What’s with the Seed Mix-Up?

If you gardened or talked to other people who gardened this year you have probably heard of the seed mix up that has been going on across the country. While seed mix-ups aren’t entirely uncommon on a small scale, this is the first time the issue has happened on such a large scale across the country.

This year’s seed mix-up was originally dubbed “peppergate” by gardening communities because the issue first showed up in peppers. The issue first showed up with jalapeño peppers that ended up not being jalapeño peppers but rather a yellow banana type pepper or a hot wax pepper. Some people also had a mix up on their bell peppers with hot peppers or other types of bell peppers. To make things even more confusing it wasn’t just gardeners who started seeds at home that were impacted but also garden centers and national wholesalers so some people bought a pack of peppers and ended up with a mix of several different types of peppers none of which might be what you wanted.

Once things started to settle down with the peppers it was then discovered that peppers weren’t the only vegetable mixed up. There have been several different varieties of tomato plants mixed up as well ranging from cherry varieties instead of romas and heirloom varieties with hybrids. While the peppers and tomatoes seem to be just a mix up of varieties many gardeners also report getting completely different plants from what they had ordered including thyme seeds that were dill, petunias that ended up being lettuce seeds instead and lettuce seed that ended up being tomatoes. Many of the issues have been linked back to one company that grows seeds for several national chains however issues with other seed companies have been noted including poor germination and seed quality. This issue is especially frustrating for many gardeners since the peppers and tomato issues aren’t caught till the vegetables start to set on fruit and people realize that wasn’t the plant they originally thought it was. By then it was too late to plant anything else, provided you could find seed that was actually what it was supposed to be.

Unfortunately, there isn’t much we can do at this point if you were one of the people affected. It is important to keep a record of what seeds you purchased that were wrong and let the companies know so they are aware of what all is mixed up. If you started your own vegetables from seed and it’s not a variety you like it’s best to get rid of that seed. While this isn’t the gardening year that many had planned it can still be a successful one. I plan to enjoy the cherry tomato I didn’t plan on by making BLT wraps and salads instead.

Watering the Landscape

While the heat wave appears to be over and we have been receiving rain it is still important to be watering your trees, shrubs and flowers in your landscaping to help reduce stress on your plants during dry spells. If water is limited in your area or your water bill is a limiting factor you need to prioritize the plants to water. Your first priority in watering around the landscape should be plants that were planted in the last couple years as they will have the smallest root system and will need the most support. The second priority will be the plants that are hard to replace including large old trees. Yes, even trees that survived the Dust Bowl era still need water to reduce stress and survive in drought conditions. Other trees that fall in this category are heirloom plants or ones that are your favorites and hard to replace. After your top two priorities the final group of plants to water are whatever plants you haven’t watered yet. Hopefully you don’t have to prioritize which plants to water but if you do use those guidelines in your planning.
Leaf miners on Vegetables
If you have ever grown columbine you probably recognize the insect damage on the leaf to the left. Leaf miners is the common name for the larval stage of several different types of insects including moths, flies, beetles and sawflies. The term “leaf miner” is actually referring to the tunneling damage caused by those insects between the layers of the leaf surface. Many of those insects will feed their entire larval period within the leaf and some will pupate inside the leaf before emerging as an adult. There are usually two generations in our area with the second generation overwintering as pupa in the ground to emerge as adults in the spring. In Kansas the most common leaf mining insect of vegetables are a type of fly and the maggot is what is causing the damage in the leaf. In tomatoes and ornamental plants, the damage they cause usually doesn’t harm the plant and only makes the leaf look bad. When it comes to plants that we eat the leaves from however the damage isn’t just superficial, it can make the leaf inedible. While the tunnels and the insects themselves are not a cause to stop eating the leaves, the feces left behind in the tunnels is. (Hope you weren’t eating as you read this.)

Controlling leaf miners in vegetables should start with cultural control methods including monitoring for the adults using yellow sticky traps, monitoring the leaves for larva and then removing the leaves if you can. Other cultural controls include using floating row covers over the plants as soon as you plant them to exclude the flies from laying eggs on the leaves, mixing your leafy vegetables with other crops as monocultures are prone to worse infestations, removing plants immediately after harvesting to prevent the pupa from entering the soil and working the soil in that area to kill any pupa in the ground. You should also avoid using excess nitrogen on leafy plants as this can cause leaf miner infestations to be worse. There are several natural predators that can help keep the leaf miners in check if you can encourage them to live in your garden. If the infestation warrants it you can use chemical control. The tricky part about treating for leaf mining insects is that they are protected by the leaf itself so spraying the surface of the leaf is not sufficient to achieve control. With ornamental plants you could use a systemic insecticide to control the miners if the damage is severe but that is not an option for controlling these insects in vegetable crops. To treat for leaf miners, use products with the following active ingredients: Spinosad, permethrin, neem oil or horticultural oils. Only use chemicals to treat when necessary as resistance to several insecticides has been found in areas with intensive vegetable gardening and over use of chemicals has also been found to make infestations worse by killing beneficial insects.

Hornworms on Tomatoes
Anyone who has gardened for several years has heard of hornworms on tomatoes. These caterpillars are the larval form of sphinx moths and belong to the Sphingidae family. In Kansas there are two hornworms that can cause problems on tomatoes, the tomato hornworm and the tobacco hornworm. Tomato hornworms come in various shades of green with eight yellow chevons and a black tail while the adults have five yellow spots on their abdomen and distinct wavy lines on their wings, the tobacco hornworm is various shades green with seven diagonal stripes and a red tail (see photo to the right) while the moth has six yellow spots on their abdomen and obscured wavy lines on their wings.

In Kansas there are two generations of these moths throughout the summer with the insects overwintering as pupa in the soil. The adults emerge in mid-June and start to lay eggs soon after. The preferred food sources include potatoes, eggplant, tomatoes and moonflowers. The larvae will feed for 30-50 days before pupating to become adults. The larvae have voracious appetites and plants with multiple caterpillars can be defoliated almost overnight. Because of their color they can be very hard to spot on the plants as they blend in with the leaves. The best control is monitoring your plants, removing any leaves that have eggs on them and then removing the caterpillars once you first notice damage. Insecticides are rarely needed as the caterpillars can be hand picked off the plants and killed. There are also several natural predators that parasitize the caterpillars and kill them before they cause too much damage.
Video of the week: Water Pine Trees all year round
During dry years, especially dry winters evergreens can start to suffer and die off. To keep pine trees healthy and provide many years of beauty and shade to your landscape, you'll need to water them during the winter. This segment demonstrates several easy ways to give your pine tree the correct amount of water. Watch the video here: https://kansashealthyyards.org/all-videos/video/water-pine-trees-year-around

Tomato and Pepper Salad with Lime

INGREDIENTS
- 2 Roma tomatoes, seeded and chopped
- 2 bell peppers, any color, sliced
- 2 Tablespoons olive oil
- 1 lime, juiced
- ¼ cup mint, chopped
- 10 black olives, sliced
- 10 green olives, sliced
- ½ cup Feta cheese, crumbled

DIRECTIONS
Mix the tomatoes, peppers, olive oil, lime juices, and mint in a large bowl. Place on a large platter or in a serving bowl. Top with olives and Feta cheese.

(Source: https://medinsteadofmeds.com/tomato-and-pepper-salad-with-lime/)

Reminders-
- Never fertilize warm season grasses after August 15th.
- Sharpen your lawn mower blade.
- Seed carrots, beets and beans.
- Remove suckers and water sprouts from fruit trees.
- Divide Iris and daylilies if needed.
- Fertilize strawberry plants
Upcoming Events

- **September 6th at Noon - Seed Saving from your Garden**
  Seed saving is a fun way to enjoy gardening without breaking the bank. Most plants produce seeds that can be saved from one year to the next, however, not all seeds are equally suited for saving. Jesse Gilmore, Wildcat Extension District Horticulture Extension Agent, will discuss the merits of seed saving, the different types of flowers and seeds, and which plants are most suited to seed saving. This class is offered online via Zoom. For more information on the Garden Hour series or to register visit here: [https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/](https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/)

- **October 4th at Noon - Putting your Garden to Bed: Winter Garden Prep**
  The growing season is nearly over, but your garden work may not be done just yet. Join Anthony Reardon, West Plains District Horticulture Extension Agent, as you learn about all of the various gardening tasks that can help your landscape throughout the winter and prepare your garden for the growing season to come. This class is offered online via Zoom. For more information on the Garden Hour series or to register visit here: [https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/](https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/)

- **October 14th from 8 am to Noon - Houseplant and Perennial Plant Swap**
  Have your houseplants grown like crazy this year and need a trim or did you divide some perennials and have extras? Bring your plants to the Plant Swap hosted by the Butler County Master Gardeners. The rules are simple: 1) Bring at least one plant, cutting or seeds to trade or sell, 2) All swaps must be labeled with plant name, 3) All plants must be pest and disease free. This event is free to attend, just bring your favorite plants to share with plant lovers in your community!!! Register so we can have enough tables: [https://forms.gle/ddB6As2f53Cf9PZa9](https://forms.gle/ddB6As2f53Cf9PZa9)

- **November 1st at Noon - Plants Gone Wild: Controlling Invasive Plants**
  Given the opportunity, certain plants can take over your landscape, woodlands, and pastures. Join Lynn Loughary, Wyandotte County Extension Horticulture Agent, as she helps you to recognize which plants you need to keep a close eye on. Learn about a few of our most invasive plants, and management strategies for their control. Discover which weeds are also regulated by law, through Kansas’s noxious weeds program. This class is offered online via Zoom. For more information on the Garden Hour series or to register visit here: [https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/](https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/)

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