



Australian Government
**Department of Agriculture,
Fisheries and Forestry**

Improving cost recovery for regulatory diagnostic activities



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Acknowledgement of Country

We acknowledge the continuous connection of First Nations Traditional Owners and Custodians to the lands, seas and waters of Australia. We recognise their care for and cultivation of Country. We pay respect to Elders past and present, and recognise their knowledge and contribution to the productivity, innovation and sustainability of Australia's agriculture, fisheries and forestry industries.

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Review of charging for diagnostic activity

In 2023, the department reviewed its regulatory diagnostic activities, including pest identification, disease testing and examination, used to assess and manage biosecurity risks associated with goods and international vessels and aircraft. The review identified instances where these activities were not charged, or only partly charged for, and opportunities to improve cost recovery.

To support ongoing sustainable funding, the department intends to improve cost recovery for diagnostic activities in 2026–27, through a phased approach that will support the department charging for regulatory diagnostic activities necessary to assess and manage biosecurity risks associated with goods and conveyances.

- **Phase 1:** Introduce new charges to recover the cost of diagnostic activities undertaken to manage biosecurity risks associated with international vessels entering Australian territory.
- **Phase 2:** Revise the existing fee structure and introduce fixed fees for most diagnostic activities undertaken for imported cargo.

While changes were originally planned to commence in 2025, implementation was delayed due to the complexity of vessel and cargo pathways and the need to enhance billing systems to ensure transparent and consistent charging. The changes are now proposed to be implemented in two stages across 2026–27.

The approach proposed in 2025, to improve cost recovery for diagnostics through the introduction of a revised fee structure has been reconsidered, and a revised approach proposed.

The revised approach is designed to better reflect the complexity of biosecurity pathways, improve price certainty, enhance transparency, and ensure more consistent billing practices. This approach aims to minimise the impacts on industry, while allowing the department to recover the cost of delivering diagnostics to manage biosecurity risk associated with goods and conveyances.

As a result, some importers may see an increase in costs, particularly where diagnostic activities were previously not charged or only partially charged, such as for certain fresh produce and vessel inspection activities.

1 Rationale for proposed changes

The 2023 review identified gaps in charging for diagnostic activities, confirming the department has not been recovering the costs of delivering the regulatory activities that should be charged for under the current arrangement. The cumulative impact of this amounts to a gap in recovery of the department's costs. For example, there are instances where no fees have been applied, or importers were only charged for 2 × 15-minute intervals (\$80, 2025–26 rates), which does not reflect the actual effort or cost to undertake diagnostic work.

The current charging approach does not reflect the complexity of import pathways, nor provide clear or predictable pricing for industry, and does not adequately recognise the highly variable and technical nature of diagnostic work, compared to other regulatory activities such as inspections or document assessment.

The proposed changes aim to address these matters and provide greater transparency and price certainty, while ensuring fees are set to recover the actual cost of delivering the activity.

2 Phase 1 - International vessels – new charges

The department is proposing to introduce 2 new charges to recover the cost of the diagnostic capability required to assess and manage the biosecurity risk associated with international vessels.

This is a revision of the current cost recovery structure and provides an alternative more effective charging structure for regulatory activities already undertaken in relation to vessels.

- Time based fees will no longer be applied for diagnostic activities undertaken in relation to vessels.
- Cost to deliver the regulatory activities will be recovered through charges.
- The proposed new charge is a one-off, applied per vessel if regulatory diagnostic activity is required during the vessel's voyage in Australian territory.

This will result in a structural change to Part 2, section 9 of both the Biosecurity Charges Imposition (Customs) Regulation 2016 and the Biosecurity Charges Imposition (General) Regulation 2016 to include 2 new charges.

Pending approval of legislative amendments, the 2 new charges are proposed to commence on **1 July 2026**.

2.1 Calculation of the new charges

Validated data on volumes, effort and cost to deliver diagnostic activities were used to calculate the proposed charges for each category.

- Charges have been set at a rate that represents the minimal efficient cost to deliver the diagnostic activities required to resolve biosecurity risk.
- Rates will be reviewed as a part of the annual review of regulatory charges to ensure they continue to be set at an amount that represents the minimal efficient cost.

2.2 Application of the charge

The one-off charge will be applied per vessel, per voyage in relation to diagnostic activity required to assess and manage biosecurity risk.

- The current rate will be published on the department's website, meaning the cost will be known ahead of time.
- Costs will increase where no charge has previously been imposed for diagnostic activities.
- The charge will be applied once per vessel, per voyage and itemised on an invoice.

Table 1 sets out the proposed new charge categories and rates.

Table 1 Proposed charges for diagnostic activity in relation to vessels

| Category | Application | Unit | Rate (\$) |
|---|---|------------|-----------|
| International Roll-on/Roll-off (Ro-Ro) cargo vessel | One off charge applied in relation to diagnostics activity to assess and manage biosecurity risk. | Per vessel | 710 |
| International vessel other than a Roll-on/Roll-off (Ro-Ro) cargo vessel | One off charge applied in relation to diagnostics activity to assess and manage biosecurity risk. | Per vessel | 189 |

The distinction between the 2 charges is based on the effort and cost to deliver diagnostic activity. Larger numbers of specimens are typically collected from Ro-Ro cargo vessels during inspections, when compared to other types of vessels. Samples collected from Ro-Ro vessels also contain greater diversity and can require complex assessment relating to seasonal pest measures. Consequently, these vessels require significantly more diagnostics effort to assess and manage biosecurity risk.

2.3 Scenarios

Scenarios 1 to 3 set out examples of how the proposed new charges would apply in different situations where diagnostic activity is required to assess and manage biosecurity risk in relation to an international vessel.

Scenario 1 Yacht with pests in cabin

During an inspection of a yacht that has sailed into Australian waters an officer finds live ants and a spider in the cabin and takes a sample which is sent to the department's laboratory. Examination under a stereo microscope confirmed the spider to be *Steatoda grossa* and the ants to be minor workers of the genus *Pheidole*. Further morphological identification is performed using identification keys/literature and comparison of a series of specimens from the sample against reference images and specimens, resulting in a species level identification of *Pheidole parva*.

In this scenario a one off charge of **\$189** would apply.

Scenario 2 Pests on Ro-Ro vessel

The department's laboratory receives a sample from an inspection of a multi-deck vessel with imported vehicles and machinery, which resulted in detection of 35 insect specimens, along with a second sample of 20 insect specimens collected by the crew during the voyage. Examination of the samples under stereo microscopy identifies 9 species, including: 3 species of stink bug, 1 grasshopper, 1 cockroach, 2 species of lady beetle, 1 dragon fly, and 1 wasp. Two of the stink bug species require dissection for morphological identification. All stink bug, lady beetle and grasshopper specimens in both samples are screened for freshness, and the species are matched spatially to decks and holds on the vessel to inform advice on the application of appropriate biosecurity measures. Based on the identified risk, the vessel is directed to undergo insecticide fogging of cargo decks and further inspection. During the second inspection officers collect a further 2 stink bug specimens which are submitted to the department's laboratory. The additional specimens are identified to species via examination under a stereo microscope and are assessed for freshness to inform further management advice.

In this scenario a one-off charge of **\$710** would apply.

Scenario 3 Container vessel with pests in dry store

During a routine vessel inspection of a container vessel an officer finds live larvae and exuviae in the galley dry store. A sample is taken which is sent to the department's laboratory. Examination under a stereo microscope indicates the specimens are larvae and larval skins in the family Dermestidae, which includes high risk pests such as khapra beetle. The specimens require slide mounting for further morphological identification and a species level determination of *Eurhopalus vespulae* is confirmed.

In this scenario a one off charge of **\$189** would apply.

3 Phase 2 - Imported goods – revised fee structure

The proposal to revise the current fee structure represents an alternative and more effective charging structure for regulatory activities already undertaken and charged for under the current cost recovery arrangement.

Subject to the approval of legislation, new charge points would be added to the legislation for each specific diagnostic activity including a description of what each activity covers and the rate at which the activity is charged per unit, (for example, for each test, diagnostic examination or activity).

This will be achieved through a structural change to legislation, with new fees included under section 106 of the Biosecurity Regulation 2026. Subject to approval this regulation will commence 1 October 2026 and replaces the current Biosecurity Regulation 2016, which is due to sunset on 1 October 2026.

Subject to further approval of legislation, implementation of the revised fee structure is proposed to commence on **1 November 2026**.

Table 2 provides a comparison of the key differences between the current and proposed fee structures.

Table 2 Comparison of current and proposed fee structure for imported goods

| Category | Current fee structure | Revised fee structure |
|------------------------------|---|--|
| Fee structure | Unspecified broad category for all fees listed as 'diagnostic activity.' | Most individual tests or activities specified as separate prescribed fees for each test or activity. |
| Cost for diagnostic activity | Calculated per 15-minute intervals plus the cost of any consumable material required. | Flat rate for each activity specified in legislation. |
| Legislated units | Rate prescribed for 15-minute intervals for each person carrying out the activity. | Rate prescribed for individual activity with a description of what it covers, and the rate at which the activity is charged per unit. Includes a tiered structure for some tests. |
| Billing | Not all activities are or can be easily itemised on invoices. | Each activity can be itemised on an invoice. |

3.1 Charging for unspecified activities under a revised structure

Unspecified diagnostic activities the department conducts in relation to goods will continue to be charged under current arrangements, applied in 15-minute intervals plus the cost of any consumable material required.

New tests or activities are expected to be added in the future, as effort and costs are validated.

Some diagnostic activities will continue to be charged under the current arrangements, due to the variable and complex nature of this work. Examples include diagnostic activities undertaken when collating and analysing data and generating reports.

Examples where this may happen are included in the Scenarios in section 3.5.

3.2 Calculation of revised fees

We have reviewed the diagnostic activities we conduct, captured and validated data collected on the volumes, effort and cost to deliver these activities, and have used this information to calculate the proposed fees for individual activities.

The proposed fee for each activity has been calculated using the actual time taken to undertake the activity, in minutes, plus the cost of any consumable materials required.

Fees will be reviewed as a part of the annual review of regulatory charges to ensure time taken and fees charged continue to align with the cost of each activity.

3.3 Application of fees

Under the revised structure, individual fees (refer to Table 3) will be charged for each diagnostic activity that is undertaken in relation to the goods imported. The total cost will vary depending on the number of activities that are carried out.

The proposed fee structure aims to provide greater transparency and price certainty, while ensuring fees are set to recover the actual cost of delivering the activity.

- Most of the department's diagnostic activities (tests, examinations) will have a legislated fee with the current rate published on the department's website, meaning most prices will be known ahead of time.
- There will be a tiered structure for some tests, resulting in cheaper rates per test when larger numbers are tested in the one batch.
- The fee for some activities will change and may increase or reduce importer's costs.
- Fees for activities provided will be itemised on an invoice.

3.4 Proposed specified diagnostic activities

Table 3 sets out the proposed new charge points for diagnostic activities including a description of the activity, the unit to which the fee will apply, and the price, calculated using 2026–27 rates.

Table 3 Proposed charge points and prices for specified diagnostic activities

| Diagnostic activity | Description of activity | Unit | 2026-27 price (\$) |
|--|---|----------------------|---------------------------|
| Sample handling | Receive and handle a sample, including one or more of the following: (a) labelling the sample (b) prioritising the sample (c) re-packaging the sample (d) preserving specimens in the sample (e) undertaking data entry in relation to the sample (f) recording and communicating diagnostic results and associated advice on biosecurity risk and biosecurity measures in respect of the sample (g) storing the sample (h) disposal of the sample | For each sample | 84 |
| Specialist sample collection | Collect and package a sample that requires specialist skills in pest or symptom recognition | For each activity | 9 |
| Basic examination | Carry out a basic examination of a sample or subsample, including making clinical observations in relation to the sample or subsample and one of the following: (a) a visual examination of the sample or sub-sample (b) a simple microscopic examination of the sample or sub-sample (c) a visual and simple microscopic examination of the sample or sub-sample | For each examination | 18 |
| Intermediate examination | Carry out an intermediate examination of a sample or sub-sample, including the activities described in a basic examination and one or more of the following: (a) slide mounting (b) simple dissection (c) humidification or incubation (d) imaging of specimens or symptoms (e) undertaking morphological identification procedures | For each examination | 130 |
| Complex examination | Carry out a complex examination of a sample or sub-sample, including the activities described in the intermediate examination and one or more of the following: (a) sourcing diagnostic literature required for identification and resolution of biosecurity risk (b) sourcing assistance from external taxonomic experts (c) preparing and sending the sample, or part of the sample, to one or more external locations (d) undertaking internal or external consultation to resolve biosecurity risk or biosecurity measures (e) complex dissection to determine sex, reproductive potential or morbidity status | For each examination | 340 |
| Rapid antigen test (RAT) – single target | Carry out a rapid antigen test that detects a single species or a group of species, including the following: (a) sampling the affected material (b) preparing the sample (c) adding the test strip (d) recording the results of the test (e) disposal of the test | For each test | 42 |

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| Diagnostic activity | Description of activity | Unit | 2026-27 price (\$) |
|---|--|---|--------------------|
| RAT – multiple targets | Carry out a rapid antigen test that detects single species or a group of species, using a single test comb, including the following: (a) sampling the affected material (b) preparing the sample (c) adding the test strip (d) recording the results of the test (e) disposal of the test | For each test | 58 |
| Microbial culturing - initial plating | Carry out initial step for isolation of microorganisms, which includes the initial plating. | For each activity | 30 |
| Microbial culturing - isolation of bacteria or fungi in pure culture, for each isolate | Carry out sub-culturing of a microorganism to obtain a pure isolate, excluding initial plating and identification. | For each isolation | 32 |
| Sheppard and Needham test | Conducting a Sheppard and Needham wash test to detect <i>Verticillium alfalfae</i> in lucerne seed, including sampling, washing, culturing microbes, incubating cultures, and screening cultures. | For each seed variety tested | 1784 |
| Extraction of nucleic acid | Carry out extraction of nucleic acid from a sample or sub-sample, either manually or robotically without purification. | For each extraction | 41 |
| Extraction and purification of nucleic acid – 1 to 2 samples | Carry out extraction and purification of nucleic acid from a sample or sub-sample, either manually or robotically. | For each extraction where 1 or 2 are carried out | 107 |
| Extraction and purification of nucleic acid – 3 to 10 samples | Carry out extraction and purification of nucleic acid from a sample or sub-sample, either manually or robotically. | For each extraction, where between 3 and 10 are carried out | 64 |
| Extraction and purification of nucleic acid – 11 or more samples | Carry out extraction and purification of nucleic acid from a sample or sub-sample, either manually or robotically. | For each extraction, where 11 or more are carried out | 49 |
| Loop-mediated amplification (LAMP) test | Carry out a loop-mediated amplification (LAMP) test of a sample. | For each test of a sample that is a single sample, or a first sample in a batch, including positive and negative controls | 149 |
| Loop-mediated amplification (LAMP) test | Carry out a LAMP test in relation to an additional sample in a batch. | For each test of an additional sample in a batch | 43 |
| Polymerase chain reaction (PCR) or quantitative polymerase chain reaction (qPCR) – 1 to 2 samples | Carry out a polymerase chain reaction (PCR) or quantitative polymerase chain reaction (qPCR) activity. | For each activity, where 1 or 2 are carried out | 86 |
| Polymerase chain reaction (PCR or qPCR) – 3 to 10 samples | Carry out a polymerase chain reaction (PCR) or quantitative polymerase chain reaction (qPCR) activity. | For each activity, where between 3 and 10 are carried out | 35 |

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| Diagnostic activity | Description of activity | Unit | 2026-27 price (\$) |
|--|---|---|---------------------------|
| Polymerase chain reaction (PCR or qPCR) – 11 or more samples | Carry out a polymerase chain reaction (PCR) or quantitative polymerase chain reaction (qPCR) activity. | For each activity, where 11 or more are carried out | 13 |
| Deoxyribonucleic acid (DNA) sequencing | Carry out sequencing of amplified DNA, derived from a sample of extracted and amplified DNA, but excluding matching to species in online databases, and analysis of sequence data. | For each sequencing | 109 |
| Electron microscopy | Carry out electron microscopy of a sample or sub-sample, including: (a) preparing the sample (b) electron microscopy of the sample (c) analysis of the results | For each sample | 236 |
| Nematode extraction | Carry out an extraction of nematodes from a sample of soil or plant material but excluding tests to identify the species present. | For each extraction | 225 |
| High throughput sequencing of small ribonucleic acid (RNA) | Carry out high throughput sequencing of small ribonucleic acid (RNA) from a sample of plant tissue, including analysis of small lengths of RNA, excluding RNA extraction. | For each sequencing | 656 |
| Herbaceous indexing | Carry out herbaceous indexing, including the following: (a) inoculating indicator plants using plant tissue from the tested plant (b) inoculating positive and negative control plants (c) observing symptoms in the indicator plants | For each plant tested | 90 |
| Woody indexing | Carry out woody indexing, including the following: (a) inoculating indicator plants by grafting tissue from the tested plant onto the indicator plant (b) grafting negative and positive control plants (c) observing symptoms in the indicator plants | For each plant tested | 238 |
| Shoot tip grafting | Carry out shoot tip grafting, including the following: (a) preparing a seedling rootstock (b) grafting a shoot tip from the tested plant onto the seedling (c) monitoring growth | For each grafting attempt | 94 |
| Enzyme-linked immunosorbent assay (ELISA) test extraction | Carry out an enzyme linked immunosorbent assay (ELISA) test extraction of a sample in preparation for an ELISA test, including: (a) reagent preparation (b) grinding plant tissue in a buffer bag | For each extraction | 10 |
| Enzyme-linked immunosorbent assay (ELISA) – 1 to 2 samples | Carry out an ELISA test of an extract of plant tissue, including the following: (a) positive and negative controls (b) incubating the extract with antibodies in a test plate (c) analysis of results | For each test, where 1 or 2 are carried out | 164 |
| Enzyme-linked immunosorbent assay (ELISA) – 3 to 10 samples | Carry out an ELISA test of an extract of plant tissue, including the following: (a) positive and negative controls (b) incubating the extract with antibodies in a test plate (c) analysis of results | For each test, where between 3 and 10 tests are carried out | 51 |

| Diagnostic activity | Description of activity | Unit | 2026-27 price (\$) |
|---|--|---|--------------------|
| Enzyme-linked immunosorbent assay (ELISA) – 11 or more samples | Carry out an ELISA test of an extract of plant tissue, including the following: (a) positive and negative controls (b) incubating the extract with antibodies in a test plate (c) analysis of results | For each test, where 11 or more tests are carried out | 21 |
| Nucleic acid quality check | Carry out a nucleic acid quality check of a sample including the following: (a) assessing the quality and quantity of RNA or DNA extracted from a sample (b) preparing a sub sample of the extraction product for analysis in an automated analysis instrument | For each activity | 11 |
| Complementary DNA (cDNA) synthesis | Carry out the synthesis of complementary DNA (cDNA) from RNA extracted from a sample. | For each activity | 14 |
| Matrix-assisted laser desorption/ionisation time of flight test (MALDI ToF) | Carry out a matrix assisted laser desorption / ionisation time of flight (MALDI ToF) mass spectrometry test of a sample, including the following: (a) handling of the sample (b) preparing the sample (c) testing the sample (d) analysis of results | For each test | 29 |

Note: The intermediate examination fee includes all activities described in the basic examination, and a complex examination fee includes the activities described in the intermediate examination. Therefore, one type of examination fee is applied for the type of examination needed to assess the biosecurity risk of the specimen being examined.

3.5 Scenarios

Scenarios 4 to 9 set out examples of how the proposed new fee structure would apply across a range of different situations where diagnostic activity (such as testing, examination, pest identification) is required to assess and manage biosecurity risk. The examples are not comprehensive for all possible diagnostic scenarios, as activities required to resolve biosecurity risk will vary according to the nature of the goods or organisms present.

- If an importer of goods is provided with preliminary diagnostic results indicating a potential biosecurity risk, they may elect to have biosecurity measures applied for release of the goods based on the potential risk identified at that point in time. If diagnostic activities cease, no further fees will be applied.
- If the importer elects to continue to have the goods secured pending further diagnostic testing to resolve the biosecurity risk, then fees will be applied for that testing.
- For goods that require testing for plant pathogens as part of the import conditions, fees will be applied for all mandatory testing and, if required, to resolve the cause of disease symptoms observed during inspection or post-entry plant quarantine.

Scenario 4 Imported fresh fruit with disease

The department's laboratory receives a sample of fresh oranges with white fungal growth. Examination under a stereo microscope confirms the presence of a species of the fungus *Penicillium*.

One sample handling fee and 1 basic examination fee are applied in this scenario.

Fees for imported fresh fruit with disease

| Activity | Price (\$) |
|--------------------------------|------------|
| Sample handling (1 × sample) | 84 |
| Basic examination (1 × sample) | 18 |
| Total cost | 102 |

Scenario 5 Imported rice with pests

The department's laboratory receives a sample of insects from inspection of a consignment of rice. Examination under a stereo microscope identifies two species of beetle in the sample, *Lasioderma serricorne* and *Tribolium castaneum*.

One sample handling fee and 2 basic examination fees are applied in this scenario.

Fees for imported rice with pests

| Activity | Price (\$) |
|-----------------------------------|-------------|
| Sample handling (1 × sample) | 84 |
| Basic examination (2 × specimens) | 2 × 18 = 36 |
| Total cost | 120 |

Scenario 6 Imported cut flowers, pests, disease and weed seeds

The department's laboratory receives 3 samples from inspection of fresh flower stems, including live pests, stems with disease symptoms, and contaminating seeds. The stems with disease symptoms on the leaves are examined under a stereo microscope. Slides of the fungi on the leaf surface are then prepared for high-power microscopy. The fungi are identified by their morphology as *Podosphaera pannosa* (powdery mildew) and a species of *Cladosporium* (sooty mould). The pests are examined under a dissecting microscope and confirmed to be a spider mite (*Tetranychus* sp.) and a predatory mite. The predatory mite requires slide mounting and is identified by morphology as *Neqseiulus barkeri*. The seeds are examined under a dissecting microscope and confirmed to be a species in the genus *Erigeron* and a species in the genus *Oxalis*.

A range of fees are applied in this scenario.

Fees for imported cut flowers, pests, disease and weed seeds

| Specified activity | Price (\$) |
|--|--------------|
| Sample handling (3 × samples) | 3 × 84 = 252 |
| Intermediate examination (fungi) | 130 |
| Basic examination (<i>Tetranychus</i> mite) | 18 |
| Intermediate examination (predatory mite) | 130 |
| Basic examination (seeds – 1 × <i>Erigeron</i> , 1 × <i>Oxalis</i>) | 2 × 18 = 36 |
| Total cost | 566 |

Scenario 7 Imported fruit with multiple disease symptoms

The department's laboratory receives a sample from an inspection of fresh stone fruit with a range of symptoms, including spots of mottled discoloration, and discrete lesions of decaying tissue that had mould on their surface. The symptoms are examined under a dissecting microscope. Slides of the lesions are prepared for

examination under high-power microscopy. Bacteria are observed in the tissue from the lesions. Fungi consistent with the genus *Colletotrichum* are also observed. The importer is advised that there are concerns about the disease symptoms and agrees to secure the goods pending further diagnostics to resolve the risk. Initial plating to isolate bacteria is conducted and the next day six colonies are tested with MALDI-ToF mass spectrometry, which indicates colony to be a genus (*Pantoea*) that includes pathogenic plant species. The colony indicated to be *Pantoea* is then isolated as a pure culture and the species is confirmed to be *P. agglomerans* with MALDI-ToF mass spectrometry.

Initial plating to isolate the fungus is conducted and two days later the genus *Colletotrichum* is confirmed with MALDI-ToF mass spectrometry. The fungus is then isolated in pure culture and DNA is extracted, amplified and sequenced to confirm the species (*Colletotrichum plurivorum*).

A sub-sample of the tissue with mottled spots is tested with rapid antigen tests for three different viruses and all are negative. Five sub-samples of whole fruits with the symptoms of mottled discoloration are sent to the department's laboratory at Mickleham, Victoria, for transmission electron microscopy, which confirms the presence of virus particles consistent with the potyvirus family. RNA is then extracted from each of the five fruits, amplified by PCR, and sequenced to identify the virus. Analysis of the sequencing results takes one hour. Given the complexity of the disease issues with this consignment, including detection of a potyvirus not previously known to be on the pathway, considerable time is spent researching literature and assessing the risk of the pathogens detected.

A range of fees are applied in this scenario.

Fees for imported fruit with multiple disease symptoms

| Specified activity | Price (\$) |
|--|---------------|
| Sample handling (1 × sample) | 84 |
| Intermediate examination (1 × fungi, 1 × bacteria) | 2 × 130 = 260 |
| Complex examination (1 × viral symptoms) | 340 |
| Microbial culturing (initial plating: 1 × bacteria plate, 1 × fungi plate) | 2 × 30 = 60 |
| Matrix-assisted laser desorption/ionisation time of flight test (MALDI ToF: 6 × bacterial colonies, 2 × fungal colonies) | 8 × 29 = 232 |
| Microbial culturing – isolation of bacteria or fungi in pure culture (1 × bacterium isolate, 1 × fungus isolate) | 2 × 32 = 64 |
| Matrix-assisted laser desorption/ionisation time of flight test (MALDI ToF: 1 × bacterium isolate, 1 × fungus isolate) | 2 × 29 = 58 |
| Nucleic acid extraction with purification – 1 to 2 samples (1 × fungus isolate) | 107 |
| Polymerase chain reaction (PCR) – 1 to 2 samples (1 × fungus isolate, 2 × gene regions) | 2 × 86 = 172 |
| DNA sequencing (2 × fungal gene regions) | 2 × 109 = 218 |
| Rapid antigen test – single target (3 × targets) | 3 × 42 = 126 |
| Electron microscopy (2 of 5 sub-samples) | 2 × 236 = 472 |
| Nucleic acid extraction with purification – 3 to 10 samples (5 × sub-samples) | 5 × 64 = 320 |
| Complementary DNA (cDNA) synthesis (5 × extracts) | 5 × 14 = 70 |
| Polymerase chain reaction (PCR) – 3 to 10 samples (Potyvirus generic primer 5 × cDNA) | 5 × 35 = 175 |
| DNA sequencing (5 × amplicons) | 5 × 109 = 545 |
| Unspecified activity | |
| Diagnostic in-office fee per quarter hour (1 hour, fungal sequencing analysis) | 4 × 42 = 168 |
| Diagnostic in-office fee per quarter hour (1 hour, viral sequencing analysis) | 4 × 42 = 168 |

| | |
|--|--------------|
| Diagnostic in-office fee per quarter hour (30 minutes, for other activities related to finalising diagnostic work such as compiling reports) | 2 × 42 = 84 |
| Total cost | 3,723 |

Scenario 8 Potato tissue culture in post entry quarantine

The department's Post-Entry Quarantine facility (PEQ) receives a consignment of tissue cultured potato, with 8 replicate containers for each of 3 cultivars. A basic examination of each container confirms the absence of disease symptoms. One container from each cultivar is selected and reworked, by transferring plantlets to fresh growth medium. A single, suitable plantlet from each re-worked cultivar is deflasked for growth in the glasshouse. During the PEQ period (6 months) the plants undergo a basic examination monthly. After 3 months the plants undergo a specialist sample collection, for nucleic acid extraction, with complementary DNA synthesis (from RNA), followed by polymerase chain reactions (PCR) for housekeeping genes and PCR tests for 25 target-pathogens. During their time in PEQ, each cultivar is reworked into fresh containers 3 times (fees applied in-office fee per 15-minutes). The plants in the glasshouse and all the tissue culture plantlets from each cultivar have final visual inspections and 6 plantlets from each cultivar are selected for release. As all testing is completed with no detections, the consignment is ready for release after 6 months and a 'testing report' is created.

A range of fees are applied for this scenario, at different times during the quarantine period.

Fees for potato tissue culture in post entry quarantine

| Specified activity | Price (\$) |
|--|----------------|
| Sample handling (3 × cultivars on arrival) | 3 × 84 = 252 |
| Basic examination (3 × cultivars, 8 × replicate containers, 24 in total) | 24 × 18 = 432 |
| Inspection in-office units (per 15-minute intervals, 3 × cultivars × 4 tissue-culture reworks, 12 units in total) | 12 × 42 = 504 |
| Basic examination (3 × cultivars × 6 occasions, monthly inspection 18 in total) | 18 × 18 = 324 |
| Specialist sample collection (3 × cultivars) | 3 × 9 = 27 |
| Nucleic acid extraction with purification – 3 to 10 samples (3 × RNA, 3 × DNA) | 6 × 64 = 384 |
| Complementary DNA (cDNA) synthesis (3 × 3 RNA, 9 units in total) | 9 × 14 = 126 |
| Polymerase chain reaction (PCR) – 3 to 10 samples (3 × DNA extracts and 3 × cDNA products, 'housekeeping' gene) | 6 × 35 = 210 |
| Polymerase chain reaction (PCR) – 3 to 10 samples (25 tests × 3 plants, separate run for each test applicable rate is for 3 to 10 samples) | 75 × 35 = 2625 |
| Basic examination (3 × cultivars – finalise for release) | 3 × 18 = 54 |
| Unspecified activity | |
| Diagnostic in-office fee per quarter hour (3 hours and 30 minutes, for other activities related to finalising diagnostic work such as compiling reports) | 14 × 42 = 588 |
| Total cost | 5,526 |

Scenario 9 Stone fruit budwood in post entry quarantine

The department's post-entry plant quarantine (PEQ) facility receives a consignment of 15 cultivars of Prunus (with 10 budwood sticks of each). All budwood sticks undergo on-arrival basic examination, with no signs of disease observed. A suitable bud stick of each cultivar is selected for propagation and is sampled for on-arrival, prescribed testing, including microbial culturing for *Phytophthora*, and nucleic acid extraction before PCR testing for *Phytophthora* and *Erwinia amylovora*, with no detections. Thirty plants are established in the

glasshouse, as 2 replicate-grafts onto rootstocks, and all plants undergo a basic examination monthly. When the plants display 'active growth', the 30 grafted plants undergo a specialist sampling collection for ELISA testing (2 target pathogens) and the samples from replicate plants are pooled before ELISA extraction and testing. At a later stage, the 30 grafted plants undergo a different specialist sampling collection for nucleic acid extraction (replicate plants are pooled), quality checks and high-throughput sequencing of small RNA for viruses and viroids. No pathogens of concern are detected by either the ELISA or small RNA sequencing. Disease symptoms are observed on one plant of one cultivar during the quarantine period and investigative diagnostic testing is conducted, including specialist sampling and microbial culturing. MALDI-ToF mass spectrometry testing is used on the initial culture plates to select colonies to take to pure culture. MALDI-ToF is used again to identify the species of bacterium, with nucleic acid extraction, PCR and DNA sequencing confirming the identification, which is a species already present in Australia. When the plants display 'mature growth' the 30 plants undergo a specialist sample collection, and replicate plants are pooled before nucleic acid extraction and PCR testing for 5 target pathogens. After approximately 14 months quarantine, the 30 plants undergo a specialist sample collection and intermediate examination for 'late-season' *Ceratocystis* testing and replicate plants are pooled before testing. Once all 15 cultivars complete their quarantine requirements, including final basic examination, they are released from PEQ.

A range of fees are applied for this scenario, at different times during the quarantine period.

Fees for stone fruit budwood in post entry quarantine

| Specified activity | Price (\$) |
|--|-----------------|
| Sample handling (15 × cultivars, on arrival) | 15 × 84 = 1260 |
| Basic examination (15 × cultivars × 10 bud sticks, on arrival 150 in total) | 150 × 18 = 2700 |
| Specialist sample collection (15 × cultivars × 1 bud stick, on arrival, 15 in total) | 15 × 9 = 135 |
| Microbial culturing – initial plating (15 × cultivars × 1 bud stick × 2 replicates, for <i>Phytophthora</i> , 30 in total) | 30 × 30 = 900 |
| Nucleic acid extraction with purification – 11 or more samples (15 × cultivars × 1 bud stick) | 15 × 49 = 735 |
| Polymerase chain reaction (PCR) – 11 or more samples ('housekeeping' gene × 15 extracts) | 15 × 13 = 195 |
| Polymerase chain reaction (PCR) – 11 or more samples (15 × extracts × 2 tests, <i>Phytophthora</i> and <i>Erwinia</i> , 30 in total) | 30 × 13 = 390 |
| Basic examination (15 × cultivars, × 2 grafted plants × 16 occasions, 480 examinations in total) | 480 × 18 = 8640 |
| Specialist sample collection (15 × cultivars × 2 grafted plants, active-growth ELISA testing, 30 in total) | 30 × 9 = 270 |
| Extraction for enzyme-linked immunosorbent assay (ELISA) (15 × cultivars, pooled for 2 grafted plants, 15 in total) | 15 × 10 = 150 |
| Enzyme-linked immunosorbent assay (ELISA) - 11 or more samples (15 × extracts × 2 tests, 30 in total) | 30 × 21 = 630 |
| Specialist sample collection (15 × cultivars × 2 grafted plants, active-growth high-throughput sequencing of small RNA, 30 in total) | 30 × 9 = 270 |
| Nucleic acid extraction with purification – 11 or more samples (15 × cultivars, 2 grafted plants pooled, 15 in total) | 15 × 49 = 735 |
| Nucleic acid quality check × 15 | 15 × 11 = 165 |
| High throughput sequencing of small ribonucleic acid (RNA) × 15 | 15 × 656 = 9840 |
| Specialist sample collection (1 × plant with symptoms) | 9 |
| Microbial culturing (initial plating) (2 × bacterial) | 2 × 30 = 60 |
| Matrix-assisted laser desorption/ionisation time of flight test (MALDI ToF) (2 × bacterial colonies) | 2 × 29 = 58 |
| Microbial culturing - isolation of bacteria or fungi in pure culture (2 × bacterium isolates) | 2 × 32 = 64 |

Improving cost recovery for diagnostic activities

| | |
|--|-----------------|
| Matrix-assisted laser desorption/ionisation time of flight test (MALDI ToF) (2 × bacterium isolates) | 2 × 29 = 58 |
| Nucleic acid extraction with purification – 1 to 2 samples (2 × bacterium isolates) | 2 × 107 = 214 |
| Polymerase chain reaction (PCR) – 1 to 2 samples (2 × bacterium isolates × 2 gene regions, 4 in total, separate run for each test applicable rate is for 1 to 2 samples) | 4 × 86 = 344 |
| DNA Sequencing (2 × amplified DNA × 2 bacterial gene regions, 4 in total) | 4 × 109 = 436 |
| Specialist sample collection (15 × cultivars × 2 grafted plants, late-season testing, 30 in total) | 30 × 9 = 270 |
| Nucleic acid extraction with purification – 11 or more samples (15 × cultivars, 2 grafted plants pooled, 15 in total) | 15 × 49 = 735 |
| Polymerase chain reaction (PCR) –11 or more samples ('housekeeping' gene × 15 extracts) | 15 × 13 = 195 |
| Polymerase chain reaction (PCR) –11 or more samples (15 × extracts × 5 tests, 75 tests in total) | 75 × 13 = 975 |
| Specialist sample collection (15 × cultivars, × 2 grafted plants for <i>Ceratocystis</i> testing, 30 in total) | 30 × 9 = 270 |
| Intermediate examination (15 × cultivars, pooled for the 2 grafted plants for <i>Ceratocystis</i> incubation, 15 in total) | 15 × 130 = 1950 |
| Basic examination (15 × cultivars × 2 grafted plants – to clear for release, 30 in total) | 30 × 18 = 540 |
| Unspecified activity | |
| Diagnostic in-office fee per quarter hour (1 hour of bacterial sequencing analysis) | 4 × 42 = 168 |
| Diagnostic in-office fee per quarter hour (6 hours for other activities related to finalising diagnostic work such as compiling reports) | 24 × 42 = 1008 |
| Total cost | 34,369 |

4 Cost comparison

Tables 4 and Table 5 compare the total cost of diagnostic activities, under the current charging arrangements, to the total cost under the proposed new charging arrangements. These are the expected costs for diagnostic activities undertaken by the department to assess and manage the biosecurity risk for each situation described in Scenarios 1 to 9.

Table 4 Comparison of cost under current and proposed charging arrangements - vessels

| Scenario | Cost under current arrangement (\$) | Cost under proposed structure 2026–27 prices (\$) | Difference (\$) | Rationale |
|---|-------------------------------------|---|-----------------|--|
| 1. Yacht with pests in cabin | 80 | 189 | +99 | Currently only 2 × in-office 15-minute fees are applied per sample submission. |
| 2. Pests on Ro-Ro vessel | 0 | 710 | +710 | Currently, no diagnostic fees are applied. |
| 3. Container vessel with pests in dry store | 0 | 189 | +189 | Currently, no diagnostic fees are applied. |

Table 5 Comparison of cost under current and proposed charging arrangements - goods

| Scenario | Estimated cost under current arrangement (\$) | Cost under proposed structure 2026–27 prices (\$) | Difference (\$) | Rationale |
|--|---|---|-----------------|---|
| 4. Imported fresh fruit with disease | 80 | 102 | +22 | Currently only 2 × in-office per 15-minute fees are applied per sample submission. |
| 5. Imported rice with pests | 80 | 120 | +40 | Currently only 2 × in-office per 15-minute fees are applied per sample submission. |
| 6. Imported cut flowers, pests, disease and weed seeds | 240 | 566 | +326 | Currently only 2 × in-office per 15-minute fees are applied per sample submission. |
| 7. Imported fruit with multiple disease symptoms | 80 | 3,723 | +3643 | Currently only 2 × in-office per 15-minute fees are applied per sample submission. |
| 8. Potato tissue culture in post entry quarantine | 5,775 | 5,526 | -249 | Current charges (time and consumable costs) have been reviewed and itemised to improve accuracy and transparency. |
| 9. Stone fruit budwood in post entry quarantine | 33,921 | 34,369 | +448 | Current charges (time and consumable costs) have been reviewed and itemised to improve accuracy and transparency. |

5 More information

More information on the proposed new fee structure and commencement of charging for all regulatory diagnostic activities will be made available through a variety of communication channels including industry advice notices, consultative committee meetings and via the department's website.

For further information e-mail: BioCRIS@aff.gov.au.