

## **QUESTIONS & ANSWERS ON LICENCE DECISION DIR 094 FOR 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, 17 wheat lines and 10 barley lines genetically modified (GM) for enhanced nutrient utilisation efficiency. The field trial will take place on up to 1 ha from 2009-12, at one site in the Australian Capital Territory.

### **What is the purpose of the trial?**

The purpose of the trial is to characterise growth and yield characteristics of the GM plants when grown under field conditions. In addition, CSIRO aims to generate sufficient grain to assess any changes in grain protein composition for the GM plants relative to non-GM plants and how this may affect dough characteristics and end-product quality. Plant materials from the GM wheat and barley will not be used for either human or animal consumption.

### **How have the GM wheat and barley lines been modified?**

Nine of the GM wheat lines and five of the GM barley lines contain a gene derived from barley that encodes a metabolic enzyme. The introduced gene is expected to result in an increase in plant biomass and yield. The remainder of the lines are control lines that do not contain this gene. All of the GM wheat and barley lines contain one of two antibiotic resistance genes derived from a common gut bacterium. These were used to identify transformed plants during initial development of the GM lines in the laboratory.

### **What controls have been imposed on 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, licence conditions have been imposed to restrict 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 the introduced genetic material. These include ensuring that the GM wheat and barley plants in the field are isolated from non-GM wheat and barley plants; that transport and storage of the GM plant materials are in accordance with OGTR guidelines; and monitoring for, and destroying, any wheat or barley plants on the release site for at least two years after harvest and until no volunteers are detected for at least six continuous 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.