



Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Spring 2011

Empowering gardeners. Providing garden solutions.

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Japanese Maples

It's easy to fall in love with Japanese maples. In the spring and fall, the rich colors of the leaves defy description. In winter, many have bright red stems or interesting branching habits. And in the summer, a tree in full leaf is a sight to behold.

The history of the Japanese maple is as rich as the leaf color. Japan's love affair with maples goes back to the seventh century, when the trees became the subject of poetry and art. Sadly, the lovely little trees became unexpected victims of two world wars due to food and fuel shortages. Imagine seeing your ancestor's collection of old trees burned as firewood! Not surprisingly, many cultivars disappeared by the end of the 1940s. Fortunately, a resurgence of interest occurred in the 1960s, and more than 320 cultivars of *Acer palmatum* have been developed from the original native trees.

Japanese maples provide a wide range of size possibilities, from dwarf to large varieties that reach to around 30 feet tall. These maples prefer a slightly acid soil but are adaptable. They do not have invasive root systems, nor are they guilty of strong root competition. So they are compatible with most plants. They do best in sandy loam with a low to medium amount of organic material and should be mulched with 2 inches of mulch. They initially have a shallow, fibrous root network, so mulch and

uniform watering is needed for several years to get a tree established. Because of this shallow root system, keep grass and weeds outside the drip line to avoid competition for moisture and nutrients.

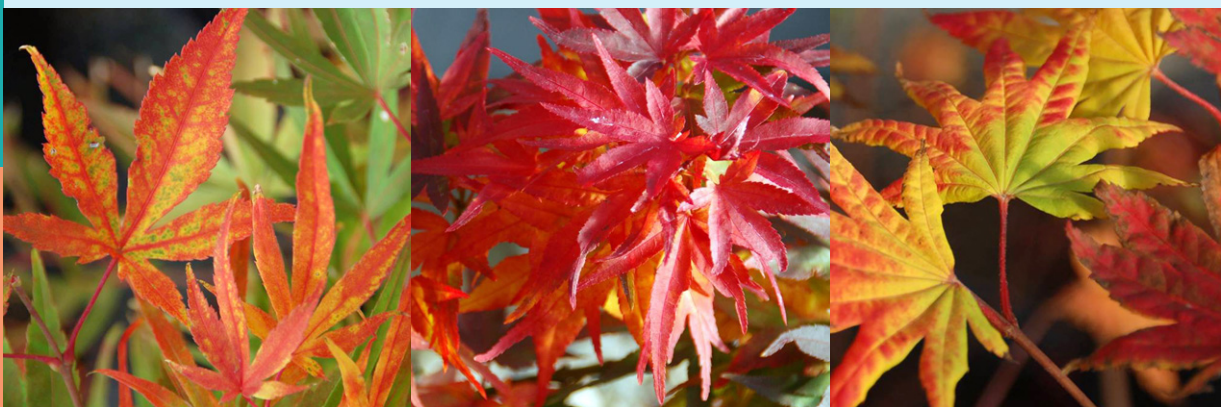
Most Japanese maples adapt well to containers and can be potted for many years without the necessity of repotting or root pruning.

I have never needed to treat for pest or disease problems. But I keep my eyes open — since Japanese maples can be damaged by insects usually found in the garden, such as aphids and spider mites. The worst enemy of maples is the sun, especially in the NC coastal plain.

Most cultivars do well and produce their best color in full sun, but they all benefit from some shade in the heat of the afternoon. Red cultivars of the *dissectum* (lace leaf) group do need some shade, but the green varieties tolerate sun very well.

And the final good news — if you enjoy wielding sharp instruments, Japanese maples thrive on pruning. You can prune a maple virtually year-round to maintain shape, but save the major work for the dormant season. Remove twiggy growth to reveal each tree's beautiful branch structure, and open-up the interior to prevent insect and disease problems. You *will* be rewarded!

— Cyndi Lauderdale



Upcoming Events

March 18-19

Triangle East Home and Garden Show

Miller Road, Wilson

- Full details available at <http://www.trieasthomeandgarden.com/>.

March 26-27

Poplar Grove Herb and Garden Fair

Poplar Grove Plantation, Wilmington NC

- <http://www.poplargo.com/> or (910) 686.9518

April 15-16

Pender County Master Gardener Plant Sale

Pender County Cooperative Extension, 801 South Walker St., Burgaw

- <http://pender.ces.ncsu.edu/> or (910) 259.1235

May 14

Pitt County Arboretum Plant Sale

Pitt County Agricultural Center, 403 Government Circle, Greenville

- 9 AM preview plant sale for Friends of the Arboretum, 10 AM - 12 PM public plant sale, 11 AM plant swap
- Call (252) 902.1709 or visit <http://pitt.ces.ncsu.edu> to find out more.

May 14 (10 AM until 2:30 PM)

Coastal Gardening Festival

Thomas A. Baum Senior Center, 300 Mustian Street, Kill Devil Hills

- This year's theme: "Gardening: Green Thumb NOT required."
- Sponsored by Dare County Master Gardener Volunteers

Spring 2011 Wilson Botanical Gardens Events

Wilson County Cooperative Extension 1806 Goldsboro Street, Wilson

- April 9, 9 AM until noon — **Spring Symposium: Wilson Alive with Color**
- April 18, 5 p.m. — **Alive at 5: Drop in and Dig**, children of all ages will plant the 4-H Garden
- May 16, 5 p.m. — **Alive at 5**
- May 6-7 — **2011 Wilson Garden Tour**, tickets \$25.
- Find out more by calling (252) 237.0111 or visit Wilson Botanical Gardens on Facebook.

Smart Gardening — Dealing with drought

Drought can cause stress for gardens and gardeners alike. Luckily, landscape beauty does not have to be sacrificed when lawns and gardens are managed for water conservation. Through proper plant selection and maintenance, gardeners can keep landscapes healthy and attractive even during drought.

Plants require varying amounts of water to thrive. When selecting and placing plants in the landscape, be sure to group them by their water needs. Divide plantings into low, moderate, and high water-use zones. High water-use zones should be composed of plants that need regular irrigation, such as highly maintained turf, annuals, roses, hydrangeas, and Japanese maples. Limit these areas to highly visible locations.

Low water-use zones should be planted with drought tolerant plants only. Highly drought tolerant plants that thrive in the coastal plain include dwarf yaupon, lantana, juniper, and muhly grass. Turfgrass and moderately drought-tolerant plants should be planted in moderate water-use zones. Zoning plantings by their water needs helps reduce overall landscape water use and will determine priorities when providing supplemental irrigation. Keep in mind that newly set out plants and lawns will require more supplemental

irrigation during drought than established plants.

To reduce landscape water needs, establish new plantings during low water-use times like fall, winter, and early spring. During drought, avoid unnecessary plant stress by reducing fertilization, pruning, and frequent mowing, which can increase plants' water needs. Incorporate organic matter into the soil before planting, and mulch around trees and shrubs to improve moisture retention. Mulch should be no more than four inches deep and should not touch the bark of trees and shrubs.

Even with proper maintenance, some plants will require supplemental irrigation. Monitor symptoms of water stress, such as wilting and leaf discoloration, to help decide when you should water.

If supplemental water is needed, pattern irrigation systems to apply water in high water-use zones of the landscape and avoid wasting water on drought-tolerant plants or on sites like driveways and roads. Early morning watering and drip irrigation systems will reduce runoff and evaporation, as well as limit disease development on plants. To learn more about landscape water conservation visit: <http://www.tarheelgardening.com/waterwise.html>.

— Katy Shook

Food Production — Irish potatoes

Irish potatoes are both productive and easy to grow, and produce best in the coastal plain when planted from early February through mid March. As Irish potatoes grow, watch for pests including weeds, which rob water and nutrients from the developing potatoes. Weeds can be controlled early with light cultivation, but as the potatoes grow, hand pull weeds to avoid damaging shallow tubers.

Colorado potato beetles are a major pest problem. Their brick-red, grublike larva feed heavily on potato leaves, reducing tuber production. Adult beetles have yellow wings with black stripes going from front to back and should be handpicked early in the season to prevent them from laying their bright orange-yellow eggs on the underside of leaves. If eggs are found, remove and squish them before they hatch. Larva can be handpicked or controlled with organic or synthetic insecticides.

Common Scab is a bacterial disease that

causes light tan to brown lesions on the potato skin that extends down into the tuber as corky areas. Consistent watering will reduce this problem. Early and late blight are fungal diseases that attack potato foliage. Early blight appears on the leaves as circular lesions with a bull's-eye appearance and can be prevented by proper fertilization and consistent watering. Late blight is the most serious disease, characterized by large brown to purplish lesions surrounded by a light green halo on the upper surface of the leaf and a white fungal mat on the lower surface.

Many potato diseases can be reduced or prevented through crop rotation, using certified seed potatoes, and by not planting behind related crops such as eggplant, pepper, and tomato. If pest problems occur, consult your local Cooperative Extension agent for control recommendations.

— Shawn Banks

Garden Spot — Sylvan Heights Waterfowl Park

For nature lovers, few places are more enjoyable to visit in North Carolina than Sylvan Heights Waterfowl Park in Scotland Neck. Offering something for bird lovers, plant enthusiasts, conservationists, and anyone who enjoys the outdoors, this educational park is home to more than 1,500 ducks, geese, swans, and other exotic birds from around the world.

As you walk through the park, located on 18 secluded acres, you'll see birds from six of Earth's seven continents, with a landscape featuring both North Carolina native plants and non-invasive exotics from the birds' native habitats. Once you have seen all the birds, you can visit the bee house to observe a working bee hive, or walk the path lined by American beautyberry to the Bird's Nest Treehouse and Beaver Pond Blind. These recent additions offer a great view of an undisturbed natural wetland and highlight plants and animals native to Halifax County.

Park Director Mike Lubbock has received 17 breeding awards, and his efforts are responsible for saving many endangered species from extinction. When you visit, be sure to stop by the incubator in the main building, where you



Photo courtesy Sylvan Heights Waterfowl Park

will almost surely find an egg about to hatch. Children love to watch the eggs shake and crack as a newborn bird emerges for the first time. Visit www.shwpark.com to learn more.

— Matt Stevens

Environmental Stewardship — Vermicomposting

Can worms really recycle your garbage? Yes! Vermicomposting is a process that turns kitchen waste into nutritious soil for plants. This process will help you reduce your household garbage and produce a quality soil amendment. Vermicomposting also requires little time or labor.

Only a few inexpensive materials are needed to build a vermicompost bin, including a plastic container. For an average size family, a bin that measures 2 feet by 3 feet and 8 inches deep will work. To prepare the bin, drill 12 half-inch holes in the bottom for aeration and drainage. Drill a few holes in the lid to ensure the worms receive plenty of oxygen.

Next, bedding materials are needed for the worms to burrow in. Examples of bedding materials include shredded black and white newspaper, paper bags, cardboard, decaying leaves, and

peat moss. Moisten bedding materials so they are evenly damp but not soaking wet. Once the layer of bedding is in place, add two handfuls of soil to supply roughage, then add the worms. This size bin should be initially stocked with a pound of red wigglers (around 1,000 worms), which can be purchased from a vermicompost worm supplier.

Place a plastic tray under the bin to collect any moisture that may drain off. Store the bin in an area where the temperature will remain between 55 and 77 degrees. Add half a pound of vegetable and fruit scraps to the bin each week to feed the worms, but avoid feeding them meat scraps, bones, fish, greasy or oily foods, and pet or human waste. For more information about vermicomposting, visit <http://worms.ncsu.edu>.

— Della King

Tips & Tasks

Spring Chores

Once March arrives, spring gardening fever is soon to follow. Spring gardening activities to work on over the next few months include:

- Plant beets, broccoli, cauliflower, cabbage, kale, kohlrabi, leaf lettuce, mustard, potatoes, radish, spinach, Swiss chard, and turnips outside through the month of March for an early spring garden.
- Wait until April and May to plant frost-sensitive vegetables such as green beans, lima beans, cantaloupe, sweet corn, cucumbers, eggplant, okra, southern peas, peppers, squash, sweet potatoes, tomatoes, and watermelons.
- Fertilize established trees and shrubs starting in March. Follow soil test results or use fertilizers like 16-4-8, 12-4-8, or 12-6-6 and follow the instructions. Do not place fertilizer directly in the planting hole of new trees, shrubs, or flowers.
- Do not fertilize Bermuda, centipede, St. Augustine, or zoysia grass lawns during early spring. Wait until May to begin this chore, once temperatures get them actively growing and able to take up the nutrients you apply.
- Give landscape beds a spring cleaning by removing winter weeds and redefining bed edges with a shovel or rented bed edger. Apply a fresh layer of organic mulch 2 to 4 inches deep but avoid piling mulch against plant stems.

— Danny Lauderdale



Showstopper — ‘Greensleeves’ dogwood

The Kousa dogwood is a handsome small- to medium-sized tree reaching a mature height of 30 feet. Sometimes referred to as the Chinese dogwood, it is an Asian cousin of our native flowering dogwood.

Our native dogwoods flower in April, while the Kousa dogwoods bloom nearly a month later, in May. The Kousa dogwood has attractive peeling bark on mature tree trunks and produces berries in autumn that resemble raspberries.

A great addition to any Carolina landscape, Kousas can be grown in full sun or partial shade. The soil should be well drained but moist. There are several named selections in the nursery trade, such as ‘Greensleeves’, ‘Satomi’, and ‘Blue Shadow’. All are hardy in zones 5 to 8. Don’t let this opportunity to transplant a real showstopper pass you by.

– John Vining

Edibles — Blueberries

Blueberries are not only delicious and nutritious – they are also easy to grow in most North Carolina yards. To grow well, blueberry bushes need acid, well-drained soil, and sun at least half of the day. Before planting, test your soil pH by submitting samples to your local Cooperative Extension center. If your soil pH is lower than 4.5 or higher than 5.5, an Extension agent will recommend ways to adjust it. Improve growing conditions by mixing composted organic matter into the soil at least 6 inches deep. In clay or heavy soils, plant bushes on a mound to improve drainage. Make sure to plant varieties suited to your area by checking with your local Extension center for recommendations. Homeowners in the NC coastal plain and piedmont should plant rabbiteye varieties such as ‘Columbus’ and ‘Climax’, while mountain gardeners can grow highbush varieties such as ‘Blueray’ and ‘Jersey’.

– Charlotte Glen

Pest Alert — Brown marmorated stink bug

Since last autumn, the brown marmorated stink bug (*Halyomorpha halys*) has been invading homes and other buildings throughout the state. The stink bug feeds on a variety of hosts in the landscape, including—but not limited to—*Buddleia* sp., pawlonia, hibiscus, zinnia, and sunflower. Both commercial and ornamental fruit trees, such as apples and peaches, can also serve as host plants. Stink bugs inflict leaf and fruit damage primarily from feeding with needlelike mouth parts.

The biggest problem for homeowners is the bugs’ overwintering behavior of collecting inside structures and homes when seeking shelter, much like the multicolored Asian lady beetle.

They do not harm people, but they can emit an unpleasant odor when crushed or vacuumed. Appearance in homes usually begins about late September or early October.

The *North Carolina Agricultural Chemicals Manual* suggests either malathion or permethrin as a control agent for ornamentals and vegetables. For homes, sealing and caulking all entry spaces usually keeps stink bugs at bay. If they are found inside, hand removal and vacuuming are the best options. A piece of ladies’ hosiery over the vacuum’s nozzle allows for easy disposal of the insects and keeps the odor from lingering in the vacuum canister.

– Will Strader

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Brown marmorated stink bug
Halyomorpha halys
© USDA/ARS

Sustainability

Western Carolina Community College

What does *sustainable* mean? Something is sustainable when it meets present needs without compromising the ability of future generations to meet their needs. Western Piedmont Community College, located in Morganton, NC, is now offering an associate’s degree in applied science in its new Sustainable Agriculture program. The two-year program is designed to teach students how to produce their own fruits, vegetables, livestock, and poultry in a way that will generate income and, at the same time, be safe for the environment. Although the program is young, interest has been high. Classes have already built a 3-acre homestead where students can learn how to use alternative techniques when growing their crops. For more information about this program, call program chair Chip Hope at 828.448.3554.

– Donna Teasley