SUBMISSION TO THE SENATE OF AUSTRALIA

The proposed importation of potatoes from New Zealand

Submission from

Forth Farm Produce Pty ltd

Trading as

Harvest Moon

Background

Harvest Moon is a producer/packer and marketer of fresh vegetables based on the north-west coast of Tasmania. The Company has been in operation for over thirty years and supplies fresh vegetables throughout Australia and also to overseas markets in Asia and Europe. Harvest Moon began by trading in fresh potatoes but has since diversified into a wide range of other crops.

Harvest Moon was one of the first companies to bring new potato varieties into Australia under PBR legislation and has an active partnership with one of the world's largest breeding companies – HZPC, based in the Netherlands. Until recently Harvest Moon had a significant share in a potato packing facility in Palmerston North in NZ. Harvest Moon has joint trading relationships with other NZ companies in the marketing and breeding of onion varieties.

Having seen at first hand the ravages that the disease, known as zebra chip, has wrought in NZ (and elsewhere in the world where it occurs) we feel obliged to make a submission on what we feel is at this stage an extreme folly whereby the risk vs potential benefit to Australia are completely out of balance.

Our business relies upon the ability of Tasmania and Australia to prevent the entry of exotic pests and the efforts of DAFF through quarantine services are an important part of this process.

Submission

This submission will address all three terms of reference for the Rural and Regional Affairs and Transport References Committee on "The proposed importation of potatoes from New Zealand.

(a) *the validity and supporting scientific evidence underpinning the Pest Risk Analysis included in the New Zealand Potatoes Import Risk Analysis"*

Our concern with this document (which dealt solely with zebra chip – caused by tomato potato psyllid and a bacteria) is that although it was current at the time it understated both the risk and also did not provide sufficient justification for the assertions therein. Much of the document was merely repetitive cut and pasting. At the time this Pest Risk Analysis (PRA) was produced the disease had only recently been identified and there was very little known about both the disease and its vector. Insofar as plant diseases go, this disease is still relatively new to science, having only been known for less than 20yrs. Our concern was that there was too little information available to provide the degree of certainty that

was being advanced in the PRA. This is borne out by the fact that there were less than 25 scientific papers to support such an extensive document. Furthermore some of the key findings relating to risk were based on very little data or on just one published paper.

Subsequent research has shown that these fears were well founded. It has since been discovered that more than one species of psyllid can carry the bacteria, that the bacteria has been found in non-Solanaceous crops (carrots) and that native Australian psyllids can indeed change feeding habits to feed on introduced commercial crops. In addition, the development of more sensitive testing methods has revealed that tubers can indeed carry the disease. All of these events were dismissed as unlikely in the 2009 PRA. It is also clear that at this stage we still do not understand the spatial and temporal distribution of this disease both within the plant and tubers.

It is our contention, that at the time of the PRA, there was insufficient evidence on which to adequately assess risk and even three years later there is still not enough evidence to adequately address the risk posed by this disease complex.

(b) the extent of scientific knowledge and understanding of the Tomato/Potato Psyllid and other pests identified in the Draft Review of Import Conditions; and

Since this pest complex has appeared in the mid-nineties there has been a large scientific effort devoted to gaining an understanding of its biology and also trying to develop control strategies. Whilst most of the pests that would be of quarantine concern to Australia are reasonably well understood it is clear that our knowledge of Tomato Potato Psyllid (TPP) and the associated Liberibacter is still limited. The advances that have been made since 2009 and mentioned in the preceding section are testament to how much more needs to be discovered.

From our perspective there are some fundamental issues which merit answers before pest risks can be adequately assessed. We also wonder and why there were no further scientific findings post 2009 considered when compiling the Draft Review? We would have thought that some consideration would have been given as to why this disease should suddenly appear in potatoes and other Solanaceous crops?

Areas which we think should have been considered include;

Why would a native insect that has been only an occasional pest of potatoes in the US suddenly emerge in the mid-nineties as a major pest irrespective of whether or not it is carrying the bacteria?

Why or what lead to the sudden emergence of this bacteria? What is the likelihood of co-evolution in other psyllid species?

What caused the change in feeding behaviour of an Australian native psyllid to utilise eggplant as a food source?

What is the likelihood that the ‘zebra chip’ bacteria could be vectored by an Australian species of psyllid?

To what extent can infected tubers pass the disease on to daughter tubers and does the disease require a period within the insect host to maintain its infectivity?

Can the bacteria multiply in plants without the vector?

What scientific principles were implemented when ascribing risk and when making assumptions about control measures, when there was almost no data available?

What is the viability of psyllid eggs with time?

Can they survive if they are dislodged from the plant foliage?

How long will psyllids rest on food source substrates?

What evidence is there as to whether eggs can carry the bacteria?

The same(?) Liberibacter has been found in carrots in Europe –what is the significance of this in the biology of this disease complex?

With these unanswered questions it is our contention that at present it is not possible to assess risk because we simply do not have enough data.

(c) any related matters

The quality of material provided by DAFF is well below the standard that one would expect in such documents. It lacks rigour, contains errors and reveals a lack of understanding of the supply chain.

It is concerning that the Draft Review of import conditions contains errors, has ignored scientific evidence and only considers in its contents three pest/diseases when it appears that there are many more of quarantine concern. Presumably these are all those listed in the Review, fallaciously, as all the pests associated with potatoes in NZ. None of these other pests/diseases are given any further consideration when assessing import risks – they should be.

The data supplied by NZ as supporting documentation and publicly available for reference, only considers Potato cyst Nematode (PCN) and Black Wart disease. Strangely it does not even consider TPP and liberibacter. The information relating to PCN is ambiguous. PCN in NZ is not subject to any official control and the documents provided by NZ are unsatisfactory and not in line with international standards on PCN. As supporting documentation it is inadequate.

In such an important document we would expect either within the main body of text or as an Appendix an attempt to update supporting documentation and a consideration of any new findings since any earlier PRA had been completed. This should cover the reasons for ignoring or dismissing new evidence and would be discussed accordingly. This is standard legal and scientific practice yet has not been done.

The apparent equating of two different dictums –absence of evidence and evidence of absence is a that appears to underpin risk analysis is a fundamental flouting of scientific principle.

Furthermore the Review reveals a lack of understanding of packing shed operations and the supply chain in making what appear to be completely unreferenced suggestions for disease control – eg. 1m separation.

We also believe that our concerns regarding the quality of work from DAFF with respect to preparations of PRAs and Import conditions seem to be part of a broader issue. We are aware that a number of other industries have raised these similar issues and this suggests that there may be a systemic problem within the Department in the ability of it to prepare work of sufficient quality.

Lastly there are some procedural issues which give cause for concern. Why is the organisation that produces a document for consideration and discussion also the body which hears appeals and makes rulings as to the validity or otherwise of material presented against its findings. This seems to be rather anomalous.