Horticulture Tips
December 2010

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

GARDEN TIPS FOR DECEMBER!

David Hillock

Lawn & Turf

- Remove leaves from cool-season grasses or mow with a mulching mower. (HLA-6420)
- Continue mowing cool-season lawns on a regular basis. (HLA-6420)
- Continue to control broadleaf weeds in well-established warm- or cool-season lawns with a post-emergent broadleaf weed killer. (HLA-6421)

Tree & Shrubs

- Select a freshly cut Christmas tree. Make a new cut prior to placing in tree stand. Add water daily.
- Live Christmas trees are a wise investment, as they become permanent additions to the landscape after the holidays.
- Light prunings of evergreens can be used for holiday decorations. Be careful with sap that can mar surfaces.

Flowers

- Apply winter mulch to protect rose bush bud unions and other perennials. Wait until after several early freezes or you will give insects a good place to winter.
- Poinsettias must have at least six hours of bright, indirect light daily. Keep plants away from drafts.

Fruits & Nuts

- Cover strawberry plants with a mulch about 3 to 4 inches thick if plants are prone to winter injury.
- Wait to prune fruit trees until late February or March.

General

- Keep all plants watered during dry conditions even though some may be dormant.
- Irrigate all plantings at least 24 hours before hard-freezing weather if soil is dry. (HLA-6404)
- Order gardening supplies for next season.
- Now is a great time to design and make structural improvements in your garden and landscape.
- Send for mail-order catalogs if you are not already on their mailing lists.
- Christmas gift ideas for the gardener might include tools, garden books, magazine subscriptions, *Oklahoma Gardening* educational tapes or membership to Oklahoma Botanical Garden & Arboretum.

- Clean and fill bird feeders.
- Make sure indoor plants are receiving enough light, or set up an indoor fluorescent plant light.
- Till garden plots without a cover crop to further expose garden pests to harsh winter conditions.
- Visit your county office to obtain gardening fact sheets for the new gardening season.
- Join a horticulture, plant or urban forestry society and support community "greening" or "beautification" projects.
- Review your garden records so you can correct past mistakes. Purchase a new gardening journal or calendar to keep the New Year's gardening records.

GARDEN TIPS FOR JANUARY!

David Hillock

- If precipitation has been deficient (1" of snow = ~ 1/10" of water), water lawns, trees, and shrubs, especially broadleaf and narrowleaf evergreens. Double check moisture in protected or raised planters.
- Check on supplies of pesticides. Secure a copy of current recommendations and post them in a convenient place. Dilution and quantity tables are also useful.
- If you did not treat young pines for tip borers in November, do so before March.
- Check that gardening tools and equipment are in good repair—sharpen, paint, and repair mowers, edgers, sprayers, and dusters.
- Inspect your irrigation system and replace worn or broken parts.
- Control overwintering insects on deciduous trees or shrubs with dormant oil sprays applied when the temperature is above 40°F in late fall and winter. Do not use "dormant" oils on evergreens. (EPP-7306)
- A product containing glyphosate plus a postemergent broadleaf herbicide can be used on dormant bermudagrass in January or February when temperatures are above 50°F for winter weed control. (HLA-6421)

2011: Year of the Tomato

David Hillock

The tomato's wild relatives originated in South America, most likely in the Andes Mountains, but the fruit was not cultivated by the Andean people. Instead, it traveled over 2,000 miles north of its center of origin to Central America where the pre-Mayan people grew and domesticated the plants, naming them xitomatl. The cherry-sized fruits of *Solanum lycopersicum* var. *cerasiforme* can still be found growing wild in the coastal mountains of Peru, Ecuador, and northern Chile. Hernán Cortés and his explorers are credited with finding the tomato in an Aztec market around 1520 and transporting the seed to Spain. From there, the tomato traveled throughout Europe and across the channel to England.

The earliest written records of the tomato are in herbal books. Botanists placed it in the nightshade family, which includes many poisonous plants. "This plant is more pleasant to the sight than either to the taste or smell because the fruit being eaten provoketh loathing and vomiting," wrote an English country doctor in 1600. Needless to say, tomatoes were not a popular food in England at that time. Gardeners grew them for curiosity, and, according to the botanist for King Charles I, "for the amorous aspect or beauty of the fruit."

Colonialists brought many plants from Europe to the New World, and the tomato was one of them. Thomas Jefferson raised them as ornamental plants at Monticello in 1781, but it wasn't until the1800s that people in North America began to relish tomatoes as food. Legend has it that Colonel Robert Gibbon Johnson staged an event in 1820 that changed public opinion. In Salem, New Jersey, so the story goes, the Colonel set out to eat a basketful of tomatoes at the local courthouse in front of an audience that had gathered to watch the writhing spectacle of his death. He survived, of course, and the tomato was embraced. Over the years this account has been embellished and enshrined, but never verified. It is, however, a proven fact that cookbooks of the time contained recipes for tomato ketchup, relishes, and soups.

In 1880, James Vick's Flower and Vegetable Catalog of Rochester, New York listed six types of tomato seeds. In that same decade Alexander Livingston of Livingston Seed Co. introduced 'Golden Queen', described in W. Atlee Burpee's 1888 Farm Annual catalog as "handsome yellow slices making a beautiful contrast in dish with the red tomatoes." Burpee listed twenty-one other tomato varieties for sale that year as well. A select few tomatoes from that era, including 'Acme', 'Paragon', and the revered 'Brandywine', can still be grown today. These and thousands of other tomatoes are known as heirloom tomatoes, loosely defined as varieties that have been in circulation for more than 50 years. Open pollinated tomatoes, which include heirlooms and all other varieties that grow true from seed, remain popular with home gardeners. Saving and sharing seed of the many unique tomato varieties is a labor of love for many gardeners who, along with organizations such as Seed Savers Exchange, help to maintain the genetic diversity of the species.

The modern age of the tomato was ushered in by Dr. Oved Shifriss, who bred 'Big Boy', one of the first F1 hybrids. Offered by W. Atlee Burpee in 1949, this meaty 1 lb. tomato is still sold today. The early ripening red tomato was an instant success for Burpee. Thousands of hybrids succeeded it, offering gardeners desirable traits such as earliness, crack-resistance, and compact habits. Continued breeding efforts have produced more healthful tomatoes with increased lycopene, and plants with multiple disease resistances. Modern tomatoes tolerate diseases caused by *Fusarium* and *Verticillium* fungi, nematodes, and viruses, and breeders expect that blight-tolerant hybrids will be available in the near future. These tolerances make it easier for gardeners and farmers to grow tomatoes without using pesticides.

Nomenclature – The botanical name for tomato has changed several times. For many years its name was *Lycopersicon* or literally, wolf peach. When the tomato was placed in the nightshade (*Solanaceae*) family, the botanical name changed to *Solanum lycopersicum*.

Classifications – Tomatoes are classified in a number of different ways, including fruit shape, days to maturation, and color. From smallest to largest, popular fruit shapes are identified as cherry, plum, standard, and beefsteak. Cherry tomatoes, which range from ¼ to one ounce, are produced in clusters. Plum tomatoes are shaped as the name implies and generally weigh between 2 and 6 ounces, although they can be twice that. Also known as paste tomatoes, they have meaty interiors and thick fruit walls. Standard-sized tomatoes weigh anywhere from 4 to 16 ounces and are round, while beefsteaks, which can be 2 pounds or more depending upon variety, are usually oblate. Grape, currant, and saladette are relatively recent tomato types. Currant tomatoes are only about half the size of cherries; grape tomatoes, oval-shaped fruits that pop in your mouth, appeared on the scene in the late 1990s. Two- to three-bite saladettes, such as the 1999 AAS (All America Selections) winner 'Juliet', are larger than cherry but often smaller than plum tomatoes.

Tomatoes are also categorized by maturity date. The number of days to maturity means the average number of days from planting outdoors to the first ripe fruit. Early tomatoes, generally speaking, are those that ripen in fewer than 70 days from transplanting; mid-season tomatoes ripen in 70 to 80 days; and late types require over 80 days.

Fruit colors range from creamy white through lime green, to pink, yellow, golden, orange, and red. Pink, yellow, and orange are milder tasting than most red varieties. Contrary to popular belief, yellow tomatoes are not lower in acids. Rather, it is the balance of acids, sugars, and aromatics that distinguishes the taste of one tomato from another.

Growth Habits – Tomato varieties are also distinguished by their growth habits, which may be determinate or indeterminate. Determinate tomatoes are relatively compact, and reach a predetermined height or number of fruit clusters. Each short branch ends in a flower cluster, and plants do most of their growing before setting fruit. Determinate tomatoes tend to ripen all at once, so that the main harvest is concentrated into a few weeks. This may be ideal for gardeners who wish to preserve fresh tomatoes for winter soups and sauces.

Indeterminate tomato plants grow, blossom, and produce tomatoes throughout the growing season. They can reach up to 12 feet tall, and produce many main stems, all of which are capable of flowering and fruiting. As shoot tips continue to grow, flower clusters are borne in the leaf axils of the elongating shoot. An example of an indeterminate variety is 1994 AAS winner 'Big Beef'. To support unwieldy growth and to keep tomatoes off of the ground, the National Garden Bureau recommends supporting plants with cages or stakes. Staked plants should be pruned to remove all but two growing stems, which are tied loosely to the stakes and trained for vertical growth. Because this system allows air to circulate around the plants, it can help prevent disease. Pruning, although not strictly necessary, can produce larger but fewer tomatoes. Suckers (shoots that grow the main stem and the branches) are easily pinched between thumb and forefinger.

There is a third type called semi-determinate which is bushy like a determinate, but will set and ripen fruit over a longer period of time. The 1984 AAS Award Winner 'Celebrity' is a semi-determinate. The best way to grow determinate or semi-determinate plants is to not prune and

place a cage around the tomato while still small. As the plant grows it fills the cage. Gardeners need only pluck ripe fruit.

Nutritional Value – Tomatoes provide abundant vitamins and minerals. One cup of cherry tomatoes will provide 25% of daily recommended Vitamin A, 32% of Vitamin C, and a substantial amount of Vitamin K and potassium. Tomatoes are also an excellent source of lycopene, a powerful antioxidant that has been linked to a reduced risk of cancers. For the best tasting, most nutritious tomatoes, grow your own and eat them fresh from your garden.

The National Garden Bureau acknowledges two experts who read the original fact sheet and contributed their knowledge. They are Julia Pruitt, Oklahoma State University, Oklahoma City, OK and Jim Waltrip, Seminis Vegetable Seeds, Saticoy, CA. We also thank Pam Ruch for her 2010 updates.

To learn more about the 'Year of the Tomato' fact sheet and the National Garden Bureau go to http://www.ngb.org/year_of/index.cfm?YOID=16. For more information about growing tomatoes in Oklahoma, go to http://www.hortla.okstate.edu/resources/index.htm.

Source: The National Garden Bureau

2011: Year of the Zinnia

David Hillock

For decades, zinnias have been the flowering annual of choice for spreading glorious colors throughout the garden as well as for cutting to bring indoors. But it wasn't always so. When the Spanish first saw zinnia species in Mexico, they thought the flower was so unattractive they named it mal de ojos, or "sickness of the eye!" Years of breeding have brought striking new colors, shapes, sizes, and growing habits to the humble zinnia. No present day gardener would ever describe this versatile bloomer as anything less than eye catching.

The Zinnia Family Tree – There are more than a dozen species of zinnias, members of the *Asteraceae* (also known as *Compositae*) family, but very few of them are grown in home gardens. *Zinnia elegans* (syn. *Z. violacea*), the common zinnia, is very familiar to gardeners. Tall, mid-sized, and dwarf varieties of this species have been grown for decades, and flowers are available in a wide range of colors. *Z. angustifolia* (also known as *Z. linearis*) is less common in gardens, but is gaining in popularity. The plants have narrower foliage and smaller single flowers. The species has golden-orange flowers, but the variety, 'Crystal White', AAS (All America Selections) winner in 1997, offers pure white daisy-like blooms with yellow centers. It is more compact than the straight species, and may overwinter in Zones 9-11. Probably the least known of the garden zinnias is *Z. haageana* or the Mexican zinnia. It is disease-resistant, grows to 15 inches, and has small, bicolored flowers.

A Bit of History—Then – When seeds of zinnias were collected and brought to Europe in the 18th century, the plants were not much to look at. Named for Dr. Johann Gottfried Zinn, who

wrote the first description of the flower, the genus Zinnia had to wait for the mid-19th century to become successful in the garden. It is probable that the first "double" came from the West Indies, for it was from seed from those islands that double flowers were first introduced in France. Brightly colored 1 ½-inch 'Lilliput' type flowers were developed in France in the 1880s, and in the late 19th and early 20th centuries, separate colors of small, double flowers began to be grown. These were the precursors of what we now know as 'Pumila' or 'Cut-and-come-again' zinnias. 'Giant Mammoth', the first strain of large, double-flowered zinnias, appeared at around the turn of the century. But the start of the zinnia's real popularity began in the 1920s when Bodger Seeds Ltd. introduced the dahlia-flowered 'Giant Dahlia' zinnia. John Bodger discovered it as a natural mutation in a field of 'Mammoth' and within the next few years selected the large, flat-flowered 'California Giant' from the strain. Available in separate colors, it was considered to be a new trend in plant habit and flower form, and won a gold medal from the Royal Horticultural Society of England. 'State Fair', an example of a modern dahlia-flowered zinnia developed through induced tetraploidy, was introduced by the Ferry Morse Seed Company in 1939. Tetraploids have four, rather than the usual two sets of chromosomes; the plants have increased disease resistance, vigorous growth, and large flowers on strong stems. Only a few other zinnias available today are tetraploids.

Despite the breeding progress, the modern F1 hybrid was still waiting in the wings—or in the field, so to speak—because of the difficulty of emasculating (removing the male parts) a zinnia without destroying the flower itself. A chance find by breeder John Mondry, working at the time for W. Atlee Burpee, changed all that. He found a plant in the field with flowers that had no petals but were composed entirely of female reproductive parts. They could form seeds only after being cross-pollinated. The discovery led the way to the dwarf F1 hybrid 'Peter Pan' series introduced from 1971 to1980. Yoshiro Arimitsu and Charles Weddle bred seven separate colors that were recognized as AAS Winners. Bodger Seed Ltd introduced the F1 hybrid 'Ruffles' series ('Scarlet', AAS, 1974; 'Cherry' and 'Yellow', AAS, 1978), developed by Mondry (who had by then resigned from Burpee) as cutting flower plants. Although still available, these early hybrids have been largely supplanted in the market by later introductions.

And Now—Breakthrough – Compact zinnias are now "in"--perhaps in response to home gardeners' smaller plots and the popularity of container gardening. Dwarf selections of *Zinnia haageana* were introduced decades ago, with 'Persian Carpet' and 'Old Mexico' garnering AAS awards in the 1950s and 1960s, and in 1997, 8- to15-inch *Z. angustifolia* 'Crystal White' was bred by Takii & Co, Ltd. Then a breeding breakthrough occurred. Two distinct species, *Z. angustifolia* and *Z. elegans*, were bred to create an interspecific cross. In 1999 the 'Profusion' zinnias, 'Cherry' and 'Orange', from Sakata Seed Corporation, won Gold Medals from AAS—the first in 10 years. They represented the best traits of both species: heat and humidity tolerance, disease resistance, easy maintenance (no deadheading required), pretty 2- to 3-inch single flowers, and compact growth (12 to 18 inches tall). These artificial interspecific hybrids developed at the University of Maryland have been given their own species name: *marylandica*. Subsequent hybrids of the kind are identified as *Zinnia marylandica* 'Zahara Starlight Rose', 'Double Zahara Fire', and 'Double Zahara Cherry', all 2010 AAS winners. With larger flowers than 'Profusion' and more color variations, they represent the new benchmark for beautiful, disease-resistant zinnias.

Zinnias—in All Their Glory – One of the reasons for the popularity of the zinnia is its diversity. Like dahlias and chrysanthemums, zinnias have a variety of flower forms—they may be single, semi-double or double. Single-flowered zinnias have just one row of petals and the center of the flower is exposed: *Z. angustifolia* 'Crystal White' is a delightful example. Double-flowered zinnias, with so many rows of petals that the center is hidden, have several shapes. "Beehive" zinnias, with rows of flat petals on small blooms, such as 'Small World Cherry' (AAS, 1982), really do look like little beehives. Button-type flowers are similar to beehive except the flower is flatter. The edges of each petal on cactus-shaped flowers roll under and the petal twists and bends. Dahlia-flowered zinnias have large flat petals, and are usually semi-double, that is, the flowers have many rows of petals but the center can be seen; they are great to use as cut flowers.

Zinnias also come in an amazing array of colors. Most are solid, but some, in particular *Z. haageana*, are bicolored with a contrasting color at the tip of each petal. You'll find yellow, orange, cherry, pink, purple, scarlet, and white, as well as fashionable chartreuse—just about every color, in fact, but blue.

Height is an important consideration when planning a garden, and zinnias have growing habits to suit every need. Tall, 3- to 4-foot varieties are best for the middle or rear of a border or in a cutting garden. Dwarf plants grow 8 to 14 inches tall and do well in pots as well as at the front of a garden. *Z. angustifolia* plants are only about 12 inches tall and wide; they are excellent in the ground, in pots or hanging containers, and as summer-flowering ground covers.

To learn more about the 'Year of the Zinnia' fact sheet and the National Garden Bureau go to http://www.ngb.org/year_of/index.cfm?YOID=8.

Source: The National Garden Bureau

Providing Adequate Lighting for Houseplants

David Hillock

Adequate water and light are the two most crucial requirements for growing plants indoors. Of these, light is usually the limiting factor, especially in rooms where outside windows are small, face the north or not present. Growing under lights relies on the intensity, quality, and quantity of light produced by fluorescent lamps.

Very few plants tolerate dark corners. Most houseplants require the light that would be found within four to eight feet of a bright south window. Some will tolerate a spot very near the window, while others will prefer less light some distance away. Too little light can result in tall, lanky, small-leafed plants. Too much light can cause leafburn on sensitive species like African Violet. Drapes should be left open during the day where houseplants are being grown; however, be careful not to allow the plants' leaves to touch the glass of the window.

Properties of Light Intensity (Brightness) – Plants have different requirements for light intensity. Desert plants, such as cacti, require very high levels of light; whereas, most tropical foliage and

flowering plants require medium levels of light. Plants are generally segregated into the following categories based on their light requirement and intensity as expressed in foot-candles (ft-c). One foot-candle is defined as the light produced by a single candle's flame as measured at a distance of one foot.

Sunny or very high (>1000 ft-c)
• Areas receiving at least 5 hours of direct sunlight in winter
• Window facing southeast, south or southwest

Semi-sunny or high (500-1000 ft-c)
• Areas receiving 2 to 5 hours of direct sunlight per day in winter
• Window facing east or west

Semi-shady or medium (150-500 ft-c)
• Areas having bright, open light, but little or no direct sunlight
• Obstructed window facing east or west

Shady or low (<150 ft-c)
• Areas receiving no direct sunlight, but having enough light to cast a shadow
• Window facing north

If the room is not naturally lit, artificial lights should be used. A 100-watt table lamp can be used about three feet above plants. Specially built fluorescent plant lights or plant flood lamps are available.

Fluorescent lamps are a good source of light for growing plants because they distribute light uniformly across the lamp and over lamp life. Plants can be grown very close to the lamps without heat damage. However, intensity rapidly decreases as distance from the lamp increases (Figure 1). Fluorescent lamps are usually suspended a few inches above the plant leaves. Either fluorescent or incandescent plant lights are satisfactory for growing plants.

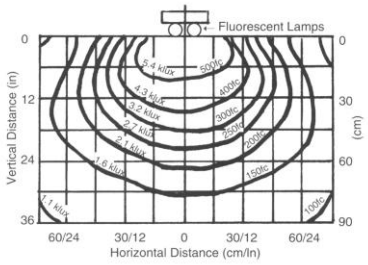

Figure 1

Quality (Color) – Plant growth lights, e.g. GroLux and GroLux WS by Sylvania or Grow & Show by General Electric, produce most of their light in the blue, red, and far red regions. Blue light provides energy for photosynthesis. Red and far-red light are important for flower initiation. Standard "cool white" fluorescent lamps produce light in the lower visible spectrum, i.e. blue to green to orange, and thus will satisfy the light requirements of many plants. Combining two of the plant growth lamps with two, cool white lamps per four-lamp fixture will provide good spectral distribution.

Quantity (Duration) – The intensity of light cast on plants' leaves and the duration are important to the maintenance and growth of those plants.

- Seedlings require 16 hours of light per day.

- Flowering indoor plants require 14 to 16 hours of light per day.
- Foliage indoor plants require 10 to 12 hours of light per day.

(Written by Douglas C. Needham, Ph.D., taken from OSU Fact Sheets HLA 6401 and 6411)

OKLAHOMA STATE PECAN SHOW 2010

Becky Carroll

Be sure to get the word out to everyone to enter their best pecans in the state show this year. There will not be any qualifying regional or district pecan shows this year. However, some county/area shows will be held at the discretion of the County Extension Educator. Winning entries from county shows will be sent to the state show. If no county/area show is available, growers may enter pecans directly by sending samples to Oklahoma State University, Department of Horticulture, Attn: Becky Carroll, 358 Ag Hall, OSU, Stillwater, OK 74078. Samples should arrive by January 21, 2011.

Samples should be entered in a sealed plastic or paper bag. Label the bag on the outside and place a label inside the bag. Information should include exhibitors name and address, county, and type of pecan entered. Be sure to follow the guidelines that are listed below before sending entries.

A few helpful hints: Take the time to select pecans that are all the same cultivar, or same size and shape natives – *don't send mixed pecans*. Select uniform, clean, uncracked pecans. Presentation can make the difference between two very similar samples. Make sure to send 2 pounds of pecans in a labeled and sealed bag.

General Rules and Guidelines

- All entries must be grown in Oklahoma during the current season.
- Each entry shall consist of two pounds of nuts.
- Entries deemed unworthy by the judges will not compete for awards.
- Label each entry as to exhibitor's name, address and cultivar of nuts. If more than one native (seedling) pecan exhibit is made, identify the nuts from separate trees by numbers. Only one exhibit of each cultivar or native tree may be entered by one individual.
- Each entry will compete in one of the following 28 classes:

1. Apache
2. Barton
3. Burkett
4. Cheyenne
5. Choctaw
6. Comanche
7. Graking
8. Gratex
9. Kanza
10. Kiowa
11. Mahan
12. Maramec
13. Mohawk
14. Pawnee
15. Peruque
16. SanSaba Improved
17. Schley (eastern)
18. Shawnee
19. Shoshoni
20. Sioux
21. Squirrels Delight
22. Stuart
23. Success
24. Western
25. Wichita
26. Other Cultivars
27. Large-Native (seedling) 60 nuts/lb or larger
28. Small-Native (seedling) more than 60 nuts/lb

- Each grower is allowed to participate at one county show of his or her choice.
- Each grower is allowed to enter one entry in each show class with the exception of Class 26 (Other Cultivars), Class 27 (Large-seedling) and Class 28 (Small- seedling)
- Each grower may enter one entry from each native (seedling) tree.
- Entries should be shipped or mailed to arrive at the show at least one day prior to the deadline.
- County pecan shows will not be affected by these rules and procedures.
- Samples will be placed in cold storage, and judged before the Oklahoma Pecan Growers Annual Meeting. At that time, the winning entries will be displayed with awards and recognitions. All entries will become the property of the OPGA.
- First, second, and third place winners in each class at the State Pecan Show will receive ribbons.
- State Pecan Show Special Awards – Plaques will be awarded for the largest pecan entry, the entry having the highest kernel percentage, the champion native and the best entry of the show.
- If a qualifying show is not available, growers may submit entries in accordance with these guidelines directly to the State Show. Entries in the state show must be received by January 21,2011 at the following address:

  Oklahoma State University
  Department of Horticulture & LA
  Attn: Becky Carroll
  358 Ag Hall
  Stillwater, OK 74078

Reminder on the 2010 Cucurbit Vegetable Production and Marketing Educational Meeting – This Year's Meeting will Include Other Popular Vegetables

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. Some topics to be addressed include weed control practices for use in vegetables, legal issues with vegetable marketing, vegetable disease control, vegetable variety information and results of a 2010 plasticulture demonstration.

This event is intended to provide information of what should be of value to Extension Educators, market garden growers, commercial farmers and agricultural supply businesses. Not only will this program 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

December 9, 2010
Global Horticulture Conference
Stillwater, OK
http://www.hortla.okstate.edu/pdf/2010_globalhort.pdf

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.

Horticulture Tips – 2010 Index

Pretty Mujch Picasso™ Petunia, 06/10
Proper Lawn Herbicide Use Requires Planning, Execution and Post-Application Follow-Up, 07/10
Providing Adequate Lighting for Houseplants, 12/10
Pruning Roses, 03/10
Re-flowering Your Poinsettias for Christmas, 10/10
Right Plant, Right Place, 10/10
Safe Application of Lawn Fertilizers, 06/10
Should I Plant a Cover Crop in the Vegetable Field this Fall?, 10/10
Shurbs that Work Well as Groundcovers, 05/10
Spider Mites, 06/10
Staking Trees, 08/10
State Fair (OKC) 4-H Horticulture Judging Contest Results for 2010, 10/10
Summer Turf Management Tips, 07/10
Ten Frequently Asked Turfgrass Questions in April, 04/10
Top Perennial Plants for the Shade, 09/10
Urban Friendly Trees, 08/10
Why is my Bermudagrass Lawn still brown in May and what can I do about it?, 05/10
Year of the Tomato – 2011, 12/10
Year of the Zinnia – 2011, 12/10