Horticulture 2020 Newsletter

No. 22 June 2, 2020

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Video of the Week: How to Grow Big Bushy Mums
K-State Garden Hour Webinar Series: Making and Supporting Pollinators in the Garden (be sure to register)

UPCOMING EVENTS

The 2020 Kansas Turfgrass Field Day is Canceled

The 2020 Kansas Turfgrass Field Day scheduled for Thursday, August 6 in Manhattan is canceled due to the complications arising from COVID-19.

The K-State campus is not allowing face-to-face contact through July 31. In addition, although turf research is continuing at Rocky Ford, the Olathe Horticulture Center, and the Pair Center, all centers are closed to the public and researchers must minimize their time at the facilities. We do plan to post written and video research updates through the remainder of the year on the Turf and Landscape Blog, accessible through our website, ksu.edu/turf. Next year's Kansas Turfgrass Field Day will be at the Rocky Ford Turfgrass Research Center in Manhattan on August 5, 2021. We are looking forward to seeing you at the 70th Kansas Turfgrass Conference, December 8, 9, and 10, 2020 in Topeka, KS.

Reminders

- Remove sucker growth from base of fruit trees
- Remove dead foliage from spring-flowering bulbs
- Do not damage tree trunks with weed whips
- Remove tree stakes that have been in place at least a year.

FRUIT

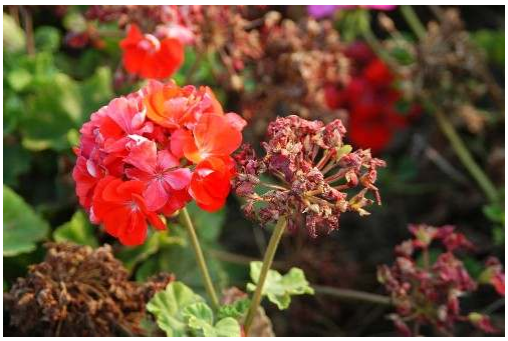
Brown Rot of Stone Fruits

The wet weather we have seen in some areas has caused perfect conditions for the formation of brown rot on stone fruits such as peaches and plums. That is assuming you have any that escaped the spring frosts. Affected fruit develop a gray to brown, fuzzy growth on the fruit, itself, which may rot in as little as a day or two. It is best to start treating fruit about a month before harvest. My peach varieties often ripen in early August but other varieties may be ready for harvest earlier. Fruit that shows symptoms cannot be saved but should be destroyed to prevent further spread.

Use Captan or myclobutanil (Immunox or F-Stop Lawn & Garden Fungicide) for control. Many fruit tree sprays contain Captan but check the label to be certain. Apply Captan or myclobutanil every 7 to 14 days. Both products can be applied up to the day of harvest. (Ward Upham)

ORNAMENTALS

Deadheading Flowers

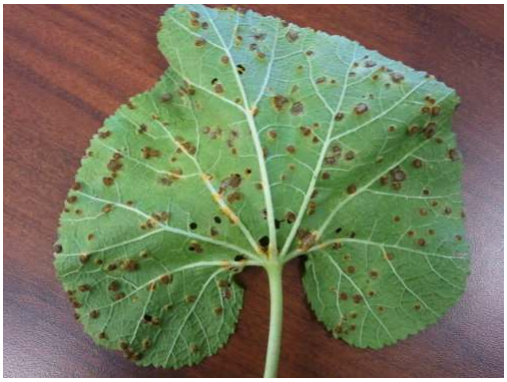


Some plants will bloom more profusely if the old, spent flowers are removed, a process called deadheading. Annuals especially, focus their energy on seed production to insure that the species survives. If you remove old flowers, the energy normally used to produce seed is now available to produce more flowers. Perennials can also benefit by lengthening the blooming season. However, some gardeners enjoy the look of spent flowers of perennials such as sedum or purple coneflower. Also, the seed produced can be a good food source for birds.

Not all plants need to be deadheaded, including sedum 'Autumn Joy', melampodium, impatiens, most flowering vines, Lythrum, periwinkle (Catharanthus), and wishbone flower (Torenia). Those that do increase bloom in response to deadheading include hardy geraniums, coreopsis, petunias, marigolds, snapdragons, begonias, roses, campanulas, blanket flowers, delphiniums, zinnias, sweet peas, salvia, scabiosa, annual heliotrope, geraniums (Pelargonium), and yarrow.

Deadheading is easily accomplished by removing spent flowers. With some plants, pinching between a thumb and finger can do this, but tough, wiry stems will require a scissors or pruning shears. (Ward Upham)

Rust on Hollyhock



Watch for rust on hollyhock. This is the most common disease on hollyhock and can cause serious injury as leaves are progressively killed through the summer. Look for yellow spots on the surface of the leaves and orangish to brown pustules on the underside. Infections can also take place on stems and green flower parts.

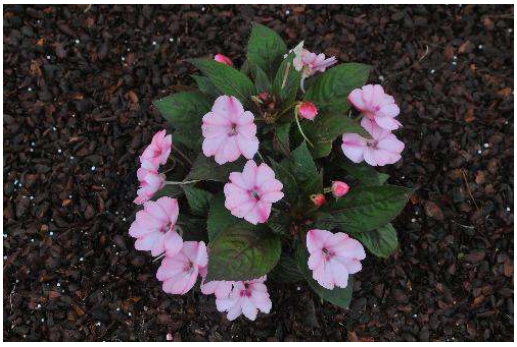
The first line of defense is to remove all hollyhock stalks, leaves and other debris in the fall and destroy them. Remove any infected foliage you see now. Just be sure the foliage is dry so you don't spread the disease. Continue to remove diseased leaves as soon as they show spots. Try using a fungicide such as sulfur or myclobutanil (Spectracide Immunox or Fertilome F-Stop Lawn and Garden Fungicide) to protect healthy foliage. Note that sulfur may burn leaves if the air temperature is over 85 degrees within 24 hours of application. Follow label directions for timing and rate. (Ward Upham)

Pinching Mums

Though some garden mums do not require pinching back, most varieties will benefit. Pinching is done by removing the top inch of growth by pinching it between your thumbnail and forefinger. You can also use a scissors or even a pair of hedge shears.

Pinching encourages lateral buds to break and grow resulting in a shorter, sturdier and fuller plant. The first pinching is usually done when the mums reach six inches in height. Remove about the top inch of growth. A second pinching should be done when the new growth from the previous pinch reaches about 4 inches. Cut the new growth down by about half. We may have time for one more pinch but maybe not as the last pinch should take place around July 4. Pinching later than July 4 can delay flowering resulting in a shorter time of flowering before frost kills the blooms. You may find a video on pinching mums helpful. It is found on our Kansas Healthy Yards website. (Ward Upham)

Sidedressing Annual Flowers



We mentioned sidedressing last week but I wanted to emphasize its importance for annual flowers. Modern annual flowers have been bred to flower early and over a long period of time. They are not as easily thrown off flowering by high nitrogen levels as vegetables are. As a matter of fact, providing nitrogen through the growing season (sidedressing) can help maintain an effective flower display for warm-season flowers.

Apply a high nitrogen sidedressing four to six weeks after flowers have been set out. Additional fertilizations every three to four weeks can be helpful during a rainy summer, or if flower beds are irrigated. Common sources of nitrogen-only fertilizers include nitrate of soda, urea, and ammonium sulfate. Blood meal is an organic fertilizer that contains primarily, but not exclusively, nitrogen. Use only one of the listed fertilizers and apply at the rate given below.

Nitrate of soda (16-0-0): Apply 1/3 pound (.75 cup) fertilizer per 100 square feet.
Blood Meal (12-1.5-.6): Apply 7 ounces (7/8 cup) fertilizer per 100 square feet.
Urea (46-0-0): Apply 2 ounces (1/4 cup) fertilizer per 100 square feet.
Ammonium Sulfate (21-0-0): Apply 4 ounces (½ cup) fertilizer per 100 square feet.

If you cannot find the above materials, you can use a lawn fertilizer that is about 30 percent nitrogen (nitrogen is the first number in the set of three) and apply it at the rate of 3 ounces (3/8 cup) per 100 square feet. Do not use a fertilizer that contains a weed killer or weed preventer. (Ward Upham)

TURF

Thatch Control in Warm-Season Lawns

Thatch control for cool-season lawn grasses such as bluegrass and tall fescue is usually done in the fall but now is the time we should perform this operation for warm-season turfgrasses such as bermudagrass and zoysiagrass. Because these operations thin the lawn, they should be performed when the lawn is in the best position to recover. For warm-season grasses that time is June through July. Buffalograss, our other common warm-season grass, normally does not need to be dethatched.

When thatch is less than one-half inch thick, there is little cause for concern; on the contrary, it may provide some protection to the crown (growing point) of the turfgrass. However, when thatch exceeds one-half inch in thickness, the lawn may start to deteriorate. Thatch is best kept in check by power-raking and/or core-aerating. If thatch is more than 3/4 inch thick, the lawn should be power-raked. Set the blades just deep enough to pull out the thatch. The lawn can be severely damaged by power-raking too deeply. In some cases, it may be easier to use a sod cutter to remove the existing sod and start over with seed, sprigs or plugs.

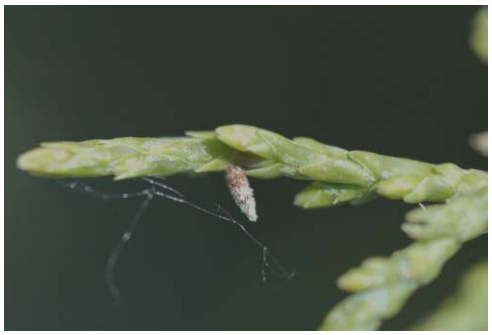
If thatch is between one-half and a 3/4- inch, thick, core-aeration is a better choice. The soil-moisture level is important to do a good job of core-aerating. It should be neither too wet nor too dry, and the soil should crumble fairly easily when worked between your fingers. Go over the lawn enough times so that the aeration holes are about 2 inches apart.

Excessive thatch accumulation can be prevented by not over-fertilizing with nitrogen. Frequent, light watering also encourages thatch. Water only when needed, and attempt to wet the entire root zone of the turf with each irrigation.

Finally, where thatch is excessive, control should be viewed as a long-term, integrated process (i.e., to include proper mowing, watering, and fertilizing) rather than a one-shot cure. One power-raking or core-aeration will seldom solve the problem. (Ward Upham)

MISCELLANEOUS

Get Ready…Get Set…Go…Get Those Bagworms!



For those of you that have been waiting patiently by reading another book or counting your stockpile of toilet paper, or for some…impatiently; it is time to look for bagworms. Although the cool weather we have experienced this spring will slow development, and consequently larvae hatching from eggs, bagworm caterpillars will eventually be present throughout Kansas feeding on broadleaf and evergreen trees and shrubs. Therefore, be prepared to act against bagworms once they are observed on plants. Bagworms are primarily a pest of conifers; however, they feed on a wide-range of host plants including a number of broadleaf plants, such as; rose, honey locust, hackberry, and flowering plum. It is important

to apply insecticides when bagworms are less than 1/4 inch long to maximize effectiveness of insecticide applications and subsequently reduce plant damage.

Several insecticides are labeled for use against bagworms including those with the following active ingredients: acephate, *Bacillus thuringiensis* subsp. kurstaki, cyfluthrin, lambda-cyhalothrin, trichlorfon, indoxacarb, chlorantraniliprole, and spinosad. Most of these active ingredients are commercially available and sold under various trade names or as generic products. However, several insecticides, however, may not be directly available to homeowners.

The key to managing bagworms with insecticides at this time of year is to apply insecticides early and frequently enough to kill the highly susceptible young caterpillars feeding on plant foliage.. Applying insecticides weekly for four to five weeks when bagworms are first noticed will reduce problems with bagworms later in the year. The bacterium, *Bacillus thuringiensis* subsp. kurstaki, which is sold under various trade names, is only active on young caterpillars and must be consumed or ingested to be effective. Therefore, thorough coverage of all plant parts and frequent applications are required. The insecticide is sensitive to ultra-violet light degradation and rainfall, which can reduce residual activity (persistence). Spinosad is the active ingredient in several homeowner products, including: Natural Guard Spinosad; Captain Jack's DeadBug Brew; and Monterey Garden Insect Spray. The insecticide works by contact and ingestion; however, activity is greatest when ingested by bagworms.

Cyfluthrin (BioAdvanced Vegetable & Garden Insect Spray), lambda-cyhalothrin (Spectracide Triazicide, Bonide Caterpillar Killer), trichlorfon, chlorantraniliprole, and indoxacarb can also be used against young caterpillars. Again, thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are essential in achieving sufficient suppression of bagworm populations. The reason multiple applications are needed is that bagworm larvae do not hatch from eggs simultaneously, but hatch over time depending on temperature. In addition, young bagworms can 'blow in' (called 'ballooning') from neighboring plants on silken threads. If left unchecked, bagworms can cause significant damage and ruin the aesthetic quality of plants. In addition, bagworms may kill plants, especially newly transplanted small evergreens, since evergreens do not usually produce another flush of growth after being fed upon or defoliated by bagworms.

If you have any questions on how to manage bagworms in your garden or landscape contact your county horticultural agent, or university-based or state extension entomologist. You can also read the new extension publication on bagworms at http://www.bookstore.ksre.ksu.edu/pubs/MF3474.pdf (Raymond Cloyd)

Recent Rains Trigger Mushroom Development

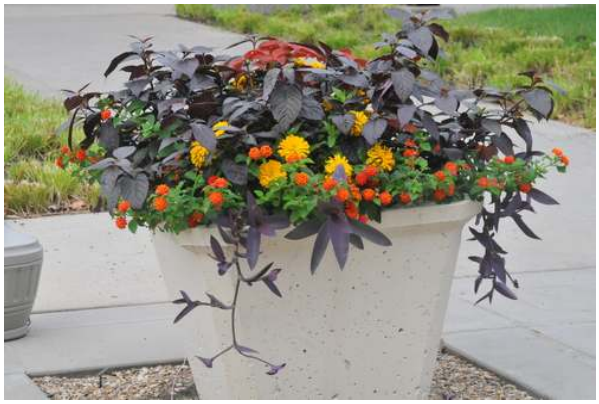
Recent rains in certain areas of Kansas have resulted in the appearance of mushrooms in home lawns and landscape beds. Although mushrooms are often spectacular in size and color, most are relatively harmless to plant life. Some of these mushrooms are associated with arc-like or circular patterns in turfgrass called fairy rings. The ring pattern is caused by the outward growth of fungal mycelium. The mycelium forms a dense, mat-like structure in the soil that decomposes organic matter. This decomposition releases nitrate into the soil, which in turn stimulates the growth of the grass at the outer portion of the ring. This results in a dark green appearance of the grass at the margin of the ring. Unfortunately,

the thick fungal mat formed by the fungus interferes with water infiltration. The fungus also may release certain byproducts that are toxic to the turf. This may lead to dieback of the turf close to the ring. Therefore, in some cases the ring is evidenced by a darker green color and in others, by a brown ring with the outside edge being darker green than the rest of the turf.

Fairy rings are difficult to control. You can sometimes eliminate the ring by digging to a depth of 6 to 12 inches and 12 inches wide on both sides of the ring, refilling the hole with non-infested soil. Or you can try to mask the symptoms by fertilizing the rest of the lawn so that it is as dark green as the ring. This often isn't a good idea because it tends to promote other turf problems. Commercial people can use certain fungicides to control fairy rings but these products are not available to homeowners. See http://www.ksre.ksu.edu/bookstore/pubs/EP155.pdf for more info on these fungicides.

Some mushrooms in lawns are not associated with fairy rings. These may be mycorrhizal (symbiotic association with tree roots) or saprophytic (live on dead organic matter such as wood, etc.) in the soil. Because some of these mushrooms are beneficial, you don't really want to kill them. Besides, a fungicide spray to the mushroom itself does little good. Remember the mushroom is simply the fruiting structure of the organism. Most of the fungus is below ground and inaccessible to the chemical. If mushrooms are a nuisance, pick them and dispose of them as soon as they appear. If there are too many for that to be practical, mow them off. Removing sources of organic debris from the soil can help if such is possible. Also, mushrooms tend to go away as soil dries. Patience may be the best control. Some of the mushrooms in the lawn are edible, but others are poisonous. Never eat mushrooms unless you are sure of their identity. (Ward Upham)

Three Steps to Choosing Potting Media for Outdoor Use: **Part 3**



I have had several questions this spring on potting soils and how to choose the best potting media. Dr. Cheryl Boyer, our Nursery Crop and Marketing Specialist, has done extensive studies on potting soils and has written the following to help homeowners make a good choice. We will present her material is three parts or steps with one step each week.

Step 1: What are You Using it For?

Step 2: Understanding Major, Minor, and Specialty Components

Step 3: Mixing and Managing

Last week we covered Step 2. So, here is Step 3.

(Ward Upham)

Step 3: Mixing and Managing

Knowing what you're working with and what you're trying to do with it will help you understand how to manage it in practical use. These materials may also listed on the ingredient list and it's helpful to know what to expect.

· *Lime:* One special challenge we have in Kansas is that we have a lot of limestone around, which raises the pH of our soil and our water. You may notice that many bagged products include lime or limestone as a fertilization amendment. This is because most soil-less media components are very low in pH, or acidic, and they're trying to get the mix to be pH neutral (so that most nutrients are available for plant uptake). In Kansas, most of our soils are on the high pH, or alkaline, side. It is to our

advantage to apply soil-less products that are low in pH because that will help to neutralize our native soil. We don't need the added limestone, but it's unlikely you'll find a product that doesn't have it mixed in. For sure, don't add more!

· *Fertilizer:* As mentioned earlier, most bagged products have a "starter charge" of fertilizer. You won't need to add anything immediately, but within a few weeks you'll need to apply a water-based fertilizer (immediately available to plants) and/or a long-term slow-release fertilizer product. These usually come rated for months of use. A short-term product (3-4 months) may sound like it will last all summer, but if it gets really hot outside the pellets may release early (if temperature is the mode of operation). Combining a shorter-term product with a longer term one (8-9 months) may cover your needs for a longer time.

· *Wetting agent:* Some products, like peat, are harvested and packaged in a very dry state and may need help retaining water when ready for use. This will likely be pre-mixed,

though if you can tell it's very dry you may want to spread it in a wheelbarrow and mix in some water (and maybe your own re-wetting agent) until it's consistent.

· *Watering:* Containers will need to be monitored for water more frequently than landscape beds, but they all need to be checked. This will vary in every situation, so you'll need to keep an eye on it until you understand how all of the components are functioning together.

Potting media products are remarkably similar once you get past the packaging. Read the ingredient label (just like in the grocery store), find what you need for your application, and then choose the product that best meets your needs and your budget. Choose on price only after you've leveled the playing field of similar products.

Got questions about an unusual component? Let me know—I love a good alternative material discussion. (Cheryl Boyer)

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