

Tomato torrado virus (ToTV)

Torradovirus lycopersici

Crops affected: Capsicum, Eggplant, Tomato

What is it?

Tomato torrado virus is a disease of greenhouse **tomato** and other solanaceous crops such as **capsicum** and **eggplant**. Symptoms include leaf discolouration (yellowing) and burn-like lesions on the leaves, as well as stunted plants (Fig. 1).

What should I look for?

Affected plants show necrotic, burn-like lesions at the base of leaflets in the upper parts of the plants (Fig.1). Lesions later turn into shot holes in the leaf. Lesions can also appear lengthwise on the stems, and can be followed by the development of necrotic line patterns or blotches. ToTV can cause deformed fruit making it unmarketable (Fig 2). Affected plants have a general “burnt-like appearance, hence the Spanish name ‘torrado’, meaning roasted.

How is it transmitted?

ToTV is transmitted by insect vectors including greenhouse whitefly (*Trialeurodes vaporariorum*) (Fig 3) and tobacco whitefly (*Bemisia tabaci*). It can also be spread by trade in infected plants. Seed transmission occurs at a low level.

Why is it important?

ToTV is an emerging disease of tomato crops. The virus has the potential to cause considerable yield losses and is reportedly causing serious economic losses in tomato crops in Spain.

Where is it present?

ToTV is present in parts of Europe including Spain and the Canary Islands, Italy, Hungary and Poland; Morocco, South Africa, Iran, Panama, Ecuador, Colombia, 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. Symptoms of ToTV. Photo credit: Prof. Dr. Ir. RAA (Rene) van der Vlugt



Fig 2. ToTV symptoms on green fruit. Photo credit Strateco factsheet.



Fig 3. ToTV vector, adult greenhouse whitefly. Photo credit: David Cappaert, Bugwood.org