

HOUSE OF ASSEMBLY

TUESDAY 29TH NOVEMBER 2016

GENE TECHNOLOGY (MISCELLANEOUS) AMENDMENT BILL

Second Reading

Adjourned debate on second reading.

(Continued from 28 September 2016.)

Mr PEDERICK (Hammond) (11:39): I rise to speak to the Gene Technology (Miscellaneous) Amendment Bill 2016. I note that the commonwealth Gene Technology Act came into being in 2000 and that the national gene technology regulatory system came into force in Australia in June 2001. Its aim is to identify and manage risks to human health and the environment posed by, or as a result of, gene technology.

The Gene Technology Act created the regulatory office, the Office of the Gene Technology Regulator, within the federal government. This office is overseen by an independent Gene Technology Regulator whose role is to administer the laws and make decisions relating to gene technology research and development in Australia. The act also created a ministerial council comprising the commonwealth health minister and ministers from each state and territory to provide broad direction and regulatory guidance to the regulator.

The bill also relates to the gene technology scheme, which regulates dealings with genetically modified material. It does not look directly at the regulation of genetically modified food, which is dealt with by Food Standards Australia New Zealand, or genetically modified drugs, which is dealt with by the Therapeutic Goods Administration. The scheme covers the use of genes as tools, and possible uses include medical research and plant research.

In 2011, the commonwealth act was reviewed and 16 recommendations were presented to ministers at the gene technology forum. Of these recommendations, 14 were supported, or supported in principle. These recommendations fall within three main categories:

- 1.Modifications to the operations of the Office of the Gene Technology Regulator;
- 2.Minor technical, administrative and consequential amendments; and
- 3.Other technical amendments.

In August 2015, the commonwealth Gene Technology Amendment Bill 2015 was passed without amendment by the House of Representatives and the Senate and came into force on 10 March 2016. The commonwealth bill dealt with five minor technical, administrative and consequential amendments that have minimal impact on the technical operation of the act.

It is to be noted that South Australia is a signatory to the national Gene Technology Agreement, an intergovernmental agreement, which sets out the understanding between the commonwealth, state and territory governments to establish a nationally consistent regulatory scheme. Within this agreement, the Gene Technology (Miscellaneous) Amendment Bill 2016 before the house will bring the South Australian Gene Technology Act 2001 into alignment with the commonwealth legislation.

We have been informed that these changes will have minimal impact on the operation of gene technology activities within South Australia. We have been advised that three states have applied agreed provisions by reference to the national law and that three state parliaments currently have bills before them. This bill deals with the five recommendations from the 2011 review, which provide minor administrative changes to the scheme. A further six recommendations have been implemented by the office of the regulator, without the need for legislative change. Three more significant recommendations are still to be considered further by the ministerial council.

I note from some of the comments during the second reading debate that the agreement is, ultimately, to ensure a national fulfilment of the principles of the gene technology legislation to protect the health and safety of people and protect the environment. This is achieved by identifying risks posed by, or as a result of, gene technology, and by managing those risks through regulation or certain dealings, which include the manipulation, storage, transfer or disposal of genetically modified organisms.

It has been a long debate, certainly in South Australia, on whether or not to have genetically modified canola, for instance, grown in this state. I note that there is a moratorium until 2019, yet over previous years we have seen the Eastern States and Western Australia have the ability to grow genetically modified canola. We have this absurd situation where, if the seed is grown on our side of the country, whether it is in Victoria or New South Wales—although I understand there are some licences to grow seed in Mount Gambier, South Australia—that seed has to be transported around through the Northern Territory to get to Western Australia because you need fresh seed every year to grow genetically modified canola.

There has been some debate about how useful genetically modified canola is. The feedback I have received from farmers in states that have been utilising this technology is that certainly in the bad drought year in Western Australia, which was in the last five years, I believe, for some farms it was the only crop that yielded because they could dry sow it early. It took every drop of rain, and they sprayed weeds with Roundup where the rest of their crops failed. A lot of comparisons are made about whether there is a yield potential and a price differential. I do not think the price differential, especially, has ever been proven. We learnt on the select committee into the grain industry, when we went to Canada, that their canola is co-mingled with either GM canola or other canola that is grown—

An honourable member: Conventional.

Mr PEDERICK: Conventional canola—thank you. That is certainly co-mingled, and it does not harm their markets into Japan, for instance, because that is the way they have done it for years and continue to do it.

There has been a lot of discussion about a benefit cost or a price benefit through not having genetically modified canola as a tool, but I do not think it has ever been proven. I have never had any evidence put before me. Interestingly, there is an ongoing court case in Western Australia at Kojonup (I am not sure whether it is up to the appeal stage), and it was certainly something that I raised five years ago with the minister and his staff in Western Australia at the time about what was happening with that. They had some interesting insights into how that supposed contamination came about. Sometimes there are other forces at play. It has caused a lot of grief. It has torn apart a community, and I think it has helped to destroy the marriage of one couple at least. This case of an organic farm allegedly being contaminated with genetically modified canola has caused a lot of headaches in the small regional community.

It is interesting how the debate has progressed over time. Certainly, a lot of people accept soy as a product. From what I am told, 99 per cent of soy products in the world

are genetically modified. Certainly, in the health scheme of things, insulin would not be around if it was not for genetic modification. In the member for Fisher's contribution, she talked about cotton, which is Bt cotton, genetically modified cotton. Farmers can restrict insecticide sprays by eight to 10 times. That is a massive saving for a farmer.

The member for Flinders will be able to help me if I am off the mark, but I think it is now around \$18 a hectare just to hire planes without chemicals. That is a huge cost if you have to fly the plane over a crop, let alone pay for the appropriate chemical, and in this case it will be an insecticide, and insecticides are expensive and they do not take prisoners. As we have heard, there is a recovery rate with regard to ladybirds another species; they can get on with their life and play their part in nature.

Some of the issues for me include the world-leading research done at the Waite Research Institute, part of the University of Adelaide, where they have a plant accelerator. From what I understand, one side is dedicated to genetically modified breeding and the other side to the regular breeding of crops. It is interesting that this work still goes on. I do not know if it has slowed down at all with the current moratorium in South Australia, but that work goes on in this state and I am sure that they need a licence for that. The minister may be able to come back with a response in his contribution about what arrangements are happening there.

Also, from what I understand—and I am happy for the minister to correct me if I am wrong—there are licences for some of the major companies growing genetically modified canola seed in the Mount Gambier area still. I would be interested in comments regarding that and, depending on what comes back, we may go into committee.

You certainly hear a lot of things regarding growing genetically modified canola. We have hundreds of kilometres of the state border up alongside Victoria, and I am sure there are farmers who have land on either side of the border who can grow genetically modified canola on one side and not on the other. There are a few rumours circulating at the moment that there may have been some seed brought into South Australia. I must say that it is only a rumour at this stage. However, I would be interested in knowing how the government would manage that under the regulatory scheme and what testing can be done and what plant testing provisions there are in the case of a plant like canola to detect if it is actually genetically modified or not.

Certainly, with regard to the legislation in the bill, I notice that part 5 deals with all the arrangements around the licensing system, around the application program, how the regulator interacts with applicants and, further down, how genetically modified material might interact with the local environment. Clauses 5 and 6 amend section 46A and section 49. Section 49 deals with issues around the dealings proposed to be authorised by the licence, which are limited to one or more of the following for purposes relating to disposing of a GMO, so this is about the disposal process. This links with the following:

(i) conducting experiments with the GMO;

(ii) propagating the GMO;

(iii) growing, raising or culturing the GMO;

(iv) transporting the GMO;

(v) any other dealings to be undertaken for the purposes of, or for purposes relating to, disposing of the GMO ...

I would certainly be interested in some of the responses on how much genetically modified material is grown in this state, especially with regard to propagating seed

whether it is by Monsanto or Bayer, which are both still live companies I am assuming. There have been a few amalgamations proposed recently with some—

Mr Treloar: It's hard to keep up.

Mr PEDERICK: —yes—chemical companies in the field. My understanding is that it does happen in this state and certainly there is work done at the Waite Institute. Across the world, there is some debate about whether genetically modified wheat would be useful. I think there is a small amount of it grown around the place, but I think it is on another level where it is grown with a grass. Obviously, canola has a broad leaf and there is a different regime of managing weeds with a broad leaf or with self-sown plants the year after that crop.

I see genetically modified plant breeding and how that has come into play over time as really, in the main, an acceleration of getting through the generations of the crossbreeding of plants. It is blown up at times to be something far more than that. It does take out a lot of the time to get through where you get varieties that have certain traits. Into the future there is probably a lot of potential in both drought-tolerant and saline-tolerant crops throughout the country, and that would certainly be beneficial for some farmers to use in their toolbox in the cropping periods.

There are a few questions around the licences. How many licences are put out through South Australia for the propagation of material? There are also other issues around conducting the use of genetically modified material, whether it is through the propagation or the disposal of that material. As I said earlier, I would also be interested to know whether there was a reasonably simple method of genetic testing that could test whether a product is actually modified material, so that could be identified in a timely manner without waiting for a lab test to come back. Then it could be dealt with quickly instead of waiting a longer time.

There certainly have been some benefits from genetic modification. It does create a lot of debate, but one thing about it is that if growing genetically modified canola were ever authorised in this state it would not make it compulsory to grow it; that is an option people can take up. It would have to be managed through the storage systems, as it has been across the world as a matter of course with their cropping programs. With those few words—

An honourable member interjecting:

Mr PEDERICK: I could keep going, but that will do. On this side of the house we support the bill, and I will be interested in the minister's response.