## Extension of nectarine import risk analysis to peaches, plums and apricots from China

## Draft review of biosecurity import requirements

August 2017



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#### Stakeholder submissions on draft reports

This draft report has been issued to give all interested parties an opportunity to comment on relevant technical biosecurity issues, with supporting rationale. A final report will then be produced taking into consideration any comments received.

Submissions should be sent to the Department of Agriculture and Water Resources following the conditions specified within the related Biosecurity Advice, which is available at: <u>agriculture.gov.au/biosecurity/risk-analysis/memos</u>

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## Acronyms and abbreviations

Term or abbreviation	Definition
АСТ	Australian Capital Territory
ALOP	Appropriate level of protection
AQSIQ	General Administration for Quality Supervision, Inspection and Quarantine of the People's Republic of China (formerly CIQSA)
BIRA	Biosecurity import risk analysis
CIQ	China Entry-Exit Inspection and Quarantine Bureau
CIQSA	State Administration for Entry-Exit Inspection and Quarantine of the People's Republic of China (now AQSIQ)
EP	Existing policy
FAO	Food and Agriculture Organization of the United Nations
IPPC	International Plant Protection Convention
ISPM	International Standard for Phytosanitary Measures
USA	The United States of America
WTO	World Trade Organization

### **Summary**

The Australian Government Department of Agriculture and Water Resources (the department) has prepared this draft report to assess the biosecurity risk associated with the import of fresh peaches (*Prunus persica*), plums (*Prunus salicina* and *Prunus domestica*) and apricots (*Prunus armeniaca*) from China into Australia.

Australia permits the importation of fresh stone fruit (nectarines, peaches, plums and apricots) from the USA (California, Idaho, Oregon and Washington) and New Zealand, for human consumption, provided they meet Australian biosecurity requirements. Australia also permits the importation of fresh nectarines from China. The import of stone fruit under the import conditions recommended in these risk analyses has occurred, including nectarines from China.

The department has conducted a risk analysis for nectarines from China and the *Final report for the non-regulated analysis of existing policy for fresh nectarine fruit from China* (Final Report for Chinese Nectarines) was released in April 2016. The department proposes to extend the import policy for nectarines from China to include other stone fruit (peaches, plums and apricots) from China. This risk analysis builds on the Final Report for Chinese Nectarines.

The department recognises the similarity of other stone fruit (apricot, peach and plum) to nectarine, as all stone fruit species belong to the same genus – *Prunus.* The pests associated with Chinese nectarines are closely aligned with the pests associated with these other stone fruit. Peaches, plums and apricots are grown in the same production areas as nectarines. Additionally, the commercial production practices, packinghouse operational procedures and government phytosanitary processes for the production of nectarines are very similar to these other stone fruit. Therefore, the biosecurity risk associated with Chinese nectarines is considered to present a very similar risk to those of the additional stone fruit.

The department has prepared this draft report after reviewing the assessment of the pests associated with Chinese nectarines, the pests associated with the other stone fruit (peaches, plums and apricots) and the latest literature. The review has identified that the pests of quarantine concern for Chinese nectarines are the same as the pests of quarantine concern for the other stone fruit.

The Final Report for Chinese Nectarines identified 19 pests as requiring phytosanitary measures to reduce the level of biosecurity risk to an acceptable level. All 19 pests were also identified as pests of quarantine concern for peaches, plums and apricots. The 19 pests identified as requiring risk management measures are *Amphitetranychus viennensis* (hawthorn spider mite), *Pseudococcus comstocki* (comstock mealybug), *Frankliniella intonsa* (Eurasian flower thrips), *Frankliniella occidentalis* (western flower thrips), *Bactrocera correcta* (guava fruit fly), *Bactrocera dorsalis* (Oriental fruit fly), *Drosophila suzukii* (spotted wing drosophila), *Adoxophyes orana* (summerfruit tortrix), *Argyrotaenia ljungiana* (grape tortrix), *Carposina sasakii* (peach fruit moth), *Grapholita funebrana* (plum fruit moth), *Grapholita molesta* (Oriental fruit moth), *Spilonota albicana* (white fruit moth), *Anarsia lineatella* (peach twig borer), *Monilinia fructigena* (brown rot), *Monilia mumecola* (brown rot), *Monilia polystroma* (brown rot), *Monilinia yunnanensis* (brown rot) and Plum pox virus.

This review identified an additional mealybug species, *Phenacoccus aceris* (apple mealybug), that was not assessed in the Final Report for Chinese Nectarines, as being a quarantine pest for the three stone fruit. The review found that *Phenacoccus aceris* is also associated with nectarine fruit, and therefore should be considered to be a quarantine pest for all stone fruit, including nectarines. The Final Report for Chinese Nectarines recommended measures for mealybugs and these measures are also proposed for this additional mealybug. *Phenacoccus aceris* has also been assessed in USA stone fruit and China apples and recommended measures proposed are the same as recommended in those risk analyses.

Given that the quarantine pests for these other stone fruit and Chinese nectarines are the same, the measures recommended for the importation of Chinese nectarines are also proposed for Chinese peaches, plums and apricots. The proposed measures include:

- visual inspection and remedial action for leaf rollers, mealybugs, spider mite and thrips
- area freedom or fruit treatment (cold disinfestation or irradiation) for fruit flies
- area freedom or fruit treatment (methyl bromide fumigation or irradiation) or a systems approach approved by the department for spotted wing drosophila
- area freedom or area of low pest prevalence or fruit treatment (methyl bromide fumigation or irradiation) or a systems approach approved by the department for fruit borers
- area freedom or area of low pest prevalence or alternative equivalent measures approved by the department for brown rots
- area freedom or systems approach approved by the department for plum pox virus.

This draft report has been published on the Department of Agriculture and Water Resources website to allow interested parties to provide comments and submission within the consultation period.

## **1** Introduction

#### **1.1** Australia's biosecurity policy framework

Australia's biosecurity policies aim to protect Australia against the risks that may arise from exotic pests entering, establishing and spreading in Australia, thereby threatening Australia's unique flora and fauna, as well as those agricultural industries that are relatively free from serious pests.

The risk analysis process is an important part of Australia's biosecurity policies. It enables the Australian Government to formally consider the risks that could be associated with importing new products into Australia. If the biosecurity risks do not achieve the appropriate level of protection (ALOP) for Australia, risk management measures are proposed to reduce the risks to an acceptable level. If the risks cannot be mitigated to an acceptable level, the goods will not be imported into Australia until suitable measures are identified.

Successive Australian Governments have maintained a stringent, but not a zero risk, approach to the management of biosecurity risks. This is expressed in terms of the ALOP for Australia, which is defined in the *Biosecurity Act 2015* as providing a high level of protection aimed at reducing risk to a very low level, but not to zero.

Australia's risk analyses are undertaken by the department using technical and scientific experts in relevant fields, and involve consultation with stakeholders at various stages during the process.

Risk analyses may take the form of a biosecurity import risk analysis (BIRA), a review of biosecurity import requirements, or other non-regulated risk analyses such as pest-specific assessments, weed risk assessments and biological control agent assessments.

Further information about Australia's biosecurity framework is provided in the *Biosecurity Import Risk Analysis Guidelines 2016*, available on the <u>Department of Agriculture and Water</u> <u>Resources website</u>.

#### 1.2 This review of biosecurity import requirements

#### 1.2.1 Background

The biosecurity agency in China, the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (AQSIQ) initially requested market access for fresh peach fruit from Shandong province to Australia in 2001 (CIQSA 2001). In 2006, AQSIQ extended this market access request to include peaches (*Prunus persica*), plums (*Prunus salicina* and *Prunus domestica*) and apricots (*Prunus armeniaca*) from all of China (AQSIQ 2006).

In September 2014, both Australia and China agreed to work on each other's top stone fruit priority and AQSIQ confirmed that nectarine fruit was China's top stone fruit priority.

Australia finalised import conditions for fresh nectarines from China in May 2016, following the release of the Final Report for Chinese Nectarines in April 2016 (Australian Government Department of Agriculture and Water Resources 2016). Trade successfully commenced in July 2016.

Australia and China agreed to progress mutual access for other stone fruit (peaches, plums and apricots) in May 2016 and re-affirmed this commitment in June 2017.

The department recognises the similarity of other stone fruit (apricot, peach and plum) to nectarine as all stone fruit species belong to the same genus – *Prunus.* In China, peaches, plums and apricots are grown in the same regions as nectarines. The production systems, packing house practices and phytosanitary processes are very similar to those used for nectarines. In addition, the pest profiles of nectarines and other stone fruit (peaches, plums and apricots) are very similar. Therefore, the Final Report for Chinese Nectarines forms the basis of import conditions for these very similar commodities from China. This position was discussed in section 1.2.3 of the Final Report for Chinese Nectarines.

Since Australia has recently developed import conditions for Chinese nectarines, the department considers it appropriate to conduct this review of import requirements as an extension of policy to other stone fruit (peach, plum and apricot). This report should be read in conjunction with the Final Report for Chinese Nectarines.

#### 1.2.2 Scope

The scope of this review is to consider the biosecurity risks that may be associated with the importation of commercially-produced fresh peach, plum and apricot fruit from China for human consumption. In this report, peaches, plums and apricots are defined as individual fruits, which may include a small amount of attached fruit stalk and calyces, but not other plant parts such as leaves.

In addition, if any pests are identified during this review, they will also be assessed as to whether they are associated with fresh nectarines from China.

#### 1.2.3 Existing policy

#### International policy

Australia permits the importation of fresh stone fruit (nectarines, peaches, plums and apricots) from the USA (California, Idaho, Oregon and Washington) and New Zealand. Australia also permits the importation of fresh nectarines from China. The import of stone fruit under the import conditions recommended in these risk analyses has occurred, including of nectarines from China. Import requirements also exist for apples, table grapes, pears and lychees and longans from China. The import requirements for these commodities for human consumption from these countries can be found in the department's Biosecurity Import Conditions (BICON) database on the <u>department's website</u>.

The department has considered the pests previously identified in existing policies and, where relevant, the information in those assessments has been taken into account in this risk analysis. The department has also reviewed the latest literature to ensure that information in previous assessments is still valid.

#### **Domestic arrangements**

The Commonwealth Government is responsible for regulating the movement of plants and plant products into and out of Australia. However, the state and territory governments are responsible for plant health controls within their individual jurisdictions. Legislation relating to resource

management or plant health may be used by state and territory government agencies to control interstate movement of plants and their products. Once plant and plant products have been cleared by Australian biosecurity officers, they may be subject to interstate movement conditions. It is the importer's responsibility to identify, and ensure compliance with all requirements.

#### 1.2.4 Contaminating pests

This draft report assesses pests with a known association with commercial peach, plum and apricot fruit grown in China. However, other organisms may unintentionally be imported with these fruits. These organisms are considered to be contaminating pests that could pose human health and phytosanitary risks. These risks are identified and addressed using existing operational procedures that require a 600 unit inspection of all consignments, or equivalent. The department will investigate if any pest detected in an imported consignment is of quarantine concern to Australia and requires remedial action.

#### 1.2.5 Consultation

The department stated in the Final Report for Chinese Nectarines (see section 1.2.3), that the assessment for nectarines is likely to form the basis of import requirements for similar risk commodities including peaches, plums and apricots. The stone fruit industry in Australia has been consulted and is supportive of this approach.

The department has consulted with the relevant state and territory governments and the stone fruit industry in Australia about the department's progress on mutual market access for additional Australian and Chinese stone fruit commodities (peaches, plums and apricots).

#### 1.2.6 Next Steps

This draft report gives stakeholders an opportunity to comment and draw attention to any scientific, technical, or other gaps in the data, or misinterpretations or errors.

The department will consider submissions received on the draft report and may consult informally with stakeholders. The department will then prepare a final report, taking into account stakeholder comments.

The final report will be published on the department's website together with a notice advising stakeholders of the release. The department will also notify the proposer, the registered stakeholders and the WTO Secretariat of the release of the final report. Publication of the final report represents the end of the risk analysis process. The recommendations made in the final report will be the basis of any biosecurity import conditions.

## 2 Pest risk assessments for quarantine pests

The department has conducted a review of the import requirements for fresh Chinese nectarines and the latest literature. The review identified 20 pests that require risk management measures to reduce the risk associated with stone fruit from China to a very low level in order to achieve the ALOP for Australia. Among these 20 pests, 19 were identified as quarantine pests of nectarines in the Final Report for Chinese Nectarines.

The department recognises the similarity of other stone fruit (apricot, peach and plum) to nectarine fruit and the similarity of production areas, commercial production systems and production practices used for nectarine and other stone fruit (apricot, peach and plum) in China. Therefore, the identified quarantine pests do not present a significantly different risk to that assessed in the Final Report for Chinese Nectarines. Further risk assessments for these quarantine pests are not required for these other stone fruits, and the outcome of the assessments in the Final Report for Chinese Nectarines will be adopted for Chinese peaches, plums and apricots.

The review identified one additional pest, *Phenacoccus aceris* (apple mealybug) that was not assessed in the Final Report for Chinese Nectarines, as a quarantine pest for peaches, plums and apricots (Appendix A). *Phenacoccus aceris* is assessed further in section 2.1 of this report.

#### 2.1 Mealybug

#### Phenococcus aceris

*Phenococcus aceris* has previously been assessed in the risk analyses for fresh stone fruit (nectarines, peaches, plums and apricots) from the USA (California, Idaho, Oregon and Washington) (Biosecurity Australia 2010b) and apples from China (Biosecurity Australia 2010a).

In both these assessments, *Phenococcus aceris* was assessed together with another mealybug species, *Pseudococcus comstocki*, as the biology and taxonomy of *Phenococcus aceris* and *Pseudococcus comstocki* were considered sufficiently similar to justify combining them into a single assessment. Although *Phenococcus aceris* was not assessed in the Final Report for Chinese Nectarines, *Pseudococcus comstocki* was. In these previous assessments, the unrestricted risk estimate for *Phenococcus aceris* and *Pseudococcus comstocki* were assessed as 'low' which does not achieve the appropriate level of protection (ALOP) for Australia. Therefore, risk management measures are required.

The department has reviewed the literature available since the previous assessments and found that the likelihoods of importation, distribution, establishment and spread, and the potential consequences are unlikely to significantly differ from the previous assessments, so the department considers that reassessment of *Phenococcus aceris* is not required. The outcome of the previous assessments will therefore be adopted for peaches, plums and apricots. As part of this review, the department has identified that *Phenococcus aceris* has a broad host range and may also be associated with fresh nectarine fruit (Appendix A). Therefore the outcome of previous assessments for *Phenococcus aceris* will also be adopted for Chinese nectarines.

The likelihood estimates for the entry, establishment and spread for *Phenococcus aceris* are based on the assessment for stone fruit from the USA (California, Idaho, Oregon and Washington) (Biosecurity Australia 2010b) and apples from China (Biosecurity Australia 2010a), and the assessment of *Pseudococcus comstocki* from China nectarines (Australian Government Department of Agriculture and Water Resources 2016). The ratings from these previous assessments are presented below.

#### Likelihood of entry, establishment and spread

Likelihood of importation:	High
Likelihood of distribution:	Moderate
Overall likelihood of entry:	Moderate
Likelihood of establishment:	High
Likelihood of spread:	High

#### Overall likelihood of entry, establishment and spread

The overall likelihood of entry, establishment and spread is determined by combining the likelihoods of entry, of establishment, and of spread using the matrix of rules shown in Table 2.2 of the Final Report for Chinese Nectarines.

The likelihood that *Phenococcus aceris* will enter Australia as a result of trade in nectarines, peaches, plums and apricots from China, be distributed in a viable state to a susceptible host, establish in Australia and subsequently spread within Australia has been assessed as: **Moderate**.

#### Consequences

Unless there is new information to suggest otherwise, the consequences a pest may cause will be the same for any commodity/country with from which the pest is imported. Accordingly there is no need to re-assess this component, and the risk ratings given in previous assessments will be adopted. The consequences of the establishment of *Phenococcus aceris* in Australia have been estimated previously from stone fruit from the USA (California, Idaho, Oregon and Washington) (Biosecurity Australia 2010b) and apples from China (Biosecurity Australia 2010a). The overall consequences for *Phenococcus aceris* have been estimated to be **Low**.

#### **Unrestricted risk outcome**

Unrestricted risk is the result of combining the likelihood of entry, establishment and spread with the estimate of consequences. Likelihoods and consequences are combined using the risk estimation matrix shown in Table 2.5 of the Final Report for Chinese Nectarines.

The unrestricted risk for *Phenococcus aceris* for nectarines, peaches, plums and apricots from China has been assessed as 'low', which does not achieve the ALOP for Australia. Therefore, specific risk management measures are required for this pest.

## **3** Pest risk management

This chapter provides information on the management of quarantine pests identified with an unrestricted risk level that does not achieve the ALOP for Australia. A summary of the proposed risk management measures adopted from the Final Report for Chinese Nectarines is provided in this chapter. Full details can be found in Chapter 5 of the Final Report for Chinese Nectarines.

#### 3.1 Pest risk management measures and phytosanitary procedures

Pest risk management evaluates and selects options for measures to reduce the risk of entry, establishment or spread of quarantine pests that have been assessed to have an unrestricted risk level that does not achieve the ALOP for Australia. In calculating the unrestricted risk, existing commercial production practices in China have been considered, as have post-harvest procedures and the packing of fruit.

In addition to China's existing commercial production systems and packing house operations for nectarines, peaches, plums and apricots and minimum border procedures in Australia, specific pest risk management measures, including operational systems, are proposed to achieve the ALOP for Australia.

In this chapter, the department has identified risk management measures that may be applied to consignments of nectarines, peaches, plums and apricots sourced from China. Finalisation of the import conditions may be undertaken with input from the Australian states and territories as appropriate.

#### 3.1.1 Pest risk management for quarantine pests

This review identified 20 pests listed in Table 3.1 as having an unrestricted risk that does not achieve the ALOP for Australia. Therefore, risk management measures are required to manage the risks posed by these pests.

Among these 20 pests, 19 are the same as those identified in the Final Report for Chinese Nectarines. Therefore, the same risk management measures for these pests are proposed for peaches, plums and apricots. Detailed risk management measures for these 19 pests can be found in section 5 of the Final Report for Chinese Nectarines, which is available on the department's website.

For the additional pest, *Phenacoccus aceris* (apple mealybug), the same risk management measures recommended for *Pseudococcus comstocki* in the Final Report for Chinese Nectarines are proposed. Similarly, nectarine fruit will now require measures for *Phenacoccus aceris* (apple mealybug). The measures recommended in the Final Report for Chinese Nectarines are considered to reduce the likelihood of entry of this pest to at least 'low'. The restricted risk for *Phenacoccus aceris* on peaches, plums, apricots and nectarines would then be reduced to at least 'very low', which would achieve Australia's ALOP.

#### 3.1.2 Consideration of alternative measures

Consistent with the principle of equivalence detailed in ISPM 11: *Pest risk analysis for quarantine pests* (FAO 2013), the department will consider any alternative measure proposed by AQSIQ, providing that it manages the target pest to achieve the ALOP for Australia. Evaluation of such

measures will require a technical submission from AQSIQ that details the proposed measures including suitable information to support the claimed efficacy.

Pest	Common name	Measures		
Amphitetranychus viennensis (EP) Pseudococcus comstocki (EP) Phenacoccus aceris (EP) Frankliniella intonsa (EP) Frankliniella occidentalis (EP, NT) Adoxophyes orana (EP) Argyrotaenia ljungiana (EP) Spilonota albicana (EP)	hawthorn spider mite comstock mealybug apple mealybug Eurasian flower thrips western flower thrips summerfruit tortrix grape tortrix white fruit moth	Visual inspection and if detected, remedial action <b>b</b> (for example methyl bromide fumigation)		
Bactrocera correcta (EP)	guava fruit fly	Area freedom <b>a</b>		
Bactrocera dorsalis (EP)	Oriental fruit fly	OR		
		Cold disinfestation treatment		
		OR		
		Irradiation		
Drosophila suzukii (EP)	spotted wing drosophila	Area freedom <b>a</b>		
	(SWD)	OR		
		Methyl bromide fumigation		
		OR		
		Irradiation		
		OR		
		A systems approach proposed by China and approved by the department		
Anarsia lineatella (EP)	peach twig borer	Area freedom <b>a</b>		
Carposina sasakii (EP)	peach fruit borer	OR		
Grapholita funebrana (EP)	plum fruit moth	Areas of low pest prevalence		
Grapholita molesta (EP, WA)	Oriental fruit moth	OR		
		Methyl bromide fumigation		
		OR		
		Irradiation		
		OR		
		Systems approach:		
		Orchard surveillance and control		
		Fruit cutting		
		Quarantine inspection and if detected, remedial action <b>b</b> (for example methyl bromide fumigation)		
Monilinia fructigena (EP)	brown rot	Area freedom <b>a</b>		
Monilia mumecola (EP)		OR		
Monilia polystroma (EP)		Areas of low pest prevalence		
Monilinia yunnanensis (EP)		OR		
		Alternative equivalent measures proposed by China and approved by the department		
Plum pox virus (EP)	PPV	Area freedom <b>a</b>		
		OR		
		A systems approach proposed by China and approved by the department		

Table 3.1 Risk management measures proposed for quarantine pests for fresh nectarines, peaches, plums and apricots from China

**a** Area freedom may include pest free areas, or pest free places of production sites. **b** Remedial action (depending on the location of the inspection) may include treatment of the consignment to ensure that the pest is no longer viable or withdrawing the consignment from export to Australia. **EP** (existing policy) pests that have previously been assessed by Australia and for which policy already exists. **NT** pests of quarantine concern for Northern Territory. **WA** pests of quarantine concern for Western Australia.

# **3.2** Operational system for the maintenance and verification of phytosanitary status

A system of operational procedures is necessary to maintain and verify the phytosanitary status of nectarines, peaches, plums and apricots from China. This is to ensure that the recommended risk management measures have been met and are maintained.

Operational procedures recommended in section 5.2 in the Final Report for Chinese Nectarines will also apply to peaches, plums and apricots.

#### 3.3 Review of policy

The department will review the import policy after the first year of trade. In addition, the department reserves the right to review the import policy as deemed necessary, for example, such as when there is reason to believe that the pest or phytosanitary status in China has changed.

#### 3.4 Meeting Australia's food laws

Imported food for human consumption must comply with the requirements of the *Imported Food Control Act 1992,* as well as Australian state and territory food laws. Among other things, these laws require all food, including imported food, to meet the standards set out in the Australia New Zealand Food Standards Code (the Code).

The Australian Government Department of Agriculture and Water Resources administers the *Imported Food Control Act 1992.* This legislation provides for the inspection and control of imported food using a risk-based border inspection program, the Imported Food Inspection Scheme. More information on this inspection scheme, including the testing of imported food, is available from the department's <u>website</u>.

Food Standards Australia New Zealand (FSANZ) is responsible for developing and maintaining the Code, including Standard 1.4.2 for agricultural and veterinary chemicals. This standard is available on the <u>Federal Register of Legislation</u> or through the <u>FSANZ website</u>.

Standard 1.4.2 and Schedules 20 and 21 of the Code set out the maximum residue limits (MRLs) and extraneous residue limits (ERLs) for agricultural or veterinary chemicals that are permitted in food, including imported food.

Standard 1.1.1 of the Code specifies that a food must not contain, as an ingredient or a component, a detectable amount of an agricultural or veterinary chemical or a metabolite or a degradation product of an agricultural or veterinary chemical, unless expressly permitted by the Code.

If irradiation is used as a phytosanitary measure, the permitted dose range should be a minimum dose of 150 gray and a maximum of 1000 gray. Irradiated produce must be labelled.

## **4** Conclusion

The findings of this *Extension of nectarine import risk analysis to peaches, plums and apricots from China – Draft review of biosecurity import requirements* builds on the comprehensive scientific analysis of relevant literature and the *Final report for the non-regulated analysis of existing policy for fresh nectarine fruit from China.* 

The department considers that the risk management measures proposed in this draft report will provide an appropriate level of protection against pests identified as associated with the trade of fresh nectarines, peaches, plums and apricots from China.

## Appendix A: Categorisation of *Phenacoccus aceris* with fresh stone fruit from China

Pest	Present in China	Present within Australia	Potential to be on pathway	Potential for establishment and spread	Potential for economic consequences	Pest risk assessment required
HEMIPTERA						
Phenacoccus aceris (Signoret, 1875) [Pseudococcidae] Apple mealybug	Yes (Raine, McMullen & Forbes 1986; Wu 2000)	No records found	Yes. Nymphs feed on fruit and bark (MAL 2007) on a wide range of hosts including stone fruit such as nectarines, peaches, plums and apricots (Beers 2007; García et al. 2015; Kaydan, Kilinçer & Kondo 2015; Trencheva & Tomov 2014).	Yes. <i>Phenacoccus aceris</i> attacks more than 100 host plants, some of which include apples, citrus, pears, stone fruit, cherries, pine trees, potato, hibiscus, rose, banana, catalpa, mulberry, honeysuckle, camellia and rhododendron (García et al. 2015; Kaydan, Kilinçer & Kondo 2015; Trencheva & Tomov 2014) and many of these hosts are present in Australia. <i>Phenacoccus aceris</i> occurs in many parts of Asia, Europe, Africa and North and South America, indicating parts of the Australian environment would be suitable for its establishment.	Yes. This species is known to vector little cherry disease (little cherry closterovirus) (Mekuria, Zhang & Eastwell 2014; Raine, McMullen & Forbes 1986; Sforza, Boudon- Padieu & Greif 2003) which is present in Australia (IPPC 2015). Little cherry virus 2 (LChV2) (genus <i>Ampelovirus</i> ) is the primary causal agent of little cherry disease in sweet cherry in North America and other parts of the world. Infected trees produce poor quality fruit that unevenly ripen (IPPC 2015; Mekuria, Zhang & Eastwell 2014).	Yes (EP)

### References

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