Horticulture Tips
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Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Oklahoma State University

GARDEN TIPS FOR SEPTEMBER!

David Hillock, Consumer Horticulturist

Landscape

- Watch for fall specials at garden centers and nurseries since fall is a great time for planting many ornamentals.
- Choose spring flowering bulbs as soon as available.
- Plant cool-season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
- Watch for and control any late infestations of tree webworms.
- Twig girdler insects should be controlled if large numbers of small branches of elms, pecans, or persimmons are uniformly girdled from the tree and fall to the ground.
- Begin to reduce the amount of light on outside tropical houseplants by placing them under shade trees before bringing them indoors for the winter.

Vegetables

- You have all of September to plant cool-season vegetables like spinach, leaf lettuce, mustard and radishes, and until the middle of September to plant rutabagas, Swiss chard, garlic and turnips.

Lawn

- Last nitrogen fertilizer application of the year on warm-season grasses should be applied no later than September 15. (HLA-6420)
- Winter broadleaf weeds like dandelion will begin to emerge in late September, which is also the best time to control them with a 2, 4-D type herbicide.
- If pre-emergent control of winter-annual weeds (henbit, chickweed, annual bluegrass, etc.) is desired in lawns, the application should be completed by the 2nd week of September. (HLA-6421) *Note: Do not treat areas that will be seeded in the fall.*
- Continue bermudagrass spray program with glyphosate products for areas being converted over to tall fescue this fall. (HLA-6421)
- Plan to seed bluegrass, fescue, or ryegrass as needed in shady areas in mid- to late-September. Fall is the best time to establish cool-season lawns. (HLA-6419)
- White grub damage can become visible this month. Apply appropriate soil insecticide if white grubs are a problem (EPP-7306). Water product into soil.

Managing Turf in the Shade

Justin Q. Moss, Turfgrass Specialist

Turfgrasses can be difficult to grow in shady areas and proper management strategies are needed for success. The following is a list of tips for growing turfgrass in the shade in Oklahoma.

1. Right plant, right place. Select the most shade tolerant species and/or cultivar available according to site usage.

2. Remove or selectively prune trees and shrubs if feasible. The north side of buildings, homes and other non-moveable structures may not be conducive to turfgrass growth. Perform a sunlight site assessment by estimating the daily length of full sunlight over the area during the growing season. If the average is at least 8 hours of sunlight, bermudagrass may work, if at least 6 hours, zoysiagrass may work, if less than 6 hours, then tall fescue or alternative landscape planting materials may be the best option. Remember, trees and shrubs can be selectively pruned to improve light penetration to the lawn surface without destroying the growth habit of the plant. Remove tree limbs within 10 feet of the ground and clear brush, plants or structures that block air movement and/or sunlight. For information on proper pruning practices, see OSU Fact Sheet HLA-6409.

3. Increase the mowing height to at least 3 inches for tall fescue (or other cool-season grasses) and at least 2 inches for bermudagrass, zoysiagrass or St. Augustinegrass. In addition, it is likely that these areas can be mowed less frequently than full sun areas. This would also help to reduce traffic stress to the area. If you are managing warm-season grass in the full-sun and cool-season grass in shade, mowing equipment should be adjusted based upon recommended heights-of-cut by species for shady versus sunny areas.

4. Fertilize lightly and frequently as opposed to heavy and infrequent. Shaded turfgrass areas can survive with half of the nitrogen needed to maintain turfgrass in the full sun. In the shade, bermudagrass may need no more than 3 lbs of nitrogen per 1,000 sq. ft. per year. Zoysiagrass, St. Augustine or tall fescue may need no more than 2 to 3 lbs of nitrogen per 1,000 sq. ft. per year. If possible, apply fertilizer at the rate of 0.5 lbs N per 1,000 sq. ft. per application, making 3 to 4 applications over the season. For warm-season grasses, only fertilize during the warm summer months. For cool-season grasses, only fertilize during the spring and fall. If possible, use blended fertilizers containing both a quickly available and a slow-release nitrogen fertilizer source to avoid a quick flush of growth. Always apply fertilizers based on yearly soil test results. For more information on proper soil testing procedures and analysis, see OSU Fact Sheets PSS-2207 and PSS-2225.

5. Avoid excessive foot and/or equipment traffic. Instead of mowing shady areas every time you mow full-sun areas, mow every other time. Rope-off or otherwise protect turf in shady areas, especially if installing new sod or re-seeding. Try not to use heavy lawnmowers or tractors in shady areas or at least try not to repeatedly mow or drive over the same tire tracks every time.

6. Reduce irrigation amount and frequency when compared to full-sun areas. Shade areas take longer to dry out than full-sun areas. If shady areas are constantly wet, there is a

significant increase in the probability of disease development, especially for cool-season grasses such as tall fescue. Allow the area to sufficiently dry between watering. If you have an automatic irrigation system, put shady turf areas on a separate zone from full-sun areas. At the same time, note that turfgrasses, trees and shrubs that are grown in the same immediate area all compete for the same resources to survive. Turfgrasses in the shade that are directly competing with large trees may need more frequent watering than turfgrasses under building or structural shade.

7. Remove weeds either by hand or with herbicides. In a home lawn situation, it may be feasible to remove weeds in shady areas by hand rather than using herbicides. Herbicides can often have a phytotoxic effect on desirable turfgrass plants. Herbicide phytotoxicity to desirable turf plants may be exacerbated by shady conditions. Also, many turfgrass herbicides can be phytotoxic to trees, shrubs or other desirable landscape plants. Always read the entire label before applying any pesticide to any part of your lawn.

8. Remove debris and leaves, especially in the fall and spring. Tree leaves and other debris only serve to block precious light to the turfgrass plant. Raking and removal is necessary and can often make a nice compost/mulch pile for other landscape beds. For tips on composting and mulching, see OSU Fact Sheets BAE-1744 and L-251.

9. Overseed, re-seed or sod. If the turfgrass plant does not receive adequate light and/or management, yearly or bi-yearly overseeding, re-seeding or sodding may be necessary. If so, follow the same basic lawn establishment instructions found in OSU Fact Sheet HLA-6419. For warm-season grasses, complete this task in the late spring/early summer. If using zoysiagrass in a shaded site it will usually need to be installed as solid sod since development from seed will be extremely slow. For best results with cool-season grasses, seed or sod in the fall. If turfgrass repair in the shade is necessary, incorporate the most shade tolerant turfgrass species and cultivars.

10. Be prepared with other planting options if necessary. If you have tried to use tall fescue and/or Kentucky bluegrass combinations and they have repeatedly failed in the shade over a 3-year period even after selective tree pruning and modified management for shade, it is time to move to an alternative shaded landscape strategy that can include shade tolerant ground covers, ornamentals and hardscape elements. Many other ornamental plants can be utilized in shady areas and many of these can tolerate shade much better than turfgrass plants. Sometimes, a nicely designed ornamental bed can be more aesthetically pleasing and easier to maintain than a thinned out turfgrass area in the shade. Hardscape elements such as mulch, pavers and other interest elements can be welcomed additions to shaded landscapes.

If you have further questions about managing turfgrass in shady areas in Oklahoma, please consult OSU Fact Sheet HLA-6608 “Managing Turfgrass in the Shade in Oklahoma” or contact your local OSU County Extension Educator.

Late Summer Color

David Hillock

As we near the end of summer many plants in the landscape are tired, but in spite of the heat there are several landscape plants putting on quite the show. Here is a picture show of just a few perennials growing in our gardens.


Solidago sp.


Eupatorium dubium 'Little Joe'


Rudbeckia sp.


Perovskia atriplicifolia 'Lacey Blue'


Zephyranthes candida


Buddleia 'Miss Molly'

Growing Onion Transplants in High Tunnels Using Sand Culture

Jim Shrefler, Extension Horticulturist

Onions are a popular crop with many Oklahoma gardeners. Onions are often grown using bare-root transplants that are produced out-of-state, generally in Texas or Arizona. Trials conducted in southeast Oklahoma over the years show that good quality onion transplants can be grown locally with good success. Benefits to local grown plants include reduced bolting, quick establishment since transplants are actively growing when planted and assurance of having the desired variety available at the time needed.

High tunnel or hoop house production is a method that has been used in southeast Oklahoma in recent years for onion transplant production. The structure is a plastic covered Quonset hut

design and can vary greatly in size. Other types of cold frames should work just as well. With the method that has been used most commonly onions are planted on the floor of these structures on beds. Onion seed are sown from mid to late October in rows that are about 5 inches apart. Seed can be planted as close as 50 seed per foot of row and should be planted no more than ½-inch deep and the soil should be kept moist until seeds germinate and emerge from the soil. Planting into a shallow layer of good quality potting soil that is spread on the surface of the bed has been found to improve seedling establishment. Structures should be kept closed from November through February and daily warming will provide a suitable growing environment. By mid to late February, plants will measure from ¼ to ½ inch in diameter and are ready to be used as transplants.

In an effort to improve seed germination and plant establishment a trial was initiated in the fall of 2012 to compare several sand and potting soil mixtures for use with onion transplant production in a high tunnel. One treatment was the use of washed fine sand alone. Within the high tunnel, after leveling soil a frame was constructed using a wood 2 X 4 about 2 feet wide and 5 feet long. A layer of woven landscape fabric was placed over the frame and pushed down to the soil surface. The frame was then filled with sand and leveled. Onions were sown in rows 5 inches apart. Although seed were not sown as heavily in the trial, a seeding rate of 50 seeds per foot of row should be possible. Seed were sown about ½-inch below the sand surface. Beds were watered from above until seeds germinated. Once plants began showing signs of nutrient stress watering was done using a fish emulsion fertilizer source with the water.

Plants were grown through the winter and removed from the beds on March 28. They were transplanted to an adjacent high tunnel and grown out to full bulbs for harvest in mid-July. Yield data will be provided in the 2013 OSU Vegetable Trial Report later this year.

There were some new benefits to growing using the sand culture system.

1. We obtained excellent germination and establishment, much better than in the sand potting soil mixes or high tunnel floor soil.
2. Watering was facilitated in that it could be accomplished quickly with a watering can or hose, without having problems of run off or washing of soil.
3. When it came time to harvest, it was very easy to remove plants without needing to use tools to lift the soil. Roots did not pass through the landscape fabric to anchor plants into the tunnel floor soil.
4. Because the sand was clean, there were essentially no weeds to contend with. This was not the case in the other soil treatments.

For anyone who has a high tunnel and is growing their own onion transplants, this is a method that is certainly worth giving a trial run.

Onion varieties and seed sources. Onion varieties that are adapted to Oklahoma include those classified as “short day”, “intermediate day” or “day neutral”. Those classified as “long day” are adapted to northern growing regions and are not likely to bulb properly in Oklahoma.

The following are some onion varieties to consider for starting as seed in Oklahoma.

Onion Varieties and Characteristics to Consider for Use in Oklahoma			
Variety	**Daylength**	**Color**	**Comments**
Cabernet	late intermediate		Consider for trial in northern OK only
Candy	Neutral		
Cimarron	Intermediate	Yellow	
Desert Sunrise	Short	Red	advertised as mild
Mt. Whitney	Neutral		
Ovation	Intermediate		
Pontiac		Yellow	Consider for trial in northern OK only
Pumba	short day		
Red grano	short		
Ruby Ring		Red	Consider for trial in northern OK only
Desert Sunrise	short day		
Sierra Blanca	Neutral	White	Same as “Super Star”
Texas Grano 1015Y		Yellow	
Yellow Granex		Yellow	
White Castle	Short	White	

The following are possible sources of seed for bulb onion varieties. No recommendation or endorsement of supplier reliability is implied and other suppliers may be found.

Possible Seed Suppliers			
Supplier	**Comments**	**Website**	**Phone**
Crookham Co.	Commercial grower supplier; Has many onion varieties	www.crookham.com	208-459-7451
Harris Seeds		www.harrisseeds.com	800-544-7938
Johnny’s Selected Seeds		www.johnnyseeds.com	877-564-6697
Jung Seeds		www.jungseed.com	800.297.3123
Morgan County Seeds		www.morgancountyseeds.com	573-378-2655
Nunhems	Commercial grower supplier; Has many onion varieties	www.nunhemsusa.com	800-733-9505
Otis S. Twilley Seed Co.		www.twilleyseed.com	800-622-7333
SeedWay	Commercial grower supplier; Has many onion varieties	www.seedway.com	800-952-7333
Siegers Seed Co.		www.siegers.com	800-962-4999

New Insecticide Mode of Action Phone App

by Robert J. Wright, University of Nebraska–Lincoln

Not repeatedly using insecticides with the same mode of action is an important principle in insecticide resistance management (IRM). There is an increasing diversity of insecticide modes of action available for use on crops. Products are now available combining two or more active ingredients, often with different modes of action. A new smart phone app has been developed that allow users to quickly look up this information from their phone.

The IRAC (Insecticide Resistance Action Committee) developed the Mode of Action Classification App for mobile devices. It is an easy-to-use, searchable database which allows the user to identify insecticide active ingredients and their respective Mode of Action groups. Once downloaded, the app doesn't require a data connection.

The user can either scroll through and open each of the groups and classes to see the active ingredients listed or use the filter function to select a particular group, class, or active ingredient to find out where they fit within the classification.

The IRAC MoA App is free and can be downloaded from the

- iTunes Apple Store for the iPhone or iPad (**https://itunes.apple.com/tr/app/irac-moa/id619358838?mt=8**)
- Google Play Store for Android phones (**https://play.google.com/store/apps/details?id=irac.moa**).

A version for tablets using the Android system will follow shortly.

(Source: The Connection – Newsletter of the North Central Integrated Pest Management Center)

New Publications!

L-431 Landscape Planning – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure discusses how to plan for landscaping your yard.

L-432 Seasonal Landscape Maintenance – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure includes tips for landscape maintenance by season.

L-433 Plant Selection Factors – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure discusses the five plant selection factors when choosing plants for your landscape.

L-434 Irrigation – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure discusses irrigation of the home lawn and garden, including some water saving tips.

L-435 Improving Soil Quality – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure discusses how to determine the type of soil you have in your lawn and garden as well as ways to improve the quality.

L-436 All You Need to Know About Mulch – Malarie Gotcher, John Schroeder and Justin Q. Moss. This brochure discusses the types and benefits of mulch and how to properly apply it.

L-438 Water Saving Design Ideas for Oklahoma Landscapes – Malarie Gotcher, John Schroeder and Justin Q. Moss. This booklet provides six different landscape designs all differing in general concept and in array of plant selection and planting strategy.

Upcoming Horticulture Events

Turfgrass and Landscape Field Day
September 18, 2013
8:30 AM – 1:00 PM
The Botanic Garden at OSU – Stillwater, OK
www.hortla.okstate.edu

GardenFest
September 21, 2013
10:00 AM to 4:00 PM
The Botanic Garden at OSU – Stillwater, OK
http://botanicalgarden.okstate.edu/gardenfest.htm

Join us at The Botanic Garden at OSU for our annual GardenFest. The theme for 2013 is "Art in the Garden". GardenFest is a fun filled day of art and gardening ideas, demonstrations, children's activities and merchandise.

Native Plant Materials for Oklahoma and Surrounding Environs Conference
October 10, 2013
8:30 AM – 4:30 PM
Wes Watkins Center – Stillwater, OK
www.hortla.okstate.edu

This conference will be team-taught by university and green industry professionals. Plant materials well suited for Oklahoma and peripheral areas will be discussed. Only plants native to the Lower 48 will be highlighted at this event.

CANCELLED - Native American Horticulture Conference
November 21, 2013
Wes Watkins Center – Stillwater, OK

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or stephanie.larimer@okstate.edu.