

Letter to Members of the South Australian Parliament about the Moratorium on the Cultivation of Genetically Modified Crops in South Australia

An open letter was recently written by five scientists making claims about the SA moratorium on GM crops, seeking to end the moratorium. The following should be noted.

The five scientists have vested interests in the matter that they have not declared.

In contrast to the claims by the five scientists, the moratorium does not prevent research into GM crops in South Australia. Nor does it prevent scientists from growing GM crops in trial sites in SA. The moratorium does not prevent the development of more resilient crops, or more sustainable farming.

The letter from the five scientists suggested that the moratorium has harmed scientific research and innovation in the State more generally. In fact, the GM crop research sector undertakes a tiny proportion of all scientific research conducted in the State, and employs a tiny proportion of all scientists in the State. Most SA scientists are not even aware that the sector exists in SA.

Crops that are genetically engineered to allow farmers to adapt to a changing climate are still undergoing research and are not currently available for farmers to plant. Such GM crops may never be commercially available. It is absurd to end a moratorium now, in order to plant crops that are actually not available.

Much of the debate in SA is about whether to grow GM canola. Yet GM canola is a small fraction of SA's agricultural produce, and those who want to grow GM canola are a small fraction of all canola growers. GM canola costs more to grow, has no yield advantage and routinely sells for a lower price. Consequently, GM canola remains a minority crop compared to conventional canola in States that allow it to be grown.

An argument has been put forward that ending the moratorium will allow non-GM farmers to market their produce as non-GM, which will allow them to get a premium for their crop, and therefore increase their income. This ignores the inevitable contamination of non-GM crops by GM crops, and the subsequent loss of any premium.

GM crops easily contaminate other crops. In North America alone, there have been contamination incidents from growing GM canola, wheat, flax, corn, rice, alfalfa and creeping bentgrass. Some of these have been from trial sites, before any commercial production. Losses have been in the billions of dollars.¹

GM canola has also contaminated non-GM crops in Australia. Pollen from herbicide-tolerant canola has been found to travel up to 5km in Australia.²

If the moratorium ends, any initial freedom to choose to grow a GM crop or a non-GM crop will end once contamination occurs. Then farmers will be growing GM crops whether they want to or not. Under Australia's system, farmers who have been contaminated with a GM crop can be charged an end point royalty and fined for growing a GM crop without a licence. This is expected to push farmers into the arms of GM crop companies, to grow GM crops under licence rather than facing such costs from contamination.

GM crops have not increased yields compared to non-GM crops. Europe (which does not grow GM crops but invested in conventional plant breeding instead) and North America (which grows GM crops) both grow corn (maize) and canola, allowing yields to be compared between the two systems for these crops. Yield improvements in Europe have significantly

outperformed those of North America for these crops since GM crops were introduced.³ Europe also reduced herbicide and insecticide use to a greater extent than the USA.³

Repeated surveys show that consumers prefer not to eat GM crops. Why would SA drop its moratorium in order to plant crops that people don't want to buy?

Dropping the moratorium will allow all GM crops to be planted, including GM wheat. GM wheat has never been commercially grown anywhere in the world, and any escapes of GM wheat varieties from old trial sites are quickly eradicated.⁴ This is because wheat is eaten by people on a daily basis and is labelled in many countries. When Canadian farmers asked their markets whether they would accept GM wheat from Canada, they found that: "The international customers that buy 82% of Canada's wheat crop say that they will stop buying if Canada introduces GM wheat. These customers have been clear—they will stop buying all wheat from us—GM and non-GM alike. This market loss issue applies to all GM wheat, not just RR wheat."⁵ Any introduction of GM wheat into South Australia therefore risks losing an industry, that is worth \$7.1 billion per year nationally (5-year average).⁶

We urge the South Australian Parliament to maintain the GM crop moratorium until there is evidence that contamination can be prevented and farmers and the SA economy can benefit from its introduction.

References

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Signed

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Please note that I have been studying the risks and safety of GMOs for 25 years in a flourishing country with a profitable agriculture sector that is benefiting from a moratorium

on GM crop cultivation and with near zero import of GMOs for food or feed for almost 15 years.

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Please note that I have been studying GMOs for 25 years with a specific focus on risks for biodiversity, organic farming and coexistence with GM crops. Switzerland has a moratorium on GM crops since 2005.

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Please note: Almost universally, scientists who are independent of the GM industry and GM research find that feeding GM food crops to any of a variety of animals causes harm to the health of the animals, which may include damage to the immune system, digestive system, liver, kidneys, pituitary gland and to reproductive disorders.

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