



Responses to non-technical comments on Part 1 of the pest risk analysis for cut flower and foliage imports

A. IMPORT CONDITIONS AND NON-COMPLIANCE

A number of stakeholders commented and raised concern about a number of aspects in relation to the revised import conditions, the high levels of non-compliance and what actions the department is taking to address the high numbers of pest interceptions.

Comment 1: Concerns were raised about the effect the revised import conditions were having on quality of cut flowers and costs associated with delays at the Australian border.

Our responsibility is managing the risks of pests and diseases arriving in Australia.

We introduced these measures in response to the high pest detection rate on the cut flower and foliage pathway, and the need to move the management of the biosecurity risks offshore, instead of relying on the single onshore critical control of methyl bromide fumigation.

Delays in the release of consignments only occur when consignments arrive with live pests. Importers can avoid such delays by meeting Australia's requirements and importing consignments free of live pests.

We have investigated the possibility of applying rapid diagnostic tests at the inspection point. However, there are currently no suitable commercially available tests that inspectors could use to expedite the identification and decision making on intercepted live pests.

Comment 2: Stakeholders raised concern that the department is not giving trading partner countries and importers enough time to transition.

We first notified importers and exporting countries in September 2017 of our intention to revise the import conditions. In response to feedback from importers, we delayed the introduction of the revised import conditions from December 2017 to 1 March 2018. Exporting country National Plant Protection Organisations (NPPOs) and importers were advised that if interception rates of live pests were not reduced through the revised import conditions by mid-2019, we would apply other measures to manage the biosecurity risks to a level acceptable to Australia.

Between 1 March 2018 and 30 April 2019, rates of non-compliant consignments for some exporting countries have decreased as a result of exporting country NPPOs applying measures. We consider that importers and exporting countries have had sufficient time to transition to the new requirements.

Comment 3: Stakeholders suggested that the department should re-instate/apply treatment at the border if live arthropod pests are intercepted.

The over-reliance on one critical control point for managing risk (on-shore fumigation) was increasing the biosecurity risk to Australia. This is why we have focused on managing the biosecurity risks off-shore and at key points along the import pathway.



Compared with previous import conditions which allowed for on-shore management, the revised import conditions require cut flowers and foliage to be certified as free from pests, prior to export, by the exporting country's National Plant Protection Organisation (NPPO). As part of the off-shore management approach, growers and exporters will need to meet the regulatory requirements (and certification processes) of the exporting country's NPPO, that they have put in place to provide surety of the certification processes.

While the revised import conditions include off-shore requirements for managing biosecurity risk, we continue to inspect all consignments on arrival at Australia's border for quarantine pests and will use a suitable remedial treatment for any live pests found (e.g. methyl bromide fumigation). Other options available to manage live pests associated with imported cut flowers and foliage are to export or destroy the consignment.

The aim of the revised import conditions is to significantly reduce the number of pests arriving with cut flower and foliage shipments at Australia's border by requiring that biosecurity risks are appropriately managed in the exporting country.

Comment 4: Stakeholders suggested that the department should certify/accredit the service providers in trading partner countries (e.g. fumigation facilities), to ensure off shore treatment is effective.

It is the responsibility of the National Plant Protection Organisation (NPPO) of an exporting country to oversee and certify phytosanitary treatments and verify the phytosanitary status of treated cut flowers and foliage prior to export to Australia.

We are monitoring compliance of treated cut flower and foliage pathways. All non-compliance is reported back to the NPPO. In cases of ongoing high non-compliance we may consider accreditation of treatment providers or auditing of the NPPO's system for managing phytosanitary treatments.

Comment 5: Concerns were raised about the department reporting information to trading partner countries on all pests and not just quarantine pests that were intercepted.

Contracting parties to the International Plant Protection Convention (IPPC) are obligated to report interceptions, instances of non-compliance and emergency action. This helps ensure that the exporting country's National Plant Protection Organisation (NPPO) understands the basis for phytosanitary actions taken against their products on import and is able to facilitate corrective action in their export systems.

Sharing non-compliance data with our trading partners is essential to allow them to make any necessary improvements to meet our requirements and ensures Australia is compliant with its IPPC obligations.

Previously, on-shore fumigation was permitted and therefore consignments arriving with quarantine pests were not considered to be non-compliant with Australia's import conditions. This meant there was no need to issue notices of non-compliance to exporting NPPOs.



Comment 6: An explanation was sought on the basis for which the department was accepting a 10 per cent threshold for non-compliance.

Our use of a non-compliance threshold of 10 per cent was based on the interception rates of some countries that had achieved non-compliance rates of as low as 10 per cent.

However, we since recognise that the flower types exported by these countries had simpler, open floral structures which made it easier to manage live pests and quickly achieve low non-compliance. We acknowledge that for flower types with more complex and closed floral structures, a 10 per cent non-compliance threshold is not likely to be as quickly achieved. As such, we have advised countries that whilst they should aim to achieve 10 per cent non-compliance if there was a consistent downward trend in a country's non-compliance towards this level then Australia would consider this to be a significant achievement. For example, a reduction of non-compliance from 60 per cent to 15 per cent would be considered a significant achievement in reducing non-compliance.

Non-compliant consignments would still be required to be treated on arrival in Australia.

B. PEST RISK ANALYSIS AND DATA

All comments and concerns raised in relation to the technical aspects of the pest risk analysis and data on interception rates is addressed in Appendix H of the *Final pest risk analysis for cut flower and foliage imports – Part 1* (the final report). Responses to stakeholder comments about the pest risk analysis and data that were not of a technical nature, are provided here.

Comment 7: Concerns were raised about the approach the department has taken in undertaking a pest risk analysis for cut flowers and foliage.

We have ensured that we have acted consistently with Australia's international obligations in undertaking the pest risk analysis for fresh cut flowers and foliage imports. The World Trade Organization (WTO) Sanitary and Phytosanitary (SPS) Agreement requires Members to ensure that their SPS risk assessments are appropriate to the circumstances and take into account risk assessment techniques developed by the relevant international organisations.

The International Standard for Phytosanitary Measures (ISPM 2 Framework for pest risk analysis) recognises that the analysis of groups of pests, where individual species share common biological characteristics, is a valid approach to risk analysis. This pest risk analysis has been undertaken in accordance with ISPM 11 (Pest risk analysis for quarantine pests). The pest risk analysis has identified the pests, and groups of pests, associated with cut flowers and foliage imports that are of biosecurity concern to Australia.

The level of biosecurity risk posed by many of these pests does not achieve the appropriate level of protection for Australia and therefore risk management measures are required. The pest risk analysis recommends phytosanitary measures that are known to be effective in managing the biosecurity risks posed by these pests and pest groups.



Comment 8: Concerns were raised about the interception data used in the pest risk analysis, which they consider is not robust enough to substantiate claims that interceptions and biosecurity risks have increased overtime.

We have, over a number of years, monitored the consignments of cut flower and foliage imports and recorded data on pest interceptions. The frequency and detail of the data collected likely differed over time, but was sufficient for the purposes at that time.

We acknowledge that the historical interception rate data could have been understated (section 5.2.1 of the final report). The perceived increase in the interception rate from the previous decade (2007 to 2017) to now, may be as a result of many factors including a change in the types of flowers in each consignment as well as an increase in the number of specimens being submitted for identification and therefore recorded in our systems (table 5.1 of the final report).

After the release of the Interim Inspector-General of Biosecurity's report on cut flower import in 2015, we had a heightened appreciation of the associated biosecurity risk and subsequently strengthened our collection of data. As such, the interception data collected in 2017 is likely a more accurate indication of the approach rate of live arthropod pests on cut flower and foliage consignments entering Australia. Of the total number of consignments that arrived in Australia in 2017 from the top 10 exporting countries, on average it was found that 59 per cent of consignments arrived with live arthropod pests.

We have continued to monitor consignments of cut flower and foliage imports since the introduction of revised import conditions (on 1 March 2018). Outcomes of this analysis are provided in section 5.4 of the final report.

C. INSPECTIONS AND DIAGNOSTICS

A number of stakeholders commented and raised concern about a number of aspects in relation to inspections of cut flower and foliage consignments at the Australian border, and the diagnostics of intercepted pests and diseases.

Comment 9: Stakeholders raised questions about the department's 600 unit sampling technique and its effectiveness, and why the department treats a whole consignment if one contaminant (e.g. a weed seed) was found in one carton.

Sampling technique

Our Biosecurity Officers are responsible for inspecting goods that arrive in Australia, for pests and diseases that are of biosecurity concern, including visual inspection and microscopic examination. Our sampling approach is in line with the International Standard for Phytosanitary Measures (ISPM 23 Guidelines for inspection).

When we inspect a consignment of imported cut flowers and foliage, we randomly select cartons from various positions in the consignment. This also includes drawing cartons from all growers and flower types so that the sample is representative of the consignment.

Inspection of a randomly-selected sample of 600 units from a consignment (with a 'unit' commonly being defined as a single item such as one flower stem, or one piece of fruit) provides a 95 per cent level of confidence of detecting rates of pest infestation of 0.5 per cent or higher



(that is, infestation at or above a rate of 1 in 200 items). This level of inspection is widely used by Australia for assessment of imported horticultural produce and similar commodities, as well as for export commodities, and, in the absence of detected pests, provides confidence that measures for pest management have been appropriately applied.

Treatment of whole consignment

Our current sampling approach does not allow us to know exactly the status of each flower type and grower within the consignment as the majority of consignments are consolidated, which may include a variety of flowers from a range of growers. That is why when we detect pests or contaminants we require action to be taken on the whole consignment.

If an importer wishes for individual lines (e.g. different flower types or growers) to be treated separately, then they can present each line to the department for sampling and inspection at the appropriate rate e.g. 600 units drawn and inspected for each flower type or grower.

Comment 10: Concerns were raised about the time it takes for the department to inspect a consignment and identify pests, particularly to species level.

Delays in the release of consignments only occur when consignments arrive with live pests. Importers can avoid such delays by meeting Australia's requirements and importing consignments free of live pests.

We strive to provide an inspection service within three business days of confirmation of the appointment, and we aim to meet this standard 95 per cent of the time. Also, we prioritise the inspection of cut flowers and other perishable goods ahead of other, non-perishable goods. Booking an appointment for inspection can be made on receipt of an air waybill rather than full documentation which allows bookings to be made in advance. In most cases, inspections are completed within 24 hours of confirmation of the booking. In other cases, during periods of peak import volumes, the next available time for inspection may fall outside the service standard for imported goods, however, we strive to avoid this as much as possible.

Our laboratories prioritise diagnostics for pests, seeds and disease samples from perishable goods, including cut flowers and fresh horticultural produce. During standard business hours, preliminary diagnostics and associated advice on the biosecurity risk and if required, biosecurity measures, is provided to inspection officers within two hours of receipt of samples by the laboratory. A frequent source of delay in receiving the samples is the time it can take to deliver the samples to the laboratory, which can vary depending on the location of the laboratory and traffic. We are interested to work with importers or their agents on how to maintain efficient delivery of samples.

We employ the largest group of diagnostic entomologists and plant pathologists in Australia, with extensive experience across a wide range of exotic pests and pathogens, supported by well-equipped biosecurity containment laboratories, with collections of exotic specimens relevant to cut flower pathways. Our laboratory scientists include taxonomic and molecular specialists, actively developing diagnostic guides and deploying innovative methods, including rapid molecular tests.

Our laboratories target diagnostics according to the suspected risk of pests or diseases, as well as pathways, providing identification to species-level where possible. Advice to inspection officers on the biosecurity risk of pest and diseases, and associated biosecurity measures, is



aligned with principles required by the *Biosecurity Act 2015*, including consideration that biosecurity measures (e.g. fumigation) are effective against the target pest and appropriate for the goods or pathway.

Identification of pests to the level of species cannot always be achieved for a range of reasons. Many pest species require adult specimens for identification and in some instances the majority of pests arriving on cut flowers are immature. In identifying some pests, we require a particular sex or life stage to determine the species. Accurate identification may also require multiple specimens, which are not always available. In some cases the species are new to science or not well understood, and identification guides or keys for exotic pest groups may be lacking or only include species from specific regions overseas.

When species-level identifications can't be achieved for the above reasons, our laboratories use molecular (DNA) diagnostics, if appropriate. Our laboratories use two platforms that can deliver relatively-rapid molecular diagnostics for specific pests or pathogens; real-time PCR (4 to 24 hours) and LAMP (60 to 70 minutes). These rapid methods only provide a positive or negative result for a very limited number of target pests on cut flower pathways. While a negative real-time PCR or LAMP result does not provide a species identification, DNA sequencing may be an option. Sequencing can take 10 or more working days and may not result in a definitive identification for pests that are new to science or lack reliable published sequences with which to match.

Comment 11: There was concern about not identifying *Tetranychus* mites to species level as some species are already in Australia.

For major pathways, approximately 20 per cent of all cut flower consignments with pests of biosecurity concern are infested *only* by members of the spider mite family, Tetranychidae, representing 14 per cent of total consignments. Currently, the majority of mites in the genus *Tetranychus* cannot be identified to species because adult males are required but are rarely intercepted. Since there are exotic spider mites that are of biosecurity concern, consignments with *Tetranychus* that can't be identified to species level are managed at the border.

To better inform management approaches for spider mites on cut flowers, we have been using molecular tests to determine the prevalence, on certain pathways, of two spotted spider mite (*Tetranychus urticae*), a species that is widespread in Australia and not of biosecurity concern. We expect to complete this work by mid-2019.

Comment 12: Stakeholders raised questions about the capacity of the department's biosecurity officers to inspect and identify thrips, mites and aphids without requiring the department's entomologists.

We have investigated the feasibility of training our inspection officers to identify commonly occurring insects on consignments of cut flowers. Our entomologists trained our inspectors to identify thrips (to order level) and aphids (to family level). Our assessment of the feasibility of providing this service whereby inspectors could identify thrips and aphids with an acceptable level of accuracy, was variable across the country.

We are considering how the results of this trial could contribute to future diagnostic workflows.



Comment 13: Concerns were raised about the lack of weekend diagnostic services which causes further delay and costs.

We review our regulatory arrangements and settings on a regular basis to ensure that they are responsive to changes in the operating environment. Any change in the current arrangements for the provision of diagnostic services would need to be based on the identification of an appropriate and sustainable resourcing model aligned to demand.

We are currently considering a number of options as part of our arrangements moving forward, including:

- extending diagnostic services to include weekends, which will depend on it being sustainable and aligned with the volume of work
- the use of third party providers for diagnostics.

We are actively considering various models that are responsive to changes in volume and demand through a sustainable resourcing model.

D. PESTS AND DISEASES

Some stakeholders commented and raised concern about the pests and diseases associated with cut flower and foliage imports and how they were considered in the pest risk analysis.

Comment 14: A stakeholder commented on the potential for pests to be vectors for more dangerous threats, such as *Xylella*, which has not been adequately addressed in the pest risk analysis.

We will fumigate any non-compliant consignments with quarantine pests as a remedial measure. This includes virus vectors such as thrips and aphids and potential *Xylella* vectors such as leafhoppers and sharpshooters.

Leafhoppers and sharpshooters are being assessed in the second part of the pest risk analysis, which will assess all other arthropod pests associated with cut flowers and foliage that were not assessed in Part 1. We expect to release the draft report for Part 2, for public consultation, in the second half of 2019.

Comment 15: A stakeholder questioned how thrips and aphids could be classified in the same risk bracket as leaf miners.

We have identified a large number of arthropod pest species associated with imported cut flowers and foliage, but some of these species are found much more frequently than others. As pest risk analyses are a detailed process, we decided to conduct the pest risk analysis in two parts. This allowed us to assess the biosecurity risk of the pests that arrive most frequently, first, as well as enabled us to consult earlier on the import conditions. The pests that most frequently arrive on cut flowers and foliage are thrips (43 per cent of all interceptions), mites (25 per cent of all interceptions) and aphids (12 per cent of all interceptions). The second part of the pest risk analysis assesses the biosecurity risks of all other arthropod pest species that arrive on cut flowers and foliage, including leaf miners.



The process of conducting the pest risk analysis in two parts will not lead to an over-emphasis of the risk, as each of these pests, and pest groups, would have been analysed individually, whether or not they were assessed at the one time and reported in the one document.

E. GENERAL

A number of comments received from stakeholders, while related to cut flower and foliage imports, were of a general nature and we have addressed those comments accordingly.

Comment 16: Concerns were raised about the department's lack of consultation with industry before import conditions changed; as well as around the pest risk analysis.

We have been consulting with National Plant Protection Organisations (NPPOs) of the 19 leading exporting countries, importers and exporters since before the import conditions for cut flowers and foliage imports were revised.

In September 2017, we corresponded with the NPPOs, all World Trade Organization members (through an SPS notification and addendums) and Australia's importers and domestic stakeholders (e.g., domestic flower growers and state and territory governments) to advise of the changes we intended to make to the import conditions for cut flower and foliage imports. In addition, an Industry Advice Notice was issued to importers, approved arrangements, freight forwarders and brokers. Importers were also notified directly through the Imported Flowers and Foliage Regulation Working Group.

Based on feedback from importers, we delayed the introduction of revised import conditions from 1 November 2017 to 1 March 2018 to assist NPPOs and importers to transition to the revised requirements. Since 1 March 2018, we have frequently communicated with NPPOs (and importers) and provided reports in relation to their consignments of cut flowers and foliage.

In relation to the pest risk analysis, our approach to engagement for changes to historical import pathways like cut flowers and foliage differs from that for new import pathways being considered. The consultation period provided for the draft report gave all domestic and international stakeholders the opportunity to engage with us on the regulation of imported cut flowers and foliage.

We informed our registered stakeholders of the commencement of the consultation on the draft report, when we released the report on 14 November 2018. In addition, we extended the consultation period for the draft pest risk analysis by six weeks, from 31 January 2019 to 15 March 2019, in response to feedback from domestic stakeholders. We offered a briefing session on the pest risk analysis, held by teleconference on 6 March 2019, and appointed an industry liaison officer to enhance our engagement and communication with domestic stakeholders. We also organised a stakeholder forum on cut flower and foliage imports on 5 April 2019, to inform all industries of the revisions we made to the import conditions for cut flowers and foliage imports as well as to discuss the findings of Part 1 of the pest risk analysis. We will continue to engage and communicate with domestic stakeholders throughout Part 2 of the pest risk analysis.



We encourage our stakeholders to register for updates on cut flowers and foliage by subscribing to:

- Biosecurity Risk Analysis Plant for plant biosecurity matters and risk analyses (agriculture.custhelp.com/)
- Import Industry Advice Notices for industry updates (agriculture.custhelp.com/)
- Biosecurity Import Conditions system (BICON) for updates on changes to import conditions (agriculture.gov.au/import/online-services/bicon)

Comment 17: Stakeholders asked the department to consider mandatory country of origin labelling.

Australia introduced new country of origin labelling requirements for imported food from 1 July 2018. These requirements do not apply to non-food items.

The addition of country of origin labelling to imported cut flowers and foliage is not an area of our responsibility. This kind of labelling is also not required for biosecurity purposes, as the phytosanitary certificate that accompanies all imported cut flower and foliage consignments gives us this information. This is a commercial decision for industry to consider, and the responsible area to contact is the Australian Government Department of Industry, Innovation and Science (www.industry.gov.au).

Comment 18: Concerns were raised about Australia's use of methyl bromide as a fumigant in light of international action to reduce its use globally.

Methyl bromide is a highly effective fumigant used to protect the biosecurity interests of Australia and other nations across the world.

In Australia, methyl bromide is used for quarantine and pre-shipment (QPS) treatment for imports and exports of certain commodities internationally and transported interstate. Since 1 January 2005, the use of methyl bromide has been prohibited in Australia under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (the Act), with the exception of certified QPS treatment. That is, it can be used to prevent the introduction, establishment and spread of a pest or disease in Australia, state or territory; or, before a commodity is exported to meet the requirements of the importing country.

The Act implements Australia's obligations as a Party to the *Montreal Protocol on Substances that Deplete the Ozone Layer* (the Montreal Protocol). Under the Montreal Protocol, the use of methyl bromide for QPS treatment is not subject to phase-out. However, the Australian Government is closely monitoring international trends in relation to the use of methyl bromide as a QPS management measure.

Further information about methyl bromide use in Australia can be found on the Australian Government Department of the Environment and Energy [website](#).