

QUESTIONS & ANSWERS ON LICENCE DECISION DIR 100 FOR LIMITED & CONTROLLED RELEASE OF GENETICALLY MODIFIED WHEAT

What is this licence for?

CSIRO has received approval to trial up to 150 lines of genetically modified wheat, under limited and controlled conditions. The field trial will take place on one site in the Queensland local government area of Redland, on a maximum area of 0.1 ha per growing season, between June 2010 and December 2013.

What is the purpose of the trial?

The purpose of the trial is to assess the agronomic performance of the GM wheat lines for biomass production, grain weight and yield under rain-fed and drought/heat prone conditions. The applicant also intends to cross some of the lines using conventional breeding to produce GM wheat which contain a combination of these traits. Plant material or products from the GM wheat will not be used for human food or animal feed, or in the production of therapeutic goods.

How have the GM wheat lines been modified?

The GM wheat lines will contain one or more of 26 genes derived from either wheat or barley. The introduced genes encode proteins that are intended to enhance survival and grain quality in heat and drought prone environments through enhanced water use efficiency, photosynthesis and carbon assimilation.

All of the GM wheat lines contain an antibiotic resistance selectable marker gene or a herbicide tolerance gene derived from a common gut bacterium or a common soil bacterium, respectively. These genes were included to allow selection of genetically modified cells during the initial development of the GM plants in the laboratory. The herbicide will not be applied in the field.

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 and the environment. However, a range of licence conditions have been imposed to limit the release to the size, location and duration requested by the applicant as these were important considerations in the assessment process. As well as limits on the scale of the release, control measures have been imposed to restrict the spread and persistence of the GMOs and their introduced genetic material. These include ensuring that the GM wheat plants in the field are isolated from non-GM wheat plants; that transport and storage of the GM plant materials are in accordance with the Regulator's guidelines; and monitoring for, and destroying, any wheat plants on the release site for at least two year after the end of the trial and until no volunteers are observed for a continuous six month period.

Want more information?

A number of documents relating to this decision are available on the OGTR website (<<http://www.ogtr.gov.au>> under "What's New") or via Freecall 1800 181 030. These documents include the finalised RARMP, an Executive Summary, a Technical Summary and a copy of the full licence.