Potato mop-top virus update
2 November 2018

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**Background**

Potato mop-top virus (PMTV) was found in New Zealand in September 2018. Biosecurity New Zealand (a part of MPI) and Potatoes New Zealand (PNZ) have been working in partnership to manage the response. This includes joint decision-making and joint cost-sharing.

PMTV is a plant virus that largely affects potatoes and it is currently a notifiable organism in New Zealand under the Biosecurity Act (this means you have to report it if you find it). The unwanted organism status under the Biosecurity Act was removed in October based on evidence that the impact on industry in New Zealand may not be as great as initially feared. This means that Biosecurity NZ will not be using any legal powers to control or contain the spread of the virus.

Advice from the international technical advisory group is that PMTV is confirmed present in New Zealand and eradication is not possible. Science advice also confirms that the virus can be managed effectively without causing major production losses. It is not a food safety issue.

PMTV is vectored by *Spongospora subterranea*, the causal agent of powdery scab, a common and widespread disease of potatoes. The virus can remain in the resting spores of powdery scab in soil for at least 18 years, meaning paddocks infected with PMTV will likely remain infectious for a long period of time.

Specific management measures are recommended, including not growing potatoes in affected paddocks, and taking measures to avoid spreading soil between paddocks and properties.

There will almost certainly be further discussion within the industry and with research scientists about the best approach to manage PMTV to minimise its impacts.

For more information, please visit the [Biosecurity New Zealand website](#), [Potatoes NZ website](#), or the [PMTV2018 Fact Sheet](#).

**Current situation**

Three paddocks are confirmed to be infected (infected property, IP) with PMTV, and a further 11 paddocks have been linked to a possible infection (suspected infected property, SIP). These unconfirmed links to infected tubers are due to bulk storage at processing plants, where tubers sourced from multiple paddocks are stored together, and cannot be traced back to their owner. All of these sites are within the Canterbury region. A second processor has identified PMTV symptoms in their processing tubers, and those tubers have been confirmed positive for the virus.

In our last update, we mentioned that there were four confirmed infected sites. New evidence found through testing of the volunteer tubers left over from last season (2017/2018) have indicated that one of those infected sites (IP) is not confirmed, and has been downgraded to a suspected infected property. Due to the nature of molecular testing and the distribution of PMTV in the field, it is very difficult to prove a lack of infection, which is why even though the volunteer tubers were not positive in this instance, the paddock still remains under suspicion.
Seed lines

Seed line testing of tubers to be grown this season (2018/2019) has been completed. All seed line samples for cultivars Innovator, Russet-Burbank, Agria, Moonlight and Nadine have shown no trace of PMTV.

Sampling and surveillance

Due to the way in which tubers are stored prior to processing, it has been difficult to trace all positive test results back to individual properties, and more testing has been required for a number of suspected properties. Sampling of volunteer potatoes from the IPs and SIPs, as well as taking soil samples from these properties is continuing. Unfortunately, due to weather issues, this sampling has had some setbacks but is scheduled to finish by mid-next week. In order to test the soil for PMTV, we use a process called soil baiting, where we have to grow “indicator” plants to assess the presence of the virus. This can take up to six weeks.

Transitioning to an industry-led management programme

Biosecurity New Zealand and PNZ are continuing to work together toward transitioning out of the current joint response and planning out what the industry-led management programme will look like.

Managing the spread

You have an important role to play in protecting your farm, your region and the potato industry from biosecurity threats. If you suspect you have found PMTV on your property, contact the Biosecurity New Zealand Pests and Diseases hotline: 0800 80 99 66.

PMTV can be spread on seed tubers, in soil associated with boots, in machinery, and in waste or by-products from potatoes, so on-farm hygiene practices and developing a robust farm biosecurity plan are vital to try to minimise and help control the spread of potato mop-top virus.

Specific on-farm management measures include:

- not growing potatoes in affected paddocks
- cleaning and/or disinfecting equipment, machinery and vehicles to avoid spreading soil between paddocks and properties
- using signage to ensure workers and visitors are aware of biosecurity hygiene practices

PNZ and Biosecurity NZ are currently developing an industry-led disease management programme and you will receive detailed guidance on planting, crop rotation and identification of symptoms in the field in the coming weeks.

Welfare support available

The impact of the PMTV response may stress both you and your business. If you need more support, the following groups can help:

- Rural Support Trust
- Healthline: 0800 611 116
- Lifeline: 0800 111 757
- Depression.org.nz or Depression Helpline: 0800 611 116
- Alcohol Drug helpline: 0800 787 797 or text 8691
- Your GP or Practice Nurse
- New National helpline service 1737 need to talk?: Call or text 1737 to contact an intervention Counsellor. 24/7 service, free, confidential, and anonymous if required.