



Genetically modified organisms in Australia



Gene technology is widely used in Australia: in agriculture, in research, in health and medicine, in education, and in industry.

When gene technology is used to create a genetically modified plant, animal or other living thing (an organism), the use of this genetically modified organism (GMO), for example growing GM canola, is regulated by the Gene Technology Regulator to protect people and the environment.

You may not create, use or import a GMO in Australia unless you have the appropriate approval.

The Gene Technology Regulator (the Regulator) is appointed by the Governor General of Australia to administer the national regulatory system for gene technology. The Regulator is assisted by the Office of the Gene Technology Regulator (OGTR).

OGTR factsheets explain what GMOs are, how they're used in Australia, how to get permission to import or use them, and how the regulatory system works to protect Australia.

Using GMOs in Australia

The current uses of genetically modified organisms in Australia include the following.

- Two genetically modified (GM) crops are grown widely in Australia: canola and cotton. Other crops are undergoing field trials. Read more [about GM crops in agriculture](#).
- GM blue-flowered carnations are grown in Australia and imported from overseas
- Researchers use genetically modified bacteria, plants, animals and other organisms in their research. They use a range of

techniques including adding, modifying or turning off genes to study what the genes do.

- Genetic modification is widely used to make medicines such as insulin, and vaccines such as Gardasil. [A small clinical trial of an oral cholera vaccine was held recently in Australia](#).
- Genetic modification is also used to make medicines and vaccines for animals such as the Hendra vaccine for horses.
- [Schools use GMOs in biology classes](#)
- [Individuals are starting to use GMOs for personal research](#).

Importing GMOs

Internationally, genetically modified organisms are more widely used than in Australia. For example, about 80 GM crops are grown around the world.

You may not import any live GM plants, animals, and other organisms unless you have approval under the relevant biosecurity and gene technology legislation. For example, you need permission from the Regulator to import GM bacteria for research, or GM 'glow in the dark' aquarium fish. Some approvals are delegated to institutional biosafety committees and are then reported to the Regulator. [Read more](#).

Regulating GM products

[Food Standards Australia New Zealand](#) is responsible for the safety assessment of genetically modified foods. The use of GM products as

human therapeutics is regulated by the [Therapeutic Goods Administration](#). The [Australian Pesticides and Veterinary Medicines Authority](#) regulates the use of GM products as pesticides or animal medicines.

Other factsheets

OGTR factsheets provide more detail on the various uses of gene technology and will tell you what to do next if you wish to do any of the above, or if you have concerns about genetically modified organisms in Australia.

There are three overview sheets and a series of sheets expanding on specific topics.

What are gene technology and GMOs: who is using GMOs; how can I use GMO's in my laboratory, business, school, community; how can I import GMOs; how do I report misuse; glowing fish; cholera vaccine trial; public participation

Genetically modified crops in Australia: what's grown; canola; wheat trials; controlling weeds, stockfeed

The rules, regulations, and processes: how are GMOs and gene technology regulated;

the processes; public participation; intentional release; unintentional release.

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