

POINTS TO MAKE : Why The trials should not be approved by ERMA:

1) These GE plants can never be used commercially because they would cause widespread GE contamination of other brassica crops. This is unacceptable because:

- It destroys people's right to buy GE-free food
- It denies the choice for NZ growers to produce GE-free products
- It will contaminate honey with GE pollen
- It will threaten export markets and NZ's reputation for producing clean, natural food
- It means in practice the harm outweighs the benefits of a field trial

2) The benefit claimed for developing GE insect-resistant plants can only ever be short-term. They are not sustainable.

- The insects will evolve to become resistant to the crops
- This could result in more use of toxic sprays to control pests
- Farm-management systems intended to stop insect-resistance cannot be adequately delivered, with a **20% failure rate** with GE-crops in the USA already.
- Any short-lived benefits before insects are resistant comes at the cost of irreversible GE contamination

3) It is wrong to spend public money on GE products that can have no commercial future and which most New Zealanders don't want

- Official surveys show a large majority (67%) of New Zealanders do not want GE crops in our agriculture
- The GE-brassica research comes at the cost of investing in research into more sustainable production methods including organic agriculture
- New Zealand communities object to this misuse of public money by Crop and Food Research
- Funding alternative research would be an opportunity to find long-term ways to reduce use of chemical sprays, and to grow clean food that exporters and consumers want and which are of proven economic benefit

4) The trials must not be in open fields but should be fully contained, (if allowed at all). This would:

- Ensure no contamination spreads as a result of flooding, wind, or through insects, animals and birds
- Allow plants to grow in soil and all material remove from the site
- Allow researchers to manage the pest insects and better monitor data
- Be consistent with the researchers' plans to artificially introduce pest-insects to replicate infestations if they don't occur naturally
- Keep away birds and mammals without use of sprays the researchers plan using
- Ensure unexpected changes in plant development are identified to prevent spread of genetic material through human error
- Allow controlled study of insect resistance over a shorter time period than ten years which is not possible if resistant larvae are destroyed as the researchers plan

5) ERMA should not approve field-experiments with GE plants that contain antibiotic –resistant marker genes

- Use of antibiotic-resistance genes in food plants adds to the risk associated with antibiotic- resistance in diseases linked to misuse of antibiotics in farming and overuse in medicine.
- It is wrong to claim GE foods are “insignificant” in possibly adding to the problem because not enough is yet known
- Previous approval by some Food Authorities similar to the experimental GE brassicas cannot be seen as reliable for risk-assessment or a guarantee of safety. These approvals are not based on independent scientific tests and there is no monitoring of public health in communities being exposed

6) The trials should not be allowed until evidence of health impacts on people and animals linked to this type of GE crop are properly investigated

- Evidence of harm to animals and people from GE crops needs to be fully investigated before any further approval for trials
- In the Philippines scientists identified immune-responses in people exposed to genes from GE plants growing near by, and found sickness in villagers
- In India some animals fed GE crops containing similar “Bt” toxins to the proposed trial-crop, have fallen sick or died
- Some forms of Bt toxins have been identified as potential allergens in humans. “Starlink Corn” was one example which prompted a billion-dollar product-recall when it accidentally contaminated human food
- Health risks of GE brassicas have not been studied in any of the previous trials, nor are tests proposed in this trial. This lack of data leaves future decisions on risk in the dark
- This and other laboratory research should be completed, peer reviewed and published in a recognized Journal before the application is considered further.

7) ERMA should not approve field-experiments for GE organisms when the precise combination of plant, bacteria, virus and other genes is not known

- Blanket-approval cannot be justified because different re-combinations may present different risks and should be considered on a case-by-case basis
- Independent scientists cannot provide expert advice on proper risk- management without knowing the gene-profile of the GE plants created
- The applicant has ignored research published overseas on the risks of Bt crops

8) The GE crop trial risks undermining public confidence in the direction and regulation of gene science. There are community expectations that research in New Zealand should focus on long-term sustainability, and respect shared values

- The field-trial should be rejected and staff employed to undertake alternative research with long-term sustainability not a short-term fix, as the aim
- Alternative research offer a possibility of commercially viable products which the GE brassica trials do not
- Alternative research will benefit New Zealand Scientist’s international reputation as being ethical, socially and environmentally responsible, informed about problems with GE crops overseas, and respectful of standards established by New Zealand society and consumer- markets