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Mr Ian Armstrong
Chair
GM Crop Moratorium Review Secretariat
New South Wales Department of Primary
Industries
Orange NSW 2800
Email: gmcrops.review@dpi.nsw.gov.au

Dear Mr Armstrong

**Re: Submission to the New South Wales Government's Review of the Moratorium on
GM Canola**

On behalf of the IHD Group, I am delighted to provide the following submission to
the New South Wales Government's Review of the Moratorium on GM Canola.

Yours sincerely,



Bill Dowdle
Operations Manager
IHD P/L

IHD Pty Ltd – Submission to the New South Wales Government’s Review of the Moratorium on GM Canola

Company Background

The IHD Group is the leading, independent retail supplier of goods and services to Australia’s diverse food and fibre production industries. Established in 1986, IHD is focused on creating value for our suppliers, customers and our retailer members. We aim to achieve this through improved product selection and use in our grower customer’s crop and animal production enterprises, leading to enhanced crop and animal yields, quality and profit.

With 24 members nationally, the Group has aggregate annual gross purchases in excess of A\$800 million. With 24 members nationally, the Group has aggregate annual gross purchases in excess of A\$800 million with representation in all states across all crop segments.

GM Review Submission Summary

With global demand for food, feed, fuel and fibre increasing dramatically each year, many primary producers have begun incorporating advances in biotechnology as a major tool for more efficient and cost effective exploitation of various crops. Indeed, advances in biotechnology such as genetic modification (GM), have led to the development of new technologies that, when applied to plant breeding, have resulted in quantum improvements in the efficiency and effectiveness with which scientists can produce new and improved plant varieties.

While the current Moratorium was imposed due primarily to trade and market access issues, it is the belief of IHD that there is now overwhelming support from the farmers through to the technology providers, grain handlers, marketers and the general public for a lifting of the moratorium in New South Wales, allowing everyone to gain the choice to access GM canola.

The International GM Picture

GM crops were first commercialised in 1996. In 2006, 10.3 million farmers planted 177.7 million hectares of biotech crops in 22 countries, representing the 10th straight year in which these crops experienced double-digit growth rates. In fact, the global biotech crop area increased more than 50-fold in the first decade of commercialisation (1996-2005). (For more information, go to: <http://www.isaaa.org>)

The Australian GM Scene

Biotech crops have been commercialised in Australia in the cotton and carnation industries for more than 10 years. Insect resistant cotton, known as Ingard cotton, for instance, has been commercially available in Australia since 1996. It produces an insecticide in its leaves and stems to protect itself from the heliothis pest. To date, it has reduced pesticide applications by approximately 50% each season. Further, CSIRO researchers predict that the latest insect resistant cotton approved commercially, known as Bollgard II, will reduce pesticide use by up to 75% over conventional varieties.

More recently, herbicide tolerant GM canola varieties – Roundup Ready and InVigor – were approved by both the Office of the Gene Technology Regulator (OGTR) and

the Food Standards Australia and New Zealand (FSANZ), however, statewide bans on planting these crops meant that it is not currently grown commercially in Australia. Interestingly, in both the cases of the OGTR and FSANZ, extensive studies were conducted to determine the environmental and health safety of canola with these biotech traits. Their reports concluded there were negligible risks to humans, animals, insects, agricultural and other environments and negligible risks for weediness and gene transfer from both types of biotech canola. (See:

<http://www.ogtr.gov.au/ir/dir020.htm> and

<http://www.ogtr.gov.au/ir/dir021.htm>

FSANZ <http://www.foodstandards.gov.au/foodmatters/gmfoods/index.cfm>)

Canada's GM Canola Picture

More than 90% of canola grown in Canada is herbicide tolerant (HT) and 85% are GM varieties, according to a report by Professors Rob Norton and Rick Roush of The University of Melbourne titled: '*Canola and Australian Farming Systems 2003-2007.*' Average Canadian production yields have increased by 15.8% in the 10 years following the introduction of biotechnology. By comparison, average Australian canola yields declined by 13.9% from 1995/96 to 2005/06 and the crop area planted to canola reduced by over 45.4%, according to a recent report by The Australian Oilseeds Federation (AOF). (Go to:

http://www.australianoilseeds.com/data/assets/pdf_file/1536/AOF_Fast_Facts_5.pdf)

Biotech canola has been grown in Canada and the United States for more than a decade and is freely traded to the main canola import markets, including Japan, Mexico, Pakistan and China. By comparison, there has been no noticeable increase in Australia's share of global canola export. It is reasonable to expect that Australian canola exports would have benefited if international buyers and consumers had a strong preference for non-GM canola. Indeed, in another recent report by The Australian Bureau of Agricultural and Resource Economics (ABARE), it did not identify any large scale implications for market access or price premium advantage from continued regulation of biotech food crops.

(See: http://www.abare.gov.au/publications_html/crops/crops_07/GM_Canola.pdf)

Global demand for canola will continue to rise by 23% or the equivalent of a 29 million tonne increase from 2005 to 2010 driven by income growth, biofuels demand and the trend toward healthier vegetable oils led by canola, according to a 2007 report by Rabobank, the world's leading specialist in food and agribusiness banking. Further, the Australian canola industry, according to the AOF's Strategic Plan 2010, needs to retain its critical mass by increasing crop area and production to sustain development of export market opportunities and ensure continued investment in the crop through the supply chain from breeding to crushing and refining capacity.

Access to new technologies and world best practices is essential given the competition in the global oils market place and the potential for increased production of canola in other world geographies such as Ukraine, the United States, European Union and South Africa.

Co-Existence Issues

As noted by Professors Norton and Roush of The University of Melbourne, "Co-existence is the term given to the ability of different production systems to maintain the integrity of the product, as well as trace it through the agrifood supply chain. It is not a product or crop

safety issue, but relates solely to the production and marketing of crops approved for use and their ability to meet agreed limits." (See above for complete reference).

The two go on to say in their 2007 report that, "In Australia, for canola, levels of adventitious presence (AP) of GM canola less than 0.9% meet State legislative standards and identification of grain as non-GM for our most sensitive trading partners. Suitable testing procedures have been identified for detecting GM presence in grain samples.

"In countries currently producing GM crops, specialty crops (e.g., organic), non-GM and GM production systems are able to co-exist. For example, in North America, where 60% of the plantings of soybean, corn and canola are GM, the evidence shows that GM crops have co-existed with non-GM and organic crops without significant economic or commercial problems. Similar conclusions were drawn from corn production systems in Spain and the European Union (EU) releases a series of case studies on co-existence. The conclusion from the ED study on corn, sugar beet and cotton was that with few or no changes in current practices, seed production is technically feasible to meet a threshold of 0.5%."

An ABARE report released in May 2007 came to similar conclusions, reporting that the commercialisation of biotech canola in Australia is likely to have no material impacts on the organic canola, livestock and honey industries. (See: http://www.abare.gov.au/publications_html/crops/crops_07/organic_farm.pdf)

The Australian canola industry has currently adopted production protocols and successfully manages identity preservation systems for new markets such as specialty canola with different oil profiles, condiment mustards and industrial oilseeds with the introduction in 2007 of canola quality *Brassica Juncea*.

The Australian grains industry currently segregates about 70 different varieties of grains indicating the supply chain already successfully manages choice from the farm through to grain handlers and consumers.

Do non-GM Crops Carry Price Premiums?

Several recent studies by the Australian Seeds Federation (ASF), AOF and ABARE found segregation of biotech crops' seed and grain products is manageable to meet customer specifications within the limits of 0.5% for seed and 0.9% for grain AP thresholds approved by the Primary Industries' Ministerial Council (PIMC) in October 2005. This is the strictest AP standard established by any of Australia's main grain export trading markets including Japan. (See: http://www.abareconomics.com/publications_html/crops/crops_06/gm_grains.pdf)

International trade in biotech grains and oilseeds is now widespread. The market in Japan is a good benchmark to assess impacts from the introduction of biotech crops because it is the world's largest canola importer. Canada is the world's largest canola exporter (accounting for 70-80% of export trade) and Australia's major export competitor into key markets.

In Canada, where canola from biotech and conventional crops is co-mingled (i.e. is not segregated), canola exports have continued to grow and it has maintained its market share for canola imports into Japan. There is no evidence of widespread or significant premiums for Australia's non-GM canola status in export markets such as Japan although small niche markets have developed for non-GM food grade soybeans with innovative retail marketing approaches. Import prices for canola delivered to Japan from 1998 to 2004 (measured by the Ministry of Finance, Japan) was US\$291.43 per tonne for Australian canola compared to an average price of US\$291.29 per tonne for

Canadian canola. (See: www.canola-council.org/seedexports and www.canola-council.org/oilmealexports)

The regulations framework established for safety risk assessment of new grains and food in Australia are highly regarded in the global community. However, regulations must not be used as a non-tariff trade barrier as has happened in Europe over the past decade. It is worth noting the European Commission is in the final approval stages for biotech crop applications, including canola (rapeseed), in time for 2008 plantings.

Canola oil derived from biotech crops is not distinguishable from oil produced from conventional varieties or in organic production systems. In the case of highly refined foods, such as canola oil, labelling is not required as there is no remaining presence of any genetic material, either protein or DNA following processing. FSANZ has established a law that allows up to 1% adventitious presence of GM in non-GM foods without the requirement for labelling. This standard is consistent with food labelling laws in Europe and much stricter than the 5.0% of GM AP in other key canola markets, including Japan.

It is clear that the global market is signalling its desire for larger supplies of canola. The opportunity for Australia is to increase its canola production base. The 2010 Strategic Plan released by the AOF in 2005 identified that the key to encouraging increased production volumes of canola will be to aim for the highest possible return per hectare from growing the crop.

The 2015 strategic plan released by the Canadian Canola Council aims to produce 75% more canola to achieve a 15 million metric tonne target. More crop area (up 30%) and more yields (up 35%) through hybrids, genetic gains and new traits accessible through biotechnology (such as drought and stress tolerance) would accomplish this target production. In turn, Australian canola growers need equivalent maximum choice to rotate herbicides in the cropping system, access to biotechnology traits and the introduction of hybrids with very high yield potential.

What are the benefits of growing GM canola?

The adoption of GM traits has provided significant economic and environmental benefits in developed and developing economies. For example, the total value of biotechnology to the Canadian industry was estimated at C\$464 million from 1997-2000.

The economic impact of biotechnology on the canola industry in Canada over the past 10 years is one of the most extensively researched and reviewed agricultural developments. Among the many benefits identified by various studies were: significantly reduced herbicide costs; better weed control; substantial increases in crop yields; and adoption of conservation or no-till practices by many primary producers. (See: A. O'Donovan, A., Harker, A.J., Beckie, K.N., Blackshaw, H.J., and VanGessel, R.E., MJ 2007. "Lessons Learned from Adoption of GM Crops in North America." Other references include: Brookes, G. and Barfoot, P., December 2006. GM Crops: "The First Ten Years –Global Socio-Economic and Environmental Impacts)."

In Australia, canola is the third most important winter grain crop grown. Oilseeds are a major part of the Australian grains industry with gross annual revenue of around \$2.5 billion. Modelling analysis of the introduction of biotech canola based on replacing 50% of triazine tolerant (TT) canola area conducted by Professor Rob Norton at The University of Melbourne in 2003 put the value from increases in canola and wheat production in cropping rotations at \$135 million to the Australian grains industry. In addition, it was estimated that 640 tonnes less triazine herbicide would be used each year.

Conclusion

The moratorium has effectively denied growers access to new improved crop varieties, in particular canola. The introduction of the legislation has halted the path to market for GM crops, created regulatory uncertainty, significantly decreased investment in GM agriculture; and perhaps most importantly, limited the ability of Australian farmers to compete on the international canola market. ABARE has estimated that the cost to Australia in lost GNP over a 10-year period, should the current moratoria continue and be extended to other GM broad-acre crops, will be between \$1.5 billion and \$5.8 billion. (Go to: http://www.abareconomics.com/publications_html/ac/ac_05/ac05_sept.pdf)

As well as very large economic losses, the benefits now being denied to farmers in New South Wales and consumers are unquestionable. Significant investment in canola varietal improvement in Australian laboratories has now nowhere to continue except overseas. Australian development of new events for other GM crops is effectively stopped by the legislation. Member companies have been unable to invest in the technology in Australia and thus bring the new improved varieties through the Australian regulatory system for commercialisation. At the same time the legislation has allowed overseas countries to gain competitive advantage.

In Australia, biotechnology, including GM technologies, has the potential to provide solutions to current and future challenges facing Australian agriculture, including climate change, by allowing the development of varieties better adapted to environmental stresses such as drought, frost, acid soils and salinity, or with reduced susceptibility to pest and diseases. Biotechnology, including GM crops, will also be developed that provide more healthy high value crops and niche market opportunities.