

Questions & Answers on licence decision DIR 112 for the limited & controlled release of genetically modified wheat and barley

What is this licence for?

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) has received approval to trial, under limited and controlled conditions, a range of GM wheat and barley lines that have been genetically modified (GM) for altered grain composition and nutrient utilisation efficiency. The field trial will take place at one site in Western Australia, on a maximum area of 1.0 ha per year between May 2012 and June 2015.

What is the purpose of the trial?

The purpose of the trial is to assess the agronomic performance and grain properties of the GM wheat and barley lines grown under field conditions. The GM wheat and barley will not be used in human food or animal feed.

How have the GM wheat and barley lines been modified?

Some of the GM wheat lines contain part of a gene derived from wheat, which is expected to suppress the function of the corresponding endogenous gene in the GM plants, resulting in altered starch composition in grains. The remainder of the GM wheat lines, and all of the GM barley lines, contain a gene from barley that is expected to enhance nitrogen utilisation efficiency. In addition, most of the GM wheat and barley lines contain one of two selectable marker genes, derived from a common gut bacterium. These genes were used to select genetically modified plant cells and plants during initial development of the GM plants in the laboratory. Some of the GM wheat and barley lines contain no selectable marker gene.

What controls have been imposed for this release?

The Risk Assessment and Risk Management Plan (RARMP) for this application concluded that the 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 conditions that provide for the secure transport and storage of the GM plant materials, and monitoring the release site for at two least years after final harvest, during which time any volunteer plants found must be destroyed.

What role does the Regulator play in matters of marketing, trade and co-existence?

The Regulator's decisions on whether or not to issue licences for dealings with genetically modified organisms are based on consideration of risks to human health and safety and the environment. Matters that relate to marketing and trade are outside the legislative responsibility of the Regulator. These matters are addressed by the States, Territories and industry.

Want more information?

A number of documents relating to this decision are available on the OGTR website (<<http://www.ogtr.gov.au>>) 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.