

Horticulture Tips

November 2002

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

The 2002 Oklahoma Watermelon and Cucurbit Educational Meeting

Jim Shrefler

Mark your calendar. The Oklahoma Watermelon and Cucurbit Meeting is scheduled for Dec. 5, 2002 and will be held at the Grady County Fairgrounds at Chickasha. This year's meeting will expand the former Statewide Watermelon Meeting to include other cucurbits of importance to Oklahoma such as squash, muskmelon, cucumber and pumpkin. Meeting topics are being selected to address the needs of both existing growers and agricultural producers who are considering the production of these crops for the first time.

Growers and Marketers of cucurbit crops as well as Extension Educators with cucurbits in their counties should consider attending this meeting. Past meetings have focused on providing technical and marketing information for existing growers. This year's meeting will also emphasize cucurbits as alternatives for producers wanting to diversify. Information to be presented should be valuable to Extension Educators who work with these growers.

To receive a detailed program and registration information, contact the Wes Watkins Agricultural Research and Extension Center at (580) 889-7343

Earthworms - out of site - but keep them in mind

Jim Shrefler

Earthworms also have an important role in terrestrial plant growth and the production of horticultural crops through their many effects on the soil environment. Probably everyone learned in elementary school that earthworms are "good for the soil". However, according to A.J. VandenBygaart, earthworms are probably more important than is often thought for their role in contributing to major physical, chemical and biological processes in soil.

Let's look at some of the important effects that earthworms have on the soil environment. Earthworms are primary decomposers of plant materials that fall on the soil surface. When leaves, shoots and roots of plants die these gradually break down into smaller fractions, eventually losing all characteristics that enabled them to be identified as a plant part and becoming soil organic matter. Various organisms are important in the progressive decomposition of plants into smaller fractions and earthworms are one of these.

Earthworms are also important as creators of macropores in the soil. These large openings or channels in the soil are created as earthworms move through the soil, feeding as they go. These pores facilitate the movement of water, gases and roots through the soil profile to the benefit of plant growth.

Still another contribution earthworms make to the benefit of plant growth is the breakdown and incorporation into the soil of plant tissue that harbors plant pathogenic organisms. The source of inoculum for some plant diseases is the tissue of infected crops that remains intact from the previous growing season. Earthworms, through their role in breaking down plant residues, reduce the amount of infected tissue that will be present when the next crop is planted. However, it cannot always be stated that this process will eliminate disease inoculum. In some cases the casts left by earthworms may themselves harbor viable plant pathogenic organisms.

You may have recently heard or seen information on increasing interest in the use of earthworms for processing of manure of various types of animals. One recent article, *Shedding Light on a Wiggly Business* by M. L. Wolf, was in the Oct. 12, 2002 edition of Oklahoma Living. This article discusses several Oklahoma businesses that deal with the production and distribution of earthworms and earthworm castings. According to the article, a Meeker, Oklahoma based farm is the largest grower of earthworms in the world. The business contracts with worm growers nationwide, including many Oklahoma growers.

The worm business has several components. Earthworms are being used as a component of various waste disposal processes including that derived from animal production and municipal sources. One type of disposal business is that of earthworm processing of waste from facilities such as horse race tracks. Another business area is the production of earthworms for sale. Still another area is the sale of "castings". Castings are the material containing mineral and organic fractions that is excreted by earthworms and which is marketed as a soil amendment for use in plant culture.

References

A.J. VandenBygaart. 2002. Boost your soil with worms. American Fruit Grower. Sept./Oct. Page 28. Meister Publications.

M.L. Wolf. 2002. Shedding light on a wiggly business. Oklahoma Living.

FDA Issues Import Alert on Cantaloupes from Mexico

William McGlynn

On October 28, 2002 the U.S. Food and Drug Administration (FDA) issued a general import alert on cantaloupes from Mexico. While previous alerts were limited to specific shippers and growers whose melons were implicated in food-borne illness outbreaks or tested positive for *Salmonella* contamination, the current alert recommends that all cantaloupes from Mexico be detained without physical examination at all U.S. ports.

This latest FDA action was not prompted by a single incident, but grew out of concerns sparked by recent FDA sampling programs that tested cantaloupe from most growing regions of Mexico for *Salmonella* contamination. The FDA believes that contaminated melons have triggered four Salmonellosis outbreaks over the last three years in the United States. These outbreaks have resulted in two deaths and at least 18 hospitalizations.

In response to this latest alert, both the Mexican government and the FDA have reaffirmed their commitment to solve the problem of contaminated produce. They propose to accomplish this through the use of a certification program for Mexican growers and processors based on good agricultural practices and good manufacturing practices. Only those firms with an approved food safety program for production, packing and shipping of fresh cantaloupes would be allowed to import melons into the US. However, the details of this proposed certification program are still being developed and there is no fixed timetable for its introduction.

Following are the official recommendations from the FDA to consumers for reducing the risk of food borne illness when buying, preparing, and storing cantaloupe or other produce:

- Purchase produce that is not bruised or damaged. If buying fresh cut produce, be sure it is refrigerated or surrounded by ice.
- After purchase, put produce that needs refrigeration away promptly. (Fresh whole produce such as bananas and potatoes do not need refrigeration.) Fresh produce should be refrigerated within two hours of peeling or cutting. Leftover cut produce should be discarded if left at room temperature for more than two hours.
- Wash hands often. Hands should be washed with hot soapy water before and after handling fresh produce, or raw meat, poultry, or seafood, as well as after using the bathroom, changing diapers, or handling pets.
- Wash all fresh fruits and vegetables with cool tap water immediately before eating. Don't use soap or detergents. Scrub firm produce, such as melons and cucumbers, with a clean produce brush. Cut away any bruised or damaged areas before eating.
- Wash surfaces often. Cutting boards, dishes, utensils, and counter tops should be washed with hot soapy water and sanitized after coming in contact with fresh produce, or raw meat, poultry, or seafood. Sanitize after use with a solution of 1 teaspoon of chlorine bleach in one quart of water.
- Don't cross-contaminate. Use clean cutting boards and utensils when handling fresh produce. If possible, use one clean cutting board for fresh produce and a separate one for raw meat, poultry, and seafood. During food preparation, wash cutting boards, utensils or dishes that have come into contact with fresh produce, raw meat, poultry, or seafood.
- Do not consume ice that has come in contact with fresh produce or other raw products.
- Use a cooler with ice or use ice gel packs when transporting or storing perishable food outdoors, including cut fresh fruits and vegetables.

Pecan Buyers

Dean McCraw

Attached is an incomplete list of pecan buyers for this year. The list is not all inclusive but may serve as a marketing aid to growers. Some of these buyers may have buying points in local areas. The quantity and quality demanded by buyers will vary. Growers should make individual contacts to determine offering price and standards.

An estimate of current pecan prices can be found on the Internet at the following site:

www.ams.usda.gov/fv/mncs/shipnut.htm

GARDEN TIPS FOR NOVEMBER!

David Hillock

Lawn & Turf

- Fertilize cool season grasses like fescue with 1 pound nitrogen per 1000 sq. ft.
- Continue to mow fescue as needed at 2 inches and water during dry conditions.
- Control broadleaf winter weeds like dandelions (FS-6601).
- Keep falling leaves off fescue to avoid damage to the foliage.

Tree & Shrub

- Prune deciduous trees in early part of winter. Prune only for structural and safety purposes.
- Wrap young, thin-barked trees with a commercial protective material to prevent winter sunscald.
- Apply dormant oil for scale infested trees and shrubs before temperatures fall below 40 degrees Fahrenheit. Follow label directions.
- Continue to plant balled and burlapped trees.
- Watch for arborvitae aphids, which tolerate cooler temperatures in evergreen shrubs.

Flowers

- Tulips can still be successfully planted through the middle of November.
- Leave foliage on asparagus, mums, and other perennials to help insulate crowns from harsh winter conditions.
- Bulbs like hyacinth, narcissus and tulip can be potted in containers for indoor forcing.

Miscellaneous

- Leftover garden seeds can be stored in an airtight container in the refrigerator or freezer until next planting season. Discard seeds over 3 years old.
- Gather and shred leaves. Add to compost, use as mulch or till into garden plots.
- Clean and store garden and landscape tools. Coat with a light application of oil to prevent rusting. Drain fuel tanks, irrigation lines, and hoses. Bring hoses indoors.

Fruits & Nuts

- Delay pruning fruit trees until next February or March before bud break.
- Harvest pecans and walnuts immediately to eliminate deterioration of the kernel.

Plants Provide Winter Interest

David Hillock

Landscapes can be somewhat boring and uninteresting during the winter months. However, there are several landscape plants that provide ornamental interest and even color during the dormant season. Listed below are a few suggestions.

Plants with attractive bark/twigs (some more attractive when defoliated):

- **Burning bush – *Euonymus alatus*.** The stems of burning bush are smooth, green to brown with 2 to 4-armed corky wings. When leaves fall in the autumn, the stems and wings are more noticeable. The green stems are particularly attractive against a light background such as a light gray wall. Burning bush does not contract scale like other euonymus species. Fall leaf color is usually a brilliant red, which is an added bonus for using this plant.
- **Heritage River birch – *Betula nigra* ‘Heritage.’** The bark of the Heritage river birch exfoliates on young trunks revealing a white to salmon-white bark color on young stems that darken to a salmon-brown as tree ages. River birch prefers acid soil (6.5 or below) and moist areas though they survive drier soils.
- **Redosier dogwood – *Cornus sericea*.** The stems of the redosier dogwood are slender, bright red to dark blood red. The bright red color of the stems is very effective against a light background particularly when it snows. Dogwoods do best in moist soils. A cultivar of the redosier dogwood is the yellowtwig dogwood – *C. s.* ‘Flaviramea.’ Stems are yellow. Yellowtwig dogwood also does best in moist soils and will often become afflicted with canker under stressed conditions.
- **Japanese kerria – *Kerria japonica*.** Japanese kerria forms a low, broad-rounded, dense shrub with upright-arching stems. The twigs are slender and green throughout the winter. The stems have a zigzag pattern and are smooth, glossy, and supple. This plant grows well in full shade.
- **Harry Lauder's walkingstick – *Corylus avellana* ‘Contorta.’** The stems of Harry Lauder's walkingstick or contorted filbert are curled and twisted, which can be quite the attraction. Leaves are also twisted, making some think the plant is sick, thus the winter effect is better appreciated.

Plants with showy, fleshy fruits/seed heads:

- **Deciduous Holly – *Ilex decidua* cultivars.** There are many evergreen hollies available but the holly I like most is the deciduous. There are several cultivars available with fruit colors in red, orange, yellow, and red-orange. Warren's Red is a common cultivar that is usually loaded with bright glossy red fruit that persist into the winter. Deciduous holly is particularly appropriate for harsh conditions where evergreen selections would normally suffer. Plants are either male or female, and in general, need both for female to bear fruit.
- **Black and red chokeberry – *Aronia melanocarpa*, *A. arbutifolia* respectively.** The fruit of chokeberry are blackish purple or glossy red. These plants will often sucker forming large colonies. Chokeberry makes a nice planting when planted in groups or massing and is well adapted to a wide range of soil conditions, tolerating both wet and dry soils.
- **Heavenly bamboo – *Nandina domestica*.** The fruit of the heavenly bamboo shrub are spectacular, large panicles of bright red berries persisting through winter. There are many cultivars to choose from.

- **Hawthorn – *Crataegus spp.*** There are many hawthorn species several being native to Oklahoma. The fruit display can be spectacular in the fall and into the winter. Color of fruits can be bright to dull red, scarlet, orange, yellow, purple, or blue depending on species/cultivar. This small tree can be severely affected by pests but the fruit display is usually worth it.
- **Ornamental grasses, sedges, etc.** Numerous ornamental grasses and sedges offer vertical texture for the garden as well as flower heads that change in color as they mature. Winter colors are often a mellow tan, gray, gold, and brown. Flower and seed heads capture light and sway in the slightest breeze.

Plants that flower late or early in the year:

- **Witchhazels – *Hamamelis spp.*** Witchhazels are unique in that they flower during the winter months from November through March depending on species/cultivars. The flowers are yellow, orange to red also depending on species/cultivar. The flowers are fragrant, very small and thus should be planted in the landscape in an area where they can be viewed up close. Witchhazel prefer moist, acid soils in sun or part shade.
- **Winter jasmine – *Jasminum nudiflorum.*** Winter jasmine is a tough, broad-spreading mounded shrub that flowers from January to March. The flowers are slender tubular-shaped, and bright yellow. If winters are mild the plant responds to the slightest degree of warm weather and may flower earlier than normal.
- **Winter honeysuckle – *Lonicera fragrantissima.*** Flowers of winter honeysuckle are creamy white, lemon-scented and extremely fragrant. Flowers open in January, peak in February, and may still be flowering in mid-March. Not the showiest flower, but certainly among the most fragrant.

Update on Organic Farming

David Hillock

Secretary Veneman Launches Organic Seal

This week Secretary Veneman launched the implementation of USDA's national organic standards for agricultural products providing for consistent labeling of organic products throughout the U.S. The national organic standards got into effect October 21. As of this date any organic agricultural product must meet the USDA standards to be sold as "organic". Under the regulations when you see the USDA Organic seal on a product it means that the product is at least 95 percent organic. Consumers can access information on the USDA organic standards at the Agricultural Marketing Service website www.ams.usda.gov/nop.

U.S. Organic Farmland on the Rise

USDA Economics Research Service has recently released a report entitled "Recent Growth Patterns in the U.S. Organic Foods Market," which shows that the U.S. farmland acreage dedicated to organic production has increased from approximately 1.4 million acres to 2.4 million acres. The report may be found at <http://www.ers.usda.gov>. According to the report the U.S. organic industry is growing between 20 to 25 percent annually. U.S. sales of organic foods reached approximately \$7.8 billion in 2000, with global sales exceeding \$17.5 billion.

KOREA HAS BECOME THE FIRST OFFICIAL INTERNATIONAL PARTNER OF THE JUNIOR MASTER GARDENER® (JMG®) PROGRAM

(COLLEGE STATION, Texas) The International JMG Program is proud to announce South Korea as its first international partner.

The agreement was formalized in mid-June between Dr. Ae Kyung Lee of Dan Kook University in South Korea and Lisa Whittlesey, Junior Master Gardener Coordinator, International JMG Program at Texas A&M University.

“I am so excited to be a part of bringing this program to Korea,” Lee said. “It is the absolute perfect program for children that want to learn about the horticultural sciences.”

Lee, who came to United States over a year ago to learn more about horticultural therapy applications and children’s gardening programs, was introduced to the JMG program and fell in love with it.

“I think that the program will go over well in Korea,” Lee said. “At the same time, it is both very educational and very fun for children.”

Lee will be the JMG Korean coordinator and has been working directly with National JMG Program and Curriculum coordinators and JMG Kids in establishing the Korean program. For her role of coordinator, Lee will be: implementing the program through JMG trainings, helping to establish a quality program and ensuring that quality, and promoting the program in Korea. Dan Kook University of South Korea will house the program. Lee said administrators at Dan Kook are eager for the program to get started.

The JMG Level One Student Handbook has already been translated into Korean and will be ready for use when the program is implemented in Korea later this year.

“We are excited and honored that Ae Kyung has decided to take the JMG program to Korea,” Whittlesey said. “It is a great “hands-on” educational program for children and I know that the children of Korea will benefit from Dan Kook’s introduction and leadership to the Korean JMG Program.”

JMG is an international youth gardening program of the University Cooperative Extension Network. With groups in 40 states and 8 countries, JMG engages children in novel, "hands-on" group and individual learning experiences that promote a love of gardening, develop an appreciation for the environment and cultivate the mind. JMG also inspires youths to be of service through service learning and leadership development projects and rewards them with certification recognition. JMG is a three-year old program, developed at Texas A&M University by Texas Cooperative Extension and the Department of Horticultural Sciences at Texas A&M. For more information please visit our website at www.jmgkids.org.

Master Gardener Corner

David Hillock

Master Gardeners Visit Campus

Two MG groups visited campus this fall. In late September the **Bryan/Marshall MGs** toured OBGA as well as some on-campus facilities. We started at OBGA with tours of the Turf Center, *Oklahoma Gardening*, and the rose trial garden. After lunch we visited the Plant Disease lab with presentations by Brian Olson and Rick Grantham and then visited the Soils lab. In early October the **Tulsa MGs** visited, also starting at OBGA, and then going to the Plant Disease lab for some hands-on activities with Brian Olson and then entomology with Pat Bolin. I believe all enjoyed the tours and workshops and went home with some newly gained, valuable knowledge.

2002 State Master Gardener Conference, June 20 – 21, 2003

The next State MG Conference will be held in Tulsa as a collaborative effort between Tulsa County Master Gardeners and Tulsa Community College North Campus. We are planning a great conference so mark your calendars now and plan to attend. Detailed information will follow early next year.

Horticulture Industries Show (HIS) - January 10-11, 2003. Planning for HIS is underway and program and preregistration forms will be mailed late November. This year HIS will be held in Springdale, AR at the Holiday Inn and all Master Gardeners are invited to attend. If you are a returning MG you can receive Continued Training Education hours by attending this conference that will count towards the minimum of 20 hours you need to keep active status. Remember, however, that only the time actually spent in class counts as training received. Travel and in-between times do not count.

Though we do offer a two-day MG/Public Garden session, you may also choose from any other session offered during the conference. There are 8 commodity groups represented during HIS all conducting seminars, workshops, and business meetings. You may choose from any of the following groups - Vegetables, Fruit, Herb, Sustainable Ag, Farmers Market, Master Gardener/Public Garden, Grape & Wine, General, and Christmas Tree. This should be another great conference, hope to see you there!

Upcoming Events

Oklahoma Turfgrass Conference & Trade Show

November 13-15, 2002

Shangri-La Resort, Afton, Oklahoma

Tree Care Issues Workshop

November 15, 2002

OBGA Educational Building, Stillwater, Oklahoma

Preregistration must be postmarked by November 5.

For more information, contact Stephanie Larimer at steph@okstate.edu.

Arkansas & Oklahoma Horticulture Industries Show

January 10-11, 2003

Holiday Inn, Springdale, Arkansas

Specialty Cut Flowers

February 27, 2003

Holiday Inn, Stillwater, Oklahoma

For more information, contact Mike Schnelle at mas@state.edu.

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.