

QUESTIONS & ANSWERS ON LICENCE DECISION DIR 082/2007 FOR LIMITED & CONTROLLED RELEASE OF GENETICALLY MODIFIED PERENNIAL RYEGRASS AND TALL FESCUE

What is this licence for?

The Victorian Department of Primary Industries (DPI Victoria) has obtained approval to trial, under limited and controlled conditions, up to 500 genetically modified (GM) perennial ryegrass and tall fescue lines. The release is proposed to take place at one site in the shire of Southern Grampians, Victoria, on an area of 800 m² per year between 2008 and 2010.

What is the purpose of the trial?

The purpose of the trial is to conduct proof-of-concept experiments with the GM perennial ryegrass and tall fescue plants to assess their agronomic performance and forage qualities. The GM perennial ryegrass and tall fescue plants from this trial will not be used for either human food or animal feed.

How have the GM perennial ryegrass and tall fescue lines been modified?

Each perennial ryegrass and tall fescue line contains one or more of 12 genes derived from perennial ryegrass and tall fescue. Expression of the introduced genes is expected to improve forage qualities by changing carbohydrate levels and improving digestibility of these pasture grasses. Similar proteins occur naturally in a range of organisms, including plants widely consumed by people and animals.

All of the GM perennial ryegrass and tall fescue 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.

Are perennial ryegrass and annual ryegrass the same?

No, perennial ryegrass (*Lolium perenne* L.) is a long-lived grass and is distinct from annual ryegrass (*Lolium rigidum*). Although these two species can cross, controls have been imposed for this trial to prevent any of the introduced genes being transferred to other grass species.

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 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 evaluation process. As well as limits on the scale of the release, control measures to restrict the spread and persistence of the GMOs and the introduced genes include ensuring that the GM perennial ryegrass and tall fescue plants do not flower in the field, that transport and storage of the GM plant materials are in accordance with OGTR guidelines; and monitoring for, and destroying, any perennial ryegrass and tall fescue plants on the release site for at least twelve months after final harvest and until no volunteers are detected for six 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.