



Snapshot of genetically modified (GM) wheat trials



- Wheat is one of a number of GM crops that have been approved for experimental field planting in Australia.
- There have been trials of GM wheat that sought to improve salt tolerance, drought resistance, disease resistance, yield, grain quality, grain nutrients and nutrient use efficiency.
- GM wheat is not grown commercially in Australia, and is not licensed for commercial release.
- The Gene Technology Regulator (the Regulator) carries out science-based risk analysis before approving field trials of GM wheat.
- Any work with GM wheat in Australia must be licensed by the Regulator. Criminal charges can apply for unauthorised dealings with GM plants of any kind.

Since 2005, the Regulator has issued 25 licences for small-field, early-stage research trials of GM wheat. Five of these field trial licences are still current. For further details, see the table on the next page.

There has been no commercial release of GM wheat in Australia, and to date the Regulator has not received any licence applications for the commercial release of GM wheat.

Each field trial is limited in its size and duration. For example, DIR 165 allows up to 5 hectares (ha) per site per year over 6 years. This is limited to 2 sites of 2 ha in the first year and 10 sites of 2 ha per year in the next 4 years and 4 sites of up to 5 ha in the final year. The trials are subject to strict containment conditions to manage the potential for spread and persistence of the GM wheat and its introduced genes into the wider environment. The OGTR actively inspects trials to make sure they are compliant with licence conditions. There have been no breaches of containment with any of these field trials. GM wheat from these trials is not permitted to enter commercial human food or animal feed supplies. CSIRO

researchers are developing wheat and wheat products that might improve nutritional properties such as glycaemic index. The Regulator has authorised CSIRO to conduct trials involving feeding foods containing GM wheat to animals and people under some licences. These studies are also subject to approval by ethics committees who consider animal and human ethical issues. Some of these trials are ongoing, while some have concluded. For full details on each trial visit the [GMO record](#).

[Related factsheets](#)

- [Genetically modified \(GM\) crops in Australia](#)
- [Genetically modified \(GM\) canola in Australia](#)
- [Stockfeed and genetically modified \(GM\) crops](#)

[Further reading](#)

- [Genetically modified organisms in Australia](#)
- [How are genetically modified organisms \(GMOs\) regulated in Australia?](#)

Version 1.6	August 2024
-------------	-------------





Current licences for limited and controlled releases (field trials) of GM wheat (as of August 2024)

Licence No	Licence holder	Modified Trait	Issued
DIR 204	Trigall Australia Pty Ltd	Abiotic stress tolerance	August 2024
DIR 201	The University of Adelaide	Enhanced yield	April 2024
DIR 186	The University of Adelaide	Enhanced yield, abiotic stress tolerance	February 2022
DIR 165	The University of Melbourne	Composition – food (human nutrition)	April 2019
DIR 162	CSIRO	Disease resistance	July 2018



Contact us: ogtr@health.gov.au, www.ogtr.gov.au, phone 1800 181 030,
or post: Office of the Gene Technology Regulator MDP 54, GPO Box 9848, Canberra ACT 2601.