Draft Advice for the review of import conditions for fresh potatoes for processing from New Zealand

Preliminary Response

In the interests of conciseness the "Draft Advice for the review of import conditions for fresh potatoes for processing from New Zealand" will hereafter referred to as the "Advice".

Summary

Importation of fresh potatoes will result in potatoes infected with *Candidatus* Liberibacter solanacearum (Liberibacter, the organism which gives rise to the condition commonly known as Zebra Chip) arriving in Australia. There is currently no non-destructive test for ascertaining whether or not potatoes contain Liberibacter. It is noted that this is not formally acknowledged in the advice, however the paper quoted for nomenclature (Pittman et al 2012) makes this clear.

It is regrettable that the Advice does not provide the standard of science and rigour that one would expect from such a document. Statements of opinion are expressed as fact and referencing other than to Government publications is minimal. One can only assume therefore that most of what is written is therefore opinion and does not qualify as science. This is unfortunate as we are lead to believe that the approach to biosecurity must be science based (C Grant pers Comm.)

Based on what is presented in the Advice Australia can have little confidence in either the ability of DAFF to assess risk and to manage the subsequent consequences should this proposal for imports go ahead as presented.

It would also have been helpful for comment if paragraphs and sections had been numbered as per normal document control procedures.

The text below considers in detail the issues raised in the Advice pertaining to importation of fresh potatoes for processing. Lastly we question whether providing comment is not just a waste of time given the concluding sentence of the Advice:

"DAFF Biosecurity will then finalise the import conditions for fresh potatoes for processing from New Zealand, taking into account stakeholder comments." This would appear to indicate that the importation is a fait accompli!

Details

In preparing this response we will use the references quoted by DAFF to support the contentions provided in the Advice.

For ease of reference, comment will wherever possible follow the sequence and headings as provided in the Advice. Quotation marks are provided on headings lifted from the Advice.

We shall also follow a similar format as it is extremely difficult to apply Document control rigour when the source document does not do so.

" 1 Introduction"

Page 5, Paragraph 2

We note that DAFF quotes both here and in paragraphs 1 and 2 on page 19, that DAFF has consulted with industry on this advice. The language suggests that this was part of the normal DAFF process in dealing with industry in Australia. It is perhaps pertinent to point out that industry contact was nearly always initiated by industry not by DAFF and was done to raise concerns with DAF about this proposal. Regrettably all of these concerns and issues, many of which related to science and risk management, have been ignored in the Advice. This will be noted in the appropriate sections elsewhere in this response.

Page 5 Paragraph 3

We note that the review of import conditions is in response to new information that there are new or modified risks posed by an import pathway. Five components are listed as being taken into account. Unfortunately it is not described as to how they have been taken into account and therefore this paragraph is meaningless. For example what should we make of dot point 3 which states:

- "relevant export compliance programs utilised by New Zealand for export of potatoes to other international markets;"

Does this mean that our risk assessment is based on the principle that if it is okay by another country then it is okay by Australia?

"Background"

Paragraph 1 last sentence

The words quarantine approved premises are used a number of times (8) in the Advice. At no stage is this defined other than a loose reference to the "Quarantine Act Sections 46A and /or 66B of the *Quarantine Act*" on in paragraph 2 on page 17. As these sections merely prescribe the method for gaining approval for quarantine premises and for construction of Compliance agreements this is not particularly helpful. Consequently we can only assume that the rather nebulous descriptions provided in the Advice are all that is required. These provide no means for auditory compliance and certainly no Hazard Analysis Critical Control Point (HACCP) procedures which is standard industry practice in assessing and monitoring risk. There is thus no quality control or other mechanism by which one can assess the adequacy or otherwise of what is proposed.

In reviewing the current standards for NZ as specified in the document "*MAFBNZ Export compliance programme for the provision of additional declarations (Potato Cyst Nematode and Potato Wart)* (MAFBNZ 2009),"(hereinafter referred to as MAFBNZ), we are left to ask what has changed? This will be considered in further detail when considering the response in relation to PCN.

Paragraph 2

We note that the initial request may have been made prior to the official notification re the appearance in NZ of the Tomato Potato Psyllid and Liberibacter.

Paragraph 3

In our view the supporting documentation supplied by MPI quoted in the Advice is completely inadequate in assessing the export requirements from NZ. Furthermore some of the documentation quoted in the MAFBNZ document is not available publicly thus cannot be assessed either (eg BNZ Exports (Plants) Policy Directive "Surveillance for Potato Cyst Nematode" 13 December 2004).

"3 Pests and Diseases identified in association with fresh potatoes from New Zealand"

Page 7

"In 2007, MPI provided DAFF Biosecurity with a list of pests and diseases associated with potato tubers in New Zealand."

The list furnished by MPI NZ and lists 3 bacteria, 3 fungi, 4 nematodes, 7 arthropods and 4 viruses.

This is simply untrue and for DAFF to accept this proposition beggars belief. It is not our responsibility to list the diseases that we know occur on potatoes in NZ however one wonders how common diseases such as common scab, powdery scab, virus Y (and its various forms), Erwinia, etc were not included. Did no-one in DAFF bother to check what occurs in NZ? This lack of rigour and sloppiness is unfortunately all too prevalent in the Advice.

We also note that there is no mention of Phytoplasmas in this list despite the recent publication by Constable et al. 2012. This raises further concerns.

Page 8 para 1

This paragraph discusses pests of regional concern. Once again it is inaccurate. We cannot speak on behalf of the WA or Tasmanian Governments however we are sure that with their area freedom for PCN they would be surprised to learn that PCN is of no concern to them. The same could also be noted for other diseases and pests such as virus Y.

Page 8, para 2

"Nomenclature……. of solanaceous plants."

The change in nomenclature is noted but we question why this was not also noted in the document released in April pertaining to importation of planting stock. Whilst not particularly important in the context of this Advice it nevertheless once again demonstrates a lack of rigour and consistency in DAFF's work that undermines confidence in the quality of what is presented.

Page 8 para 4

The statement that the disease can only be transmitted by its vector is unreferenced and thus must rank as an opinion and therefore merits qualification. Whilst a discussion on the origin and evolution of this complex is outside this response it perhaps would have been helpful for DAFF to consider some more recent research.

We also note that the comment that psyllid does not feed upon tubers is unreferenced. Has this actually been studied or is this just a case that no-one has yet looked? The two situations are vastly different.

It must be noted that this disease is new and was only first described in Mexico in 1994 (Secor 2009). It is still poorly understood and that the Pest Risk Analysis by DAFF upon which this Advice is predicated was produced in 2009. Much new information has been discovered since then although the biology, ecology and evolution of the complex is still relatively poorly understood and the importance of the disease is reflected in the millions that have been spent on the disease since its first occurrence. (Schreiber et al 2012). It is now established that there are two strains of the disease and it is thought that these may have evolved independently (Gudemstead 2012, pers comm). Whilst much could be written about what has been discovered since 2009, it is not the responsibility of Ausveg to provide an update on an out of date Pest risk Analysis (PRA) provided by DAFF. We would merely make the observation that DAFF still reference the 2009 PRA without qualification and this once again calls into question the vigour with which they pursue new developments in what is a rapidly evolving area of research. It is thus very surprising that DAFF considers its 2009 PRA as a "Final Pest Risk Analysis" when the science related to this disease is still regarded as in its infancy in 2012 and had barely begun in 2009.

Page 9 para 2

The MAFBNZ document only covers PCN and Black wart. It makes no mention of any other pest or disease that may be of concern from a quarantine perspective including the rest of the pests listed on page 7, to say nothing of any others which may be of concern.

There is therefore absolutely no basis for the statement "DAFF Biosecurity considers that a combination of mitigation measures may be required to manage the risks associated with imported potatoes from New Zealand to Australia consistent with Australia's appropriate level of protection. These proposed measures have been outlined in section 6."

Without further explanation of the rationale there is no justification for the proposition put forward in this paragraph.

"4 Existing policies for potatoes"

Page 10 Para 2?

> As discussed earlier the following statement is meaningless as it does not describe how or what was taken into account or why.

"These previous import conditions were taken into consideration as part of this review process to determine whether additional measures are required to mitigate the risks associated with this import pathway. "

Page 10, Section 4.1.2

The last sentence of this paragraph has no basis because, as described above, DAFF has failed to provide any update on its 2009 PRA and thus a great degree of caution is needed in interpreting this opinion from DAFF.

Page 10 last Paragraph

As described earlier in our response, this paragraph is completely meaningless. What are the requirements of a "quarantine approved premises", what are the "specific standards", what are the "measures" that will "prevent the Australian environment being exposed to any quarantine issues"? Where is the data to support this statement? The word prevent implies zero risk yet in their own risk based assessment DAFF acknowledges the area of risk assessment is based on probabilities (Final Pest Risk Analysis report for "*Candidatus* Liberibacter *psyllaurus*" in fresh fruit, potato tubers, nursery stock and its vector the tomato-potato *(sic)* psyllid, 2009). Data clearly show, eg Pitman et al 2012, that tubers infected with Liberibacter will enter Australia.

It must also be commented that whilst industry have been repeatedly advised by DAFF(C Grant Pers Comm) that there is no such thing as zero risk DAFF sees no contradiction in the words "prevent the Australian environment being exposed……..to any quarantine issues".

Page 11

See our paragraph above.

Section "4.1.3 New Zealand requirements for exporting potatoes free from potato cyst nematode (PCN) and potato black wart.

Para 1

We note that the MAFBNZ document has been assessed by DAFF and this has helped "inform the review process". Another meaningless statement however as this is the only document from NZ referenced by DAFF our comments will be restricted to those pertinent to the MAFBNZ document.

"4.2 domestic policy"

Our comments on the appropriateness or otherwise of the PCN protocol will be referenced to the documents cited by DAFF, and other documents that apply to PCN control within Australia. It is also to be noted that the new Australian Draft Guidelines for the PCN management and control have been publicly available since January 2012 (Australian National Potato Cyst Nematode Plan 2012) and that these propose a very structured view of PCN management which has been accepted by industry. DAFF has not consulted this plan. This again provides for a misalignment of standards between what the Australian industry will impose (based on the new EU directive 2007/33/EC and existing Australian protocol (Anon, 2002) and the rather lax standards used by NZ which are not consistent with either Australian, the EU or North American standards (D Blaesing pers comm 2012).

Page 12

Once again the rather nebulous statement "The risk mitigation measures recommended under domestic PCN legislation were assessed as part of the review of import conditions process." has no meaning and perhaps is cause for even greater concern.

Page 13

"5 Verification visits

5.1 Potato processing facility"

We note that DAFF visited a facility in Australia and conducted an assessment as to how the facility would comply with the ICA-44. We note this was not an audit and furthermore we note that the specific areas of the ICA against which the facility was assessed are not mentioned. Clearly some aspects of the PCA were not applicable or if so they are directly contradictory with other aspects of the Advice. Whether or not this has been deliberately vague is not up to us to decide but there is a decided lack of rigour in this whole section 5.1.

"5.2 New Zealand potato production practices and packing house procedures'

If it is only intended that the potatoes come the Manawtu *(sic)*-Rangitikei region, why was it felt necessary to visit production and packing facilities in Pukekohe?

Similar comments apply as noted above for those pertaining to Australian visits.

Page 14

"6 Proposed risk management measures for fresh potatoes for processing from New Zealand"

This section is almost worthless and reveals a concerning lack of rigour and attention to detail. It also lacks scientific basis.

It was noted earlier that the MAFBNZ document upon which the NZ import request only covers PCN and Black wart. None of the other pests and diseases of concern to Australia are mentioned. Furthermore in compiling the Advice DAFF makes no mention of any other pests or diseases either. There is no further mention in the Advice of any pest other than PCN and black wart in the Advice. Are we to assume that they are of no interest, were they forgotten or are they not a problem? This is just another example of the complete lack of rigour and detail in the DAFF document.

In the context of the paragraph preceding much of what is written in Section 6 of the Advice thus has little value or meaning.

The MZFBNZ document has two protocols for PCN control there is no mention by DAFF as to which one they intend to use. We are unaware of any official protocol or management for control of PCN within NZ and thus all land in NZ would under the Australian guidelines (2012) be linked and regarded as at risk. A gap of 10 years is not sufficient to guarantee freedom from PCN and this is unacceptable. Whilst after 10 years it is very difficult to find through conventional soil testing there is evidence that this is no guarantee of freedom from the pest (reference)

We note that pre-harvest fork testing is permitted (page 14, para 3, dot point 2). How would this be useful for PCN detection on resistant varieties?

The MAFBNZ document permits the grower to make the decision about the requirement or otherwise for PCN testing. This is an intriguing approach to PCN (or any other form of risk management). Depending upon which of the protocols one uses, there appears to be no requirement in the MAFBNZ document relating to seed quality, farm hygiene, other diseases, and type of testing.

We see no reason why we should accept NZ's lax attitude to PCN control. It would be fair to comment that the MAFBNZ document is of a standard that is no better than that provided by DAFF in its Advice.

DAFF has not clarified in the Advice which of the two protocols in MAFBNZ it intends to use. As mentioned earlier in our response we also unable to provide a complete analysis of the MAFBNZ document as some of the key references are not available. Perhaps DAFF could have checked to see why before releasing the Advice.

Page 14 para 6.2 Packing House Processes

What does practically free from soil mean?

Page 15

"6.3 Packing and Labelling"

Dot point 2

What is the basis for the 1metre separation? Presumably DAFF have some scientific evidence which has not been cited to show that 1m is a critical distance to prevent the spread of any pest or disease which may be of quarantine concern to Australia?

We note the use of the "ensure" in the 2nd last paragraph. Once again we assume that there is some evidence published to show that this level of confidence is justified.

Page 16 par 2

We have already provided evidence in our discussion on the MAFBNZ document to show that the claims made in this paragraph cannot be substantiated.

"6.5 Transport to DAFF Biosecurity…… and processing"

Para 2

Door ajar containers.

What evidence is there to show that psyllids or other quarantine pests know that, when they have arrived in Australia and are in port or the port area, that they should not leave the container? What evidence has DAFF got that shows the security of door ajar containers being left open poses a low risk of incursion? This paragraph is not acceptable in its present form.

Page 15 last para.

As discussed earlier the scientific data shows that imported consignments will probably contain potatoes infected with Liberibacter. Will this result in the consignment being rejected? We would think it hard to sustain an argument that tuber infected with Liberibacter is not diseased! We note a similar. How is this statement reconciled with the last paragraph on page 16 and quoted below..

"If live quarantine pests, disease symptoms or contaminants including unidentified plant material, seeds or trash are found, the consignment must be treated (using a DAFF Biosecurity-approved method that suitably addresses the quarantine risk) or re-exported or destroyed."

We would hope that the detection of a tuber infected with Liberibacter will result in consignments being destroyed and subject to deep burial.

Page 17

"6.6 Processing in a …… (QAP)

Concerns have already been raised as to what is meant by this and they are raised again here.

There is no HACCP procedure and after reference to sections 46A and 66B of the quarantine Act we have gained very little further clarification.

The issue around proper quality procedures and documents has been raised in prior meetings with DAFF but there appears to be no recognition of their necessity within the Advice. This is surprising as HACCP is a key component of most quality schemes where risk needs to be managed. They are also standard practice within industry. Without a comprehensive QA scheme incorporating HACCP it is hard to envisage how DAFF can conduct audits and how risk can be assessed and managed.

We therefore are of the opinion that much of what is written in this section (6.6) has little validity as we do not know what is meant by statements such as "secure conditions", "DAFF Biosecurity requirements", "appropriate segregation procedures", "approved quarantine waste management" etc. and there many other examples of such terminology.

The statement in the 2nd last paragraph that DAFF will audit weights is also intriguing. How will moisture loss be catered for?

The last paragraph once again mentions auditing procedures. Previous comments on the ability to audit without a QA procedure apply.

Page 19

The issue associated with consultation have already been highlighted and at best the comments in the Advice are disingenuous.

Conclusion

In its present form this Advice is both lacking in rigour, detail, science and logic. It is completely unacceptable as even a reference point and the defects lead us to question the veracity of the process and its conclusions.

The other issue which is not covered in either the PRA or the Advice is the combination of risk of entry when considered together with many hundreds of hosts of the psyllid (reference!!!!). This has not been addressed. Similarly the ability of these hosts to carry or transmit Liberibacter is not well documented (Trumble pers comm) Check in NZ.

It is our understanding that TPP can exist on plants as diverse as lettuce and fir trees. Is it not the practice to consider multiple entry pathways and the combined risk posed by such?