

3 July 2008

UPDATE – *Candidatus Liberibacter* species

Potatoes

The *Candidatus Liberibacter* species bacterium, recently found in glasshouse tomato and capsicum crops, has now been detected in commercial potato crops in the Auckland region.

MAF Biosecurity New Zealand (MAFBNZ) notified trading partners of the find on Friday 27 June and advised we would continue to issue phytosanitary certification for potatoes. There were several determinates to this decision:

- Our trading partners are already aware of the bacterium and have had an opportunity to manage any risks this may pose.
- We now have a better understanding of the bacterium and its relationship to the likely vector Tomato/Potato psyllid - we believe this insect plays a pivotal role in the transmission of the bacterium.
- Finally, there are fundamental differences between potatoes and tomatoes and capsicums which give us a wider range of options to work with.

MAFBNZ staff spoke with the two biggest importing countries, French Polynesia and Fiji, earlier this week.

Fiji has temporarily suspended import permits for potatoes from New Zealand while they consider next actions. MAFBNZ export staff will be talking to Fiji officials again this week to discuss next steps with regards to import requirements. Fijian concerns centre on the possible vector Tomato Potato Psyllid (TPP) and they are keen to ensure this psyllid does not enter Fiji.

French Polynesia placed additional conditions on potatoes imported from New Zealand following the notification of the bacterium being found on tomato and capsicums on 3 June 2008. These additional conditions were dependent on the bacterium not being found on commercial outdoor crops of potatoes. These conditions can no longer be met and consequently MAFBNZ can no longer issue phytosanitary certificates for fresh potatoes entering French Polynesia. MAFBNZ will be talking with officials there again this week to negotiate ongoing market access.

Niue is the only other country to respond to the notification – while they have made no changes they are currently in the process of reviewing their potato import protocols and have requested further information.

Symptoms

Symptoms do vary but where there is evidence of psyllid infestations growers may see any or all of the following in **potato tops** - smaller than normal, yellowing and tops can develop a scorched appearance before prematurely collapsing. Plants affected by the bacterium can exhibit some, all or in some cases, none of the above. MAFBNZ is still investigating whether all of the above can be linked directly to the bacterium or may be the result of another influence.

Tomatoes/Capsicums

Negotiations with Japan

MAFBNZ staff met with Japan MAFF officials last week and had a constructive meeting. The Japanese officials have requested further technical information and are currently considering our proposal to reinstate trade in capsicums and tomatoes in light of the following;



- the fruit is for human consumption and therefore any bacteria present will be removed from the propagation chain when consumed.
- even if discarded, fruit containing the bacterium is unlikely to propagate as seed containing bacterium generally aborts; and
- the likely vector, the tomato potato psyllid (TPP), is not present in Japan. This means there is no way the bacterium can be transmitted even if fruit is discarded.

While re-opening the Japanese market is still our top priority, negotiations with Australia will not be far behind.

The tomato and capsicum results from the limited surveillance survey are starting to come in now with the full set of results expected by the end of next week.

Tamarillos

Tamarillos from one site (a non-commercial crop) were tested and the result was negative - we will survey and test a further commercial site as part of the surveillance programme. Results are expected by mid-July.

Surveillance

A limited survey is underway in tomatoes, capsicums and potato crops to establish the distribution of the bacterium in New Zealand – a tamarillo crop will also be surveyed.

The survey will help us gather information on management options for both export certification, and contain and control strategies. Information gathered will also determine how disease symptoms in affected hosts are expressed.

The active surveillance programme is being carried out by a MAFBNZ approved contractor who is in the process of visiting around 44 sites across the country - these include 31 tomato/capsicum sites, 12 potato sites and 1 tamarillo site

Results of the glasshouse tomato and capsicum survey are expected by mid July. Growers at the sites surveyed will be notified of their individual results by telephone and letter as results become available over the next few weeks.

The potato survey is due to start this week and the single tamarillo site survey will take place early next week - results should be confirmed by late July.

Science programme

MAFBNZ scientists are investigating a number of issues to help us establish some base information such as is *Liberibacter* seed transmissible, is it spread by Tomato/Potato psyllid (TPP), is it graft transmissible and can the *Liberibacter* be vectored from harvested, infected fruit by TPP?

This work is expected to be complete by late July and the results will help determine actions growers can take to protect their crops.

Images and symptom reminders can be found on the MAFBNZ website:

<http://www.biosecurity.govt.nz/pests/surv-mgmt/resp/tom-cap-bacterium>

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