

Horticulture Tips

August 2002

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 ½ 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)

Fall Vegetable Gardening

Jim Shrefler

Fall can be a fruitful time for vegetable production. With spring gardening, plants are generally being established while temperatures are mild and reaching maturity as the temperature is warming up. This is ideal for warm season vegetables such as okra, tomato, pepper, squash and muskmelon. However, for cooler season vegetables the warm temperatures that coincide with maturity of a spring planting can be detrimental to an otherwise healthy crop that is in its final stage of maturation. Another option for these crops, that may give even better results than spring planting, is to plant them in the late summer for a fall harvest. Examples of such crops are broccoli, lettuce, Swiss chard. OSU Fact sheet F-6009 provides information on suggested vegetables and planting dates for fall gardens.

One challenge to fall gardening is the early establishment of plants. Soil temperatures are often higher than desirable for seed germination and may be high enough to prevent germination of seed of some vegetables. Vegetables whose seed are particularly sensitive to high (95°F) temperatures include lima bean, lettuce, parsnip and spinach. However, there are things that may be done to modify soil temperatures to aid in getting plants established.

1. Row covers may be suspended above the seed row to shade the soil. Keep the sides open for good air movement.
2. Transplants may be started in a protected environment and later set in the field. Be careful not to take plants from low light to full sun too suddenly.
3. Keeping seedbed moist and loose following planting will help moderate the temperature. Overhead irrigation with a sprinkler or hose nozzle will seal the surface and lead to crust formation as the soil dries. A better choice would be to lay a soaker hose along the row so water will seep onto the soil surface. A moist soil surface will not heat up as much as a dry surface.
4. Mulch may be placed alongside the row to protect the soil surface from exposure to sunlight and the heating that results.

Warm season vegetables such as tomato, corn, squash and green beans may also be planted in the fall garden. One risk with these vegetables in the fall garden is their sensitivity to frost. Plant

them early enough to be sure to be able to begin harvesting and then enjoy them as long as weather permits.

Pest control may also pose a greater challenge to fall garden establishment than for plantings made earlier in the year. High numbers of insect pests such as grasshoppers, corn earworm (same as tomato fruit worm) and squash bugs are often found in mid summer and can rapidly destroy small seedlings. To minimize the risk of losses to such pests, scout plants frequently for insect activity and be prepared to control pests in a timely manner as needed. Placing screen over seedling rows may be one way to exclude insects while plants are becoming established in small garden areas. For information on pest identification and the selection of control measures consult your County Extension Office.

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.

Some Common Lawn Questions/Answers for August Concerning Home Lawn Care in Oklahoma

Dennis Martin

Question 1: Is removal of crabgrass recommended in August with herbicides?

Answer: We generally do not recommend chemical application measure for control of crabgrass once August has arrived. This is due to the fact that the very large, mature crabgrass plant are much less susceptible to herbicides such as MSMA by this late in the growing season and the herbicide rates and repeat applications necessary for control in combination with heat/drought can cause unacceptable injury on bermudagrass turf.

Question 2: Can I still safely plant bermudagrass in August?

Answer: The main concern in planting bermudagrass in August centers around getting enough maturity on the grass during the remaining growing season for turf to survive the upcoming winter. High temperature in combination with drought and longer shade lines (sun angle causing extended shadows to the north side of objects) can slow down the growth of bermudagrass if optimum management is not practiced.

Sodding of bermudagrass through the end of August can still be successfully conducted providing proper establishment procedures are followed "to the letter." For details see OSU Fact Sheet 6419 – Establishing a lawn in Oklahoma.

Sprigging of turf areas with the more winter hardy types of bermudagrass can usually be successfully if performed prior to August 15, provided that optimum management practices are followed "to the letter" (FS-6419). Failure to followed recommended practices may result in slower establishment and more likelihood of winter kill on immature turf going into the winter months. The more winter hardy bermudagrasses that can be sprigged or sodded are Quickstand Common, U-3 type common bermudagrasses, Greenfield, Midiron, Midlawn and Patriot (available in 2003). Types of bermudagrass that have increased risk of winter injury due to late-season sprigging include Tifway (419), Tifgreen (328) and Sunturf.

Seeding can only be practiced with the most winter hardy of varieties AND it must be completed by August 15 AND optimum establishment procedures must be followed to the letter. The same caveats apply for failure to follow recommendations to the letter. The most winter hardy seeded bermudagrasses are Guymon, Wrangler, Riviera and Yukon. Varieties that have a very large risk of winter kill if seeded in August include VNS (variety not stated) material and NuMex Sahara or Sahara and Yuma or Yuma Dwarf.

Question 3: Is it too early in August to plant cool-season lawns?

Answer: Generally, temperatures are too hot in August to successfully establish a cool season lawn by seeding in August. It is, however, not too early to take a soil test from the area in question and to kill out any currently unwanted perennial grass present such as bermudagrass or tall fescue using labeled rates of a glyphosate containing herbicide such as Roundup Pro or

Kleenup. Actual seeding of cool-season grasses such as tall fescue, perennial ryegrass or Kentucky bluegrass, for the purpose of establishing a perennial lawn, can take place beginning about September 15 and continuing through about October 15. Typically late September is ideal. We want to have at least 8 weeks of mild weather (not too hot or cold) conditions for cool-season lawns to grow prior to regular freezing weather. Seeding in mid to late September affords us these conditions based on long-term average weather conditions. Note, we often see too many folks wait far too late into October to guarantee success of the establishment operation.

Newly Revised – F-6409 – Pruning Ornamental Trees, Shrubs, and Vines

David Hillock

The Pruning Ornamental Trees, Shrubs, and Vines fact sheet has been revised, is “hot off the press,” and reflects the most current methods and procedures for pruning trees, shrubs, and vines. Included in the revision are new figures that clearly illustrate some of the dos and don’ts of pruning. Please check out the new edition of the pruning fact sheet when you get a chance.

Why is My Tree All Sappy?!

David Hillock

We have received several calls recently from concerned homeowners about their shade trees leaking sticky sap all over the yard. It is getting on the house, patio, car, and other landscape plants. Though I have not actually crawled up in a tree yet to see exactly what the culprit is, I am pretty certain that aphids are the critters causing all this havoc. They don’t seem to care what kind of tree they attack though pecan has been the most frequently reported. I have an elm tree right next to my garage and driveway and it is also dripping sap on my car.

So what should you do about it? Other than regularly washing everything in the yard off with water, my suggestion would be - nothing! It is true that aphids suck juices from the tree and then excrete what is called honeydew (the sticky stuff), and this is not the healthiest thing for a tree. However, it is not likely the aphid will cause any severe damage or result in death of the tree. Most general purpose insecticides will control aphids, but most homeowners don’t have the proper equipment to reach high into a mature shade tree and get good coverage. Thus they would have to hire a professional pesticide applicator. This could end up costing more than it is worth. There are natural predators of aphids that will eventually do their thing and reduce the aphid population, just be patient and give them time to catch up with the population explosion that seems to have occurred.

So, get out the hose as often as necessary and give everything in the garden, including the car if necessary, a good shower. If possible you may want to park your car somewhere else for a while so you don’t have to wash it as often.

National Pesticide Information Center

David Hillock

The National Pesticide Information Center (NPIC), previously the National Pesticide Telecommunications Network, is a national toll-free telephone and internet service that provides objective, science-based information about a wide variety of pesticide-related subjects to the public and to professionals. NPIC answers over 20,000 questions a year on numerous pesticide topics, including pesticide products and active ingredients, recognition and management of pesticide poisoning, toxicology, and environmental chemistry. NPIC also provides referrals for laboratory analyses, investigation of pesticide incidents, emergency treatment information, safety information, health and environmental effects, and cleanup and disposal procedures. This service is sponsored cooperatively by Oregon State University and the U.S. Environmental Protection Agency (EPA).

NPIC can assist the Master Gardener program by serving as an additional resource for volunteers to provide to callers with pesticide concerns. This is also an excellent resource for the County Extension Educator. NPIC operates seven days a week from 6:30 a.m. to 4:30 p.m. Pacific time. Call 1-800-858-7378 or go to <http://npic.orst.edu/>.

A Passion for Peppers

Steve Owens

Have you ever wondered why we have two food products that go by the same name of pepper. We have garden peppers and black pepper. The garden peppers, some which are sweet and others hot, are all variations of the plant *capsicum anuum*. It's native to South America, Central America and the West Indies. Black pepper or white pepper, depending on how it's harvested and processed, is one of the oldest and probably the most widely used spices in the world today. It's made from ground-up peppercorns, the small round fruit of the plant *Piper nigrum*. The black pepper plant is a woody vine native to the Malabar Coast of India. The garden peppers are in the family solanaceae or the nightshade family. This family contains plants such as petunias, tomatoes, potatoes, tobacco and eggplant. The black pepper plant belongs in the Piperaceae family. This family also contains the Peperomias, some of our showy houseplants.

It's interesting that both types of pepper are edible, they share the same name, and they both have a taste that's spicy, hot or pungent. But other than these few things, they have nothing else in common. They are in two completely different families and they come from lands that are thousands of miles apart. So why are they both called pepper? We have to look at our History books to find the answer. When Christopher Columbus discovered the New World, he was actually looking for a new trade route to the Far East. Some of the highly coveted trade items from the Far East at that time were the spices, like black pepper. When Columbus discovered the Americas and found the native people of the West Indies using this fruit that tasted so fiery, hot and spicy, he assumed it was a type of pepper like that of India and the name stuck. He introduced this "new pepper" to the rest of the world, and in a short time it was being grown and relished around the globe. This new way to make food hot and spicy sparked the creation of new

cuisines in countries like India, China, Indonesia and Thailand, and changed the world of cooking forever.

Because peppers have been grown in other parts of the world now for so many years, specific local varieties have been developed in different areas. For instance, several small, extremely hot, thin-skinned varieties have been developed in Southeast Asia, like the 'Thai Hot' and the 'Thai Dragon'. The country of Hungary has developed a group of waxy-skinned varieties known as the Hungarian wax peppers. If they contain no heat, they are also known as the sweet banana peppers. Likewise, a hot banana pepper is also known as a Hungarian hot wax pepper. Several other countries have developed their own style of peppers as well. We sometimes refer to all these peppers as ethnic peppers. But no matter where they are grown in the world today, all peppers have their roots right here in the Western hemisphere.

There are several types and varieties of peppers but most people divide them into two groups, sweet peppers and hot peppers. They contain a high amount of vitamin C, some with as much as ten times that of an orange. Bell peppers are what people usually think of when sweet peppers are mentioned; however, there are several non-bell sweet peppers. Today sweet bell peppers can be found in the supermarket in many colors other than traditional green. These bright fruits in colors of yellow, red, orange, purple, white and even black can sometimes cost as much as 3-4 times that of the green ones.

The hot peppers come in many different forms and heat levels as well. The compound in these peppers responsible for the heat is called capsaicin. Certain peppers contain extremely high amounts and are grown not to be eaten but for capsaicin extraction alone. The capsaicin is used in products like pepper spray and deep-heating muscle ointments. The part of the pepper where the highest amount of capsaicin is produced is the placenta, and not the seeds like many people think. The placenta is the fleshy tissue where the seeds are attached. The seeds absorb the capsaicin from the placenta during processing, but the seeds of a fresh hot pepper in the garden contain little.

To remove the burning sensation from your mouth after eating a pepper that's too hot, drink milk or eat yogurt or ice cream. A substance in dairy products called casein will disrupt the reaction. A very small but extremely hot pepper is the Bird's eye pepper, sometimes called the Chiltepin (*Capsicum annuum* var. *mimimum*). It has been used in the hybridization of other hot peppers. Its fruit are only about a half-inch in diameter but some consider it one of the three hottest peppers in the world.

Peppers are fairly easy to grow in the garden. Because of their close relation to the tomato, their cultural requirements are similar, only peppers need to be planted a little later in the spring than tomatoes. A location with full sun and well-drained soil is important. Few insects will severely damage the pepper plant or fruit but there are several disease problems like viruses and bacterial spots that can cause problems. When summer temperatures stay above 90 degrees, peppers have reduced fruit set and may drop some of their flowers. Cooler weather in the fall will cause them to flower and set fruit again.

Besides growing peppers for the dining table, they're also quite showy when used as ornamentals. More and more people are using peppers in their planting beds and containers to spice-up the display. Some have showy foliage, some have colorful fruit and a few have both. A few colorful varieties in the pepper garden at the *Oklahoma Gardening Studio* are 'Nosegay', a 6-8 inch tall plant with marble size peppers of red, orange and yellow; 'Medusa', which has erect, twisted, multi colored chilies; and 'Chilly Chili', another multi-colored, erect fruited variety that contains no heat and is a 2002 All-America Selections winner. A dark purple foliated pepper that has purple flowers and fruit that changes to about 4 or 5 different colors is the variety 'Pretty-in-Purple'. 'Variengata' is a tri-color leaved plant with green, white and purple and small colorful fruits. A truly unique pepper from Seed Savers Exchange is an African-American heirloom called 'Fish'. It has clean, crisp white variegated foliage and fruits that have white stripes before maturing to red. It was used extensively in the Oyster and Crab houses of the Chesapeake Bay area.

Occasionally ornamental peppers are erroneously thought to be poisonous, but all forms of *Capsicum annuum* are edible. The ornamental varieties are however bred more for show than taste. A plant related to the pepper and closely resembling it in appearance, the Jerusalem Cherry (*Solanum pseudocapsicum*) is poisonous. Also called the Christmas Cherry, the plants have round, cherry-pepper-sized, orange and red fruit and are used as ornamentals. There is also the False Jerusalem Cherry (*Solanum capiscastrum*) that looks similar but has slightly pointed fruits. Both plants can cause vomiting, nausea, and other problems if eaten and should be kept away from children and pets.

Whether growing peppers for food or landscape color, these festive New World plants are sure to enliven your garden.

Landscaping Trends

David Hillock

Trends come and go and come again and landscaping trends are no exception. According to Sunset Publishing Corporation, publisher of *Sunset Midwestern Landscaping*, some of the hottest trends are:

- **Using native plants in the landscape including wildflowers and grasses.** Most native plants require minimal maintenance, making them ideal for busy homeowners.
- **Chemical-free gardens.** Homeowners are eager to reduce chemical usage and are using more non-toxic alternatives.
- **Exterior decorating** is becoming popular, including lighting, color, art, and furnishings.
- **Sophisticated food gardening.** Gardeners are planting more varieties of fruits and vegetables. Growing vegetables in containers for the space-limited gardener is very popular.
- **Container gardening.** Growing plants in containers offers great flexibility and can be changed on an annual basis. Using tropicals is becoming extremely popular and many of these can be over-wintered indoors.
- **Casual planting style with formal elements** is becoming more popular.

- **Gardeners are becoming more conscious about conserving water** and are choosing drought-tolerant plants for the landscape.
- **Plant collecting.** Gardeners are collecting seed and plants on travels and shopping more on the internet and from catalogs for those rare and unusual plants.

Try these drought-tolerant plants in your garden!

David Hillock

Remember that drought tolerant does not mean that you can plant it in the ground and then just leave it. Proper care is needed the first one or two growing seasons to ensure a healthy, established plant. Be sure to provide regular watering in order to establish a good root system. Once you are sure the plant is established, begin to back off on the watering applying water less often but in large enough amounts to moisten the soil depth to at least 10 – 12 inches. A deep, healthy root system will help the plant tolerate drought conditions better than a shallow root system.

LARGE TREES (40+ feet tall):

- Caddo Sugar Maple (*Acer saccharum* Caddo)
- Common Hackberry (*Celtis occidentalis*)
- Ginkgo (*Ginkgo biloba*)
- Kentucky Coffeetree (*Gymnocladus dioicus*)
- Bur Oak (*Quercus macrocarpa*)
- Chinkapin Oak (*Quercus muhlenbergii*)
- Shumard Oak (*Quercus shumardii*)
- Bald Cypress (*Taxodium distichum*)

MEDIUM-SIZED TREES (25-40 feet tall):

- Arizona Cypress (*Cypressus arizonica*)
- Chinese Pistache (*Pistacia chinensis*)
- Western Soapberry (*Sapindus drummondii*)
- Cedar Elm (*Ulmus crassifolia*)

SMALL TREES (15-25 feet tall):

- Shantung Maple (*Acer truncatum*)
- Oklahoma Redbud (*Cercis canadensis* variety *texensis* 'Oklahoma')
- Desert Willow (*Chilopsis linearis*)
- Winterberry Euonymus (*Euonymus bungeanus*)

DWARF SHRUBS (1-3 feet tall):

- Dwarf Yaupon Holly (*Ilex vomitoria* 'Nana')
- Magic Carpet Spirea (*Spiraea x bumalda* 'Magic Carpet')
- Miniature Crape Myrtle (*Lagerstroemia indica*)
- Nandina cultivars (*Nandina domestica* 'Moonbay', 'Gulfstream', 'Harbour', 'Nana')

SMALL SHRUBS (3-5 feet tall):

- Glossy Abelia (*Abelia grandiflora*)
- Deciduous Holly (*Ilex decidua*)
- Winter Jasmine (*Jasminum nudiflorum*)
- Junipers (*Juniperus* species)
- Dwarf Crape Myrtle (*Lagerstroemia indica*)
- Nandina (*Nandina domestica*)
- Mugo Pine (*Pinus mugo* variety *mugo*)

MEDIUM-SIZED SHRUBS (6-9 feet tall):

- Althea or Rose of Sharon (*Hibiscus syriacus*)
- Crape Myrtle (*Lagerstroemia indica*)
- Shrub roses (*Rosa* species)
- Sumac (*Rhus* species)
- Vanhoutte Spirea (*Spiraea x vanhouttei*)

LARGE SHRUBS (10-25 feet tall):

- Smoke Tree (*Cotinus* species)
- Crape Myrtle (*Lagerstroemia indica*)
- Silverberry Elaeagnus (*Elaeagnus pungens* 'Fruitlandii')
- Yaupon Holly (*Ilex vomitoria*)
- Eastern Arborvitae (*Thuja occidentalis*)
- Vitex or Chaste Tree (*Vitex angus-castus*)

CLIMBERS:

- Crossvine (*Bignonia capreolata*)
- Trumpet Vine (*Campsis radicans*)
- English Ivy (*Hedera helix*)
- Virginia Creeper (*Parthenocissus quinquefolia*)
- Boston Ivy (*Parthenocissus tricuspidata*)
- Climbing roses (*Rosa* species)

GOUNDCOVERS:

- Hardy Ice Plant (*Delosperma copperi*)
- English Ivy (*Hedera helix*)
- Junipers (*Juniperus* species)
- Liriope or Monkey grass (*Liriope muscari*)
- Creeping Phlox (*Phlox subulata*)
- Stonecrop (*Sedum* species)
- Santolina (*Santolina* species)

ORNAMENTAL GRASSES (Perennial):

- Plume Grass (*Erianthus ravennae*)
- Maiden Grass (*Miscanthus sinensis* 'Gracillimus')

- Japanese Silver Grass (*Miscanthus sinensis* 'Variegatus')
- Zebra Grass (*Miscanthus sinensis* 'Zebrinus')
- Muhly Grass (*Muehlenbergia lindheimeri*)
- Switch Grass (*Panicum virgatum*)
- Fountain grasses (*Pennisetum* species)

PERENNIALS:

- Yarrow (*Achillea* species)
- Wormwood (*Artemisia* species)
- Blue Mist Spirea (*Caryopteris x clandonensis* 'Blue Mist')
- Plumbago (*Ceratostigma plumbaginoides*)
- Shasta Daisy (*Chrysanthemum x superbum*)
- Coreopsis (*Coreopsis* species)
- Coneflower (*Echinacea purpurea*)
- Gaillardia or Blanket Flower (*Gaillardia grandiflora*)
- Gaura (*Gaura lindheimeri*)
- Daylily (*Hemerocallis* species and hybrids)
- Bearded Iris (*Iris* species and hybrids)
- Ornamental Oregano (*Origanum laevigatum*)
- Russian Sage (*Perovskia atriplicifolia*)
- Black-Eyed Susan (*Rudbeckia fulgida*)
- Autumn Sage (*Salvia greggii*)
- Verbena (*Verbena canadensis*)

ANNUALS:

- Joseph's Coat (*Alternanthera* species)
- Summer Snapdragon (*Angelonia angustifolia*)
- Ornamental Peppers (*Capsicum* species)
- Madagascar Periwinkle (*Catharanthus rosea*)
- Cockscomb (*Celeosia* species)
- Cosmos (*Cosmos* species)
- Mexican Heather (*Cuphea hyssopifolia*)
- Gazania (*Gazania splendens*)
- Gomphrena or Globe Amaranth (*Gomphrena globosa*)
- Firebush (*Hamelia patens*)
- Sunflower (*Helianthus annuus*)
- Lantana (*Lantana camara*)
- Melampodium or Medallion Plant (*Melampodium paludosum*)
- Pentas or Starflower (*Pentas lanceolata*)
- Portulaca (*Portulaca grandiflora*)
- Purslane (*Portulaca* species)
- Mexican Bush Sage (*Salvia leucantha*)
- Dusty Miller (*Senecio cineraria*)
- Purple Heart (*Setcreasea pallida*)

- Marigolds (*Tagetes* species)
- Mexican Sunflower (*Tithonia rotundifolia*)
- Mexican Zinnia (*Zinnia haageana* syn. *Z. angustifolia* and *Z. linearis*)

Upcoming Events

Multi-State Ornamental Plant Materials Conference

September 25-26, 2002

Holiday Inn, Stillwater, Oklahoma

Preregistration information will be mailed out soon regarding this conference.

Specialty Cut Flowers

February 27, 2003

Stillwater, Oklahoma

2003 Oklahoma Grape Management Class

Oklahoma Fruit Research Station, Perkins, Oklahoma

2003 Pecan Management Class

Oklahoma Pecan Research Station, Perkins, Oklahoma

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