




Speech By
Scott Stewart

MEMBER FOR TOWNSVILLE

Record of Proceedings, 13 October 2016

GENE TECHNOLOGY (QUEENSLAND) BILL

 **Mr STEWART** (Townsville—ALP) (3.23 pm): It gives me great pleasure to rise to support the Gene Technology (Queensland) Bill 2016 as chair of the Education, Innovation and Small Business Committee whose responsibility it was to examine the bill in detail. Firstly, I would like to acknowledge the many groups and organisations for their submissions and for those who spoke to the committee at the various public hearings over the duration of the inquiry. I too would also like to thank the members of both sides of the House who were members of the committee and the secretariat staff for their involvement in the examination of the bill.

Queensland has been very strongly supportive of the national gene technology regulatory scheme since its introduction in 2000 to ensure gene technology takes place within a robust, ethical and scientific regulatory framework that is focused on the protection of human health, safety and the environment. Whilst it is recognised that some members of the community may hold concerns about gene technology and genetically modified organisms, GMOs, this bill is not about whether or not gene technology activities should be conducted in Queensland; rather, it is about ensuring that the arrangements regulating Queensland state government agencies, higher education institutions and sole traders align with the Commonwealth arrangements in the most efficient manner possible.

Recent advances in biotechnology provide ways of introducing very precise changes to genetic material—the sets of instructions in cells of all living creatures, which can include genes, parts of genes, groups of genes and so on. This allows, for the first time, researchers to transfer the properties instructed by a single gene from one organism to another.

Using these new techniques, commonly called gene technology, researchers can modify organisms by directly inserting or removing one or more parts of the gene so that an organism gains, loses or changes a specific characteristic or set of characteristics. The organisms changed or created using gene technology techniques are usually called genetically modified organisms or, in short, GMOs.

Gene technology does not include sexual reproduction, homologous recombination or any other technique specified as not gene technology in the Commonwealth Gene Technology Regulations 2001. The Commonwealth Gene Technology Act states that GMOs do not include human beings or organisms declared by regulation not to be GMOs. Gene technology is an important part of the genomics revolution which is the study of genes, their functions and interrelationships as being translated into benefits for agriculture, the environment, human health and other applications that we have not yet envisaged.

GMOs and products derived from GMOs have been benefitting Queenslanders for many years and many more are in the pipeline. We have already heard the shadow minister, the member for Mount Ommaney, highlight that genetically modified crops have been widely grown around the world and in Australia for the last 20 years. 1996 was the first year in which a significant area of crops containing GM traits were planted both on a global basis, 1.6 million hectares, and in Australia, 40,000 hectares. In 2014, 181.5 million hectares of GM crops were grown around the world.

The first GMO approval for commercial release in Australia was insect resistant cotton. This allowed Queensland farmers to grow GM cotton from 1996 onwards. GM cotton, either insect resistant, herbicide tolerate or both, accounts for over 99 per cent of production in Australia. Some other examples include the production of insulin which has been produced through genetic modification for over 30 years. Using gene technology researchers have also been able to modify existing cattle vaccines to deal with a wider range of cattle diseases. One of these is bovine respiratory disease which is the No. 1 disease affecting feedlot cattle in Queensland.

Gene technology has been used to develop new drought-resistant chickpeas. Chickpeas are now a major export crop in Queensland, but, importantly, they are also valuable to improving soil health in what were previously monocultural cropping areas. Herbicide-tolerate sugar cane is currently being trialled by Sugar Research Australia in the Burdekin, Mackay, Bundaberg, Moreton Bay and Hinchinbrook. The Queensland University of Technology is leading the multimillion dollar research project funded by the Bill and Melinda Gates Foundation to produce a genetically modified banana with greatly increased levels of betacarotene which the human body converts to vitamin A. This product has the potential to ease the suffering of millions of people in Africa and Asia for whom vitamin A deficiency can cause blindness or death. These examples are at the leading edge of a discipline that is continually growing and developing as scientists improve their methods of introducing genetic modifications. The long-term potential of these technologies is enormous, but there are also risks to be managed. That is why it is critical that we have the best regulatory system in place, which is exactly the aim of this bill.

Queensland's Gene Technology Act 2001 and the Gene Technology Regulation 2002 are part of an integrated national legislative scheme. By regulating and managing risks associated with gene technology and genetically modified organisms—this is not a test, but they are GMOs—the scheme focuses on protecting the environment and the health and safety of people while still enabling the development, testing and commercial release of highly productive new crops and lifesaving vaccines. State legislation is therefore necessary to ensure a regulatory coverage of state government agencies, higher education institutions and sole traders.

Under the intergovernmental Gene Technology Agreement 2001, Queensland has committed to keeping our legislation consistent with the Commonwealth legislation which covers the majority of organisations conducting dealings with GMOs. Queensland's legislation has been amended, as we have already heard, four times since 2007 to mirror the Commonwealth legislation which means there is great scope for development.

A further set of minor and technical amendments to the Commonwealth Gene Technology Act 2000 commenced on 11 March 2016 and, as such, the Queensland and Commonwealth legislation are once again out of alignment. Submitters to the bill expressed concern regarding the lock-step opt-out approach in the bill, citing that this approach will provide 'minimal opportunity for the Queensland minister or parliament to review or debate legislation that would affect Queensland agriculture'.

The bill adopts a lock-step opt-out approach by providing Queensland the ability to opt out of Commonwealth amendments by regulation if the amendments are not in Queensland's interests. Clause 7 allows for the modification of Commonwealth gene technology laws by regulation enabling Queensland to apply the Commonwealth legislation as if the amendment had not taken effect. The explanatory notes state that a regulation under clause 7 can be made to specify that an amendment to Commonwealth gene technology laws will not come into force in Queensland.

Both clauses 7 and 22 provide the power to make regulations under the new act. Any regulation made to opt out of a Commonwealth amendment would be subject to the possibility of disallowance by the Legislative Assembly under section 50 of the Statutory Instruments Act 1992. The explanatory notes state that the opt-out provision in the bill is a safeguard for Queensland but one that would be used rarely. Advice from the department illustrates their confidence in the consultation and approval process for any proposed changes to Commonwealth gene technology legislation. According to the explanatory notes, there is 'considerable opportunity for a jurisdiction to raise issues and seek to resolve any matters of concern'.

The final aspect of the bill is the ability to vary applications to GMOs, genetically modified organisms. The bill reflects amendments to Commonwealth gene technology laws in March this year about application to vary a licence. Clause 31 provides that undecided applications to vary existing GMO licences made under the current act will be dealt with under section 71 of the repeal act but would exclude section 71(2B). Section 71(2B) provides that the regulator must not vary a licence if the original application for the licence does not cover the risks posed by the new dealings raised by the variation.

Mr Rickuss interjected.

Madam DEPUTY SPEAKER (Ms Farmer): Thank you, member for Lockyer. I do not think the member for Townsville is accepting your interjections.

Mr STEWART: The explanatory notes state that by excluding section 71(2B) the regulator will be able to approve licence variations by taking into account the risk assessment and risk management plans already prepared for licence applications, for which licences have been issued, other than the original licence.

The department advised the committee that the most common requests made to the regulator to vary licences include variation of field trial licences when poor weather conditions impact on research and trial sites; extension of time when further funding has been received; addition of local government areas to locate enough growers for plant trials; and changing the configuration and number of trial sites if experimental plans have changed. Requests to vary licences for contained laboratories include adding or removing facilities, extending the period of a licence; and growing new organisms, genes or vectors to the licence but only when proposed dealings have been assessed in the risk assessment and risk management plans for that licence or any other licence.

The Gene Technology (Queensland) Bill 2016 will effectively introduce the latest Commonwealth amendments. This bill will establish a lock-step opt-out approach so that consistency with the Commonwealth legislation is automatically maintained, while the Queensland parliament's ability to block any Commonwealth amendments that are not in Queensland's interest are still preserved. I commend the bill to the House.