



## Australian National Botanic Gardens

### SAVING THREATENED PLANT SPECIES

This project involves action to improve the viability of Australian plant species through improved management of plant and seed collections. A national assessment of collections of threatened plant species will support targeted development and enhancement of collections for potential recovery efforts.

### Year 2 update (2-year project)

#### OVERVIEW OF PROGRESS

- A method to assess the genetic diversity of collections in the Australian National Botanic Gardens (ANBG) was developed and applied to examine how comprehensive the current holdings of threatened plant species are. Data was also acquired on holdings in the Royal Botanic Gardens of New South Wales and Victoria.
- A gap analysis of holdings was conducted to build a list of threatened species to be targeted for additional collection of material. Species were selected based on expanding genetic diversity in existing collections and complementing current species conservation programs.
- Field trips have been undertaken, with help from the Friends of the ANBG volunteers, to collect seeds and cuttings from the list of target species. Significant accessions have been made for 17 threatened plant species, including from multiple populations per species where possible, resulting in a greater capture of genetic diversity.
- The ANBG has partnered with the ACT Government and the NSW Office of Environment and Heritage to initiate recovery actions for the endangered *Swainsona recta*. The small seed production facility at the ANBG is being upgraded to allow creation of an orchard that will provide seed for future translocations back into the wild.
- A final report will summarise outcomes, including the implications of maximising genetic diversity in ex situ collections for species recovery efforts, using examples from Australian threatened species.
- Planning for the reintroduction of four threatened plant species back into the wild is underway, with two species to be reintroduced this year.



Developing *Grevillea wilkinsonii* fruit