Climate Change Alliance formed to Address Climate Change

An international meeting held in Melbourne this week heard that up to a quarter of the plant species grown in botanic gardens might not survive the predicted changes to the world's climate.

By 2090, Victoria's climate is predicted to be the same as present-day Dubbo. Under the high emissions scenario, the state can expect a 3°C increase in mean temperature, up to 13 more days each year above 35 °C and 9 per cent less rainfall.

A comprehensive analysis of its collections by **Royal Botanic Gardens Victoria** (RBGV) shows that at least 26 per cent of the species will be put at risk with the climate conditions predicted for Melbourne over coming decades.

To address this threat to botanic gardens internationally, 13 representatives of botanical organisations flew into Melbourne this week, for the world's first **Botanic Gardens Climate Change Summit,** initiated and hosted at RBGV.

Together they formed an alliance to share expertise, strengthen leadership and develop responses to the impacts of climate change on plants and plant landscapes. They completed this task by signing a declaration that they will work as an alliance to "safe-guard life by protecting landscapes."

"This is no trivial pursuit. Botanic gardens need to be part of a combined community and government commitment to respond to climate change right now," said Professor Tim Entwisle, Director and Chief Executive, RBGV. "Climate change is a threat to plants and to people. Already it is changing what we can grow in our botanic gardens, streets and parks, and increasingly it will change our world. A tree planted now, must survive the climate in 70 years, as well as today."

This summit is an outcome of RBGV's *Engagement and Impact Strategy* and *Landscape Succession Strategy*. In August 2017, the organisation commissioned an assessment of the risks from climate change for the living collections and landscapes of Melbourne Gardens. The strategy outlines priority areas for management intervention, such as procuring new species, succession replanting, and improving site conditions.

The first priority must be to halt carbon pollution. The Victorian Government's commitment to a renewable energy future – with legislated targets and support for transition to zero (net) emissions by 2050 – is a model for other countries. Similarly, RBGV is now a world leader in not only promoting climate-friendly gardening, but in adapting botanic garden landscapes to an already changed world.

"It is our responsibility to adapt our botanic gardens to the now unavoidable changes in our climate. We are obliged to review what we grow, adapt our cultural landscapes with care and responsibility, and in some cases grow new plants and learn new horticultural techniques," continued Professor Entwisle.

"We can't stick our heads in the sand and hope that this venerable old garden will survive as it is – we must plan for the succession of our landscape."

