

26 June 2008

New plant disease in tomatoes and capsicums – an update

This is an update on the new plant disease (a bacterium of the *Candidatus* Liberibacter species) that has been identified in some greenhouse tomato and capsicum crops.

MAFBNZ temporarily withdrew its phytosanitary certification for the export of tomatoes and capsicums on Tuesday 3 June. We are of the opinion that the application of a prohibition or other phytosanitary measures to tomato and capsicum fruit is not the best approach to take. This opinion is based on an evaluation of the likelihood of the new Liberibacter being introduced into another country through trade in tomato and capsicum fruit. Although little is known about the Liberibacter in tomatoes and capsicums, much can be drawn from the biology of other members of this genus, and the application of phytosanitary principles.

In other types of *Candidatus* Liberibacter the bacteria is restricted in the plant to the phloem and is recorded as present in fruit of their hosts (e.g. Citrus). They are also accepted as being transmitted by psyllids (*Trioza erytrae* and *Diaphorina citri*), and the new to NZ psyllid (*Bactericera cockerelli*) is implicated in the spread of the new species of Liberibacter found in New Zealand.

Therefore we are continuing to push to have the ban on export certification lifted, our trading partners advised of the technical justification for doing so, and to be assured that any measures applied by these countries are technically justified, risk based, and consistent with measures applied to other like commodities and pests.

Industry, through our consultant Market Access Solutions, and MAFBNZ have developed a certification programme, including a testing regime for site freedom. We are also developing a code of practice for the control of psyllids. We have engaged Crop & Food Research, Lincoln to urgently provide Industry with an accredited commercial testing facility (this will be an extension of its existing PCR facility for potato PCN). This should be operational by mid July.

However we prefer to think of the compliance programme as a measure of last resort, rather than the first point of discussion in negotiations with trading partners. Our reasoning for this is that the implementation of the certification programme could easily fail due to detection of the Liberibacter in an export crop, before harvest or at any time during export. If this happens there is no contingency available to the grower, they are excluded from the programme and their business is at risk.

MAFBNZ officials are meeting with Japan's MAFF 26/27 June in Japan. MAF now also believes there are very good technical grounds for the lifting of the suspension of export certification and a resumption of trade. This will form the basis of the discussions with Japan MAFF. MAF will wait for an initial response from Japan before deciding whether other options need to be raised. We discussed and agree on these options and MAF will use its discretion in making this decision. Further action for other markets is planned and will be progressed after the meeting with Japan is concluded and an outcome known. That should occur next week.

A number of key questions are being urgently researched (by IDC) including:

- How is the bacterium transmitted; e.g. insect vectors, grafting, seed transmission and whether the bacterium can be transmitted by the vector from infected fruit.
- The relationship between the disease and the plant health symptoms observed by growers in their crops.

This work has been prioritised and the individual results will be provided to us as they come to hand. Some quite critical information on the disease's transmission and vector should be available by the end of July. This work by IDC and industry funded Crop & Food Research work will produce options for growers to manage the disease.

The psyllid remains unconfirmed as the vector of this new Liberibacter. However, it is a potentially serious pest for the greenhouse vegetable and potato industry anyway. The psyllid appears to be successfully over-wintering in several parts of the North Island and Nelson in greenhouse crops. This week it was also confirmed in a greenhouse capsicum crop in Christchurch.

Follow the links to two other related documents; i.e.

- The first in a weekly series of MAFBNZ Updates –
- A diagnostic summary of this new Liberibacter species from MAF's Investigation and Diagnostic Centre (the Plant Health & Environment Laboratory in Auckland).

For images of this new plant disease go to:

www.biosecurity.govt.nz/pests/surv-mgmt/resp/tom-cap-bacterium