

## Biosecurity Advice – Update

### Pest

*Xanthomonas citri* Citrus Canker – Update 2

### Date

Apr 2018

### Location

Northern Territory

### Current Situation

- There is very strong evidence that citrus canker has been detected in Darwin in the Northern Territory.
- It was detected on a variety of West Indian lime, grown for the retail trade. The suspect disease has not been detected in citrus growing areas or on the commercial variety of citrus grown in orchards. However, surveillance in citrus growing areas is ongoing.
- Secondary diagnostic testing is being conducted by specialists at the Elizabeth Macarthur Agricultural Institute in New South Wales. Samples collected from grapefruit, Kaffir lime, West Indian lime and Tahitian lime are also being tested.
- This diagnostic testing is complex and may take several weeks. In the meantime, emergency response measures have been activated to manage any potential risk of the disease spreading.
- This detection occurred in early April 2018, when plants showing signs of infection were found at two retail outlets in Darwin and Palmerston.
- Three citrus plants are understood to have been sold from the Darwin retailer, and three from the Palmerston retailer, before the symptoms were noticed.
- All citrus products have been removed from the affected retail outlets and will have been disposed of under strict biosecurity procedures.
- The Northern Territory Department of Primary Industry and Resources is working with the retailers and production nurseries and other jurisdictions to undertake tracing activities.
- We are urging Northern Territory residents who have citrus plants, to check them for signs of citrus canker. Plants that were purchased this year are of concern. You can find out more about what symptoms to look for by visiting [outbreak.gov.au](http://outbreak.gov.au).
- The Consultative Committee on Emergency Plant Pests (CCEPP) has met to discuss this incident and is assisting the Northern Territory Department of Primary Industry and Resources with its response to this incident.
- Citrus canker has been found in Australia previously and was successfully eradicated.
- It is unknown at this stage how the disease may have infected plants in the Northern Territory, and all leads are being investigated to determine its origin and how far it may have spread.
- Citrus canker does not affect human health, animals or other plants, and infected fruit remains safe to be consumed.

## Biosecurity and reporting

- Early detection, reporting and not moving infected plants is vital, and will give us the best chance of eradicating this disease.
- You should not collect a sample or move the suspect plant.
- Signs of infection can look like other bacterial diseases that are known in northern Australia. All suspected cases should be reported.
- If you think you have a plant with citrus canker, or if you have recently bought citrus plants from a Darwin or Palmerston retail outlet, please contact the Exotic Plant Pest Hotline on **1800 084 881**.
- When phoning the hotline you can arrange to submit a photo for preliminary diagnosis. The photo should be a clear image of the suspect plant, the disease symptoms and the plant's label, if you still have it.
- Interstate travellers also have a role in preventing the spread of pests and diseases. Do not take fruit, whole plants or plant cuttings into another state or territory without checking first. You can do this on the Interstate Quarantine website which is [interstatequarantine.org.au](http://interstatequarantine.org.au).

## About the disease

- Citrus canker is a contagious disease caused by the bacteria *Xanthomonas citri* sub species *citri* which can affect all citrus plants. There are also non-citrus hosts for this disease.
- Citrus canker is native to South East Asia. It infects a plant through wounds and natural openings on leaves, stems, thorns and fruit.
- The disease presents as lesions or cankers at infection sites and severely impacts fruit quality and yield.
- Symptoms are exacerbated by injury caused by feeding activity of the insect citrus leaf miner, which is the larvae of a small moth widely distributed in Australia.
- The symptoms of citrus canker include blister-like lesions that are raised, tan to brown in colour, and are surrounded by an oily, water-soaked margin and a yellow ring or halo. Large or older lesions may have a crater-like appearance.
- Premature fruit drop can occur, along with defoliation, twig dieback and general tree decline. In severe cases, it can lead to tree death.
- Citrus canker can be spread rapidly over short distances, particularly in tropical and subtropical climates by wind-blown rain. Overhead irrigation systems can also spread the disease. Long distance spread occurs through flooding, cyclones, or by people moving infected plant material or equipment.
- More information on citrus canker can be found on the department's website: <http://www.agriculture.gov.au/pests-diseases-weeds/plant/citrus-canker>



*Figure 1 - Citrus canker symptoms include blister like lesions - Source Dept. of Agriculture and Water Resources*



*Figure 2- Citrus canker lesions on stem - Source DAFQ*



Figure 3 - Citrus canker lesions on grapefruit leaf Source Dan Robl USDA

## Trade

- The Department of Agriculture and Water Resources will notify the International Plant Protection Convention that there is a very high probability that this detection is citrus canker.
- There are no international trade implications at present, however the department will work with trading partners should any issues arise.
- Some jurisdictions are considering movement restrictions that will help keep citrus canker out of their production industries. Interim measures will be in place until a national protocol is agreed upon.
- The Northern Territory is not a significant commercial producer of citrus.
- In 2018, the Department of Agriculture and Water Resources did not issue any certification for the export of any citrus material, including nursery stock from Darwin.
- The Australian Government is committed to maintaining Australia's favourable pest and disease status which includes internationally recognised country freedom from citrus canker.

## Background

- Citrus canker has previously been detected in Australia but has been eradicated in each instance.

- The first recorded outbreak of citrus canker was in the Northern Territory in 1912. The initial occurrence of the disease took 11 years to fully eradicate.
- In 1984, a program was initiated to eradicate citrus canker from Thursday Island. Over a two-year period, a total of 10 citrus trees were found to have canker symptoms and were destroyed. No symptoms of citrus canker have been observed on Thursday Island since February 1986, and the disease was declared eradicated in September 1988.
- Citrus canker was detected in the Northern Territory again in 1991 at Lambell's Lagoon, about 50 kilometres from Darwin, and affected a small number of pomelo citrus trees.
- All affected trees were destroyed, and the area was intensively monitored for two years. Citrus canker was officially declared eradicated in the Northern Territory in 1995. The Department of Primary Industry and Resources has continued to undertake regular surveillance and testing since then to help ensure the Territory remained citrus canker free.
- The disease was also detected on several commercial citrus orchards in Emerald, Queensland, in 2004. Eradication of the outbreak and restoration of country freedom for the disease was declared in January 2009.