

Capsicum chlorosis virus (CaCV)

Orthotospovirus capsiciflavi

Crops affected: Capsicum, Chilli, Tomato

What is it?

CaCV is a Tospovirus whose major economic hosts include **capsicum**, **chilli** and **tomato**. CaCV is an emerging disease, and its host range is still not completely known. CaCV is known to occur in several weeds which play an important role in the survival and dispersal of the virus.

What should I look for?

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 (Fig 3). Affected plants are often stunted and wilted, particularly when infected early, and may eventually die.

Fruit may exhibit symptoms such as mottling (inconsistent colour), ringspots, and irregular growth (Fig 4 & 5). Fruit on infected capsicum plants can be small, distorted, often with surface scarring or necrotic lesions (Fig 5).

How is it transmitted?

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

Why is it important?

Globally, Tospoviruses are 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. Market quality can be seriously affected.

Where is it present?

CaCV has reported to have been found in the USA and Hawaii, Greece, Iran, India, China, Taiwan, Thailand, Vietnam, and Australia.

How can I protect my industry?

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



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Fig 1. Leaf necrosis (Tomato spotted wilt virus) Photo credit: Edward Sikora, Auburn University, Bugwood.org



Fig 2. Ring spots on fruit (Tomato spotted wilt virus) Photo credit: Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org



Fig 3. CaCV symptoms on chilli pepper leaves. Photo credit: Pissawan Chiemsombat, Kasetsart University.

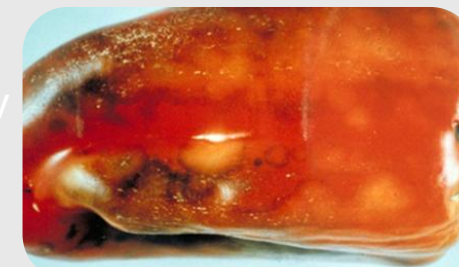


Fig 4. CaCV symptoms on capsicum, ring spots with necrotic border. Photo credit: G. Marchoux, INRA Station de Pathologie Végétale, Bugwood.org.



Fig 5. Fruit from a plant infected by CaCV. Photo credit: VG0 7128 Integrated management of viral disease in vegetables. Technical reference note, DAFF