# Millipedes

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. A week and a half ago I was leading a bird walk and someone stopped and pointed down on the trail and wanted to know what that "bug" was. Well, that bug was a millipede. At the time I mentioned that I was expecting to see some isolate population explosions of these rascals but I hadn't yet. 48 hours later the first call came in. Millipedes aren't insects, but they are arthropods. They are the little dark "worms" that have lots of legs and when disturbed often curl up. Millepedes feed on decaying organic matter, often leaves of trees, shrubs and grass. When you have a wet period, like we did earlier this spring, you have excellent conditions for organic matter breakdown and this will often lead to millipede population explosions. Then when it starts to get hotter and drier, the millipedes go looking for a better location and they often wind up massing on your sidewalk or patio or even the side of your house. Some even manage to wander into your house but usually die before long. If you walk out on them, hopefully with shoes on, they crunch under your feet. Pretty disgusting! If you find millipedes massing outside your house you can treat them with just about any lawn and garden insecticide with a nuisance pests label. Spraying directly on them is most effective, but spraying the foundation and up on the side of the house can be helpful for later waves of invaders. The good news is that after a few weeks of hot dry weather they will usually disappear. In the meantime, treat the outside of the house and sweep up the ones that make it inside! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

# Tomato Leaf Spots

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. The leaf spots have started on tomatoes, with a vengeance. First we had rainy conditions which led to wet leaves which led to leaf diseases. Then we had hot and dry weather which led to a lot of watering, which, if done with a sprinkler system, leads to wet leaves and warm temperatures which leads to even worse leaf disease issues. There's a couple of different diseases that we will get on tomato leaves this time of year. It really doesn't matter which one they are as prevention and treatment is pretty much the same. The first step is preventing or reducing the incidence of disease. Keeping the leaves dry is crucial. Plant at a space to allow good air movement. Cage or stake tomatoes to keep them up in the air flow. Apply a good organic mulch which will reduce water splashing and splashing water is what commonly moves the disease spores around. Even rotating your tomatoes around the garden so you don't have tomatoes growing the same spot year after year will help reduce the spores. If leaves on tomato plants become badly infected, clip them off and get them out of the garden. Don't use a sprinkler as this gets the leaves wet but if you have to use a sprinkler, water early in the morning when we are likely to have dew anyway. That way the leaves dry off quickly. Sprinklers should never be run in the afternoon or evening. If you do need fungicides, start early and use Mancozeb, mainly early season or Chlorothalonil. It is important to apply the spray to upper and lower leaf surfaces as the disease will infect leaves from either side. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

# Squash Bugs

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Squash bugs are getting active. You may not have seen very many yet, but that's the time to get on them. We have two generations per year and the 1st generation nymphs are getting active. Many gardeners make the mistake of just seeing a squash bug or two and not thinking it's enough to worry about. The problem is that while the 1<sup>st</sup> generation is usually fairly small, the 2<sup>nd</sup> generation makes a huge jump in population and then you have a big problem! The other mistake that gardeners make is that they let the squash bugs get too big before they start treating. Squash bugs have a piercing sucking mouthpart. Unlike insects that feed on leaves and will eat the insecticide, you HAVE to get the insecticide directly on the squash bug for control. While insecticides are quite effective on squash bug nymphs, squash bug adults are VERY hard to kill. I'll be right honest, if you want to control squash bugs you need to start spraying NOW whether you see any or not. The other challenge is that they feed on the undersides of the leaves. Sprinkling a dust form insecticide on the tops of the leaves will do no good. You need to be spraying on the upper and lower leaf surface when bugs are active either early morning or late evening, not in the heat of the day when they are taking shelter in debris at the base of the plant. Insecticide choices are somewhat limited. Peremthrin, which is found in quite a few products is going to be good as will Malathion or methoxychlor. Spray the undersides of the leaves thoroughly as well as the ground under the plant. Retreat as the label allows! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

#### **Tomato Hornworms**

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Many tomato growers have come out to their tomato plants one summer morning to find a whole lot of leaves have been devoured. Upon closer inspection you are likely to find dark green or black droppings or what I like to refer to as caterpillar poo! What you are seeing is evidence of either the tomato or tobacco hornworm a.k.a. 5 spotted hawk moth or the Carolina sphinx moth. Don't worry about which one it is, damage and treatment is the same. These caterpillars start off small but get as big as your finger by the time they pupate. The caterpillars both have a long horn on the back end of their bodies which is quite typical of sphinx moths. When they finish feeding they crawl to the ground, burrow in and pupae under ground. The larvae feed during the night and then hide, very well, during the day. They tend to go deep inside the plant and just lie right along the larger stems. By doing this they can effectively disappear and are easy to overlook. There are several chemical sprays including Bt, spinosad, cyfluthrin and permethrin that can be used. But honestly, the damage is often being done by only one or two caterpillars. Slow and deliberate examination of the plant will usually turn up the culprits where you can then take great pleasure in grabbing them and slamming them to the ground. Little boys love doing this! However, there are several small wasps that will parasitize hornworms. If you see small white projections on the hornworms, leave them alone. The larvae are feeding on the hornworm and will kill it. This will lead to more wasps to kill more worms. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

# Trees Losing Leaves?

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. When we have very good growing conditions as trees leaf out, it is quite common for many tree species to put on a lot of leaves. I often refer to this as the buffet syndrome - lots of food you so just sort of go nuts! In fact, just like us eating way more food than we need at the buffet, the trees, because of all the moisture and good conditions, put on way more leaves than they need. Following either of these events, there are consequences. You go home from the buffet stuffed and muttering, "I can't believe I ate the whole thing." The weather turns off hotter and drier and it's muttering, I can't believe I grew all of these leaves. You'll be miserable for a while as you digest that over indulgence. The tree has it somewhat easier. It just starts shutting off food to a bunch of the leaves, they turn color and fall off the tree. Balance is restored between the capacity of the tree and the leaves it is trying to keep alive. So all of that is simply to tell you that often times trees drop leaves simply because they put on too many. In some cases, with weather like this, leaves can be impacted by scorch which is caused by more water being lost out of the leaf than the tree can move to it. Leaves usually will turn brown between the leaf veins often starting on the outer edges of the leaf. Maples are very prone to this. While it looks bad, it usually doesn't hurt the tree. The one thing that you do want to be on the lookout for is when leaves just up and die and don't fall off the tree, especially if it is all the leaves on a branch. This is often an indication of a disease issue and you need to call me on this! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.