Horticulture Tips
September 2021

Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Department of Horticulture & Landscape Architecture
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 second week of September. *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.
- 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.

Fall is for Planting Trees and Shrubs

David Hillock

Fall is an excellent time to plant most trees and shrubs. In fact, research suggests that early fall planting is best for container-grown and B&B shade and ornamental trees and pines, but spring is best for planting bare-root plants and broadleaf evergreens, such as holly and Southern magnolia. Plants planted in the fall have more time for the root system to become established before the onset of summer heat. Plants installed during the growing season are susceptible to high transpiration rates leading to drying of plant tissues.

A perfect example of this was seen at the Oklahoma Gardening© Studio Gardens several years ago when we planted the Edible Landscape bed. One blueberry shrub was planted in the fall and then several more were planted in the spring. There was a noticeable difference between the one planted in the fall and those planted the following spring. Despite the heat, the fall planted shrub looked awesome and was barely phased by the extreme temperatures that summer. The others struggled, having crispy leaves, dropping many of them, and barely hanging on despite the intense watering provided to keep them alive.

So, if you need to replace a tree or shrub or want to add more to the landscape, now is the time to be looking for that perfect plant. The weather should be changing for the better as we move through the month of September, bringing cooler temperatures and additional rainfall, something we all will eagerly welcome, and our plants will greatly appreciate.

September Pecan Topics Webinar

Becky Carroll, Associate Extension Specialist, Fruit and Pecans

September 10 will be the next scheduled Pecan Topics Webinar. Beginning at 1 p.m., topics will include late season insects, updates on the crop and preparing the orchard for harvest. Pecan Topics for September is open to anyone with an interest in pecans - homeowners, hobbyists, and commercial growers. In-service credit is available to extension personnel.

Speakers will include Kelly Seuhs visiting about late-season insect pests including reminders about weevil, aphids, and stink bugs. Jacob Harriett, Lincoln County Game Warden will discuss

how to protect your pecan crop from wildlife. Becky Carroll will discuss crop development, crop outlooks, and the upcoming field day on September 23.

Register in advance - https://dasnr.zoom.us/meeting/register/tJ0rce6qqT8sGNDpGqujY-vNmfWc6g6KbFz4. After registering, you will receive a confirmation email containing information about joining the meeting.

Information and recordings of previous sessions are available on the Oklahoma Pecan Management webpage- http://okpecans.okstate.edu or the Oklahoma Pecan Management Facebook page - @okpecans.

Questions can be emailed to becky.carroll@okstate.edu.

Pecan Field Day - September 23

Becky Carroll

The Oklahoma Pecan Growers Association is hosting a Fall Field Day on September 23 from 3-6 p.m. Registration will begin at 2:30 p.m. at the Bryant's Pecan Farm, 22270 County Road 1475, Ada, OK 74820 (just East of Francis). Mr. Bryant has lived on the farm for over 80 years and developed the pecan business with the help of his family. A BBQ dinner will be served at the conclusion of the event.

Agenda items include orchard history from the Bryant Family; tours of the orchard, cleaning, and storefront; late-season insect pests; disease pressure in 2021; weed control in native groves; cultivars for low-input orchards; and pecan crop insurance.

The field day is free of charge, but participants should email ssloan@okpecangrowers.com to register or go to www.okpecangrowers.com. More information can be found at www.okpecans.okstate.edu.

Vegetable Pest Management

Lynn Brandenberger, Extension Specialist

There are plenty of pests that can attack our gardens. First that comes to mind are insect pests, but not all insects are pests. Next to consider are disease pests, usually either a fungus, virus or bacteria, but sometimes what looks like a disease might be a physiological condition i.e. blossom end rot. Last but certainly not least are weed pests those pesky plants that compete with our crops for light, water, and nutrients.

Steps to managing pests:

1. Identify what is going on, is it a disease or could it be a physiological condition, or insect damage or what? What sort of weather conditions have been happening that may be causing a problem or at least adding to the problem.
2. With experience you will begin to understand what your garden is up against regarding pests, and you can then consider managing those pests rather than just reacting.
    a. Become familiar with what pests are interested in eating or competing with your crops.
        i. Come up with a plan:
            1. What pests should I expect with each crop?
            2. Will the pest always be a problem or just occasionally?
            3. Are there cultural things I can do to manage the risk from the pest?
            4. Are there biological approaches to managing the pest?
            5. What are my options for controlling the pest?

When you manage pests from a more wholistic approach you can reduce the amount of effort that is put into traditional means of pest control. The questions given above are useful in deciding what approach you may want to take to "stay ahead" of the pests that your garden may encounter. Gardening in Oklahoma is different almost every year, but with a gain in knowledge and experience hopefully you will be ready next season to take on pests that may have been challenging this season.

Tips for Harvesting Vegetable Crops

Lynn Brandenberger

Harvesting vegetables maybe just a little more complicated than we think at first. There are several things to be considered.

1. Time of day: During hot weather it's best to harvest early in the morning prior to the heat of the day. Reason being is that vegetables will absorb heat during the day and that heat

is not a good thing for maintaining the quality of harvested vegetables. Just because we've removed the fruit, leaf or root from the garden does not mean that respiration stops i.e. burning off sugars that are in the harvested produce. Higher temperatures mean higher respiration rates resulting in poorer quality.

   a. After harvesting: At the very least store fresh produce in the shade or better yet in a building to reduce sun exposure and "heating up of the produce" don't keep it in your vehicle.

2. Know your produce: Different types of produce should be stored at different temperatures and relative humidity. Warm-season vegetables such as tomato, cucumbers, and squash should be stored at 50-60°F whereas cool-season vegetables such as turnip, radish, collard and kale should be stored at 32-35°F.

3. Pay attention to the food safety side of handling fresh fruits and vegetables. Use clean harvest containers, knives, clippers, etc. when harvesting. It also means you need to wash your hands with soap and water prior to beginning harvest.

Snow White or the Powdery Mildew Huntsman

Andrej Svyantek, Assistant Extension Specialist, Viticulture and Enology

Throughout the state, I have been noting powdery mildew infections ranging from slight to severe. This may be due to our early, cool, wet spring conditions that may have promoted disease development. This is a brief overview of the pathogen, control options, and what to do to reduce future infections in the vineyard.

Powdery mildew of grapevines is caused by a fungus (*Uncinula necator* [syn. *Erysiphe necator*]) (Fig. 1). On leaves it can be found as a white, fuzzy growth coating the upper surface. The fungus overwinters on dormant wood in sexual structures known as asci. These asci give rise to initial infections from ascospores. Asci require cool conditions with moderate leaf wetness to allow for ascospore release. After ascospores infect grapevine tissue, the fungus reproduces asexually via conidia. These conidial infections spread when environmental conditions promote their growth (six consecutive hours of cool-to-warm temperatures [70-85°F]).

Powdery mildew is commonly confused with downy mildew, but they can be differentiated by the position of the infection relative to the surface of the leaf: Downy mildew is found on the bottom of the leaves (think downy = down). Powdery mildew is found on the top of leaves, but it also infects stems, and fruit.

Infection reduces vine health, hardiness, yield, and fruit and wine quality. Powdery mildew infections must be pre-emptively treated with preventative fungicides. Prevention is economic compared to the costs and risks associated with post-infection treatment. Once infection is noted, fruit quality and yield rapidly decline. Powdery mildew's impact on wine quality is highly negative. Descriptors like musty, old and moldy book, and mushroomy, can reduce a wine's appeal.

Figure 1. Powdery mildew infection on leaves (left) and leaves and fruit (right).

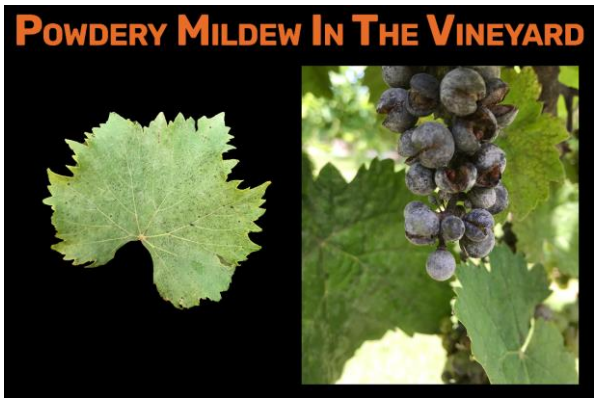

Table 1. Susceptibility to powdery mildew, sulfur, and powdery mildew occurrence for multiple grapevine cultivars grown in Oklahoma.

Cultivar	Powdery mildew susceptibility[1]	Sulfur sensitivity[1]	Powdery mildew observed in 2021 scouting[2]
Arandell	*	***	N
Aromella	**	-	N
Cabernet Franc	***	-	N/A
Cabernet Sauvignon	***	-	Y
Cayuga White	*	-	Y
Chambourcin	*	***	Y
Chardonel	***	-	N
Chardonnay	***	-	N/A
Frontenac	**	*	Y
La Crescent	**	-	N/A
Leon Millot	**	***	N/A
Marechal Foch	**	***	N/A
Marquette	*	*	N/A
Merlot	***	-	N/A
Niagara	**	-	N
Noiret	*	-	Y
Norton (syn. Cynthiana)	*	***	N
Riesling	***	-	Y
Sangiovese	***	-	Y
Traminette	**	-	Y
Vidal Blanc	***	-	Y
Vignoles	***	-	Y
Villard Blanc	***	*	N

[1]- = resistant, *= slightly susceptible, **= moderately susceptible, ***= highly susceptible (Adapted from Double A Vineyards- Grapevine Variety Characteristic Chart).
[2] Y= Yes, N= No, N/A= cultivar not observed during infection period in 2021

Control of powdery mildew in the vineyard
Control measures for grapevine powdery mildew begin in the springtime at pruning and do not end until leaf fall. During spring pruning, cutting out previously infected canes covered in splotchy red, white, and black patches at the start of the season can help reduce inoculum. Removal and proper disposal of wood will take the infected material away from your healthy vines. A dormant sulfur application can be applied to reduce existing inoculum in the vineyard.

Once the growing season begins, vineyards will need to implement a cautious and conscious fungicide approach to maximize control. The following guides can be useful in developing a spray program.

- Southeast Regional Bunch Grape Integrated Management Guide: https://smallfruits.org/files/2021/02/2021-Bunch-Grape-Spray-Guide.pdf
- Midwest Fruit Pest Management Guide: https://ag.purdue.edu/hla/Hort/Documents/ID-465.pdf

If a local grapevine grower is experiencing a powdery mildew infection:

- **Do not spray high resistance risk fungicides on actively sporulating colonies of powdery mildew.** These fungicides are meant for preventative application. Examples of high-risk Fungicide Resistance Action Committee (FRAC) Code defined chemical groups include strobilurins (QoIs; FRAC 11) and demthylation inhibitors (DMIs; FRAC 3).
- **Consider using lower resistance risk chemistry** (such as sulfur) but make sure there is no known cultivar sensitivity/interactions.
    - Sulfur and copper formulations can damage the leaves (leaf burning symptoms) of non-sensitive varieties when applied at temperatures above 90°F. Sulfur can be applied in the evening to allow for a slower oxidative effect on plant material, this reduces leaf burning that would occur under hotter conditions. However, for sensitive cultivars, sulfur will still burn them (Table 1).
- **Read the label: many commonly used fungicides have no control against powdery mildew.**
    - From discussion with growers, the following fungicides (common names used, formulations/product may differ) have been used with no effect on powdery mildew: Captan, Mancozeb, Ziram. This is expected; they do not offer any control against powdery mildew and are not labeled for it. Reviewing labels helps to make sure your chemical budget goes towards its goal- control and prevention.
- **Contact me**
    - If an infection is persisting and a producer frequently utilizes products from high risk FRAC groups, please have them contact me immediately. We are currently collecting samples of powdery mildew from across the state to screen for fungicide resistance to QoIs and DMIs (https://framenetworks.wsu.edu/grower-information/). This knowledge will help us better understand how to plan spray programs for the future.

In closing:

Know your fungus,
Know your -icides,
Tactfully apply chemicals, or
We all must set them aside.

Further reading on grapevine powdery mildew:
Ohio State University: Powdery Mildew Powdery Mildew
Oregon State University: How to Deal with a Vineyard Powdery Mildew Outbreak
University of California Davis: UC Pest Management Guidelines- Powdery Mildew

Five Deer Resistant Plants

Casey Hentges, Host, Oklahoma Gardening
Laura Payne, Assistant Producer, Oklahoma Gardening

Are you finding your landscape chewed up and destroyed like it was the salad bar at the end of the lunch period? If so, then you might find yourself going to great lengths to keep deer away from your garden. Since several control methods are expensive or unreliable planting plants that deer do not like to eat might be a better option.

Disclaimer, there is no such thing as a true deer-resistant plant. Environmental conditions and deer populations may entice deer to eat plants they don't generally find palatable. Also, sometimes deer just like the tender new growth on a plant. In general, deer do not like plants with strong smells. Therefore, you may have success planting lantana, chives, mint, and other strong-smelling herbs around those plants you've noticed the deer prefer.

Here are five plants touted to be deer resistant:

Aphrodite Sweetshrub, *Calycanthus floridus* 'Aphrodite' – This shrub catches your attention when in bloom but will not attract the attention of the deer. Sweetshrub has sweet apple-like fragrant blooms that almost look like a rose-colored magnolia. The flowers are long lasting and can be dried for potpourri. The leaves, seed pods and bark also have a spicy scent when crushed. While it does prefer rich loamy soil, it can tolerate clay soils. Planted in full sun it can reach 4-6 feet tall, and it can tolerate shady locations but may become leggy.

Spirea, *Spiraea*, spp. – There are so many fabulous spirea. Some bloom in the spring, such as the bridal wreath spirea and some bloom in the summer. The flowers bloom in shades of pink, red, white; while their leaves can be narrow or broad like a birch leaf in shades of green, blue and chartreuse. Some spirea's have exceptional fall color. With all these factors to consider when selecting which variety to choose, you also want to note the mature size of the plant. Some spirea grow a couple of feet tall and stay more compact, while others can reach several feet in height and become a large shrub.

Ornamental Grasses – While we may think deer like to eat grass, there are several ornamental grasses that deer will leave alone. The list includes Lemon grass, Pink Muhly, Ravenna, and Switch grass.

Deer don't typically like plants that carry a strong smell. The strong lemony smell of lemon grass, *Cymbopogon citratus*, may be what keeps the deer at bay with this grass. Although, lemon

grass tends to be an annual in most of Oklahoma it is one that will reach a large size by the end of the season.

Pink Muhly, *Muhlenbergia capillaris*, is an ornamental grass that tends to have a hairy spikier form than a soft grass which is what makes this grass deer resistant. While this grass will go undetected most of the season by you and the deer, it is a grass that grabs your attention in late summer into fall, when it produces a pink cloud of plumes over the entire plant.

The size alone of the Ravenna grass might be what the deer find so intimidating. Ravenna grass, *Saccharum ravennae*, can reach a mature height of 9 - 12 feet tall, making a striking focal point in any garden as the plumes look like fireworks shooting up out of this massive clumping grass. It is cold hardy in Oklahoma and like most other ornamental grasses, doesn't have any major pest problem.

Switchgrass, *Panicum virgatum*, is a native grass here in Oklahoma and has adapted to survive against the deer population. It is a smaller grass only reaching a height of about 3-5 feet tall. It looks nice when planted in a mass and comes in shades of green, blue, and red foliage.

Beebalm, *Monarda didyma* – To add a little more color into your garden, nothing will signal the deer to stop like the scarlet beebalm. This plant will act like a giant green light to more desirable wildlife like hummingbirds and butterflies with its tubular, bright red and pink flowers. Often when trying to attract hummingbirds and butterflies, you will also attract bees to this plant, but don't worry, the crushed-up leaves have been used to soothe bee stings, hence the common name Beebalm.

Goldenrod, Solidago spp. – Another plant that is resistant to deer and will extend nectar to your pollinators is the Goldenrod. This plant will bloom beautiful yellow flowers late summer into fall. There are several cultivars on the market that grow shorter than the native solidago. The native Solidago blooms the same time as ragweed and is often incorrectly identified and blamed for the ragweed allergy symptoms. It is tolerant of a range of soils including our Oklahoma clay soil but prefers full sun. If you have a wetter site, *Solidago rugose* may be more appropriate and if you have a drier site, you might look for *Solidago speciose*.

For more information: http://extension.uga.edu/publications/detail.cfm?number=C985

Cool-season Lawn Planting and Renovation

David Hillock, Consumer Horticulturist and Dennis Martin, Extension Specialist, Turfgrass

The period mid-September through early October in Oklahoma typically has near-ideal day/night temperature combinations for germination of cool-season grasses. So, let the tall fescue, perennial ryegrass and Kentucky bluegrass seeding begin (if you have access to water)! Sodding of these grasses is also appropriate at this time. The best temperatures for germination are when we experience a mid-80s day and upper 50s/low 60s night. You might be asking, is it possible that we will get fooled and the temperatures will shoot back up. Sure, anything is possible in Oklahoma, but what is key to remember is the nighttime lows are what's important. When you

see evening temperatures from the upper 50s to mid-70s, it's time to seed cool-season lawns. So even if a few day-time highs slip back in the mid to upper 90s, (and it will happen) our day-time lows are looking great!

Fact sheet HLA-6418 covers turfgrass selection, while HLA-6419 covers the establishment (planting method) and HLA-6420 covers the mainstream long-term maintenance practices (mowing, fertilization, irrigation, etc.). A newer fact sheet, HLA-6608, addresses managing turfgrass in the shade.

There are many satisfactory performing tall fescues. These include, but are not limited to Crossfire II, Houndog V, Millenium, Rembrandt, Plantation to name just a few. There are dozens of good performers. A blend is a combination of two or more varieties within the same species. A mix is two or more species combined. Blends and mixes are beneficial in cool-season lawns as they broaden the genetic diversity present. In theory, this decreases the likelihood that your lawn will be completely wiped out by a single disease or single insect infestation.

Most importantly, if turf-type quality is expected, choose a turf-type rather than a forage type tall fescue. Forage type fescues include Fawn and Alta. General purpose soil stabilizer types include the old K-31, Kentucky 31, KY 31, they get used as a forage and as a lawn, but these variations on Kentucky 31 are not true turf-type tall fescue despite what the marketing message on the seed bag might say. Turf-types are selected for improved color, texture, density, slower vertical leaf expansion rate and other important characteristics for lawn use.

Tall fescues are best in medium to light shade. There are no hard and fast rules for "hours of sunlight" required. There are no perfect solutions to dense shade where grasses fail repeatedly, year-in and year-out. It is best to take a hint if grass is failing in a shaded site many years, it's time to move on to mulches, shade tolerant perennial ground covers, hardscape elements, etc.; a list of alternate shade tolerant plants can also be found in fact sheet HLA-6608. Sometimes grass does not die exclusively from shade, but rather the combination of shade and tree root competition for nutrients and water in combination with added disease pressure due to less air movement and more grass canopy moisture caused by less air movement in a "tight and mature" landscape.

In lightly shaded areas, mixtures of tall fescue and Kentucky bluegrass can sometimes work best. While Kentucky bluegrass is generally not as shade tolerant as tall fescue, it still has some shade tolerance, and it has improved brown patch disease and *Rhizoctonia* blight resistance over that of tall fescue. Brown patch is usually the most serious disease of tall fescue. These mixtures will often have Kentucky bluegrass present at 5 to 10% by weight and tall fescue at 90 to 95%. There are 10 times as many bluegrass seeds in a pound of bluegrass as there are tall fescue seeds present in a pound of fescue, so we use about 10 times less bluegrass seed to get to a 50/50 species count. Never use a 100% stand of Kentucky bluegrass in most areas of Oklahoma because pure stands of Kentucky bluegrass in most of Oklahoma can get summer patch disease. Also, older Kentucky bluegrasses such as Park, Newport, South Dakota Common (SD Common), Kenblue and variety not stated (VNS = when there is no variety name stated) really don't bring any value to the cool-season mix. So, if these are the only ones available locally, you might as well use 100% tall fescue. Most other varieties of Kentucky bluegrass that you might

encounter (there are hundreds nationally, and yet few repeatedly available in Oklahoma from year to year) are improvements and will benefit the mix!

There is seldom any benefit and there is often detriment created by mixes of cool-season perennial grasses with annual or Italian ryegrass. Yet, if you scout the store shelves, you will find these mixes. Annual ryegrass simply competes with the cool-season perennial grasses in the mix in the cool portion of the year when good growth can take place and then annual ryegrass, having taken its fair share of the lawn, dies out in the heat. This leaves uninformed consumers in a panic at worst and with unsightly dead areas in their remaining cool-season perennial lawn at best. Avoid mixes of annual ryegrass with the desirable cool-season perennials like tall fescue, perennial ryegrass, and Kentucky bluegrass.

Twig Girdlers

David Hillock

It is not uncommon to find small twigs lying around the yard this time of year. You may also see twigs loosely attached or lodged in the canopy of trees. This is usually an indication that twig girdlers, long-horned borers, have been actively working on your trees. Twigs look as if someone whittled the end that was attached to the tree.

Adult twig girdlers will girdle the branches before laying eggs in the twig. Apparently, the larvae cannot survive in live wood. These twigs usually break off and fall to the ground or get lodged in the canopy. Larvae overwinter in the dead twig either in the tree or on the ground becoming active again in spring. Eventually they pupate, emerge as adults during August and September and then start the process all over again.

Generally, twig girdler damage is not detrimental to a tree, but can result in reduced production in pecans as well as affect the beauty and aesthetic quality of ornamental trees. Besides pecan, twig girdlers are commonly found on hickory, persimmon, and elm. They also attack oaks, honeylocust, hackberry, poplar, dogwood, sourwood, and various fruit trees.

Insecticide treatment is usually not necessary unless there are heavy infestations that will affect fruit or nut production. The best approach for control is gathering and destroying the severed twigs during the fall, winter, and spring.

Sunflowers - Harvesting and Roasting

David Hillock

Harvest begins in mid-September and can run into October. A check of the flower head will indicate maturity; florets in the center of the flower disk are shriveled, heads are downturned, and a lemon-yellow color is on the backside. Pull a few seeds and split them with a knife to check if seed meat has filled. Poorly filled seeds may be due to a lack of pollinating insects.

Sunflower seeds are ripe when they fall off the head or the birds start eating them. To prevent loss, cover the heads with a paper sack, cheesecloth or nylon netting once the yellow petals start turning brown. Secure the sack, cheesecloth or nylon netting with a rubber band or twist tie to prevent seeds from dropping. Heads can also be cut with about a foot of stem attached and hung in a warm, dry, well-ventilated, rodent and insect-free place. Cut the heads once a few seeds start turning the traditional black with white stripes. The flavor will not be as good as those ripened on the plant, but less loss will occur. Once the seed is dried, it can be rubbed easily from the seed heads. Humidity levels must be kept low to prevent spoilage. Sunflower seeds will remain viable for seven years when stored in a cool dry, dark location.

Raw mature seeds may easily be prepared at home by covering unshelled seeds with salted water (2 qts. of water to ¼ to ½ cups salt). Bring to a boil and simmer two hours or soak in a salt solution overnight. Drain and dry on absorbent paper.

Put sunflower seeds in a shallow pan in a 300-degree F oven for 30 to 40 minutes or until golden brown, stirring occasionally. Take out of oven and add one teaspoon of melted butter or margarine to one cup of seeds. Stir to coat. Put on an absorbent towel. Salt to taste.

(Sources: Ohio State University Extension Factsheet, Horticulture and Crop Science, Growing Sunflowers, HYG-1228-92; Illinois Coop. Ext. Service, Horticulture Solutions Series, Sunflowers—Harvesting)

A Second Crop

David Hillock

Remember that there are several cool-season vegetables that can still be planted throughout the month of September for a fall/winter crop of fresh produce. Plant veggies that grow rapidly, such as lettuce, spinach, mustard, radish, beet, collard, Swiss chard, turnip, kohlrabi, and kale. Onion, garlic, and leek are also planted now, but won't be ready to harvest until late spring to early June of next year. If you can get broccoli and cauliflower seedlings, plant those as well.

The key to survival for these cool-season plants is to keep the plants cool and moist until temperatures begin to drop. You can purchase shade cloth specifically for this purpose or use other materials found around the house. Old window screens, scrap wood staked vertically, extra pieces of landscape fabric, etc. work well in reducing temperatures and dry winds that can exhaust young plants. Grass clippings sprinkled lightly on top of young seedlings about 1/8-inch thick, cools the soil, reduces evaporation, and suppresses weed seeds on the soil surface.

Tips for Bringing Plants Indoors

David Hillock

Because of our warm humid weather during summer, many indoor, tropical plants are often grown outdoors. They love the hot, humid conditions of our summers and will often grow leaps

and bounds. However, cooler weather will soon be arriving, and these tropical plants will need to be moved indoors.

Do not move plants immediately from outside to inside. Plant stress may occur when plants are exposed to sudden changes in temperature, light, and humidity.

As a rule, you will want to move houseplants indoors around the time that the outside temperature is about the same as the indoor temperature.

Light levels inside the home are much lower compared to the bright sunlight outside. To help your plants adjust to the lower light levels before moving them inside, gradually reduce the light levels to which they are exposed by placing them in shaded areas for a few weeks. This will allow the plants to acclimate to the new environmental conditions.

Frequently check plants for insects while moving them from locations. You do not want to infest healthy plants with insects. Remove infested and dead plant material. If insects are seen, treat them with a labeled insecticide outdoors.

Controlling Winter Annual Weeds

David Hillock

If winter annual weeds, such as henbit and annual bluegrass, have been a problem in the past then you will want to apply a preemergence herbicide as soon as possible. Many of our winter annual weeds germinate in the fall or early winter and survive as very young plants until late winter or early spring when conditions are more favorable for growth. Waiting until you notice them is too late.

The key to effective control is timing. Preemergence herbicides must be applied well in advance of the expected germination time of the weeds to be controlled, for winter annual weeds this is by September 15. In addition, the products must be watered in to activate them. At least ½ inch of water either through rainfall, or irrigation if no precipitation is expected, within a couple days after application is recommended. In some cases, the product needs to be incorporated into the upper surface of soil.

There are several products available in the garden centers that will effectively control germination of most winter annual weeds. Some are labeled just for turf areas, and some are labeled for both turf and ornamental areas. Examples of products labeled for use in lawn and ornamental areas include some containing benefin + oryzalin or those containing bensulide. Another product available that contains trifluralin can be used in ornamental and vegetable beds. Again, there are several to choose from; choose one that is labeled for your particular site/situation and labeled to control the weeds you are targeting. Be sure to read and follow the label directions for best results and to avoid damaging any desirable plants.