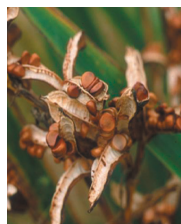


## An ambitious seed collection program

Over 6 years, the Seeds for Life program will collect seeds, herbarium specimens, and associated information from 1,000 Queensland plant species. These seeds will be stored as duplicate collections, and used in research undertaken both in Queensland and the United Kingdom for the Millennium Seed Bank Project.

## The Millenium Seed Bank project (MSBP)

The MSBP is an international collaborative plant conservation initiative. This worldwide effort aims to safeguard 24,000 plant species from around the globe against extinction. The project is staffed by the Seed Conservation Department of the Royal Botanic Gardens, Kew, in the United Kingdom.



## Industry partners contribute



The MSBP will contribute considerable direct funding and in-kind support to the Seeds for Life Project. The Seeds for Life Partnership will also contribute significant funds, together with in-kind contributions. Financial support from the Australian mining industry has also enabled a more comprehensive program to be undertaken.

## Q-Seed a high powered partnership

Q-Seed is a consortium of Queensland research, non-government organisations and government bodies, collectively called the **Q-Seed partnership**. *Seeds for Life* is its first project, establishing an international partnership with the Millennium Seed Bank Project, Royal Botanic Gardens, Kew, in the United Kingdom and with other host states and countries throughout the world.

Seeds for Life partners are:



With thanks to our sponsor for the Seeds for Life brochure:



BHP Billiton Mitsubishi Alliance

Contact the Seeds for Life Project

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All photos of seed images in this brochure are courtesy of Australian National Botanic Gardens.



# Seeds for Life

Seeds for Life



## Seeds for Life

An international partnership in seed conservation and research for Queensland



# Collecting and studying seed is important

Understanding seed biology –  
improving revegetation technologies

A significant number of important indigenous species have seed characteristics that can exclude them from revegetation projects or limit their use. Some important questions are largely unanswered for many of these species:

- What are the best conditions for germination?
- What factors affect storage life?
- What are the mechanisms of seed dormancy and how can dormancy be broken?
- Why is seed viability so short for some species and how can we increase this?

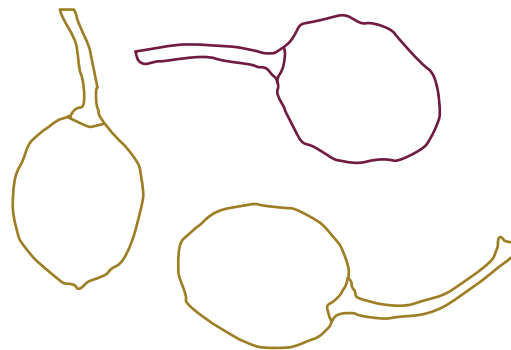
Answering these and other seed biology questions will enable a more complete range of species to be reliably established in revegetation projects for mine site rehabilitation or ecological restoration, and for utilization in horticulture, floriculture or forestry.



## Ex-situ conservation genebanks

Storing seed in genebanks is complimentary to on-site, ecosystem approaches to conservation, especially of rare and threatened species that have only limited natural populations. These seed collections can help re-establish lost natural populations or rescue those under threat, and provide germplasm for utilization in biodiscovery or plant improvement programs.

Seeds for Life



## Three project themes

### Threatened species & ecosystems

Seeds for Life's seed collection strategies will target species from threatened ecosystems, including any rare and threatened species from these locations. Research results from these species will provide information to inform conservation and recovery programs and to develop alternative ex-situ conservation strategies such as cryopreservation, for recalcitrant-seeded species. Griffith University and the Brisbane Botanic Gardens will coordinate this aspect of Seeds for Life.

### Landscape rehabilitation

Landscape rehabilitation, as a component of sustainable land use, has emerged as a major priority in natural resource management in Australia. In recognition of this, University of Queensland and the Australian Centre for Minerals Extension and Research will focus their efforts on species that are the mainstay of landscape repair, particularly, those that are of use to the mining industry.



### Training extension

Industry and community seed collectors across the state will receive seed collection training and ongoing seed system support to encourage their participation as Collection Partners. Greening Australia Queensland and the Australian Centre for Minerals Extension and Research will deliver these services as well as seed quality data in return for contributions of seed. Research results from the Seeds for Life research partners, the University of Queensland and Griffith University, will be interpreted in web and printed products that will assist on-ground revegetation projects.

