

Genetically Modified cotton under the spotlight

Genetically modified cotton was the subject of a public hearing on 18 October for a committee inquiry into the issues faced by Australian primary producers who wish to make use of gene technology. As cotton is the first GM crop to be grown commercially in Australia, it provided a useful case study of the development and use of GM crops for the members of the House of Representatives Standing Committee on Primary Industries and Regional Services, chaired by Fran Bailey.

'cotton is the first GM crop to be grown commercially in Australia'

The committee spoke to organisations involved in different stages of the development, commercialisation and use of Bt cotton, which has been genetically modified to contain a protein toxic to major pests. Among those appearing before the committee were representatives of the cotton growers, Monsanto which owns the Bt gene, CSIRO which helped to field test the new variety and whose cotton cultivars were used with the Bt gene, and Cotton Seed Distributors which was licensed to sell Bt cotton.

The issues raised during the committee's public hearing with cotton interests reinforced messages that the committee has received from a range of individuals and organisations during earlier public hearings and from written submissions to the inquiry.

- Using GM crops is seen by many as essential for the economic sustainability of Australian primary production. This is true of cotton for which one of the main threats is the development of resistance to conventional pesticides.
- The domination of vital gene technologies by large multinational companies means that Australian organisations must form strategic alliances with these companies, as CSIRO and Cotton

Seed Distributors did, to gain access to the technologies. It also means that access to technologies that are needed to maintain Australia's international competitiveness may be denied, because it is not in the multinationals' global interest. This has been the cotton industry's recent experience.

- Cotton Seed Distributors' experience confirmed that negotiating freedom to operate when gene technologies are commercialised is very complex and expensive. More expertise and resources are needed for Australia to gain maximum benefit from its discoveries.
- Risks from GM crops need to be identified and managed. Very considerable risks have been recognised with some crops, although the risks with cotton are likely to be less. For example, tests have established a very low likelihood of genetic contamination from GM cotton. There is, however, the risk of resistance to Bt developing among target pests. This risk has been addressed by the cotton industry, which adopted a mandatory management strategy, including a cap on how much GM cotton is grown.
- Environmental impacts of GM crops need to be examined on a case by case basis. In the case of Bt cotton, there are environmental benefits; the use of conventional pesticides has fallen by nearly half, thereby reducing contamination and impacts on beneficial insects. This is one of the major reasons for growing Bt cotton, given that there are no financial advantages in doing so.
- There are growing concerns about the use of GM crops. It is likely that GM and non GM products will need to be segregated to meet consumer needs and future labelling requirements.

The nature of the debate about gene technology and its products demonstrates the need for more public information and consultation about the use of gene technologies.

The committee will use information such as that presented to it by the cotton industry and other participants in the inquiry when it prepares its report next year. More information about the committee's activities can be found by phoning (02) 6277 4500 or on the committee's internet site at www.aph.gov.au/house/committee/primind/gtingq/index.htm.