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Commissioners
Productivity Commission
Inquiry into the Regulation of Agriculture
Locked Bag 2
Collins Street
East Melbourne Vic 8003

Dear Commissioners Mr Paul Lindwall and Mr Ken Baxter,

I thank the Commission for accepting my submission and for the opportunity to participate in the Commission's consultation process. I am a final year PhD student of Plant Science in the Centre of Excellence for Translational Photosynthesis at the Australian National University, with a firm background in environmental social science and policy. I wish to express support for the Commission's draft recommendation 6.1, that the moratorium on genetically modified crops in all states listed be removed, and that all state and territory governments should also repeal the legislation that imposes or gives them powers to impose moratoria on the cultivation of genetically modified organisms by 2018. In the following submission I would like to highlight some salient points as to why this must be retained in the final report:

I thank the commissioners for their thorough work and the balance with which they have weighed the evidence presented to them, the draft recommendations 6.1 will help Australia to rise to the challenges, and reap the benefits of life in the 21st century.

Yours sincerely,

Duncan Fitzpatrick

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Executive Summary:

The moratoria on the cultivation of 'GM products', and working towards a more reasoned approach to regulating and managing the products of molecular tools is necessary on humanitarian grounds, and to enable talented Australian researchers to improve plant traits without the otherwise necessary input from large biotech companies. Why draft recommendation 6.1 is significant is discussed within three short sections:

- Humanitarian Motivations for Exploiting GM Technology
- Regulatory Change will Support Innovation and Promote Competition
- Avoiding Simplistic Approaches to a Complex Issue

Humanitarian Motivations for Exploring GM Technology

It should be remembered that not everybody involved with, or passionate about food security, is working to look after niche markets able to afford paying a premium for what are demonstrably 'pseudo-scientific benefits'. Proponents of GM technologies are not necessarily driven by potential profits; they can also be motivated by humanitarian and social justice concerns. The global population is forecast to hit nine billion people by 2040, and much of this population growth will occur in places where paying extra for an equivalent staple food product is not an option.

In her submission made to this Commission, organic farmer Ms Rosemary Cousin stated "the demand currently vastly outstrips our capacity to supply". This demand is driven by a comparatively tiny (by number of people) market comprising wealthy consumers in wealthy economies. In the long term the Commission's well-reasoned draft recommendation to lift moratoria on GM crops will help the less affluent in the world to access food staples comprising demonstrated levels of equal or greater safety and nutrition, at lower cost and with a minimal need to clear more natural ecosystems across Australia.

Regulatory Change will Support Innovation and Promote Competition

The lifting of the moratoria will also promote greater market stability, helping new participants including, young researchers such as myself, those passionate about technology like the 'biohackers' (who were unreasonably demonised by submissions to this Commission from Gene Ethics), and world leading Australian research institutions such as CSIRO, to move ideas beyond the lab bench and into the field. This could result in a direct challenge to the market dominance of 'Big Biotech' or 'The Cartel' as Gene Ethics dubbed it, which is 'so feared by so many' in submissions to this Commission, yet perversely a market dominance directly protected by this fear. It is this fear that drives regulatory cost burdens beyond the realistic capacity of small players who are then unable to bring new products to market.

As such it is the lifting of the moratoria and, going forward, a more sensible application of regulatory burden to new molecular breeding approaches that underpin the only way to drive GM technology towards realising the *idealistic goals and hopes* made possible through molecular plant biology. This drive should move us away from traits that we have been delivered in the past, cynically eyed as a clever way to sell more brand specific herbicides, and towards those we are all waiting for: improved drought and salinity tolerance; pest and disease resistance; lower requirements for nutrients; higher nutritional value; and decreased production of unwanted and even toxic natural components.

These goals are ambitious. They are difficult to realise. They have long timeframes. All of this makes them far less profitable, at least in the short term. That is to say, such goals are 'uninteresting' to big biotech, making it a necessity that we – the non-commercial research sector - are provided with a stable platform on which to raise funds to show the Australian tax payer that our efforts can and will bear fruit.

Avoiding Simplistic Approaches to a Complex Issue

I understand the fears of those opposed to GM crops. I grew up in the hills outside of Melbourne, going to high school in Emerald – the home of Gene Ethics. As a young undergraduate student of environmental social science I learnt about the perceived dangers of GM, and to embrace the precautionary principle. In fact, I wrote passionately about the need for a Victorian moratorium on GM in the mid 2000's. Wanting to learn more, I embarked on a 'hard' science degree and I am now in the final stages of writing up my PhD thesis in Plant Science at the Australian National University.

I can clearly see where people, on both sides of the fence, are using misleading or even downright dishonest arguments.

Science is complicated, it has taken a decade for me to figure out the subtleties of this discourse. If there is one point that I would wish to impress upon the Commission on this topic it is this: GM technology is not a product, merely a tool. Its use should be regulated no more than that of other tools. For example, a hammer's use is regulated in terms of outcomes, not the mere fact of its existence. If a person uses a hammer to cause harm to another person, we do not ban the use of all hammers. We do not leave those who cannot afford a house made of bricks, that doesn't require the use of a hammer for its construction, to go without a roof over their head. New breeding techniques must be considered for what they are, and not what people think they may be.

Community expectations are important, healthy scepticism is welcomed. There is room for co-existence and consumer choice in Australia. We possess the expertise to effectively manage such a system and the capacity to innovate new methods to confirm a product's purity or source. Establishing a dynamic system able to please the majority will require negotiations in good faith, based on realistic and evidence based claims. For the sake of our future prosperity, this must be accomplished.

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