

Horticulture Tips

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

GARDEN TIPS FOR JULY!

David Hillock

Vegetable Garden

- Make fall vegetable garden plantings in late July. Fact Sheet [HLA-6009](#) gives planting recommendations.

Lawn

- Brown patch disease of cool-season grasses can be a problem. ([HLA-6420](#))
- Meet water requirements of turfgrasses. ([HLA-6420](#))
- Fertilization of warm-season grasses can continue if water is present for growth. ([HLA-6420](#))
- Vegetative establishment of warm-season grasses should be completed by the end of July to ensure the least risk of winter kill. ([HLA-6419](#))
- Mowing heights for cool-season turf grasses should be at 3 inches during hot, dry summer months. Gradually raise mowing height of bermudagrass lawns from 1½ to 2 inches.
- Sharpen or replace mower blades as needed. Shredded leaf blades are an invitation to disease and allow more stress on the grass.

Trees and Shrubs

- Control bermudagrass around trees and shrubs with Poast, Fusilade or Glyphosate herbicides. Follow directions closely to avoid harming desirable plants.

Fruits

- Continue insect combat and control in the orchard, garden and landscape. ([EPP-7306](#), [EPP-7313](#), [EPP-7319](#))
- Check pesticide labels for "stop" spraying recommendations prior to harvest.
- Harvest fruit from the orchard early in the morning and refrigerate as soon as possible.

Flowers

- Divide and replant crowded Hybrid Iris (Bearded Iris) after flowering until August.

General Landscape

- Water plants deeply and early in the morning. Most plants need approximately 1 to 2½ inches of water per week.
- Providing birdbaths, shelter and food will help turn your landscape into a backyard wildlife habitat.
- Insect identification is important so you don't get rid of the "Good Guys." ([EPP-7307](#))
- The hotter and drier it gets, the larger the spider mite populations!
- Expect some leaf fall, a normal reaction to drought. Water young plantings well.
- Have you visited the *Oklahoma Gardening Studio Gardens* in Stillwater for a group tour?

New Fact Sheet Addresses Concerns Regarding Outdoor Residential (Mosquito) Misting Systems

David Hillock

EPA's new Web fact sheet on outdoor residential misting systems, also known as mosquito misting systems, will help consumers decide if residential pesticide misting systems are appropriate for their home, understand safety precautions for using outdoor misting systems, find related information on a variety of methods for mosquito control, and understand the role of the EPA and state agencies in regulating misters.

EPA developed this fact sheet because an increasing number of households have purchased timed-release outdoor residential misting systems to control mosquitoes and other insects around the home. However, advertisers, the media and other sources sometimes provide information about misting systems that is difficult to interpret or might conflict with other information. The new Web page describes outdoor residential misting systems and discusses the pesticides used in the systems, their safety and effectiveness, and the regulatory authority of EPA and state governments regarding misting systems.

The Outdoor Residential Misting Systems fact sheet is available on EPA's Web site at http://www.epa.gov/pesticides/factsheets/misting_systems.htm.

Plants and Waterlogged Soils

David Hillock

So far this year, most of Oklahoma has obviously seen more than its share of rain. We have been in dire need of rain, but it would be nice if it was a little more spread out and did not come down in torrential downpours. While many areas are able to handle the rain and the plants are very happy, the downside is waterlogged soils and suffering or dead plants.

Two scenarios can occur when soils become saturated – roots shut down or they rot, both resulting in wilted or dead leaves and sometimes dead plants. In short the symptoms are much like under watering or drought because the roots cannot function properly or are damaged enough they cannot supply water to the plant when needed, thus wilting, scorching and yellowing of leaves is common. These symptoms may be visible even now during the seemingly constant rain on more sensitive plants; but, symptoms may not show up on some plants until after the rain has stopped and the weather turns hot and dry again. Below are some additional tips.

Water Logged Soils

- Root activity slows or shuts down, and plants show symptoms of drought.
- Decline in root growth slows plant growth processes.
- Leaves may wilt from lack of water uptake.
- Root rots are common in some species.
- Lower interior leaves may yellow.

Leaf Scorch (short-term water deficiency in leaves)

- Marginal burning.
- Often from the top down, southwest side or side with root injury or root restrictions.

Contributing factors to leaf scorch.

- Dry or overly wet soils.
- Compacted soils.
- Limited root spread.
- Root injury.
- Structural damage to xylem tissues.
- Trunk and branch injury.
- Excessive wind and heat.
- Excessive canopy growth (from heavy fertilization).

In the case of waterlogged soils, there may not be much one can do but wait and hope plants have some tolerance. In some cases it might be beneficial or even necessary to install or construct a drainage system. A temporary system might consist of only a narrow trench leading to a lower part of the property. If drainage seems to be a constant problem then a more permanent system like a French drain or other subsurface drainage system may be needed.

Native Passiflora for Fruit and Flower

Eric T. Stafne

There are two species of *Passiflora* native to North America (and Oklahoma). The smaller, non-showy species is *Passiflora lutea*. This has small flowers and small, purple fruit. It is a perennial, but with very limited ornamental potential. The second species is *Passiflora incarnata*, often referred to commonly as 'maypops'. This species has large, showy flowers and large fruit.

Passiflora incarnata has been important in historical and religious contexts. It has been called the "Flower of the Five Wounds" to symbolize the crucifixion of Christ. Archaeological evidence in the southeastern U.S. identifies it as an important food crop for Native Americans since the Late Archaic period. The Algonkian and Creek tribes may have been the first to domesticate the plant and Europeans may have also consumed it after coming to North America. An early description of the fruit described it as growing with fields of corn and being a good summer cooling fruit.

Most *Passiflora* species originated in South America, especially Brazil. Some of the South American species are similar to *P. incarnata*, with *P. edulis* bearing a close resemblance. *P. edulis* is an edible passionfruit and is grown in many tropical areas. *P. incarnata* is also edible, but seedy and not as sweet as *P. edulis*. However, there is great potential for *P. incarnata* in North America as an ornamental and fruit crop.

Researchers in Florida and Georgia tried crossing *P. edulis* and *P. incarnata*. They were trying to make an edible fruit that could be grown in temperate climates. Of course, an added bonus is

the extremely showy flowers that would be prized for ornamental value as well as an insect and bird attractant. This research culminated in the release of an ornamental cultivar, 'Byron Beauty'. However, even though *P. edulis* and *P. incarnata* look similar, they are different species and crosses mainly resulted in sterile offspring. This is not of consequence for ornamentals, but is a problem in breeding for fruit-bearing vines. Hence, no fruit producing vines were released from the research program and no further work is being done.

P. incarnata is also known for its pharmacological properties. It is used as a sedative and antispasmodic in Europe and is an over-the-counter herbal supplement for headache sufferers in the U.S. Other potential uses could be uncovered with more research.

There is one major obstacle for *P. incarnata* to become a valuable ornamental vine. It is weedy and difficult to control. The root system can run deep underground and produce sprouts 20 feet away from the mother plant. Mowing the sprouts only seems to enhance the number of sprouts. Selection for a less vigorous and invasive individual would aid in it becoming an ornamental for home beautification and enhancement.

The native passiflora of North America deserve more attention for both ornamental and fruit purposes. They attract staggering numbers of bees and hummingbirds and produce copious amounts of fruit. It is also native to Oklahoma and grows well in all soils, but especially poor soils. Therefore, it is something that both homeowners and researchers could put more effort into discovering.

Fact Sheet Numbering System Revised

David Hillock

The prefixes of our fact sheets have changed. This was due to a shortfall in the numbering system created years ago. Each fact sheet number has remained the same, but the prefixes are assigned by departments. For example: Horticulture and Landscape Architecture will now be HLA; for example "F-6420 Lawn Management in Oklahoma" will be "HLA-6420 Lawn Management in Oklahoma."

Following is a complete list of prefixes:

- AGEC Ag Economics
- ANSI Animal Science
- BAE Biosystems and Ag Engineering
- EPP Entomology and Plant Pathology
- HLA Horticulture and Landscape Architecture
- NREM Natural Resource Ecology and Management
- PSS Plant and Soil Sciences
- VTMD Veterinary Medicine

New Fact Sheets

The following fact sheets are fairly new to the OSU publication system and may be of interest.

[NREM-100 Water Gardens - A Low Management Approach](#)

This fact sheet offers advice on water garden planning and management. It should be accompanied by SRAC-435, which provides additional needed details.

[HLA-6254 Growing Muscadine Grapes in Oklahoma](#)

This fact sheet discusses Muscadine grapes, including plant selection, site selection, soil preparation, planting and propagation, pruning and training, harvesting and pest management.

[HLA-6253 Rootstocks for Grape Production](#)

This fact sheet discusses using rootstocks for grape production.

[HLA-6255 Commercial Blueberry Production in Oklahoma](#)

This fact sheet discusses growing blueberries commercially in Oklahoma, including cultivar selection, site selection, irrigation, site preparation, fertilizing, pruning, harvesting and pest damage control.

[HLA-6256 Growing Elderberries in Oklahoma](#)

This fact sheet discusses growing elderberries in Oklahoma, including site selection, planting, fertilization, weed management, pruning, diseases, insect pests, harvesting and suggested cultivars.

[HLA-6257 Growing and Producing Pears in Oklahoma](#)

This fact sheet discusses growing and producing pears in Oklahoma. This includes the different varieties available, site selection and preparation, planting, pruning, training, fertilization, irrigation, weed control, harvesting and pest control.

[EPP-7155 Nectar and Pollen Plants of Oklahoma](#)

This fact sheet discusses the major sources of nectar and pollen for beekeepers.

Upcoming Horticulture Events

Native American Horticulture Conference

August 21, 2007, Stillwater

OSU Turfgrass, Nursery and Landscape Field Day

September 12, 2007, OSU Botanical Garden, Stillwater

Plant Materials Conference

October 9-10, 2007, Stillwater

This workshop will feature speakers lecturing on both herbaceous and woody ornamental species. Both native and non-native plant materials will be presented. For more information, contact Mike Schnelle at 405-744-7361 or mike.schnelle@okstate.edu.

Tree Care Workshop

November 7, 2007, OSU Botanical Garden, Stillwater

University personnel at OSU-Stillwater will host a tree care workshop designed for arborists, horticulturalists, urban foresters and other allied professionals. The workshop will be taught

primarily indoors with afternoon laboratories offered at the OSU Botanical Garden. For more information, contact Mike Schnelle at 405-744-7361 or mike.schnelle@okstate.edu.

62nd Annual Oklahoma Turf Conference & Trade Show
November 13-15, 2007, Watkins Center, OSU-Stillwater

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