

## **Questions & Answers on licence DIR 211 – field trial of genetically modified (GM) safflower**

### **What does this licence allow?**

Miruku Australia Pty Ltd has been issued a licence to grow GM safflower modified for dairy protein production and altered fat composition. The field trial can take place from now until December 2029, commencing with up to 1 hectare of planting in 2025 and increasing to a maximum of 20 sites of up to 5 hectares each in 2029. The maximum total planting area is 231 hectares over the 5 years of the trial. The field trial will be conducted at sites in New South Wales, Victoria, Western Australia and South Australia.

### **How has the GM safflower been modified?**

The GM safflower contains introduced genes for dairy protein production and altered fat composition. The genes come from cattle and from plants, including genes from common plant species and gene fragments from safflower. The genes are expected to result in safflower plants that produce a dairy protein and have altered fatty acid compositions.

The GM safflower also contains introduced selectable marker genes. These are genes for tolerance to the herbicide glufosinate, resistance to the antibiotic hygromycin, or a visual selectable marker derived from a common skin bacterium. These genes were used to select plants during laboratory development of the GM safflower and do not have any function when plants are grown in the field.

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

The trial aims to assess the performance of the GM safflower under field conditions. The GM safflower grown in the field trial will not be used in commercial human food or animal feed. Products derived from GM safflower lines with dairy protein production and altered fat composition are proposed to be used for human sensory trials which would need to be conducted under the oversight of a Human Research Ethics Committee.

### **What controls are imposed for this release?**

The Risk Assessment and Risk Management Plan (RARMP) prepared for this application concluded that the field trial poses negligible risks to people or the environment. However, as this is a field trial under limited and controlled conditions, a number of licence conditions have been imposed to restrict when and where the trial can take place, limit the size of the trial (a maximum of 5 ha per site), and minimise GM safflower from spreading outside the trial sites. For example, there are conditions to isolate trial sites from other safflower crops or sexually compatible species, to securely transport and store the GMOs, and to inspect the sites at the end of the trial to ensure that all GM plants are destroyed. Full details of these control measures are available in the licence.

### **Want more information?**

A number of documents relating to this decision are available on the [DIR 211](#) page of the OGTR website or via Freecall 1800 181 030. These documents include the finalised Risk Assessment and Risk Management Plan (RARMP), a summary of the RARMP and the licence.

**The Office of the Gene Technology Regulator**  
**Tel: 1800 181 030    E-mail: [ogtr@health.gov.au](mailto:ogtr@health.gov.au)**  
**[OGTR Website](#)**