

Video Transcript: How to Identify Foliar Symptoms of Bacterial Disease in Onion

When and Where to Look for Symptoms on an Onion Plant

Leaf symptoms of bacterial disease usually appear after onions start bulbing.

Although leaf symptoms may occur in younger plants, too.

At first, bacterial disease usually appears on a single middle-aged leaf—not usually in the youngest leaves of the onion plant; not usually in the oldest leaves of the onion plant.

Next, bacterial disease might appear in the opposite middle-aged leaves of the onion plant.

Next, all middle-aged and young leaves might collapse while outer leaves remain healthy.

Eventually, the whole plant might collapse and die.

Bacterial diseases of onion can spread down the leaves, into the neck and into the bulb.

Not all plants with foliar symptoms will result in bulb rot.

Common Leaf Symptoms of Bacterial Diseases

Onion leaves infected with bacteria can be white in color, brownish gray, pale green, or yellow.

Infected leaves can look water-soaked, or dry and necrotic.

Very early foliar symptoms appear as a white spot extending from the leaf axil.

Bacteria may enter mechanical wounds such as those caused by hail and cause disease extending from the wounds.

Sometimes, collapsed leaves are invaded by secondary fungi with dark-colored spores.

Tips for Field Scouting

- Look for white leaves.
- Keep an eye out for plants with collapsed inner leaves.
- Bacterial disease is often randomly distributed in the field.
- “Hotspots” can occur, such as in areas where the soil is wet.

Lookalikes

Iris Yellow Spot Virus

- Iris Yellow Spot Virus (IYSV) can also cause leaf collapse.
- Look for white or greenish elongated lesions on mid-aged leaves in plants infected by IYSV.
- Bacterial disease / IYSV

Fusarium Basal Rot (FBR)

- FBR usually causes leaves to die back uniformly, unlike bacterial diseases.
- To confirm FBR, look for poor roots and a rotting basal plate.
- FBR – corky basal plate rot

Bacterial Bulb Rot

- Bacterial bulb rot appears as slimy rot coming from neck

Other

- Anything that damages the basal plate or roots can cause leaf dieback such as a split basal plate or pink root.

Credits and More Information

For more information, visit <https://alliumnet.com/>

Nature's Ninja graphic provided courtesy of the National Onion Association

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