

Who Invests in Grains Research?



GRDC is the Grains and Research Development Corporation. They are responsible for planning, investing, and overseeing research, development and extension for 25 different crops such as wheat, canola, chickpeas and lentils.

The primary purpose of the GRDC is to drive discovery, development, and innovation that enhances the productivity, profitability and sustainability of Australian grain growers and benefit the industry and wider community. GRDC is predominately funded by grain growers and the Australian Government.

Scan the QR code or click on the [link](https://www.youtube.com/watch?v=IUvll7WzUZg) to view the video focused on the role of the Grains Research and Development Corporation.



Record three lasting images from the video about the role of GRDC, the technologies they use and the key areas they target.

1. _____

2. _____

3. _____

This resource has been developed by:

Plant Breeding

View the images below carefully and formulate a sentence that could be used to describe the role of a plant breeder/researcher in the grain industry.



This resource has been developed by:

Australian Grain Production

Plant breeding is the development of a new variety of plant that offers an advantage to those using it. The advantage may be increased quality of produce; increased yield (the quantity of a product); tolerance to an environmental factor, e.g. heat; resistance to a pest or disease; or even an enjoyable alternative product for consumers, e.g. a new coloured fruit.

Brainstorm and identify at least four factors that can impact the growth and productivity of crops (abiotic or biotic) and a genetic trait that plant breeders would want to use to combat this factor. Record your ideas inside the map of Australia. An example has been provided.

1.
Abiotic Factor:
Saline soils (salinity)
Genetic trait:
Salt tolerant gene

2.
Abiotic Factor:

Genetic trait:

3.
Abiotic Factor:

Genetic trait:

4.
Abiotic Factor:

Genetic trait:

5.
Abiotic Factor:

Genetic trait:



This resource has been developed by:

Breeding a New Plant Variety



Design a new plant variety that combats one or more abiotic or biotic issue/s.
Your plant should deliver a practical solution to a known or imaginary problem.

➤ **Plant name:**

➤ **Genus name:**

➤ **Dimensions of plant (mm):**

Length: _____ Width: _____

➤ **Plant description:**

➤ **Two end products:**

1. _____
2. _____

➤ **Features of genetic improvement:**

➤ **Sketch of plant:**

➤ **Australian growing areas:**



This resource has been developed by: