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'We want to ensure that developments in biotechnology are captured for the benefit of the Australian community, industry and the environment, while safeguarding human health and ensuring environmental protection.'

So what are the main issues?

Marketers of GM canola and of products from livestock fed on GM materials, including GM canola, are unlikely to be disadvantaged in the Australian and world markets — GM canola seems to be finding ready markets throughout the world at prices very similar to those received for conventional canola.

There may be niche markets that pay premium prices for certified non-GM canola. The best prospect for the development of more widespread premiums may come from the reduced availability of conventional canola arising from the commercialisation of GM canola in Australia.

Finally, in deciding whether to grow a GM crop after it has been licenced for commercial release, market access issues are only part of the consideration. These should be weighed against the:

- agronomic benefits (such as higher yields or reduced inputs)
- environmental benefits (such as reduced chemical use)
- any costs associated with keeping GM and non-GM separate in the handling and storage process.

How do I find out more?

This brochure is one in a series of Biotechnology briefs presenting summaries of key reports on biotechnology and Australian agriculture.

More information is available in the report:

Foster, M. and French, S. 2007, Market Acceptance of GM Canola, ABARE Research Report 07.5 prepared for the Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, March 2007.

Other titles in this series?

Biotechnology briefs: GM grains in Australia - Identity preservation

Biotechnology briefs: GM oilseed crops and the Australian oilseed industry

Biotechnology briefs: GM canola - Potential impacts on organic farming in Australia

The Australian Government's National Biotechnology Strategy funded the production of these reports and brochures.



Biotechnology

Market acceptance of GM canola

briefs

Marketers of genetically modified (GM) canola are unlikely to be disadvantaged in the Australian and world markets. GM canola seems to be finding ready markets throughout the world at very similar prices to those received for conventional canola.

Is canola the same as rapeseed?

Canola is a cultivar of rapeseed developed by Canadian scientists in the 1970s. It has lower levels of certain anti-nutritional compounds than are typically found in rapeseed.

Virtually all Canadian and Australian rapeseed meets the canola standard and is usually termed 'canola'. Elsewhere, notably in the European Union (EU), the crop is typically called rapeseed, though the bulk of it meets the canola standard.

Is genetically modified canola grown in Australia?

Two varieties of genetically modified (GM) canola were approved by the Gene Technology Regulator in 2003 for commercial release in Australia. However, a number of concerns related to market acceptance have meant that the main canola producing states in Australia have put in place legislation preventing commercial plantings of GM canola.

What are the concerns about GM canola?

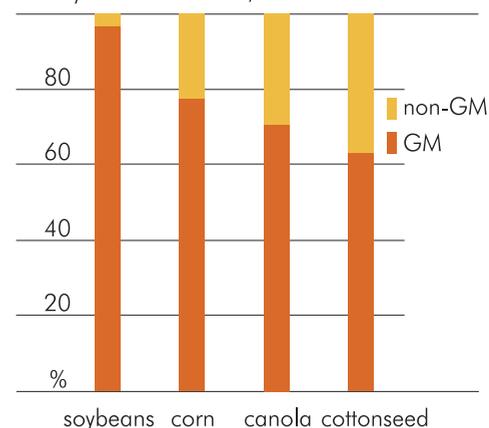
The concerns arise mainly from the perception that there is considerable consumer resistance to GM crops throughout the world. This includes resistance to products that are obtained from livestock fed on GM feedstuffs. Opponents of GM canola believe that its commercial production in Australia will lead to losses of markets for Australian canola and the loss of price

premiums for non-GM canola.

These attitudes are very much at odds with consumer buying patterns. Countries that produce GM products dominate world trade in grains and oilseeds. Figure 1 provides a comparison of the amounts of GM and non-GM grains produced throughout the world between 2003 and 2006.

Marketers of wheat and barley in Australia have claimed that the unintended presence of GM canola in their shipments could jeopardise some of their markets, which are crucial for the Australian economy. Worldwide experience since the introduction of GM grains in 1996 has shown that it is difficult to avoid the unintended presence of GM materials through cross pollination in fields and co-mingling in the grain handling and storage system.

fig 1 shares of GM and non-GM producing countries in world grain trade three years to 2005-06; excludes intra-EU trade



What is Australia's role in the world canola market?

The world canola market is very concentrated. Canada dominates the export trade with a market share of 71 per cent in the three years to 2005-06 (if intra-European Union trade is excluded). Over the same period, Australia accounted for 19 per cent of world canola exports. Australia's main customer for canola is Japan. Figure 2 documents the importance of Canada and Australia as canola suppliers to Japan.

What is Canada's experience with GM canola?

When Canada introduced GM canola, it lost access to the EU market for its canola seed. However, Canada has found ready markets for its increased canola supplies elsewhere, particularly in Mexico, the United States, Pakistan and China. Today, virtually all Canada's export canola can be considered GM, but this has not stopped its exports reaching record levels in 2006. Japan readily accepts Canada's GM canola at very similar prices to those paid for Australian non-GM canola (figure 2).

What are the markets for canola?

At the world level, the canola market has differentiated into the following segments:

- GM
- conventional
- certified non-GM
- organic

The EU is likely to be a growing market for canola or rapeseed over the next decade, especially for biofuel production. Australia currently has the advantage of being able to supply non-GM canola to the EU market,

but this could largely disappear if the EU lifts its ban on GM canola imports¹.

¹ In March 2007 the EU listed the Moatoria on the approval of GM seed for animal feed and industrial use.

What about GM stockfeed?

In Australia, farmers use GM feedstuffs widely – particularly locally produced cottonseed and imported soybean meal. However, some food manufacturers prefer not to use GM products and some livestock producers prefer not to use GM feed.

Some exporters of livestock products, most notably pig meat and dairy foods, believe that there is a market advantage in countries such as Japan from not using GM feedstuffs in animal production processes. However, the preference for products from livestock not fed on GM materials appears to be very much a niche market and is largely confined to dairy products.

fig 2 Japanese imports and import prices of GM (Canadian) and non-GM (Australian) canola

