Exotic Pest Fact Sheet 7

Capsicum Chlorosis Virus (CaCV)

What is it?

CaCV is a Tospovirus whose major economic hosts include capsicums, chillies and tomatoes. CaCV is emerging as economically important and as such, it's host range is still not completely known. CaCV is known to occur on several weeds which play an important role in the survival and dispersal of the virus.

How is it transmitted?

CaCV is spread by thrips. Sources of infection are other infected plants including weeds near crops. The virus is not spread by other insects, mechanically, in soil or in seed.

What does it look like?

In tomatoes, CaCV symptoms are reported to be similar to tomato spotted wilt virus (Fig 1 & 2). Growing tips are usually severely affected with systemic necrosis and greatly stunted growth. Older leaves may show a chlorotic or necrotic ringspot pattern. Fruit may exhibit symptoms such as mottling (inconsistent colour), ringspots, and irregular growth. Affected plants are often stunted and wilted, particularly when infected early, and may eventually die.

Why is it important?

Tospoviruses are collectively of worldwide importance causing significant economic losses on a wide range of crops in areas they are known to be present. Early infections can cause a severe impact on yield because they prevent flowering and fruit set.

Where is it present?

CaCV has reported to have been found in Hawaii, Australia, India and South East Asia.

How can I protect my industry?

Check your production site frequently for the presence of new diseases and unusual symptoms. Make sure you are familiar with common industry diseases so you can recognise something different.

TomatoesNZ

Fig 1: Ring spots on fruit (Tomato spotted wilt virus) Photo: Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org licensed under a Creative Commons Attribution 3.0 License.

Fig 2: Leaf necrosis (Tomato spotted wilt virus) Photo: Edward Sikora, Auburn University, Bugwood.org licensed under a Creative Commons Attribution-Noncommercial 3.0 License.