

Horticulture Tips

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

GARDEN TIPS FOR AUGUST!

David Hillock

Vegetables

- August is a good month to start your fall vegetable garden. Bush beans, cucumbers, and summer squash can be replanted for another crop. Beets, broccoli, carrots, potatoes, lettuce, and other cool season crops can also be planted at this time. (F-6009).
- Soak vegetable seed overnight prior to planting. Once planted, cover them with compost to avoid soil crusting. Mulch to keep planting bed moist and provide shade during initial establishment. Monitor and control insect pests that prevent a good start of plants in your fall garden.

Fruit and Nut

- Continue protective insect applications on the fruit orchard. A good spray schedule is often abandoned too early. Follow directions on last application prior to harvest. (F-7319)

Flowers

- Towards the end of the month, divide and replant spring-blooming perennials like iris, peonies, and daylilies if needed.

General

- Water compost during extremely dry periods so that it remains active. Turn the pile to generate heat throughout for proper sterilization.
- Always follow directions on both synthetic and natural pesticide products.
- Watch for high populations of worms, aphids, spider mites, thrips, scales and other insects on plant material in the garden and landscape and treat as needed. (F-7306)
- Water all plants thoroughly unless rainfall has been adequate. It is better to water more in depth, less often and early in the morning.

Trees and Shrubs

- Discontinue deadheading roses by mid-August to help initiate winter hardiness.
- Watch for 2nd generation of fall webworm in late August/early September. Remove webs that enclose branches and destroy; or spray with good penetration with an appropriate insecticide.

Lawn and Turf

- Grassy winter weeds like *Poa annua*, better known as annual bluegrass, can be prevented with a preemergence herbicide application in late August. Water in the product after application. (F-6420)

- Areas of turf with large brown spots should be checked for high numbers of grubs. Mid-to-late August is the best time to control heavy white grub infestations in the lawn. Apply appropriate insecticide if white grubs are a problem. Water product into soil. (F-7306)
- Tall fescue should be mowed at 3 inches during the hot summer and up to 3 1/2 inches if it grows under heavier shade. (F-6420)
- For areas being converted to tall fescue this fall, begin spraying out bermudagrass with a product containing glyphosate in early August. (F-6419 & F-6421)
- Irrigated lawns can be fertilized once again. If you have had a problem with spring dead spot in your bermuda lawn, this should be your last application of fertilizer for the year.
- Brown patch of cool-season grasses can be a problem. (F-6420)

August Pecan Topics

Becky Carroll

Apple and peach growers thin their crops to produce better fruit, pecan growers can benefit from the same idea. Crop load management for pecans is a main concern for pecan growers with improved varieties that overproduce. Growers should be checking fruit loads carefully and be ready to thin usually around the first week of August. Thinning should be done when the ovule has expanded between 50-100% in the water stage. Thinning the fruit will increase fruit quality and help reduce alternate bearing as well as giving the tree added cold hardiness. Fact Sheet #6251 Pecan Crop Load Management details the procedure.

With all the welcome and unusual rains across the state, the dreaded pecan weevil will be emerging from the soil. Weevil traps should already be in place in the orchard. The Circle trap is the preferred trap for monitoring weevil emergence. Fact Sheet #7190 Monitoring Adult Weevil Populations in Pecan and Fruit Trees in Oklahoma explains how to construct and when and where to place the traps.

Plant Profile - Moneywort

David Hillock

Moneywort (*Lysimachia nummularia*) also known as Creeping Jenny as well as other common names, is a wonderful groundcover that grows quite well throughout Oklahoma.

Moneywort is a low, creeping plant that roots at the nodes of the long trailing stems. It only grows to about 2 to 4 inches tall and can spread at least 24 inches. Leaves are rounded and bright green. The specific epithet *nummularia* is derived from the Latin word *nummus*, coin, and refers to the small, almost circular leaves. The cultivar 'Aurea' has yellow foliage. Large quantities of yellow cup-shaped flowers appear in late spring with sporadic flowering until midsummer if the soil is kept moist.

Moneywort prefers a moist soil. It will not thrive in dry soils, but is quite adaptable to varied conditions. The great thing about this groundcover is that it will tolerate both sun and shade. 'Aurea' should be grown in full sun to enhance the yellow foliage, but will also tolerate shade. Under moist conditions it can spread vigorously throughout the garden. I planted a few small clumps I received from a friend, and now the groundcover has spread at least ten feet either direction. Obviously, it can be quite vigorous under ideal conditions; some might consider it invasive under certain situations. I don't mind at all right now. It makes a nice natural "mulch" that shades out most weed seeds. Eventually, I will have to thin it out to make room for some more perennials.

Because of its creeping growth habit it works well to cover banks, stone walls, etc. The cultivar 'Aurea' could brighten a dull area. Other uses include hanging baskets or for naturalization along the edges of streams, lakes, or ponds.

Fall Planting Guide

Table 1. Tender Vegetables - (harvest before frost).* Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beans, Bush	Aug. 10-20	Seed	18-24	3-6	1	50-60
Beans, Cowpea	July 15 – Aug. 1	Seed	18-48	6-12	1.5	75
Beans, Pole	July 15-30	Seed	24-36	12-18	1	60-70
Beans, Lima	Aug 10-20	Seed	18-24	4-8	1	70-80
Cilantro	July 15–Aug 1	Seed	9	4	.5	When plant is 4-6 in. tall
Corn, Sweet ³	July 15	Seed	36	12-18	1	80-100
Cucumber	Aug 10-20	Seed or Plants ²	36-32	12-30	.5 to .75	60-70
Eggplant	July 15	Plants	36	18	-	80-90
Pepper	July 15	Plants	36	24	-	90-110
Pumpkin	July 15-30	Seed or Plants ²	36-60	30-48	1	100-120
Summer Squash	July 15- Sept. 1	Seed or Plants ²	36	24-36	1	40-50
Winter Squash	July 15-30	Seed or Plants ²	36-48	30-48	1	100-120
Tomatillo	July 15	Plants	48	24-36	-	90-100
Tomato	July 1–15	Plants	48	24-36	-	70-90

1 = There may be advantages to planting earlier if soil moisture and climatic conditions are favorable

2 = Set plants into the garden 1 to 1 1/2 months after planting the seed.

3 = Be vigilant about scouting for fall armyworms in whorl of seedlings and young plants.

* Unless using a cold frame or row covers to extend the season.

Table 2. Semi-hardy vegetables - (may continue to grow and be harvested after several frosts). Many varieties will do well – select varieties that are early maturing and disease resistant.

Kind	Time to plant	Method of Planting	Between Rows (inches)	In the Row (inches)	Depth to Cover Seed (inches)	Days from planting to Harvest
Beet	Aug 1-15	Seed	12-18	3-4	.5-.75	60-70
Broccoli	July 15- Aug 15	Plants	18-30	16-20	-	70-80
Brussel Sprouts	July 15- Aug 15	Plants	18-30	16-20	-	90-100
Cabbage	Aug 1-25	Plants	18-24	16-20	-	75-90
Chinese Cabbage	Aug 1-25	Seed or Plants ¹	12-16	10-18	.5	75-90
Carrots	July 15- Aug 15	Seed	12-18	1-2	.25	70-80
Cauliflower	Aug 1-25	Plants	18-24	16-20	-	70-80
Collards	Aug 1- Sept 1	Seed or Plants ¹	30-36	18-24	.5	75-85
Garlic	Sept 1-Oct. 15	Bulbs (cloves)	12	4	2	Early June the following year
Irish Potato	Aug 1-15	Seed potatoes	30-42	10-16	2	90-110
Kale	Sept. 1	Plants	24-36	18	-	50-65
Kohlrabi	Sept. 1	Plants	18-24	4-6	-	50-70
Leaf Lettuce	Aug 1-15	Seed or Plants ¹	12-18	2-3	.25	60-70
Leek	Sept. 1	Seed or Plants ¹	12-24	2-4	.5	Late spring the following year
Mustard	Sept. 10- Oct 10	Seed	12-18	2-3	.5	40-50
Onions	Sept. 1	Seed, Sets, or Plants ¹	12-18	4	.25	Late spring the following year
Parsnip	July 15-Aug 15	Seed or Plants ¹	12-18	4-6	.25	120
Peas, green	Aug 15- Sept. 1	Seed	36	2	2	60-90
Radish	Aug 15- Oct 10	Seed	8-12	.75-1	.5	20-40
Rutabaga	Aug 15- Sept 15	Seed	24-36	3-4	.5	80-90
Spinach	Sept 5-25	Seed	8-12	1-2	.5	50-60
Swiss Chard	Aug 1- Sept 15	Seed	24-30	2-3	.5	50-60
Turnip	Aug 1- Sept 15	Seed	12-24	2-3	.5	50-60

1 = Set plants into the garden 1 to 1 1/2 months after planting the seed.

Note: If planting or sowing into cold frames, plant two weeks later than date indicated. With our abundant winter sunshine, be sure to allow for ventilation. Also, check frequently for pests – especially aphids.

Recommended reading: "The New Organic Grower's Four-Season Harvest" by Eliot Coleman, Chelsea Green Publishers.

Bagworm Watch

Tom A. Royer, Extension Entomologist

Bagworms commonly infest juniper and other evergreen shrubs. They often go unnoticed until the caterpillars become large and are causing visible damage. The most efficient way to control a bagworm infestation is to be proactive and inspect susceptible plants early. While it is getting late, you may still have some time to control them before they cause extensive damage.

Bagworms overwinter as eggs and begin to hatch in mid-May. The newly hatched caterpillars immediately construct a silken bag and attach bits of their food source to the outside of the bag. This bag serves as a protection from predators, weather, and unfortunately from insecticide applications.

Suspected plants should be closely inspected, because bagworms can be easily missed in the dense foliage of the inner part of the tree. If an infestation is heavy, thorough coverage with an insecticide over the interior of the shrub will be necessary to achieve control.

There are several insecticides registered for bagworm control. Products containing *Bacillus thuringiensis* (Bactospeine, Biotrol, DiPel) are excellent choices, but it may be too late to obtain effective control at this time. Other products, such as malathion, Sevin, Orthene and Bayer Advanced Multi-insect Killer are very effective but will kill more beneficial insects than Bt products.

Alternative Insect Control

David Hillock

Instead of reaching for a synthetic insecticide to control those unwanted pests in the garden, try some more environmentally friendly options first. One pest management technique that is easier on our environment is mechanical control. Mechanical control is the use of hands-on techniques as well as simple equipment, devices, and natural ingredients that provide a protective barrier between plants and insects.

Exclusion Devices

Examples of exclusion devices include row covers, nets to keep birds away from ripening fruit, paper collars placed around stems of plants to prevent cutworm damage, and proper fencing or barriers to halt the spread of bermudagrass or to prevent pets and wild animals from damaging the garden.

Handpicking

Hand destruction or removal of insects and egg masses insures quick and positive control. This method is especially effective with foliage-feeding insects such as squash bugs, hornworms, and bean beetles. Excluding labor, handpicking is the least expensive of all organic or natural control practices.

Disadvantages are that handpicking must be performed long before insect damage is noticeable and at the key stage of development of the insect. Gardeners must actively monitor their crops, watching for the first sign of damage before insect populations get too high.

Traps and Attractants

Mechanical traps and attractants are used in two ways: to trap enough insects to lower crop damage or to monitor how many and what species of insects are in the garden. Traps and attractants often appeal to an insect's needs for food, shelter, and reproduction. A disadvantage of traps or attractants is that they may trap beneficial insects. Also, while some traps may be homemade using simple, inexpensive materials, others are expensive and must be cleaned or replaced periodically.

Water Pressure Sprays

A forceful stream of water will sometimes dislodge insects such as aphids and spider mites from foliage and plant stems. This practice must be repeated since many of the insects are likely to return. Water pressure should be used only on sturdy plants to avoid plant damage. This method may also be a problem since frequent applications of water could increase diseases or could cause root problems if the soil is already too wet. Therefore, use water sprays in the morning so plants will dry out during the day.

Insect Vacuums

The use of vacuums to remove certain kinds of insects from plants is another method. These tools may contain a disposable cartridge lined with a non-toxic, sticky gel to trap insects sucked up by the machine. Hand-held, battery powered vacuums are available, some of which have a small hose attachment to use when reaching across a row or bed.

Diatomaceous Earth

Diatomaceous earth is composed of finely ground skeletons of fossil diatoms. Sharp edges of the ground diatoms scratch the waxy or oily outer layer of soft-bodied insects, which reportedly die eventually from dehydration. The formulation of diatomaceous earth sold for swimming pool filters does not help control insects. Diatomaceous earth is considered a pesticide, but is non-toxic to birds and mammals. Disadvantages are that it can kill beneficial insects such as lady bugs and it is less effective against pests in humid weather. Gardeners must wear a dust mask when applying diatomaceous earth to plants.

Insecticidal soaps

Insecticidal soaps evidently kill insect pests by penetrating the insect's outer coat cuticle or entering the respiratory system and causing cell damage or disruption. Several insecticidal soaps are distributed for control of insects and mites. Available under a variety of trade names, the active ingredient of all is potassium salt of fatty acids. Soaps are chemically similar to liquid hand soaps. However, there are many features of commercial insecticidal soap products that distinguish them from the dishwashing liquids or soaps that are sometimes substituted.

Insecticidal soaps sold for control of insects:

- are selected to control insects;
- are selected to minimize potential plant injury; and
- are of consistent manufacture.

Certain brands of hand soaps and liquid dishwashing detergents can be effective for this purpose. However, **there is increased risk of plant injury with these products.** They are not designed for use on plants. Dry dish soaps and all clothes-washing detergents are too harsh to be used on plants. One of the most serious potential drawbacks to the use of soap-detergent sprays is their potential to cause plant injury (phytotoxicity). Certain plants are sensitive to these sprays and may be seriously injured. The risk of plant damage is greater with homemade preparations of household soaps or detergents. A short residual action means repeat applications may be needed at relatively short intervals (four to seven days) to control certain pests. Also, application must be thorough and completely wet the pest. Environmental factors also can affect use of soaps. In particular, soaps (but not synthetic detergents) are affected by the presence of minerals found in hard water, which results in chemical changes. Control decreases if hard-water sources are used. Insecticidal soaps may also be more effective if drying is not overly rapid, such as early or late in the day.

Horticultural Oils

Oils are petroleum-based products containing certain fatty acids that form layers on plant parts to smother insects or provide a mechanical barrier to prevent damage. There are two kinds of oils: growing season (summer) and dormant.

For more information on these and other control techniques refer to F-6432 Earth-Kind Gardening Series: Mechanical Pest Controls.

Harvesting Popcorn

David Hillock

There are no shortcuts to popcorn harvest. Popcorn must mature on the stalk. In a normal year, it takes about 120 days from seed to harvest. The kernels are usually hard and ready to harvest by the time the stalks turn brown and dry. The husks will be dry also. Harvest before cool, damp weather settles in, to prevent the possibility of mold growth.

After picking the ears, remove the husks and cure the ears for two or three weeks. To cure, place them in a mesh bag and hang in a warm, dry, well ventilated place. After curing, remove the kernels by rubbing one ear against another, starting at the tip and working toward the base. Store the kernels in sealed one-quart jars, filled three fourths full and store in the refrigerator, if possible. Properly stored popcorn should keep for three to four years before becoming stale.

How popcorn pops depends on its moisture content. If many kernels remain unpopped or pop only partially, they are too dry. Try adding one tablespoon of water per quart jar and shaking the jar twice a day for a couple of days. If a test popping shows kernels are still too dry, repeat the process once. If kernels are too moist, they will pop very slowly with a loud explosion and steam may rise from the popper. To encourage moisture loss, leave the popcorn storage container unsealed until a test popping shows the kernels are properly cured (The Neblin, November 2001, pg 2).

Upcoming Horticulture Events

Multi-State Plant Materials Conference

September 22-23, 2004

Holiday Inn, Stillwater

Nursery/Greenhouse Trade Show and Convention

October 8-9, 2004

Cox Convention Center, Oklahoma City

Tree Care Issues Conference

November 3, 2004

OSU Botanical Gardens Educational Building, Stillwater

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