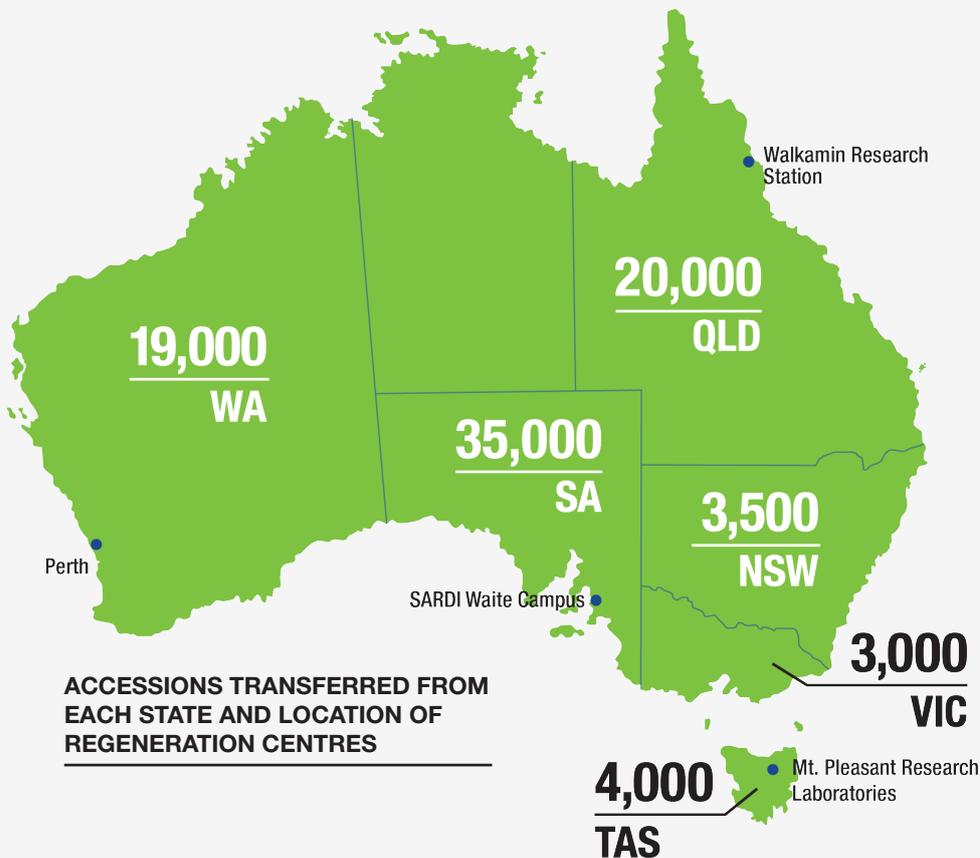


## WHO IS AUSTRALIAN PASTURES GENE BANK?

The Australian Pastures Genebank (APG) is Australia's first national pasture and forage genetic resource centre. It is located in Adelaide and operated by the South Australian Research and Development Institute (SARDI) on behalf of government and industry stakeholders.



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## PURPOSE

The APG was established in 2014 as the national facility to conserve the diversity of Australia's current and prospective pasture and forage species for global and national food security now and forever.

Seed and associated data from eleven significant collections of temperate and tropical pasture and forages from around Australia have been consolidated and transferred to the APG.

Seed is held in cold storage and its quality and quantity monitored and regeneration of seed is undertaken in locations that best match climatic and edaphic requirements of the species.

Seed is used nationally and internationally to support science, education and the development of new varieties to benefit producers and sustain and enhance agricultural productivity and environmental preservation.

## ACTIVITIES

APG monitors the health of the collection and regenerates the seed to International Genebank Standards to facilitate the conservation and utilisation of the collection.

## NATIONAL MANDATE

**All pasture and forage species of actual or potential value to Australian agriculture.** This includes plants to be grown for livestock food and fibre, crop rotation and the environment.

## COLD ROOM STORAGE

APG has cold storage facilities for seed storage for:

- Long (-20°C)
- Medium (+2°C)
- Short term (+12°C)

Each cold room storage facility has the capacity to hold up to **120,000** accessions

## WHY APG?

- Producers representing the cattle, sheep, wool, fodder, pasture seed and mixed farming cropping industries are the ultimate beneficiaries of the APG collection.
- Over 540 cultivars of temperate and tropical grass and legume species have been directly or indirectly developed from APG germplasm, with 215 trading commercially in Australia today.
- The estimated impact of the APG on pasture productivity improvement through genetic gain ranges from 0.5 - 2% per annum for industries valued at \$29 billion in 2017.
- Independent external review of APG highlighted a return on investment of 20:1 for industry and its investors.
- The diversity in APG provides breeders the tools to sustain and enhance agricultural productivity in the face of current and future challenges and opportunities associated with a growing population, changing climate, new plant pests and diseases, and changing farming systems.
- Access to genetic resources is vital insurance to national and global food security.

## COLLECTION

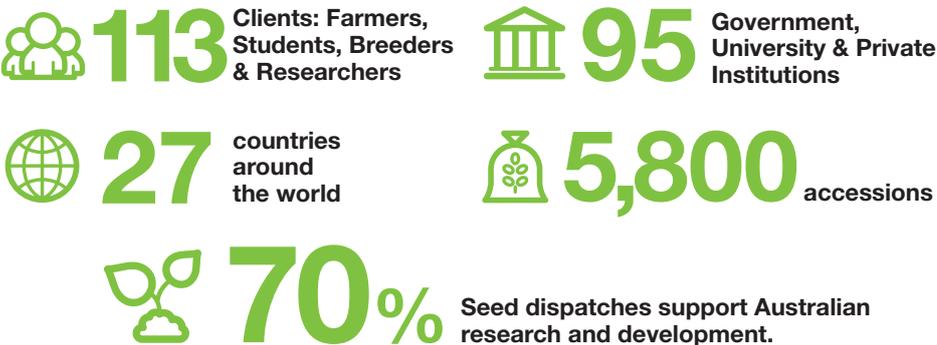
The APG is the custodian of one of the world's most diverse and significant tropical and temperate pasture and forage collections. Almost 90% of the accessions held in the APG have been collected from the wild all over the world by Australian scientists over the last 70 years. This seed is globally unique and not held in any other genebanks.

The APG currently holds:

over <b>84,800</b>	from <b>2,619</b>	from <b>178</b>
<b>ACCESSIONS</b>	<b>SPECIES</b>	<b>COUNTRIES</b>

## CLIENT SERVICE

Over the last four years APG has distributed seed to more than



## BENEFIT SHARING

The APG operates under the framework of the International Treaty on Plant Genetic Resources for Food and Agriculture.

Seeds and associated data are distributed under a Standard Materials Transfer Agreement and can be requested online through:



APG GRIN Global public website  
<https://apg.pir.sa.gov.au/gringlobal>



Genesys global website  
<https://www.genesys-pgr.org>

## STAKEHOLDERS

The APG is a partnership between Commonwealth and all State Governments and five industry bodies representing the meat, wool, dairy, seed and grain industries.



## FAST FACTS

World's largest collection of **Medicago, Trifolium, Serradella, Biserulla** and tropical forages.

## SPECIES

Major temperate pastures species held include lucerne, sub clover, serradella, **annual medic, phalaris, tall fescue, ryegrass, lotus, biserulla, cocksfoot, chicory** and saltbush.

Major tropical species held include **Styloanthus, Desmanthus, Digitaria, Cenchrus, Paspalum, Panicum, Lablab** and **Leucaena**

**60,300**  
accessions

**TEMPERATE**

**24,500**  
accessions

**TROPICAL**

## FAMILIES

**10,100**  
accessions

**GRASSES**

**73,500**  
accessions

**LEGUMES**

**1,200**  
accessions

**OTHER**

## RISK MANAGEMENT



Svalbard  
**Global Seed Vault**

The APG has prepared for the future with over 500 seeds of 28,000 accessions safely duplicated in the Global Seed Vault in Svalbard, Norway.