

## House of Representatives Inquiry into Primary Producer Access to Gene Technology

Melbourne Hearing 13<sup>th</sup> August 99

### **Additional information supplied on the day.**

The Organic Industry in Australia believes it is important to clearly and urgently state the minimum conditions whereby our industry will be protected and able to prosper in the face of widespread production of genetically engineered crops.

Notwithstanding the above, we support the notion of a five year, or longer, freeze on further releases of GMO trial crops or commercial releases.

### **Below are the hazards that the Organic industry faces from Gene Technology.**

- ◇ **Gene Introgression** - this occurs with same species and related species through hybridisation as a consequence of pollen transfer. This is not a matter of “if it will occur”, rather, “when will it occur”. Trials of canola are already widespread see attached GMAC documents. The area of trials is in the 1000,s of hectares.
- ◇ **Escape of the crop plant to the wild** - here the plant moves into the feral and volunteer populations that abut growing areas where the gene can multiply and further spread. Again this is not a matter of “if it will occur”, rather, “when will it occur”.
- ◇ **Economic hazards** - through either of the above, genetic contamination or pollution of organic and “GE free” crops will occur. The risk of this depends on the crop species and their degree of pollination and ability to spread into the wild. Farmers affected will lose their ability to carry out their chosen trade and will lose income when such contamination occurs.
- ◇ **Environmental hazards** - traits such as herbicide resistance, insect resistance, drought resistance, salt tolerance all have unique risks attached.
  - ◇ Herbicide resistance - may lead to greater use of herbicides with ecological impact.
  - ◇ Insect resistant plants - may lead to resistance in insect population to build leading to loss of biological controls such as Bt sprays for organic farmers
  - ◇ Insect resistant plants - may lead to impact on non target organisms.
  - ◇ Drought resistant and salt tolerant plants - may lead to weeds moving into areas they have not previously been able to establish in.

- ◇ **Extension of the agricultural estate** - traits for drought resistance, salt tolerance and other hardier traits will lead to an extension of land under agronomic production into marginal areas. These marginal areas as they exist today are necessary for maintaining species biodiversity. The head of the Australian museum in Sydney has warned of an impending crisis and claims we need a huge area to be set aside for species protection (10 times as large as Kakadu) and we need to start seriously farming our native species in order to protect them. He would like to see a minimisation of intensive farming as we know it today, not an intensification.

**In order to mitigate or minimise the effects of the above hazards the following protocols are proposed.**

➤ **Liability**

The establishment of liability for environmental and economic damage. This must identify who will pay when such damage can be identified. We maintain that these groups are a minimum for establishment of liability:

- Developer of GMO, presumably the holder of patents and beneficiary of licence fees
- Government bodies who approved release, both State and Federal
- All businesses that engage in production and growing of the GMO

➤ **Compensation fund**

The establishment of a compensation fund is required to respond when economic hazards arise. This is best funded through a levy to be collected on any GMO transaction, ie sale of seed, royalty payment, sale of product. An organic or “GE free” farmer can then apply directly to this fund for compensation immediately they suffer a financial loss as a result of contamination. It is unthinkable to suggest that we have the common law system to protect ourselves. The onus would be on us to fight a costly court case where we would need to establish causality (what farm or group of farms). We may still lose while all along we have already lost our source of income.

Such a compensation fund would also be responsible for paying out in the event of loss of earnings from a widespread environmental effect such as the development of Bt resistance from the use of GMO crops. Bt is an essential integrated pest management tool for organic farmers and we will suffer financially if this is damaged.

**The simple questions that must be satisfied are: “What right does an individual farmer have to engage in a production technology that crosses his boundary and stops another farmer from earning his income?”**

**Also where this risk exists, it is the governments clear responsibility to provide for appropriate regulatory protection for the existing organic and “GE free” industry!**

➤ **Buffer Zones**

Appropriate buffer zones in the case of open pollinated varieties. For example canola is currently being trialed or been trialed recently in hundreds of sites covering thousands of hectares throughout canola growing regions of Australia. We expect that contamination has already occurred and should we do testing we would discover this fact. An appropriate buffer zone in the case of canola would be perhaps 15 km from the nearest canola crop.

➤ **Environmental impact assessment**

Environmental impact assessment studies on all releases of GMO crops whether field trial or commercial release. The mining and forestry industry is subject to these controls now with only a tiny area of Australia effected. These EIS studies must be independent and based on quantitative risk assessment. Mathematical modelling with established parameters must be undertaken to quantify the risks. An independent evaluation is then undertaken to identify if the risk is to be mitigated or minimised. Then make a decision if the release is to proceed. The people empowered to make this decision must have no vested interest and be experts at understanding quantitative risk assessment. Most of the current people involved in GMAC have a vested interest in biotechnology and flawed decisions will take place as a result.

➤ **Notification of planting of GMO crop.**

This must be mandatory whether trial or commercial release to all farmers in the region including all local, state, regional management authorities.

➤ **Monitoring of GMO.**

Whether trial or commercial release, an independent system of monitoring beginning with meeting EIS criteria, buffer zone criteria etc etc and ending with a regulatory system that is able to take swift and appropriate action should an environmental or economic hazard present itself.

➤ **Quality Management System**

A quality management system approach for the production of GMO food crops from paddock to plate, certified, audited and regulated is essential to protect our organic and “GE free” industries and our environment.