

## Eggplant, Pepper, and Tomato

### **Frogeye Leaf Spot (Cercospora Leaf Spot)**

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#### **Identification and Life Cycle**

Frogeye leaf spot is a disease of pepper caused by fungus *Cercospora capsici*. The disease is most damaging in tropical and subtropical environments, but occurs occasionally in the western U.S. Frogeye leaf spot is favored by high temperatures (86 to 95°) and abundant moisture. Infection occurs when spores land on and directly penetrate leaves through natural openings. Spores are disseminated by wind, splashing water, or by contaminated equipment. The pathogen is thought to survive between pepper crops in association with crop debris and possibly seed.

#### **Plant Response and Damage**

Frogeye leaf spot symptoms first appear on leaves, petioles, and stems as small, round, water-soaked spots. These spots develop into lesions with a light brown to white interior and a brown to red to purple border. Older lesions may have concentric rings of water-soaked areas and dark rings. Lesions range in size from 0.1 to 0.5 inches, and become brittle and crack as they age. Stems can become girdled by a single elongated stem lesion. The disease is of minor importance in the High Plains region in most years.

#### **Management Approaches**

#### **Biological Control**

No biological control strategies have been developed for frogeye leaf spot.

## Cultural Control

Practice a three-year or longer crop rotation between pepper crops. Deeply incorporate crop residues to reduce pathogen survival between seasons. Varieties differ in their susceptibility to frogeye leaf spot, but the reaction of most varieties is unknown.

## Chemical Control

Fungicides are rarely if ever required to control frogeye leaf spot in the High Plains. If disease is confirmed, a regular fungicide spray program should be initiated. Newer fungicides such as Flint, Quadris, Cabrio, and Tanos may suppress or control frogeye leaf spot, but are not registered specifically for this disease.

### *Product List for Frogeye Leaf Spot:*

| <b>Pesticide</b>         | <b>Rate/Acre</b> | <b>Application Frequency (days)</b> | <b>Remarks</b>                 |
|--------------------------|------------------|-------------------------------------|--------------------------------|
| <b>Captan</b>            |                  |                                     |                                |
| Captan 50                | 2 lb             | 3-7 days                            | 4 day REI                      |
| <b>Copper Fungicides</b> |                  |                                     |                                |
| Champ Dry Prill          | 2 lb             | 7-10 days                           |                                |
| Champ Formula 2          | 2 pt             | 7-10 days                           |                                |
| Copper-Count-N           | 4 pt             | 7-10 days                           |                                |
| Kocide 101               | 1.5-3 lbs        | 5-7 days                            |                                |
| Kocide DF                | 1.5-3 lbs        | 5-7 days                            |                                |
| Kocide 4.5LF             | 1-2 pts          | 5-7 days                            |                                |
| Kocide 3000              | 0.75-1.25 lb     | 7-10 days                           | (for pepper)                   |
| Nordox                   | 2-4 lb           | 7-10 days                           |                                |
| Top Cop + S              | 4 pt             | 7-10 days                           | 1 day PHI                      |
| Tri-Basic Copper         | 3 lb             | 7-10 days                           | 1 day PHI                      |
| <b>EBDC</b>              |                  |                                     |                                |
| Maneb 75DF               | 1.5-2 lb         | 7-10 days                           | Maximum of 12.8 lbs; 5 day PHI |
| Maneb 80W                | 1.5-2 lb         | 7-10 days                           | Maximum of 12 lbs; 5 day PHI   |

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Categories: Eggplant, Pepper, Tomato, Disease, Frogeye Leaf Spot, Cercospora Leaf Spot

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