Australian Government
Department of Health and Aged Care
Office of the Gene Technology Regulator

12 December 2024

Summary of Licence Application DIR 212

The University of Adelaide has made an application under the *Gene Technology Act 2000* (the Act) for Dealings involving the Intentional Release (DIR) of genetically modified organisms (GMOs) into the Australian environment.

Project Title	Limited and controlled release of canola genetically modified for increased photosynthesis and photorespiration
Parent organism	Canola (*Brassica napus* L.)
Genetic modifications	
Introduced genes	Introduced genes conferring increased photosynthesis and photorespiration: • *GhPGLP1* gene from *Gossypium hirsutum* (cotton) • *AtPetC* gene from *Arabidopsis thaliana* • *AtPip1,3* gene from *A. thaliana* Introduced marker genes: • *hptII* gene from *Escherichia coli* for antibiotic resistance • *bar* gene from *Streptomyces hygroscopicus* for tolerance to the herbicide glufosinate
Genetic modification method	*Agrobacterium*-mediated transformation
Number of lines	Up to 15 lines
Principal purpose	To evaluate the performance of the GM canola under field conditions
Previous releases	There have been no previous releases of the GMOs
Proposed limits	
Proposed use of GM plants	No use in human food or animal feed proposed
Proposed location	The trial is proposed to take place at one site in South Australia (Light Regional Council)
Proposed release size	Up to 2 ha per year
Proposed period of release	From April 2025 to January 2030

Proposed Controls include measures to:

- restrict access to the trial site by people and animals
- limit outcrossing to non-GM plants through the use of monitoring and isolation zones
- ensure GM seeds and plant material are contained during transport and storage in accordance with the Regulator's guidelines
- ensure that GM plants do not remain after harvest through regular inspection of the trial site and destruction of any GM plants found before flowering.

Consideration as a limited and controlled release (field trial)

This application is considered to be a limited and controlled release application under section 50A of the Act, as the Regulator was satisfied that:

- its principal purpose is to enable the applicant to conduct experiments; and

- the applicant has proposed limits and controls that are of a kind that the Regulator is not required to consult before preparing the consultation version of the RARMP.

Next steps

The Gene Technology legislation sets out what the Regulator must do, as well as what the Regulator can or must consider, before deciding whether or not to issue a licence for this application.

The Regulator's staff will prepare a consultation version of the Risk Assessment and Risk Management Plan (RARMP) considering aspects of the application including the proposed limits and controls in accordance with the legislation.

The Regulator will seek comment on the consultation RARMP from the public, as well as a wide range of experts, agencies and authorities. The public and experts will be invited to provide submissions on the risks to human health and safety, and on risks to the environment from the proposed release.

At this stage, the consultation RARMP is expected to be released for comment in **late February 2025**.

After consultation, the Regulator's staff will finalise the RARMP, taking into account advice on relevant matters. The finalised RARMP will form the basis of the Regulator's decision whether or not to issue a licence. The consultation and final versions of the RARMP and associated documents will be available on the OGTR website when they are released.

Other information available from the OGTR website:

- documents on genetic modification methods and selectable marker genes
- information on Australia's national scheme for regulation of gene technology and
- information on the DIR application process.

Please use the contact details below if you:

- would like a copy of the application. Please include the identifier DIR 212
- have any questions about the application or the legislated evaluation process or
- wish to register on the mailing list.

The Office of the Gene Technology Regulator, MDP 54, GPO Box 9848, Canberra ACT 2601
Telephone: 1800 181 030
Email: ogtr@health.gov.au