Horticulture Tips
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Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Department of Horticulture & Landscape Architecture
Oklahoma State University

GARDEN TIPS FOR JULY!

David Hillock, Senior Extension Specialist

Vegetable Garden

- Make fall vegetable garden plantings in late July. Fact Sheet HLA-6009 gives planting recommendations.

Lawn

- Brown patch disease of cool-season grasses can be a problem. (HLA-6420)
- Meet water requirements of turfgrasses. (HLA-6420)
- Fertilization of warm-season grasses can continue if water is present for growth. (HLA-6420)
- Vegetative establishment of warm-season grasses should be completed by the end of July to ensure the least risk of winter kill. (HLA-6419)
- Mowing heights for cool-season turf grasses should be at 3" during hot, dry summer months. Gradually raise mowing height of bermudagrass lawns from 1½ to 2".
- Sharpen or replace mower blades as needed. Shredded leaf blades are an invitation to disease and allow more stress on the grass.

Tree and Shrub

- Control bermudagrass around trees and shrubs with products containing sethoxydim, fusilade or glyphosate herbicides. Follow directions closely to avoid harming desirable plants.

Fruits

- Continue insect combat and control in the orchard, garden, and landscape. (EPP-7306, EPP-7313, EPP-7319)
- Check pesticide labels for "stop" spraying recommendations prior to harvest.
- Harvest fruit from the orchard early in the morning and refrigerate as soon as possible.

Flowers

- Divide and replant crowded Hybrid iris (Bearded Iris) after flowering until August.

General Landscape

- Water plants deeply and early in the morning. Most plants need approximately 1 to 2½ inches of water per week.

- Providing birdbaths, shelter and food will help turn your landscape into a backyard wildlife habitat.
- Insect identification is important, so you don't get rid of the "Good Guys." (EPP-7307)
- The hotter and drier it gets, the larger the spider mite populations!
- Expect some leaf fall, a normal reaction to drought. Water young plantings well.

Register for Upcoming Field Day Focusing on Hops & Grapes

Becky Carroll, Senior Extension Specialist

Growing hops and wine grapes will be the focus of the Field Day at the Cimarron Valley Research Station on July 19, 2024, Enter on the north side of the station at 1003 E. 104th Street, Perkins, OK 74059. Check-in will start at 8:30 a.m. We will conclude around 11:30 a.m.

There is no charge to attend but registration should be completed by July 16, 2024. Register here - https://okstatecasnr.az1.qualtrics.com/jfe/form/SV_507NwqlCiQ7s3bg

In the hop yard, we will discuss topics such as:

- Cultivar selection
- Trellis construction
- Planting & Management
- Pest Management
- Harvest & Post Harvest Handling

In the vineyard, topics will be:

- Grape research project
- Disease Management
- Wine shipping

Bring a lawn chair, sunscreen, and be prepared for a warm July morning. We will provide plenty of cold water and some shade. There will be plenty of time for questions in the field.

The event will conclude with an open invitation for a discounted brewery tour (all ages) and beer/wine tasting (21+) at the Iron Monk Brewing Company, 519 S. Husband St. in Stillwater.

Leaf Samples Can Provide Growers with Fertilizer Plans

Becky Carroll

Although fertilizer applications are usually made in early Spring, July is the critical time to find out what your pecan, blackberry, peach, apple trees and grapevines really need. Tissue analysis is a reliable management tool used to indicate the fertility needs of several fruit crops. Pecan, blackberry and fruit trees can be monitored by collecting leaf samples while grapevine monitoring requires collection of leaf petioles.

Timing is critical. Sample pecan and tree fruits during July, blackberries after harvest, and grapes at veraison (berry color change). Pecan and fruit tree leaf samples are collected according to a new Fact Sheet – HLA 6504 https://extension.okstate.edu/fact-sheets/pecan-leaf-sample-instructions.html. A Spanish version can be found at https://extension.okstate.edu/fact-sheets/instrucciones-para-las-muestras-dehojas-de-nueces-pecanas.html.

Grapevine petiole sampling procedures can be found at https://extension.okstate.edu/programs/viticulture-and-enology/july-is-grape-petiole-sampling-time.html . To sample blackberries, after harvest collect fully matured leaves from midway on the primocane (new vegetative shoots). Sample should be about 60 or more leaves. Rinse them and let dry before submitting in a forage bag.

Results will only be as accurate as the sample collected so it is advised to follow the directions. Once the leaves are sampled, they should be submitted to the local county extension office. The cost for tissue analysis is $23. The extension office will send the samples to the OSU Soil, Water, and Forage Lab. The results will be returned to the extension educator and then shared with the grower. If you need assistance with interpreting the results, please contact me.

Fertilizer recommendations will be provided for the following spring application. Frequently growers find out that they are applying unnecessary nutrients and can reduce their costs of fertilizing. The fee for a leaf sample can be an inexpensive tool to determine shortages or excesses before problems develop.

Summer is for Fall Harvest

David Hillock

Summer may not seem like the best time to be thinking about a fall garden, but July through September is the time to start planting several vegetable varieties to have a fall harvest. Some tender vegetables that can be started in July and August and harvested before fall frosts include beans, cilantro, sweet corn, cucumber, pumpkin, and summer and winter squash. Be sure to choose varieties that mature early and are disease resistant. Some semi-hardy plants, those that may continue to grow and be harvested after several frosts, include beet, broccoli, cabbage, carrots, garlic, leaf lettuce, parsnip, and radish.

Climatic conditions of July and August involve high soil temperature, high light intensity, and rapid drying of the soil, resulting in an increase in the problems of obtaining a uniform stand of plants. Achieving a full stand of plants in the heat of summer may require special treatments. This might include shade over rows when seeded and supplemental watering to reduce soil temperature and aid in seed germination.

Insects and weeds can be more prevalent this time of year so check frequently for insect activity and weed growth and use appropriate control measures. For more information on planting a fall garden see OSU Extension Fact Sheet HLA-6009 Fall Gardening.

Dividing and Replanting Iris

David Hillock

Irises are relatively carefree, easy to grow and long-lived perennials; however, they should be divided every three to four years when they become crowded. Crowded iris will begin to decline in growth and will have fewer and smaller flowers.

Divide the rhizomes (underground stems) after the plants have flowered; July through August is the best time to do this in Oklahoma. Throw away any segments that are diseased, riddled with insects or small and weak. Separate healthy rhizomes into segments with one fan of leaves and several roots. Cut the leaves back to six inches. When planting the new plant, spread the roots out in the soil and position the top of the rhizome at the soil surface. If planted too deep they will not flower as well and are more susceptible to disease and insect attack.

Brown Patch Disease of Cool-Season Grasses

David Hillock

Brown patch is a disease that commonly shows up on cool-season turfgrasses, especially tall fescue, but can occasionally appear on hybrid bermudagrass and zoysiagrass. Brown patch disease appears as brown patches up to three feet in diameter. Leaves first take on a dark color, then wilt and turn brown.

Brown patch usually occurs in hot, humid weather when night temperatures are above 60°F and foliage remains wet for prolonged periods. Poor soil drainage, lack of air movement, cloudy weather, heavy dew, overwatering and watering in late afternoon favor prolonged leaf wetness and increased disease severity. The application of high rates of nitrogen and or deficiencies of phosphorus and potassium, especially when weather conditions are favorable for brown patch, can increase disease severity. Excessive thatch, mowing when wet and leaf fraying by dull mower blades can also enhance the severity of brown patch.

Control starts with good management practices. Though there are varieties of turf-type tall fescue that are considered resistant to brown patch, even resistant varieties succumb when growing conditions are less than ideal for growth of strong plants (as described above) and environmental conditions are highly favorable for disease development.

When environmental conditions favor disease, avoid application of excessive rates of nitrogen. Fertilizer should be applied judiciously, and adequate amounts of phosphorus and potassium are essential to ensure the highest possible levels of plant resistance. In general, cool-season turfgrasses should not receive more than one pound of actual nitrogen per 1,000 square feet at any one time. Use very low rates or avoid applying nitrogen in late spring or summer to cool-season turfgrasses. In a typical home lawn situation, the last application of fertilizer in the spring should be applied no later than early May. Ensure adequate amounts of phosphorus and potassium by applying these nutrients based on soil test results.

Reduce prolonged leaf wetness by watering infrequently to a depth of 6 to 8 inches and at a time when the foliage is likely to dry quickly. Avoid watering in late afternoon and evening and allow for better air movement by removing unwanted vegetation and selectively pruning trees and shrubs. Removal of morning dew reduces prolonged leaf wetness and exudates that favor disease development. This can be accomplished by dragging a hose across the turfgrass or by running the irrigation system for a short time. Good surface and soil drainage must be present to reduce disease incidence.

Make sure mower blades are sharp to reduce the amount of wounded turfgrass in which the fungus can enter the plant. Collect and promptly dispose of clippings on infected areas or when conditions favor disease development. Avoid mowing turfgrass when wet, and do not mow too low so that the turfgrass will be better able to resist the disease.

Applications of effective fungicides, when the first disease symptoms appear, will give good control of brown patch on highly maintained turfgrass. A preventative fungicide program should be considered in areas where the above conditions are difficult to control or change and when conditions are favorable for disease development.

For more information on managing cool-season grasses see leaflet **L-442 Cool-Season Lawn Management Calendar** and fact sheet **HLA-6420 Lawn Management in Oklahoma**.

Injury Prevention Tips for Gardening

David Hillock

Using common sense and joint/muscle protection techniques can help minimize potential injury or overuse of our hands and arms.

Gardening, a common summertime activity, can cause repetitive injuries if not done correctly. It is important to take precautions to avoid injuries. Gardening is made up of many repetitive activities such as weeding, digging, raking, lifting, gripping, stooping, squatting, etc. The nature of these activities places the avid gardener at higher risk for injury than those with a more stationary hobby. For those who work full time and garden in their off time, the risk of injury is even greater since the body doesn't have time to recover between activities.

The repetitive nature of gardening places stress on the hands, wrists, elbows, neck, back, hips, knees and ankles. Poor posture and awkward positions only increase the stress to the body. Using proper ergonomics, good posture and performing warm up exercises prior to gardening can help prevent injuries.

There are numerous ergonomic tools for gardening available at home and garden stores and online. These tools are designed to place less stress on the body during use, thus helping to prevent injuries. For the do-it-yourselfer, tool handles can be built up using padded tape or foam pipe insulation. Another alternative is to wear padded gloves like those used by bikers or weightlifters. Any of these options will increase traction for gripping, decrease the amount of

muscle force needed to grip, and decrease the stress and strain on the joints. Tools ideal for padding include rakes, shovels, trowels, pruning shears, and spray nozzles.

Periodic maintenance of tools can lessen the chance of injury. Shovels, hoes, trowels, and pruning shears require less muscle force to use if kept sharp. Tools with moving parts should be lubricated. Simple modifications to help prevent injuries include:

- Stretch before and after gardening
- Change position frequently
- Keep work as close to your body as possible
- Avoid reaching
- Use light weight equipment
- Use step stools or ladders to avoid reaching overhead
- Use two hands when possible
- Avoid twisting the forearm
- Keep elbows slightly bent
- Avoid overexertion
- Keep wrists in neutral
- Avoid a tight sustained grip
- Take short breaks every hour
- Bend from knees instead of from your back
- Keep back straight
- Rotate activities
- Use padding under the knees when kneeling

If, despite your best efforts, you get a sprain or strain, use the "RICE" principle (rest, ice, compression, and elevation). Once injured, it is important to limit aggravating activities to avoid making the injury worse. If symptoms persist, your doctor may recommend a brace, prescribe an anti-inflammatory, and/or make a referral for physical or occupational therapy.

Watering the Yard and Garden Efficiently

David Hillock

During the summer, watering the landscape and garden can be the primary focus of our activities. Irrigation systems, whether a simple hose-end sprinkler or an elaborate in-ground system, help us accomplish this great task with a little more ease. Obviously, some systems require a little more attention and effort than others. However, all should be closely monitored and managed so that they work efficiently and provide adequate coverage for the plants' needs.

A minimum of 1 inch of water per week is usually required to maintain optimum growth of most plants. However, that will vary depending on the types of plants grown, the soil type, and weather conditions. During the hottest and driest part of the summer, 2 or more inches per week may be necessary. But how much water does your sprinkler(s) put out?

One way to find out how much water your system is discharging is to catch the water. Use straight-sided canisters such as tuna cans and place them randomly under the sprinkler pattern. About 6 cans work well. Turn the sprinkler(s) on and let them run for about 15 minutes. Turn off the water and measure the depth of water caught in each can using a simple ruler. Average all the measurements together and this will tell you how much the system is discharging and how long to run the sprinkler system. For example, you wish to place one inch of water when you irrigate. The average amount of water that was measured when running the system for 15 minutes was .25 inches. So, you will need to run your system for one hour to irrigate one inch.

Some plants require constantly moist soil to maintain optimum growth and performance while others are quite drought tolerant and might even prefer drier soils. One way to make sure all the plants in the landscape are getting what they need is to group plants together based on their watering needs. Be careful not to plant together two plants that have completely different water needs or one of them will eventually suffer and die.

Fleas and Ticks in the Yard

David Hillock

We are in flea and tick season. Successful flea and tick management relies on Integrated Pest Management (IPM). Pets, pet areas, the yard, and home must all be treated and may need repeat applications. Non-chemical methods should be used with chemical treatments. There are many good products on the market. Insect growth regulators (IGRs) are available for the pet, yard, and inside the home. Here are a few more tips.

Flea adults feed on blood and females require a blood meal to lay eggs. All stages of ticks except eggs feed on blood. Male and female adult ticks need a blood meal before they mate and before females can lay eggs. Both fleas and ticks prefer shady, moist areas outdoors.

There are over 2,000 species of fleas in the world; the cat flea is the most common flea found in urban areas and is an intermediate host of the tapeworm. Cat fleas lay eggs on the host, and some fall off and develop in pet bedding, carpet, soil, etc. Eggs hatch in about 1 to 12 days. The larvae are tiny, whitish, legless, covered with hairs, and feed on organic debris, their own caste (skins), and adult feces. Larvae develop over 7 to 26 days and may last over several months if conditions are not favorable. Favorable conditions include 50% or greater humidity and 55 to 90 degrees Fahrenheit. Flea larvae do not survive in direct sunlight or standing water. After the larvae reach the last growth stage, they spin a cocoon. This is called the pupating stage and may last 1 week to several months depending on the direct pressure and area disturbance, increased temperature and humidity, and body warmth of host. When an adult cat flea emerges from a cocoon, it will normally only live 7 to 10 days if it doesn't get a blood meal. The average life span of females on a host is about 11 days and males about 7 days. Egg to adult may last 16 days to 20 months.

There are four species of ticks in Oklahoma. These can transmit diseases to humans including Rocky Mountain spotted fever and Lyme disease. The normal life cycle of a tick from the larval stage until adult lays effs is usually a year or more.

The American dog tick is found throughout Oklahoma but is very abundant in wooded or partially wooded recreational areas. The lone star tick and black legged tick are most abundant in wooded areas in eastern Oklahoma, although the black legged tick does occur in wooded areas of some western counties. The brown dog tick is common throughout Oklahoma and almost always is associated with dogs and areas where dogs are kept (kennels, dog houses, porches or in the house). The black legged tick and brown dog tick commonly prefer other hosts other than humans.

The pet, home and yard should be treated at the same time to prevent infestation from a treated area. There are many methods that should be used in addition to chemical treatments.

Because dogs may carry fleas and ticks into urban areas, they should be checked when returning from a suspected infested area to reduce tick establishment in their yard.

Lawns must be mowed frequently and the prevention of build up of tall grass, weeds or brush in fence lines or around shrubbery is important. Remember these pests prefer shady areas.

There are many insecticides available for fleas and ticks. There are growth regulators available for yards that prevent fleas from reproducing. Insecticides should be used according to the label. It is recommended chemical families be alternated every other treatment to avoid insecticide resistance. These chemicals should not be mixed and applied in yards at the same time.

Mix outdoors away from drains and use only the recommended amount on the label directions.

Cover all exposed skin when mixing and applying insecticides. Use a dust mask when mixing or applying dusts, powders or granules.

Climbing Sweet Potato Vine

Casey Hentges, Associate Extension Specialist
Bailey Singleton, Extension Assistant

An old garden favorite is headed in a new direction. The sweet potato vine has been a staple in the ornamental summer garden for many years. Originally it was chosen to quickly cover an area of the garden with a vibrant chartreuse color, a deep black, or even the tricolor variegated with green, white, and pink foliage. It was as good as mulch at covering bare areas. Over the years, the breeding of various characteristics has evolved. There are sweet potatoes with heart shaped leaves, finer textured foliage, and even well-behaved ones that maintain a more controlled growth habit. While ornamental sweet potatoes are edible, they have been bred for aesthetic features and not sugar content, so they are very starchy and not desirable to eat.

Traditionally, sweet potatoes are often used as a spiller in a pot, or to trail or creep along the soil surface, but now there is the option to get your sweet potatoes to grow vertically. Two options include: Sweet Caroline Upside™ Key Lime Ornamental Sweet Potato Vine and Sweet Caroline Upside™ Black Coffee Ornamental Sweet Potato Vine, both of which are *Ipomoea batatas*.

The climbing sweet potato vines do best when given something to twist around and will even climb upon themselves reaching a height of 3-6 feet. Both are going to give you all the vigor of the traditional sweet potato vine, but is best suited to growing vertically. Sweet Caroline Upside™ Key Lime offers a chartreuse color while Sweet Caroline Upside™ Black Coffee has a deep purple/black color. These plants can grow on a variety of trellises and work well as an annual vine in the landscape. Just like the traditional sweet potato vines, these climbing varieties thrive in full sun and have an average water need.

Now with this new added height of one of our old-time favorites, the sweet potatoes no longer have to be limited to large areas or the edge of containers to spill over. They can now take center stage as the thriller and make a bold statement in landscapes.

https://www.youtube.com/watch?v=QdXRBvSJn8k

Oklahoma Pecan Growers Association Annual Meeting Highlights

Becky Carroll

Pecan growers from across Oklahoma and surrounding states made their way to Ardmore for the 2024 Oklahoma Pecan Growers Convention & Trade Show. The May 30 - June 1 meeting featured many interesting topics like breeding work being done at the USDA featuring scab and cold hardiness, monitoring methods in pecan orchards, biopesticide application costs, and sheller panel discussing pricing. Many thanks to all our speakers and especially the vendors. Thanks to extension educators Lauren Minyard, Stephanie Smith, and Shylan Milligan for their assistance with the event.

Buchanan Family Pecan Farm north of Dickson hosted the Saturday morning field day. The Buchanan's orchard experienced tornado damage losing around 300 trees during the late April storms that devastated many Oklahomans. Much of the field day emphasized what to do after a disaster, clean-up procedures, and Ila Anderson USDA FSA County Executive Director, introduced attendees to programs available after a storm. A major focus was also on pruning and training for strong resilient trees. Charlie Graham and Charles Rohla demonstrated techniques on several trees with attendee input.

The 2023 State Pecan Show winners were announced during the Award Luncheon on Friday. Top award winners were: Largest Pecan exhibited by Dick Hoffman of Payne County. He entered a Mohawk that measured 34.2 pecans per pound. The Highest Percent kernel award was given to Dick Hoffman, Payne County with his Wichita pecan at 60.3 percent kernel. Champion Native was awarded to Ray Purdy of Kay County. His entry was 74.9 pecans per pound and 49.9 percent kernel. The Best of Show pecan was a Kanza entered by Ray Purdy of Kay County. The Kanza was 55.4 nuts per pound and 53.6 percent kernel.

Other special awards presented went to:
Herman Hinrichs Award – Wes Lee, Oklahoma State University
Grower of the Year – Ron Hollis, Holliswood Farm, Boynton, OK
Grove of the Year – Arbuckle Mountain Pecans, Springer, OK

Wes Lee was honored with the Herman Hinrichs Pecan Citation Award.

Photos of the events can be found on the @okpecangrowers.com Facebook page.

The 2025 OPGA meeting will be held on June 7-9 at The Lodge at Sequoyah State Park. Make plans to attend!