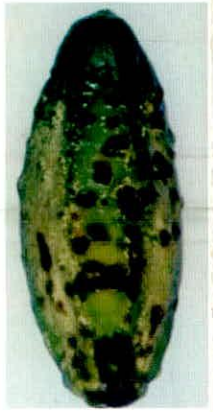
Scab

Scab-like lesions on the fruit. During humid weather, a fungal brownish mat of spores develops on the fruit.

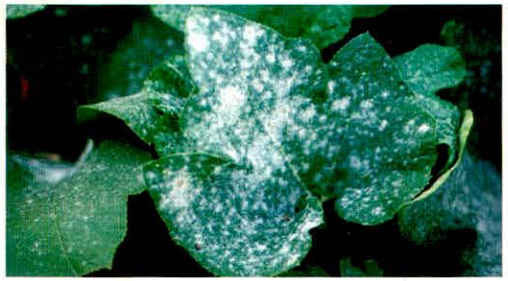


Management

- The disease may be controlled with periodic fungicide sprays

Powdery mildew

The disease is characterized by white powdery-like growth, especially on the upper side of leaves, and on stems.

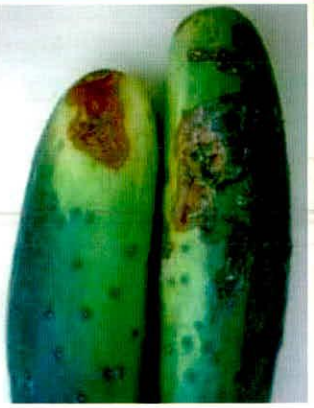


Management

- Maintain healthy vigorous crop
- Remove volunteer cucurbit crops and weeds around the field, sanitation
- Weekly fungicidal sprays
- Recent data indicate that sodium bicarbonate (household baking soda) and potassium silicate sprays may effectively control powdery mildew, as well as other cucumber diseases.

Fruit or Soil Rots

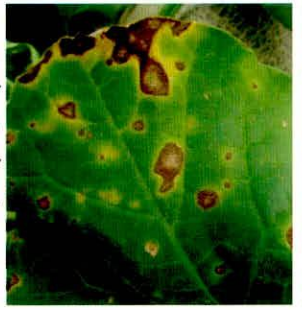
Fruit lesions from Rhizoctonia begin as dark -green water-soaked areas, then affected tissues collapse leaving small holes in the fruit which eventually dry-up. A brownish mycelial growth on the lesions appears in affected fruits during continuous humid conditions.



Management

- Fruit rots are partially controlled with trellises and plastic mulches.
- Recommended cultural practices for Pythium control include disking the soil 3-4 weeks prior to planting to completely decompose old organic matter which helps to prevent the disease organism from surviving in the soil.
- Fungicidal sprays may be effective in controlling this disease.

Alternaria leaf blight



It firsts infects mature leaves near the crown of the plant. Fruit can suffer from sunscald due to leaf loss. Wet, rainy weather favours diseases. Damage can be very severe in warm, wet conditions. The fungus survives from season to season in plant debris.

Management

- Rotate vegetables so that a location goes three or more years without growing any member of the squash family.
- Use drip irrigation instead of overhead sprinklers if possible.
- Do not work in plants when wet.

CUCUMBER DISEASE MANAGEMENT



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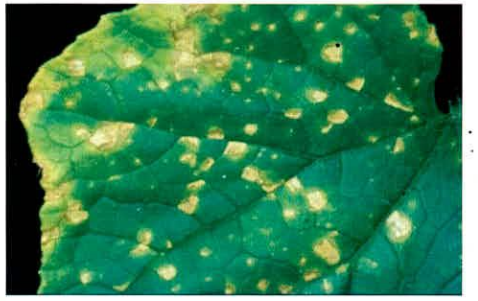
Introduction

Important diseases of cucumbers include the papaya ringspot virus, zucchini yellow mosaic, watermelon mosaic, cucumber mosaic, angular leaf spot, anthracnose, damping-off (Pythium and Rhizoctonia root rot), leaf spot, downy and powdery mildews and scab.

Angular leaf spot



First symptoms are small, water-soaked angular lesions on the leaf underside. Lesions, restricted between the small cucumber leaf veins, turn yellow, develop yellow hollows, and finally disintegrate.

Management

- Controls include a 2-3 year rotation
- Use disease-free seed,
- Weekly sprays of a broad-spectrum fungicide such as Chlorothalonil plus a copper fungicide. Be aware that high copper application rates may result in crop injury, especially during the early crop stages.

Anthracnose



Leaf spot lesions distinguished by the pinkish spore masses which develop in the lesions. The symptoms first appear on the foliage as small, yellowish water-soaked areas which later turn dark and dry out. The lesions are not restricted by the leaf veins. Severely affected vines usually die. Shallow brownish elongated



Management

- destroy the crop immediately after the last harvest.
- Five-year rotations are recommended on anthracnose infested areas.
- Weekly fungicide preventative programs are recommended during humid rainy weather in areas where anthracnose is a problem.

Damping-off



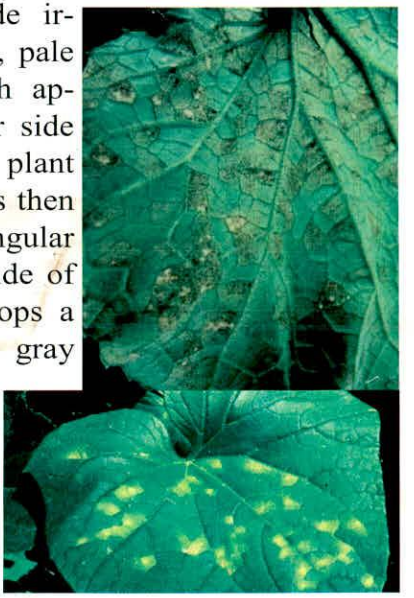
Affected seedlings fail to emerge or collapse shortly after emergence. Emerged seedlings affected by Pythium turn a light green color and the cotyledons collapse. Water soaked lesions also appear on the seedlings at the soil level.

Management

- Ensure proper soil sterilization and strict sanitation practices.
- Improved drainage and wider planting distances are recommended.
- High-quality seed is recommended but resistance to damping-off is not available.

Downy mildew

Initial lesions, which are limited by the small leaf veins, include irregular to angular, pale green spots which appear on the upper side of leaves near the plant crown. The lesions then turn into yellow angular spots. The underside of leaves later develops a downy white to gray mold, which may turn gray to purple during wet weather.



Management

- Apply weekly fungicide treatments. Sprays are less effective once the disease has appeared in the field.

Gummy stem blight



Initial leaf symptoms are irregular circular dark spots which may be surrounded by a yellow halo, and later dry up and crack.

Management

- Soil sterilization and proper sanitation in the greenhouse
- Apply weekly fungicide applications, rotations
- A choice of drip instead of sprinkler irrigation.

