

QUESTIONS & ANSWERS ON LICENCE DECISION DIR 079/2007: LIMITED & CONTROLLED RELEASE OF GENETICALLY MODIFIED BANANA

What is this licence for?

Queensland University of Technology has obtained approval to trial, under limited and controlled conditions, approximately 17 banana lines that have been genetically modified (GM). The release is proposed take place at one site in the local government area of Cassowary Coast, Queensland, on a maximum total area of 1.4 ha between July 2008 and April 2010.

What is the purpose of the trial?

The purpose of the trial is to conduct proof of concept experiments with the GM banana plants to assess their development and disease response. None of the GM bananas are permitted to be used as human food or animal feed.

How have the GM banana lines been modified?

Up to 16 of the GM banana lines contain a gene derived from a nematode worm that makes a protein that is expected to confer disease resistance. Similar proteins occur naturally in a range of organisms, including plants widely consumed by people and animals.

One GM banana line contains a widely used reporter gene that codes for a non-toxic protein which provides a visual indication of which plant tissues contain the gene. The gene is derived from a jellyfish.

All of the GM banana lines also contain an antibiotic resistance selectable marker gene, which was used to identify transformed plants during initial development of GM plants in the laboratory. This gene is from a common gut bacterium.

What are the effects of the genetic modification?

The expression of the new genes is expected to confer disease resistance by preventing cells from dying in response to infection, or to enable visual identification of plant tissues in which the gene is expressed.

What controls have been imposed on this release?

The finalised Risk Assessment and Risk Management Plan (RARMP) that was prepared for this limited and controlled release and formed the basis of the Regulator's decision to issue the licence, concluded that the proposed release poses negligible risks to people or 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 evaluation process. Control measures to restrict the spread and persistence of the GMOs and the introduced genes include ensuring that transport and storage of the GM plant materials are in accordance with OGTR guidelines, and monitoring for, and destroying, any volunteer plants on the release site for at least twelve months after final harvest and until no volunteers are detected for 6 months.

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.