

# Horticulture Tips

## April 2010

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

### **GARDEN TIPS FOR APRIL!**

*David Hillock*

#### Fruit and Nut

- Don't spray insecticides during fruit tree bloom or pollination may be affected. Disease sprays can continue according to schedule and label directions. ([EPP-7319](#))
- Control cedar-apple rust. When the orange jelly galls are visible on juniper (cedar), following a rain, begin treating apple and crabapple trees with a fungicide. ([EPP-7319](#), [EPP-7611](#))
- Fire blight bacterial disease can be controlled at this time. Plant disease-resistant varieties to avoid diseases.
- Continue spray schedules for disease prone fruit and pine trees.

#### Tree and Shrub

- Proper watering of newly planted trees and shrubs often means the difference between success and replacement.
- Remove any winter-damaged branches or plants that have not begun to grow. Prune spring flowering plants as soon as they are finished blooming. ([HLA-6404](#), [HLA-6409](#))
- Control of powdery mildew disease can be done with early detection and regular treatment. Many new plant cultivars are resistant. ([EPP-7617](#))
- Leaf spot diseases can cause premature death of foliage and reduce plant vigor.

#### Flowers

- Most bedding plants, summer flowering bulbs, and annual flower seeds can be planted after danger of frost. This happens around mid-April in most of Oklahoma. Hold off mulching these crops until spring rains subside and soil temperatures warm up. Warm-season annuals should not be planted until soil temperatures are in the low 60s.
- Harden off transplants outside in partial protection from sun and wind prior to planting.
- Let spring flowering bulb foliage remain as long as possible before removing it.

#### Vegetables

- Wait a little longer for it to warm up before planting cucurbit crops and okra.
- Plant vegetable crops in successive plantings to ensure a steady supply of produce rather than harvesting all at once.
- Cover cucurbit crops with a floating row cover to keep out insect pests. Remove during bloom time.

- Watch for cutworm damage and add flea beetle scouting to your list of activities in the vegetable garden.

### Landscape - General

- Hummingbirds arrive in Oklahoma in early April. Get your bird feeders ready using 1 part sugar to 4 parts water. Do not use red food coloring.
- Keep the bird feeder filled during the summer and help control insects at the same time.
- Lace bugs, aphids, spider mites, bagworms, etc. can start popping up in the landscape and garden later this month. Keep a close eye on all plants and use mechanical, cultural, and biological control options first.
- Be alert for both insect pests and predators. Some pests can be hand picked without using a pesticide. Do not spray if predators such as lady beetles are present. Spray only when there are too few predators to be effective.
- Schedule a group tour of the *Oklahoma Gardening Studio Gardens* in Stillwater between the first of May and late October!

### Lawn

- Warm-season grass lawns can be established beginning late April from sprigs, plugs or sod. ([HLA-6419](#))
- Fertilizer programs can begin for warm season grasses in April. The following recommendations are to achieve optimum performance and appearance of commonly grown species in Oklahoma.
  - Zoysiagrass: 3 lbs N/1,000 sq. ft.
  - Bahiagrass: 3 lbs N/1,000 sq. ft.
  - Buffalograss: 2 - 3 lbs N/1,000 sq. ft.
  - Buffalograss/grama mixes: 3 lbs N/1,000 sq. ft.
  - Bermudagrass: 4-6 lbs N/1,000 sq. ft.
  - Centipedegrass: 2 lbs N/1,000 sq. ft.
  - St. Augustinegrass: 3-6 lbs N/1,000 sq. ft.

When using quick release forms of fertilizer, use one pound of actual nitrogen per 1,000 sq. ft. per application; water in nitrate fertilizers. ([HLA-6420](#))

- Mowing of warm-season lawns can begin now ([HLA-6420](#)). Cutting height for bermuda and zoysia should be 1 to 1½ inches high, and buffalograss 1½ to 3 inches high.
- Damage from Spring Dead Spot Disease (SDS) becomes visible in bermudagrass ([EPP-7665](#)). Perform practices that promote grass recovery. Do not spray fungicides at this time for SDS control.
- Grub damage can be visible in lawns at this time. Check for the presence of grubs before ever applying any insecticide treatments. Apply appropriate soil insecticide if white grubs are a problem ([EPP-7306](#)). Water product into soil.

## Garden Planting Guide for Warm-Season Vegetables

<u>Vegetable</u>	<u>Time to Plant*</u>	<u>Days to Harvest</u>	<u>Method of Planting</u>
Bean, Lima	April 15-30	90-120	Seed
Beans, Green or Wax	April 10-30	50-60	Seed
Beans, Pole	April 10-30	60-90	Seed
Cantaloupe	May 1-20	80-100	Seed or Plants
Cucumber	April 10-30 or later	50-70	Seed or Plants
Eggplant	April 10-30	80-90	Plants
Okra	April 10-30 or later	60-70	Seed
Pepper	April 10-30 or later	90-110	Plants
Pumpkin	April 10-30	90-120	Seed
Southern Pea	May 1-June 10	85-100	Seed
Squash, Summer	April 10-30 or later	40-60	Seed or Plants
Squash, Winter	May 15-June 15	110-125	Seed or Plants
Sweet Corn	Mar. 25-April 30	80-100	Seed
Sweet Potato	May 1-June 10	100-120	Plants
Tomato	April 10-30	70-90	Plants
Watermelon	May 1-20	90-120	Seed

\*These dates indicate planting times from southeast to northwest Oklahoma. Specific climate and weather may influence planting dates. For Cool-Season Vegetables, the soil temperature at the depth where the seeds are planted should be at least 40°F.

### **N-P-K and Plant Growth**

*David Hillock*

Plant growth and health is dependent on several mineral elements in the soil. Nitrogen (N), phosphorus (P) and potassium (K) are considered the macronutrients, not because they are larger than the other essential elements, but simply they are used in larger quantities by the plant. These are also the three numbers you will see on most fertilizer bags and always in that order, N-P-K.

Nitrogen is needed for the development of dark, green color in plants. It is essential for rapid and continuous vegetative growth. Of all the nutrients, N is most commonly deficient, especially when plant vegetation is removed from the area where it grew (bagging lawn clippings).

Phosphorus aids plants in getting off to a rapid, vigorous start, promotes early root formation, stimulates blooming and seed production, and hastens maturity. Phosphorus deficiency in mature landscapes and gardens is uncommon because plants use only about 1/8 as much phosphorus as

they do nitrogen. Since phosphorus is also immobile in the soil, it accumulates and will be adequately supplied by soils that have a history of annual applications of phosphorus.

Potassium or potash is needed for plant health and disease resistance. It is important in ripening of fruit and helps to develop full, plump seeds. Potassium deficiency is common in high rainfall regions such as eastern Oklahoma.

Where needed and applied in required amounts, commercial fertilizers *do not* injure the soil. They *do not* poison vegetables or other plant growth. They *do not* destroy animal life—earthworms or bacteria—in the soil. On the contrary, the addition of fertilizer provides both plant and animal life in the soil with nutrients essential to their welfare.

To make sure your plants have the required nutrients to encourage lush and vigorous growth and production have your soil tested every few years. Soil tests can be conducted through your County Extension Office. For more information on improving soil fertility and taking soil samples see fact sheets [HLA-6007 Improving Garden Soil Fertility](#) and [PSS-2207 How to Get a Good Soil Sample](#).

## **Can Potting Soil Be Reused?**

*Kim Rebek*

This is a question extension personnel hear often, usually in the spring when gardeners are moving plants back outdoors and upgrading pot sizes. In general, there is nothing wrong with reusing potting soil; it can be expensive to replace the soil every year. However, there are certain considerations to be made when reusing soil.

Used soil will require fertilizer applications to replace nutrients that have leached from the soil or have been utilized by plants previously growing in the medium. Incorporating a slow release fertilizer at the proper rate will take care of nutrition needs for several months. If you are using a slow release fertilizer, liquid fertilizer is not necessary.

One concern when reusing potting soil is with the build up of salts in the medium. Excessive levels of salts can be detrimental to plant development. Not all water sources are the same, salts may be a problem in some city water systems and not others, likewise, some well water sources may have higher salt concentrations than others. Typically, rainwater (such as water collected in a rain barrel) will have lower levels of salts and is excellent for watering containers. You can often see salt accumulation (crystal formation) when you examine your soils and the salts also tend to form a white ring on clay containers. These are good indicators that salt accumulation may be problematic if reusing soil.

Commercial potting soils have agents added to the mix that help the media take up and hold water. These agents break down over time. Likewise, peat and other organic agents mixed into soils for the same purpose of holding water decompose over time. As such, older soils tend not to hold water as well and often appear "compacted". This could be addressed by mixing new and

used potting soils together, adding organic matter to the potting soil (such as compost), or adding a water-holding agent, such as "Soil Moist".

Another option is to add your used potting soil to your compost pile. A good compost pile has mixture of green material, brown material, and soil. Finished compost can then be used to fill your containers. The compost will have the water-holding properties you are looking for. Composting used potting soil will also help with salt accumulation problems.

Finally, if insects, disease or weed seeds are a concern, pasteurize soil (and also compost) in your oven. It is particularly important to pasteurize potting soil that will be used to start seeds. Simply bake moistened soil at 180°F for at least 30 minutes.

## **Plant Highlight – Crocosmia**

*David Hillock*

Crocosmia or Montbretia (*Crocosmia x crocosmiiflora*) is a wonderful summer flowering bulb that produces some stunning flowers in mid to late summer.

Crocosmia, native to South African grasslands, are in the Iris family and grow about 1½' to 3' tall. Stems are erect and arch near the tip. Leaves are sword-shaped and resemble those of gladiolus. The name Crocosmia is derived from the Greek words *krokos* (saffron) and *osme* (smell), referring to the saffron-like scent of the dried leaves or flowers.



Flowers of Crocosmia are orange, orange-red, scarlet red, yellow or bi-colored; several cultivars are available. Flowers are tubular and open from the base of the flower scape (stem) to the tip, delivering cascades of colorful blooms on the stiffly arching stem.

Crocosmia grow best in average to medium moisture and well-drained soil in full sun or part shade; they are very tolerant of our heat and humidity. Spider mites are the most common pest and can damage the foliage and even hinder normal flowering if left unchecked.

While we refer to Crocosmia as “bulbs” they are truly corms. The corms can be planted in the spring for blooms that summer. Plants should be divided every 2-3 years to prevent overcrowding and encourage vigor and flowering.

Crocosmia is best planted in clumps in plant borders or beds or can be an attractive addition in containers. Flowers attract bees and hummingbirds. It also makes a great fresh cut flower and is often used commercially in floral arrangements.

## Ten Frequently Asked Turfgrass Questions in April

*Dennis Martin*

1. Where can I find out when and where the next Oklahoma Pesticide Applicator Testing Sessions will be held?

Response: The Oklahoma Department of Agriculture, Food & Forestry is the state agency responsible for pesticide applicator testing, certification and licensing in Oklahoma. The locations and dates of upcoming applicator testing are posted at this website:

<http://www.oda.state.ok.us/forms/cps/testsession.pdf>

2. What does “pre-emergence herbicide” and “post-emergence herbicide” mean?

Response: A pre-emergence herbicide is a product that is applied to a turfgrass area with intent of being put in place before the germination of a certain target weed or weeds. As such, the product kills those specific targets at the time when their seed germinates and attempts to put out a small root or shoot. A post-emergent herbicide is put out after the target weed or weeds are already visible to the applicator and the intent is that the herbicide kills an already germinated or emerged weed.

3. Is it too late to apply a pre-emergent herbicide for crabgrass in April?

Response: If you intend to control crabgrass in a turfgrass area then it is not too late. Even if crabgrass has already started germinating in your area, by applying a pre-emergent herbicide early in the month as per label directions and activating the product by watering it in with two split applications of ¼ inch of water; you will still get the benefit of some pre-emergence crabgrass control. If crabgrass has already started to germinate, you will probably need to apply a post-emergent product to kill the crabgrass seedlings once you can see the plants and before they produce more than 4 tillers. Not all crabgrass seed on a site germinates on the same day or even the same week. Use of a pre-emergent on a site where some germination has already started will still help reduce the severity of the infestation. Also, once you apply a post-emergent herbicide for killing existing crabgrass, a small opening in the turf stand occurs and you need a pre-emergent in place to suppress more germination in the opening. Moisture has been variable over the state. Note, if you have been irrigating then you have eliminated dry surface as a restriction on germination and you may have some seedlings present.

4. I had crabgrass in my lawn last year, how do I know if crabgrass has already started to germinate in my lawn?

Response: If you know that you had crabgrass last year go to the spots where it was located. Although killed by freezes you can probably see how even dead crabgrass leaves and stems look different than those of bermudagrass and obviously different than those of tall fescue. In the case of a bermudagrass lawn, the dead crabgrass plants usually have a wider leaf width, a different foliage color and plant growth habit even looks different than bermudagrass shoots killed by freezes. Part the dead or live canopy of the turf near the outskirts of the “crabgrass skeletons” from last year and see if you see rather broad bladed grass seedlings emerging from the soil. Each

crabgrass plant usually sets hundreds of seed so you will most assuredly find it where the skeletons are present from last year. This is the best method. This method of examining the site for presence of a weed is called “scouting”. In this case you are scouting for a specific weed, crabgrass.

5. What herbicides are used for pre-emergent crabgrass control in turfgrasses?

Response: The most commonly used pre-emergent herbicide active ingredients and one of the most widely available product names associated with these active ingredients (in parentheses) in the trade are pendimethalin (Pendulum), prodiamine (Barricade), oryzalin (Surflan) and dithiopyr (Dimension). Additional trade names for these products can be found. Remember to read and follow all label directions of a pesticide. The mention of trade names does not constitute an endorsement of a product nor does the lack of listing of a trade name mean any bias or discrimination against a product. These four active ingredients and products can be used with an expected great degree of success based on trials conducted at Oklahoma State University using the professional grade products at rates suitable for the southern U.S.

6. I have heard that the organic arsenicals post-emergent herbicides are being removed from the market, what do you know about this?

Response: For the latest information, please see the U.S. EPA Organic Arsenicals Information Page at: [http://www.epa.gov/pesticides/reregistration/organic\\_arsenicals\\_fs.html](http://www.epa.gov/pesticides/reregistration/organic_arsenicals_fs.html).

The most common of the organic arsenical herbicides are those with active ingredients abbreviated as MSMA, DSMA, CMA and Cacodylic acid. Reregistration of the use of these products has been cancelled for use in residential lawns. However, the product that remains in the sales or distribution chain or on the store shelf can still be purchased and used as per the labeled directions. Product that is already in the consumers possession can also still be used indefinitely as per the label. Organic arsenicals that were labeled for non-residential uses, including roadsides, golf courses and sod farms can still be purchased and used as per the label. On these specific use sites, the product must be used up in a manner consistent with its label no later than December 31, 2013, otherwise it can be disposed of at a designated pesticide collection/disposal event. All use of the organic arsenical herbicides, except MSMA use on cotton, will be canceled in two phases. In addition to products used on cotton, MSMA products with uses phasing out over several years will include new restrictions, summarized below, to protect water resources.

**Phase 1** – Many existing uses were canceled as of December 31, 2009. Use on residential areas of existing labeled material can continue until the product is used up, consistent with the label directions. Certain additional restrictions on use were put in place in other use areas (please read on).

**Phase 2** – January 1, 2010, MSMA use on golf courses, sod farms, and highway rights-of-way will be canceled as of December 31, 2012, with use of existing stocks permitted only through 2013. The following new use restrictions will apply:

For golf courses:

- Spot treatments only (100 sq. ft. per spot), not to exceed 25 percent of the total golf course acreage per year
- One broadcast treatment for newly constructed courses only

For sod farms:

- 1-2 broadcast applications
- 25 foot buffer around permanent water bodies

For highway rights-of-way:

- Two broadcast applications ONLY on highway rights-of-way
- 100 foot buffer around permanent water bodies

7. Is it okay to seed or sod cool-season lawns of tall fescue, Kentucky bluegrass and/or perennial ryegrass in April?

Response: The answer is two-fold. 1. Yes, but the spring is the distance second choice as opposed to the fall. An April seeded lawn only has the months of April and May before it starts to face non-optimal growing temperatures in most of June through the early portion of September. Seedlings stands often succumb to heat, drought, disease or insect feeding during the summer. By far the fall is much better time for seeding, with an early through mid-October seeding time being preferred. Refer to *OSU Fact Sheet [HLA-6419: Establishing a Lawn in Oklahoma](#)* for details. 2. It is okay to lay cool-season turf sod in April. Usually there is no problem in getting it properly established in April in time for tolerating the summer. Again, see the fact sheet referenced above.

8. Is it okay to fertilize my cool-season lawn in April?

Response: If you want to have a higher quality cool-season lawn, then the March-April time frame is appropriate for a fertilization. Also the April-early May time frame is appropriate. Often times, two separate applications, one in March and one in early May is suggested for optimizing cool-season lawn quality. Generally, cool-season lawns are not fertilized in late May through early September. See *OSU Fact Sheet [HLA-6420: Lawn Management in Oklahoma](#)* for details on lawn fertility programs.

9. Can warm-season lawns of Bermuda, Buffalo or Zoysia be fertilized in April?

Response: In general, April is the first month of the year when fertilizing warm-season lawns can be suggested. Depending upon the individual year, warm-season lawns have come out of winter dormancy and are attempting to put on growth. Most warm-season lawns were a little behind in terms of greenup by late March this year. Once the competitive winter annual weeds have been controlled, generally warm-season lawns can be fertilized in mid-April and onward until no later than September 15. Every year is slightly different with variable warming trends, rainfall, late frost, etc. Adjust your individual management program and frequently check the weather forecast in addition to scouting your lawn. See *OSU Fact Sheet [HLA-6420: Lawn Management in Oklahoma](#)* for details on lawn fertility programs.



#### 10. Can I seed a warm-season lawn in April?

Response: Certainly one can seed a lawn in April but the real question is “*How early is it advisable to seed a warm-season lawn?*” Provided that one has excellent erosion control measures in place, it does not hurt the warm-season turfgrass seed to be properly seeded in the month of April. Work by Dr. Mike Richardson at the University of Arkansas has shown that bermudagrass can be seeded much earlier in the year than when it can be expected to successfully germinate and yet this did not hurt the bermudagrass seed. Common sense tells us that no matter what, excellent erosion control measures must be in place so that seed does not wash or puddle, regardless of when it is seeded. These measures include but are not limited to drill seeding into stubble or other dead cover, hydro seeding/mulching, broadcast seeding followed by light raking for incorporation and mulching with either clean wheat straw, shredded mulch, spun bound polyester seed cloth or other mulch. Even though the soil may be a bit cool for germination of warm-season grass seed, the seed primes and imbibes water, meaning it takes up moisture from the soil and this starts key enzymatic processes. But the seed won’t germinate (having a root or shoot emerge from the seed) until conditions are warm enough to do so. While there is a risk of late frosts or hard freezes killing early germinating warm-season turfgrasses from seed, complete stand loss from early seeding is really rare. Warm soil also generally protects against a light frost. What is more of a problem is flash hard rains (in some years) washing the soil and seed into puddles such that too low of seed amounts remain in some areas and grossly overage amounts are present where seed was puddled. So the question is not whether seeding in April is okay, but rather, if you are going to seed and wait on the seed to germinate do you have excellent erosion control measures in place to keep the seed from washing while one is waiting for it to germinate and establish? This question is important regardless of when one is planning on seeding, but more risk of seed puddling is present the longer the seed is laying in the soil waiting to germinate. Refer to *OSU Fact Sheet [HLA-6419: Establishing a Lawn in Oklahoma](#)* for details.

### Upcoming Horticulture Events

**Annual OSU Turf Club Benefit Golf Tournament Set for April 16 at Stillwater – The 10<sup>th</sup> Annual OSU Turfgrass Classic fund raiser golf tournament will be held on April 16, 2010 at Lakeside Golf Club. Information on the event is available on-line at: [http://www.hortla.okstate.edu/events/pdf/turfgrass\\_classic.pdf](http://www.hortla.okstate.edu/events/pdf/turfgrass_classic.pdf).** This benefit tournament is for the OSU Turf Club (The Student Chapter of the Golf Course Superintendents Association of America). The course is located at 5201 N. Washington St., Stillwater. The tournament format will be a 4-Person Scramble with a 1:30 p.m. Shotgun Start and dinner following the event. The entry fee is \$75/Person (\$300/Team). Opportunities for sponsorship and donations are also available. Please contact Ryan Savage 405-401-7877 or [ryan.savage@okstate.edu](mailto:ryan.savage@okstate.edu) for more information.

**2010 OTRF/OGCSA Benefit Golf Tournament Set for April 26 at Oklahoma City Golf & Country Club** – The 2010 Oklahoma Turfgrass Research Foundation (OTRF) and Oklahoma Golf Course Superintendents Association (OGCSA) Benefit Golf Tournament will be held on Monday, April 26 at Oklahoma City Golf & Country Club. This event should not be confused with the April 16th OSU Turf Club Fund Raising Tournament held in Stillwater.

The OTRF/OGCSA Benefit Tournament helps OTRF in its turf research support and OGCSA in providing student scholarships. Last year's tournament brought in the largest amount ever for both associations at \$9K for each association and the goal is to exceed last years mark. There are several ways you can contribute to the cause. Choose one, several or all of the following. Remember, it is for a good cause...1. Bring a team for the 4-person scramble, which is \$700 per team. Mulligan's are included in this amount. 2. Sponsor a tee box, Closest to the Pin contest, Longest Drive contest, or Straightest Drive contest at \$250. 3. Have a sign displayed somewhere on the golf course with your information for \$100. Signs will be provided. 4. Donate cash or prizes to help pay for the other prizes and to offset OTRF/OGCSA expenses. 5. Sponsor a hole-in-one contest.

The Oklahoma City Golf & Country Club is located at 2201 NW 63rd Street, Oklahoma City, OK 73116. Thanks to Craig Elms, CGCS Superintendent and his membership for hosting the event. Registration starts at 10:30 a.m. At 11:00 a.m. lunch-will provided by Syngenta. The tournament starts at 12:30 p.m. with a Shot Gun Start. For more information on the tournament and a registration form, visit our departmental website at <http://www.hortla.okstate.edu>. Look under upcoming events.

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or [stephanie.larimer@okstate.edu](mailto:stephanie.larimer@okstate.edu).