Agrifood Awareness AUSTRALIA Limited

Telephone: 02 6273 9535
Fax: 02 6273 3968
Email: info@afaa.com.au
Web site: http://www.afaa.com.au
Address: PO Box E10, Kingston, ACT, 2604
ABN: 49 103 817 296

Genetically Modified Crops Management Act Review
GPO Box 1671
ADELAIDE SA 5001
Email: gmcropsactreview@saugov.sa.gov.au

16 August, 2007

Dear Members of the South Australian GM Crop Advisory Committee,

Please find enclosed Agrifood Awareness Australia Limited's submission to the South Australian moratorium review on genetically modified (GM) canola.

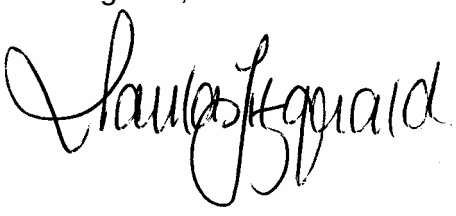
In 2006, the global area of GM crops continued to climb for the tenth consecutive year at a sustained double-digit growth rate of 13 per cent, reaching 102 million hectares.

A total of 10.3 million farmers from 22 countries (both developed and developing) planted GM crops in 2006. These countries, in order of hectarage were, USA, Argentina, Brazil, Canada, India, China, Paraguay, South Africa, Uruguay, Philippines, Australia, Romania, Mexico, Spain, Colombia, France, Iran, Honduras, Czech Republic, Portugal, Germany, and Slovakia – which includes small GM crop plantings in six European Union countries.

The major GM crops being grown and traded around the world were soybean occupying 58.6 million hectares, followed by corn (25.2 million hectares), cotton (13.4 million hectares) and canola (4.8 million hectares).

Genetically modified canola has been successfully grown and traded around the world for over a decade. The moratorium on GM canola is denying Australia access to a technology which is becoming widely accepted and is being fully utilised by our global competitors. Australia, particularly the Australian grains industry, is now ready to commercialise GM canola. It is time for the South Australian Government to remove the moratorium on GM canola and allow the industry to manage the commercial introduction.

Kind regards,



Paula Fitzgerald
EXECUTIVE DIRECTOR

ADDRESSING THE TERMS OF REFERENCE

A. THE PURPOSE AND OBJECTIVES OF THE ACT

Since the introduction of the Act/moratorium in 2004, many factors have changed - for example, the global adoption of GM crops has continued to increase. Genetically modified crops have now been grown and traded globally for over a decade and have been managed to meet customer requirements.

While the intention of the Act is to regulate all GM food crops, it really only applies to GM canola, as there are no other GM crops (food or otherwise) on the commercial horizon in Australia. It is likely that the next GM crop (with the exception of new cotton varieties) is likely to be at least seven years away.

Australian cotton growers have had access to GM varieties since 1996 and GM varieties now account for over 90 per cent of the commercial plantings. Genetically modified cotton has resulted in positive environmental, economic and social outcomes. Further, GM cotton has resulted in no market access issues.

GM canola

Canadian canola growers have enjoyed considerable benefits from the adoption of GM canola. The SA Act/moratorium has prevented Australian farmers from accessing these varieties and enjoying the same benefits.

In 2004 in Canada 70 per cent of canola grown was GM varieties. In 2000, the Canadian Canola Council commissioned a study to qualify and quantify the agronomic and economic impacts of GM canola.

The study entitled *An Agronomic and Economic Assessment of Transgenic Canola* (http://www.canola-council.org/manual/GMO/gmo_main.htm) found that:

- Growers chose GM varieties for several reasons. The key benefit and motivator to adopting GM varieties was more efficient weed control and ease of herbicide management in preventing weed resistance.
- Other reasons, related to weed management, included cleaning up fields, reducing the number of passes to control weeds and perennial weed control.
- Some producers reported better yields, higher yields, the ability to reduce costs and generate most profits.
- Other reasons for choosing GM varieties were to reduce tillage, seed earlier, conserve moisture and to compare GM varieties to conventional canola on a trial basis.

The Canadian Canola Council reports that the direct economic impact to growers of the adoption of GM canola from 1997 to 2000 is within the range of $144 and $249 million, varying between the farmer-based estimate and the value determined by the economic model.

Further, the Council notes that when a technology like GM canola is adopted, it can impact the whole community (examples include added investment in canola crushing capacity, impacts on local seed, herbicide and equipment industry investments and

development, added shipping, handling, marketing etc). The total indirect impact from the 1997 to 2000 period is estimated to range between $58 and $215 million.

In his report entitled *Conservation farming systems and canola* (www.croplifeaustralia.org.au/files/biotechnology/information/Conservation%20farming%20systems%) Dr Rob Norton of the University of Melbourne noted in 2003 that:

- Research in Australia has demonstrated that wheat following canola has a 20 per cent yield benefit over wheat following wheat.
- The introduction of two lines of GM canola with tolerance to either Roundup or glufosinate-ammonium herbicides will give farmers additional weed control options.
- GM canola will allow farmers to sow earlier, achieve better weed control when compared to current conventional canola weed control systems and avoid the inherent yield and oil penalties associated with Triazine Tolerant (TT) canola.
- Based on a scenario of GM canola replacing 50 per cent of the TT canola and 40 per cent of the conventional canola, and with an additional 160,000 hectares of canola plantings because of the new technology, it could be estimated that:
    - An extra 200,000 hectares of canola would be grown under direct drilling or minimum tillage
    - 640 tonnes less triazine herbicide would be used each year
    - average Australian canola yields would increase from 1.27 tonnes per hectare to 1.38 tonnes per hectare, with an increase of canola production estimated at 295,000 tonnes annually
    - wheat production would increase by 64,000 tonnes on the additional canola area.

This increase in canola and wheat production would be worth $135 million to the Australian grains industry.

Broader agriculture

Beyond canola producers, the Act has also had an impact on the broader Australian oilseed industry and plant breeders, and has resulted in a disincentive to invest in research and development in this area. A continuation of the moratorium, which presents no clear path to market for approved GM products, threatens research investment in this area, innovation and Australia's scientific capacity.

Industry ability

In May 2002, the Primary Industries Ministerial Council (PIMC) agreed that any GM risks to agricultural production should be managed by industry self regulation, supplemented by government monitoring. (See: http://www.mincos.gov.au/pdf/pimc_res_01.pdf). The Australian grains industry recently launched a statement entitled "Delivering market choice with GM canola" (www.afaa.com.au) which demonstrated the industry's ability, preparedness and commitment to managing the commercial introduction of GM canola.

Moratorium cost

ABARE concluded in September 2005 that, "A continuance of the current moratoriums, and extension to other transgenic broadacre crops, is expected to result in a loss of gross national product of $3 billion, in net present value terms, over the next ten years".

B: THE OPERATION OF THE ACT

Australia's gene technology regulatory system – overseen by the Gene Technology Regulator (GTR) is based on sound science, is transparent and considered to be the most rigorous system in the world.

State based moratoria have simply banned GTR-approved products, providing no regulatory framework in terms of delivery of additional data, independent assessment, transparency, etc.

State based moratoria have broken down the intention of the Federal Gene Technology Act/regulatory system which is to provide a national system for gene technology regulation in Australia.

Genetically modified crops have been grown and traded globally for over a decade. Market-based considerations should be encouraged to be discussed with commodity sectors during the development phase of a GM product to ensure that industry-based management systems, if necessary, can be implemented prior to a GM product gaining GTR approval.

C: THE REGULATION THAT PROHIBITS THE CULTIVATION OF GM FOOD CROPS IN SOUTH AUSTRALIA

The Australian grains industry has a strong and recognised reputation for delivering products that meet specific customer requirements.

The Australian grains industry supports the commercialisation of the approved GM canola varieties, as was demonstrated by the recent launch of the "Delivering market choice with GM canola" statement.

This document details the protocols and processes that the grains industry supply chain either has available or can implement to allow the commercialisation of GM canola, and meet marketplace, trade and regulatory requirements.

The information in the document has been compiled from extensive consultation with key stakeholders across the grains supply chain, from technology developers, through farmers and bulk handlers to marketers and industry representative organisations. Consultation revealed a wide and strong support for the commercialisation of GM canola for the benefits it can provide to Australian agriculture.

Behind this document sits the comprehensive 'Principles for process management of grain' report which states in detail the protocols, procedures and processes that are to be managed along the supply chain; which include standards, QA procedures, stewardship programs, codes of practice and commercial contractual arrangements.

The key elements of the document include:

- Acknowledgement that approved GM canola varieties were approved in 2003 by the Australian regulatory process providing assurance of food and environmental safety; and that GM canola has been grown and traded around the world for more than a decade.
- The principles underpinning GM canola commercialisation are that:

- trade in Australian canola is maintained or enhanced
- market choice along the supply chain is enabled
- it is open and transparent
- confidence is provided to all stakeholders

- The fundamental tenet is that participants right along the supply chain to have the ability to exercise choice. (The industry recognises that not all supply chain participants may choose to adopt GM canola, and hence, the supply chain must be in a position to offer and provide choice at all times).
- In providing market choice, supply chain participants can source, supply and manage the production, processing, manufacturing and delivery of product to a pre-determined set of specifications.
- Recognition that the Australian grains industry's supply chains are flexible and have the required capacity for existing or new processes to: enable GM grains to co-exist, use a semi-integrated system, or provide separate supply chains and infrastructure.
- Five criteria which have been developed to evaluate GM canola against to provide assurance that the approved GM canola meets the requirements for market choice.

Key supply chain stakeholders have endorsed the document as a pathway for commercialisation and agree the Australian grains industry is ready to move ahead with approved GM canola. The South Australia Government is encouraged to recognise the ability and commitment of the Australian grains industry, and the broader agricultural sector, to responsibly managing the commercial introduction of new products, particularly GM crops.

D: ENDURING GMO STATUS OF KANGAROO ISLAND AND EYRE PENINSULA

Agricultural organisations, particularly state farm associations and commodity councils have policies in place (see http://www.afaa.com.au/n_industry_policies_landing.asp) which support choice. While some Kangaroo Island and Eyre Peninsula citizens may choose not to cultivate or consume GM food crops, prohibiting them all together is denying others in the community the right to choose.

A recent report form ABARE entitled "Potential impacts from the introduction of GM canola on organic farming in Australia" (http://www.abareconomics.com/publications_html/crops/crops_07/organic_farm.pdf) notes that the introduction of GM canola would have minimal, if any, impact on Australia's organic industry.

The ABARE study assessed the potential impacts of the commercialisation of GM canola on the Australian organic production sector and concluded that:

- If GM canola were commercialised in Australia, the direct impacts on organic canola production in Australia are likely to be negligible. The provisions under the Australian organic certification standards require that organic production is isolated from the production of non-organic products, including GM canola.
- Only very small amounts, even none, of organic canola oil and organic canola meal were produced in recent years. This indicates that the organic livestock industries use suitable feed other than organic canola meal. This suggests that an introduction of GM canola would have minimal impact on the organic livestock industry.
- The impact on organic honey production is expected to be minimal. This is because GM canola is most likely to be planted as an alternative to conventional canola,

which is also unsuitable for organic honey production. Planting a crop not permitted in organic agriculture in place of conventional canola, which for residue reasons cannot usually be grown in the vicinity of organic hives, would have no additional effect on organic honey production.

Further, ABARE notes in a report entitled "Market Acceptance of GM canola" (www.abareconomics.com/publications_html/crops/crops_07/gm_canola.pdf) that comparisons between Australian and Canadian domestic prices which have been used to suggest that there is a growing price premium for Australian canola in world markets on the basis of its non-GM status, appear to be inaccurate. ABARE notes that, such a comparison reflects a range of domestic supply and demand conditions in the two markets, making it difficult to isolate any potential preferences for non-GM canola.

ABARE indicates that while there is some very limited evidence of price premiums for organic and certified GM-free canola, markets for these canola types are still very much small niches and mainly located in developed countries with high incomes per person.

At the world level, the canola market has become differentiated into GM, conventional, certified GM-free and organic segments. While there is some limited evidence of price premiums for organic and certified GM-free canola, markets for these canola types are still very much small niches and mainly located in developed countries with high incomes per person. A conclusion of this analysis is that, in the main traditional import markets for canola — Bangladesh, China, Japan, Mexico and Pakistan — GM canola is generally accepted as readily as conventional canola and is priced at very similar levels.

The South Australian government is strongly encouraged to recognise the Australian grains industry's demonstrated capacity and preparedness to deliver market choice. Designated GE Free Zones do not promote an environment of choice and deny consumers the opportunities to exploit the benefits offered by GM foods and crops, particularly GM canola.