

Extension Tip of the Week

Sometimes, growing tomatoes is difficult, just because they are tomatoes. Tomato issues can have two disease sources, environmental such as the weather or systemic in nature.

The following fungal and bacterial disease issues can be seen in a tomato crop grown in Iowa home gardens:

Septoria leaf spot

Probably the most common fungal disease in tomatoes in Iowa. It first appears as small, water-soaked spots that become about 1/8 inch in diameter while lesions develop a grayish white center with dark edges. The lighted colored centers of these spots are the most distinctive symptom of Septoria leaf spot. Lower leaves are affected first and progress upward if rainy weather persists. Defoliation of leaves can occur after prolonged warm, wet weather.

Early blight

Again caused by a fungus and the most typical symptom is loss of lower leaves. Brown spots with dark edges appear on the lower leaves and spots frequently merge forming irregular blotches. Dark concentric rings appear in leaf spots, giving a “target” appearance. The fungus attacks the fruit on the stem end causing large, black, sunken area.

Anthracnose

Anthracnose first appears on ripe or ripening fruit in small circular, indented spots on the skin. As the spots expand, they develop dark centers or concentric rings of dark specks which are the spore producing bodies. It appears commonly in overripe fruits. Therefore, harvesting ripe fruit on a regular basis is important.

Fusarium wilt

This fungus is unique in that it attacks only certain tomato cultivars. This soil-dwelling fungus symptom is leaf yellowing and wilting that progress upward from the base of the stem. Initially, only one side of a leaf midrib, one branch, or one side of a plant will be affected, but soon spread to the remainder of the plant. Plants die early and produce few, if any fruit. Plant varieties that are resistant to fusarium and look for the letter “F” following the variety name indicate it is resistant. This is not a sure thing against Fusarium, but if infected it will not be as severe and you could have a reasonable yield from the tomato plant.

Verticillium wilt

This fungus attacks other plant species including potato, pepper, eggplant, strawberries, watermelons and radishes. Again, the wilt appears on the lower leaves and progresses upward. Yellow blotches develop on lower leaves and leaves rapidly turn completely yellow, wither and drop off. Infected plants may survive but are stunted and the yield is reduced. Names of Verticillium resistant tomato cultivars are followed by a letter “V” on the variety label. Rotate away from all crops in the tomato family for at least four years.

Late blight

Not a common fungus in Iowa, but when it occurs it can devastate a tomato plant during periods of cool, rainy weather. It can infect either young, upper leaves or old, lower leaves. It appears in mid- or late August during persistent cool, wet weather, or when cool night temperatures cause frequent heavy dews