

Questions & Answers on licence DIR 149 – field trial of genetically modified (GM) Indian mustard (Juncea canola)

What is this licence for?

Nuseed Pty Ltd has received approval by the Gene Technology Regulator to trial, under limited and controlled conditions, Juncea canola plants with altered oil content. The field trial is permitted to take place over five years between April 2017 and May 2022, with trial sites selected from 102 possible local government areas in New South Wales, Victoria and Queensland. The trial may be conducted at a maximum of 4 sites of up to 2 hectares (ha) per site in 2017, 10 sites of up to 5 ha per site in 2018 and 15 sites of up to 10 ha per site in each subsequent year.

How has the GM Juncea canola been modified?

The GM Juncea canola has been modified to alter the oil content in the seed, specifically to produce long chain omega-3 oils. Short-chain omega-3 oils are naturally produced in Juncea canola seeds. The production of long chain omega-3 oils is achieved in the GM Juncea canola by introduction of a number of genes from other organisms that naturally make long chain omega-3 oils. Additionally, the GM Juncea canola contains a selectable marker gene, which was used to select GM plant cells and plants during initial development in the laboratory.

What is the purpose of the trial?

The purpose of the field trial is to evaluate the agronomic characteristics and oil content of the GM Juncea canola under field conditions. The GM Juncea canola will not enter the human food or animal feed supply, but some GM material may be used for small-scale experimental animal feeding studies.

What controls have been imposed for this release?

The Risk Assessment and Risk Management Plan (RARMP) for this application concluded that the proposed release poses negligible risks to people or the environment. However, a range of licence conditions will limit the size, location and duration of the release, as well as restrict the spread and persistence of the GM Juncea canola and the introduced genetic material. Control measures include conditions that provide for secure transport and storage of the GM plant materials, restricting pollen flow to other Juncea canola and related crops, and post-harvest monitoring of release sites for at least 24 months to ensure that no GMOs remain. A full list of the control measures are detailed in the licence.

Want more information?

A number of documents relating to this decision are available on the [DIR 149](#) page of the OGTR website or via Freecall 1 800 181 030. These documents include the finalised RARMP, a summary of the RARMP and the licence.

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