

BRAZILIAN WILT (*CERATOCYSTIS FIMBRIATA*) READINESS PLAN

WHAT GROWERS CAN DO TO REDUCE RISK

- Know what a Brazilian wilt infection looks like and inspect your property. **If you think you have an infection take a photo, and phone MPI on 0800 80 99 66 or KVH on 0800 665 825.**
- Do not prune your vines or dispose of plant material until MPI approval has been given.
- Spread of the disease occurs through movement of infected plant material, soil and contaminated orchard equipment; therefore hygiene and sourcing clean plant material are the best preventative measures.
- We all have a role to play as a biosecurity team of 4.7 million people. Biosecurity is everyone's business.
- For further information on this biosecurity threat to the kiwifruit industry please visit <http://kvh.org.nz/brazilianwilt>

GIA AND THE WIDER RESPONSE

- Government Industry Agreement (GIA) provides for joint decision making and cost sharing between government and industries, for biosecurity readiness and response.
- KVH represents kiwifruit and kiwiberry sectors as part of GIA.
- An Operational Agreement is in place – this sets out, amongst other things, how decision-making and costs are shared for both readiness and response between MPI and KVH.
- MPI and KVH have developed a readiness plan for Brazilian wilt, for more information please visit <http://kvh.org.nz/brazilianwilt>

ADDRESSING KNOWLEDGE GAPS

GIA Readiness Work Plan

- KVH is working together with MPI on readiness projects to refine response strategies and diagnostic tools.
- Readiness projects include: high risk zone modeling, developing a containment strategy, and developing surveillance and diagnostic tools.
- Industry-specific projects are implemented to improve readiness for an incursion, such as screening kiwifruit cultivars against a range of pathogen strains in Brazil, to determine relative susceptibility and potential for breeding for increased tolerance.
- A 'Biosecurity Steering Group' drives relevant science projects with funding from KVH and Zespri.

WHAT HAPPENS IF WE HAVE A BRAZILIAN WILT INCURSION?

This documents activities immediately following confirmation of a Brazilian wilt find. Key elements include:



Key stakeholders are notified early

- MPI notify KVH and other affected GIA partners
- KVH notify industry stakeholders by email/phone calls



Regular updates

- MPI daily stakeholder calls & emails
- KVH updates to industry through routine channels (e.g. special bulletins, teleconferences etc.)



Response Governance forms

- Both MPI and industry are represented on Response Governance



Deployment of resources

- MPI and industry identify and deploy resources as needed



Figure 1. Symptoms of Brazilian wilt infection in kiwifruit (Brazil). Clockwise from top left; leaf wilt and curl, cane shriveling and vine discoloration.

KEY RESPONSE ELEMENTS FOR THE KIWIFRUIT INDUSTRY

Eradication may be feasible in the event that the infection is detected early, found to be localised, and limited.

Key activities for kiwifruit industry include;

- Maintaining hygiene and sourcing clean plant material
- Appropriate disposal and disinfection of plant material and equipment
- Education campaigns to raise awareness and encourage reporting of symptoms.

Movement controls

- MPI are likely to Establish movement controls to either the orchard boundary or 500m (depending on what is closer). Other high risk sites, such as source nurseries, may also need movement controls applied until testing can verify absence of the pathogen
- Delimiting survey to determine extent of infection. Testing would include asymptomatic and symptomatic vines. Intensive sampling and testing may be carried out to 500m and less intensive to 1 km plus any high-risk sites identified through tracing activities
- Minimising risk of spread by removing infected vines and sanitising tools. Other orchards should halt pruning activities until the delimiting survey is complete, especially those orchards within 1 km of the infection site.

Organism management

- No treatments have been effective to date with fungicides and phosphoric acids being trialled by many growers.
- Containment strategies may include "trenching" - constructing two layers of trenches 1.5m deep and lined with plastic around the infected trees, constructing the inner layer around the infected trees and the outer layer including a ring of healthy trees surrounding the infection site
- The pathogen is typically spread through movement of infected plant material, soil, and contaminated orchard equipment; therefore hygiene and sourcing clean plant material are the best preventative measures.

Trade

Impacts from market access restrictions are expected to be low as fruit is not considered a pathway of entry as the pathogen is not known to infect fruit.

KEY MESSAGES FOR INDUSTRY AFTER CONFIRMED FIND

- This strain of Brazilian wilt has never settled in New Zealand but has caused substantive damage in Brazil. It spreads through multiple vectors and no treatments have been effective to date. The taxonomy of Brazilian wilt is complex and it is poorly understood which strains will impact the kiwifruit sector.
- The [people] who made the report to MPI/KVH have done exactly the right thing and we applaud them for making such a prompt notification. Early notifications are critical as they give us the best chance of successfully responding to protect New Zealand.



Biosecurity New Zealand

Ministry for Primary Industries
Manatū Ahu Matua