

Question Time Brief

# GENETICALLY MODIFIED CROPS IN AUSTRALIA

## Current Issue

*Genetic modification continues to be contentious in Australia.*

- *Weekly Times reports "GM Canola growing wild in WA town" [21 September 2011]*
- *Weekly Times "Two charged over Greenpeace raid on GM wheat trial" [14 September 2011]*
- *North Queensland Register outlines GM seed spillage issues in West Australia "GM seed spillage renews calls for ban" (25 August 2011).*
- *Australian article says "Organic farmer sues over GM taint" (28 July 11).*

## Talking Points

- In Australia, genetically modified organisms and genetically modified foods are regulated through an integrated legislative framework.
- The framework is three-tiered: genetically modified crops are not released to farmers unless they have been assessed as safe for human health and the environment; genetically modified foods are not approved for sale unless they have been assessed as safe; and foods that are approved must be labelled to allow consumer choice.
- The intentional release of a genetically modified crop into the Australian environment must be licensed by the Gene Technology Regulator. The license will only be issued if risks can be managed so as to protect the health and safety of people and the environment.
- Economic and marketing considerations such as coexistence and segregation in agricultural supply chains are addressed through state specific requirements and industry protocols.
- Decisions on whether to allow genetically modified crop production in part or all of a state or territory are a matter for that jurisdiction. Containment, coexistence and segregation are also managed through state-specific requirements, combined with industry protocols.
- Food Standards Australia New Zealand administers the

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regulation and labelling of genetically modified foods and ingredients and assesses all genetically modified foods for human consumption on a case by case basis.

- The safety assessment protocol used by Food Standards Australia New Zealand for genetically modified foods is based on internationally recognised principles for assessing the safety of whole foods.

**Key Facts****If asked: Wild GM canola found in WA**

- I am aware there were two genetically modified canola plants found growing among 190 other stray canola plants on roadsides in Esperance, Western Australia, in September 2011.
- I understand industry has procedures in place for the containment and transportation of seed including GM canola.
- Herbicide tolerant canola plants may be controlled by slashing, grading or treating with appropriate herbicides.
- It is important to note that before any GM canola is grown in Australia the Office of the Gene Technology Regulator has found it as safe to human health and safety and the environment as non GM canola varieties.

**If asked: seed spillage of GM canola in WA**

- I am aware of the spillage of Roundup Ready GM Canola on the Albany Highway in south-west Western Australia in August 2011.
- I understand that the transport company involved has a well-established management procedure in place for clean-up of grain spills and that the site is being closely monitored.
- Herbicides other than Roundup can be effectively used to control any plants that may germinate. When germination of residual seed became apparent the transport company coordinated spraying under the guidance of the West Australian government. The first spraying occurred around 8 September. Follow-up spraying is planned as required and the site is regularly inspected to identify further germination.

**If asked: contamination of organic farm with GM canola in WA**

- I am aware that there is a legal dispute between two West Australian farmers over a GM canola crop contaminating an organic farm.
- From a national perspective, the Gene Technology Regulator has approved the commercial release of GM canola.
- Decisions to permit genetically modified crop production are a matter for that jurisdiction. Coexistence and segregation are also managed through state-specific requirements, combined with industry protocols.
- It would be inappropriate for me to comment on any legal action.

**Question Time Brief****If asked: CSIRO GM wheat trials**

- The CSIRO GM wheat field trial was approved in 2009 under strict containment conditions by the Gene Technology Regulator after conducting a rigorous science-based risk assessment and extensive consultation.
- This trial is not secret - details, including trial locations, have been available on the Regulator's website since 2009.
- There has been no breach of containment for any GM wheat trials and wheat from these trials cannot enter the human or animal food supplies.
- To date, there has been no commercial release of GM wheat in Australia, nor has any application for commercial release been submitted to the regulator.
- CSIRO has stated it has no immediate plans to conduct human GM wheat trials and has only sought approval from the Regulator for future trials if and when they are needed, and that the animal trials are still continuing.
- This research could have positive health impacts not only for the lifestyle related diseases that affect Australians, but also for developing regions.
- I am advised that the incident of vandalism of a CSIRO GM wheat field trial is being investigated by the police and the Gene Technology Regulator and two women have been charged over the incident.

**Background****Wild GM canola found**

- The Conservation Council of Western Australia conducted a small study that found two GM canola plants of 190 stray canola plants collected along major roadsides into Esperance, WA's main GM canola growing region.
- Roundup Ready GM canola is one of the three types of herbicide tolerant canola grown in WA. The other two other types of herbicide tolerant canola grown in WA are triazine tolerant canola and imidiazoline-tolerant canola. There are both chemical and physical methods of control of these plants.
- Canola plants have been growing on roadsides in Western Australia since 1996, the year of the first widespread canola plantings. Seeds are accidentally dropped on roadsides during transport of grain. As GM canola is now planted in WA it is not unexpected that there will be GM canola 'volunteers' on roadsides.
- University of Melbourne research has shown that roadside canola plants do not generally persist for more than one year.
- There is no scientifically substantiated evidence of harm to people from GM canola approved by the Regulator.

**GM Canola Spillage**

- About 15 tonnes of GM canola was spilt near the West Australian town of Williams on 11 August 2011.
- The grain handler Co-operative Bulk Handling (CBH) has advised that the canola seed, gravel and top soil from the surrounding area has been removed. The handler has been working with the Western Australian Government to monitor and treat the site to mitigate any risk of contamination to surrounding areas.

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- Roundup Ready canola is not resistant to other herbicides used for control of broad leaf weeds.
- The site of the accident is 100 km north of the organic farm involved in the legal dispute over GM contamination, and is within a zone of 12 grain growers who have declared themselves 'GM-free'.

**GM Liability issues**

- A Statutory Review of the *Gene Technology Act 2000* was conducted in 2005. The review considered issues such as strict liability for contamination and concluded that specific provisions should not be introduced on strict liability, compensation funds, mandatory insurance and third party appeals.
  - The Statutory Review recommended that the Act should be reviewed every five years. The Department of Health and Ageing is currently conducting a review of the Act to ensure that it continues to accommodate emerging trends.
- State reviews of genetically modified crop legislation concluded that liability concerns can be adequately dealt with through common law and consumer protection legislation and therefore there is no need for additional liability measures to be put in place.

**Greenpeace and the CSIRO GM wheat trials**

- CSIRO have been conducting small contained trials of GM wheat with different traits since 2005. These trials are restricted in size and duration and crops from the trials are not permitted to enter the human or animal food supply.
- Two NSW women have been summonsed to appear in the ACT Magistrates Court charged with a number of offences. Including trespass and damaging Commonwealth property.
- The women are alleged to have entered a trial site in Ginninderra, Canberra and destroyed the 0.5ha trial plot with a whipper-snipper.

**FOI request from Greenpeace to the CSIRO**

- Media reports that in May 2011, Greenpeace lodged an FOI request with CSIRO for all documents relating to nutritional testing CSIRO had conducted, or will conduct, on pigs, rats or humans, with food produced using GM.
- Having identified 1042 related documents, CSIRO denied the request, citing the 539 hours required to process them as unreasonably resource intensive and not in the public interest. CSIRO suggested the request be modified to exclude documents relating to a project being undertaken on a commercial footing.

**GM foods**

- 47 genetically modified foods have been approved to date.
- Food Standards Australia New Zealand will not approve a genetically modified food for sale or use if there is evidence it would pose a risk to public health and safety.
- Foods from approved genetically modified crops have been consumed since genetically modified crops were first grown commercially in six countries in 1996, including the United States.
- Scientific evidence indicates that feeding genetically modified plant material to livestock does not affect the nutritional value or safety of the meat, milk and eggs derived from those animals. As these food products are not genetically modified, they are not required to be labelled as such.
- Genetically modified foods are required to be labelled in accordance with the Australia New Zealand Food Standards Code, enabling consumers to make informed choices about what they eat.

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- The Minister for Health and Ageing, the Hon. Nicola Roxon MP, has the lead Australian Government responsibility for the regulation of genetically modified organisms and genetically modified foods.
  - The Gene Technology Regulator is an independent statutory office holder in the Health Portfolio, responsible for the Gene Technology Act 2000.
- The Regulator has approved the commercial release of several varieties of cotton, canola, carnations and a rose; and has issued licences for field trials of crops as diverse as banana, sugarcane, wheat and barley, pineapple, papaya, white clover and grapevines, as well as the ornamental plant, torenia.
- In 2011, 700 000 hectares of genetically modified canola and cotton was planted in Australia. 2010 was the third year genetically modified canola could be grown commercially in New South Wales (24 040 hectares) and Victoria (36 500 hectares). It was the first year genetically modified canola could be grown commercially in Western Australia (72 790 hectares).
- Tasmania has a moratorium on the commercial release of genetically modified organisms until 2014. In 2008 the South Australian government extended its moratorium on genetically modified food crops until 2019.

**Potential benefits of GM**

- Biotechnology, including the development of genetically modified crops, can assist in increasing agricultural productivity in the face of climate change, resource constraints and the pressures of providing a secure food supply.
- Genetically modified crops can benefit the environment by changing the way farmers manage their crops.
- ABARES released two reports in 2008 which found that genetic modification of crops is delivering significant cost savings to farmers in other countries. Australian growers could lose significant market share if their access to genetically modified crop technology is restricted.

**FOI request from Greenpeace to DAFF**

- On 5 September 2011, the department received a Freedom of Information (FOI) request from Greenpeace seeking all documents pertaining to 'the development of salinity and drought-tolerant genetically modified wheat in Australia'.
- The department is responding to this request and have sent the applicant a notice of estimated charges.

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