



# Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Spring 2011

Empowering  
gardeners.  
Providing  
garden  
solutions.

## in this issue

### MOUNTAIN NEWS

Selecting Plants  
for Your Garden

Shiitake  
Mushrooms

The Botanical  
Gardens at  
Asheville

Minimize Pesticides  
on Fruit Trees

### STATE NEWS

Japanese Maples

'Greensleeves'  
Kousa Dogwood

Blueberries

Stinkbugs

## 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 12 (8:00-NOON)**

**Spring Garden School**

Rutherford County Extension Center, Spindale

- This year's event highlights edibles, featuring edible landscapes, beekeeping, culinary herbs and more.
- Call (828) 287.6011 to register

**March 12 (10:00-NOON)**

**Home Lawn Care Workshop**

Morganton Ace Hardware, Morganton

- Learn how to manage your lawn, whether sowing a new lawn or controlling weeds in an established lawn.
- Call (828) 439.4460 to register.

**March 19 (10:00-3:00)**

**Composting Bonanza**

Jackson Park, Hendersonville

- Learn about home and commercial composting plus vermicomposting.
- Pre-registration is required. Call (828) 692.0385

**March 31 (5:30-7:30)**

**Building a Raised Bed Garden**

Burke County Extension Center, Morganton

- Learn how to build and maintain your own raised beds. What to plant and how to extend the growing season are just two of the topics covered.
- Call (828) 439.4460 to register.

**April 4 (3:00-4:00)**

**Grow a Great WNC Lawn**

Bullington Center, Hendersonville

- Learn how to keep that mountain lawn green and growing at this informative workshop.
- Call (828) 697.4891 to register

**April 19 (5:30-7:30)**

**Spring Weed Tour**

Burke Extension Center, Morganton

- Take a tour of the lawn and see what's growing and how to control what you find there.
- Call (828) 439.4460 to register

## Smart Gardening: Selecting plants for your garden

This is the season when most gardeners are hitting the garden centers and retail nurseries to shop for great plants. Often, they are overwhelmed by the variety of choices. The guidelines below may help you make sound decisions on what plants to purchase.

Begin by developing a checklist of environmental conditions in the areas of your yard or patio that you want to plant. Include the amount of sun or shade, soil drainage, air movement, presence of utilities, access to irrigation, and soil type.

What kind of plants are you looking for? Do you prefer annuals, perennials, shrubs, trees, vines, or would you like a few of each? Do you want flowers? If so, what colors and sizes? When do you want them to bloom, and how much maintenance are you willing to provide?

Do you want the plants to have a purpose such as to serve as a screen, provide food for

wildlife, climb a wall or fence, act as a ground cover, or be a specimen plant? Are you interested in native plants? Are you interested in edible landscaping? Do you want winter interest or summer interest only? Do you have concerns about pest control and prefer plants that have few pest problems?

There are many vendors in all areas of North Carolina who carry quality plants. Often those that are grown locally and either sold by the grower or by a local, knowledgeable vendor will be the best plants for your garden. Take this checklist to your garden center or retail nursery of choice and consult with the knowledgeable staff. If the people working there can't answer your questions, find a vendor with staff who can. Many of our garden centers and retail nurseries employ NC Certified Plant Professionals who can point you in the right direction.

— Clifford Ruth

## Food Production: Shiitake mushrooms

Vegetable gardening doesn't have to be simply about beans and corn and tomatoes—not anymore, anyway. North Carolina farmers are learning about new crops that can be grown in our state. Not all farmers have the acreage needed to grow traditional crops, but some specialty crops don't require large areas. A crop such as shiitake mushrooms can fit in an extremely small space. Although production in North Carolina is limited, more than 70 family farms across the state supplement their incomes by growing shiitakes.

Button mushrooms are the number-one seller in the country, but shiitakes are a close second and are the type grown in North Carolina. The mushrooms are grown on stacked logs and do not have to be plowed or weeded. They have few pest problems and can be pro-

duced without the use of pesticides. The small quantities grown in North Carolina are sold at farmers' markets and at local restaurants. It is a

business where grower and customer get to know each other and come to appreciate each other's unique talents.

Shiitakes need a specialized growing system and are produced on logs inoculated with spawn. A log can produce for up to ten years and as farmers learn more about this exotic crop, harvests are becoming more consistent and reliable. Like all food production, it's a hard job, but how exciting to see that first little mushroom pop up on a stack of logs!

If you would like to learn more about growing shiitake mushrooms, check out the website at [www.ces.ncsu.edu/forestry/](http://www.ces.ncsu.edu/forestry/).

— Donna Teasley



## Garden Spot: *The Botanical Gardens at Asheville*

In 1960, a group of visionary citizens from the Asheville area saw the need for a public garden to showcase plants native to the southern Appalachians. They were concerned about the loss of biodiversity and the dwindling number of native plant habitats.

Thanks to their efforts, the 10-acre Botanical Gardens at Asheville were established on land owned by what is now UNC-Asheville. The gardens are still thriving, and in 2010 they celebrated their fiftieth anniversary. The botanical gardens host many special events throughout the year and are a popular location for weddings and other special events as well.

The plant collection of the Botanical Gardens at Asheville represents more than 600 species that are native to the southern Appalachians. These include many species of trees, shrubs, wildflowers, vines, grasses, and sedges. Habitats vary from sunny and dry to shaded and wet, allowing suitable niches for a wide variety of plants. The gardens are a refuge for more than 50 species that



Photo courtesy BGA.

Visitors take inspiration from features such as this rock garden, which includes Heartleaf, Christmas Fern, and Bleeding Heart.

are considered uncommon, rare, or endangered on a regional, state, or federal level.

April through May is the peak season for spring blooms throughout much of the gardens. Admission is free, but donations are accepted. For more information, visit the BGA website at: <http://www.ashevillebotanicalgardens.org>, and plan your visit today!

—Diane Turner

## Environmental Stewardship: *Minimize pesticides on fruit trees*

If you have fruit trees such as apples and peaches in the landscape, you may think you need to spray every week to keep insects and diseases away. But good management techniques can help you minimize pesticide use.

Sanitation is a key in reducing diseases that affect the tree and fruit. Removing pruned wood reduces fire blight and black rot inoculum on apples. Raking up and disposing of dead leaves will also help reduce apple scab problems in the spring. Also dispose of rotted and mummified fruit, as diseases for both apples and peaches will overwinter on the fruit.

Pruning fruit trees every year is a must in most circumstances. Pruning opens up the tree to sunlight and allows air movement. Both sunlight and air movement help dry out the tree canopy after dews and rain, thereby reduc-



ing conditions that favor disease development. Pruning also allows pesticides to better penetrate the interior of the tree.

Know your tree fruit pests and what conditions favor them. Apples and peaches are susceptible to diseases that are favored by either cool or hot weather. Most insect pests show up at specific times of the year, which means pesticide sprays should be timed accordingly.

Finally, be prepared to accept a little cosmetic damage. Some diseases, like sooty blotch and flyspeck, are superficial and can be eliminated by peeling the fruit. By facing the reality that your fruit won't have that supermarket look, you can save sprays and still enjoy delicious, quality fruit.

—Bill Hanlin

# Tips & Tasks

## March

- This is a good time for severely pruning shrubs that need renovation.
- Prune fruit trees, blueberries, and grapes, and plant all fruit crops.
- Apply pre-emergent herbicides for crabgrass by mid-March to stop crabgrass seeds from germinating.
- Replenish mulch to maintain a 3- to 4-inch layer.
- It takes about 6 weeks to grow tomato and pepper transplants from seed. Plant seeds in late March for transplanting in early May.
- Divide and transplant perennials.

## April

- Mow tall fescue lawns to a height of 2½ to 3 inches to help control weeds.
- Control broadleaf weeds in lawns as they begin to appear. Apply a broadleaf herbicide such as 2-4, D or MCPP.
- If needed, trim spring-flowering trees after blooms fade.
- Prune evergreen shrubs now through June.

## May

- Daffodil bulbs can be moved now. Dig deep so you don't damage the bulb.
- Plant warm-season vegetables around the first of May. Wait until Mother's Day for gardens at higher elevations.
- Zoysia grass lawns can be fertilized with 1/2 pound of nitrogen per 1,000 square feet 3 weeks after the grass has greened.
- If you move house plants outdoors for the summer, wait until nighttime temperatures are above 50 degrees. Do not place plants in direct sunlight.

—Diane Turner



## 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

### 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

State University  
A&T State University  
**NC COOPERATIVE EXTENSION**  
Empowering People · Providing Solutions  
[www.ces.ncsu.edu](http://www.ces.ncsu.edu)

**Extension Gardener** provides timely, research-based horticultural information. We publish 4 issues per year. Send comments about **Extension Gardener** to Editor and Team Leader **Lucy Bradley**, Ph.D., Extension Specialist, Urban Horticulture, Box 7609, NC State University, Raleigh, NC 27695-7609

Managing Editor **Will Strader**  
Content Editor **David Goforth**  
Regional Editors  
Coastal Plain **Anne Edwards, Charlotte Glenn**  
Piedmont **Carl Matyac, Mark Blevins**  
Mountains **Donna Teasley, Dianne Turner**  
Production Editor **Viki Balkcum**  
Designer **Karl Larson**

Photos courtesy JC Raulston Arboretum unless otherwise noted.

The use of brand names does not imply endorsement by N.C. Cooperative Extension nor discrimination against similar products or services not mentioned.

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, veteran status, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

©North Carolina Cooperative Extension **Extension Gardener** may not be reproduced without written permission. Any news media using sections of the newsletter should credit "Extension Gardener, N.C. Cooperative Extension."

11-CALS-2465—3/11

<http://extensiongardener.ncsu.edu>



Brown marmorated stink bug  
*Halyomorpha halys*

© USDA/ARS