

28th June, 2011
75 Gembrook Rd
Launching Place
Victoria 3139

Office of the Chief Executive
Biosecurity Australia
GPO Box 858
CANBERRA ACT 2601

Dear Sir or Madam,

We wish to make comment on the draft report for the non-regulated analysis of existing policy for apples from New Zealand (a review)

Standard Commercial Practices

This report relies on New Zealand to monitor fruit it wishes to export to Australia using 'standard commercial practices'.

What are the 'standard commercial practices'? What practices and procedures will New Zealand growers be required to undertake to ensure the risk of fireblight, European canker and various insect pests do not come in with consignments of apples? The answer to this question is not found in the report, only that they are well established commercial practices.

Our understanding of "standard commercial practices" is that these are a response to science based commercial practices, and market driven demands on our product. We believe, as they are subject to market force, these practices will vary according to growing conditions, financial ability of each farm to counteract pest and disease pressure, the effect of weather conditions and will be subject to the market influences of supply and demand. The report discusses the application of integrated fruit production methods in relation to the control of fireblight, European Canker and apple leaf curling midge. It uses words such as 'recommended', 'guidance', 'orchard managers aim', 'should be augmented' and that decisions are made by orchard managers. Orchard managers will have variable skill levels and abilities to successfully manage an IFP system. There would appear to be no mandated controls or words in the report that state the grower will or the grower shall (e.g. remove infected trees from the orchard or not export fruit from an infested block). The only mandatory requirement is that the orchard spray diary is inspected by the Independent Verification Agency – a standard procedure of all quality control systems. Whilst the diary is inspected, it is a record of what has happened, not the report card on the success of the spray program. The success of a spray program is influenced by a number of factors – financial, climatic, and labour and machine resources and is especially time critical. An application of a spray does not necessarily control or eliminate the problem. The inspection of a spray diary would not ensure pest and disease control.

It would appear there is no date or permanency attached to these standard orchard practices or the mandatory application of these practices thus giving New Zealand growers the opportunity to change these practices without referencing Australian quarantine requirements as they would always be 'standard commercial practices'. Indeed the New Zealand system is a living document subject to grower review each year.

We are subject to quality controls in Australia to ensure food safety and to meet the quality needs of our customers. These are sometimes changed by negotiation to meet climatic conditions and adjusted to ensure sufficient fruit is available for sale under the "clauses of variation to specifications". Recent changes to commercial practices in Australia was the acceptance of fruit with calyx cracking due to drought/frost, brix downgrades due to growing

conditions, increased amount of blemish due to growing conditions i.e. hail marks. The variations to specifications are commercially based decisions under a well established regime of Coles supermarkets – a major customer to whom we supply fruit.

Mr Snow Hardy, Managing Director, ENZA New Zealand, the owner of the variety Jazz in an address to Jazz growers in Australia in March 2011, stated they allowed New Zealand growers to pack hail marked fruit to ensure there was sufficient quantity of the fruit for sale in a year with considerable hail damaged fruit. This is a current example of market forces interfering with science, and these factors may allow fireblight infected fruit or other pests and disease to come into Australia.

Standard commercial practices should never be used as a substitute for rigorous quarantine inspection and mandated requirements that allow the export of fruit to other countries, or even into some areas of Australia because these practices are subject to factors outside of sound science.

Climate change and pest and disease control

The report also discusses conditions that may lead to the outbreak of fireblight but does not consider the effect of climate variability and the fact the weather conditions are changing. The New Zealand Ministry for Environment website (last updated 14/12/2009) on climate change advises there will be an increase in temperature due to climate change and that the changes will result in both positive and negative effects. It expects that agricultural productivity will increase in some areas but there will be an increased risk of drought and increased spread of pests and disease. Earlier springs and longer frost-free seasons could affect the emergence, first flowering and health of leafing or flowering plants and will almost certainly change the timing of the disease life cycle. Indeed climate change makes the predictability of pest and disease even more complex. It is also expected that fruit and vegetable growers may find it more expensive to insure against weather related damage e.g., hail – a vector for fireblight infection.

A disease incursion such as European canker or new insect pests will increase our cost of production, as less fruit may be yielded that meets market specification or the trees may be diseased and not reach their potential yields. It will mean an increase in the costs of chemical spraying or manual pruning or thinning. Fireblight is another issue. It cannot be eradicated and one method of control used in New Zealand is to spray antibiotics. Microbiology Professor at the Australian National University, Peter Collignon, suggests these antibiotics may stay in the fruit for up to six months. Antibiotics are not allowed to be sprayed on Australian fruit but it would appear we will have New Zealand fruit available for sale that in certain growing conditions will have inevitably been sprayed with streptomycin. The use of antibiotic in food production is of increasing concern to the medical profession as it can cause resistance to pathogens in the human population and our health system. The draft report states that streptomycin resistance strains of fireblight bacterium have been found in Hawkes Bay.¹ This is a huge concern as one of the principal agents to control fireblight is losing its effectiveness. The report cites evidence of fireblight under IFP as reduced. This is misleading as it will have been almost certainly due to the changed climate which has happily coincided with the introduction of IFP into New Zealand. Fireblight spread is influenced by a number of factors – climatic conditions being the most important. Should New Zealand have climatic conditions that increase the likelihood of fireblight outbreaks, the resistance to antibiotics will cause even more issues and control of the disease is unlikely even under the most diligently adhered to spray program. Lack of control will lead to an increased incidence of fireblight bacterium being in fruit – e.g. the calyx. Resistance to antibiotics is a human health issue and the ability to control human, animal and plant disease will be compromised.

Disease pressures heavily impact our profitability and, would impact on Australia's clean green image that has successfully allowed access into overseas markets as well as putting Australian grown food as a top priority for Australian consumers.

Probability of entry

The draft report relies on the proposition that the probability of entry of quarantine pests and disease will be extremely low or very low². It is this factor that is determining the overall acceptable level of protection. The probability of entry seems to rely heavily on the correct and successful application of an IFP program and on fruit not coming from New Zealand in the flowering season – September through October for most fruiting trees considered as a very risky time, the report considers the bulk of the exports will be from February to August, but also states ultimately, economic factors and market access will determine the market window for New Zealand apples.³ Given the shortage of apples in late December through to February most years and the resultant price increase due to supply and demand factors combined with the ability to store apples long term using both CA storage and SmartFresh technology, the assumption made about the landing of fruit when conditions are more favourable for the establishment of disease seems to be poorly based.

The report states that whilst most fruit will come in the form of an 18kg carton, bulk bins are utilised where the receiving markets specifically prefer re-pack on arrival.⁴ Further the report states the lines of apples sent for repacking are stored in the bulk bins.⁵ If any fruit is sent to Australia for repacking, what risks are attributed to pest and diseases being harboured in the bulk bins especially if these bins have been used as or stored near harvest bins as pests could over winter in these bins? How are the bulk bins to be disinfected, how can you check a bulk bin of 400kg of apples for trash, dirt, insect eggs, bacterium when the regime is to inspect only 600 apples? It would appear from the report that various pests and disease can survive cold storage. Repacking is likely to occur in areas close to orchards. There has been a marked increase in Australia of the amount of fruit being presented in punnets or clamshell packing at the request of supermarkets in recent years. The allowance of fruit to be sent for repacking would increase the risk of a pest and disease incursion. The export of bulk bins of fruit for repacking should not be allowed to ensure the level of risk remains low.

As an orchard business, we have practised Integrated Fruit Production for over 25 years and since 1998 have had an independently audited quality assurance system which covers all aspects of our production. As such we have significant knowledge of an IFP based system and the use of standard commercial practice. The fundamental principle of an IFP system is that you use nature's principles of predatory behaviour and compromise of various outcomes to achieve a system less reliant on traditional chemical controls. In adopting an IFP system, you must accept unexpected results in terms of infections and population of pests and disease as results are heavily affected by seasonal and climatic conditions. Every orchard has its own customised system depending on its unique micro environment and the length of time the IFP system has been operating (we have two orchards eight kilometres apart and each orchard has its own challenges). Over this time we have had to adjust to climate – drought for ten years, extreme temperatures and unseasonable weather and to the changing needs of the market – the customer. Decisions regarding orchard management have had to be 'adjusted' to ensure economic production of market quality fruit, whilst giving priority to growing practices that maintain consumer confidence, meet food safety regulations and are the safest possible to the environment and human health. In doing so we protect our growing environment for years to come and ensure all tools used in growing including chemicals are not subject to overuse and resistance. However, decisions are made primarily to meet the key economic drivers of profitability and this leads to compromise. Higher pest and disease presence may have to be accepted to meet the market needs for low residues (some countries ban the most effective disease controls – like Australia's ban over antibiotic use) and as such the grower in some years has to deal with lower yields and/or higher damage in order to meet overall customer requirements. It will mean more pressure in the packing facility to eliminate fruit affected by pest and disease, some of which will not be visible.

IFP was introduced to the New Zealand after demands placed by United Kingdom supermarkets that fruit should be produced using an IFP programme. The market requirements were the driver for the development of an IFP programme in New Zealand. As such science was compromised by the needs of the market. The New Zealand programme is as a 'living' document and continues to be modified as required.⁶ These modifications would

be in response to a number of the market factors, grower profitability and new growing techniques.

The success of any IFP system requires careful monitoring and then informed decision making to identify and then manage a potential problem. The decision may be a wait and see approach and/or use of chemical assistance and would be influenced by resources available, both financial and physical, as well as climatic conditions. The introduction of an exotic or unknown pest or disease in an orchard would stress any production system. However, in an IFP system the stresses and changes would be magnified and the management and decision making would be more difficult to control and with unpredictable results.

A breakdown in quarantine would see the emergence of new pest or diseases which would jeopardise the years of dedication and skilful management that has allowed Australian growers to produce fruit using a safer and more sustainable production system.

Conclusions

The draft report attempts to cede control of Australia's quarantine protocols to another country and sets a dangerous precedent of 'standard commercial practices' being the key requirement for import of food into Australia. As the pests and diseases that are the subject of the protocol occur in the growing environment, it is extremely difficult to monitor and then contain and control the pest or disease in a variable environment. This is why this sets such a dangerous precedent as it is subject to variation, interpretation and application and the practices are not mandated. This poses a very great risk to quarantine protocols and Australia's growing environment and food security.

In the past Biosecurity Australia and all of its various forms and identities has assured Australian Farming, Forestry and Fisheries industries that all of its decisions are based on science alone and the application of scientific rigour to all of its decisions. Now we have a situation where it is publicly stating that it must allow for trade, and in doing so commercial practices, in its decision. It sets a dangerous precedent that quarantine policy is now to be influenced by financial factors, commercial customer requirements and not by science alone.

Food safety and Food security are at increased risk if this emphasis on trade and its commercial considerations are allowed to dominate Biosecurity Australia decision making.

We ask that Biosecurity Australia take back control of quarantine and revisit the draft report to ensure this dangerous precedent of "standard commercial practices" is not allowed to become the key requirement for import of food into Australia. We also ask that the issues of climate factors in the incidence and spread of fireblight be looked into further noting the New Zealand Minister of Environments statement that climate change will influence pest and disease. We also ask no bulk transport of fruit in bins be allowed due to the increased risk of pest and disease burden and the increased risks associated with repacking.

This draft report deals with apples but will this become the key requirement for all imported food and goods?

Further we request that any import requirements have the capacity to deal with disease outbreaks in the country of origin, and in doing so have disease status incorporated in them much like the fruit fly protocols in Victoria to ensure the risk of importation of pest and disease into Australia is minimised. Australia should protect its food growers from the impact of imported pest and disease and Biosecurity Australia is required to ensure we have a robust quarantine system capable of doing so now and into the future without the intrusion of trade and economic considerations at the expense of science.

Yours sincerely

Susan Finger

David Finger

¹ Page 62 of the Draft report

² Page 115 of the Draft report

³ Page 28 of the Draft report

⁴ Page 26 of the Draft report

⁵ Page 27 of the Draft report

⁶ Page 12 Integrated Fruit Production in the New Zealand Pipfruit Industry by Jonathon W Wiltshire
2003