

From: The Sustainable Agriculture & Communities Alliance

To: FSANZ [submissions@foodstandards.gov.au](mailto:submissions@foodstandards.gov.au)

### **Submission regarding A1199 | SPS V11 and Z6 GM potato lines**

The farmers and community members of the Sustainable Agriculture & Communities Alliance thank FSANZ for the opportunity to submit our concerns about the proposed licensing of genetically modified Snowden potatoes.

#### **The Precautionary Principle and Evidence for Risks Concerning GM foods**

We have been unable to find any evidence for independent and rigorous assessment of the safety of the above-mentioned potatoes. We cannot accept FSANZ's assurances that the proponents of the GM potatoes have shown them to be safe. That is reminiscent of the industry assurances about the safety of tobacco.

We are aware that some genetically modified crops, including potatoes, have had unanticipated effects on the health of people and/or animals.

There is evidence that in some cases trans-genes have survived the process of digestion and that GM foods can affect animals and people in negative ways. There is growing evidence that dsRNAs may affect mammals and therefore concerns about the effects on people and animals are valid. Evidence of harm from GM foods and of the ongoing mutations of the genes in such foods is growing and not becoming less as time goes on. The genetic modification industry is still developing and knowledge is not complete about the effects of consumption of GM crops.

It is of utmost importance that any food crops that will carry new genetic traits should be thoroughly studied by independent scientists who are not employed by the GM industry. Such studies should preferably be several years in duration, in order to eliminate any possibility of unexpected negative effects on people or animals.

Genetic engineering is *still accumulating scientific knowledge*, and cannot guarantee that harm or unexpected effects will not develop. In fact past experiences have shown that *numerous unexpected and untoward effects* have occurred in the past, and caused financial, agricultural and human health problems. As an example: The Navdanya study was the first that looked at the long term negative impact of Bt cotton on soil organisms; it is a wake up to regulators around the world. It also shows that the claims of the Biotechnology industry about the safety of GM crops are misleading. Another example is GM toxins found in the blood of women and babies.

A study published recently in [Nature Biotechnology](#) explored the accuracy of the GM technique known as Cas9 scissors: *Scientists at the Sanger Institute at Cambridge, UK sought to determine whether Cas9's cut and paste process is accurate enough to be safely used in humans for treating disease. To answer this important question, they examined in detail the DNA segments in mouse embryonic stem cells and human cells near the segment that was cut to see if they were affected.*

*They found that after the DNA was repaired (new DNA pasted into the "cut" segment), the scissors continued to cut the DNA over and over again. They found significant areas near the cut site where DNA had been removed, rearranged or inverted.*

*If a fragment of DNA is removed or inverted (the genes switched around), the gene modification could be dangerous, and even lead to disease.*

See References (1) (2) (3) (4) (5) (6) (7)

### **Obvious and Deliberate Intention to not Label the GM potatoes:**

Our members are concerned that the public would not be made aware of the fact that the potatoes in question have been genetically engineered, as FSANZ has dismissed out of hand any possibility that the potatoes are different in composition from other non-GM potatoes. As the old saying goes: "The proof of the pudding is in the eating".

### **High Public Consumption of Potatoes: Risks of Unforeseen Problems: Who Benefits?**

The benefits of non-browning potatoes are primarily only to the GM industry and the manufacturers of foods such as fried potato chips. However, there are several non-GM lines of potatoes that could be used for commercial potato sources, and these would pose none of the inherent risks to consumers that there are with unlabelled GM potatoes that have no history of safety or long and rigorous testing.

### **Genetic Inheritance and Cross-Fertilization Issues:**

With any GM food crops there is the inevitability of the GM lines becoming part of the mainstream seed and food production, via cross fertilization as well as from sowing of non-GM and GM crops in the same crop because of seed saving.

The problem with GM foods becoming mainstream and mixed up with other potato crops, and also not being labelled or produced in specially assigned paddocks, is that there is no way of telling from their appearance what possibly harmful proteins these crops may contain. The genetic lines (good and bad) are then part of the food chain for ever.

### **Poor Returns to Farmers From GM Crops:**

GM canola, corn and maize have a history of poor financial returns for farmers, with the benefits being to the GM producers themselves, who hold the patents for their use and also sell more chemicals to use with these crops.

### **Marketing Problems:**

Most GM strains of foods are only pesticide resistant, and the public is more and more aware of the fact that GM crops contain higher levels of agricultural chemicals, and that some of these chemicals are now subject to litigation because of evidence that they trigger various forms of cancer.

It would not be a good idea for FSANZ to approve crops that would have a negative image for either the Australian public or overseas buyers. This is especially so if, down line, the potatoes in question are found to have developed harmful products.

### **Recommendations:**

In the interests of public safety and the precautionary principle, we recommend that FSANZ makes public independent and peer reviewed experimental studies to show that the dsRNAs in the non-browning GM potatoes will not survive digestion and affect laboratory animals when the potatoes are fed to them.

Also FSANZ should make public the methodology used in the research laboratories so that an assessment may be made as to the reliability of any reassurance about safety of consumption.

FSANZ should publish information on the full analysis of the contents of the GM potatoes, so that any potential novel toxins or proteins may be identified.

If studies show that GM potatoes may contain allergens or toxins, even if they are imported from a country such as the USA, FSANZ should stand firm against their importation into Australia, in the interests of community health and agriculture.

Yours truly,



Secretary, SACA

1. References:
2. Monsanto's Bt Cotton Kills the Soil as Well as Farmers,  
<https://www.globalresearch.ca/monsanto-s-bt-cotton-kills-the-soil-as-well-as-farmers/12432>
3. Molecular characterization of an unauthorized genetically modified *Bacillus subtilis* production strain identified in a vitamin B<sub>2</sub> feed additive, [ValentinaParacchini<sup>a1</sup>MauroPetrillo<sup>a1</sup>RalfReiting<sup>b</sup>AlexandreAngersLoustau<sup>a</sup>DanielaWahler<sup>c</sup>AndreaStolz<sup>c</sup>BirgitSchönig<sup>c</sup>AnastasiaMatthies<sup>c</sup>JoachimBendiek<sup>c</sup>Dominik.Meinel<sup>d</sup>SvenPecoraro<sup>d</sup>UlrichBusch<sup>d</sup>AlexPatak<sup>a</sup>JoachimKreysa<sup>a</sup>LutzGrohmann<sup>c</sup>](#)
4. Mass Deaths in Sheep Grazing on Bt Cotton, Science in Society Archive  
<http://www.i-sis.org.uk/MDSGBTC.php>
5. <http://www.roslin.ed.ac.uk/public-interest/dolly-the-sheep/a-life-of-dolly/>
6. <https://www.sanger.ac.uk/news/view/genome-damage-crisprcas9-gene-editing-higher-thought>
7. Toxin from GM crops found in human blood: Study  
<http://indiatoday.intoday.in/site/story/toxin-from-gm-crops-found-in-human-blood/1/137728.html>