

Questions & Answers on licence DIR 158 – Commercial release of genetically modified safflower

What does this licence allow?

The Gene Technology Regulator has issued a licence to GO Resources Pty Ltd that permits commercial cultivation of genetically modified (GM) safflower in Australia. The GM safflower has been modified for high oleic acid composition in the seed. The GM safflower and its products would enter general commerce, with the oil intended for use in the industrial oil market, not for human food, and the meal to be used as stock feed.

Where will this safflower be grown?

Farmers may grow the GM safflower anywhere in Australia, subject to restrictions in some Australian States and Territories for marketing reasons. Commercial safflower production occurs mainly in New South Wales, Victoria and South Australia.

How has the GM safflower been modified?

The GM safflower has been modified to alter the oil profile in the seed. Suppressing two genes already present in safflower leads to production of more oleic acid (a mono-unsaturated fatty acid), and less linoleic acid (a poly-unsaturated fatty acid) in the seed. Seeds from the GM safflower contain approximately 92% oleic acid, and less than 2% linoleic acid. High purity oleic acid has applications in industry as a replacement to petroleum-based precursors in the manufacture of plastics, lubricants or cosmetics.

The GM safflower also contains a selectable marker gene from a common soil bacterium. This gene confers antibiotic resistance. It was used to select plants during laboratory development of the GM safflower and does not have any function when plants are grown in the field.

Has this GM safflower received any other approvals in Australia?

Food Standards Australia New Zealand (FSANZ) is responsible for food safety. The GM safflower has been developed for industrial oil applications and there is no intention to use it in human food. Nonetheless, an application to FSANZ for approval of the GM safflower lines has been lodged. Note that FSANZ has previously approved oil from GM high oleic soybean as safe for human consumption.

What controls have been imposed for this GM safflower?

The licence is for an ongoing commercial release. The Regulator has not imposed any specific measures to manage risk, as the risk assessment concluded that this release of the GM safflower poses negligible risks to the health and safety of people or the environment. However, general conditions have been imposed to ensure that there is ongoing oversight of the release.

Want more information?

A number of documents relating to this decision are available on the [DIR 158](#) page of the OGTR website or via Freecall 1800 181 030. These documents include the finalised Risk Assessment and Risk Management Plan (RARMP), a summary of the RARMP and the licence.

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