

There are several problems with the Safety Assessment¹ for this application.

1. Testing is too limited. Testing revealed that the introduced proteins are pre-existing in human food; are not very similar to known allergens; and are present in fairly similar levels in GM bananas to non-GM bananas. The assumption follows that therefore these products are safe for humans.
 - a. The University of Queensland states that scientists “don’t really understand the genomes of many plants and animals we eat”², followed by the assumption that therefore altering it should be OK, and that there is no evidence to the contrary. This is not rigorous science.
 - b. While laboratory testing suggests the introduced proteins will be broken down in digestion, it is contended elsewhere that “Small fragments of DNA from food can and do enter the blood stream and body organs”³.
 - c. No long-term and inter-generational studies have been carried out on any GM crops^{3,4}.
 - d. Indeed the Royal Society suggests that ongoing monitoring should mitigate risks⁵. This represents a significant ethical issue for GM crops: it looks like an un-announced mass experiment.
2. Environmental risks are not assessed. It needs to be demonstrated that cross-pollination will not contaminate, for example, organic or heirloom crops. Effects on bees and other insects need to be studied. Long-term effects on the soil as GM crops die and rot need to be studied.
3. Safety for animals eating the GM crops has not been assessed. I find this concerning. If animal studies are typically used to ascertain food safety for humans³, I wonder why this aspect has not been addressed in this case.
4. The assessment does not consider the ethical problem of patenting a food crop.
 - a. There is no assessment of the financial risk to farmers who need to annually buy their permitted GM plants^{6,7,8}.
 - b. There is no addressing of the philosophical question of patenting a plant. I am not convinced by the argument that collecting seeds (or palm suckers) is not a human right⁹. There seem to be sinister attempts both to remove human autonomy, and to introduce changes highly unlikely or impossible to have happened by chance: thus directly intervening in the scientifically theorised evolutionary process.
 - c. Ironically, the unexplained precision observed at many levels of the natural world seems to defy reliance on chance origins, and hints at the spiritual question of a Designer, whom some call God, some call Nature. The practice of genetically tweaking and patenting plants does seem to be asking for trouble on many fronts if we are indeed messing with something bigger than we realise.

I therefore submit that this, and all other genetically modified food crops, be placed on moratorium until rigorously tested on at least three generations of willing humans, including during pregnancy, if this can be passed by an ethics committee.

1. Downloaded from <https://www.foodstandards.gov.au/code/applications/Pages/A1274---Food-derived-from-disease-resistant-banana-line-QCAV-4-.aspx>
2. <https://qaafi.uq.edu.au/article/2023/05/what%E2%80%99s-latest-gmos-and-gene-edited-foods-%E2%80%93-and-what-are-concerns>
3. <https://www.medicalnewstoday.com/articles/324576#cons>
4. <https://www.consumerreports.org/cro/magazine/2015/02/gmo-foods-what-you-need-to-know/index.htm>
5. <https://royalsociety.org/topics-policy/projects/gm-plants/gm-crops-have-been-around-20-years-might-there-still-be-unexpected-untoward-side-effects/>
6. <https://royalsociety.org/topics-policy/projects/gm-plants/how-are-gm-crops-regulated/>
7. <https://sitn.hms.harvard.edu/flash/2015/the-patent-landscape-of-genetically-modified-organisms/>
8. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/reel13&div=40&id=&page=>
9. https://en.wikipedia.org/wiki/Talk:Percy_Schmeiser##