We can all protect New Zealand's precious plants from unwanted pests and diseases.

Our help protects not only our environment, but also our economy, human and animal health, and culturally valuable plants.

By being aware of what to look for, you too can help to keep unwanted pests and diseases out of New Zealand.

Tell your family and friends what you have learnt – before they visit New Zealand or send packages from overseas.

**Be a guardian.
Ko Tātou.
This Is Us.**

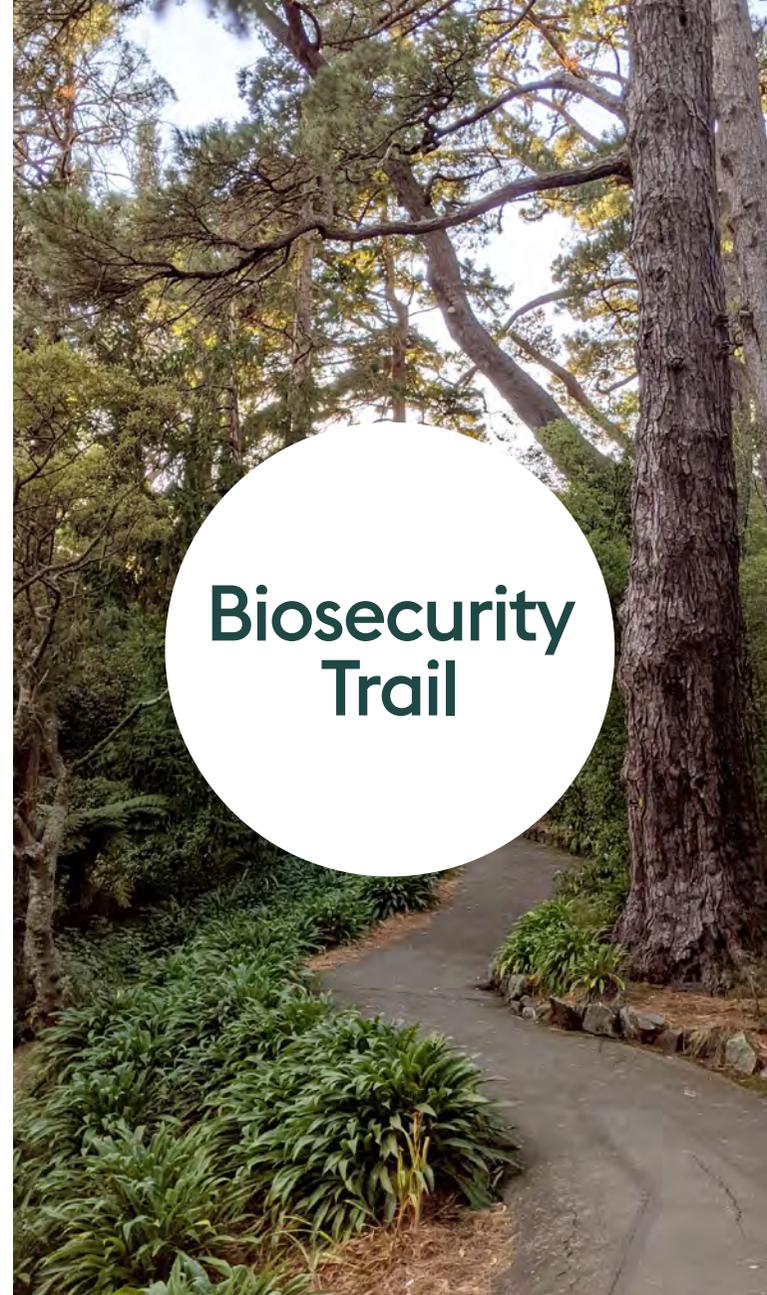KO TĀTOU THIS IS US
BIOSECURITY 2025

What is biosecurity?

Biosecurity is the system that protects our native flora and fauna, as well as our commercial agriculture, horticulture and forestry industries, from unwanted pests and diseases. In New Zealand front-line biosecurity includes, border officers, sniffer dogs and x-ray systems, to detect unwanted pests, diseases or seeds that may enter through goods or passengers coming into the country.

More information about New Zealand's biosecurity can be found at:
biosecurity.govt.nz

Biosecurity New Zealand
Ministry for Primary Industries
Manatū Ahu Matua

For information on Biosecurity research and other activities:
b3nz.org.nz
plantandfood.co.nz

B3 Science Solutions for
Better Border Biosecurity
AOTEAROA NEW ZEALAND

W Wellington Gardens

Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

W Wellington Gardens

Plant & Food™
Research
Rangahau Ahumāra Kai

Biosecurity Trail

This trail is available at Wellington Botanic Garden ki Paekākā

Scan the QR codes to learn more about each pest or disease. Each QR code will take you to a relevant video or website.

Key

- **·····** Trail route
- ☕ Cafe
- 🚻 Toilets
- 🛍 Gift shop

Centennial Entrance ➡

Founders Entrance ➡

Pipitea Entrance ➡

Herb Garden

Lady Norwood Rose Garden

2

1

Begonia House & Picnic Café 🚻 ☕

Soundshell Lawn

Druid Hill

Treehouse Visitor Centre & Shop 🚻 🛍

3

4

Threatened Species

Remembrance Ridge

6 **5**

7

Discovery Garden

P

1. Brown marmorated stink bug (BMSB)
Halyomorpha halys

Plant affected: Grapes

Do you order goods from overseas? Watch out! Did you know that in 2018, 26 stinkbugs were found alive and smelly in shoes someone had ordered from eBay? Luckily the person who found them called the Ministry for Primary Industries (MPI) hotline and a potential biosecurity crisis was averted. These stinkbugs feed on over 300 types of plants including important crop foods like apples, grapes and maize, and also infest homes in their thousands over the winter. This pest is not present in New Zealand. Help us protect our food and environment by keeping this stinky pest out!

Photo credit: Manoharie Sandanayaka PFR, NZ

2. Nun moth
Lymantria monacha

Plant affected: Radiata pine

Imagine if your Christmas tree was stripped bare of needles by caterpillars! Nun moth caterpillars could ruin our festive season and forest industry. Wood products are New Zealand's third largest export earner. Our radiata pine and Douglas fir are used in a huge range of building products. The potential arrival of nun moth is a major concern. Their caterpillars start their lives on male pine cones and then feed on the leaves and needles of many different conifer trees, like this pine tree. This damages and can even kill the tree. Luckily nun moths are not present in New Zealand.

Photo credit: DAFF Archive, Bugwood

3. Queensland fruit fly
Bactrocera tryoni

Plant affected: Lemons

In 2019 eleven Queensland fruit flies were found in Auckland. Residents rallied behind the Ministry for Primary Industries (MPI) to ensure fruit did not leave controlled areas, protecting the rest of Aotearoa. These swift actions resulted in the disappearance of the fly within six months, and movement restrictions were lifted. Fruit fly maggots destroy many crops including citrus, stone fruit, pears, feijoa, tomato and avocado. Queensland fruit fly remains a threat and an outbreak would close our export produce market and have serious impacts on many industries and home gardens. Let's keep our fruit maggot free!

Photo credit: NSW Department of Primary Industries, Australia

4. Kauri dieback
Phytophthora agathidicida

Plant affected: Kauri

The iconic kauri tree is a rangatira, a protector of our forests, and is one of the longest living trees in the world. The timber is internationally prized and entrepreneurial Māori were exporting logs by the early 1800s. European colonists soon joined the industry and kauri forests were decimated. Today, remaining kauri are threatened by kauri dieback, caused by a microscopic fungus-like organism that lives in the soil and infects kauri roots. It damages tissues that carry nutrients and water within the tree, effectively starving it to death. Spores can live for a number of years in the soil and root fragments making it tricky to control the disease. Dieback is present in New Zealand, but you can help to stop its spread.

Photo credit: Amanda Peart, Auckland Council

Keeping watch

Unwanted pests and diseases can damage New Zealand's economy, environment and way of life.

They can endanger native species and upset delicate ecosystems.

Learn why we want to keep them out and how you can help!

5. Myrtle rust
Austropuccinia psidii

Plant affected: Northern rātā

New Zealand's iconic Christmas trees – the rātā and pōhutukawa with their brilliant red flowers – are at risk and need our help. Myrtle rust is a fungal disease that attacks these trees as well as mānuka and other plants in the myrtle family. The spread of myrtle rust could threaten the mānuka honey industry, and could harm specific trees such as the 800-year-old pōhutukawa at Cape Reinga. In Māoritanga, this tree marks the pathway to the traditional homeland of Hawai'iki. Myrtle rust poses the highest risk in the warmer northern parts of the North Island.

Photo credit: MPI, NZ

6. Xylella
Xylella fastidiosa

Plant affected: Olive trees

New Zealand produces international award-winning wine and olive oils. Imagine if a bacterium snuck into our country and destroyed the olive trees and grapevines. Xylella is a bacterium spread by some small insects and damages many plants including grapevines, olives, stone fruit, citrus, berries, and common garden plants. Xylella disease has different names which depend on the infected plant species. In olive trees it is called Olive Quick Decline syndrome. In grapevines it is called Pierce's disease. Xylella is not present in New Zealand, and we are working hard to prevent it arriving.

Photo credit: J.A. Navas-Cortes, CSIC

7. Clover leaf weevil
Hypera zoilus

Plant affected: Clover

Clover is an underrated star of our pastures, worth more than a lucky four-leafed clover hunt. It is one of the few plants that pulls nitrogen from the air into its roots and then into the soil. Soil nitrogen is a vital nutrient for other plants like the ryegrass our grazing animals depend upon. If clover leaves are munched up by the little leaf weevil, pasture will be damaged, and animals and agricultural production could suffer. This weevil is not present in New Zealand, but could become a significant pest if it establishes here.

Photo credit: C.B. Phillips & B.I.P. Barratt, AgResearch, NZ

Biosecurity New Zealand PEST AND DISEASE HOTLINE free phone 0800 80 99 66

What can I do to help?

See something suspicious?

Note the location, take photos, capture it and contact the Biosecurity New Zealand Pest and Disease Hotline, call 0800 80 99 66.

Check your packages!

Check your international packages for insects or plant material as soon as you open them. Many insects could hide in the crevices or packaging of your international parcel. If you find anything in your parcel, capture it and report it to the Biosecurity New Zealand Pest and Disease Hotline, call 0800 80 99 66.

Research it!

Check it is safe before you order seeds and plants on the internet. Checking the domain name is .co.nz or purchasing in NZD does not necessarily mean the seeds and plants are coming from New Zealand. Seeds and plants can be imported safely and legally but only if thorough investigations are done before purchasing to ensure that Biosecurity NZ regulations are followed. Find more information from MPI here: mpi.govt.nz/import

Clean your shoes!

If you're heading into the forest, clean your shoes before and after each visit. Keep to the tracks and help stop the spread of diseases. Clean shoes before you arrive in New Zealand, so that you don't carry soil or unwanted seeds into the country.