

County: Harlan

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Blossom end rot can ruin tomato harvest

Although tomato harvest is a few months away, now is the time to begin thinking about preventing disease that will affect your tomatoes. Nothing can ruin a mouth watering tomato more than reaching for one on the vine only to find an ugly, flattened spot on it. If the ugly spot is located on the fruit opposite the stem end, it is likely blossom end rot, a disease caused by a lack of calcium that commonly occurs in tomatoes but can also affect eggplant, peppers and many cucurbits.

Blossom end rot spots develop into dark brown, leathery decays that may affect half of the tomato. Calcium is an essential part of the chemical “glue” that binds cells together within the fruit. When fruits are enlarging rapidly, sufficient amounts of calcium do not reach the end of the fruit. This causes cells to come apart, resulting in a rot or decay in that area. Calcium does not move easily from other plant parts, so any disruption in the plant’s uptake can result in a deficiency.

Soils in Kentucky are rarely deficient in calcium, but water plays a critical role in the plant’s uptake and distribution of calcium. So maintaining an even supply of moisture is important in controlling blossom end rot. However, to be sure that a soil is not calcium-deficient, soil tests should be taken, and if needed, it can be applied as lime prior to planting.

Irrigate plants as needed, and use mulch to conserve soil moisture. Irrigate on a consistent basis. Don’t allow plants to become stressed from too much or too little water. Avoid wetting foliage as much as possible as this could encourage fungal and bacterial diseases to develop on the plant.

Trickle or drip irrigation is an excellent way of getting water to plants without the risk of wetting the foliage or splashing soil onto the foliage which can also lead to disease problems.

In addition, excessive amounts of ammonium tend to depress a plant’s calcium uptake. Avoid using urea or fertilizers high in ammonium. Instead, choose fertilizers high in nitrate. Calcium nitrate is an excellent nitrogen fertilizer, although it is more expensive than other nitrogen sources.

For more information on how to keep diseases from dampening your gardening enthusiasm, contact the Harlan County Cooperative Extension Service at 573-4464.

Also, if you’re interested in more information about gardening, contact us and ask for the “Home Vegetable Gardening” in Kentucky publication. This publication is a great tool to use in all gardening applications. It contains planting dates, pesticide and fungicide use, and information about specific plants and varieties, as well as other timely tidbits concerning your garden.

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