

MPI Emerging Risks System for Biosecurity

21th Stakeholder Report
5 September 2020 – 19 March 2021

23rd April 2020



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Overview of MPI Emerging Risks System - Biosecurity

The MPI Emerging Risks System – Biosecurity (ERS) is designed to proactively identify and manage emerging risks to New Zealand’s biosecurity. The ERS focusses on hazards to plant and animal health and other invasive species in the terrestrial and aquatic environments. The current priorities of the ERS are significant changes to the number, distribution, or epidemiology of exotic organisms of biosecurity concern to New Zealand.

Alerts are progressed into the ERS for assessment if they contain new information about a biosecurity risk species, such as a newly reported host/commodity, a new distribution, or a newly described species. A significant proportion of alerts sent to the ERS are not progressed into the ERS because the information in the alert is already known or does not signal an increased risk to New Zealand biosecurity.

After initial risk assessment, alerts progressed into the system may be:

- Closed with no further assessment required as the assessment indicates that the risk is currently managed or there is no pathway. However, these alerts may result in:
 - setting up active monitoring to alert the ERS to any new relevant information that could influence future decision making, and/or
 - situational awareness reports being sent to MPI border staff, and/or
 - the assessment being sent “For Your Information” (FYI) to MPI Risk Managers;
- Sent to a specialist MPI Risk Analyst for further assessment;
- Sent to an MPI Risk Manager to determine if additional risk management e.g. changes to an import health standard or readiness plan, is required.

Alerts sent to a specialist MPI Risk Analyst may be:

- Closed, with no further assessment required. However, these alerts may result in:
 - active monitoring being set up, and/or
 - situational awareness reports being sent to MPI border staff, and/or
 - the assessment being sent as an FYI to MPI Risk Managers;
- Sent to a MPI Risk Manager to determine if additional risk management is required.

Alerts sent to an MPI Risk Manager may result in:

- The alert being closed, with no further assessment required. However, these alerts may result in:
 - active monitoring being set up, and/or
 - situational awareness reports being sent to MPI border staff;
- Risk management action being taken e.g. changes to an import health standard or readiness plan.

The MPI Emerging Risks System is explained in more detail in Appendix 1.

ERS Alert Data

Since the inception of the ERS on 31st August 2012, the system has received a total of 18,030 alerts; 2,295 of these have been progressed to the risk assessment stage after initial screening. Information about the outcome of these alerts is presented in Table 1. The number of alerts entered into the ERS during the reporting period is presented in Table 2. All activity in the reporting period, regardless of submission date, is presented in Table 3. Many of these activities occurred in alerts submitted into the ERS prior to the reporting period.

Table 1. Information about all ERS alerts

Alert category	Number	Details
Total alerts received (undergoing initial screening)	18,030	
Alerts requiring risk assessment	2,295	12.7% of total alerts screened
Alerts closed after risk assessment	1,684	73.3% of alerts requiring risk assessment
Alerts awaiting conclusion of risk assessment	72	4.3% of alerts requiring risk assessment
Alerts requiring risk management evaluation	539	32% of alerts requiring risk assessment
Alerts logged for consideration at next review of relevant import health standards	166	9.8% of alerts requiring risk assessment 30.8% of alerts requiring risk management evaluation
Alerts resulting in urgent changes to import health standards	51	3% of alerts requiring risk assessment 9.4% of alerts requiring risk management evaluation
Alerts resulting in active monitoring	529	31.4% of alerts requiring risk assessment
Alerts resulting in situational awareness for MPI border staff	86	5.1% of alerts requiring risk assessment

ERS Report for the period 5th September 2020 – 19th March 2021

This Stakeholder Report is the 21th in a series of updates for MPI staff and external stakeholders on the ERS. Appendix 2 provides a summary of all activity and conclusions in the ERS from 5th September 2020 to 19th March 2021).

A complete list of all alerts sent to the ERS since its inception on 31 August 2012 is available in previous Stakeholder Reports: June 2013, August 2013, January 2014, May 2014, October 2014, May 2015, December 2015, June 2016, September 2016, December 2016, March 2017, August 2017, November 2017, March 2018, July 2018, December 2018, June 2019, September 2019, March 2020 and September 2020. Copies are available on request.

Summary of Actions for the period 5th September 2020 – 19th March 2021

From 5th September 2020 – 19th March 2021, 804 potential biosecurity risks were assessed out of which:

- one resulted in an change of an import health standard (IHS);
- two were logged for future IHS amendments; and
- one resulted in the need for situational awareness for border staff.

ERS alerts received during the period covered by this report (5th Sept 2020 – 19th Mar 2021)

Table 2. Initial screening outcome of all ERS alerts received during the period of this report

Alert category	Number	Details
Total alerts received (requiring initial screening)	803	216 related to terrestrial animal health 45 related to aquatic animal health 542 related to plant health
Alerts closed after initial screening	682	84.9% of total alerts screened
Alerts requiring risk assessment	116	14.4% of total alerts screened
Alerts awaiting initial screening	5	0.6% of total alerts screened

Activity in the ERS during the period covered by this report (5th Sept 2020 – 19th Mar 2021)

These activities apply to alerts received both prior to and during the period of this report.

Table 3. All activity in the ERS occurring during the period of this report

Alert category	Number	Details
Alerts completing initial screening	820	
Alerts closed after initial screening	703	85.7% of alerts completing initial screening
Alerts that progressed to risk assessment	117	14.3% of alerts completing initial screening
Alerts completing risk assessment	138	
Alerts closed after risk assessment	100	72.5% of alerts completing risk assessment
Alerts requiring risk management evaluation following risk assessment	38	27.5% of alerts completing risk assessment
Outcome of alerts completing risk management evaluation	14	<ul style="list-style-type: none"> 12 managed by existing standards, no further management action required (though for 11 alerts active monitoring requested, and for 1 alerts situational awareness for border staff requested) 2 logged for amendment consideration at next review of IHS
Alerts resulting in change to IHS	1	
Alerts resulting in active monitoring (22 from alerts closed after risk assessment, 11 after risk management evaluation)	33	
Alerts resulting in situational awareness for border staff (7 from alerts closed after risk assessment, 2 after risk management evaluation)	9	

A few examples of recent alerts are included below. They are some of the alerts that resulted in the need for further risk assessment or a review of risk management, and/or involved organisms that may pose a high risk to New Zealand.

Alert 7793: received 21/02/2021 from a Department of Conservation (DOC) officer, sharing an article reporting the death of captive geckos and skinks on Christmas Island, Australia due to a new bacterium identified as *Enterococcus lacertideformus*.

Conclusion: There are two main open pathways: zoo animals from Australia and “hitchhikers” with passengers, cargo, or mail. The overall risk was assessed to be negligible. However, because of the lack of information available on this new bacteria, regular monitoring of new literature has been initiated. The organism was added to the animal risk assessors’ list of diseases to monitor.

Rationale:

On 21st February 2021 the ERS was notified by an officer working for DOC of reported deaths of captive and critically endangered Lister’s geckos (*Lepidodactylus listeri*) and blue-tailed skinks (*Cryptoblepharus egeriae*) due to the *Enterococcus lacertideformus* bacterium, on Christmas Island, Australia.

Enterococcus lacertideformus is a newly described pathogen and it is unknown if the pathogen is present in New Zealand, Australia, or other international reptile species. According to the literature, the bacterium was identified by microscopy and was characterised using its genome but was unable to be grown in laboratory growth mediums. The disease’s clinical signs are weight loss, facial swelling of soft tissues and listlessness leading to death in all cases.

The likelihood of entry via hitchhiker lizard species is greater than for introduction from zoo lizards. The current and proposed Import Health Standards require that imported lizards have been residents at zoos, with requirements for strict veterinary supervisions and investigation of disease outbreaks. Once the animals for import are selected, they must come from a healthy population and undergo a minimum of 90-day pre-export quarantine period. Once this time has lapsed, they are only imported if they are clinically healthy. The likelihood of entry of this disease from Australian and European zoos is therefore negligible.

It is unknown if native New Zealand lizard and skink species are susceptible to *E. lacertideformus*. However, as Australian native species are prone, there is a possibility the pathogen could affect the rare and environmentally important native lizard and skink species.

The risk assessment identified two possible pathways for entry of the organism into New Zealand: Zoo lizards from Australia (through the current Import Health Standards) and “hitchhiker” (unintentional entry via the cargo, mail or passenger pathways). The overall risk rating assigned to the zoo lizards from Australia pathway was assessed to be negligible. The overall risk rating assigned to the “hitchhiker” pathway was assessed to be non-negligible but difficult to quantify due to the high level of uncertainty surrounding the information available (or lack thereof) on this pathogen. Currently, the border has several methods/processes in place to detect hitchhiker pests such as lizards.

Alert 7175: received on 10/10/2020 from Google Scholar described a virus, tentatively named Actinidia yellowing virus 1 (AcYV1), being isolated from *Actinidia deliciosa* (green kiwifruit) and *A. chinensis* (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province, China.

Conclusion: Entry pathways for AcYV1 are well managed; the emergence of this virus has not significantly increased the risk to New Zealand. The alert initiated a monitoring for new information action.

Rationale: On October 10th, 2020 the ERS was notified by a Google Scholar alert of the isolation of the novel Actinidia yellowing virus 1 (AcYV1) from green and gold kiwifruit (*Actinidia deliciosa* and *A. chinensis*) in Shaanxi Province, China.

Based on the demarcation criteria of the International Committee on Taxonomy of Viruses (ICTV), AcYV1 might be a new member of the genus *Waikavirus* in the family *Secoviridae*. AcYV1 was also detected in some asymptomatic plants.

Potential entry pathways into New Zealand for AcYV1 is nursery stock of host plants. The virus is currently only present in Shaanxi Province of China which has a high climate match with New Zealand. Furthermore, as the host species are grown in high numbers in New Zealand, the potential for the virus to establish and spread is high.

If AcYV1 established in New Zealand, the potential for impacts is high. Kiwifruit is an economically important species for the country as it is a dominant export crop.

The virus is only known from China and import pathways from China are inactive. *Actinidia* nursery stock is required to undergo 20 months in Post Entry Quarantine.

These measures are likely to mitigate risk of AcYV1. The emergence of the novel AcYV1 in China on Kiwifruits has not significantly increased the risk to New Zealand.

Alert 6793-1: received 22/07/2020 from IBIS of *Fusarium verticillioides* (banana fruit rot) found on bananas (*Musa* spp.) grown in Jordan.

Conclusion: Risk from the fungus was considered not be managed by existing standards and risk management is currently underway.

Rationale: On 22nd July 2020 the ERS was notified by IBIS of *Fusarium verticillioides* (banana fruit rot) being found for the first time in Jordan on bananas (*Musa* spp.).

Fusarium verticillioides is a commonly found soil borne fungal species that can be seed transmitted and cause systemic infections in various hosts. It also causes one of the most damaging postharvest diseases of bananas.

Importation of *Musa* spp. infected with *F. verticillioides* would impact many of New Zealand plant-based industries as the fungus has a large host-range which include economically important crops such as maize, wheat, barley, grape, pea, potato and tomato.

Jordan has not previously exported any *Musa* spp. to New Zealand. However, should this change the most likely pathway for entry of *F. verticillioides* into New Zealand is currently the seeds for sowing pathway.

There is a potential for *F. verticillioides* to establish in New Zealand due to the suitability of the climate, wide host availability and ability to persist in all developmental stages within hosts. Establishment would be particularly likely in the warmer northern regions of New Zealand.

Risk management evaluation concluded the required action to be non-urgent as the fungus has been reported on *Musa* spp. from China, Guatemala, Mexico, Congo, Indonesia, Malaysia, Philippines, Thailand and Turkey and *Musa* spp. seeds have not been imported from any of these countries.

Alert 6504: received 15/05/2020 from an MPI staff member to assess if *Tetranychus evansi* (red spider mite) on eggplant (*Solanum melongena*) and beans (*Phaseolus* spp.) from Fiji and sweet corn (*Zea mays*), beans and capsicum (*Capsicum annuum*) from Australia are unmanaged pathways.

Conclusion: The potential entry pathways for *T. evansi* were deemed to be managed by basic measures. However, as the species has not been reported from fresh produce at the border and has been detected from Auckland (in three separate locations), situational awareness for the border will be required to report on non-compliance or any failure of existing measures.

Rationale: On 15nd May 2020 the ERS was notified by an MPI staff member to assess if targeted measures for *Tetranychus evansi* (red spider mite) are required on eggplant (*Solanum melongena*) and beans (*Phaseolus* spp.) from Fiji and sweet corn (*Zea mays*), beans and capsicum (*Capsicum annuum*) from Australia.

Adult red spider mites are small (0.3-0.5 mm) and can vary in colour from light orange to deep orange red or brown. The mites are a major pest of solanaceous crops, especially tomato and eggplant in greenhouses. Feeding punctures results in leaf wilting and drop and the plants may die as a result of severe infestations. The mite's rapid development and high fecundity lead to quick population growth and result in significant economic damage.

There is a high potential for entry into New Zealand. The mite can be found on fresh tomato, beans and capsicum. It is present in Queensland, Australia from where there are frequent imports of host commodity. There is no evidence suggesting that the mite is present in Fiji. The mite is very difficult to detect without a magnifier.

If *T. evansi* established in New Zealand, the potential for impacts is high. Many of the solanaceous species listed as hosts (e.g. tomato, potato) are important crops in New Zealand.

The mite is present in areas with similar climate conditions and to New Zealand, and a wide range of hosts are present in New Zealand.

Risk from the mite was found to require situational awareness at the border and will require monitoring for new information in the future.

Alert 6544-1: received 27/05/2020 from the European Plant Protection Organisation (EPPO) regarding the first report of *Pepino mosaic virus* (PepMV) in commercial tomatoes (*Solanum lycopersicum*) crops in Israel.

Conclusion: Risk from the virus was considered not be managed by existing standards. Risk management is currently underway and monitoring for new information will be undertaken.

Rationale: On 27th May 2020 the ERS was notified by EPPO on the first report of *Pepino mosaic virus* (PepMV) in commercial tomatoes (*Solanum lycopersicum*) crops in Israel.

Described on pepino (*Solanum muricatum*), the virus mainly affects glasshouse tomatoes. The experimental host range includes mostly solanaceous plants, including potato and tobacco. Symptoms include yellow mosaic in young leaves of pepino, fruit discolouration, yellow spots on leaves, mild interveinal chlorosis and in some cases minor leaf malformations on tomatoes. Natural infections have never been observed in potato crops.

PepMV is transmitted by contact of contaminated tools, hands, clothing, direct plant to plant contact, and propagation (grafting, cuttings), as well as by seeds.

Potential to enter New Zealand is considered to be moderate to high. There are open and active seeds for sowing pathways with only basic measures in place. PepMV is seed transmitted and *Solanum lycopersicum* and *S. muricatum* are major hosts of the virus. While PepMV is a quarantine pest for *S. lycopersicum* seeds, it is not for *S. muricatum* which only has basic measures in place. Several other minor and wild hosts also only have basic measures in place.

Potential impacts of the virus, if it were to establish, are also moderate to high. Tomatoes are an important host for the PepMV virus, along with other *Solanum* species. Tomatoes are an economically important industry in NZ and the PepMV has the potential to impact this industry.

Required action was considered to be non-urgent as risk from PePMV is managed on host from the alert (tomato) and other solanaceous plant hosts such as potato have only been observed under experimental conditions. PePMV is not managed on other hosts therefore the situation will need to be monitored for change in risk on these hosts.

Appendix 1 Background - MPI Emerging Risks System - Biosecurity

WHAT:

The MPI Emerging Risks System for Biosecurity (ERS) is a centralised system, to provide a systematic intelligence-led approach that enables early prioritisation and coordination of risk based interventions for new and emerging biosecurity risks across MPI and industry.

The MPI ERS monitors the flow and uptake of information of potential emerging biosecurity risk, including actions taken by risk analysts and risk managers.

FOCUS:

The current focus of the MPI ERS is information that signals significant changes to the distribution, hosts, or virulence of exotic organisms of biosecurity concern. It covers risks affecting plants and animals (terrestrial or aquatic) or organisms that may carry human disease.

Regular reporting across the Ministry and external stakeholders provides the information to identify key emerging risks and the coordination of risk based interventions.

WHEN:

The MPI ERS was implemented in August 2012. It is under continuous improvement.

WHY:

Identifying potential and emerging threats is an important component of effective biosecurity risk management. Staff from across MPI have historically kept watch on new and emerging pests and diseases. Doing this in a coordinated way and ensuring appropriate action was being taken was, however, challenging. The MPI ERS provides a clear entry point for emerging risk information from staff, stakeholders and other sources to enter the organisation, be properly assessed, and have appropriate action taken. Importantly, it also provides a mechanism to communicate emerging risks to stakeholders so they also have an opportunity to consider and take appropriate action within their own sphere of influence.

HOW:

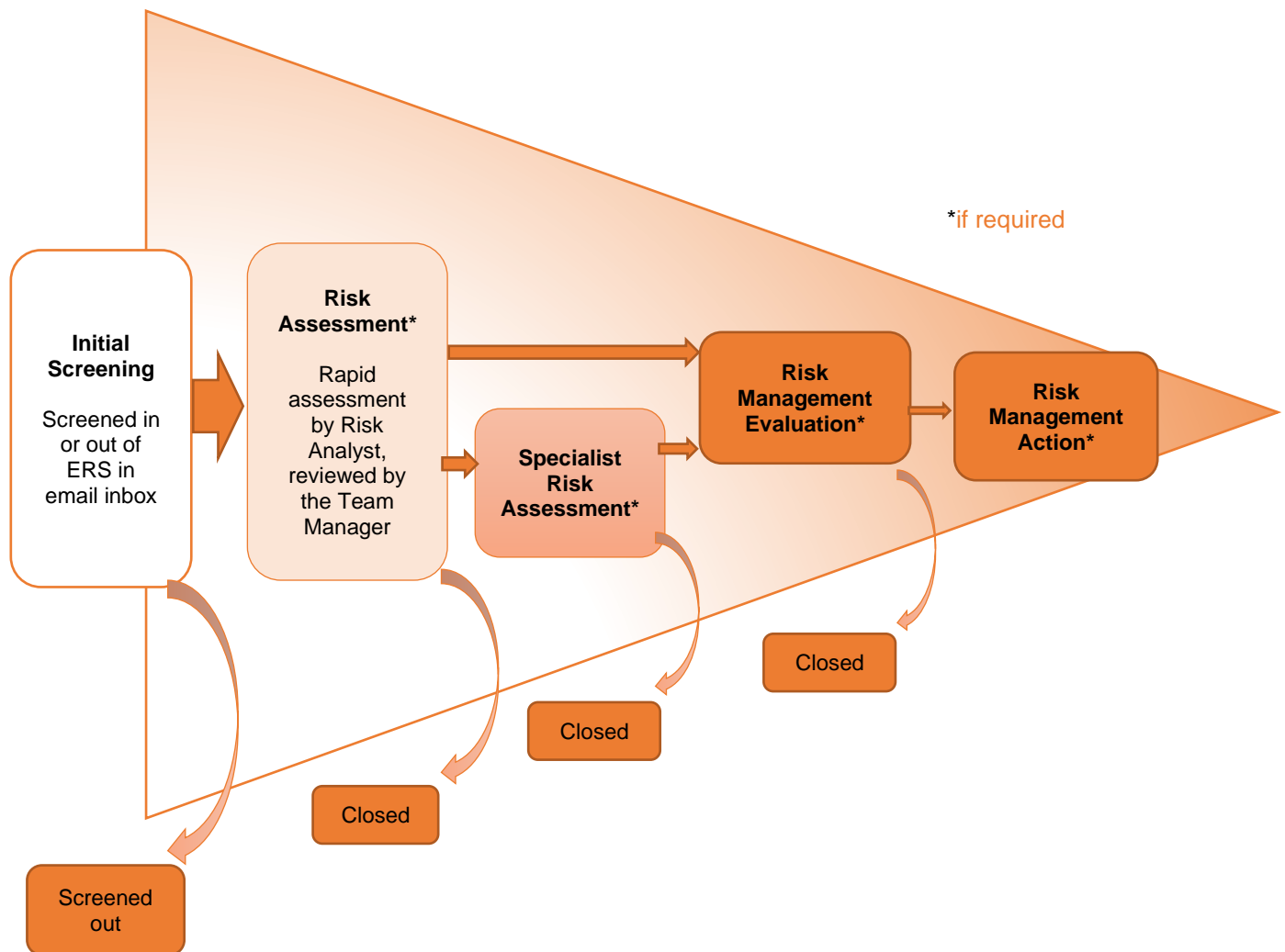
The MPI Emerging Risks System for Biosecurity enables every New Zealander to engage with the system and be biosecurity-conscious. The emergingrisks@mpi.govt.nz enables you to submit any new information about a potential new pest that could impact your industry, and/or New Zealand's Biosecurity System.

Industry members are key contributors of alerts to the MPI ERS. These alerts are prioritised in the MPI ERS as experience has taught us that this is the most valuable information to inform the MPI ERS of emerging biosecurity risks.

Risk management action is undertaken if the alert signals an increased risk to New Zealand biosecurity. An example of action is the amendment to a schedule of an import health standard to manage the changed risk.

Refer to "The Emerging Risks System for Biosecurity – Process Diagram (overleaf).

THE EMERGING RISK SYSTEM FOR BIOSECURITY - PROCESS



Steps involved in the ERS Process:

1. Initiation by the submission of an email. External stakeholders and MPI staff members are all contributors to the MPI ERS. In addition, the following global electronic notification systems provide alerts into ERS:
 - EPPO (European and Mediterranean Plant Protection Organization) alerts,
 - IBIS (International Biosecurity Intelligence System) alerts;
 - PestLens – a United States Department of Agriculture exotic plant pest monitoring system that provides timely information to support informed safeguarding against pests that threaten U.S. agriculture and natural resources);
 - ProMed (Program for Monitoring Emerging Diseases) – an Internet-based reporting system dedicated to rapid global dissemination of information on outbreaks of infectious diseases and acute exposures to toxins that affect human health, including those in animals and in plants grown for food or animal feed);
 - Plant Science Scan – a Canadian Food Inspection Agency, Plant Health Science Division scan of external sources for information that might be of regulatory significance or interest to Canada’s national plant health.
2. Initial screening of multiple information sources is carried out according to a science-based filter using specified criteria. The alert is either screened in or out based on whether: we are aware of the information already; the information concerns something of value in New Zealand, or; it concerns a change in distribution or host, etc.

3. If an alert is not closed after initial screening, a risk assessment is undertaken to determine whether there is an increase in the risk profile for the biosecurity of New Zealand.
4. If the alert signals any change in risk profile, risk management evaluation is undertaken by risk managers to determine whether current risk measures are sufficient for an emerging risk. An assessment is made of what action (if any) may be needed (off-shore, at the border, or in readiness and response planning).
5. If further risk assessment of the alert information is required (either by the original risk analyst or the risk manager), the alert is progressed to a specialist risk analyst.
6. If the alert does not currently signal an increased risk to New Zealand biosecurity (e.g. measures are already in place to manage risk), the alert is recorded and closed.
7. When an alert is closed, regardless of the stage at which it was closed and the outcome, the submitter (if it was an individual rather than an automated alert system) is notified of the outcome and the rationale behind it.
8. Regular reporting to stakeholders to identify key emerging risks and for the coordination of risk based interventions.

The Risk Management Evaluation by risk managers involves checking a number of sources to consider:

- Are there any identified hosts or associated products that are eligible for import under a valid import health standard (IHS)?
- Are there already specific pre-export, on-shore (border) or off-shore measures in place that would appropriately manage the emerging risk?
- Does an IHS need to be amended, revoked or suspended? Are amendments required urgently?
- Do procedures at the border require urgent amendments?
- Are there commodities in transit to NZ that we need to action on?
- Are we already sufficiently prepared? If not, is the residual risk sufficient to warrant preparedness actions?
- Are there other factors that make action advisable?
- What communications are required and what audience needs to be targeted (includes internal, external stakeholders – exporters, importers, NPPO's, Minister, MPI Officials etc.)?
- Do stakeholders need to be involved in this decision?

HOW YOU CAN HELP:

Email any new information of potential emerging biosecurity risks directly into the ERS, EmergingRisks@mpi.govt.nz.

As a guide we would be particularly interested in events that in your experience, or noted through your contacts, might be “significant” changes to the number, distribution, hosts, or epidemiology of exotic organisms of biosecurity concern. For example: witnessing outbreaks in unusual circumstances overseas on plants or animals that are in New Zealand; receiving reports of pests and diseases occurring on new hosts that have not been seen before; or outbreaks of disease in new animal populations overseas. Early alerts to these situations provide an opportunity to more effectively respond to and communicate these new risks.

As the scope of the system expands to cover biosecurity impacts and potential new pathway information, we will be interested to receive information on any big changes to the way we do

business in New Zealand where this may impact on our biosecurity risk profile. For example, large scale changes that may mean we might import higher volumes of particular commodities or cultivate new animal or plant varieties on a wider scale.

The first step in the ERS screens multiple information sources according to a science-based filter that uses specified criteria. The Risk Analyst receives and assesses the “alert” against specified criteria, which include:

- Have we looked at this before?
- What has changed?
- What is the potential for organism establishment and impact?
- Are there viable pathways?
- What does the information mean about the risk? Has it changed substantially?
- Is it worth considering further?
- Is it urgent?

Where the information does not indicate a significant emerging risk, the alert is closed and the information filed.

VALUE OF THE MPI EMERGING RISKS SYSTEM – BIOSECURITY

- Has systematically increased the rate at which MPI is informed of new information on pests and diseases associated with commodities. There is a significant amount of new information signaling pests and diseases associated with imports which is captured by the centralized process of ERS, and then communicated to the right people.
- Has highlighted that for certain animal or plant species (e.g. grapes) our knowledge of associated risks is changing radically (new information, new pathways).
- Has been used systematically as a source of information by some Risk Managers to consider whether new risks have arisen when issuing permits under import health standards.
- Has resulted in streamlining the communication of emerging risk information to relevant parties – resulting in a less scatter-gun communication and response (with decreased duplication of risk assessment).
- Has facilitated some amendments to MPI’s current measures in response to emerging risks processed by the system.
- Is providing confidence that MPI’s risk management programme is adapting to the changing environment of emerging risk information.
- Is continuously improving including: the refining of decision criteria throughout the system; increasing the Administrator’s role in monitoring system performance; evaluation of system performance by Quality Assurance reviews, and the establishment of system evaluation discussions between Risk and Risk Management.
- Provides the opportunity to apply a quality assurance process to MPI’s identification and management of emerging risks.

APPENDIX 2

ERS - Summary of actions and conclusions of emerging risk alerts (5th September 2020 – 19th March 2021)

Risk management has been undertaken

Risk management action is undertaken when the alert signals an increased risk to New Zealand biosecurity. Amendment to a schedule of an Import Health Standard has been undertaken to manage the changed risk.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Import Health Standard changed	Tracking #	Date of contribution to ERS
Plant health	<i>Tomato apical stunt viroid</i> (TASVd)	Viroid	<i>Solanum lycopersicum</i> (tomato)	New research/awareness: Australian Department of Agricultural and Water Resources draft pest risk analysis for Pepino mosaic virus and pospiviroids (<i>Columnea latent viroid</i> , <i>Pepper chat fruit viroid</i> , <i>Tomato apical stunt viroid</i> , <i>Tomato chlorotic dwarf viroid</i> and <i>Tomato planta macho viroid</i>) associated with tomato seed.	IHS 155.02.05: Seeds for Sowing	3548-1	8/08/2018

Risk management changes will be considered at the next review of Import Health Standard

The changed risk is not covered by an existing standard, however the affected commodity is not currently imported from countries/regions that pose a risk. The changed risk is logged for amendment consideration of Import Health Standard at next review. In the meantime it is managed on an import-by-import basis.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant Health	<i>Tomato chlorosis virus</i> (ToCV)	Virus	Multiple	New host association: in Egypt, 52 plant species in 22 families growing in the vicinity of tomatoes infected with <i>Tomato chlorosis virus</i> (ToCV) were tested for ToCV. Forty-four species tested positive for ToCV, of which 37 were considered new hosts.	6579-1	8/06/2020
Plant Health	Camellia japonica associated emaravirus 1 (CjEV1)	Virus	<i>Camellia sinensis</i> (tea)	Change in distribution: first report of the emaravirus <i>Camellia japonica</i> associated emaravirus 1 (CjEV1) in China. Found on symptomatic <i>Camellia sinensis</i> (tea) in plants.	6858-1	7/08/2020

Alerts used for situational awareness to assist border staff

Additional information from assessed alerts was passed on to assist border staff for their situational awareness.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant health	<i>Tetranychus evansi</i> (red spider mite)	Arachnid	<i>Zea mays</i> (maize); <i>Phaseolus</i> spp. (beans); <i>Capsicum annuum</i> (pepper); <i>Solanum melongena</i> (eggplant)	New/change in pathway: Eggplant (<i>Solanum melongena</i>) and beans (<i>Phaseolus</i> spp.) from Fiji and sweet corn (<i>Zea mays</i>), beans (<i>Phaseolus</i> spp.) and capsicum (<i>Capsicum annuum</i>) from Australia may be an unmanaged pathway for <i>Tetranychus evansi</i> and may require targeted measures.	6504	15/05/2020
Plant health	<i>Vespa mandarinia</i> (Asian giant hornet)	Insect	n/a	New research/New awareness:a live <i>Vespa mandarinia</i> (Asian giant hornet) queen has been found in Bellingham (06/06/2020), Washington State, USA; and one live individual in Langley Township (25/05/2020), British Columbia, Canada suggesting they have survived overwintering in these locations. Additionally, genetic studies suggest that the AGH found in the USA originated from South Korea, while those found in Canada are from Japan.	6637	22/06/2020
Plant health	<i>Solenopsis invicta</i> (red imported fire ant, RIFA)	Insect	n/a	New Country post border detection/incursion: approximately 1000 red imported fire ants (<i>Solenopsis invicta</i>) including queens and brood intercepted on a vessel ex-China unloading freight at Chiba Port Japan	6640	24/06/2020
Plant health	<i>Nipaecoccus viridis</i> (spherical mealybug)	Insect	<i>Citrus</i> spp. (citrus)	New research/new awareness: <i>Nipaecoccus viridis</i> affecting citrus in the US.	6755	14/07/2020
Plant health	<i>Bactrocera tryoni</i> (Queensland fruit fly)	Insect	n/a	New country post border detection/incursion: Outbreaks of Queensland fruit fly (<i>Bactrocera tryoni</i>) have been declared in the Riverland (South Australia) and Coolbellup regions of Australia.	7621	11/01/2021
Plant health	<i>Ceratitis capitata</i> (Mediterranean fruit fly)	Insect	n/a	New or change in pathway/commodity type: in metropolitan Adelaide, Australia, there are a number of <i>Ceratitis capitata</i> (Mediterranean fruit fly) outbreaks, including some that overlap.	7679	15/01/2021
Plant health	<i>Groundnut bud necrosis virus</i> (GBNV)	Virus	<i>Anthurium andraeanum</i> (flamingo lily)	New host association: First report of the <i>Groundnut bud necrosis virus</i> (GBNV) infecting <i>Anthurium andraeanum</i> (flamingo lily) in India. Infected plants showed symptoms necrosis on leaves and spathe and spathe malformation.	6244-2	13/03/2020
Plant health	<i>Hot pepper alphaendornavirus</i> (HPEV)	Virus	<i>Capsicum annuum</i> (pepper)	New research/new awareness: a paper reviewing plantviruses that infect Solanaceae family members lists a number of "recently described" viruses that have not been assessed in the Emerging Risks System, including <i>Hot pepper alphaendornavirus</i> (HPEV), with the host plant listed as chilli pepper (<i>Capsicum frutescens</i>).	6584-1	31/05/2020
Plant health	Unknown (plant seeds, species unknown)	Unknown	Unknown	New or change in Pathway/Commodity type: Public notices about unsolicited mail shipments of unidentified seeds from China have been issued by agriculture officials in 27 US states.	6838	29/07/2020

Active monitoring set up to inform ERS as new information becomes available

The potential risk is of no immediate concern but is worth monitoring for change – ‘Active monitoring’ has been set up.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant health	<i>Pseudomonas allii</i>	Bacterium	<i>Allium cepa</i> (onion)	Newly described organism/taxon: New bacterium, <i>Pseudomonas allii</i> (Gammaproteobacteria: Pseudomonadales) causing sot rot in <i>Allium cepa</i> (onions), described from Japan.	7520	11/12/2020
Plant health	<i>Dickeya undicola</i>	Bacterium	n/a	Newly described organism / taxon: A new pectobacterium (<i>Dickeya undicola</i>) has been isolated from surface waters in Europe and Asia. Under laboratory conditions it can cause maceration symptoms in potato tubers and onions.	7531	15/12/2020
Animal health	<i>Enterococcus lacertideformus</i>	Bacterium	Order Squamata	Email from DOC Scientific Officer (Biosecurity) regarding an article reporting the death of captive geckos and skinks on Christmas Island (Australia) due to a new bacterium <i>Enterococcus lacertideformus</i> .	7793	12/02/2021
Plant health	<i>Xylella fastidiosa</i> (Pierce's disease of grapevines)	Bacterium	<i>Amaranthus retroflexus</i> (redroot amaranth); <i>Artemisia</i> sp. (sagebrush); <i>Calicotome</i> sp.	New research/ awareness: Thirty-seven (37) new plant species added to host list of <i>Xylella fastidiosa</i> by EFSA Panel on Plant health	6408-2	29/04/2020
Animal health	<i>Enterococcus lacertideformus</i>	Bacterium	Order Squamata	Email from DOC Scientific Officer (Biosecurity) regarding an article reporting the death of captive geckos and skinks on Christmas Island (Australia) due to a new bacterium <i>Enterococcus lacertideformus</i> .	7793-1	12/02/2021
Plant health	<i>Botrytis polygoni</i>	Fungus	<i>Fagopyrum esculentum</i> (buckwheat); <i>Fagopyrum tataricum</i> (Tartary buckwheat); <i>Fallopia convolvulus</i>	Newly described organism/taxon: New fungus species, <i>Botrytis polygoni</i> (Leotiomyces: Helotiales), described from China, isolated from <i>Fagopyrum esculentum</i> (buckwheat), <i>F. tataricum</i> (Tartary buckwheat), and <i>Fallopia convolvulus</i> (black bindweed) plants.	7553	18/12/2020
Plant health	<i>Chrysosporthe puriensis</i>	Fungus	<i>Tibouchina</i> spp.; <i>Eucalyptus grandis</i> x <i>Eucalyptus urophylla</i> ; <i>Eucalyptus</i> spp. (gums)	Newly described organism/taxon: <i>Chrysosporthe puriensis</i> sp. nov. fungus is associated with <i>Tibouchina</i> spp. (Melastomataceae) in Brazil: an emerging threat to Eucalyptus.	7705	22/01/2021
Plant health	<i>Didymella corylicola</i>	Fungus	Corylaceae; <i>Corylus avellana</i> (hazel)	Newly described species/taxon: new fungus species, <i>Didymella corylicola</i> (Dothideomycetes: Pleosporales), described from Italy. Isolated from <i>Corylus avellana</i> (hazel) trees exhibiting fruits with damaged and discoloured kernels.	7788	12/02/2021
Plant health	<i>Thanatephorus cucumeris</i>	Fungus	<i>Actinidia</i> spp. (kiwifruit)	New host association: <i>Thanatephorus cucumeris</i> (syn. <i>Rhizoctonia solani</i>) causing blight on kiwifruit roots and seedlings in China.	7884	3/03/2021
Plant health	<i>Phomopsis vexans</i> (Phomopsis blight of eggplant)	Fungus	<i>Capsicum annuum</i> (pepper)	Other: Mexico has notified the WTO SPS of measures to manage <i>Phomopsis vexans</i> (Phomopsis blight of eggplant) on capsicum (<i>Capsicum annuum</i>) seeds originating in Brazil.	7259-1	29/10/2020
Plant health	<i>Scirtothrips aurantii</i> (South African citrus thrips)	Insect	<i>Citrus</i> spp. (citrus)	Change in distribution: First report of <i>Scirtothrips aurantii</i> (South African citrus thrips) in Huelva (Andalusia), Spain. The pest is currently under official control.	7667	13/01/2021
Plant health	<i>Albugo koreana</i>	Oomycete	<i>Camelina sativa</i> (camelina)	Change in distribution/New host association: First report of the oomycete <i>Albugo koreana</i> (Incertaedis: Albuginales) in China, and first record on <i>Camelina sativa</i> .	7823	26/02/2021

Plant health	<i>Candidatus</i> Phytoplasma solani' (SrXII-Astolbur)	Phytoplasma	<i>Daucus carota</i> (carrot)	New research/awareness: New evidence of seed transmission of <i>Candidatus</i> Phytoplasma solani (16SrXii-A stolbur) in carrots (<i>Dacus carota</i>) in Serbia.	7290	2/11/2020
Plant health	' <i>Candidatus</i> Phytoplasma stylosanthis' (SrXXXVII-A)	Phytoplasma	<i>Carica papaya</i> (papaya); <i>Solanum tuberosum</i> (potato); <i>Saccharum officinarum</i> (sugarcane); <i>Medicago sativa</i> (alfalfa)	Newly described organism/taxon: New phytoplasma, ' <i>Candidatus</i> Phytoplasma stylosanthis', described from Australia associated with <i>Solanum tuberosum</i> (potato), <i>Carica papaya</i> (papaya), <i>Saccharum officinarum</i> (sugarcane), and <i>Medicago sativa</i> (alfalfa).	7573	24/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	This alert was created to supplement alert 7070 which was closed. The original case was to alert of the first case of classical CWD (Chronic Wasting Disease) in reindeer identified outside the Nordfjella zone 1 (Norway), where the disease was first detected in 2016. Extra information will be collated in the Risk Assessment section regarding CWD in commodities from Norway and other affected countries.	7358	17/11/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542	13/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542-1	13/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542-2	13/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542-3	13/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542-4	13/12/2020
Animal health	<i>Babesia microti</i>	Protozoan	Felidae; Canidae	The surveillance team has raised and ERS awareness on the potential entry pathway of <i>Babesia microti</i> into New Zealand through importation of cats and dogs, through their email dated 3 August 2020.	6844	3/08/2020
Plant health	Apple chlorotic fruit spot viroid (ACFSVd)	Viroid	<i>Malus</i> sp. (apple)	New research/awareness: Transmission studies of the newly described apple chlorotic fruit spot viroid indicate that the viroid is effectively transmitted by grafting, budding and seed.	6744-1	11/07/2020
Plant health	Actinidia yellowing virus 1 (AcYV)	Virus	<i>Actinidia chinensis</i> (gold kiwifruit); <i>Actinidia deliciosa</i> (green kiwifruit)	Newly described organism/taxon: a newly described virus, potentially in the genus Waikavirus and tentatively named Actinidia yellowing virus 1 (AcYV1) has been isolated from both <i>Actinidia deliciosa</i> (green kiwifruit) and <i>A. chinensis</i> (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province of China.	7175	10/10/2020
Plant health	Actinidia yellowing virus 2 (AcYV)	Virus	<i>Actinidia chinensis</i> (gold kiwifruit); <i>Actinidia deliciosa</i> (green kiwifruit)	Newly described organism/taxon: a newly described virus, potentially in the family Tombusviridae and tentatively named Actinidia yellowing virus 2 (AcYV2) has been isolated from both <i>Actinidia deliciosa</i> (green kiwifruit) and <i>A. chinensis</i> (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province of China.	7176	10/10/2020
Plant health	<i>Emaravirus</i> (infecting <i>Quercus robur</i>)	Virus	<i>Quercus robur</i> (English oak)	Newly described organism/taxon: Identification of an <i>Emaravirus</i> in a common oak (<i>Quercus robur</i>) conservation seed orchard in Germany.	7323	10/11/2020

Plant health	<i>Tea plant necrotic ring blotch virus</i> (TPNRBV)	Virus	<i>Camellia sinensis</i> (tea)	Newly described organism/taxon: A novel Blunervirus species, <i>Tea plant necrotic ring blotch virus</i> (TPNRBV), was isolated from <i>Camellia sinensis</i> (tea) plants with leaf discoloration symptoms typical of viral infection, in Zhejiang province, China.	7568	23/12/2020
Plant health	Tea plant line pattern virus (TPLPV)	Virus	<i>Camellia sinensis</i> (tea)	Newly described organism/taxon: A novel Ilarvirus species, Tea plant line pattern virus (TPLPV), was isolated from <i>Camellia sinensis</i> (tea) plants with leaf discoloration symptoms typical of viral infection, in Zhejiang province, China.	7569	23/12/2020
Plant health	<i>Camellia japonica</i> associated emaravirus (CjEV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new Emaravirus, <i>Camellia japonica</i> associated emaravirus 2 (CjEV2), was isolated from <i>Camellia japonica</i> plants with variegation symptoms (principally on leaves, sometimes on colored flowers) in Italy.	7579	24/12/2020
Plant health	<i>Camellia japonica</i> associated betaflexivirus (CjBV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new Betaflexivirus, <i>Camellia japonica</i> associated betaflexivirus 1 (CjBV1) was isolated from <i>Camellia japonica</i> plants with variegation symptoms (principally on leaves, sometimes on colored flowers) and asymptomatic <i>Camellia japonica</i> plants in Italy.	7580	24/12/2020
Plant health	<i>Camellia japonica</i> associated betaflexivirus (CjBV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new Betaflexivirus, <i>Camellia japonica</i> associated betaflexivirus 2 (CjBV2) was isolated from <i>Camellia japonica</i> (Japanese camellia) plants with variegation symptoms (principally on leaves, sometimes on colored flowers) and asymptomatic <i>Camellia japonica</i> plants in Italy.	7581	24/12/2020
Plant health	<i>Groundnut bud necrosis virus</i> (GBNV)	Virus	<i>Anthurium andraeanum</i> (flamingo lily)	New host association: First report of the <i>Groundnut bud necrosis tospovirus</i> (GBNV) infecting <i>Anthurium andraeanum</i> (flamingo lily) in India. Infected plants showed symptoms necrosis on leaves and spathe and spathe malformation.	6244-2	13/03/2020
Plant health	<i>Pepino mosaic virus</i> (PepMV)	Virus	<i>Solanum lycopersicum</i> (tomato)	New country post border detection/incursion: first report of <i>Pepino mosaic virus</i> (PepMV) in commercial tomatoes (<i>Solanum lycopersicum</i>) crops in Israel.	6544-1	27/05/2020
Plant health	<i>Camellia japonica</i> associated betaflexivirus (CjBV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new Betaflexivirus, <i>Camellia japonica</i> associated betaflexivirus 2 (CjBV2) was isolated from <i>Camellia japonica</i> (Japanese camellia) plants with variegation symptoms (principally on leaves, sometimes on colored flowers) and asymptomatic <i>Camellia japonica</i> plants in Italy.	7581-1	24/12/2020

Alerts passed to risk managers for further evaluation

Alerts that have undergone risk assessment and were passed to Risk Managers to determine whether additional risk management measures are required.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant health	<i>Enterobacter mori</i>	Bacterium	<i>Morus alba</i> (white mulberry)	New research/new information: <i>Enterobacter mori</i> was previously described from <i>Morus alba</i> and has recently been isolated from kiwifruit showing wilting symptoms in southern China - Potential entry pathways on <i>Morus</i> should be assessed.	6829	28/07/2020
Plant health	<i>Pseudomonas brassicae</i>	Bacterium	<i>Brassica oleracea</i> var. <i>italica</i> (sprouting broccoli)	Newly described organism/taxon: a newly described bacterium <i>Pseudomonas brassicae</i> causing water soaking and head rot symptoms in <i>Brassica oleracea</i> var. <i>italica</i> (broccoli) has been described from Japan.	7087	18/09/2020
Plant health	<i>Pseudomonas syringae</i> pv. <i>actinidiae</i> (bacterial canker of kiwifruit, Psa)	Bacterium	<i>Broussonetia papyrifera</i> (paper mulberry)	New host association: first report of the bacterium <i>Pseudomonas syringae</i> pv. <i>actinidiae</i> infecting <i>Broussonetia papyrifera</i> (paper mulberry). Reported from China.	7198	23/10/2020
Plant health	<i>Xanthomonas perforans</i> (bacterial spot of tomato)	Bacterium	<i>Solanum lycopersicum</i> (tomato); <i>Capsicum annuum</i> (pepper)	Other: Mexico has notified the WTO SPS of measures to manage <i>Xanthomonas perforans</i> (bacterial spot of tomato) on capsicum (<i>Capsicum annuum</i>) and tomato (<i>Solanum lycopersicum</i>) seeds originating in Brazil.	7256	29/10/2020
Plant health	<i>Acidovorax citrulli</i>	Bacterium	<i>Solanum lycopersicum</i> (tomato); <i>Solanum melongena</i> (eggplant)	Change in distribution/new host association: First report of <i>Acidovorax citrulli</i> on tomato (<i>Solanum lycopersicum</i>) seedlings in Greece.	7761	5/02/2021
Animal health	<i>Enterococcus lacertideformus</i>	Bacterium	Order Squamata	Email from DOC Scientific Officer (Biosecurity) regarding an article reporting the death of captive geckos and skinks on Christmas Island (Australia) due to a new bacterium <i>Enterococcus lacertideformus</i> .	7793	12/02/2021
Plant health	<i>Xylella fastidiosa</i> (Pierce's disease of grapevines)	Bacterium	<i>Brachyglottis compacta</i> (Castlepoint daisy); <i>Clianthus puniceus</i> (kaka beak); <i>Gahnia</i> sp.; <i>Oleria traversiorum</i> ; <i>Pachystegia insignis</i> ; <i>Phyllocladus alpinus</i> ; <i>Pomaderris edgerleyi</i> ; <i>Veronica parviflora</i> ; <i>Calystegia soldanella</i> ; <i>Isotoma fluviatilis</i>	New host association of <i>Xylella fastidiosa</i> with New Zealand native species, eight of which are validated (<i>Brachyglottis compacta</i> , <i>Clianthus puniceus</i> , <i>Gahnia</i> sp., <i>Oleria traversiorum</i> , <i>Pachystegia insignis</i> , <i>Phyllocladus alpinus</i> , <i>Pomaderris edgerleyi</i> , <i>Veronica parviflora</i> , <i>Calystegia soldanella</i> and <i>Isotoma fluviatilis</i>).	7829	1/03/2021
Plant health	<i>Fusarium verticilloides</i> (Banana fruit rot)	Fungus	<i>Musa</i> sp. (banana, plantain)	New or change in Pathway/Commodity type - This alert is the first report of the fungus <i>Fusarium verticilloides</i> on bananas grown in Jordan.	6793	22/07/2020
Plant health	<i>Phoma destructiva</i> (fruit and stem rot)	Fungus	<i>Capsicum annuum</i> (pepper)	New research/ New awareness: Peru have notified the WTO/SPS of measures put in place for <i>Phoma destructiva</i> (fruit and stem rot) on <i>Capsicum annuum</i> seeds for sowing from China.	6851	5/08/2020
Plant health	<i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (fusarium wilt)	Fungus	<i>Capsicum annuum</i> (pepper)	Other: Mexico has notified the WTO SPS of measures to manage <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (fusarium wilt) on capsicum (<i>Capsicum annuum</i>) seeds originating in Brazil.	7258	29/10/2020

Plant health	<i>Phomopsis vexans</i> (Phomopsis blight of eggplant)	Fungus	<i>Capsicum annuum</i> (pepper)	Other: Mexico has notified the WTO SPS of measures to manage <i>Phomopsis vexans</i> (Phomopsis blight of eggplant) on capsicum (<i>Capsicum annuum</i>) seeds originating in Brazil.	7259	29/10/2020
Plant health	<i>Fusarium oxysporum</i> f. sp. <i>cannabis</i>	Fungus	<i>Cannabis sativa</i> (cannabis)	New reasearch/ awareness: Costa Rica have put measures in place for <i>Fusarium oxysporum</i> f. sp. <i>cannabis</i> on import of <i>Cannabis</i> seeds for sowing from all countries.	7361	2/09/2020
Plant health	<i>Chrysoporthe austroafricana</i> (chrysoporthe canker/eucalyptus canker)	Fungus	<i>Eucalyptus</i> spp. (gums); <i>Corymbia</i> spp. (gums)	Other: Australia has published their national list of exotic environmental pests, weeds and diseases.	7627	12/01/2021
Plant health	<i>Colletotrichum tropicale</i>	Fungus	<i>Persea americana</i> (avocado); <i>Passiflora edulis</i> (passionfruit)	New host association: first report of the anthracnose fungus <i>Colletotrichum tropicale</i> (Sordariomycetes: Glomerellales) infecting <i>Persea americana</i> (avocado) and <i>Passiflora edulis</i> (passionfruit). Reported from Mexico (avocado) and Brazil (passionfruit).	7743	29/01/2021
Plant health	<i>Diaporthe angelicae</i>	Fungus	<i>Daucus carota</i> (carrot)	New research/new awareness: from 30 March 2021 the Australian government will require all consignments of <i>Daucus carota</i> (carrot) seed for sowing imported into Australia to be treated with a broad spectrum fungicide to manage the risk of the fungal pathogen <i>Diaporthe angelicae</i> .	7790	11/02/2021
Plant health	<i>Cercospora foeniculi</i>	Fungus	<i>Foeniculum vulgare</i> (fennel)	New research/new awareness: from 30 March 2021 the Australian government will require all consignments of <i>Foeniculum vulgare</i> (fennel) seed for sowing imported into Australia to be treated with a broad spectrum fungicide to manage the risk of the fungal pathogen <i>Cercospora foeniculi</i> .	7791	11/02/2021
Plant health	<i>Bactrocera zonata</i> (peach fruit fly)	Insect	Unknown	Change in Distribution: The peach fruit fly <i>Bactrocera zonata</i> has been detected for the first time in Chowchilla Madera County, California USA.	7187	13/10/2020
Plant health	<i>Choristoneura rosaceana</i> (oblique-banded leafroller)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Choristoneura rosaceana</i> (oblique-banded leafroller).	7230	26/10/2020
Plant health	<i>Trogoderma granarium</i> (Khapra beetle)	Insect	Stored products (dried)	Change in distribution: Khapra beetle (<i>Trogoderma granarium</i>) found in dried fruits from Uzbekistan in Russia.	7500	7/12/2020
Plant health	<i>Bactrocera tryoni</i> (Queensland fruit fly)	Insect	n/a	New country post border detection/incursion: Outbreaks of Queensland fruit fly (<i>Bactrocera tryoni</i>) have been declared in the Riverland (South Australia) and Coolbellup regions of Australia.	7621	11/01/2021
Plant health	<i>Homalodisca vitripennis</i> (glassy winged sharpshooter)	Insect	<i>Citrus</i> spp. (citrus)	New research/new awareness: insecticide resistance in California populations of the glassy-winged sharpshooter <i>Homalodisca vitripennis</i> .	7672	14/01/2021
Plant health	<i>Albugo candida</i> (white rust)	Oomycete	<i>Brassica oleracea</i> var. <i>italica</i> (sprouting broccoli)	New research/New awareness: Reports from 2004 and 2013 indicate that <i>Albugo candida</i> , causal agent of white blister rust in <i>Brassica</i> spp. may be seed transmissible in broccoli (<i>Brassica oleracea</i> var. <i>italica</i>).	6633	19/06/2020
Plant health	Gene-edited plant germplasm	Plant	n/a	New or change in pathway/commodity type: gene-edited Petunia (<i>Petunia x atkinsiana</i>) varieties and gene edited barley (<i>Hordeum vulgare</i>) varieties have been deemed non-GMO's by the USDA.	7047	4/09/2020

Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	News item reporting that CWD (Chronic Wasting Disease - prion affecting cervids) has spread to Southwest Montana (USA), a prominent part of the greater Yellowstone ecosystem.	7542	13/12/2020
Plant health	Apple chlorotic fruit spot viroid (ACFSVd)	Viroid	<i>Malus</i> sp. (apple)	New research/awareness: Transmission studies of the newly described apple chlorotic fruit spot viroid indicate that the viroid is effectively transmitted by grafting, budding and seed.	6744	11/07/2020
Plant health	Potato spindle tuber viroid (PSTVd)	Viroid	<i>Petunia</i> spp. (petunias); <i>Chrysanthemum</i> spp. (chrysanthemums)	New research/New awareness: <i>Potato spindle tuber viroid</i> (PSTVd) is seed transmissible in <i>Chrysanthemum</i> and <i>Petunia</i> spp. seeds for sowing.	7194	20/10/2020
Plant health	<i>Tobamovirus</i> (novel from Hoya)	Virus	<i>Hoya nummularioides</i> (yellow corona waxplant)	New pathway information: Two undetermined Tobamoviruses have been intercepted on <i>Hoya nummularioides</i> plants imported from the Philippines. One of these viruses is the same (identified by sequence) as earlier identified on Hoya plants from Thailand.	6521	22/05/2020
Plant health	<i>Apple stem grooving virus</i>	Virus	Multiple; <i>Citrus</i> spp. (citrus); <i>Lilium</i> spp. (lilies); <i>Malus</i> spp. (apples); <i>Pyrus</i> spp. (pears)	New research/new awareness: A recent risk assessment suggests that <i>Apple stem grooving virus</i> may not be managed by existing measures on import pathways for host commodities.	6841	31/07/2020
Plant health	Camellia japonica associated emaravirus (CjEV)	Virus	<i>Camellia sinensis</i> (tea)	Change in distribution: first report of the emaravirus Camellia japonica associated emaravirus 1 (CjEV1) in China. Found on symptomatic Camellia sinensis (tea) plants.	6858	7/08/2020
Plant health	Watermelon green mottle mosaic virus (WGMMV)	Virus	<i>Lagenaria siceraria</i> (bottle gourd); <i>Benincasa hispida</i> (Chinese winter melon); <i>Cucurbita pepo</i> (Asian pumpkin); <i>Cucurbita sativum</i> (Japanese cucumber); <i>Momordica charantia</i> (Bitter Melon)	New host association and change in distribution: Watermelon green mottle mosaic virus (WGMMV) was found in opogourd (<i>Lagenaria siceraria</i>), fuzzy gourd (<i>Benincasa hispida</i>), Asian pumpkin (<i>Cucurbita pepo</i>), Japanese cucumber (<i>Cucumis sativus</i>), and bitter melon (<i>Momordica charantia</i>) in North America.	6987	31/08/2020
Plant health	<i>Citrus leaf blotch virus</i> (CLBV)	Virus	<i>Morus alba</i> (white mulberry)	New host association. This alert is the first report of <i>Citrus leaf blotch virus</i> (CLBV) in <i>Morus alba</i> . The report is from <i>Morus alba</i> grown in China.	7155	6/10/2020
Plant health	<i>Tomato leaf curl New Delhi virus</i> (ToLCNDV)	Virus	<i>Cucurbita pepo</i> (pumpkin, zucchini)	New research/awareness: first report of seed transmission of the begomovirus <i>Tomato leaf curl New Delhi virus</i> (ToLCNDV), from Italy, in <i>Cucurbita pepo</i> (zucchini) in experimental settings.	7312	6/11/2020
Plant health	<i>Tomato leaf curl New Delhi virus</i> (ToLCNDV)	Virus	<i>Chrysanthemum indicum</i> (guldaudi); <i>Crossandra infundibuliformis</i>	New host association: first reports (in 2018) of <i>Tomato leaf curl New Delhi virus</i> (ToLCNDV) infecting <i>Chrysanthemum indicum</i> (syn <i>Dendranthema indicum</i>) (guldaudi) (causing leaf curl, mosaic, and mottling), and <i>Crossandra infundibuliformis</i> (firecracker flower) (causing plant stunting, flower abortion, and leaf yellowing, mottling, curling, and distortion). Reported from India.	7338	13/11/2020
Plant health	<i>Cowpea aphid-borne mosaic virus</i> (CABMV)	Virus	<i>Passiflora edulis</i> (passionfruit)	New research/awareness: New phytosanitary requirements to import passion fruit plants (<i>Passiflora edulis</i>) of Taiwanese origin and provenance into Peru includes measures for <i>Cowpea aphid-borne mosaic virus</i> (CABMV).	7386	20/11/2020
Plant health	Camellia japonica associated betaflexivirus (CjBV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new Betaflexivirus, Camellia japonica associated betaflexivirus 2 (CjBV2) was isolated from <i>Camellia japonica</i> (Japanese camellia) plants with variegation symptoms (principally on leaves, sometimes on colored flowers) and asymptomatic <i>Camellia japonica</i> plants in Italy.	7581	24/12/2020

Plant health	<i>Tomato black ring virus</i> (TBRV)	Virus	<i>Solanum lycopersicum</i> (tomato)	New research/new awareness: a recent scientific report from the Czech republic, reports cultivar-dependent seed transmission of <i>Tomato black ring virus</i> (TBRV) in tomato (<i>Solanum lycopersicum</i>), at rates of between 1.7% and 14.6%.	7595	6/01/2021
Plant health	<i>Cowpea aphid-borne mosaic virus</i> (CABMV)	Virus	<i>Arachis hypogaea</i> (peanut); <i>Vigna</i> spp. (beans)	Other: Concerns over whether <i>Arachis hypogaea</i> and <i>Vigna</i> Seeds for sowing are unmanaged pathways for <i>Cowpea aphid-borne mosaic virus</i> (CABMV)	7757	4/02/2021
Plant health	<i>Groundnut bud necrosis virus</i> (GBNV)	Virus	<i>Hoya carnosa</i> (wax plant)	New host association: <i>Groundnut bud necrosis virus</i> (GBNV) was detected in <i>Hoya carnosa</i> (wax plant) plants exhibiting chlorotic rings at the New Zealand border. This appears to be the first report of GBNV infecting <i>Hoya</i> species.	7792	12/02/2021

Alerts passed to Risk Analysts for risk assessment, and closed after risk assessment

Alerts that have undergone initial screening and were passed to Risk Analysts for a more in-depth risk assessment and have been closed (as the risk was considered managed by current measure found within relevant [Import Health Standards](#)). NB: some alerts closed at this stage may have generated Active Monitoring and/or Situational Awareness for the Border outcomes. Alerts that have undergone risk assessment and were passed to a risk manager for further evaluation are presented in the table above.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant health	<i>Ralstonia solanacearum</i> (bacterial wilt of potato)	Bacterium	<i>Solanum lycopersicum</i> (tomato)	Change in distribution: first report of <i>Ralstonia solanacearum</i> biovar 2 in Tanzania affecting tomato (<i>Solanum lycopersicum</i>)	7098	24/09/2020
Plant health	<i>Acidovorax citrulli</i>	Bacterium	<i>Citrullus lanatus</i> (watermelon)	Change in distribution: First report of the bacterium <i>Acidovorax citrulli</i> in North Macedonia on <i>Citrullus lanatus</i> (watermelon).	7116	24/09/2020
Plant health	<i>Xanthomonas euroxanthea</i>	Bacterium	<i>Juglans regia</i> (common walnut)	Newly described organism/taxon: a new bacterium, <i>Xanthomonas euroxanthea</i> has been described. The bacterium was isolated from a cultivated <i>Juglans regia</i> (English walnut) plant in a municipal garden in Portugal.	7205	9/10/2020
Animal health	<i>Corynebacterium pseudotuberculosis</i> (pigeon fever)	Bacterium	<i>Equus</i> spp. (horses)	A case of Pigeon Fever (<i>Corynebacterium pseudotuberculosis</i>) in a horse in Washington State, USA. This is considered an emerging disease in the USA.	7336	13/11/2020
Plant health	<i>Pseudomonas allii</i>	Bacterium	<i>Allium cepa</i> (onion)	Newly described organism/taxon: New bacterium, <i>Pseudomonas allii</i> (Gammaproteobacteria: Pseudomonadales) causing sot rot in <i>Allium cepa</i> (onions), described from Japan.	7520	11/12/2020
Plant health	<i>Dickeya poaceiphila</i>	Bacterium	<i>Saccharum officinarum</i> (sugarcane)	Newly described organism / taxon: A novel pectobacterium (<i>Dickeya poaceiphila</i>) has been isolated from sugar cane.	7528	14/12/2020
Plant health	<i>Dickeya undicola</i>	Bacterium	n/a	Newly described organism / taxon: A new pectobacterium (<i>Dickeya undicola</i>) has been isolated from surface waters in Europe and Asia. Under laboratory conditions it can cause maceration symptoms in potato tubers and onions.	7531	15/12/2020
Plant health	<i>Clavibacter sepedonicus</i> (potato ring rot)	Bacterium	<i>Solanum tuberosum</i> (potato)	New research/new awareness: Latent infection by <i>Clavibacter sepedonicus</i> (potato ring rot) in potato (<i>Solanum tuberosum</i>) and possible limitations of commonly used methods such as immunofluorescence testing, semi-selective culture and biotesting for detecting the pathogen.	7556	17/12/2020
Plant health	<i>Dickeya fangzhongdai</i>	Bacterium	<i>Dendrobium nobile</i> (noble dendrobium)	Change in distribution/New host association: <i>Dickeya fangdongzhai</i> identified in <i>Dendrobium nobile</i> leaves and stems with soft rot symptoms in Tamil, India	7565	22/12/2020
Plant health	<i>Colletotrichum chrysophilum</i>	Fungus	<i>Malus domestica</i> (apple)	New host association: first report of <i>Colletotrichum chrysophilum</i> and <i>C. noveboracense</i> as pathogens of apple.	6722	7/07/2020
Plant health	<i>Colletotrichum noveboracense</i>	Fungus	<i>Malus domestica</i> (apple)	Newly described organism/taxon: A new species <i>Colletotrichum noveboracense</i> has been described causing bitter rot of apple in New York, USA.	6741	11/07/2020
Plant health	<i>Pleioacarpon algeriense</i>	Fungus	<i>Persea americana</i> (avocado); <i>Vitis vinifera</i> (grapevine)	Change in distribution: first report of the fungus <i>Pleioacarpon algeriense</i> in Sicily, Italy and a new host association causing stem crown and root rot symptoms in avocado (<i>Persea americana</i>).	6886	14/08/2020

Plant health	<i>Pestalotiopsis pini</i>	Fungus	<i>Pinus pinea</i> (stone pine)	Newly described organism/taxon: a new fungus <i>Pestalotiopsis pini</i> (Sordariomycetes: Amphisphaerales), isolated from <i>Pinus pinea</i> (Italian stone pine) trees displaying shoot and needle blight, cone decay, and trunk necrosis symptoms in Portugal.	6888	14/08/2020
Plant health	<i>Diaporthe rosiphthora</i>	Fungus	<i>Rosa x hybrida</i> (rose)	Newly described organism/taxon: <i>Diaporthe rosiphthora</i> caused severe dieback in <i>Rosa x hybrida</i> (cultivars 'Grand Gala', 'Príncipe Negro', 'Saltinho' and 'Greta') in Brazil.	7000	1/09/2020
Plant health	<i>Colletotrichum aenigma</i>	Fungus	<i>Juglans regia</i> (common walnut)	New host association: first report of the anthracnose fungus <i>Colletotrichum aenigma</i> (Sordariomycetes: Glomerellales) infecting <i>Juglans regia</i> (English walnut). Reported from China.	7003	21/08/2020
Plant health	<i>Pestalotiopsis camelliae</i>	Fungus	<i>Camellia sinensis</i> (tea)	Change in distribution: first report of the fungi <i>Pestalotiopsis camelliae</i> , <i>Pestalotiopsis yanglingensis</i> , and <i>Pestalotiopsis trachicarpicola</i> (Sordariomycetes: Amphisphaerales) in Taiwan. Found infecting cultivated <i>Camellia sinensis</i> (tea) plants in Taiwan exhibiting grey leaf blight symptoms.	7013	28/08/2020
Plant health	<i>Pestalotiopsis yanglingensis</i>	Fungus	<i>Camellia sinensis</i> (tea)	Change in distribution: first report of the fungi <i>Pestalotiopsis camelliae</i> , <i>Pestalotiopsis yanglingensis</i> , and <i>Pestalotiopsis trachicarpicola</i> (Sordariomycetes: Amphisphaerales) in Taiwan. Found infecting cultivated <i>Camellia sinensis</i> (tea) plants in Taiwan exhibiting grey leaf blight symptoms.	7014	28/08/2020
Plant health	<i>Pestalotiopsis trachicarpicola</i>	Fungus	<i>Camellia sinensis</i> (tea)	Change in distribution: first report of the fungi <i>Pestalotiopsis camelliae</i> , <i>Pestalotiopsis yanglingensis</i> , and <i>Pestalotiopsis trachicarpicola</i> (Sordariomycetes: Amphisphaerales) in Taiwan. Found infecting cultivated <i>Camellia sinensis</i> (tea) plants in Taiwan exhibiting grey leaf blight symptoms.	7015	28/08/2020
Plant health	<i>Diaporthe</i> sp.	Fungus	<i>Corylus avellana</i> (hazel)	Change in Distribution: first report of grey necrosis of hazelnut (<i>Corylus avellana</i>) in Chile. The necrosis is caused by a fungal complex comprising of <i>Fusarium sporotrichioides</i> , <i>Alternaria alternata</i> , <i>Diaporthe</i> sp. (and its anamorph <i>Phomopsis</i> sp.) and <i>Neofusiococcum</i> sp.	7151	5/10/2020
Plant health	<i>Diaporthe fusicola</i>	Fungus	<i>Osmanthus fragrans</i>	New host association: First report of the fungus <i>Diaporthe fusicola</i> (Sordariomycetes: Diaporthales) causing necrosis in <i>Osmanthus fragrans</i> (sweet osmanthus).	7172	16/10/2020
Plant health	<i>Phaeoacremonium italicum</i>	Fungus	<i>Olea europaea</i> (olive)	New research/New awareness: seven vascular fungi (<i>Acremonium sclerotigenum</i> (= <i>Acremonium egyptiacum</i>), <i>Cadophora luteo-olivacea</i> , <i>Paracremonium</i> sp., <i>Phaeoacremonium italicum</i> , <i>Ph. minimum</i> , <i>Ph. scolyti</i> and <i>Pseudophaeomoniella oleicola</i>) associated with branch dieback of olive (<i>Olea</i> sp.) identified in Spain.	7181	10/10/2020
Plant health	<i>Phaeoacremonium minimum</i>	Fungus	<i>Olea europaea</i> (olive)	New research/New awareness: seven vascular fungi (<i>Acremonium sclerotigenum</i> (= <i>Acremonium egyptiacum</i>), <i>Cadophora luteo-olivacea</i> , <i>Paracremonium</i> sp., <i>Phaeoacremonium italicum</i> , <i>Ph. minimum</i> , <i>Ph. scolyti</i> and <i>Pseudophaeomoniella oleicola</i>) associated with branch dieback of olive (<i>Olea</i> sp.) identified in Spain.	7182	10/10/2020
Plant health	<i>Phaeoacremonium scolyti</i>	Fungus	<i>Olea europaea</i> (olive)	New research/New awareness: seven vascular fungi (<i>Acremonium sclerotigenum</i> (= <i>Acremonium egyptiacum</i>), <i>Cadophora luteo-olivacea</i> , <i>Paracremonium</i> sp.,	7184	10/10/2020

				<i>Phaeoacremonium italicum</i> , <i>Ph. minimum</i> , <i>Ph. scolyti</i> and <i>Pseudophaeomoniella oleicola</i> associated with branch dieback of olive (<i>Olea</i> sp.) identified in Spain.		
Plant health	<i>Gymnosporangium clavipes</i> (Gymnosporangium rust)	Fungus	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Gymnosporangium clavipes</i> (Gymnosporangium rust).	7225	23/10/2020
Plant health	<i>Gymnosporangium libocedri</i> (Gymnosporangium rust)	Fungus	<i>Malus</i> spp. (apples)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Gymnosporangium libocedri</i> (Gymnosporangium rust).	7229	23/10/2020
Plant health	<i>Pseudopezalotiopsis chinensis</i>	Fungus	<i>Camellia sinensis</i> (tea)	Change of distribution: first report of the fungi <i>Pseudopezalotiopsis chinensis</i> (Sordariomycetes: Amphisphaeriales) in Taiwan on cultivated <i>Camellia sinensis</i> (tea).	7275	30/10/2020
Plant health	<i>Pseudopezalotiopsis camelliae-sinensis</i>	Fungus	<i>Camellia sinensis</i> (tea)	Change of distribution: first report of the fungi <i>Pseudopezalotiopsis camelliae-sinensis</i> (Sordariomycetes: Amphisphaeriales) in Taiwan on cultivated <i>Camellia sinensis</i> (tea).	7276	30/10/2020
Plant health	<i>Diplodia insularis</i>	Fungus	<i>Quercus suber</i> (cork oak); <i>Eucalyptus globulus</i> (Tasmanian blue gum)	New host record/change in distribution: First report of the fungus <i>Diplodia insularis</i> (Dothideomycetes: Botryosphaeriales) in Portugal with new host records	7374	20/11/2020
Plant health	<i>Synchytrium endobioticum</i> (potato wart)	Fungus	<i>Solanum tuberosum</i> (potato)	Change in distribution: New Report of Potato Wart (<i>Synchytrium endobioticum</i>) in Prince Edward Island, Canada.	7478	1/12/2020
Plant health	<i>Botrytis polygoni</i>	Fungus	<i>Fagopyrum esculentum</i> (buckwheat); <i>Fagopyrum tataricum</i> (Tartary buckwheat); <i>Fallopia convolvulus</i> (black bindweed)	Newly described organism/taxon: New fungus species, <i>Botrytis polygoni</i> (Leotiomyces: Helotiales), described from China, isolated from <i>Fagopyrum esculentum</i> (buckwheat), <i>F. tataricum</i> (Tartary buckwheat), and <i>Fallopia convolvulus</i> (black bindweed) plants.	7553	18/12/2020
Plant health	<i>Teratosphaeria destructans</i> (eucalypt leaf blight)	Fungus	n/a	Other: Australia has published their national list of exotic environmental pests, weeds and diseases	7637	12/01/2021
Plant health	<i>Teratosphaeria gauchensis</i> (Teratosphaeria canker)	Fungus	n/a	Other: Australia has published their national list of exotic environmental pests, weeds and diseases	7638	12/01/2021
Plant health	<i>Fusarium miscanthi</i>	Fungus	<i>Zea mays</i> (maize)	Change in distribution; new host association: first report of the fungus <i>Fusarium miscanthi</i> (Sordariomycetes: Hypocreales) in China and the first report of <i>F. miscanthi</i> infecting <i>Zea mays</i> (maize).	7677	15/01/2021
Plant health	<i>Chrysoporthe puriensis</i>	Fungus	<i>Tibouchina</i> spp. ; <i>Eucalyptus grandis</i> x <i>Eucalyptus urophylla</i> ; <i>Eucalyptus</i> spp. (gums)	Newly described organism/taxon: <i>Chrysoporthe puriensis</i> sp. nov. fungus is associated with <i>Tibouchina</i> spp. (Melastomataceae) in Brazil: an emerging threat to Eucalyptus.	7705	22/01/2021
Plant health	<i>Didymella corylicola</i>	Fungus	Corylaceae; <i>Corylus avellana</i> (hazel)	Newly described species/taxon: new fungus species, <i>Didymella corylicola</i> (Dothideomycetes: Pleosporales),	7788	12/02/2021

				described from Italy. Isolated from <i>Corylus avellana</i> (hazel) trees exhibiting fruits with damaged and discoloured kernels.		
Plant health	<i>Elsinoë australis</i> (citrus scab)	Fungus	<i>Populus tomentosa</i> (Chinese white poplar); <i>Populus deltoides</i> (eastern cottonwood)	Change in distribution/ New host association/New taxon (pathovar): <i>Elsinoë australis</i> (EU Annexes) was detected for the first time in South-eastern China (Anhui and Jiangsu) in 2016-2017 causing leaf anthracnose on poplar trees (<i>Populus tomentosa</i> and <i>P. deltoides</i>). This is the first report in China, and the first report on poplar. This is possibly a new pathovar - causing scab on hybrid citrus but not on orange, lemon or grapefruit	7867	4/03/2021
Plant health	<i>Thanatephorus cucumeris</i>	Fungus	<i>Actinidia</i> spp. (kiwifruit)	New host association: <i>Thanatephorus cucumeris</i> (syn. <i>Rhizoctonia solani</i>) causing blight on kiwifruit roots and seedlings in China.	7884	3/03/2021
Plant health	<i>Alternaria jacinthicola</i>	Fungus	<i>Opuntia cochenillifera</i> (cochineal nopal cactus)	Change in distribution, New host association: The fungus <i>Alternaria jacinthicola</i> (Dothideomycetes: Pleosporales) was confirmed as the causative agent for necrotic cladode spots in <i>Nopalea cochenillifera</i> (prickly pear) plants in Brazil.	7899	8/03/2021
Plant health	<i>Solenopsis invicta</i> (red imported fire ant, RIFA)	Insect	n/a	New Country post border detection/incursion: approximately 1000 red imported fire ants (<i>Solenopsis invicta</i>) including queens and brood intercepted on a vessel ex-China unloading freight at Chiba Port, Japan	6640	24/06/2020
Plant health	<i>Trogoderma granarium</i> (Khapra beetle)	Insect	Multiple	New research/new awareness: as a result of increasing interceptions of <i>Trogoderma granarium</i> (Khapra beetle), Australia proposes to implement emergency measures to high risk plant products that are hosts of Khapra beetle.	6860	6/08/2020
Plant health	<i>Halyomorpha halys</i> (brown marmorated stink bug)	Insect	n/a	New country post border detection /incursion: detection of <i>Halyomorpha halys</i> (brown marmorated stink bug, BMSB) in the United Kingdom. An individual was caught in a pheromone trap at Rainham Marshes nature reserve in Essex.	7008	24/08/2020
Plant health	<i>Archips rosana</i> (European leafroller)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Archips rosana</i> (European leafroller).	7214	23/10/2020
Plant health	<i>Archips argyrospila</i> (fruit tree leafroller)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Archips argyrospila</i> (fruit tree leafroller)	7215	23/10/2020
Plant health	<i>Archips podana</i> (large fruit tree tortrix)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Archips podana</i> (large fruit tree tortrix).	7216	23/10/2020

Plant health	<i>Argyrotaenia franciscana</i> (orange tortrix)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Argyrotaenia franciscana</i> (orange tortrix).	7217	23/10/2020
Plant health	<i>Pandemis pyrusana</i> (Pandemis leafroller)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Pandemis pyrusana</i> (Pandemis leafroller).	7218	23/10/2020
Plant health	<i>Grapholita packardi</i> (cherry fruitworm)	Insect	<i>Malus domestica</i> (apple)	New research/New awareness: The Australian Department of Agriculture, Water and the Environment has released a draft risk analysis on fresh apple (<i>Malus</i> spp.) fruit from the Pacific Northwest states of the USA that identifies 24 pests requiring risk management measures. These pests include <i>Grapholita packardi</i> (cherry fruitworm).	7219	23/10/2020
Plant health	<i>Liriomyza huidobrensis</i> (serpentine leafminer)	Insect	n/a	New country post-border detection/incursion: first detection of <i>Liriomyza huidobrensis</i> (serpentine leafminer) in Australia. It was found infesting field-grown vegetables in western Sydney in late October 2020. Surveillance is underway to determine the extent of the incursion.	7330	11/11/2020
Plant health	<i>Scirtothrips aurantii</i> (South African citrus thrips)	Insect	<i>Citrus</i> spp. (citrus)	Change in distribution: First report of <i>Scirtothrips aurantii</i> (South African citrus thrips) in Huelva (Andalusia), Spain. The pest is currently under official control.	7667	13/01/2021
Plant health	<i>Ceratitis capitata</i> (Mediterranean fruit fly)	Insect	n/a	New or change in pathway/commodity type: in metropolitan Adelaide, Australia, there are a number of <i>Ceratitis capitata</i> (Mediterranean fruit fly) outbreaks, including some that overlap.	7679	15/01/2021
Plant health	<i>Spodoptera ornithogalli</i> (synonym <i>Spodoptera marima</i>) (yellow-striped armyworm)	Insect	<i>Asparagus officinalis</i> (asparagus); Multiple; <i>Vigna</i> spp. (beans); <i>Solanum lycopersicum</i> (tomato); <i>Beta vulgaris</i> (beet); <i>Zea mays</i> (maize); <i>Solanum tuberosum</i> (potato); <i>Capsicum annuum</i> (pepper); <i>Helianthus annuus</i> (sunflower); <i>Triticum durum</i> (durum wheat); <i>Glycine max</i> (soybean); <i>Sorghum bicolor</i> (sorghum); <i>Chrysanthemum</i> spp. (chrysanthemums); <i>Rosa</i> spp. (roses);	Other: <i>Spodoptera ornithogalli</i> (Lepidoptera Noctuidae) (yellow striped armyworm) has been added to the EPPO alert list.	7737	28/01/2021
Plant health	<i>Albugo koreana</i>	Oomycete	<i>Camelina sativa</i> (camelina)	Change in distribution/New host association: First report of the oomycete <i>Albugo koreana</i> (Incertae sedis: Albuginales) in China, and first record on <i>Camelina sativa</i> .	7823	26/02/2021

Plant health	' <i>Candidatus</i> Phytoplasma australasia' (papaya dieback)	Phytoplasma	<i>Pelargonium x hortorum</i> (zonal geranium)	New host association: First report of <i>Pelargonium x hortorum</i> (zonal geranium) as a host of ' <i>Candidatus</i> Phytoplasma australasia' (papaya dieback) from Iran.	7050	31/07/2020
Plant health	' <i>Candidatus</i> Phytoplasma solani' (bois noir SrXII-A, stolbur phytoplasma)	Phytoplasma	<i>Beta vulgaris</i> (beet)	New research/New awareness: Rubbery Taproot Disease of Sugar Beet (<i>Beta vulgaris</i>) in Serbia associated with ' <i>Candidatus</i> <i>Phytoplasma solani</i> ' (16SrXII-A stolbur).	7186	13/10/2020
Plant health	<i>Candidatus</i> Phytoplasma solani' (SrXII-Astolbur)	Phytoplasma	<i>Daucus carota</i> (carrot)	New research/awareness: New evidence of seed transmission of <i>Candidatus</i> Phytoplasma solani (16SrXii-A stolbur) in carrots (<i>Dacus carota</i>) in Serbia.	7290	2/11/2020
Plant health	' <i>Candidatus</i> Phytoplasma stylosanthis' (SrXXXVII-A)	Phytoplasma	<i>Carica papaya</i> (papaya); <i>Solanum tuberosum</i> (potato); <i>Saccharum officinarum</i> (sugarcane)	Newly described organism/taxon: New phytoplasma, ' <i>Candidatus</i> Phytoplasma stylosanthis', described from Australia associated with <i>Solanum tuberosum</i> (potato), <i>Carica papaya</i> (papaya), <i>Saccharum officinarum</i> (sugarcane), and <i>Medicago sativa</i> (alfalfa).	7573	24/12/2020
Animal health	Chronic Wasting Disease (CWD)	Prion	Cervidae	This alert was created to supplement alert 7070 which was closed. The original case was to alert of the first case of classical CWD (Chronic Wasting Disease) in reindeer identified outside the Nordfjella zone 1 (Norway), where the disease was first detected in 2016. Extra information will be collated in the Risk Assessment section regarding CWD in commodities from Norway and other affected countries.	7358	17/11/2020
Animal health	<i>Babesia microti</i>	Protozoan	Felidae; Canidae	The surveillance team has raised and ERS awareness on the potential entry pathway of <i>Babesia microti</i> into New Zealand through importation of cats and dogs, through their email dated 3 August 2020.	6844	3/08/2020
Plant health	Unknown (plant seeds, species unknown)	Unknown	Unknown	New or change in Pathway/Commodity type: Public notices about unsolicited mail shipments of unidentified seeds from China have been issued by agriculture officials in 27 US states.	6838	29/07/2020
Plant health	<i>Tomato chlorosis virus</i> (ToCV)	Virus	<i>Solanum lycopersicum</i> (tomato)	Change in distribution: first detections of <i>Tomato chlorosis virus</i> (ToCV) in Kenya (2017) and Pakistan (2019), in <i>Solanum lycopersicum</i> (tomato) plants.	6582	8/06/2020
Plant health	Pear chlorotic leaf spot-associated virus (PCLSaV)	Virus	<i>Pyrus pyrifolia</i> (nashi pear)	Newly described organism/taxon: A novel emaravirus named 'virus Pear chlorotic leaf spot-associated virus (PCLSaV)' causes pear chlorotic leaf spot (PCLS) in commercially cultivated sandy pear (<i>Pyrus pyrifolia</i>) trees in central and southern China.	6618	17/06/2020
Animal health	<i>Porcine respirovirus</i> (PRV)	Virus	Suidae	This is a journal article of a first report of <i>Porcine respirovirus 1</i> in South America as published in Veterinary Microbiology (246) 2020.	6662	29/06/2020
Plant health	Persimmon ampelovirus (PAmpV)	Virus	<i>Diospyros kaki</i> (Japanese persimmon)	Newly described organism/taxon: A new ampelovirus tentatively named Persimmon ampelovirus (PAmpV) was detected in Japanese persimmon 'Reigyoku' (<i>Diospyros kaki</i>) with graft-transmissible stunt symptoms.	6835	30/07/2020
Plant health	Persimmon polerovirus (PPoIV)	Virus	<i>Diospyros kaki</i> (Japanese persimmon)	Newly described organism/taxon: A new polerovirus tentatively named Persimmon polerovirus (PPoIV) was detected in Japanese persimmon 'Reigyoku' (<i>Diospyros kaki</i>) with graft-transmissible stunt symptoms.	6836	30/07/2020

Plant health	Persimmon waikavirus (PWaiV)	Virus	<i>Diospyros kaki</i> (Japanese persimmon)	Newly described organism/taxon: A new waikavirus tentatively named Persimmon waikavirus (PWaiV) was detected in Japanese persimmon 'Reigyoku' (<i>Diospyros kaki</i>) with graft-transmissible stunt symptoms.	6837	30/07/2020
Plant health	Tomato fruit blotch virus (ToFBV)	Virus	<i>Solanum lycopersicum</i> (tomato)	Newly described organism/taxon: Tomato fruit blotch virus (ToFBV), a new blunervirus infects tomato crops in Italy and Australia.	6889	11/08/2020
Plant health	Cherry rasp leaf virus (CRLV)	Virus	<i>Sambucus nigra</i> (elder); <i>Malva</i> spp. (mallows)	New host association: <i>Sambucus nigra</i> subsp. <i>caerulea</i> and <i>Malva</i> spp. are newly identified hosts of <i>Cherry rasp leaf virus</i> (CRLV)	7068	11/09/2020
Plant health	Citrus yellow vein clearing virus (CYVCV)	Virus	<i>Vitis vinifera</i> (grapevine)	New host association: First report of the mandarivirus <i>Citrus yellow vein clearing virus</i> (CYVCV) naturally infecting <i>Vitis vinifera</i> (grape). Reported from Turkey.	7080	11/09/2020
Plant health	Actinidia yellowing ringspot virus (AYRSpV)	Virus	<i>Actinidia chinensis</i> (gold kiwifruit); <i>Actinidia deliciosa</i> (green kiwifruit)	Newly described organism/taxon: a newly described virus, potentially in the genus Ilavirus and tentatively named Actinidia yellowing ringspot virus 1 (AYRSpV) has been isolated from both <i>Actinidia deliciosa</i> (green kiwifruit) and <i>A. chinensis</i> (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province of China.	7174	10/10/2020
Plant health	Actinidia yellowing virus (AcYV1)	Virus	<i>Actinidia chinensis</i> (gold kiwifruit); <i>Actinidia deliciosa</i> (green kiwifruit)	Newly described organism/taxon: a newly described virus, potentially in the genus Waikavirus and tentatively named Actinidia yellowing virus 1 (AcYV1) has been isolated from both <i>Actinidia deliciosa</i> (green kiwifruit) and <i>A. chinensis</i> (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province of China.	7175	10/10/2020
Plant health	Actinidia yellowing virus (AcYV2)	Virus	<i>Actinidia chinensis</i> (gold kiwifruit); <i>Actinidia deliciosa</i> (green kiwifruit)	Newly described organism/taxon: a newly described virus, potentially in the family Tombusviridae and tentatively named Actinidia yellowing virus 2 (AcYV2) has been isolated from both <i>Actinidia deliciosa</i> (green kiwifruit) and <i>A. chinensis</i> (gold kiwifruit) plants showing leaf yellowing symptoms in Shaanxi Province of China.	7176	10/10/2020
Plant health	Tomato black ring virus (TBRV)	Virus	<i>Solanum lycopersicum</i> (tomato)	Change in distribution: First report of the nepovirus <i>Tomato black ring virus</i> (TBRV) on <i>Solanum lycopersicum</i> (tomato) plants in Saudi Arabia.	7273	30/10/2020
Plant health	Emaravirus (infecting <i>Quercus robur</i>)	Virus	<i>Quercus robur</i> (English oak)	Newly described organism/taxon: Identification of an <i>Emaravirus</i> in a common oak (<i>Quercus robur</i>) conservation seed orchard in Germany.	7323	10/11/2020
Plant health	<i>Hoya tobamovirus</i> (HoToV)	Virus	<i>Hoya</i> spp. (hoyas)	Newly described organism/taxon: a new tobamovirus, provisionally named <i>Hoya tobamovirus 2</i> (HoToV2), has been isolated in Germany from <i>Hoya</i> spp. plants displaying ringspots, necrotic lesions and irregular chlorosis or chlorotic spots.	7331	11/11/2020
Plant health	High Plains wheat mosaic virus (HPWMV)	Virus	<i>Triticum aestivum</i> (wheat); <i>Hordeum vulgare</i> (barley)	Change in distribution: First report of <i>High Plains wheat mosaic virus</i> (HPWMV) in Canada. It was detected on wheat (<i>Triticum aestivum</i>) and foxtail barley (<i>Hordeum jubatum</i>) plants in Alberta during surveys in 2017.	7428	26/11/2020
Plant health	Tomato spotted wilt virus (TSWV)	Virus	<i>Solanum lycopersicum</i> (tomato)	Other: A type of resistance-breaking <i>Tomato spotted wilt virus</i> is continuing to spread through production areas of California.	7473	29/11/2020

Plant health	<i>Tea plant necrotic ring blotch virus</i> (TPNRBV)	Virus	<i>Camellia sinensis</i> (tea)	Newly described organism/taxon: A novel <i>Blunervirus</i> species, <i>Tea plant necrotic ring blotch virus</i> (TPNRBV), was isolated from <i>Camellia sinensis</i> (tea) plants with leaf discoloration symptoms typical of viral infection, in Zhejiang province, China.	7568	23/12/2020
Plant health	Tea plant line pattern virus (TPLPV)	Virus	<i>Camellia sinensis</i> (tea)	Newly described organism/taxon: A novel <i>Illavirus</i> species, Tea plant line pattern virus (TPLPV), was isolated from <i>Camellia sinensis</i> (tea) plants with leaf discoloration symptoms typical of viral infection, in Zhejiang province, China.	7569	23/12/2020
Plant health	<i>Camellia japonica</i> associated emaravirus (CjEV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new <i>Emaravirus</i> , <i>Camellia japonica</i> associated emaravirus 2 (CjEV2), was isolated from <i>Camellia japonica</i> plants with variegation symptoms (principally on leaves, sometimes on colored flowers) in Italy.	7579	24/12/2020
Plant health	<i>Camellia japonica</i> associated betaflexivirus (CjBV)	Virus	<i>Camellia japonica</i> (Japanese camellia)	Newly described organism/taxon: A new <i>Betaflexivirus</i> , <i>Camellia japonica</i> associated betaflexivirus 1 (CjBV1) was isolated from <i>Camellia japonica</i> plants with variegation symptoms (principally on leaves, sometimes on colored flowers) and asymptomatic <i>Camellia japonica</i> plants in Italy.	7580	24/12/2020
Plant health	<i>Mume virus A</i> (MuVA)	Virus	<i>Prunus mume</i> (Japanese apricot)	Change in distribution: First report of <i>Mume virus A</i> (MuVA) from Japanese apricot (<i>Prunus mume</i>) in China. It was detected along with two other viruses in trees showing viral disease symptoms, in Beijing, Wuhan, Wuxi and Nanjin.	7800	16/02/2021

Alerts passed to Risk Analysts for risk assessment in this reporting period, and awaiting completion of risk assessment

Alerts that have undergone initial screening and were passed to Risk Analysts for a more in-depth risk assessment and are awaiting completion of risk assessment.

Field of alert	Species/ Causative agent	Organism type	Host	Alert details	Tracking #	Date of contribution to ERS
Plant health	<i>Dickeya fangzhongdai</i>	Bacterium	<i>Allium cepa</i> (onion); <i>Phalaenopsis</i> spp. (moth orchids); <i>Aglaonema</i> sp. (Chinese evergreen); <i>Dendrobium nobile</i> (noble dendrobium); <i>Artocarpus heterophyllus</i> (jackfruit); <i>Pyrus pyrifolia</i> (nashi pear); <i>Aloe vera</i> (aloe vera); <i>Solanum tuberosum</i> (potato); <i>Daucus carota</i> (carrot)	Change in distribution/New host association: First report of <i>Dickeya fangzhongdai</i> causing soft rot of onion (<i>Allium cepa</i>) in New York State, USA.	7561	21/12/2020
Aquatic health	<i>Hemigrapsus sanguineus</i> (Japanese shore crab)	Crustacea	<i>Caulacanthus okamura</i>	<i>Hemigrapsus sanguineus</i> in Port Phillip Bay.	7711	22/01/2021
Plant health	<i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (fusarium wilt)	Fungus	<i>Cannabis sativa</i> (cannabis)	Ecuadorproposes fungicide treatment measures for <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> on <i>Cannabis sativa</i> seed for sowing. <i>F. oxysporum</i> f. sp. <i>vasinfectum</i> may not be managed on our standard.	7888	3/03/2021
Plant health	<i>Delottococcus aberiae</i>	Insect	<i>Citrus</i> spp.	New research/awareness: <i>Delottococcus aberiae</i> found in orange plantations in Region of Murcia, Spain.	7917	15/03/2021
Plant health	<i>Dickeya fangzhongdai</i>	Bacterium	<i>Pyrus pyrifolia</i> (nashi pear); <i>Phalaenopsis</i> sp. (moth orchid); <i>Aglaonema</i> sp. (Chinese evergreen); <i>Dendrobium nobile</i> (noble dendrobium); <i>Allium cepa</i> (onion); <i>Artocarpus heterophyllus</i> (jackfruit)	Change in distribution: <i>Dickeya fangzhongdai</i> (Gammaproteobacteria: Enterobacteriales) was confirmed to be the causative agent of bleeding trunk and branch cankers, resulting inplant dieback and sometimes death in <i>Pyrus pyrifolia</i> (Asian pear) plants. This is the first report of <i>D.fangzhongdai</i> in South Korea.	7914	12/03/2021
Plant health	<i>Trichoderma afroharzianum</i>	Fungus	<i>Zea mays</i> (maize)	Change in distribution and Change in virulence/pathogenicity: first report of the fungus <i>Trichoderma afroharzianum</i> causing severe rot in corn (<i>Zea mays</i>) cobs in Germany. Molecular analysis indicates there are new highly pathogenic strains.	7189	15/10/2020
Plant health	<i>Elsinoë australis</i> (citrus scab)	Fungus	<i>Populus tomentosa</i> (Chinese white poplar); <i>Populus deltoides</i> (eastern cottonwood)	Change in distribution/ New host association/New taxon (pathovar): <i>Elsinoë australis</i> (EU Annexes) was detected for the first time in South-eastern China (Anhui and Jiangsu) in 2016-2017 causing leaf anthracnose on poplar trees (<i>Populus tomentosa</i> and <i>P. deltoides</i>). This is the first report in China, and the first report on poplar. This is possibly a new pathovar - causing scab on hybrid citrus but not on orange, lemon or grapefruit	7867	4/03/2021
Plant health	<i>Phyllactinia imperialis</i>	Fungus	<i>Actinidia</i> spp. (kiwifruit)	New host association: <i>Phyllactinia imperialis</i> causing powdery mildew on leaves of kiwifruit in China.	7882	3/03/2021

Plant health	<i>Botryosphaeria kuwatsukai</i> (apple ring rot)	Fungus	<i>Actinidia</i> spp. (kiwifruit); <i>Malus</i> spp. (apple); <i>Pyrus pyrifolia</i> (nashi pear); <i>Pyrus</i> spp. (pears); <i>Pyrus communis</i> (European pear)	New host association: <i>Botryosphaeria kuwatsukai</i> (apple ring rot) a causing vine blight on kiwifruit in China.	7885	3/03/2021
Plant health	<i>Cercospora iteodaphnes</i>	Fungus	<i>Actinidia</i> spp. (kiwifruit); <i>Listea</i> spp.; Myristicaceae; <i>Bambusa</i> sp. (bamboo); <i>Ochlandra</i> spp. (bamboo)	New host association: <i>Cercospora iteodaphnes</i> (allegedly synonymous with <i>Spiropes scopiformis</i>) has been found to cause leaf mold on kiwifruit (<i>Actinidia</i>) in China.	7886	3/03/2021
Plant health	<i>Pseudocercospora dypsidis</i>	Fungus	<i>Dypsis lutescens</i> (areca palm)	Newly described organism/taxon: A new fungus, <i>Pseudocercospora dypsidis</i> (Dothideomycetes: Capnodiales) was isolated from <i>Dypsis lutescens</i> (yellow butterfly palm) plants exhibiting leaf blight in Thailand. The PEST ID database lists the genus <i>Pseudocercospora</i> as reportable (queried 3/10/21).	7916	12/03/2021
Plant health	<i>Tuta absoluta</i> (tomato leafminer)	Insect	Solanaceae; Amaranthaceae; Asteraceae; Brassicaceae; Convolvulaceae	New host association(s): Updated list of host plants of <i>Tuta absoluta</i> (Meyrick, 1917) (Lepidoptera: Gelechiidae) (tomato leafminer) with reference to Romania.	7582	29/12/2020
Aquatic health	Unknown contaminating organisms			Multiple species of new-to-NZ marine macroalgae have entered New Zealand undetected via the aquarium trade pathway.	7367	19/11/2020

Alerts closed after initial screening

Alerts considered not to represent a potential increase in risk to New Zealand after initial screening by the initial risk assessor. Individual alerts and alert details are not provided due to the volume of alerts screened.

Field of alert	Date of contribution to ERS	Number of alerts screened and closed without further risk assessment
Animal health (risk to terrestrial animal health)	5 th September 2020 – 19 th March 2021	216
Aquatic health (risk to aquatic animal health)	5 th September 2020 – 19 th March 2021	45
Plant health (risk to plant health)	5 th September 2020 – 19 th March 2021	542