

Case Study 1

Importation of Table Grapes from California



Contents

| | <i>Page</i> |
|--|-------------|
| Why Did We Select This Case Study? | 7 |
| Key Findings | 7 |
| Recommendations | 8 |
| Introduction | 8 |
| How Are the Risks Managed? | 10 |
| Import Health Standard for the Importation of Table Grapes from California | 10 |
| How Did MAF Conduct the Pest Risk Analyses and Revise the Import Health Standard? | 17 |
| Why Was Trade Suspended a Second Time? | 22 |
| Current Situation | 25 |
| | |
| Figures | |
| 1.1 Summary of Risk Analysis for Pierce’s Disease and Glassy-winged Sharpshooter | 11 |
| 1.2 Outline of Phytosanitary Measures and Procedures for the Importation of Fresh Table Grapes (<i>Vitis Inifera</i>) from California to New Zealand | 15 |
| 1.3 Original Timetable for Revising the Import Health Standard | 18 |
| 1.4 Number of Black Widow Spiders Detected Having Crossed the Border | 24 |

Why Did We Select This Case Study?

- 1.1 We selected this case to enable us to examine the process used by the Ministry of Agriculture and Forestry (MAF) to prepare a pest risk analysis to mitigate biosecurity risks before a pest reaches the border. Another reason for selecting this topic was that it gave us the opportunity to highlight the tension that exists between the demands of trade and the need for effective biosecurity measures.
- 1.2 A number of spiders, including black widow spiders, entered New Zealand in consignments of table grapes. Trade in table grapes from California was suspended while the risks posed by the spiders were assessed.
- 1.3 Another pest, the glassy-winged sharpshooter is also associated with this pathway. To date there have been no interceptions of this pest on the table grapes pathway, but the New Zealand wine industry has been very concerned about the risks it poses.
- 1.4 This case study gave us the opportunity to examine how MAF consulted with the wine industry in its analysis of the risks posed by the glassy-winged sharpshooter. It also enabled us to examine the work of the Plants Biosecurity Group within MAF Biosecurity.

Key Findings

- 1.5 *Good process was followed in the risk analysis prepared in 2001 to revise the import health standard. (See paragraphs 1.23-1.42 on pages 10-15 1.47-1.69, and paragraphs 1.47-1.69 on pages 17-22.)*
- 1.6 *MAF's aim was to ensure that the revised import health standard was completed by the start of the new grape season, thereby ensuring no disruption to the importation of table grapes from California. MAF involved relevant stakeholders and took their views into account. (See paragraphs 1.48-1.53 on pages 18-19, and paragraphs 1.54-1.62 on pages 19-20.)*
- 1.7 *The requirements imposed by MAF on the importation of table grapes are among the strictest of any of the 50 countries to which California exports table grapes. The California Table Grape Commission informed us that it felt that MAF was one of the most credible organisations of its type. (See paragraphs 1.63-1.69 on pages 21-22.)*

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.8 *MAF revoked the import health standard for table grapes from California in November 2001. MAF told us that it did so on the basis of advice received from the Ministry of Health (MoH) and the Department of Conservation (DOC), which informed MAF that the risk posed by the number of black widow spiders entering New Zealand with the grapes was unacceptably high. When we asked MoH and DOC about the reasons why trade was suspended, they had differing views about why and at whose behest the decision to suspend trade was taken. (See paragraphs 1.70-1.74 on pages 22-23.)*
- 1.9 *When trade was suspended a second time, the number of spiders that had been identified entering New Zealand was below the number that MAF expected to enter on this pathway. This suggests a change in the appropriate level of protection against spiders, and yet there was no statement that the level had been changed. (See paragraphs 1.75-1.80 on pages 23-24.)*

Recommendations

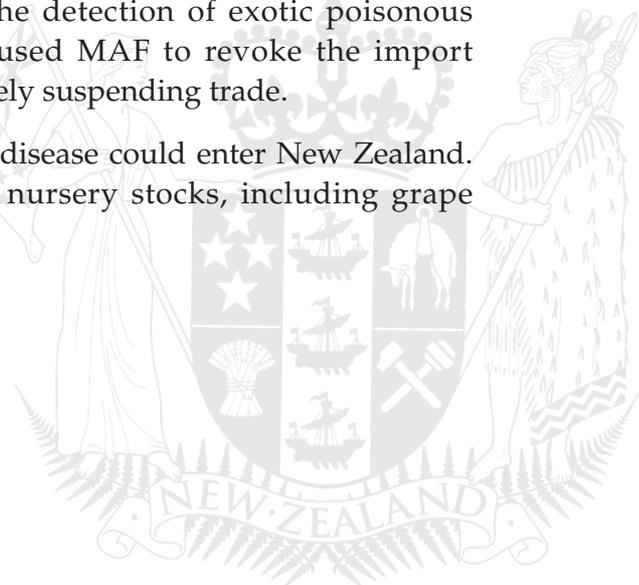
- 1.10 *All meetings between departments should be documented to record what decisions have been taken and how the decisions were reached. (See paragraphs 1.70-1.73 on pages 22-23.)*
- 1.11 *Before MAF issues an import health standard it should seek a written statement from departments that may be affected by pests or diseases associated with the importation on the level of protection against those risks afforded by measures included in the standard. (See paragraph 1.73 on page 23.)*
- 1.12 *MAF and other affected departments should co-ordinate media releases about pest and disease incursions. (See paragraph 1.74 on page 23.)*

Introduction

- 1.13 *In January 2001 MAF suspended importation of table grapes from California pending a review of the risks associated with the grapes. Trade was suspended because of a change in the risk profile associated with the grapes, and because a number of live spiders had entered in consignments of table grapes. Following the review, MAF allowed Californian table grapes to be imported, subject to the introduction of additional measures to eliminate certain risks associated with importation of the grapes.*

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.14 Despite these new measures, spiders continued to enter the country, and trade was once again suspended in November 2001.
- 1.15 We examined MAF's risk analysis process and subsequent development of the import health standard for the importation of table grapes from California. In this case study, we highlight the difficulty of balancing trade with effective biosecurity measures, and the tension created by having a number of government agencies each with different biosecurity responsibilities.
- 1.16 New Zealand imports approximately \$8 million of table grapes from California each year. The import season runs from late-June through to December.
- 1.17 In October and November 2000, MAF received reports of live spiders, including black widow spiders, found in bunches of grapes imported from California. This raised concerns that the measures introduced by MAF to minimise the risk of spiders entering New Zealand with the grapes could be ineffective, and that, if spiders could breach our border controls, then other more high-risk pests might also be imported with table grapes.
- 1.18 Towards the end of 2000, MAF, the Winegrowers of New Zealand and the Wine Institute of New Zealand were becoming increasingly aware of the threat posed by a pest called the glassy-winged sharpshooter (GWSS). The main threat associated with the GWSS is that it carries and spreads Pierce's disease, a disease that destroys grapevines.
- 1.19 This insect, native to South America, has spread throughout Southern California and introduced Pierce's disease there. It was first detected in California in 1990, and has destroyed a large number of grapevines. Because the GWSS is now established in parts of California, the risk profile associated with importing table grapes from California has changed. It was both this change in risk profile and the detection of exotic poisonous spiders in Californian grapes that caused MAF to revoke the import health standard in January 2001, effectively suspending trade.
- 1.20 The GWSS is not the only way Pierce's disease could enter New Zealand. It could also enter as a bacterium on nursery stocks, including grape budwood.



CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

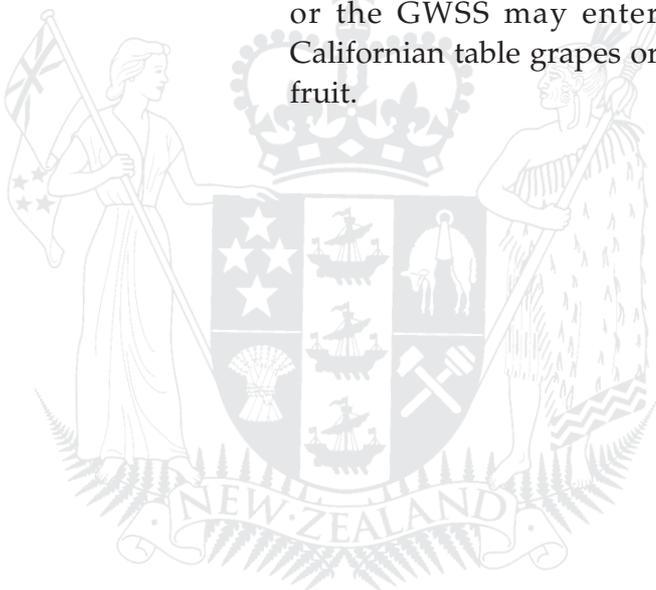
How Are the Risks Managed?

- 1.21 MAF manages biosecurity risks associated with the importation of commodities by requiring the authorities in the exporting countries to ensure that certain measures are undertaken prior to and/or during export of the commodity. These measures are identified as a result of a scientific pest risk analysis and are designed to reduce the risks by, for example, killing pests that may be present in the consignment of the commodity.
- 1.22 The measures are set out in an import health standard. Once MAF is confident that all the measures included in an import health standard have been taken, biosecurity clearance is given to the consignment and the commodity is allowed to enter New Zealand.

Import Health Standard for the Importation of Table Grapes from California

Preparing a Pest Risk Analysis

- 1.23 MAF prepared two separate pest risk analyses, one for the GWSS and one for Pierce's disease. MAF also identified additional risk-mitigating measures for the effective management of poisonous spiders associated with this pathway.
- 1.24 Both pest risk analyses state that they were done in accordance with the *MAF Plants Biosecurity Standard for Pest Risk Assessment (2001)*, which was finalised on 28 June 2001.
- 1.25 Figure 1.1 on the opposite page sets out the likelihood that Pierce's disease or the GWSS may enter New Zealand through the importation of Californian table grapes or the importation of nursery stock or fresh citrus fruit.



**CASE STUDY 1 –
IMPORTATION OF TABLE GRAPES FROM CALIFORNIA**

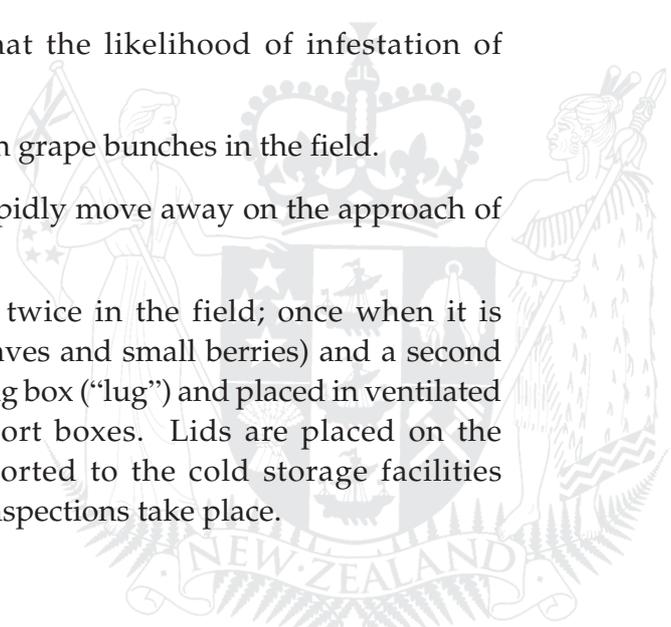
*Figure 1.1
Summary of Risk Analysis for Pierce’s Disease and
Glassy-winged Sharpshooter*

| <i>Pathway</i> | <i>Volume of pathway</i> | <i>Likelihood of entry of Pierce’s disease on pathway</i> | <i>Likelihood of entry of GWSS on pathway</i> | <i>Likelihood of establishment of GWSS</i> | <i>Likelihood of spread of GWSS</i> |
|---|--------------------------|---|---|--|-------------------------------------|
| Nursery stock – whole plants and leafy cuttings | Small | High | High | High | High |
| Nursery stock – grape/ citrus budwood | Small | High | Low | High | High |
| Fresh citrus | Large | Low | Low | High | High |
| Table grapes | Large | Low | Low | High | High |

1.26 Figure 1.1 shows that the likelihood of the GWSS entering New Zealand by way of table grapes is low.

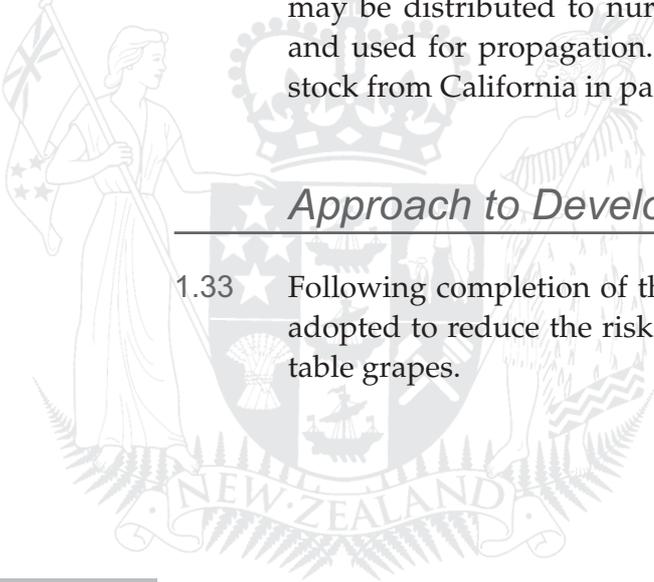
1.27 The pest risk analysis concluded that the likelihood of infestation of grapes in the field was low because:

- The GWSS is not reported to feed on grape bunches in the field.
- The GWSS has been observed to rapidly move away on the approach of a person.
- Each bunch of grapes is handled twice in the field; once when it is picked and trimmed (to remove leaves and small berries) and a second time when it is taken from the picking box (“lug”) and placed in ventilated plastic bags and packed into export boxes. Lids are placed on the export boxes before being transported to the cold storage facilities where fumigation and pre-export inspections take place.



CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.28 Moreover, after picking, packing and fumigation, table grapes are stored at or below 1°C from 1-30 days. The grapes are then shipped to New Zealand at or below 1°C taking a minimum of 21 days, and on arrival may be stored at or below 1°C from 1-60 days. The minimum storage time at or below 1°C would therefore be 23 days and the maximum 111 days.
- 1.29 Experiments to determine how long the GWSS can survive at 1°C have been conducted in the United States by the Animal and Plant Health Inspection Service (APHIS). The experiments did not establish conclusively that the pest is killed by cold storage conditions. However, the results, combined with the fact that the GWSS is unlikely to be on grape bunches, led the risk analysis to conclude that the risk of this particular pest entering New Zealand on table grapes was low.
- 1.30 However, the risk of the GWSS entering New Zealand by way of whole plants and leafy cuttings is high. The reasons are that:
- the GWSS has a very wide host range;
 - eggs are laid into the epidermis of the lower leaf and are not easily controlled by insecticides; and
 - detection of eggs laid in leaves may be difficult on inspection at port of entry.
- 1.31 The pest risk analysis for Pierce's disease also concluded that the risk of the disease entering New Zealand through grape imports was low, but the risk of it entering through the importation of whole plants and grape budwood was high.
- 1.32 In particular, grape budwood is imported as leafless, dormant cuttings. Pierce's disease may be present in grape budwood at origin. The disease is not likely to be detected at port of entry inspection, and the budwood may be distributed to nurseries and vineyards throughout New Zealand and used for propagation. We outline the import restrictions for nursery stock from California in paragraphs 1.41-1.42 on page 15.



Approach to Developing the Import Health Standard

- 1.33 Following completion of the pest risk analyses, a “systems approach” was adopted to reduce the risks associated with the importation of Californian table grapes.

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

1.34 Broadly, a “systems approach” is:

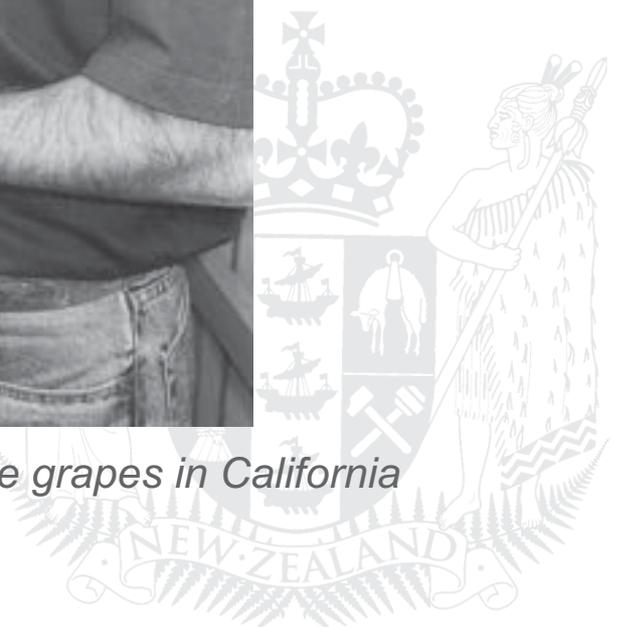
The combination of distinctly different pest mitigation measures and phytosanitary safeguards which individually reduce pest risk and cumulatively result in phytosanitary security.

1.35 Critical control points are established to identify the parts of the grape production system where pest infestation can occur and how it can be controlled. These become the critical control points where certain activities must be applied to measure, reduce or eliminate pest infestations.

1.36 Inspection alone does not mitigate risk, but is instead used to verify that the pest population is below the detection threshold, indicating that the preceding steps in the system have been effective.



MAF Quarantine officer inspects table grapes in California

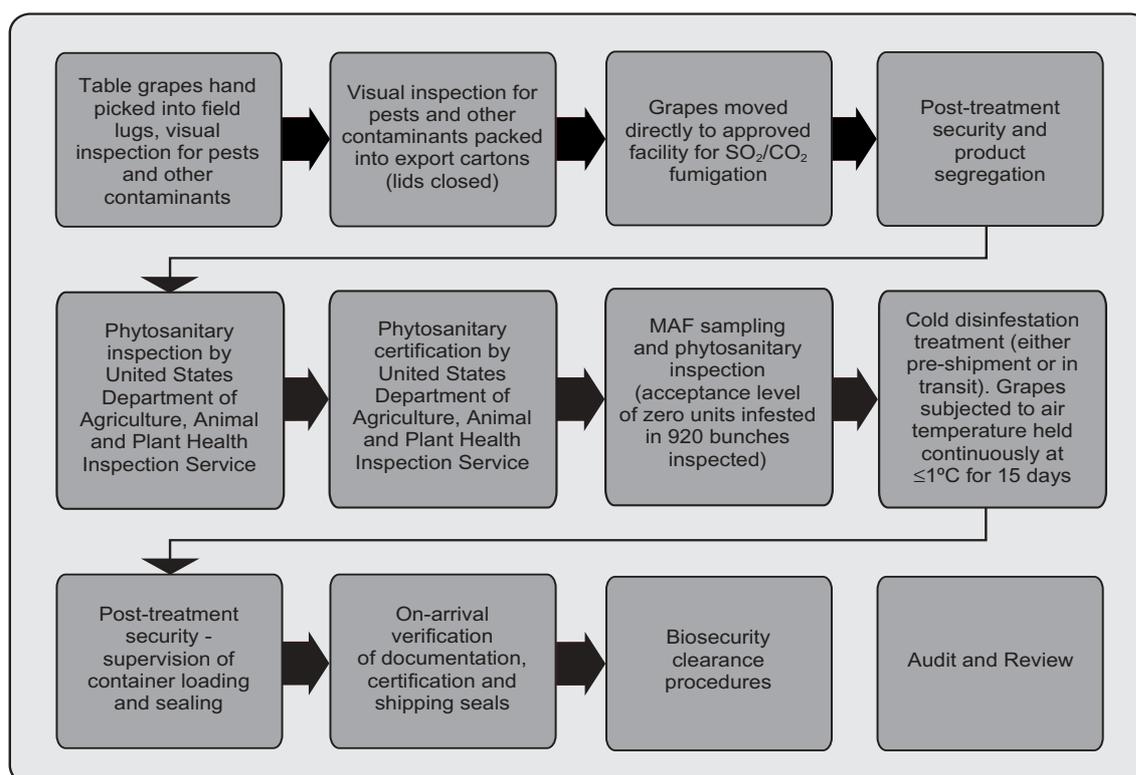


CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.37 Based upon the systems approach, the following activities set out in the import health standard are designed to mitigate the risk of the GWSS entering New Zealand through grape imports:
- field inspections;
 - prohibition of parts of hosts (freedom from trash and leaves);
 - post-treatment security and product segregation;
 - pre-export inspection and certification;
 - MAF and APHIS sampling and inspection at increased rates;
 - cold disinfestation treatment (either pre-shipment or in-transit);
 - supervision of container loading and sealing;
 - accredited operating systems and procedures;
 - on-arrival verification of documentation/certification; and
 - formalised audit programmes.
- 1.38 Figure 1.2 on the opposite page outlines the minimum procedures that MAF requires for the importation of grapes from California.
- 1.39 Special requirements applying to the importation of table grapes from California were:
- The Animal and Plant Health Inspection Service in the United States and MAF, either in the United States or in New Zealand, will each inspect 920 bunches of grapes per consignment for all visually detectable regulated pests.
 - A zero acceptance level for leaf material and/trash found in the 920-unit sample (i.e. the entire consignment is rejected for export if leaves are found).
 - Mandatory cold disinfestation treatment conducted either in-transit or pre-export (under two options depending on the time of export) and associated hourly recording of air temperatures within the export carton.
- 1.40 MAF cannot point to any one part of the process that would eliminate the risk of the GWSS entering New Zealand. Rather, the process taken as a whole reduces the risk to an acceptable level.

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

Figure 1.2
Outline of Phytosanitary Measures and Procedures for the
Importation of Fresh Table Grapes (*Vitis Inifera*) from
California to New Zealand



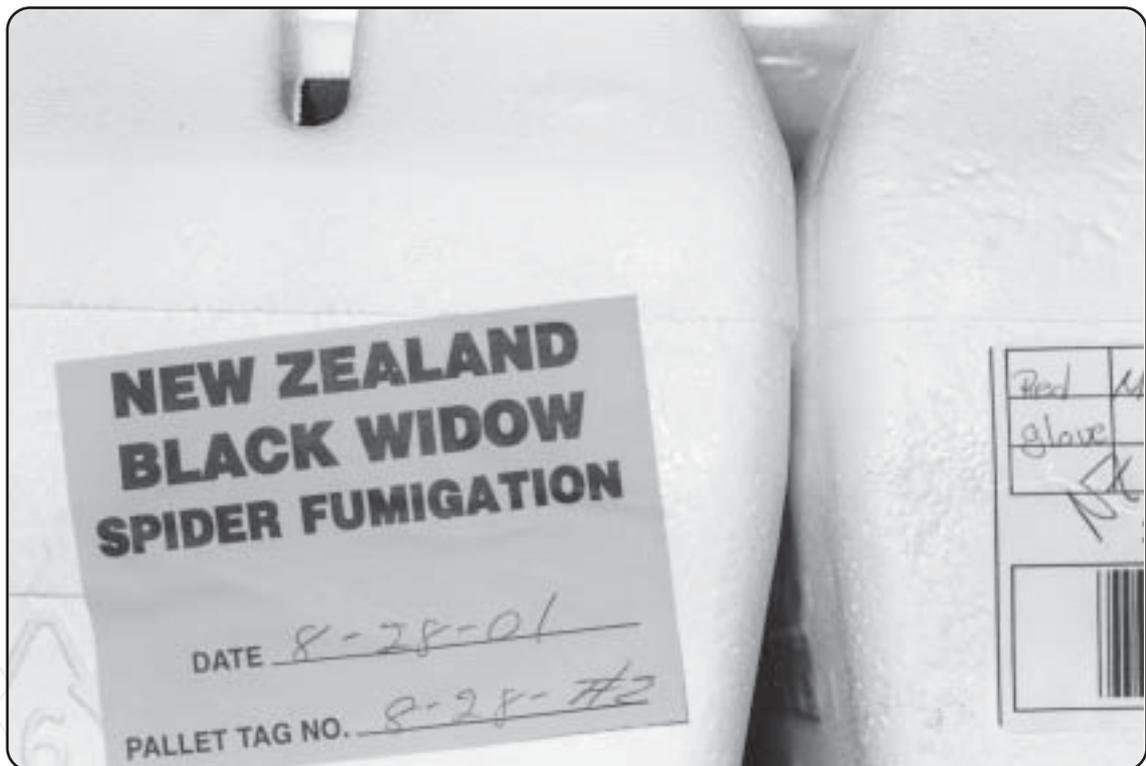
Nursery Stock

- 1.41 MAF also revised the import health standard for nursery stock.
- 1.42 The general rule is that the importation of nursery stock from California is prohibited. However, nursery stock from California will be allowed to be imported where:
- an import permit has been obtained;
 - the plant is shipped in a dormant state;
 - the plant has been tested in an “accredited” New Zealand or overseas laboratory and is free from Pierce’s disease; and
 - the plant is held in quarantine for at least two growing seasons.

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

Fumigation

- 1.43 The measures to mitigate the risks posed by spiders entering New Zealand on this pathway include a post-harvest fumigation treatment using a sulphur dioxide and carbon dioxide mixture to kill any spiders present in the grapes. This fumigation treatment is proven to be only 90% effective in killing black widow spiders.
- 1.44 Black widow spiders pose no significant threat to the sectors for which MAF has responsibility. However, they could pose a threat to both the health of New Zealanders and New Zealand's biodiversity. We expected that the Ministry of Health (MoH) and the Department of Conservation (DOC) would have provided formal advice to MAF about the implications of the 90% threshold on health and biodiversity, but we found no evidence that they had done so.



Containers of fumigated table grapes bound for New Zealand

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.45 After reviewing the procedures to manage the risks posed by spiders, MAF agreed to continue to accept the sulphur dioxide and carbon dioxide fumigation treatment to kill spiders. MAF did, however, increase the level of inspections of the grapes to get a higher level of confidence that the bunches of grapes were not infested.
- 1.46 For pests like black widow spiders, MAF usually requires inspections that give 95% confidence that not more than 0.5% of the units (for example, bunches of grapes) in a consignment are infested with quarantine pests. However, for spiders on the table grape pathway, MAF required a 99% confidence level. In practice, this meant that 920, as opposed to 600, bunches of grapes per consignment were inspected. Furthermore, MAF required:
- registration of treatment facilities by APHIS;
 - operator training;
 - inspection of fumigation enclosures before the start of the season; and
 - ongoing monitoring.

How Did MAF Conduct the Pest Risk Analyses and Revise the Import Health Standard?

Good process was followed in the risk analysis conducted in 2001 to revise the import health standard.

- 1.47 We examined MAF Biosecurity's pest risk analysis process and subsequent revision of the import health standard. We focused on the following particular aspects of the process:
- timetable;
 - consultation; and
 - audit of the process.



CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

Timetable for Revising the Import Health Standard

MAF's aim was to ensure that the revised import health standard was completed by the start of the new grape season, thereby ensuring no disruption to the importation of table grapes from California.

1.48 Figure 1.3 below shows the original timetable for revising the import health standard.

*Figure 1.3
Original Timetable for Revising the Import Health Standard*

| | |
|------------------|--|
| 15 February 2001 | <ul style="list-style-type: none">• Project Team to meet to determine risk analysis requirements. |
| 3 April 2001 | <ul style="list-style-type: none">• MAF to complete draft pest risk analysis.• Internal peer review of pest risk analysis and development of draft import health standard. |
| 17 April 2001 | <ul style="list-style-type: none">• MAF Working Group to approve pest risk analysis and draft import health standard for stakeholder consultation, World Trade Organisation notification, etc. |
| 21 May 2001 | <ul style="list-style-type: none">• MAF to review submissions and amend draft import health standard. |
| 28 May 2001 | <ul style="list-style-type: none">• MAF to issue import health standard. |

1.49 Three points can be made about this timetable.

1.50 First, MAF's aim was to ensure that the revised import health standard was issued by the start of the new grape season, thereby ensuring no disruption to the importation of Californian table grapes. The grape import season clearly "drove" the time within which MAF wanted to develop the revised standard.

1.51 Secondly, working within such a short time creates the risk of "short-cuts" being taken. For example, we understand that under World Trade Organisation Agreements, a 60-day consultation period is required on draft import health standards, thereby giving all members an opportunity to comment on the draft standard. MAF did not adequately build this into the development timetable for the import health standard, carrying

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

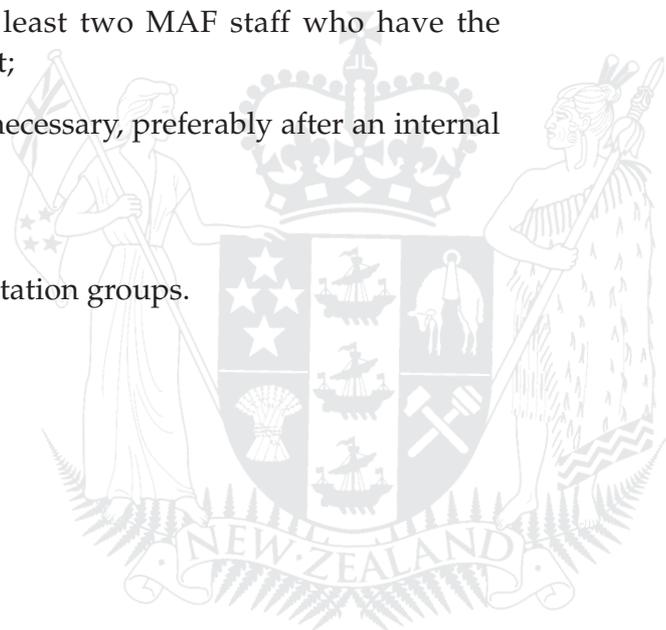
the risk that it could not adequately consider the views of all those consulted. However, we note that MAF subsequently said that the 60-day consultation period did not apply to facilitative trade measures

- 1.52 Thirdly, revocation and replacement of the grape import health standard assumed a priority status within MAF, resulting in other work on the planned work programme being displaced.
- 1.53 By allowing trade to drive the risk analysis process – for example, by setting deadlines to match the growing seasons of crops – there is a risk that the quality of the process may be compromised. While we found no evidence of that occurring in this particular instance, MAF should ensure that its process is transparent and that stakeholders have sufficient information and time to comment on drafts of risk analyses and import health standards.

Consultation

MAF involved relevant stakeholders and took their views into account.

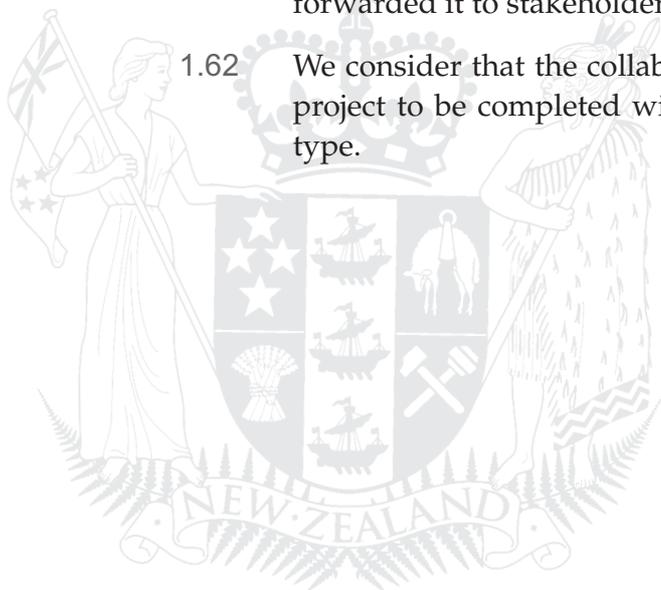
- 1.54 MAF's Plants Biosecurity Group has set out consultation requirements in the *Consultation Procedure* dated 4 December 2001.
- 1.55 The procedure applies to projects or policy developments that are likely to have a “significant effect” on people or organisations outside MAF. The review of grape imports from California fell into that category.
- 1.56 The procedure requires MAF to:
- set up consultation lists;
 - obtain internal peer review by at least two MAF staff who have the ability to add value to the document;
 - obtain external peer review where necessary, preferably after an internal peer review has been conducted;
 - analyse all submissions; and
 - provide a formal response to consultation groups.



CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

Establishment of Working Group.

- 1.57 MAF established a working group comprising representatives from MAF, DOC, MoH, the Wine Institute of New Zealand, and grape importers.
- 1.58 The role of this group is somewhat unclear – it had no terms of reference. However, it had a number of functions:
- It provided MAF with a vehicle by which it could keep stakeholders informed of developments with the import health standard.
 - It gave stakeholders an opportunity to have technical input into the risk analysis.
 - It may have had an oversight role.
- 1.59 Despite the lack of terms of reference the group appeared to work well. It met on two occasions. On 15 February 2001, MAF gave a presentation on the background to the issue, including the timetable for issue of a new import health standard, and potential measures that could be adopted for the 2001 season.
- 1.60 The group met again on 22 May 2001 to review the actions from the last meeting and also to work through and agree the approach that MAF proposed to take.
- 1.61 MAF adopted a collaborative approach by including all stakeholder groups in the working group and keeping them updated on progress of the review. Stakeholders expressed technical views to MAF, all of which were listened to, and some were adopted. Stakeholders also requested that MAF obtain further information from APHIS about the impact of cool storage on each life stage of the GWSS and also on the efficacy of SO₂/CO₂ fumigation. MAF duly requested this information, and then forwarded it to stakeholders.
- 1.62 We consider that the collaborative approach adopted by MAF allowed the project to be completed within a relatively short time for a project of this type.



Audit of the Process

The requirements imposed by MAF on the importation of table grapes are among the strictest of any of the 50 countries to which California exports table grapes. The California Table Grape Commission informed us that it felt that MAF was one of the most credible organisations of its type.

- 1.63 A representative of MAF's Plants Biosecurity Group visited California to audit the prescribed phytosanitary measures and operational procedures included in the import health standard for this commodity.
- 1.64 This audit resulted in three recommendations being made to strengthen the measures applied in California. These recommendations were to:
- use a highly visible tamper-proof sticker or tape to identify pallets of grapes that have undergone fumigation (see picture on page 16);
 - modify the commodity inspection report to identify the number of grape bunches inspected ; and
 - improve the assessment of County Inspector¹ proficiency.
- 1.65 APHIS accepted these recommendations.
- 1.66 The audit was well planned and involved a comprehensive inspection of procedures at six packhouse and treatment facilities. It was also a good opportunity for MAF officials to:
- Build effective working relationships with their United States counterparts.
 - Explain New Zealand's unique biosecurity situation and requirements to the United States officials and others affected by the phytosanitary measures introduced by MAF. These included the owners of and workers at the vineyards and treatment facilities, and also the President of the California Table Grape Commission.
- 1.67 The requirements imposed by MAF on the table grape pathway are among the strictest of any of the 50 countries to which California exports table grapes. The inspections that the bunches of grapes are subjected to are also the toughest that MAF has imposed on any commodity that is imported into New Zealand.

1 These are US officials who carry out inspections in the packing facilities located within their county.

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.68 We were informed by the California Table Grape Commission that, despite this (or because of it), it felt that MAF was one of the most credible organisations of its type, and that it always played by the rules as laid out in the World Trade Organisation SPS Agreement (see Appendix 2 of the main report). The Commission also commended the MAF employees, with whom it has undertaken a considerable amount of work over recent years, on their professionalism and on their ability to maintain good working relationships under difficult circumstances.
- 1.69 The greater the level of awareness and understanding of New Zealand's biosecurity requirements that exists amongst officials and stakeholders – such as exporters overseas – the greater the likelihood that MAF's biosecurity requirements will be met. We were impressed with the way in which MAF officials undertook this important role, often in the face of considerable opposition from those directly affected by MAF's requirements.

Why Was Trade Suspended a Second Time?

MAF told us that it revoked the import health standard for table grapes from California in November 2001 on the basis of advice received from the MoH and DOC, which informed MAF that the risk posed by the number of live exotic spiders entering New Zealand with the grapes was unacceptably high. When we asked MoH and DOC about the reasons why trade was suspended, they had differing views about why, and at whose behest, the decision to suspend trade was taken.

- 1.70 MAF revoked the import health standard for table grapes from California in November 2001. MAF told us it did this on the basis of advice received from MoH and DOC, which informed MAF that the risk posed by the number of black widow spiders, other exotic spiders, and “hitchhiker” pests entering New Zealand with the grapes was unacceptably high. Moreover, DOC was also concerned that treatment efficacy had not been tested against hitchhiker pests.

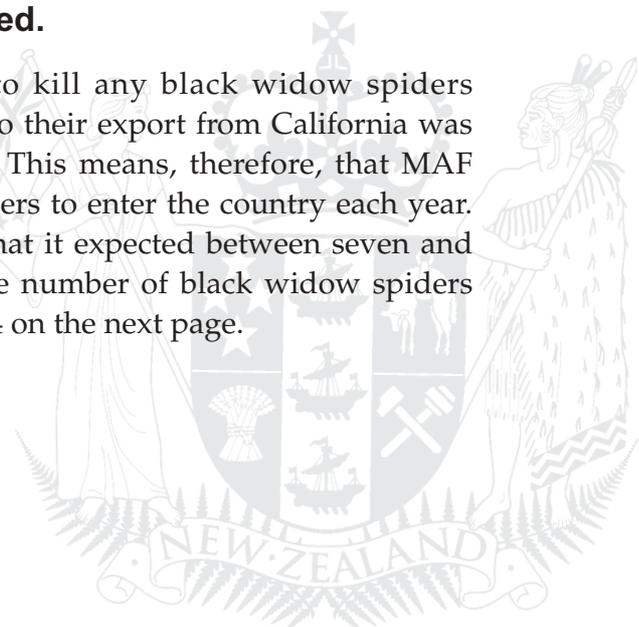
- 1.71 The meeting at which the decision was taken to revoke the import health standard, pending another review of the risks, was not minuted. However, we noted that a subsequent communication to APHIS notifying it of the revocation, and the reasons for the revocation, was copied to the meeting participants.

CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

- 1.72 Two issues were of concern to us. First, we believe that minutes of the meeting should have been circulated to the participants to ensure that all of them agreed on the outcome and conclusions of the meeting. Secondly, and related to the first point, when we asked the participants about the reasons why trade was suspended they had differing views about why and at whose behest the decision to suspend trade was taken.
- 1.73 Black widow spiders pose no significant threat to the productive sectors for which MAF has responsibility. They pose a greater threat to public health and (potentially) to native flora and fauna. Only MAF could revoke the standard, as it had issued it in the first place. In doing so, we feel that it should have obtained from the other agencies a formal, written statement outlining their reasons for recommending that trade be suspended. Further, it is vital that these important inter-agency meetings are minuted to ensure that the decision-making process is transparent and in line with the requirements of the SPS Agreement.
- 1.74 The finding of live black widow spiders in bunches of table grapes from California attracted a lot of media attention that required a co-ordinated response to public concerns. MAF was criticised about the nature of some of its press releases concerning these detections. We consider that MAF could have managed the public release of information better had it co-ordinated the media releases (in particular the early ones) with MoH and DOC.

When trade was suspended a second time, the number of spiders that had been detected entering New Zealand was below the number that MAF expected to enter on this pathway. This suggests a change in the appropriate level of protection against spiders and yet there was no statement that the level had been changed.

- 1.75 The fumigation treatment designed to kill any black widow spiders present in the bunches of grapes prior to their export from California was only ever proven to be 90% effective. This means, therefore, that MAF expected a certain number of these spiders to enter the country each year. In November 2001, MAF did indicate that it expected between seven and ten live spiders to enter each year. The number of black widow spiders actually detected are shown in Figure 1.4 on the next page.



CASE STUDY 1 – IMPORTATION OF TABLE GRAPES FROM CALIFORNIA

*Figure 1.4
Number of Black Widow Spiders Detected Having
Entered New Zealand*

| <i>Year</i> | <i>Number</i> |
|-------------|---------------|
| 1997 | 1 |
| 1998 | 1 |
| 1999 | - |
| 2000 | 4 |
| 2001 | 4 |

- 1.76 Two issues arise with this information. First, it appears that the number of live black widow spiders detected entering New Zealand immediately before trade was suspended fell within the acceptable risk level previously set. Accordingly, suspension of trade represented a change to the acceptable level of risk tolerated for the importation of grapes.
- 1.77 Secondly, had this information (that MAF expected 7-10 live spiders to enter the country each year) been released in conjunction with MoH information about the risks associated with the spiders at the start of the importing season, or when the first spider was detected, it is possible that MAF could have managed the media coverage of this issue better.
- 1.78 When a live spider is detected, MAF must identify in which treatment facility the grapes were fumigated. It must also determine whether the spider entered the country as a result of systems failure or merely due to the fumigation treatment being only 90% effective.
- 1.79 We were impressed with the effectiveness of the trace-back procedure in place to enable MAF to do this. Four black widow spiders were detected in 2001. MAF found that two entered as a result of systems failure (an incorrect dosage of gas had been used for fumigating the grapes), and two as a result of the 90% effectiveness of the fumigation treatment (i.e. the import health standard at that time allowed for the entry of one live spider per one million bunches of grapes).
- 1.80 It is important that MAF is able to investigate effectively, because it enables MAF to suspend imports fumigated by any particular treatment facility where system failures have occurred.

Current Situation

- 1.81 An inter-agency project team (MAF Biosecurity, DOC and MoH) was established in late-November 2001, to oversee development of risk assessments addressing concerns over the importation of grapes. On 13 June 2002, MAF Biosecurity and MoH issued the following three documents:
- *Pest Risk Assessment – Spiders Associated with Table Grapes from United States of America (State of California), Australia, Mexico and Chile;*
 - *Mitigation Measures for the Management of the Risks Posed by Exotic Spiders Entering New Zealand in Association with Imported Table Grapes;* and
 - *Towards a Health Impact Assessment,* relating to venomous spiders entering New Zealand in association with imported table grapes.
- 1.82 Broadly:
- the Pest Risk Assessment estimates the likelihood of exotic spiders associated with the importation of table grapes entering and establishing in New Zealand;
 - the Mitigation Measures document summarises the measures that are or potentially could be used to mitigate the risks; and
 - the Health Impact Assessment assesses the public health risk posed by venomous spiders associated with the importation of table grapes.
- 1.83 We have not reviewed these documents. The inter-agency project team requested that any submissions on them should be made before 24 July 2002. Following a review of submissions and incorporation of relevant comments into the three documents, they formed the basis of a revised import health standard.
- 1.84 On 6 September 2002, MAF issued a revised import health standard for the importation of table grapes from California based on the work of the inter-agency project team. The project team considered the risk of any regulated pests, including spiders and the GWSS, entering New Zealand with the grapes. The team concluded that the risk to public health posed by spiders entering the country on imported grapes was moderately low and did not warrant the ongoing suspension of Californian imports. The issuing of the standard, which will be reviewed at the end of the first export season, enabled trade to resume immediately.

