## Tomato Leaf Diseases

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Tomatoes have a lot of issues to begin with and then let's put them in a year with lots of rain, humidity and occasional heat and it just gets worse. Four things seem to be heading the list of tomato woes right now. The first one is lots of blooms but no fruit. This is a heat issue - night time temperatures above 70 degrees discourages tomato blooms from setting. Just ride it out and you should get fruit set soon. Next is rotten areas on the blossom end of the fruit. This is blossom end rot and is a physiological condition, not a disease. It tends to happen early in the season and once the roots catch up to the tops, it should stop. Next is defoliation. Most common causes are blister beetles and tomato hornworms. Both can strip a lot of leaves in a hurry. Any garden insecticide labeled for tomatoes should work just fine. The biggest problem of all though is septoria leaf blight. The leaves on the bottom start turning brown and dying and it works right up the plant. Try to keep the leaves as dry as possible but then start spraying with the fungicide chlorothalonil. This is the active ingredient in Fertilome Broad Spectrum fungicide, Hi-Yield Vegetable, Flower, Fruit and Ornamental Fungicide and Ortho Max Disease Control. Pick the tomatoes that are ripe and then spray. Use a sprayer that has NEVER had weed killers in it. Spray the upper and lower leaf surfaces thoroughly and repeat this every seven days into September. For organic gardens you can use Liquid Copper Fungicide although it may be a bit harder to find. Liquid copper is an approved organic fungicide for gardens. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Moles

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. At the county fair a couple of weeks ago I must have had a half dozen people asking me about moles. Moles are those insectivores, they aren't rodents, that swim through the soil eating insects and insect like critters. Moles don't eat roots and kill plants, but their burrowing can cause air pockets around plant roots that will cause issues. Moles are very busy because they have to eat over half their weight in insects every day. When we have a lot of rain it keeps insects close to the soil surface and makes it easy for moles to go swimming through your yard. Controlling moles is not an easy task. Poison baits don't generally work because the moles won't eat it. They depend on their nose touching something that moves in the soil and when it does, they eat it. Baits just lay there and do nothing so they are usually ignored. Sound and vibration devices likewise are worthless because the moles quickly become acclimated to it. And forget the old juicy fruit chewing gum remedy - it has the some challenges as poison baits. Castor oil sprays also seem to be worthless. Controlling soil insects like grubs can help, but generally all we can do is wait till the mole eats all the insects and moves on which is my recommended approach. Trapping can work if you are dedicated and willing to spend the time to do it. Pick up our bulletin at the extension office for trapping hints and details. Using a garden hose has worked for some homeowners but again, it takes dedication and persistence. Tolerance is the best approach, and keep stomping down the tunnels in the meantime! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Cicada Killers

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We have numerous bees and wasps that cause a lot of folks to freak out. Some species are justifiable freaking out, while others aren't. Cicada Killers and Carpenter Bees are two of the latter. Carpenter bees look like bumblebees but have a shiny, not fuzzy, abdomen. Cicada Killers look like huge wasps with black and yellow stripes on their abdomen. These are both solitary species - meaning that they don't live in a social hive like bumblebees, honeybees or yellow jackets. For solitary nesting species, the lone queen does all the work. Builds the nest chamber, lays the egg, fills the chamber with food and then starts on the next one. While many of these solitary nesting insects have stingers, they generally won't waste time using them on us unless we grab them or something. The female busily goes on with her duties until she has laid her eggs and then ignores everyone and feeds on flowers the rest of the summer. But the males are another story. They hang around anywhere that a female is just in case they need to mate. Their only purpose is to mate with a new queen. They defend their air space against anything else, including humans. They fly around you, dive bomb you and buzz your face. Here's the kicker - all male bees are stingerless. They have no stinger. Everything they do is bluff. If you have disturbed a bee that can sting you, they usually won't start buzzing around your head, they'll go for the sting at the nearest exposed body part. You won't know they are there until they deliver a sting. Best thing on all of these is to just ignore them or use hornet spray. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.