



## 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 turfgrasses should be at 3 inches during hot, dry summer months. Gradually raise mowing height of bermudagrass lawns from 1 ½ 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.

### Tree and Shrub

- Control bermudagrass around trees and shrubs with products containing sethoxydim, 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 2 ½ 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.

## **HOLD OFF ON SAMPLING LEAVES AND PETIOLES UNTIL MID-JULY**

*Becky Carroll*

Grape, pecan and tree fruit growers have an easy to use and inexpensive way to monitor the fertility needs of their plants. Although fertilizer is applied in the springtime, July is the time to determine what grape, pecan, peach or apple trees require for best health and production. Tissue analysis is a reliable management tool used to indicate the fertility needs. Soil samples indicate what nutrients are in the soil, but tissue samples reflect what the plant is able to take up from the

soil. Pecans and fruit trees can be monitored by collecting leaf samples while grapevine monitoring requires collection of leaf petioles.

July is the month for both sampling times. Since most of Oklahoma has experienced heavy rainfall over the past few weeks, nutrient levels in the leaves may have been impacted. If possible, take samples a little later in the month to allow trees and vines to recover from the abundant rainfall. Grapevines should be sampled during veraison (berry color change), which varies greatly within types and varieties of grapes. Pecan and fruit tree leaf samples are collected according to fact sheet [HLA-6232 Fertilizing Pecan and Fruit Trees](#) or the simplified instructions located at <http://okpecans.okstate.edu/news/pecan-leaf-samples-instructions>. Grapevine petiole sampling procedures can be found at <http://www.grapes.okstate.edu/news/july-is-grape-petiole-sampling-time>.

Results will only be as accurate as the sample collected so it is advised to follow the directions. Once the leaves are sampled, they should be submitted to the local county extension office. The cost for tissue analysis is \$20. The extension office will send the samples to the OSU Soil, Water, and Forage Lab. The results will be returned to the extension educator for interpretation and then shared with the grower. Interpretation guidelines are available on the OSU SWAFL website <http://soiltesting.okstate.edu/soil-test-interpretation-program>.

Fertilizer recommendations will be provided for the following spring application. Frequently growers find out that they are applying unnecessary nutrients and can reduce their costs of fertilizing. The fee for a tissue sample can be an inexpensive tool to determine shortages or excesses before problems develop.

### **HOW SAFE ARE VEGETABLES THAT WERE FLOODED?**

*David Hillock*

With the recent flooding across the state the question about how safe is produce that was affected by the flood has arisen.

Vegetables submersed in flood water that may have been contaminated with sewage, animal manures or herbicides from neighboring properties can be dangerous and should be avoided. The safest approach is to discard all vegetables exposed to this type of water, especially leafy vegetables. Portions of plants that were not submersed in water or developed after the flood water receded may still be safe to eat. Be sure to wash all vegetables before eating.

### **DELAYED FRUIT MATURITY: THE CAUSE AND EFFECT**

*Lynn Brandenberger*

There are a number of conditions that can result in delayed fruit maturity. Usual culprits could include poor plant nutrition, stresses including drought and flooding, temperature extremes and disease. After the cool wet spring we have experienced in Oklahoma we can likely add one more to the list – cloudy weather.

During the drought of the past several years we really haven't had problems with reduced levels of sunlight from cloudy weather and that is the real issue connected to some of the delayed fruit maturity we are experiencing. Thankfully the sun has come out again and most fruit maturity problems caused by the extended cloudy season will soon cease to be an issue.

This challenge with fruit ripening comes about when there are days and weeks of cloudy overcast weather that prevents the intense sunlight which is needed for proper fruit development and maturity. Think of it this way, since the sun is the energy source that drives photosynthesis and the plant's manufacture of sugars is reduced significantly when a large portion of that energy is blocked by cloudy weather, then it makes sense that fruits such as tomato, melons, etc. will not ripen and sweeten up like they should under cloudy conditions.

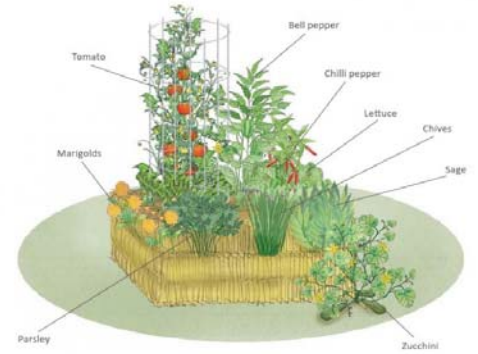
So, although I don't really like the high temperatures of summer and the boiling sun that causes them, even I have to admit that the bright sunny days of summer are necessary if we want to reap the benefits from our fruiting crops such as tomato and melons.

# STRAW BALE GARDENING

*David Hillock*

Gardening in straw or hay bales has become a popular way to garden. Growing a garden in bales allows gardening when conditions do not allow working the ground, when there are poor soil conditions or when the gardener may have limited ability to move in or around the garden.

Other benefits include extending the growing season by planting a little earlier in the spring and later into the fall as the bale provides insulation to plant roots, plus, as it decomposes, it provides heat to keep plants warm. Another advantage is plants are growing above the ground so they remain cleaner and there is a reduced chance of ground dwelling insect and disease attacks.



Straw or hay bales from alfalfa, wheat, oats, rye or other cereals are suitable for making such a bed. Straw bales are preferable over hay since straw contains less seed than hay. The straw or hay bale should be tight and held together with two to three strands of twine, preferably made from a biodegradable material such as sisal, but synthetic materials can also be used. Biodegradable twines should be positioned parallel to the ground to avoid their hastened decomposition.

Fresh straw bales should be allowed to decompose for at least one to two weeks before planting. This is important because the microbes in the bale will use any nutrients present to breakdown (or decompose) the straw depriving the plants of nutrients such as nitrogen, phosphorus and other essential elements.

Decomposition is an exothermic process; this means that substantial heat is released as the fresh straw is broken down. This can further damage seed or seedlings placed directly into a fresh bale. Thus, old or pre-seasoned bales are very desirable for bale gardening.

There are two ways to plant the 'bed.' One way is to make pockets or holes about 3 to 4 inches deep by gently loosening and carefully removing a small amount of the straw. The number of pockets can vary depending on what the grower plans to grow. The other method is adding or spreading soil materials on the top of each bale, also called a flat straw/hay bale bed. For both methods, the growing medium can be a compost or manure. Once the growing media is in place, the bales need to be moistened. It is important to induce a good rooting environment for successful production on bale beds.

Watering – Proper watering is crucial due to the fact that the water infiltration rate is high in straw bales and they can dry out quicker. The best way to approach watering is through a drip or soaker hose system set up on a timer.

Fertilization – The nutrient supply for plants established in straw bales is also critical. Growers must ensure that an adequate supply of the major nutrients is available. Nitrogen deficiency is very common. If crops show yellowing of old leaves it may be an indication of nitrogen deficiency. Purpling is a symptom of phosphorus deficiency. Leaf margin necrosis is a symptom of potassium deficiency. Straw bale beds can be enriched with the application of soil, manure, compost or a mixture of these.

Weed Control – The greatest benefit of the straw bale garden is there are in general fewer weed problems. Weeds that do show up can easily be removed mechanically or manually.

For more information on straw bale gardening see OSU Extension fact sheet [PSS-2264 Straw Bale Bed: A Way to Garden While Building Soil](#).

## SMART IRRIGATION MONTH

*Leighona Bernstein and Justin Quetone Moss*

July is Smart Irrigation Month and OSU-Oklahoma City will host an irrigation seminar on July 16 from 12 to 1 p.m. in Room 196 of the Agriculture Technologies Center. The seminar will feature Robert Reaves from the Oklahoma Irrigation Association.

Reaves will demonstrate the proper use and benefits of water conservation technology. Soil moisture sensors, climate based irrigation controllers and rain/freeze sensors will headline the seminar. Mist reduction irrigation nozzles will also be discussed.

These devices save water by helping users determine how much irrigation is necessary to keep their lawns alive while conserving water and being smart about irrigation.

Register by calling 405-297-3477 or emailing [Joshua.Campbell@okstate.edu](mailto:Joshua.Campbell@okstate.edu). Admission is free and lunch will be provided to pre-registered guests.

Wes Watkins Center – Stillwater, OK



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