



### Scientific Name

*Tomato spotted wilt virus* (TSWV)  
*Tomato chlorotic spot virus* (TCSV)

### Greenhouse/High Tunnel Host Crops

Tomato, pepper, lettuce

### Identification

#### Foliage

- Symptoms first appear as necrotic and/or chlorotic spots or streaks on the foliage, leaf petioles and stems
- Plants start to turn a pale green color and become very distorted and stunted
- Stems may develop purplish-brown streaking

#### Fruit

- Green immature tomato fruit are mottled and have slightly raised areas with faint concentric rings
- On mature fruit, these faint rings turn into very distinct red or yellowish-white rings
- Necrotic ringspots form on tomato fruits with *Tomato chlorotic spot virus*

### Often Confused With

Fusarium wilt, Verticillium wilt, *Pepino mosaic virus*

### Thresholds

Economic action thresholds have been described by the [University of Florida IFAS Extension website](http://www.ifas.ufl.edu/extension). Management needs to take place if one thrips adult is found per tomato flower or if two larvae on average are found per fruit of any size.



### Favorable Environmental Conditions

Dry and warm conditions (approximately 75°F) are favorable for thrips reproduction.

### Scouting Notes

It is very important to look for signs of thrips damage. If any plants exhibit viral symptoms, remove them in order to prevent further infections. More information can be found at [University of Florida IFAS Extension website](http://www.ifas.ufl.edu/extension).



### Management Notes

**Monitor Thrips Populations** – *Tospoviruses* are transmitted by fourteen different thrips species in a persistent propagative manner. Thrips populations can multiply exponentially so it is very important to monitor them.

**Use Resistant Varieties** – There are several commercial tomato varieties resistant to *tospoviruses*.

**Use Virus-Free Tomato Transplants** – *Tospoviruses* can be technically transmitted to new healthy plants through vegetative propagation and grafting.

**Remove Weeds** – Many weed species harbor *tospoviruses* and may serve as reservoirs for the new season. It is important to remove these weeds while tomatoes are planted in the high tunnels to prevent infection.