

IMPORTANT ISSUES SURROUNDING THE IMPORTATION OF NEW ZEALAND APPLES

1.0 Introduction

This paper is submitted by the Australian Apple and Pear Growers Association on behalf of all apple and pear growers in Australia and is a response to the "Draft Inventory of Issues Raised by Stakeholders in Response to the Draft IRA on New Zealand Apples" (The Inventory).

The Inventory was a long and overly complex document. AAPGA submits that the issues of major importance can be summarised in a small number of succinct points that need to be investigated thoroughly before any decision on whether or not to allow importation of New Zealand apples can be made.

The issues fall into three main categories. They are

- The ability of fire blight bacteria to transfer from apples to a host plant in Australia;
- The ability of fire blight bacteria to transfer from apple trash to a host plant in Australia;
- The process of analysis of the risk to Australia of importing New Zealand apples; and
- The issues surrounding other pests

The details of points to be raised around each of these issues is listed below. Some points have brief comments but most are presented as basic information.

The apple and pear growers of Australia are adamant that it is of fundamental importance that all of these issues be thoroughly investigated, that new research be carried out where necessary and that the responses to each point are such that they allow a high level confidence in the reliability of the final decision.

2.0 The Ability of Fire Blight to Transfer From Apples to an Australian Host

The issues that are required to be resolved in this area are:

- a) The maximum number of bacteria that can be found on or in an apparently healthy apple including endophytic colonies and epiphytic colonies:
- b) The ability of the bacteria to survive the normal and possible extreme conditions involved in all aspects of exportation (are the fire blight bacteria "fragile" or "hardy"?)
- c) The disposal patterns of fruit and waste in Australia
- d) The identification of Australian native plant species that are potential hosts.
- e) The ability of fire blight bacteria to survive on non-host plants.
- f) The ability of New Zealand insects to act as carriers of fire blight including those insects identified as prohibited pests and those that are not prohibited pests but are associated with New Zealand fruit or packaging.
- g) The ability of Australian insects to act as carriers of fire blight.
- h) The ability of fire blight bacteria to move from apples/trash to packaging and the survival rate on packaging and the potential of fire blight bacteria to transfer from packaging to a host plant.
- i) The potential for fire blight cross infection in coolstore.
- j) The potential for fire blight cross infection at point of sale.
- k) The potential for fire blight cross infection from bins and grading equipment.

- l) The length of time fire blight bacteria can survive on apple or packaging.
- m) The impact of Australian climatic conditions for potential spread of fire blight
- n) The identification of all potential pathways of infection from fruit and packaging to Australia host plants
- o) The quantification of the minimum number of bacteria needed to infect a host plant (This will require several pieces of research to reach similar conclusions rather than a single piece of research or reliance on one piece of research from a range of conflicting outcomes).
- p) The investigation of how fire blight was established in the UK, in Hawaii and in the South Tyrol area of Italy, and consideration of the implications of the results of those investigations on the Australia / New Zealand situation
- q) The conduct of case studies of pest incursions into Australia of previously not present pests or diseases that occurred despite quarantine arrangements designed to prevent their entry and the consideration of the implications of these case studies on the importation of New Zealand apples.
- r) The variations of the viability of fire blight bacteria in epiphytically versus endophytically infected fruits.

3.0 The Ability of Fire Blight to Transfer From Trash to an Australian Host

- a) The conduct of all the items listed above as they relate to apple trash rather than apple fruit
- b) The practical ability of New Zealand apple packers to exclude all trash from apple packs.

4.0 The Risk Assessment

The review of risk assessment is a major issue in the Draft IRA and will remain a major issue until stakeholders can have confidence in the methodology of the risk assessment. The main difficulty appears to be that the risk assessment has been carried out by people with excellent qualifications in areas other than risk assessment. Risk assessment is a complex area of specialist study and the apple and pear growers respectfully but strongly suggest that such a specialist be included in any further review of the New Zealand request for access for apples. In considering the risk analysis the following issues are required to be resolved:

- a) The appropriateness of Monte Carlo system
- b) The employed methodology for combining events.
- c) The inclusion of all pathways identified as a result of item 2n (above).
- d) The quantification of the potential volume of apples to be imported and the impact on the risk of varying the volume of imports.
- e) The inclusion of relevant environmental factors.
- f) The conduct of a new economic impact study that includes both direct and flow-on impacts and the inclusion of the outcome in the consideration of "consequence" in the risk assessment.
- g) The inclusion of the outcomes of 2m (above) in the risk assessment (ie Australia's climatic conditions).
- h) The use of an appropriate distribution of risk quantification above and below the mid point.
- i) The clear definition of Australia's A.L.O.P.

- j) The design and application of an appropriate quantitative methodology.
- k) The ramifications of Australia importing apples from a country with endemic fire blight on Australia's export apple sector and the inclusion of the outcomes of the investigation in the "consequence" section of the risk analysis.
- l) The inclusion of the likely impact of an incursion when deciding level of detailed information required as a starting point for the risk analysis.

5.0 Other Insects and Diseases

Australian apple and pear growers are of the view that the assessment of pests and diseases other than fire blight was not handled in sufficient detail in the Draft IRA. There is also a view that the list was not comprehensive and did not take into account the differences between Australian states. The following points are required to be investigated prior to the release of a final decision.

(a) Carpophilus S.P.P.

- I. The identity of the genus of the species present in New Zealand.
- II. The orchard inspection procedure.
- III. The ability to discover the presence of the insect by inspection.
- IV. The economic consequences in other products – grain, dried fruit etc.
- V. The potential spread pattern in Australian conditions.
- VI. The environmental impact on native species.
- VII. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector

(b) Cnephasia Jactatana (Walker)

- I. The practical ability of New Zealand apple packers to exclude all trash from apple packs.
- II. The orchard inspection procedure.
- III. The ability to discover the presence of the insect by inspection.
- IV. The potential impact of this pest on native species.
- V. The ability of this pest to spread in Australian conditions.
- VI. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- VII. The extent of crop losses caused by this pest in New Zealand.
- VIII. The consideration of a detailed economic evaluation of incursion.

(c) Ctenopseustis Herna, C. Obliquana, Planotortrix Excessana, P.Octo Dugdale and Tortricinae Species

- I. The identity of the species present in New Zealand.
- II. The orchard inspection procedure.
- III. The ability to discover the presence of larvae in the calyx by orchard inspection.

- IV. The potential impact of this pest on native species.
- V. The practical ability of New Zealand apple packers to exclude all trash from apple packs.
- VI. The disposal patterns of trash in Australian conditions.
- VII. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- VIII. The economic impact of the incursion of this pest
- IX. The breeding cycle of this pest under Australian climatic conditions.

(d) Dasineura Mali Keiffer

- I. The orchard inspection procedure.
- II. The breeding cycle of this pest under Australian climatic conditions.
- III. The ability to discover the presence of the insect by inspection.
- IV. The potential impact of this pest on native species.
- V. The economic consequences in other products – grain, dried fruit etc.
- VI. The practical ability of New Zealand apple packers to exclude all trash from apple packs.
- VII. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- VIII. The economic impact of the incursion of this pest
- IX. The ability for midge to act as carrier for other diseases.
- X. The resistance of this pest to chemical control.

(e) Graphania Mutans (Walker) and Graphania sp

- I. The actual level of occurrence of this pest in New Zealand.
- II. The length of time that the eggs of this pest can survive in the calyx of apples
- III. The orchard inspection procedure.
- IV. The ability to discover the presence of the eggs of this pest by inspection.
- V. The potential impact of this pest on native species.
- VI. The breeding cycle of this pest under Australian climatic conditions.
- VII. The practical ability of New Zealand apple packers to exclude all trash from apple packs.
- VIII. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- IX. The economic consequences in other products – grain, dried fruit etc.

(f) Pseudococcide Species

- I. The identity of the species present in New Zealand.
- II. The orchard inspection procedure.
- III. The ability to discover the presence of the pest by inspection.

- IV. The potential impact of this pest on native species.
- V. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- VI. The economic consequences in other products – grain, dried fruit etc.

(g) Pyrgotis Plagiata (Walker)

- I. The detailed biology of this pest.
- II. The potential impact of this pest on native species.
- III. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- IV. The economic consequences in other products – grain, dried fruit etc.
- V. The orchard inspection procedure.
- VI. The breeding cycle of this pest under Australian climatic conditions.

(h) Stathmopoda Horticola Dugdale

- I. The actual level of occurrence of this pest in New Zealand.
- II. The orchard inspection procedure.
- III. The potential impact of this pest on native species.
- IV. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- V. The economic consequences in other products – grain, dried fruit etc.
- VI. The breeding cycle of this pest under Australian climatic conditions.

(i) Thrips Obscuratus (Crawford)

- I. The ability of this pest to act as carrier for other diseases.
- II. The orchard inspection procedure.
- III. The potential impact of this pest on native species.
- IV. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- V. The economic consequences in other products – grain, dried fruit etc.
- VI. The breeding cycle of this pest under Australian climatic conditions.
- VII. The practical ability of New Zealand apple packers to exclude all trash from apple packs.

(j) Eriophyes Mali Burts

- I. The ability of this pest to act as carrier for other diseases.
- II. The ability of other pests to act as carriers for blister mites.
- III. The breeding cycle of this pest under Australian climatic conditions.
- IV. The ability for mite to be spread by climatic conditions.
- V. The effect that this pest may have on crop yields.

- VI. The orchard inspection procedure.
- VII. The ability to discover the presence of the pest by inspection.
- VIII. The potential impact of this pest on native species.
- IX. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- X. The economic consequences in other products – grain, dried fruit etc.
- XI. The breeding cycle of this pest under Australian climatic conditions.
- XII. The practical ability of New Zealand apple packers to exclude all trash from apple packs.

(k) Nectria Galligena Bresadola

- I. The ability to discover latent infections.
- II. The historic incidence of disease in New Zealand.
- III. The classification of rots in inspection procedure.
- IV. The likelihood of early detection and the impact of the failure of early detection.
- V. The distribution of known host plants in Australia.
- VI. The impact on Australian species.
- VII. The ability of other pests to act as carriers of spores.
- VIII. The appropriate orchard inspection procedures required to discover latent infections.
- IX. The effectiveness of inspection procedure for latent infections.
- X. The ramifications of Australia importing apples from a country that is host to this pest on Australia's export apple sector
- XI. The practical ability of New Zealand apple packers to exclude all trash from apple packs.

(l) Others

- I. N.S.W., Queensland & Western Australia suggest that there are other prohibited pests that have not been included. This claim needs to be thoroughly investigated and any pests found to have been omitted from the Draft IRA will need to be included in any further investigations.

Relevance

The points outlined in this document are relevant only to the initial part of the IRA. These items need to be thoroughly investigated and sound conclusions made before any decision can be made on the appropriateness or otherwise of putting any protocol relating to the export of apples from New Zealand to Australia.

The view of the apple and pear growers of Australia, supported by the Senate Enquiry and State Departments of Agriculture, is that the risk assessment contained in the draft IRA is faulty. As the remainder of the IRA flows from the risk assessment, it is not appropriate to address the remainder of the Draft IRA until the points listed in this document have been addressed.