

Comments from the Victorian Departments of Health and Human Services and Economic Development, Jobs, Transport and Resources

Submission due: 14 February 2018

The Victorian Departments of Health and Human Services and Economic Development, Jobs, Transport and Resources (the departments) welcome the opportunity to provide comments on Application A1154 – Food derived from insect-protected cotton line MON88702 (the Application).

The Application seeks permission for the sale and use of food derived from an insect-protected cotton line MON88702 which has been genetically modified (GM) to provide protection from piercing and sucking insects belonging to the Hemiptera and Thysanoptera orders. The departments understand that:

- The Applicant has no intention to apply for permission to cultivate the crop of MON88702 in Australia or New Zealand.
- MON 88702 was developed through *Agrobacterium*-mediated transformation of cotton using a two transfer DNA (T-DNA) transformation plasmid vector containing *mCry51Aa2* and *aadA* expression cassettes.
- Traditional techniques of breeding, segregation, selection, and screening were used to isolate those plants that contained the *mCry51Aa2* expression cassette only.
- The major foods derived from cotton are highly refined cottonseed oil and linters (essentially pure cellulose fibres) which, as they would be unlikely to contain any novel protein or DNA, would not require GM labelling. Cottonseed oil may be used in foods such as frying oil, salad and cooking oil, and as an ingredient in mayonnaise, salad dressing, shortening, and margarine.
- The approval of Application A1154 would permit food derived from this GM cotton to enter the Australian and New Zealand markets.

In addition, the departments note the following:

- FSANZ has previously approved a similar application for Insect-protected Soybean Line MON87751 (Application A1110). MON87751 was transformed using a similar *Agrobacterium*-mediated transformation procedure.
- The application provides appropriate information regarding the genetic modification of the cotton line, including a detailed description of insertion of the PV-GHIR508523 plasmid at a specific locus of the cotton MON 88702 genome, and of the inheritance and stability of the insert across multiple generations.
- Bioinformatics analysis compared the 16 potential open reading frames (ORFs) to known protein toxins in the NCBI protein database and found no homology to known allergens or known toxins.
- The safety assessment showed that dietary exposure to mCry51Aa2 protein derived from MON 88702 did not pose health-related risk to humans or animals.

Overall, no toxicity, allergenicity or nutrient composition concerns were raised by FSANZ in its safety assessment of this Application.

On this basis, the departments support the progression of Application A1154.
