Horticulture 2023 Newsletter

No. 22 June 6, 2023

1712 Claflin, 2021 Throckmorton Plant Science Cntr.
Manhattan, KS 66506 (785) 532-6173

Video of the Week: How to Grow Big Bushy Mums

ANNOUNCEMENTS

Drought Tolerant Lawns of Kansas
Warm Season Turfgrasses

Wednesday, June 7th 12:00PM -1:00PM CST

Kansas weather is extreme, but summers are frequently hot and dry. Join Dr. Ross Braun, Assistant Professor of Turfgrass and Landscape Management, as he explains what it means to live in our "transitional climatic zone", with the option to grow both cool- and warm-season turfgrass species. Learn how to grow grass species that are more drought tolerant, in order to better survive our summer weather and conserve water.

Register Here!

Please register for this free Zoom Webinar at:
ksre-learn.com/KStateGardenHour

K-STATE Research and Extension

https://hnr.k-state.edu/extension/consumer-horticulture/garden-hour/

REMINDERS

- Remove sucker growth from base of fruit trees
- Stop harvesting asparagus to allow the plants to build up energy for next year.
- 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.
-

ORNAMENTALS

Deadheading Flowers

Deadheading is the process of removing spent flowers from a plant. Multiple benefits can be achieved from this task. It promotes blooming and can lengthen the bloom season. Plants naturally direct energy toward seed production. By removing old flowers from the plant, seed production is halted and the plant will use energy to create additional blooms.

Some plants do not benefit from deadheading. Impatiens, moss rose (Portulaca) and fibrous begonias are known as "self-cleaning" and do not need to be deadheaded to remove spent blooms. Melampodium is a quick-growing annual and will grow past expired blooms so deadheading isn't necessary. Most flowering vines, periwinkle (Catharanthus) and wishbone flower (Torenia) also do not require deadheading.

There are some other reasons you may choose not to deadhead. Removing flowers prevents the plants from reseeding consequently limiting the number of plants the following growing season. No seedheads also eliminates a food source for birds and other wildlife. Some plants such as coneflower (Echinacea) have attractive seedheads you may choose to leave intact.

Hardy geraniums, coreopsis, petunias, marigolds (Tagetes), snapdragons (Antirrhinum), begonias, roses, campanulas, blanket flowers (Gaillardia), delphiniums, zinnias, sweet peas (Lathyrus odoratus), salvia, scabiosa, annual heliotrope, geraniums (Pelargonium) and yarrow (Achillea) are all plants that increase flower production if deadheaded.

Blooms should be removed as soon as they begin to fade. For soft-tissue plants, the bloom can usually be pinched off using your thumb and forefinger. Pruners may be required for tougher stems. (Cynthia Domenghini)

Sidedressing Annual Flowers

Applying a high nitrogen fertilizer to warm-season annuals four to six weeks after flowering can promote more vigorous growth and a longer blooming season. Implementing a regular fertilization program every three to four weeks is important if your garden receives regular irrigation or during a rainy summer.

Common sources of nitrogen-only fertilizers include nitrate of soda, urea and ammonium sulfate. Blood meal is an organic fertilizer that contains nitrogen. Use one of these fertilizers at the following rate:

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 (1/2 cup) fertilizer per 100 square feet

Alternatively, a lawn fertilizer that is about 30 percent nitrogen (nitrogen is the first number listed in the series of three) can be applied at a rate of 3 ounces (3/8 cup) per 100 square feet. Do not use a fertilizer that contains a weed killer or weed preventer. (Cynthia Domenghini)

Rust on Hollyhock

Hollyhock rust is commonly found on hollyhocks (*Alcea rosea*) and can be seen on other ornamentals and weeds, particularly common mallow. This fungal disease presents as yellowish spots on leaf surfaces and orange-brownish bumps on the undersides. Spots may also appear on stems.

The fungus that causes Hollyhock rust (*Puccinia malvacearum*) can be transmitted into the garden by wind or infected transplants. Once the fungus has entered the garden it can be further spread by splashing water. The fungus thrives in warm, humid conditions and can overwinter in plant debris.

To avoid introducing this disease into the landscape carefully inspect plants before bringing them home. Monitor plants throughout the growing season to catch early signs of the disease for most effective control. In the fall remove all hollyhock stalks, leaves and debris and destroy them as a proactive measure against overwintering the fungus. Keep area weed-free to remove host plants. If symptoms of rust are present during the growing season, remove infected foliage and dispose of it. Protect healthy leaves using a fungicide such as sulfur or myclobutanil (Spectracide Immunox or Fertilome F-Stop Lawn and Garden Fungicide). Sulfur may burn leaves if the air temperature is over 85 degrees F within 24 hours of application. Follow label directions for timing and rate. (Cynthia Domenghini)

Pinching Mums

Most varieties of garden mums benefit from being pinched back when they reach six inches tall. This is done to promote lateral growth preventing the plants from becoming tall and leggy. Pinching can be done with clippers or using your thumbnail and forefinger. Remove the top inch of growth for the first round of pinching. When the new growth reaches 4-inches in height, pinch a second time removing about half of the plant's height. Avoid pinching later than July 4th otherwise flowering may be delayed and shortened due to frost. Here is a video on pinching mums from our Kansas Healthy Yards website. (Cynthia Domenghini)

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. Bermudagrass will often come back if rhizomes remain in the soil. If not, you will need to 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

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)

Contributors:

Cynthia Domenghini,. Instructor (cdom@ksu.edu)
Cheryl Boyer, Nursery Specialist (crboyer@ksu.edu)
Ward Upham, Extension Associate (wupham@ksu.edu)

Division of Horticulture
1712 Claflin, 2021 Throckmorton
Manhattan, KS 66506
(785) 532-6173

For questions or further information, contact: wupham@ksu.edu OR cdipman@ksu.edu
This newsletter is also available on the World Wide Web at:
http://hnr.k-state.edu/extension/info-center/newsletters/index.html
The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.