NZPBRA
NEW ZEALAND PLANT BREEDING AND RESEARCH ASSOCIATION

SUBMISSION

TO

FOOD STANDARDS AUSTRALIA NEW ZEALAND

ON THE

FOOD DERIVED USING NEW BREEDING TECHNIQUES CONSULTATION PAPER

APRIL 2018

SUBMISSION ON THE FOOD DERIVED USING NEW BREEDING TECHNIQUES CONSULTATION PAPER

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FSANZ
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Dear FSANZ

SUBMISSION ON THE FOOD DERIVED USING NEW BREEDING TECHNIQUES CONSULTATION PAPER

The New Zealand Plant Breeding & Research Association (NZPBRA) represents a group of seed and research companies engaged in the development and marketing of plant intellectual property for the New Zealand arable and pastoral sectors.

The Association has a keen interest in public discussions around gene editing techniques and the potential applications in plant breeding and for food.

The following submission provides specific comment the questions posed in FANZs consultation paper on food derived using new breeding techniques.

Yours sincerely

Thomas Chin
General Manager

Response to FSANZ Consultation paper - Food derived using new breeding techniques

3.1.1 Genome contains new DNA

3.1.1 Questions

Do you agree, as a general principle, that food derived from organisms containing new pieces of DNA should be captured for pre-market safety assessment and approval?

Should there be any exceptions to this general principle?

In principle yes, but in some cases it will be impossible to determine if there is new DNA particularly if it is a change in genome location or orientation of insertion. So then, it will rely on the integrity of the organisation using the technology.

3.1.2 Genome unchanged by gene technology

3.1.2 Questions

Should food from null segregant organisms be excluded from pre-assessment and approval?

If yes, should that exclusion be conditional on specific criteria and what should those criteria be?

If no, what are your specific safety concerns for food derived from null segregants?

Yes, null segregants should be excluded. They have no foreign DNA and therefore should not produce compounds new to the plant or animal in question.

3.1.3 Genome changed but no new DNA

3.1.3 Questions

Are foods from genome edited organisms likely to be the same in terms of risk to foods derived using chemical or radiation mutagenesis? If no, how are they different?

If yes, would this apply to all derived food products or are there likely to be some foods that carry a greater risk and therefore warrant pre-market safety assessment and approval?

Yes, foods from genome edited organisms are likely to be the same in terms of risk to foods derived using chemical or radiation mutagenesis. One might argue they are even a lesser risk as genome edited organisms will have more research undertaken to perfect the expression of the trait whereas chemical or radiation mutagenesis is completely random.

3.2 Other techniques

3.2 Questions

Are you aware of other techniques not currently addressed by this paper which have the potential to be used in the future for the development of food products?

Should food derived from other techniques, such as DNA methylation, be subject to pre-market safety assessment and approval?

No, and food derived from other techniques, such as DNA methylation, should not be subject to pre-market safety assessment and approval as these will result in the loss of a trait rather than the expression of compounds new to the plant or animal in question.

3.3 Regulatory trigger

3.3 Questions

Do you think a process-based definition is appropriate as a trigger for pre-market approval in the case of NBTs? If no, what other approaches could be used?

If yes, how could a process-based approach be applied to NBTs?

Are there any aspects of the current definitions that should be retained or remain applicable?

The process based trigger is not necessarily the best option, and we would prefer regulation to be based on the outcome – what the NBT produces, not the method of production. We would suggest that the Canadian process is worth considering –

Canada's regulatory approach is essentially to review products rather than processes. In other words, the focus is on the traits expressed in the products and not on the method used to introduce those traits. This approach applies to both traditional breeding methods and genetic engineering.

The principle behind this so called product-based approach entails channelling all products, whether they are genetically modified or not, through a single risk management system. Since existing acts and regulations already provide for effective risk management systems, the product-based approach does not require any major legislative change.

Unlike other countries, "Canada relies on the concept of novelty to trigger regulatory oversight, thereby enabling the regulation of a wider array of novel seeds or foods."

3.4 Other relevant issues

3.4 Question

Are there other issues not mentioned in this paper, that FSANZ should also consider, either as part of this Review or any subsequent Proposal to amend the Code?

No.