

Tomato Issues

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Tomatoes are without a doubt THE most popular garden vegetable to grow. Even people with no “formal” garden will often have a couple of tomatoes in pots or buckets just so they can get that fresh tomato taste. It also stands to reason that county extension agents probably field more questions about tomatoes than any other garden vegetable. July normally gets us right into the heart of tomato production season and with it, right into the heart of tomato production problems. Let’s try to tackle a few of the most common tomato questions that I help homeowners deal with.

Abnormal leaf growth is common in tomatoes. If the leaf is curling up right along the big vein that goes down the center of the leaf, then you are looking at physiological leaf curl. It tends to be a problem early in the season when we have hot weather as the plant doesn’t have as big of a root system that it needs so curls up the leaves to reduce water loss out of the leaves. As the summer moves along this becomes less and less of an issue. We also often see very distorted, puckered, curled growth of new tomato leaves. This is often caused by herbicide drift from commonly used lawn weed killers. The vapors can drift for several blocks and points out the importance of spraying in cooler calm weather, not on hot windy days. Plants normally grow out of minor damage but severe distortion may prevent the plant from producing correctly for the rest of the summer.

When I was talking about an insufficient root system on the leaf curl, it can also impact the fruit with a condition known as blossom end rot. This is where the tomato develops a dark spot on the end opposite the stem and it sinks in rendering the tomato unusable. This is not a disease but a temporary calcium imbalance caused by rapid growth, extreme soil moisture fluctuations or sudden changes from cool to hot weather. Our soils are not calcium deficient so adding more calcium won’t help. Avoid fertilizing with an ammonium form of fertilizer and use one that is a nitrate based like calcium nitrate or nitrate of soda. Excess ammonium ions can interfere with calcium uptake by the roots. Maintain a steady soil moisture level and use mulches. Eventually the roots catch up to the tops and blossom end rot disappears. Until that time, just pick those afflicted tomatoes off and toss them into the compost pile.

The last annual tomato problem is the leaf disease that starts killing the leaves of the tomato plants from the bottom up. By the end of the summer you can have a four foot tall tomato plant but leaves only on the top 6 inches of the plant. There are two different diseases that can cause this, early blight and Septoria leaf spot. Both can occur anytime during the year and while I see both, I find that Septoria leaf spot is probably more common. The disease moves from the base of the plant up, leaf by leaf. The infected leaves release disease spores that most commonly infect the next leaf up on the underside of the leaf.

The best way to slow this disease down is through sanitation and air circulation. Clean all the old tomato debris off at the end of the season to remove disease spores. Rotate your tomatoes so you are only growing them about once every four years in the same location. Allow plenty of room for air movement around the plants and water at the base of plants so you keep the leaves dry. You can also treat with fungicides containing chlorothalonil or coppers (Bordeaux) but remember you need to get the spray on the undersides of the leaves as well as the topsides.