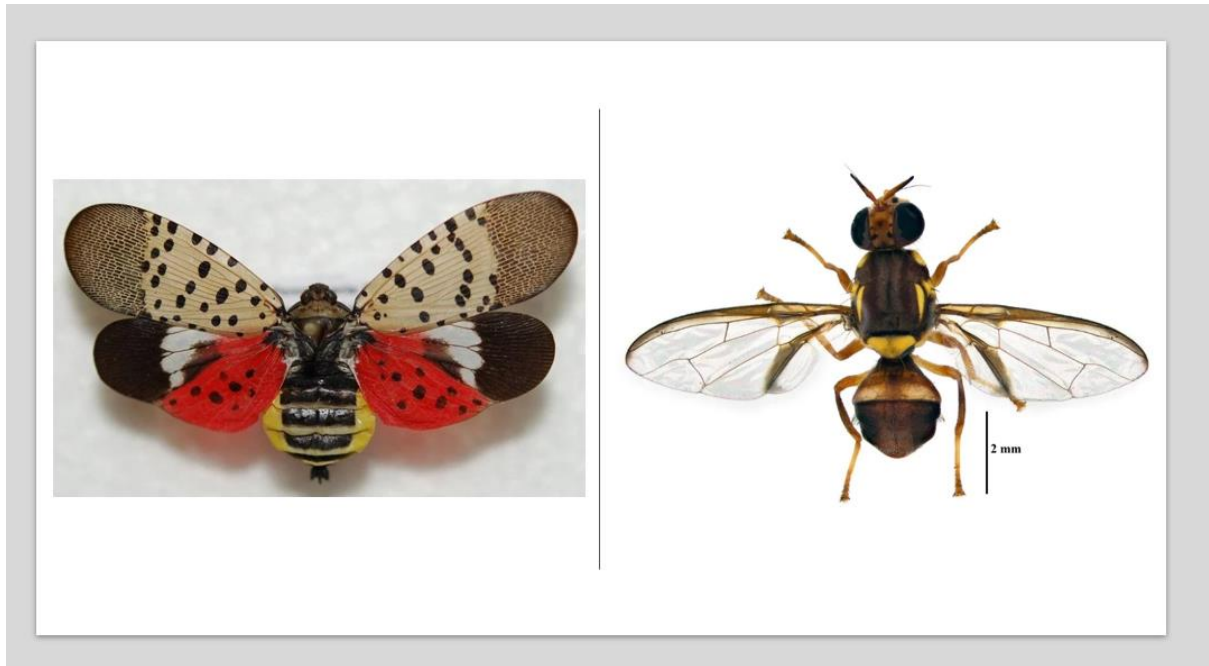


ARE YOU A BIOSECURITY QUIZ MASTER?

1. Name the government department responsible for biosecurity.

Biosecurity New Zealand / the Ministry for Primary Industries

2. These pests are some of the top threats to horticulture. What are they and how might they impact the sector?



Spotted Lanternfly - Production impacts: Adults and nymphs feed on young stems and bark tissue with their piercing and sucking mouthparts and excrete large amounts of sticky liquid called honeydew. Extensive feeding results in oozing wounds on trunks, wilting and death of branches.

Fruit Fly - Market access impacts: Any incursion can severely impact where we sell our fruit.

3. Imagine you have just imported a tractor from Italy. Name a potential biosecurity risk that could be associated with this import and what you can do to reduce this risk.

Biosecurity risk can include hitchhiker pests, and/or contamination from soil and plant material which could harbour unwanted organisms.

How might you reduce the risk? If you know the exporter, you can ask them to clean the items before sending. Be sure to inspect the machinery yourself prior to using it on the orchard. If possible, before bringing onto an orchard, wash down off the orchard on a hard surface. If something is found, be sure to report it and if it is a pest try to catch it, snap it, and report it.

4. A key lesson from the Psa response was that everyone involved needs to be able to hit the ground running in a biosecurity response, working towards the same pre-agreed goals. The GIA framework has been established to help with this. What does GIA stand for and what is it?

GIA stands for Government Industry Agreements.

The GIA partnership commits the kiwifruit industry to work with government and other primary sector industries to improve readiness for future biosecurity events and jointly respond to future outbreaks.

5. In the event of a major response, a wide range of organisations are likely to be called upon to assist, each with their own responsibilities and tasks. To help with coordination, there is a national framework of team structures, functions, processes, and terminology that is applied to all biosecurity/emergency responses. Can you name this national emergency response framework?

Coordinated Incident Management System or CIMS.

6. At its most basic level climate change is thought of as “a warming world”, but there are a range of elements, aside from increasing temperatures, that could have significant impacts on biosecurity risk. Name two other factors of climate change that could impact biosecurity, and how could they increase biosecurity risk.

Factors:

- Increased extreme weather events such as droughts, floods, storms.
- Altered rainfall, and wetter or drier conditions.
- Differing global trade patterns and movement of people.

How these might impact biosecurity:

- Increased risk from new pests and diseases (i.e., sub-tropical species) that are currently limited by our climate.
- Kiwifruit grown in other regions that expose them to other pests and disease.
- New crops grown (sub-tropical crops) that could bring new pests and disease with them.
- Existing pests could establish in other areas/regions.
- Sleeper pests (i.e., those that are established but are currently limited by climate).

7. New Zealand has several national surveillance programmes and trapping networks targeting some of our most unwanted pests and diseases. Why are these so important?

Assuring trade partners that New Zealand exports are safe

Many countries require evidence that New Zealand's primary-sector goods will not carry pests or diseases to their shores. The best possible assurance we can give them is to prove those organisms do not live here – using rigorous and reliable science.

Early detection

Should a harmful pest or disease arrive in New Zealand; surveillance programmes give us early warning. By telling us what is here, and where it is, they allow us to mount a swift and coordinated response to eradicate or control an outbreak.

Understanding and controlling established pests and diseases.

When pests or diseases are established in New Zealand, we aim to understand them and, if possible, stop them from spreading around the country. Surveillance programmes tell us if harmful organisms are changing or moving, so we can manage the risks.

8. It has been a tough 12 months for the growing community and wider industry, with many external challenges taking priority, including a few unforeseen climatic events. Explain how you might ensure biosecurity remains relevant in your networks despite competing priorities.

The below is not an extensive list:

- Educating employees - staff briefings, pest of the month, toolbox meetings etc.
- Setting an example, ensuring you are undertaking good biosecurity practices yourself.
- Set clear expectations for staff.
- Build expectations in contracts.
- Staff biosecurity training.
- Encourage managers and Boards to include biosecurity in their risk management.
- Take part in industry community biosecurity events to stay up-to-date with topical threats.

9. Name two pathogens **not present** in New Zealand that are biosecurity threats to your industry.

The below is not an extensive list:

- *Ceratocystis fimbriata*
- Verticillium Wilt
- Non-NZ Psa
- Invasive *Phytophthoras*
- Cercospora spot (*Cercospora purpurea*)
- Avocado sunblotch viroid

10. Name four high-risk pathways or inputs for the movement of biosecurity risk onto an orchard.

Machinery, contractors, nursery plants, mature plants, budwood, pollen, compost.

11. A grower is worried about the biosecurity risk that contractors may bring on to their property. What are three things they can do to reduce this risk?

- Have signs stating best practice.
- Wash down facilities.
- Tool sanitiser available – or provide tools on site.
- Sign-in sheets for traceability or use of Onside.
- Foot bath.
- State biosecurity requirements into agreement.
- Designated parking areas.

12. Biosecurity is everyone's responsibility. What are three important actions that can be done on-orchard to improve biosecurity?

There are a wide range of practices including, but not limited to:

- Understanding your risks.
- Agree what must happen on site i.e., limit orchard access and ensure all visitors are biosecurity aware.
- Ensure all plant material brought on-site is pest and disease free (i.e., KPCS certified or Avocado High Health Scheme certified).
- Check and clean.
- Sanitise tools.
- Provide wash down facilities.
- Foot baths.
- Ensure everything is free of plant material and soil before entering an orchard.
- Report the unusual.

13. Why is traceability important for biosecurity?

The implementation of an effective traceability system enables a quick response to a biosecurity incursion by tracing suspect or infected plant material and locating, prioritising, and treating suspect or infected orchards. If the origin and downstream impacts of the incident cannot be traced quickly and accurately, there is reduced ability to control the spread of pests and the biosecurity incursion has the potential to impact an entire sector, or even extend to other sectors.

14. There are several ways in which you can report something unusual on your orchards. Name two of these.

The Ministry for Primary Industries (MPI) hotline, the MPI online form, the Find-A-Pest app, or by contacting an industry body such as KVH.