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**From:** usha@zestbiotech.co.nz  
**Sent:** Monday, 26 August 2019 12:39 PM  
**To:** Mailroom Mailbox  
**Subject:** Plan Change 7 to the LWRP Submission  
**Attachments:** ECan Submission 26 August 2019.pdf

Submission attached.



Ms. Usha Amaranathan

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COO

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File No:

# Submission on Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan

Form 5: Submissions on a Publicly Notified Proposed Policy Statement or Regional Plan under Clause 5 of Schedule 1 of the Resource Management Act 1991

Return your signed submission by 5.00pm Friday 13 September 2019 to:

Proposed Plan Change 7 to the Land and Water Regional Plan  
Environment Canterbury  
P O Box 345  
Christchurch 8140

Full Name: \_\_\_\_\_ Phone (Hm): \_\_\_\_\_  
Organisation\*: Zest Biotech Phone (Wk): 0274455575  
\* the organisation that this submission is made on behalf of  
Postal Address: 15 The Glade South, Pukekohe Phone (Cell): \_\_\_\_\_  
Postcode: 2120  
Email: info@zestbiotech.co.nz Fax: \_\_\_\_\_

U Amaranathan, address as above

### Trade Competition

Pursuant to Schedule 1 of the Resource Management Act 1991, a person who could gain an advantage in trade competition through the submission may make a submission only if directly affected by an effect of the proposed policy statement or plan that:

- a) adversely affects the environment; and
- b) does not relate to trade competition or the effects of trade competition.

Please tick the sentence that applies to you:

- I could not gain an advantage in trade competition through this submission; or
- I could gain an advantage in trade competition through this submission.

**If you have ticked this box please select one of the following:**

- I am directly affected by an effect of the subject matter of the submission
- I am not directly affected by an effect of the subject matter of the submission

Signature:  Date: 26/08/2019

(Signature of person making submission or person authorised to sign on behalf of person making the submission)

Please note:

(1) all information contained in a submission under the Resource Management Act 1991, including names and addresses for service, becomes public information.

- I do not wish to be heard in support of my submission; or
- I do wish to be heard in support of my submission; and if so,
- I would be prepared to consider presenting my submission in a joint case with others making a similar submission at any hearing



26 August 2019

To whom it may concern,

## **Submission on Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan**

### Biozest: Technology to Support the Reduction of Nitrate Excretion in Dairy Animals

Zest Biotech is a Kiwi biotechnology company based in Pukekohe. We have invented and developed a technology called Biozest which is a pasture spray that increases pasture and ruminant productivity while reducing urea excretion and GHG emissions. When livestock graze the treated pasture, more pasture is converted to milk and meat and less is wasted as methane and urea. Biozest helps farmers to reduce their environmental footprint through productivity gains.

**Biozest reduces urea excretion (by 24% -36% in dairy cows). This has a major benefit for the environment. The type of nitrogen that is excreted is less liable to leaching. Reduced urea means nitrous oxide emissions are also reduced. This data is from controlled, on-farm and full life cycle trial work.**

In on-farm, controlled trials with Biozest, pasture productivity was doubled and milk and meat productivity was increased by over 30%. The result is economically smart, climate-smart pastoral farming, more profit less gas and urea.

### Developed, Tested and Proven in New Zealand, Internationally Recognised

Our company founder has just returned from the 7<sup>th</sup> Greenhouse Gas Animal Agriculture Conference in Brazil. This is the premium international event on the subject of greenhouse gas emissions due to animal agricultural practices. The conference hosted 200 delegates from 39 countries and the programme featured 111 poster presentations and 47 oral presentations. We were selected to give an oral presentation which was very well received by top international scientists. This demonstrates how well our work is regarded at this level and by the top scientists beyond NZ.

### An Economically Smart, Climate-Smart Solution

We have developed a technology that both reduces nitrates and emissions and increases productivity, there are no undesirable effects, it is not a cost bleed – in fact it substantially increases farmer returns. Biozest can be integrated into our pasture fed systems. It has been assessed by MPI and can be applied on all farms, including Organic farms as it is BioGro certified.

<https://www.zestbiotech.co.nz/biozest>

We would like to ensure Environment Canterbury is aware that there are other tools to reduce nitrate levels that farmers may not be aware of. Best practice guidelines should point farmers towards new technologies.

We understand that the council may not be able to tell or encourage farmers to use one product over another but there has been a continuous stream of news reports telling farmers that there are no technologies to help them reduce nitrates and greenhouse gases – this leads to a lot of uncertainty and, naturally, resistance to rule changes such as this. This view that we do not have economically smart, climate-smart technologies is now outdated but the good new stories are not being heard – we do have technologies to support farmers to make positive changes that will increase returns and farmers need to be aware that there are options available.

We would hope that the council will get behind Kiwi companies such as ours that are investing in research and development of tools to reduce nitrates (and greenhouse gas emissions). We are prepared to get involved in extension work or present to farmer groups organised by the council or other parties.

We also hope that the council will use its influence (which is far greater than ours as a small NZ company) to ensure measurement tools and modelling systems are designed or adapted to recognise new technologies and that recognition is not financially prohibitive. This will ensure farmers have access to recognised tools and their efforts to reduce nitrates (and GHG) are accounted for.

Farmers must be aware that there are tools to help them achieve the targets that are being set and, contrary to popular belief, reducing environmental impact can result in increased efficiency and therefore increased returns.