News Column for use the week of July 1, 2024 Kelsey Hatesohl, Extension Agent, Horticulture River Valley Extension District June 27, 2024

Tomato Leaf-Spot Diseases

This time of year, two common leaf-spot disease appear on tomato plants. Septoria leaf spot and early blight. Brown spots on the leaves characterize both diseases, so it is important to figure out which disease you have so you can treat it accordingly.

Septoria leaf spot usually appears earlier in the season than early blight and produces small dark spots. Spots made by early blight are much larger and often have distorted "target" pattern of concentric circles. With both diseases, heavily infected leaves eventually turn yellow and drop. Older leaves are more susceptible than younger ones, so these diseases often start at the bottom of the plant and work up.

Mulching, caging, or staking keep plants off the ground, making them less vulnerable to both this diseases. Better air circulation allows foliage to dry quicker having less of a chance to develop these diseases. Mulching also helps prevent water from splashing up onto the leaves and carrying disease spores to the plant.

In situations where these diseases have been a problem in the past, rotation is a good strategy. It is too late for that now, but keep in mind for next year. Actually, rotation is a good idea even if you have not had problems in the past. Unfortunately, for many gardeners their space is too small to make rotation practical. If you have room, rotate the location of the tomatoes each year to an area that had not had tomatoes or related crops (peppers, potatoes, eggplant) for several years.

If rotation is not feasible, fungicides are often helpful. Be sure to cover both upper and lower leaf surfaces, and reapply fungicide if rainfall removes it. Plants usually become susceptible when the tomato fruit is about the size of a walnut. Chlorothalonil is a good choice for fruiting plants because it has a 0-day waiting period, meaning that fruit can be harvested once the spray is dry. Chlorothalonil can be found in numerous products including Fertilome Broad-Spectrum Landscape and Garden Fungicide, Ortho Garden Disease Control, Garden Tech Daconil and others. Be sure to start protecting plants when the disease is first seen. It is virtually impossible to control this disease on heavily infected plants. If Chlorothalonil doesn't seem to be effective, try mancozeb (Bonide Mancozeb Flowable). Note that there is a five-day waiting period between application and when the fruit can be harvested. You may wish to pick some tomatoes green just before you spray if you use Mancozeb as the tomato fruit will ripen inside.

As with all chemicals make sure to read the label to make sure it is listed for use on both the specific disease you are trying to get rid of and the plant the disease is on. If you have any questions feel free to stop by or contact me in the Washington office, 785-325-2121 or khatesohl@ksu.edu.

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