

(revision date:6/6/2014)

Tomato: Mosaic viruses

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Several viruses can cause mosaic symptoms in tomatoes, including tobacco mosaic virus (TMV), tomato mosaic virus (ToMV), and cucumber mosaic virus (CMV). Symptoms caused by TMV and ToMV are similar. Leaves show green mottling and may be curled, stunted, and slightly deformed. Plants may be stunted and are generally somewhat yellowed. Fruit is not usually affected but may be small and ripen unevenly. An internal browning of fruit may also occur. TMV and ToMV can be spread by tools, hands, and clothing. Symptoms of CMV include leaves with yellow mottling, bushy and stunted plants, and a reduced yield of small, slow-to-mature fruit. The most striking symptom of CMV infection is the shoestring-like appearance of some leaves. CMV has a wide host range and may be spread by aphids.

Management Options

Non-Chemical Management

- ~ Control weeds in and around the garden to reduce numbers of possible hosts. Other hosts include cucumber and related crops. (CMV)
- ~ Control aphids to help prevent spread of disease. (CMV)
- ~ Plant resistant varieties. Among these are 'Carmen', 'Carnival', 'Casino Royale', 'Cavalier', 'Celebrity', 'First Lady', 'Merced', 'Milagro', and 'President'. (TMV)
- ~ Do not handle plants after using tobacco products. (TMV and ToMV)
- ~ Immediately remove and destroy infected plants.
- ~ Wash hands frequently with soap and water when handling plants. (TMV and ToMV)

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

Tomato: Mosaic viruses

Images



*~ Caption: Tomato mosaic virus symptoms
~ Photo by: R.S. Byther*