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

GARDEN TIPS FOR OCTOBER!

David Hillock, Consumer Horticulturist

Turfgrass

- You can continue to replant or establish cool-season lawns like fescue.
- The mowing height for fescue should be lowered to approximately 2 ½ inches for fall and winter cutting.
- Broadleaf weeds like dandelions can be easily controlled during October (HLA-6421 & HLA-6601).
- Mow and neatly edge warm-season lawns before killing frost.

Ornamentals

- Plant cool-season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
- Begin planting spring-flowering bulbs like tulips, hyacinths, crocus and daffodils.
- Good companion plants for bulbs are ground covers such as ajuga, vinca, English ivy, alyssum, moneywort, thrift, phlox, oxalis and leadwort.
- Peonies, daylilies and other spring-flowering perennials should be divided or planted now.
- Dig and store tender perennials like cannas, dahlias and caladiums in a cool, dry location.
- Purchase trees from nurseries and garden centers at this time to select the fall color you prefer.
- Many perennials can be planted at this time and the selection is quite nice.
- Plant fall mums and asters and keep them watered during dry conditions. Don't crowd since they take a couple of years to reach maturity.
- Plant container-grown trees and shrubs this month.
- Check and treat houseplants for insect pests before bringing them indoors and repot rootbound plants.

Fruits & Vegetables

- Dig sweet potatoes and harvest pumpkins and winter squash.
- Remove green fruit from tomato plants when frost threatens.
- Harvest Oriental persimmons and pawpaws as they begin to change color.
- There is still time to plant radishes and mustard in the fall garden.
- Use a cold frame device to plant spinach, lettuce and various other cool-season crops for production most of the winter.

- Plant cool-season cover crops like Austrian winter peas, wheat, clover and rye in otherwise fallow garden plots.
- Remove all debris from the garden to prevent overwintering of various garden pests.
- Start new planting bed preparations now with plenty of organic matter.

Water Gardens

- Take tropical water garden plants indoors when water temperatures near 50 degrees Fahrenheit.
- Close the water garden for the winter by placing hardy plants in the deeper areas of the pool. Stop feeding the fish.
- Cover water gardens with bird netting to catch dropping leaves during the winter months.

Should I Plant a Cover Crop in the Vegetable Field this Fall?

Jim Shrefler, Area Horticulturist, Wes Watkins Agricultural Research and Extension Center

A common activity this time of year on Oklahoma vegetable farms is the seeding of fall cover crops. This is done for various reasons including the prevention of soil erosion, storage of soil nutrients, improvement of soil physical properties, production of nitrogen for next year's vegetable crop, reduction of potential disease problems in future vegetable crops, production of a source of organic mulch material and an early spring forage for grazing. Most of these possible benefits of cover crops will only be obtained if the grower uses a properly selected cover crop species, or in some cases, a specific crop variety.

If you are mainly interested in just having a crop in the ground for the prevention of soil erosion there are many options. Possibilities include ryegrass, fescue, cereal rye, wheat, clover, Austrian winter pea, and others. One factor to consider is when you will stop the growth of the cover crop in the spring and prepare the soil for planting. Choose a crop that will establish quickly to provide good ground cover. Some cover crops, such as ryegrass, can achieve considerable growth during winter to provide soil cover, thereby reducing the potential for soil erosion to occur. It also provides considerable green manure when turned into the soil in early spring.

When nutrient production and management is a primary concern there are several factors to consider. In many southeast Oklahoma soils mineralized soil nitrogen in the form of nitrate can be readily lost from soil as water percolates through the soil profile and carries away the nitrogen beyond the plant root zone. Grass crops with extensive root systems are effective at removing this nutrient from the soil and converting it into organic forms within the plant, thereby reducing the chance for leaching losses to occur. Winter cover crops such as cereal rye, ryegrass and wheat are effective at such nitrogen uptake. Winter legumes are not as effective at trapping existing soil nitrogen as are grasses. However, these nitrogen fixing crops can capture atmospheric nitrogen during the winter months for use by the legume plant. The nitrogen is released during the following growing season after the cover crop is turned into the soil.

Most cover crops, including the winter weed cover that becomes established with no grower intervention, will provide some benefit in terms of producing organic material that becomes part

of the soil when the residue is turned under as a manure crop. If this winter cover is grazed or hayed in the spring, these benefits are essentially lost. Several cover crops that are particularly beneficial for soil improvement are annual ryegrass, cereal rye, wheat, mustard and sweet clover. Work with sweet clover in southeast Oklahoma showed that it may be slow to develop and not produce as much biomass as some other crops in time for early spring vegetable planting. If an earlier maturing legume is needed, crimson clover may be a better choice.

There is opportunity for using cover crops as part of insect pest or disease management systems. However, the use of a given practice may need to be developed to fit the production system of a given farm. Cereal rye has been shown to be effective for reducing damage from root knot nematode. A good general practice would be to use a cereal rye cover crop in fields and gardens used for growing vegetables. This practice should be used in conjunction with crop rotation within the field and the use of nematode resistant crop varieties when available in crops such as tomato.

If you do not have experience with growing the cover crops discussed here, do not let that be a discouragement from trying to do so, maybe at first on a trial basis. You will need to determine how to stop the cover crop from growing in time to incorporate the residue before planting vegetables next year. Options include herbicides, mowing, tillage or some combination of these. For smaller gardens where the only tillage used is a roto-tiller care should be taken to not allow the growth of a coarse cover crop, such as cereal rye, to become too advanced as it will become difficult to break up the residues. In general, it is best to kill cover crops before seed production occurs, doing so early enough to allow time for residue to decay. In the case of cereal rye, do this when the shoots begin to elongate. One approach would be to spray with glyphosate herbicide, wait 10 days for the herbicide to translocate through the plants, and then mow as short as possible. There is less need to use the herbicide treatment with a clover crop as it will be killed relatively easy with mowing and tillage. After mowing, residues should be turned under when soil moisture is suitable for tillage.

An excellent resource on the cover crop use and its benefits is *Managing Cover Crops Profitably* 3rd ed., Handbook Series Book 9, Sustainable Agriculture Network.

Right Plant, Right Place

David Hillock

One of the most common design mistakes I see in the landscape is improper placement of plant materials relative to their mature size. It is so easy to do too. I know I have done it on occasion. Sometimes it is from ignoring the mature size, wanting to make something fit in that one space; after all, it looks great in that particular spot! Sometimes it is just ignorance or not paying attention to the plant label. In any event, it is important to realize that more than likely the plant is going to get much bigger than it currently is in that nursery container.

The two most common misplacements I usually see are foundation or corner plantings and walkway or edge plantings. This mistake usually leads to butchering, ending up with deformed

plants that many refer to as "meatballing." The usual culprits, and by no fault of their own, are hollies, crapemyrtles, and junipers to name a few. Most of these become large plants as they mature. While there are cultivars or varieties available that grow smaller, the common varieties found in most garden centers will grow quite large. For example, I don't know of very many spreading junipers that only grow 2-3' wide; yet, we plant them only two feet from the edge of a sidewalk. Most spreading junipers I am familiar with will spread 6-8' wide in a short amount of time. Knowing they will spread that much means they should not be planted within four feet of the edge of the sidewalk (measuring from the center of the plant).

Another example is the hollies. Burford holly is a very popular plant. It is a tough, beautiful plant, and quite cute in small containers in the nursery. But did you know it can reach at least 10' tall and just as wide? And if left unchecked can reach heights of 20+ feet. Maybe you knew that and had the intention of pruning it each year to keep it in bounds. But that can get old after a while or you move and the new owner is not aware of the care you were giving it or the ultimate size of that plant. Eventually you end up with this monstrous shrub covering your beautiful picture window. Usually it is best to not depend on heavy pruning to keep plants within a desired size. Rather choose plants that "fit" and are in scale with the space.

So as you venture to the garden center this fall to buy your plants (remember fall is the perfect time to establish many landscape plants), be sure to take a look at the label or do a little research to make sure the plant you are buying is truly going to be comfortable in the space you would like to plant it.

Brassica Greens Variety Trial

Lynn Brandenberger, Horticulture Food Crops Extension & Research Specialist

Brassica greens are an important commercial vegetable crop for producers within Oklahoma. These crops are grown for both processing and for fresh market. During the past few years as consumers have begun to give more consideration to the nutritional content of their diets, crops such as brassica greens have become more popular because of their high levels of vitamins and minerals. Cultivar trials are an important tool for increasing production efficiency. The objective of this spring 2008 trial was to observe improved cultivars of brassica greens for yield and quality.

Kale yields were significantly higher for Darkibor which yielded 12.9 tons/acre compared to Dwarf Siberian, Red Russian, and Winterbor which had 8.1, 5.6, and 3.9 tons/acre, respectively (Table 1). Mustard yields were significantly higher for Miike Giant compared to Indian Red Giant with yields of 12.1 and 4.5 tons/acre, respectively. Mustard spinach yields were highest for Savannah, Summer Fest, and Misome which recorded yields of 9.8, 8.1, and 6.8 tons/acre. Bolting ratings on 6/4/08 had the highest percentage differences. Misome, Choho, Indian Red Giant, Green Boy, and Miike Giant had the highest amount of bolting of all cultivars in the trial with percent bolting of 91, 30, 26, 24, and 19%, respectively.

In general, the authors felt that the most important aspect of the trial was the opportunity to observe these cultivars for bolting resistance. There were significant differences observed between different cultivars with the Kales as a group being the most bolt-resistant. Highest yielding cultivars in the trial included Darkibor kale, Miike Giant Mustard, and Savannah mustard spinach.

Table 1. Spring 2008 Greens cultivar trial, Bixby, OK

Cultivar[x]	Company	Type	Days to Harvest	% Emergence	% Bolting 5/21/08	% Bolting 6/4/08	% Regrowth 6/4/08	Yield tons/acre[z]
Red Russian	Pacific seed	Kale	58	84 a-b[y]	0 d	0 d	83 a-b	5.6 d-e
Darkibor	Bejo	Kale	65	65 c-d	0 d	0 d	6 e	12.9 a
Winterbor	Bejo	Kale	58	69 b-d	0 d	0 d	65 c	3.9 e
Dwarf Siberian	Christianson	Kale	58	76 a-d	0 d	0 d	89 a	8.1 c-d
Indian Red Giant	Takii	Mustard	58	61 d-e	0 d	26 b-c	84 a	4.5 e
Miike Giant	Takii	Mustard	65	50 e	0 d	19 c	18 d	12.1 a-b
Choho	Takii	Mustard spinach	58	78 a-c	2 c	30 b	88 a	5.4 d-e
Green Boy	Takii	Mustard spinach	58	79 a-c	5 b	24 b-c	83 a-b	5.9 d-e
Misome	Takii	Mustard spinach	58	83 a-b	10 a	91 a	74 b	6.8 c-e
Summer Fest	Takii	Mustard spinach	57	88 a	0 d	1 d	86 a	8.1 c-d
Savannah	Sakata	Mustard spinach	57	86 a	0 d	0 d	90 a	9.8 b-c

[z] Yield data on 5/21, 5/22, and 5/29.

[y] Numbers in a column followed by the same letter exhibited no significant differences based on Duncan's Multiple Range Test where P=0.05.

Re-flowering Your Poinsettias for Christmas

David Hillock

If you have managed to keep your poinsettia plant healthy during the summer by proper watering, fertilization, and grooming you are probably ready for the challenge of getting your poinsettia to re-flower.

If you have been growing your poinsettias in the garden during the summer, lift the pots from the flower garden or shrub border in late September. Bring the plants inside and place them in a sunny window. Avoid "burning" light, but do not give too much shade or leaf drop, spindly growth, and sparse blooming may result; water as needed, avoiding extremes of underwatering or overwatering.

Use a house plant fertilizer during this indoor forcing period, following the manufacturer's recommendations relative to rate and frequency. Do not apply more fertilizer than recommended.

Poinsettias must have long, uninterrupted nights to bloom and in order for the plants to flower for Christmas, **they should be kept in complete darkness from 6 p.m. to 8 a.m. each night**, beginning in late September, placing them back in the sunny window each day. This can be as simple as placing the plant every evening in a light-proof box or in a closet. Follow this procedure until good bract color is showing. If possible, the temperature should remain between 60°F to 70°F. Whether you prefer trying to re-flower your poinsettia or purchase another the following Christmas, enjoy the poinsettia's flaming beauty each year. This living symbol of a joyous season is a colorful part of the American Christmas tradition.

New Fact Sheets

HLA-6442 Hydroponics – Arjina Shrestha and Bruce Dunn. This fact sheet discusses hydroponics--growing plants in a liquid nutrient solution with or without the use of artificial media.

HLA-6443 Layering Propagation for the Home Gardener – Bruce Dunn, David Hillock, Sunny Evans, and Clint Bentley. This fact sheet discusses different layering methods for propagation.

CR-6609 Commercial Sources of Buffalograss Seed, Sod and Plugs – Dennis Martin, Justin Moss, David Hillock, and Greg Bell. This current report has a list of commercial sources of buffalograss seed, sod and plugs.

2010 State Fair 4-H Horticulture Judging Contest Results

Shelley Mitchell, Extension Associate, 4-H and Youth Programs

The 2010 State 4-H Horticulture Judging Contest was Saturday, September 18, at the Oklahoma State Fairgrounds in Oklahoma City. Junior and senior 4-H members competed as teams and as individuals to identify 40 horticultural specimens (200 points possible) and to judge classes of red delicious apples, okra, and cherry tomatoes (50 points possible per class). There were 25 junior 4-H participants and 17 senior 4-H participants, 4 more participants than last year (yeah!).

Junior Team Results:
1st – 771 points – Bryan County – Allison Robinson, Alyssa Robinson, Kyle Dowd, Clay Shires
2nd – 605 points – Payne County – Don Preston, Ginger Wall, David Wall, Andrew Cicle
3rd – 601 points – Pontotoc County Team 1 – Grady Alexander, Amanda Daniel, Jacom Atkins, Kaysey Atkins
4th – 444 points – Pontotoc County Team 2 – Alyssa James, Gabrielle Padilla, Emily Taylor
5th – 416 points – Pontotoc County Team 3 – Adam Daniel, Andrew Daniel, Adeline Daniel

Junior Individual Results:
1st – Alyssa Robinson – 268 points
2nd – Allison Robinson – 254 points (115 on horticulture identification)
3rd – Rachel Childers – 254 points (110 on horticulture identification)
4th – Clay Shires – 249 points
5th – Kyle Dowd – 248 points

Senior Team Results:
1st – Payne County – 861 points – Conner Carroll, Emily Wessel, Madison Rash, Kendra Rash
2nd – Bryan County – 843 points – Maddi Shires, Leslie Carter, Teegan Munson, Jake Shires
3rd – Pontotoc County – 623 points – Alicia Daniel, Melissa Pope, Brittany Jolly
4th – Jackson County – 435 points – Debra Kime, Amber Patterson, Tara Baker, Cynthia Kime

Senior Individual Results:
1st – Emily Wessel – 298 points
2nd – Conner Carroll – 287 points
3rd – Maddi Shires – 285 points
4th – Teegan Munson – 284 points
5th – Madison Rash – 276 points

2010 Cucurbit Vegetable Production and Marketing Educational Meeting
Jim Shrefler

The 2010 Oklahoma Cucurbit Production and Marketing Educational Meeting will be held Thursday, December 16 at the Grady County Fairgrounds in Chickasha. In response to developing market opportunities and producer interests, this year's meeting will include topics that should be of interest to all vegetable growers including Market Gardeners and Farmers' Market Growers. The meeting is intended to provide information that should be of value to Extension Educators, market garden growers, commercial farmers and agricultural supply businesses. Not only will this event address numerous topics related to cucurbit fruits and vegetables (watermelon, cantaloupe, squash, pumpkins, etc.), the program will include other important vegetables as well.

The meeting will be held from 9 a.m. to 3 p.m. in the Fairgrounds Community Building in Chickasha (Grady County Fairgrounds). Please note that there will be a $10 registration fee for this year's event. We request that you register by December 8 to guarantee the noon meal. Watch for further details on the program and registration at www.lane-ag.org or contact the Lane Agriculture Center at 580-889-7343 or by email jim.shrefler@okstate.edu.

Upcoming Horticulture Events

October 9, 2010
Grape Seminar – So You Want to Grow Grapes?
Cimarron Valley Research Station, Perkins, OK
http://www.hortla.okstate.edu/events/grapes/index.htm

October 13-14, 2010
Ornamental Plant Materials Conference
Wes Watkins Center, Stillwater, OK
http://www.hortla.okstate.edu/events/pdf/2010plantmaterial.pdf

November 3, 2010
Tree Care Conference
Botanic Gardens at OSU, Stillwater, OK

December 9, 2010
Global Horticulture Conference
Stillwater, OK

January 14-15, 2011
Horticulture Industries Show
Fort Smith, Arkansas
http://www.hortla.okstate.edu/his/

April 14, 2011
Gardening with Disabilities
Stillwater, OK

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