Horticulture Tips
October 2009

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

GARDEN TIPS FOR OCTOBER!

David Hillock

Turfgrass

- You can continue to replant or establish cool-season lawns like fescue.
- The mowing height for fescue should be lowered to approximately 2½ inches for fall and winter cutting.
- Broadleaf weeds like dandelions can be easily controlled during October (HLA-6421 & HLA-6601).
- Mow and neatly edge warm-season lawns before killing frost.

Ornamentals

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

Fruits & Vegetables

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

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

Water Gardens

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

Twig Litter

David Hillock

You may be noticing a bunch of twigs littering the yard right now. This is possibly a result of a longhorned beetle often referred to as the twig girdler. Close inspection of the twigs will reveal a distinct cut made by this beetle. It is a uniform V-shaped cut with a small central area with a jagged surface caused by the break.

This small beetle (about ½ inch long) is active from late August through early October feeding on tender bark near branch ends where they lay eggs after they girdle the twig. The girdling extends through the bark and well into the wood in a complete circle around the stem and leaves only a thin column of the center wood attached. The twig will die beyond the chewed portion and will remain hanging in the tree or when the wind blows fall to the ground. The eggs laid in the twigs will hatch in about 3 weeks. The small larvae overwinter in the dead twig either in the tree or on the ground. Larvae grow rapidly in the spring and tunnel toward the severed end of the twig. The mature larva pupates in the twig and then emerges as an adult beetle in August and September.

Twig girdlers are commonly found on pecan, hickory, persimmon and elm. They also attack oaks, honeylocust, hackberry, poplar, dogwood, sourwood and various fruit trees.

It is not uncommon to see the ground under infested trees almost covered with twigs that have been cut off. This affects the beauty and aesthetic quality of ornamental plantings. The fruiting area of heavily infested pecan trees is often greatly reduced, resulting in low nut yields the following year and sometimes longer. This type of injury causes the development of many offshoots that adversely affect the symmetry of the tree.

Control this time of year is best achieved by gathering and destroying the twigs this fall, winter and spring when the eggs and larvae are in the twigs. Insecticides may be necessary next August and September to prevent damage from heavy infestations.

The Plant Disease and Insect Diagnostics Lab (PDIDL)

Kim Rebek

The PDIDL is a service of the Oklahoma Cooperative extension Service. The primary goal of the PDIDL is to provide residents in the State of Oklahoma with both accurate diagnoses of plant diseases and insect pests and recommendations for their control. The PDIDL operates throughout the year to provide plant disease and insect identification services to extension educators, individuals, consultants, and commercial producers. The PDIDL strives to provide both accurate and timely diagnosis of the samples received. All samples received in the lab are examined for plant disease based on symptoms and the presence or absence of pathogens (microorganisms that cause disease). Diagnostic replies are sent by mail and include a diagnosis, recommendations for control, and supplemental information when available. The following outlines the proper steps to follow in collect plant and soil samples.

Collecting plant samples:

- Collect several plant specimens showing various stages of disease development. Select plants that are still alive.
- Collect the entire plant whenever possible. Plants should be dug (not pulled) to keep the roots intact.
- For tree samples, the branches sent in should be at least 8 inches long.

Plant sample packaging:

- Wrap the roots of the plant in a plastic bag so that they do not dry out. If the plant is already potted then it can be left in the pot for shipping.
- Wrap the entire sample in plant bags to keep it from drying out (exceptions: wrap fleshy fruits beginning to decay and mushrooms in newspaper).
- Place the plant in a sturdy box or mailing tube. Do not add water or wet paper towels.
- Send a detailed history explaining the disease symptoms, when disease began, name, address, and phone number.

Collecting soil samples**:**

- Take several soil samples in an area showing possible nematode damage. Collect the soil at a depth where the root concentration is the greatest (1-12 inches). Mix the samples from the area.
- Remove a single 1 pint sample for nematode analysis.

Soil sample packaging**:**

- Place soil in a non-vented plastic bag. Label the bag with collection date, location, and crop.

Soil and plant samples should first be taken to your county Cooperative Extension Office for identification. Extension educators at your local office are trained to assist in identifying plant problems. In some cases, particularly with less common pests, the county educators may need assistance in identifying the cause of the problem. In this case, they will direct you toward the PDIDL.

Submitting a sample to PDIDL:

- Before submitting a sample, please complete a Plant Disease or Insect Diagnostic Request Form and submit it with the sample.

- Mail first class in a sturdy box or take it to your county Cooperative Extension Office to have it shipped.
- Submit sample and form to:
  Plant Disease and Insect Diagnostic Laboratory
  Entomology and Plant Pathology
  Oklahoma State University
  127 NRC
  Stillwater OK 74078-3033

Planting Garlic

Kim Rebek

As we move into October, many of our warm-season vegetables finally succumb to the cool night temperatures. And while it is hard to say good bye to those fresh tomatoes, we do have a new crop to look forward to. So pull out those withered plants and till up the soil, because now is the time to plant garlic for early summer harvest.

Garlic or *Allium sativum*, is a relative of the onion and is one of those crops that has been grown for thousands of years, originating in central Asia. Though we only usually see one or two different types of garlic at the supermarket, there are actually quite a range of varieties. OSU factsheet **HLA-6032 Vegetable Varieties for the Home Garden in Oklahoma** lists a number of varieties that will perform well in Oklahoma. You can also talk with growers at your local farmers market to find out what varieties do well in your region.

Heavy clay soils can cause misshapen bulbs. It is a good idea to mix in compost to lighten the soil. Garlic also does well with a lot of organic matter mixed into the soil, so be generous. Good drainage is also important for garlic production.

Dig trenches three to four inches deep and in rows spaced one foot apart. Garlic really does not take up a great deal of space, so it makes a wonderful addition to any garden. If you don't have a lot of space in your garden, plant garlic in among your herbs or perennials. The plant's tall slender leaves will look like they belong just about anywhere.

A garlic bulb is made up of a number of smaller sections called cloves. When planting garlic, separate the bulb into individual cloves and each will produce a new plant. Set the cloves four inches apart in the rows. Only use cloves that appear healthy and fresh. Cloves have a top and bottom. Place the clove with the pointed end up and the flat tip down, which is the same orientation in which they are arranged on the bulb.

Take the time to ensure that each bulb remains in the upright position as you fill the soil in around it. This will keep the necks of the bulbs straight. Cover your cloves to a depth of two inches and keep them moist, but not too wet. Over watering can lead to poor bulb development and mold problems.

Cloves will establish roots throughout the fall and be ready for growth when warm temperatures arrive in spring. For more information on fall gardening, visit OSU Factsheet **HLA-6009 Fall Gardening**.

2009 State Fair Horticulture Contest Results

Shelley Mitchell

This year at the Oklahoma City State Fair, we had 24 juniors and 14 seniors in the horticulture contest, which consisted of identifying 40 specimens (200 points available) and judging 3 classes worth 50 points each (jalapeños, onions, and daisies). Since there is no horticulture contest at the Tulsa State Fair, all 77 counties are able to bring 4-H members to the contest in Oklahoma City. The results are as follows:

Senior Teams: (Only the scores from the top 3 members of each team are kept.)

1st place -	Payne County	Emily Wessel	949 points
		Conner Carroll	
		Kendra Rash	
		Lauren Highfield	
2nd place -	Bryan County	Zack Childers	846 points
		Maddi Shires	
		Leslie Carter	
3rd place -	Jackson County	Debra Kime	369 points
		Amber Patterson	
		William Kime	
		Kagen Fordurey	

Senior Individuals:

1st place -	Conner Carroll (Payne)	330 points
2nd place -	Maddi Shires (Bryan)	322 points
3rd place -	Kendra Rash (Payne)	310 points
4th place -	Emily Wessel (Payne)	309 points
5th place -	Zack Childers (Bryan)	280 points
6th place -	Leslie Carter (Bryan)	244 points
7th place -	Ethan Coply (Payne)	220 points
8th place -	Lauren Highfield (Payne)	216 points
9th place -	Melissa Pope (Pontotoc)	200 points
10th place -	Hannah Nelson (Grady)	166 points

Junior Teams: (Only the scores from the top 3 members of each team are kept.)

1st	Bryan County	Jake Shires	891 points
		Tiegan Munson	
		Clay Shires	
		Alyssa Robinson	

2nd	Payne County	Madison Rash Susan Weckler Karen Weckler	834 points
3rd	Bryan County	Kyle Dowd Rachel Childers Allison Robinson	806 points

Junior Individuals:

1st	Alyssa Robinson	304 pts
2nd	Jake Shires	303 pts
3rd	Susan Weckler	290 pts
4th	Clay Shires	284 pts
5th	Karen Weckler	275 pts (145 on ID)
6th	Tiegan Munson	275 pts (135 on ID)
7th	Allison Robinson	275 pts (130 on ID)
8th	Madison Rash	269 pts
9th	Rachel Childers	268 pts
10th	Kyle Dowd	263 pts

Overall: The scores on the identification test ranged from 0 to 190 out of 200. The most mis-identified specimens for the juniors were hackberry (23/24 contestants missed it), Benjamin fig and Boston fern (21/24), Virginia creeper, and amur maple (20/24). For the seniors, the most mis-identified specimens were Boston fern (12/14 missed it), Virginia creeper (10/14), almond, beet, glossy abelia, photinia, Japanese maple, silver maple, and lacebark elm (9/14). The most readily identified specimens for the juniors were radish (19/24 correctly identified it), artichoke (15/24), crape myrtle (14/24), and Colorado spruce (13/24). The most readily identified specimens for the seniors were radish (12/14), artichoke (11/14), turnip and ginkgo (10/14), Southern magnolia, pin oak, purpleleaf plum, and canna (9/14).

In the judging classes, 8 juniors correctly placed the class of jalapeños, 6 correctly placed the class of onions, and 1 correctly placed the class of daisies (but 5 scored 49/50). For the senior classes, 7 correctly placed the jalapeños, 4 correctly placed the onions, and 2 correctly placed the daisies (and 1 got a 49/50).

Remember: Missing stems, peeled onions, mismatched sizes of produce, off-colors, bent flower stems, and flowers with petals missing are placed lower in their classes.

I hope to see everyone back again for the 2010 Horticulture Contest at the Oklahoma City State Fair! Thank you to all of the 4-H leaders, coaches, and contestants who helped make this year's contest a success!

Food Safety in Pecans

Eric T. Stafne, Michael W. Smith, and William G. McGlynn

Food safety is becoming more of an issue in all crops, and pecan is no exception. In the past, nut crops were considered to be at very low risk for developing a food safety issue; however, pistachios and almonds were both implicated in such situations recently. Therefore, the Oklahoma Pecan Growers' Association (OPGA) has decided to adopt a plan of action to deal with any potential food safety issues in pecans, following the lead of the Georgia Pecan Growers' Association. The desire of the OPGA is to educate anyone who might be contacted in the event of a food safety problem and to make sure proper information is relayed. With that in mind, within this issue of Hort Tips is a letter from the OPGA president Bob Knight, introducing the plan of action followed by the full text of the plan. Please read these carefully and keep it in a readily accessible location. Please feel free to contact Drs. Stafne, Smith or McGlynn for further information.

President's Corner

The OPGA Board of Directors met this September at the new Ardmore Convention Center. This will be the site of the 2010 OPGA conference on the 20, 21, and 22 of June. In addition to working out the arrangements for the summer meeting the board discussed the issues associated with Salmonella as it affects our industry. Pretty much any agricultural crop that is grown outdoors is potentially exposed to Salmonella, also this and other food born diseases can be transmitted by food handlers. The shelling industry addresses this in various ways including sanitizing pecans before and after they are shelled. This leaves the other major exposure: retailers that crack and shell pecans during the pecan season.

We, as a board, feel that it is incumbent upon us to have a plan in place to respond to the media in the event of a news story blaming pecans for illness, falsely or not. In this newsletter is our crisis communication plan to be used in such an event. Dr. William McGlynn (405-744-7573), horticultural food scientist at OSU, will be the technical contact for the media in this plan, and I will be the OPGA contact. It is our intent to communicate honestly to the public in such an event, and to identify the source of and contain the exposure as much as possible. Please review the plan and contact me at Knutnet@aol.com if you have any comments. This plan is in keeping with a plan developed by the Georgia Pecan Growers Association.

It is also the position of the board that anyone cracking and selling pecans to the public should follow all of the applicable health regulations including (but not limited to) properly sanitizing pecans before cracking.

Please remember that what you do as a retailer can affect the entire state pecan industry. Our season for selling fresh market pecans in the fall is relatively short, and a Salmonella scare that lasted a few weeks or months could essentially take out an entire crop year.

Robert Knight
OPGA President

Oklahoma Pecan Growers Association Crisis Communication Plan September 2009

Background

Oklahoma pecan growers are very thoughtful about their operations and realize their vulnerability to a food crisis situation, whether the crisis is related to food safety, or other unforeseen circumstances. In the event of such a situation, the grower's first call should be to the Oklahoma Pecan Growers Association (OPGA).

Overview

Few things are as important to an industry's success as its reputation, which can be significantly threatened when confronted with a crisis. Every industry is susceptible to crises because they result from a wide variety of factors.

In the food industry, these events take on additional importance because food has a daily impact on the people's lives and health.

The perceptions and reactions of outside influencers and key audiences, such as retailers, wholesalers, growers, shippers, regulatory agencies, other industry associations, and the media determine the impact on the reputation of the Association and the Oklahoma pecan industry as a whole.

Identifying a Crisis

It is difficult to anticipate and prepare for a communication crisis; however, it is possible to establish a structure and process for information gathering, decision making, and communications, thereby building a culture of crisis preparedness. Internal and external communications play crucial roles in controlling issues with key audiences before they develop into crises.

Following are scenarios that provide the potential for negative exposure for the pecan industry and the OPGA:

- Contamination
- Product Recall
- Consumer illness

Organization of Crisis Management Team

The following primary crisis communication objectives can help OPGA maintain the industry's reputation:

- Centralize the control and flow of information through the OPGA Educational Advisor and an appointed crisis management team.
- Act quickly and consistently at the onset of a potential crisis in a forthcoming honest manner
- Protect the industry's short and long term market
- Coordinate message with the National Pecan Growers Association, National Pecan Shellers Association, Oklahoma Department of Agriculture, Food & Forestry, and other organizations as needed.

Key Audience and Their Needs
During a crisis, the organization must disseminate its messages and, in return, listen for important feedback. The media often "shapes" the issue/crisis and may sensationalize the situation. Therefore, the media must be viewed as an audience and as an "information venue" for important messages. **It is important to note that the OPGA communicates through the media, not to the media**.

However, the media cannot be the only channel used to deliver messages. The OPGA must communicate directly with other audiences affected by the issue at hand such as retailers, other industry associations, consumers, etc.

Growers
For grower representatives to be most effective, they will need to be fully briefed on the situation and have information at hand to answer difficult questions from their contacts.

Industry Associations
Key affiliated industry associations should receive all external communications on an FYI basis.

Media
It is important to be both proactive and conservative with the media. A crisis is best contained when the media receives a timely, forthright explanation of the issue from OPGA rather than from other sources; however, the information must be concise and reiterated constantly to ensure that there is a shared, clear understanding of the situation.

Consumers
Because they are the intended end audience, communications to consumers should be a top priority. All distributed information should place the situation in its proper context, provide clear, concise information on the steps consumers should take, providing a contact to answer additional questions and provide a sense of concern regarding consumers' overall well being.

Regulatory Agencies
It is important to communicate with relevant regulatory agencies such as the Oklahoma Department of Agriculture, Food, & Forestry, USDA, and FDA. In addition to receiving all required notification, these agencies should receive all media statements prior to broad distribution, and contact should be made with the media spokesperson so that they have a personal contact at the OPGA.

Key Messages
- The OPGA should express regret that a problem has developed, even if blame does not rest with the industry
- OPGA should be prepared to take responsibility for solving the problem, regardless of fault
- Inform audiences that OPGA is taking steps to ensure the problem will not happen again
- If appropriate, detail how the OPGA and the industry will help those affected

Crisis Communication Process

1. Evaluate conditions and determine course of action.
2. Assemble and mobilize crisis team.
3. Identify what information has been made public.
4. Determine potential for media coverage.
5. Determine if government agency response is expected.
6. Develop a unified, clear message coming from one credible source.
7. Determine which audience to target, who should be in charge of communication, and questions to consider.

Questions to Consider

• What do retailers, wholesalers, growers, and shippers need to know about the source of the problem?
• What actions to they need to take to resolve the situation?
• What information will they provide to their consumers, customers, and employees?
• Will the news media get information on the situation whether OPGA gives it to them or not?
• Will the industry's reputation be affected unless information is released through the news media?
• Is there a broader, national industry group that can more appropriately handle the situation?
• Can this become an industry issue rather than an Oklahoma issue?
• How will consumers react?
• To whom will they direct questions?
• What information or misinformation have they already received?
• Could other industry associations be an ambassador for OPGA?
• Will other associations help solicit testimony from experts on the issue?
• Does the incident involve a wholesaler?
• Are there other companies that could have been impacted by the wholesaler?
• Is the wholesaler prepared to communicate?
• Does the situation create uncertainty in other wholesalers' minds about Oklahoma-grown pecans?

Crisis Response & Communication Tools

An initial statement for all interested audience groups should include:
• Statement of problem, its cause, and if possible, solution
• Regret over the incident
• Date and time of problem
• Magnitude of problem and response
• Involvement of regulatory agencies where appropriate
• Explanation of how the organization will make restitution if appropriate
• Actions taken to contain problem (recall, etc.)
• Actions underway to prevent recurrence

Crisis Contact Card

OPGA should create a small card with the management team's phone numbers and email addresses. This card should be laminated and provided to all members as part of any annual

membership packet. The reverse side of the card should contain a list of "What to do in the event of crisis":

1. Nothing is "off the record"
2. Never say "no comment"
3. Avoid jargon; speak in personal terms
4. Don't speculate, deal in facts
5. If you don't know the answer, say so
6. Don't repeat negative questions or phrases
7. Make sure you understand the question before answering
8. Don't argue, maintain poise
9. Speak only for your organization or company
10. Maintain control and stick to your agenda

Crisis Contact List
OPGA managers should keep a large crisis contact sheet with the same contact information described for the card above as well as relevant regulatory agencies (state and federal) and other industry associations. Duplicate copies should be kept in multiple locations.

Crisis Section of Web Site
OPGA can also create a section of its website that would be activated only in times of crisis. This section could contain one area of information/answers for media and another with information and tips for grower members dealing with the situation.

Oklahoma Cucurbit Production and Marketing Educational Meeting

Jim Shrefler

The 2009 Oklahoma Cucurbit Production and Marketing Educational Meeting will be held Wednesday, December 9 in Chickasha. The event will be held at the Fairgrounds Community Building. Meeting time is 9 a.m. to 3 p.m. and anyone interested in the growing and marketing of cucurbit vegetables (cucumber, watermelon, pumpkin, cantaloupe, squash, etc.) is welcome to attend. There will be a $10 registration fee to cover lunch and meeting materials. For details, call 580-889-7343 or email jim.shrefler@okstate.edu . Event information will be posted at www.lane-ag.org as is becomes available.

Upcoming Horticulture Events

Tree Care Conference
October 28, 2009, OSU Botanical Garden, Stillwater

Global Horticulture
December 2, 2009, Stillwater

Horticulture Industries Show
January 8 and 9, 2010, Tulsa Community College, Tulsa

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