The Grapevine

Vivipary on Grasses

Wednesday of last week appeared to be the day to stump the extension agents across the state with several of us having questions that we shared with the group. This one was new to me and I thought you might find it interesting as well. Vivipary is a term originating in Latin that translates to “live birth”. In plants, vivipary is the germination of seeds without a rest period while the seed is still attached to the fruit. Vivipary is fairly common in apples and tomatoes. In plants this can occur because of environmental factors or genetic mutations of the plant. Seed dormancy in plants is related to the levels of two plant hormones, Abscisic acid (ABA) which inhibits growth and seed germination and Gibberelllic acid (GA) which facilitates seed germination and cell elongation. These two hormones work opposite each other in plants. Concentrations of ABA in plants are a direct response to moisture levels, the higher the moisture content, the lower the ABA the levels will be and the seeds may germinate while still in the fruit. When this happens in tomatoes and apples or other fruit the fruit is still good to eat (don’t eat the germinating seeds of tomatoes however as they can cause stomach issues), it just may not look as appetizing as it normally would. As I said this is not uncommon in tomatoes, apples and several cereal grains (oats, rye, wheat and corn) but this week is the first I have heard of vivipary happening in ornamental grasses. In nature, vivipary is an evolutionary advantage in certain climates such as alpine areas with a short growing season or with mangroves to ensure their offspring survive in a semi-aquatic tidal environment. In short, this process is fascinating and occurs in many different species of plants all over the world. Vivipary can occur in produce found in the grocery store but it’s also as likely to occur in produce grown in your garden as well. If you haven’t found a tomato similar to the photo yet, now you know what is going on when you find one in the future.

Paper Mulberry

This was my “stump the agent” question last Wednesday. I was sent some photos of a tree/shrub that the individual had found while out for a drive to identify because it was different. After stumpng several colleagues, we finally came up with the answer, a Paper Mulberry or Broussonetia papyrifera. This tree is native to Asia and was introduced as a fast-growing shade tree in the United States. In its native lands this tree is used to make paper while in parts of the South Pacific its bark was used to make bark cloth. In the United States you can find this tree occasionally from Massachusetts west to Illinois and south to Texas. Paper mulberry is a large shrub or small tree that can reach heights of approximately 30 feet. It’s leaves resemble the native mulberry however the are lightly hairy and pale underneath. The leaves can be arranged alternately, opposite or whorled around the stem. This plant is tolerant of drought and poor soils however it can be invasive and due to its fast growth as weak stems so I do not recommend planting it in our area.
False Purple Thistle

This week’s plant was inspired by my trip down to Augusta on Ohio Street late last week. As I was driving down the road I saw these beautiful purple blooms that I originally thought were Liatris but a closer inspection showed them to be False Purple Thistle (Leavenworth’s Eryngo) or Eryngium leavenworthii a native plant to Kansas. While its common name calls it a thistle this plant is actually not a true thistle but is often confused with one based on its flowers and appearance. It is actually in the Sea Holly family of striking ornamental plants grown for their flowers. False purple thistle is an annual plant with a leafy stem that is broadly branched at the top. Almost the entire plant has some shade of purple to it with the leaves emerging as gray/green then turning purple as they mature and the royal purple thistle-like flowers that bloom from mid-summer through early fall. This plant grows from 24 to 42” tall and does best in poor soil in full sun to light shade so this plant is excellent for a shallow soil site, a rock garden or in a sunny gravel garden. This plant is deer resistant, requires low care and tolerates heat and drought conditions. The blooms make excellent fresh cut or dried flowers in a flower arrangement just wear gloves when handling because of the prickles. I know, I’m recommending you plant a “thistle” in your flowerbeds but unlike the musk thistle I grew up with this one is a native and far better behaved than musk thistles. While it is an annual, this plant will self-sow in the flowerbed so it would not need replanting.

Fall Webworm

These insects are becoming noticeable across the area as they make their nests in trees. These caterpillars are pale-green to yellow to nearly white with black spots and long white hairs. They are often confused with the eastern tent caterpillars that are also in our area however the two can be distinguished by their webs. The fall webworm has a loosely woven web encasing entire branches and the caterpillars feed inside the web while the eastern tent caterpillar has a densely woven web in the crotches or forks of tree branches and they feed outside the nest only coming inside at night or rainy weather. The fall webworm feeds on a wide range of trees including birch, crabapple, maples, hickory, pecan, mulberry and walnut. Because this caterpillar only feeds inside the nest they are difficult to control by chemical unless you have a high-powered spray that can penetrate the web. Most of the time it’s easiest to cut the branch with the web off and dispose of it rather than use chemical for control. Unless there are multiple nests on the tree or the tree was already stressed by other pests most mature trees can tolerate a few nests of fall webworm without any damage, especially in the fall.

Environmental Stress

With the hot temperatures and continuing drought conditions trees and shrubs are looking stressed across the area. Unfortunately, our long term forecast for the area indicates that we will likely be dry going into the winter which is not great news after the year and a half of drought we have had. As we head into winter it’s important to set trees and shrubs up for success by watering deeply through the fall and winter until the temperatures are below 40 degrees. Water slowly till you have soaked the soil to a depth of at least 12” to provide adequate moisture for the roots. This can be done using a soaker hose around the edge of the drip line and run for several hours, use a sprinkler and run it till the soil is saturated in the top 12” or you can use a hose set to trickle out water and move it around the tree. Evergreens should be watered till the ground freezes to prevent winter damage. Continue to water on a regular basis through the winter when temperatures allow it.
Video of the week: Organic Fertilizer, Is it Better?
Organic products are popular, even for turfgrass. This segment looks at some of the main differences between organic and synthetic lawn fertilizers. No matter what you choose, it’s important to use the right amount of fertilizer at the right time in order to have a lush, green lawn. Watch the video here: https://kansashealthyyards.org/all-videos/video/organic-fertilizer-is-it-better

Blazing Stuffed Peppers
INGREDIENTS
• 4 medium bell peppers, any color
• ½ medium onion, chopped
• 2 cups corn (fresh or frozen)
• 2 small tomatoes, chopped
• 2 (15.5 ounces) cans black beans, drained and rinsed
• 2 teaspoons olive oil
• 1 teaspoon cumin
• ½ teaspoon cayenne pepper
• 1 garlic clove, minced
• 2 teaspoon cilantro, finely chopped
• 1 cup shredded cheddar cheese (try Pepper Jack for more spice)

DIRECTIONS
1. Rinse peppers and cut in half lengthwise; remove seeds. Place peppers in a large pot and cover with water. Bring to a boil, reduce the heat, cover and simmer for five minutes; drain. Set pepper halves on greased baking sheet. Preheat oven to 350 F. In a small skillet, sauté the chopped onion until tender.

2. Mix together onions, tomatoes, corn and black beans in a medium-sized bowl. In a small bowl, combine oil and seasonings; add to vegetable mixture and mix thoroughly. Fill pepper halves with mixture and top with cheese. Bake for eight to 10 minutes or until cheese is melted.

(Source: https://www.ndsu.edu/agriculture/extension/recipes/blazin-stuffed-peppers)
Reminders-
- Fertilize cool season grasses if you haven’t already
- Dig gladiolus bulbs when foliage begins to turn yellow and air dry till spring
- Buy spring flowering bulbs while the selection is still good
- Harvest winter squash when the rind is hard enough it isn’t easily punctured by a fingernail

Upcoming Events
- **September 14th at 6 pm** - Winter Care of Houseplants - Bradford Memorial Library in El Dorado
  Over 66% of U.S. households have at least one houseplant, but often the terms used to describe their care can be confusing. Decode common houseplant terms related to light, water, and other plant needs. Learn about some unique houseplants and the best practices to keep them thriving. Join us at the Bradford Memorial Library (611 S. Washington St. El Dorado, KS) at 6 pm for this free webinar. There will be free cuttings of some houseplants given away!

- **September 30th at 10 am** - Feeding the Birds in Winter - Rose Hill Public Library
  There is nothing more enjoyable on a cold winter day than watching the cardinals and gold finch flitting on the feeder and frolicking in the snow. While feeding the birds can be simple there are a few tips and tricks that can help you be more successful attracting birds to your feeders in the winter. Join us at the Rose Hill Public Library on September 30th at 10 am to learn more about feeding the birds and making your backyard attractive to our feathered friends this winter. This event is free and pre-registration is not required.

- **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 15th from Noon to 4 pm** - 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)