Submission to the Agricultural Innovation Inquiry

My husband and I are keen to make a submission to this committee because we are alarmed at the way in which unproven agricultural technologies are being introduced to Australian agriculture by corporations who are profit driven rather than the future of agriculture for the benefit of all Australians.

We make our submission as consumers and gardeners.

The essence of good farm production is the soil. A primary aim of this committee should be

- how do we begin/continue to improve our soil
- will these new technologies harm our soil.

In Australia, countless years of applying farm chemicals to the soil and not focussing on building the soil has resulted in depleted soils and increasing costs for farmers.

Compost

In Vasse, near Busselton, we have a small company, Landsave Organics, which produces premium compost
This Compost provides both macro and micro nutrients. It contains organic sources of NPK (nitrogen, phosphorus and potassium) and supplies trace minerals such as boron, cobalt, copper, iodine, manganese, molybdenum and zinc while providing an inoculum of incredibly diverse beneficial microbes.

The compost contains aerobic bacteria and fungi that services the nutritional needs of the plant at the proper rate and time as they are required.

It acts as a carrier for hundreds of millions of aerobic bacteria and fungi per gram of finished material. They stimulate soil digestion and therefore help complete the carbon, nitrogen and other nutrient cycles.

The company's research is proving that premium compost, with its related micro flora, has a healing effect on plants and the soil. Microorganisms provide natural soil antibiotics, enzymes and vitamins as a by-product of

their metabolism. The microorganisms in premium compost are natural enemies of fungi or bacteria that cause plant diseases and an effective tool in battling nematodes and other persistent problems.

My husband and I have no financial interest whatsoever in this company. I am just impressed by the fact they are trucking their compost hundreds of kilometers round the state to knowledgeable farmers who are saving their businesses tens of thousands of dollars in fertilizer costs. This is the type of innovation the committee needs to be focusing on.

Humus

There needs to be greater emphasis on building humus in the soil.

Farms with their big machinery could also produce more compost for their own farms . While maybe not in the class of Landsave it still would be a valuable contribution to the soil. They can also produce worm castings or vermicompost . Some farmers spray their crops with worm tea as a fertilizer.

Greater use of green manures will add to humus.

Biodynamic farms have been shown to withstand droughts better than conventional farms. Pictures from the air in times of drought show these farm tinged green while those around them are barren. A major aim of these farms is to build up their humus levels.

Genetically Modified crops

There is a huge push by the biotech corporations to increase the amount and variety of GM crops grown in Australia.

We hope that the committee will resist being swayed by the promises of drought, salt or frost resistant seed, by claims of higher yields and environmental benefits. Any study of the US situation would find that none of these claims are true. The committee needs to remain sceptical and evaluate all the claims.

Many of these crops are drenched in Roundup, resulting in poisoning of the land, crops covered in a probable carcinogen, Roundup resistant weeds - and huge profits for the company.

These crops eg GM canola receive a considerably lower price (around $50 a tonne presently) as GM crops can only be sold principally as stock food or for biofuel. Those who claim the opponents of GM are mislead refuse to look at the total lack of research to demonstrate that these foods are safe (Monsanto's questionable research goes for 3 months . Where's the long term research?)Evidence from independent researchers e.g.Seralini - show alarming results with rats fed a GM diet.

Populations will only eat GM food when it is hidden. Premiums are always going to be paid for non GM food.

The S Australian and Tasmanian governments are wise to maintain a moratorium on GM crops.

Marker Assisted Selection

The modern breeding technique called MAS (marker-assisted selection) has gone through a silent revolution in recent years. MAS makes traditional breeding more efficient. It does not include the transfer of isolated gene sequences such as genetic engineering, but offers tools for targeted selection of the existing plant material for further breeding. MAS has already proven to be a valuable tool for plant breeders: it requires less investment, raises fewer safety concerns, respects species barriers, and is accepted by the public. There are dozens of examples of already marketed MAS-bred varieties, demonstrating its high potential to meet challenges such as a changing climate, disease resistance or higher nutritional qualities. In contrast, genetic engineering - even after 25 years of global efforts - has basically only delivered two single-trait types of plants: herbicide-tolerant and pest-resistant.