

QUESTIONS & ANSWERS ON LICENCE DECISION DIR 076/2007: 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 1,300 banana lines that have been genetically modified (GM) for enhanced nutrition. The release will take place at one site in the local government area of Cassowary Coast, Queensland, on a maximum total area of 1.4 ha between May 2008 and May 2012.

What are the effects of the genetic modification?

The expression of the new genes is expected to increase the level of pro-vitamin A, vitamin E or iron in the fruit of the GM banana lines.

How have the GM banana lines been modified?

The GM banana lines contain genes derived from a number of sources that are intended to enhance the nutritional properties of banana. All the introduced genes except one are derived from plants, including banana, maize, rice, soybean and thale cress (a common plant of the mustard family). The other gene is derived from a common soil bacterium.

Some of the GM banana lines contain a reporter gene that would indicate how well the introduced genes operate in the fruit. In addition, all lines contain an antibiotic resistance marker gene that was used in the laboratory to develop the different GM banana lines.

What is the purpose of the trial?

The aim of the trial is to conduct experiments to measure the expression and effectiveness of the introduced genes and to assess the agronomic performance of the GM banana lines under field conditions.

The trial involves proof of concept research that is funded under an international aid project and if it is successful, the technology will be transferred to developing countries. The GM banana lines are not intended for release in Australia.

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. In addition, none of the GM bananas are permitted to be used as human food or animal feed.

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.