THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

LEAF MOLD
IN PROTECTED CULTURE

Scientific Name
Passalora fulva; formerly *Cladosporium fulvum* and *Fulvia fulva*

Greenhouse/High Tunnel Host Crops
Tomato, eggplant, pepper

Identification
Foliage
- First appears as olive-green to gray velvety mycelia on the undersides of older leaves
- Pale green lesions coalesce into larger yellowish-brown lesions with poorly defined margins
- The leaves become very chlorotic and curl
- Defoliation occurs until the entire plant dies

Fruits
- Occasionally the disease spreads to the stems, petioles, blossoms, and both immature and mature fruit
- On the blossoms or fruit, symptoms may appear as bronze lesions
- As the disease progresses on the fruit, a leathery rot with irregular margins forms on the stem-end

Often Confused With
Botrytis gray mold, late blight, powdery mildew

Thresholds
Currently, there is no threshold information available.

Favorable Environmental Conditions
This pathogen needs excess water on foliage or high relative humidity (>85%) and grows best at temperatures between 40 – 94°F. The conidia (spores) germinate ideally at 75 – 78°F, where spore production is most abundant at relative humidity 80 – 90%.

Scouting Notes
Look for moldy growth appearing on the undersides of older leaves. If the disease has progressed there will be an overall decline in plant health, starting with chlorosis and defoliation.

Management Notes
Reduce Relative Humidity – High relative humidity and free moisture on leaves are the major driving forces for leaf mold disease progression. Limiting overhead irrigation and handling of plants during periods of high humidity will help in managing leaf mold. Increasing air circulation by increasing spacing and pruning should aid in keeping humidity lower than 85%.

Use Resistant Varieties – There are several tomato cultivars available that are partially or highly resistant to leaf mold. However, the pathogen is variable and the use of resistant varieties should not be relied upon as the sole means of managing this disease.

Start with Clean Seed – Tomato seeds can be sanitized before planting; simple treatment with dilute bleach will kill bacterial and fungal pathogens on seeds. Refer to the "Hot Water and Chlorine Treatment of Vegetable Seeds to Eradicate Bacterial Plant Pathogens" fact sheet.