Comment on Independent Bacteriologist's report contained in correspondence from former Department Secretary Andrew Metcalfe to Senator Heffernan

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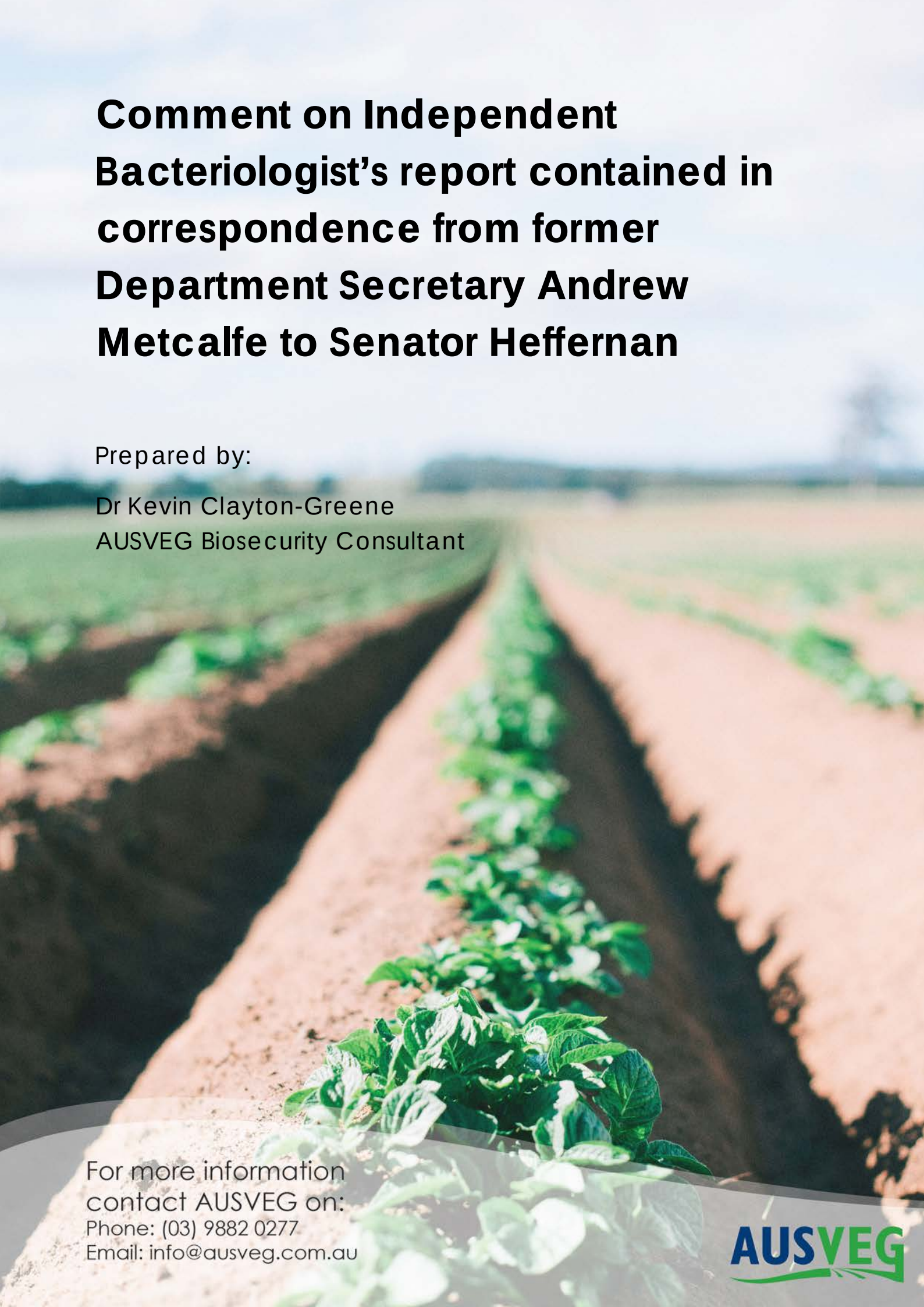

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AUSVEG

Comment on DAFF's Independent Assessment of its IRA for import of Potatoes from New Zealand

In preparing this comment I am working from the letter, and accompanying report provided to Senator Heffernan's Office by the then Secretary Andrew Metcalfe, dated May 2013.

In this letter the issue of pineapple and ginger imports are also covered, as is the Department's Risk Estimation matrix. The efficacy of this matrix is lauded by Secretary Metcalfe and we have since seen the perfunctory response of DAFF to the Peace report.

The role of the now replaced Australian Centre of Excellence for Risk Analysis (ACERA), now the Centre of Excellence for Biosecurity Risk Analysis (CEBRA) and its expertise is noted. Perhaps the best point to make of note is that with the exception of Dr Dale Cooper from Broadleaf Capital International, nowhere in all of these advisory committees that now service CEBRA is there a representative from the private sector as per the website:

http://cebra.unimelb.edu.au/about/committees

This is rather surprising given that the Federal Government, through Department of Agriculture (DOA), is a key contributor and has a commitment to cooperatively working with the private sector.

Attachment A

In the discussion provided under this document the work of the Eminent Scientists Group in providing assistance to the IRA process is mentioned.

http://www.daff.gov.au/about/contactus/governance/eminent_scientists_group)

Upon searching the appropriate section on the DAFF website (see URL above) I note that the website was last updated in January 2012 and the most recent report was in 2009 on prawns. The other "recent" reports (sic) date from 2008 and 2006 - none of which are related to potatoes nor the other items in Secretary Metcalfe's letter. This type of looseness with facts/truth is typical of the level of work which we have come to expect from DAFF and undermines any ability to have confidence or belief in what they claim. One is then left to wonder why Secretary Metcalfe chose to mention this aspect of DAFF in his letter.

There is little worthy of comment in the rest of Attachment A.

Hayward's Report

This was presented to DAFF in December 2012.

In reviewing this report it must be considered that we were not provided with the Terms of Reference provided to Dr Hayward and thus we can only comment on what is written and claimed as result.

Scope of the Report

In our (AUSVEG) submission we covered a number of potential pest and disease introductions that occur in NZ but which were not addressed in the IRA. These pest and diseases were on a list supplied by MAF to DAFF as occurring in NZ but not in Australia and included PCN. This aspect of our submission was ignored by Hayward so presumably was not in his Terms of Reference as the report by Hayward is restricted solely to the science restricted to TPP.

From this, one could conclude that his terms of reference were fairly narrow. This means that concerns raised by AUSVEG about these other potential pests and diseases are regarded by DOA as either having no merit or alternatively they do not have an answer. To date, however, they remain unaddressed.

Report's Independence

In assessing the merits of Dr Hayward's report, the use of the word "independent" warrants comment.

The independence of a report whereby the bacteriologist who provided input or comment on the very document he is subsequently asked to review is open to serious question.

This is a serious conflict of interest, and belies any claim about this being an independent report. Dr Hayward quotes himself in the report as referenced in the following citation contained in the bibliography.

Hayward A C (2011) Report to Biosecurity Australia on the draft revised import conditions for entry of potatoes from New Zealand for processing and the position paper for the review of import conditions for fresh potatoes from New Zealand.

Given the Dr Hayward provided input and advice to DAFF on the Potato IRA, then his review of work to which he himself contributed largely to undermines any claim to independence.

Unfortunately, the issues at stake in Biosecurity and the way information is handled mitigate against objective analysis by any government agency, despite the public affirmations to the contrary.

This is further evidenced on page 4 of Dr Hayward's report when discussing the mode of entry of Tomato-Potato Psyllid into NZ. A paper by Thomas et al (2011) and cited by Dr Hayward is a case in point. This paper, which is described by Dr Hayward as a "thorough analysis of the possible entry pathways for this insect pest" (referring to TPP entering into NZ), also comes from a conflicted point of view. All the authors are MAF employees; thus are hardly in a position to publicly do anything which may lead to MAF being incriminated. There is little evidence to suggest that MAF is any less averse to self-evaluation than DAFF.

The actual paper by Thomas et al (2011) rests on a number of assumptions which do not appear to be equally applied when assessing import risk. Other potential pathways, such as air travellers, shipping etc. are not considered. The whole thesis of the paper by Thomas is supposition and not a

single item of evidence is presented to support the argument that material was smuggled. In fact, there is no more evidence presented for smuggling than there is for any other mode of entry.

This discussion is raised not because one seeks to enter into debate about the likely origin of the NZ incursion, but merely because once again the arguments and application of rigour towards evidence do not appear to be applied equally when personnel who are in conflicted position are seeking to advance a theory.

Furthermore, one can only speculate why Dr Hayward should be so keen to ascribe such prominence to its likely entry into NZ. It is, however, consistent with a tendency in the report to minimise risk.

TPP Biology

Dr Hayward claims on page 6 that soil components have a repellent effect upon TPP, however, this is unreferenced. If this refers to kaolin sprays in the following paragraph then that is hardly representative of soil.

Chemical and biological methods of control are also covered by Dr Hayward – Why? What has this to do with the science of the Import Risk Analysis? Furthermore, management or control would not seem to be part of incursion response whereby eradication is the aim. Is this section once again merely to subtly suggest that TPP is not such a big issue even if it arrives in Australia?

Zebra Chip and TPP

One of the issues when studying the literature on Zebra Chip is the fact that we are often not comparing “apples with apples”. The different degrees of sensitivity between NZ and US molecular tests for Liberibacter mean that data cannot always be validly compared and it is the view of a number of NZ scientists that the US data is in some cases misleading. Surprisingly, although there is a discussion about this aspect of research, there is no consideration of this ‘problem’ in the report by Dr Hayward when presenting data. All papers are treated equally as if they were all derived from the same methodology.

The variation amongst haplotypes A through D is discussed. It would be unfair on Dr Hayward to cite more recent work in this field, however, this recent data is showing some interesting results which do not necessarily reflect a set of highly conserved and stable haplotypes. This area is very much a work in progress scientifically.

In considering the role of tuber transmission, a short discussion notes that infected tubers can grow, but this is dismissed as the potatoes for import are solely for processing therefore there is no risk according to Hayward. This is an interesting conclusion given the uncertainty surrounding the disease’s entry to NZ.

The same reasoning is used again when considering the likelihood of native psyllids acquiring the Lso bacteria; The potatoes are entering Australia for processing thus there is no risk. This would seem to be a somewhat circular argument. It is, however, conceded by Dr Hayward that native psyllids could potentially acquire the pathogen.

The likelihood of Lso being acquired from the environment is also considered. This is problematic as there is currently much scientific discussion/speculation upon the significance of acquisition of the genome through phages. The origin of the sudden appearance of highly pathogenic Lso strains around 1986 is still unclear. Debate on this issue is at best still speculative.

Insect Proof Containers

Dr Hayward notes;

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> It is required that New Zealand potatoes are imported in insect proof containers and opened only within quarantine approved premises in a metropolitan area, as specified in the *Draft report for the review of import conditions for fresh potatoes for processing from New Zealand, 3 July 2012.* When these conditions are applied the risks of importing an exotic pest are minimised, as previously concluded (Hayward 2011).

Having re-examined the DAFF 2012 Draft report I can find no evidence of this, only that the shipping containers must be fully sealed (page 15 of DAFF report). The rest of the conditions have already been queried, and provide no protection against TPP infestation of loads.

Either Dr Hayward has misinterpreted the DAFF report, does not understand commercial and packing shed operations; or DAFF has shifted the goalposts since the original Draft of 2012.

All the other issues raised in our original submission are unanswered.

One is left to conclude that the report commissioned by DAFF has produced exactly what DAFF wanted it to do, and thus contributes little value toward improving either the rigour of DAFF's work, or correcting the obvious flaws in DAFF's original Draft Report of 2012.