

## GENETICALLY MODIFIED WHEAT AND SUGARCANE IN AUSTRALIA

### KEY POINTS

- The Government believes gene technology can assist in dealing with emerging challenges, including those arising from climate change and pressure on global food supplies. Genetically modified (GM) crops can also benefit the environment by changing the way farmers manage their crops, such as through reduced herbicide use.
- The Government supports the existing national framework for management and regulation of GM crops and food, which includes careful scientific assessment of human health and environmental risks.
- GM wheat and GM sugarcane are not grown commercially in Australia, however the Gene Technology Regulator has issued several licences for field trials of these crops.
  - GM sugarcane is being studied for traits such as herbicide tolerance, altered plant growth, enhanced drought tolerance, enhanced nitrogen use efficiency, altered sucrose accumulation, and improved cellulosic ethanol production from sugarcane biomass. Trials are currently being conducted in Queensland.
  - GM wheat is being studied for traits such as enhanced nutrient utilisation efficiency, altered starch composition, altered grain composition (for baking quality and nutritional characteristics), and drought tolerance. GM wheat trials are currently underway in the Australian Capital Territory, South Australia and Victoria.
- In May 2009, nine grains organisations from Australia, Canada and the United States (three from each country – the Australian organisations were the Grains Council of Australia, the Grain Growers Association and the Pastoralists and Graziers Association of Western Australia) issued a joint statement indicating their intention to work toward the synchronised commercialisation of GM wheat. While this intention may be aimed at minimising market disruptions, any GM crop that is going to be commercialised in Australia must first be assessed and licensed by the Gene Technology Regulator. Markets must then be identified for the product for it to be viable.

### BACKGROUND

#### Overview of Gene Technology Regulation in Australia

The regulation of genetically modified organisms (GMOs) and genetically modified (GM) food in Australia is achieved through an integrated legislative framework which includes the Gene Technology Regulator, Food Standards Australia New Zealand, the Australian Pesticides and Veterinary Medicines Authority and a number of other regulatory authorities with complementary responsibilities and expertise.

The Gene Technology Regulator (the regulator) is responsible for the assessment and regulation of the intentional release of GMOs into the Australian environment, such as commercial release of a GM crop. Under the *Gene Technology Act 2000*, the regulator must assess each application for commercial release and will only issue a licence for its release if the assessment shows any potential risks can be managed so as to protect the health and safety of people and the environment. Since 2000, the regulator has approved several varieties of GM cotton, canola, carnations and a rose for commercial release in Australia.

Food Standards Australia New Zealand (FSANZ) is responsible for the assessment and regulation of GM foods. GM foods cannot be sold in Australia unless they have been assessed as safe for sale for human consumption by FSANZ. To allow consumers to

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make an informed choice, human food derived from GM crops must be labelled as GM if any genetic material and/or protein other than that normally present in the food is contained in the final product.

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