# Horticulture Tips
## October 2012

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

## GARDEN TIPS FOR OCTOBER!

*David Hillock, Consumer Horticulturist*

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.

## Update on Imprelis Herbicide Use in Oklahoma

*David Hillock, Consumer Horticulturist*

Last year several cases of landscape plant damage due to herbicide toxicity was reported, largely in the northern areas of the country. It was determined in many of these cases that a new product released in late 2010 by the DuPont Company was to blame. This new herbicide was for post-emergent broad-leaved weed control for turf professionals that would serve as an option to the traditional "three-way" products. The new material, Imprelis, contains a single active ingredient, aminocyclopyrachlor, an auxin-mimic. It was shown to control a broad spectrum of weeds including some tough ones like ground ivy, wild violet, and henbit. It appeared to be an effective tool for turfgrass management programs and subsequently was widely adopted by the industry.

During July 2011, homeowners and landscapers reported Imprelis-damaged trees throughout the northern United States from Minnesota and Iowa to Pennsylvania. As reports of damage continued to mount and the story became national news, the US EPA issued a Stop Sale order for Imprelis on August 11, 2011, barely two months after the initial reports of damage became public. DuPont reports that damage associated with Imprelis has cost the company $225 million and the total cost may eventually reach $575 million.

Several species of landscape plants that showed damage after the use of Imprelis included spruce, white pine, maple, oak, honey locust, viburnum, and hydrangea. Cases in New Jersey showed spruce and white pine to completely die within three to four weeks after the initial symptoms developed on the new growth. The other species exhibited leaf curling and cupping as well as yellowing and stunted growth, but had not died. One year later, Extension professionals from Penn State, Purdue University and Michigan State report that it appears more subtle and longer-term tree damage is becoming apparent – even to trees showed little impact in 2011.

Imprelis was not heavily marketed into the turf bermudagrass arena in Oklahoma so very little was used in lawns, landscapes, golf courses and sports fields in Oklahoma. Imprelis had its registration pulled in Oklahoma when the national stop sale and the product recall occurred. It was never re-registered in Oklahoma.

According to Mike Vandeventer of ODAFF, the agency worked one complaint last year relating to Imprelis from Boise City; it was confirmed that Imprelis was used. A quick survey of the major chemical suppliers was conducted and it was reported to ODAFF that no Imprelis sales had taken place. Checking in the major metropolitan areas of the state did not identify any Imprelis use.

While the product Imprelis is no longer sold, other products with the active ingredient aminocyclopyrachlor are registered for use in Oklahoma. Scotts has a few products labeled for homeowner use (spot weed control and weed & feed type products), but homeowners should be cautioned to use it carefully and be sure to follow label directions. Cautions and restrictions found on labels include: Do not apply more than two times per year; Do not use grass clippings from treated areas for mulch or compost; Grass clippings must either be left on the treated lawn or if allowed by local yard waste regulations, disposed of in the trash; Apply only to grass; and Do not apply to flowers, shrubs, trees, fruit or vegetable gardens or beds.

DuPont has products registered to control broadleaf weeds and woody plants for use in non-agricultural areas such as industrial sites, rights-of-ways, and natural areas and where valuable woody plants are not being grown or will not be affected.

**Resources:**

- Plant & Pest Advisory. Landscape, Nursery & Turf Edition, June 30, 2011. Rutgers Cooperative Extension Publication. http://njaes.rutgers.edu/pubs/plantandpestadvisory/2011/ln063011.pdf
- Tree damage from Imprelis: One year later. Posted on June 19, 2012 by Dr. Bert Cregg, Michigan State University Extension, Departments of Horticulture and Forestry. http://www.msue.msu.edu
- Dr. Dennis Martin, Extension Turfgrass Specialist, Oklahoma State University
- Jen Olson, Plant Disease Diagnostician, Oklahoma State University
- Mike Vandeventer, Oklahoma Department of Agriculture, Food and Forestry
- Kelly Solutions - http://www.kellysolutions.com/OK/showproductsbychem.asp?PC_Code=288008&PctStart=0&PctEnd=100&Chemical_Name=Aminocyclopyrachlor

## Perennials for Fall Color

*David Hillock*

Perennials are excellent landscape plants that come in many shapes, sizes, and colors. One benefit to using perennials is they are more permanent so you only have to plant them once as opposed to annuals. Too often we focus on the spring and summer flowering plants, but there are several species that bloom in the fall too. Below are just a handful of perennials that put on a great display in late summer and fall.

| **Plant name** | **Size** | **Flower Color** | **Bloom Time** | **Culture** | **Comments** |
|---|---|---|---|---|---|
| *Anemone* x *hybrida* – Japanese anemone | 2-4’ | white or pink | late summer and fall | Morning sun, part shade; fertile, moist, well-drained soil | Border, woodland |
| *Ligularia spp.* – ragwort | mounded, 3-4’ tall | yellowish-orange | mid summer to early fall | Part to full shade; well-drained, moist to wet soil | Specimen, bog garden |
| *Tricyrtis hirta* – Toad Lily | upright, 2-3’ tall, 2’ wide | pale lilac, pink, or red with purple spots | late summer, fall | Shade; well-drained, moist soil | Woodland garden, shade perennial border, deer resistant, OK Proven selection |
| *Aster spp.* – aster | 1 – 5’ | lavender , purple, red, white, pink and many shades in between | late summer to fall | Sun, well-drained soil, average fertility. Can spread rapidly. Many cultivars | Depends on height, naturalized areas |
| *Ceratostigma plumbaginoides* – *plumbago, leadwort* | 8-12” tall, 12-18” wide | dark blue | summer to late fall | Part shade or full sun, well-drained | Ground cover, rock garden, OK Proven selection |
| *Chelone lyonii* – Pink Turtlehead | 3’ tall, 2’ wide | pink; also white and rose flowering species | late summer to early fall | Part shade or full sun, consistently moist to wet | Along stream or pond, border, or wild garden |
| *Dendranthema* x *morifolium* – hardy chrysanthemum | Mounded 1-3’ | orange, yellow, red, bronze, white, lavender | Late summer to frost | Sun, well-drained soil; heavy feeder | Border, massing, cut |
| *Gaura lindheimeri* – Gaura, whirling butterflies | vase shaped to 5’ | pink, white | Early summer to frost | Sun, well-drained soil; tap root, drought tolerant | Border. Siskiyou Pink is OK Proven selection with loose growth habit. |
| *Helianthus angustifolius* – *Swamp or Narrow-leaf Sunflower* | 6-8’ tall | Golden yellow | Late summer to fall | Will grow in moist soils, but very drought tolerant | Border, specimen, native plant |
| *Salvia greggii* – autumn sage | 2-3’, erect semi-shrub | pink, red, white | early summer to frost | Sun, prefers well-drained, dry soil. Very drought tolerant | Border, container; hummingbird plant, OK Proven selection |
| *Verbena canadensis* ‘Homestead’ – Homestead verbena | 6”, low spreading | Deep purple | Summer to frost | Sun, well-drained soil | Groundcover, edging, rock garden, border; OK Proven selection |

## High Tunnel Leafy Greens

*Lynn Brandenberger, OSU Extension Vegetable Specialist*

High tunnel vegetable crop production is used in the U.S. and worldwide. High tunnels (hoop houses) are basically plastic covered frames that use only passive solar heat for warmth. High tunnels have been used to extend the growing season of warm-season vegetable crops such as tomatoes, peppers, and cucurbits. These structures allow farmers to start these crops much earlier in the spring and to continue production much later in the fall. This is a good use for these structures, but without supplemental heat, warm-season crops cannot be grown in these structures during the coldest months of the year (December-February). A key aspect of fresh market growing is producing and selling crops year round. Trials were completed in 2011 and 2012 to decide the feasibility of growing cool-season greens in a high tunnel for commercial production during the winter months.

The report on these trials will soon be completed and available on-line at: http://www.hortla.okstate.edu/industry/vegetables/index.htm. The work was funded by a specialty crop grant received from the Oklahoma Department of Agriculture, Food, and Forestry (ODAFF) to help fresh market farmers develop alternative crops. There were four locations for the study which included sites at Ardmore (Noble Foundation), Lane (Wes Watkins Research and Extension Center), Oklahoma City (OSU/OKC), and Tulsa (Our Farm, a commercial farm). Results in the report will include reports for each site for each year of the study and a summary.

## Leaf Lettuce Trial Results

*Lynn Brandenberger, OSU Extension Vegetable Specialist*

Fresh lettuce is consumed both in salads and as a garnish for sandwiches. During the past few years, leaf lettuce has grown in popularity possibly due to its somewhat higher nutritive value compared to head types. Both Romaine and leaf lettuce have higher levels of vitamin C, A and calcium compared to head types, but still lag behind other leafy greens in nutritive value. In Oklahoma, leaf lettuce is produced for fresh market due to a shorter growing season and improved chances of success compared to head types. The objectives of this trial were to observe the feasibility of growing leaf lettuce in western Oklahoma using drip irrigation and to determine the yield and quality characteristics of different leaf lettuce varieties.

Two Star Leaf Lettuce

The leafy lettuce trial was completed this past year at Helena, Oklahoma with some interesting results. Although there really were few differences seen between the ten varieties in the trial both Grand Rapids and Waldmann's Dark Green did have more culls than other varieties primarily due to tip burn. Decisions about what varieties to produce should be based upon color preferences of the farmer and consumer. For complete results of this trial go to: http://www.hortla.okstate.edu/industry/vegetables/index.htm.

## Upcoming Horticulture Events

**GardenFest**
October 6, 2012 – The Botanic Garden at OSU – Stillwater, OK

This year's GardenFest theme is "Art in the Garden" celebrating the centuries-old relationship between landscape and art with speaker W. Gary Smith, demonstrations, vendors, live music and hands-on activities for children. For more information and a schedule of events, please visit http://botanicgarden.okstate.edu/gardenfest.htm.

**Global Horticulture Conference**
November 7, 2012 – Wes Watkins Center – Stillwater, OK

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