# SUBMISSION TO PRODUCTIVITY COMMISSION BENCHMARKING STUDY ON FOOD SAFETY REGULATION

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**Introduction**

The Productivity Commission review seeks to benchmark the enforcement of food safety standards on business. At the same time, farming practices also reflect the impact of legislation regulating pesticide use on food safety. In this context two areas of horticultural production, protected cropping, involving controlled environment and hydroponic growing systems, and organic farming, are of particular interest. They represent the starkest examples of growers' challenge to produce safe, fresh produce against a backdrop of regulatory difficulties with pesticide registration and food safety (FSANZ Food Standards Code). The following submission provides some insight into this problem.

## 1. Greenhouse and Hydroponics Industry Submission

Prepared by: Stephen Goodwin on behalf of the greenhouse & hydroponic industry

The protected cropping industry is represented by greenhouse vegetables such as tomatoes, cucumber, capsicum, egg plant, hydroponic lettuce, hydroponic Asian vegetables and herbs. Using modern technology, crops are grown under protected conditions with an optimal environment and in hydroponic systems, both of which contribute to shorter crop cycles in some produce such as leafy vegetables and herbs, and a slower rate of pesticide breakdown due to the filtration of UV through glass and plastic. Most of the withholding periods governing harvest intervals are based on data collected from field grown crops, where pesticide breakdown and crop growth varies from that encountered under protected cropping conditions as explained above. In this operating environment, growers of sensitive produce such as hydroponic lettuce, even when produced under GAP conditions, can struggle to meet legal pesticide residue requirements at harvest, placing their businesses at risk.

Under the present method of calculating major and minor crops in Australia, with the exception of tomatoes, the rest of the crops grown under protected cropping are classified as minor use and are rarely considered as economically viable markets by pesticide manufacturers when registering pesticide products. Consequently, the protected cropping industry has to rely on the permit system to obtain legal access for many of its pesticides. Currently permits issued by the APVMA for a new use have an MRL set following a rigorous process. The approved use is subsequently gazetted. The MRL then has to be adopted into the FSANZ Food Standard Code for the MRL to be officially recognized. This also involves a rigorous process independent of that conducted by the APVMA, which can delay the adoption of an MRL for up to 18 months. This makes many permits unavailable to growers, sometimes for the entire approval period of the permit. I am absolutely convinced that almost the entire growing population in this industry is unaware of this

fact and the threat to their businesses it represents. Although I have been involved with pesticides in the protected cropping industry for over 30 years as a research scientist with NSW DPI, I was unaware of this until recently when the following grower brought an example of what can happen to my attention.

**Case Study:** **Freshzest Herbs, Caniaba, NSW.**
Managing Director: Mr Robert Hayes

Freshzest has a new 1ha Faber glasshouse at Caniaba, near Lismore on the NSW North Coast (see article in Practical Hydroponics & Greenhouses, Issue 106 May/June 2009) as well as an equal size production farm in Victoria and is one of Australia's largest producers and suppliers of fresh herbs, dealing directly with Woolworths. Freshzest is also a rarity amongst growers of any persuasion in that they maintain due diligence with regards to their legal obligations to pesticide MRLs and to consumer safety. New pesticides are applied to a trial crop area with samples taken at 1, 3, 5, 7 and 14 days after spraying and frozen, before sending them off for residue analysis at their own expense. Freshzest maintains absolute vigilance on pesticide residues to ensure that they do not breech the MRLs and that the withholding periods (WHPs) that they apply are adequate for this purpose. Freshzest often imposes more rigorous WHPs than are stipulated on the label. As part of its HACCP procedure, Freshzest also routinely conducts random sampling from its harvested product in the coolroom, of every line grown or bought, prior to going to the market. These samples are sent off to the laboratory for a C3 residue analysis, where a large range of pesticides are screened for residues. This procedure is the minimum annual requirement requested by the supermarkets.

So you can see, Freshzest goes to extreme lengths to ensure fresh produce is safe for consumers, yet even they have fallen foul of Woolworths's random pesticide residue sampling. A recent APVMA permit was issued to the herb and spice industry for a new use in which an MRL of 50ppm was set. Freshzest subsequently received a residue violation from Woolworths because its random testing had detected a residue of the same pesticide of 0.8ppm. This use had not been adopted into the Food Standard Codes by FSANZ and as such there was no legal residue limit. Freshzest produce was suspended from trade for a period of time costing them several tens of thousands of dollars. Until this recent situation, even the NATA accredited laboratory used by Freshzest for residue testing, referenced the APVMA's MRL standard, not the FSANZ Food Code MRL.

In another example of the adverse impact of current pesticide regulation and subsequent implications for food safety, the protected cropping industry is positioned favourably through its operating environment to utilise commercially produced biocontrol agents (BCAs) extensively in place of routine applications of synthetic pesticides. Presently there are about 20 BCAs available or near available for routine use in greenhouse crops. However they do not work in isolation and from time to time must be supported by reduced risk pesticides. Reduced risk pesticides can be from the ranks of synthetic chemicals, but more so they are alternative chemicals that work by a non-chemical action and can be based on kaolin, starch, alginate, silica and other physically acting ingredients. These types of chemicals have the potential to play an important role in food safety in that they represent a low toxicological risk. However, they are often developed by small companies who do not have the financial resources of the multinational pesticide companies (see the following comments from the organics industry). Currently there is no category for reduced risk pesticides, no opportunity to develop their registration through a modified regulatory process at a faster

throughput and lower cost. The current pesticides legislation is a massive disincentive for these small companies and these important products and most of them do not get on to the market, forcing growers to use less benign pesticides that adversely impact on BCAs and consequently food safety.

**Conclusion:**

In the recently concluded NSW pesticide residue survey, Clean fresh, the protected cropping industry contributed 40% of the commodity basket (hydroponic lettuce & greenhouse cucumber) selected for testing. The protected cropping industry strives to implement safe pest management practices and to avoid residue detections exceeding the MRL, but is thwarted in this endeavour by a flawed pesticide regulatory system. The failure to provide for timely, cost effective registration opportunities for all minor crops, the failure to provide for timely, cost effective registration of reduced risk pesticides to support biocontrol programs and the failure to provide immediate adoption of MRLs from the APVMA to the FSANZ food standard code, result in a public perception that hydroponic and greenhouse produce is unsafe for consumers (SMH Friday July 3 2009 *'Consumers blind to toxic dangers at greengrocer.'*

This is the impact of the current Agricultural & Veterinary Chemicals Act 1994 on food safety. Failure to deliver the right tools and mechanisms to enable greenhouse and hydroponic growers to demonstrate that their produce is in fact safe to eat.

## 2. Organic Industry Submission

Prepared by: Gary Leeson, Organic Crop Protectants and Chair Biological Farmers of Australia Bio-inputs Advisory Committee, on behalf of the organics industry.

The organic food industry in Australia is in its infancy but has great potential to join the rapid growth that has been enjoyed in Europe and North America. The key to its growth is providing producers with the regulatory framework needed to meet both domestic and overseas standards so that they can compete effectively.

**Impact of Pesticide Regulatory Framework on our Industry**

*High Cost of registration*

Organic Producers are very reliant on access to pest and disease control products that fall within International Organic standards. They need to be of either mineral, microbial of plant extract origin. This greatly restricts the number of products they can use and within Australia this list is very small compared with overseas countries that we compete with. The main limiting factor to the lack of pest and disease control products that meet organic standards is the high relative cost of registering these types of products through the APVMA. Small companies servicing small markets simply cannot justify an expected $90,000 registration fee coupled with all the other supported data generation costs.

*Time frame*

The other problem is the time frame for registration, which can be a number of years depending on the complexity of the registration. The nature of some of these novel biological and botanical products, can result in the timeframe extending way beyond the expected 18-24 months.

An example of this is neem, which is registered in the USA, Europe and NZ, but is restricted to only ornamental use here in Australia. It took my company over 5 years to obtain a highly restricted use pattern that will see us recouping our registration costs over the next 10 years. We also have a soft soap spray that is already registered in NZ for *Botyrtis* control in wine grapes that we submitted to the APVMA over 12mths ago and is still under review. There are many other examples of these types of products.

**Impact on Food Safety**

As Chair of the BFA Bio-Inputs Committee I am aware of many products that are simply sold as "fertilizers" and "plant tonics", because the suppliers don't have the resources to meet the APVMA compliance requirements. I am also aware of producers making their own "pesticides" simply out of desperation. This scenario is highly undesirable because it leaves the door open for OH & S and food safety problems.

The above issues of cost and time are a major burden imposed by present regulatory legislation that is having a serious impact on food safety.

**Our suggested models**

In the US market the EPA has two systems that allow smaller companies to pay a second tier fee structure for "niche markets" or "minor crops" and if the products are classified as "reduced risk" they are given a much more rapid registration time frame, which is also related to the reduced review requirements. The view within the organic industry is that if a product is already registered in another OECD country and/or has ingredients that are GENERALLY RECOGNISED AS SAFE (GRAS) then the process should be as simple as a label review and approval. New Zealand also has a relatively simple process that does not seem to take anywhere near the same amount of time or money to register products that have a known history of use in other countries.