to cultivation. This presentation will introduce the Australian native tropical plant collection, including some perhaps surprising taxa such as Australian Rhododendrons and epiphytic orchids including *Phalaenopsis* species. We will share some of the new horticultural tools and techniques, and creative plant displays developed to best showcase this collection. We will also discuss approaches to developing the horticultural plan and landscape design, as well as logistics associated with sourcing and moving plant material, maintaining plants with diverse horticultural needs, and transitioning plants into the 12 m high conservatory. Given its location in the cool temperate climate of Canberra, the conservatory building is not a standard glasshouse. Instead, it combines innovative and sustainable design with specialised environmental control systems. We will share insights about how we have incorporated sustainable, innovative design, horticulture, and visitor engagement to inspire and engage people with Australia's tropical flora. We will also highlight how the conservatory enables contributions to conservation and research into Australia's distinctive tropical flora and share examples of visual and auditory interpretations including traditional cultural knowledge from Australia's First Nations people.