



JOHN MICKEL, MLA STATE MEMER FOR LOGAN

Hansard 18 October 2001

GENE TECHNOLOGY BILL

Mr MICKEL (Logan—ALP) (6.53 p.m.): I want to congratulate the minister on his maiden bill. Rather than going over the regulatory framework that many members have outlined, I want to quickly get to what biotechnology can mean for our farmers. A study by the Australian Bureau of Agricultural Resource Economics found that in 2000 around 40 million hectares of genetically modified crops were harvested throughout the world. These were mainly soy beans, maize, canola and cotton. They mainly came from the United States and, to a lesser extent, Argentina and Canada.

In Australia the only genetically modified broadacre crops that have reached commercialisation have been an insect resistant cotton that accounted for around 34 per cent of total Australian cotton plantings in 2000 and a herbicide tolerant cotton that accounted for a further three per cent. This means a reduction in the spraying which communities in those areas found so offensive. New technology means that cotton crops are able to withstand ravages of infection by insects. I want to also mention in passing that the cotton industry, leading the charge here, also creates important business opportunities in many rural centres. For the moment it seems, however, that public opinion in most of our major markets does not favour genetically modified foods. Asian buyers have indicated to the Supermarket to Asia program mainly that they want to source non-genetically modified food from Australia. Because of our relatively late entry into the genetically modified food production race, we have a window of opportunity to exploit this consumer requirement. However, we are warned that it is important to maintain flexibility and not to be locked out of any new technology. The pendulum of consumer opinion will swing as consumers see benefits in modified foods, and this will probably come from health or therapeutic advantages as foods are tailored to give those effects.

We should not regard biotechnology as something new. As we have heard already this evening, it has been around in the past to produce bread and beer and to make cheese. We can build on traditional biotechnology. For example, living plant cells are being used to produce biodegradable plastics, chemicals and fuels. Other GMO technology will see efforts to improve the taste and shelf life of foods. It will help manipulate genes that control the ripening of fruit and vegetables, allowing them to be transported further and kept longer.

Another wave of GMO technology that has been discussed will be in functional foods—foods that provide health benefits above and beyond basic nutrition. Nutraceuticals are foods that are genetically engineered to contain vaccines, drugs and other vital pharmaceuticals. Research is now under way to produce fruits and vegetables that express vaccines or therapies against diseases such as hepatitis B, diarrhoea, cholera, malaria and cancer. Therapeutic hormones, vaccines and industrial chemicals might be produced by molecular farming whereby plants and animals are genetically engineered to produce naturally occurring bioactive substances in commercial quantities.

In the year 2000 the Brisbane Institute was told-

Queensland is already a leading player in the field of biotechnology with a high rate of investment and the highest concentration of research jobs, that is more than 3,000, of any state. Queensland is also one of Australia's leaders in bio-industry services with more than 2,000 employees and is a clear leader in per capita bio-industry research funding in Australia with \$33.19 in bio research funding for every person in the state. Overall it has attracted \$119.5 million in competitive Commonwealth bio-industry funding.

I want to make this salient point about technologies and the rate of change. The Internet took only seven years to achieve the same level of worldwide penetration that the telephone took about 50 years to achieve.

With respect to agriculture, I want to finish on this point. I want to instance canola. There has been a dramatic increase in exports to Asian countries of 47 per cent. The commercial release of canola varieties that are genetically modified to be tolerant of particular herbicides in Australia will be possible in the next few years. The Australian Bureau of Agricultural Resource Economics estimates that the benefit of these crops is that they will offer a yield advantage of around seven per cent, compared with conventional varieties, and a decrease in weed control costs, including seed cloth, equivalent to a three per cent reduction in total production costs. It is estimated that the adoption of a GM variety would result in Australian canola production increasing by nearly nine per cent by the year 2010 and Australian feed exports increasing by around 12 per cent.

In closing, I congratulate the minister. Farmers in the fields have nothing to fear from this legislation. It is complementary legislation to the Commonwealth's and it deserves the support of the House.