



Extension Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Summer 2010

Empowering gardeners. Providing garden solutions.

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Hardy Tropicals — Go Bananas

Last summer, JC Raulston Arboretum's Tim Alderton reintroduced me to the pink velvet banana, *Musa velutina*, and piqued my interest in plants that are typically thought of as tropical but are hardy in at least central North Carolina. The pink velvet banana has proven itself hardy as far north as USDA Hardiness Zone 7B. While banana foliage alone is enough to provide a tropical look in the garden, this plant has the added attraction of pink bananas. This isn't a very tall banana plant, typically reaching only about 3 to 6 feet tall.

If you prefer yellow to pink, you might consider the Chinese yellow banana, *Musella lasiocarpa*. The large yellow flowers of this banana have been described as "lotus-like" and resembling "giant golden artichokes." This species appears to be as hardy as *Musa velutina*.

Those who live in the coldest areas of North Carolina might consider the textile or Japanese fiber banana, *Musa basjoo*, which is believed to be the most cold-hardy banana. It has been reported to survive in areas colder than those found in our state. This species also produces the largest banana plant of the three and may grow to be 10 feet tall or more.

Although all of these bananas are relatively hardy, mulching around the "trunk" (pseu-

dostem) during cold weather is suggested while the plant is getting established. When growing *Musa basjoo* in Zones 6 and colder, mulch may be helpful even after establishment.

Besides colorful, cold-hardy bananas, another exciting discovery for me has been cold-tolerant *clumping* bamboo. I think most of us have seen bamboo growing in North Carolina, but many hardy bamboos are of the running type — the ones that people are usually more concerned with getting rid of than planting. Dr. Todd Lasseigne, Executive Director of Kernersville's Paul J. Ciener Botanical Garden, recently introduced me to *Fargesia rufa* 'Green Panda'. This cultivar grows to approximately 6 – 8 feet tall and is reported to withstand temperatures down to -15°F. There are other *Fargesia* species and cultivars as well, including *Fargesia robusta* 'Green Screen' and *Fargesia murieliae* 'New Umbrella'. With *Fargesia*, the concern in North Carolina is more likely to be heat than cold — they do not fare well in areas with hot, humid nights. Although information about exactly where the southern limit of production lies is hard to come by, I offer this caution to those in North Carolina's coastal plain: Avoid investing a lot of money on this bamboo without trying some for several years first.

— Mary Helen Ferguson

Musella lasiocarpa



Musa velutina



Musa basjoo





Upcoming Events

June 1 (2 – 4 PM)

Ecological Gardener's Guide to Insect Control

Sarah P. Duke Gardens, Durham

- Learn how insects play important roles in our gardens and how to manage insect pests without negatively affecting beneficial insects. Fees apply.
- Call 919.668.1707 to register.

June 4 – 5

Piedmont Herb Festival

Union County Extension Center, Monroe

- A Friday night dinner is a local food banquet with lecture and music by Dr. James A Duke. Saturday's festivities include classes on all aspects of herbs, a trade fair, plant walks and cooking classes. Fees apply.
- Call 704.283.3822 to register.

June 8 – 9

Rain Water Harvesting and Rain Garden Workshop

Gaston County Extension Center, Dallas

- Learn how to plan and install a cistern and rain garden in this hands-on free workshop.
- Call 704.922.2112 for details and to pre-register.

August 8

Made For the Shade

Sarah P. Duke Gardens, Durham

- Learn how to embrace the shade with ideas for shade gardening, shade-loving plants, and finding those easy wonderful plants that won't get eaten up by the critters. Free.
- Call 919.668.1707 to register.

Smart Gardening — Stormwater management in the garden

There are butterfly gardens, children's gardens and vegetable gardens, all of which are designed and developed around a theme. What kind of garden is built around the theme of rain? Rain gardens are gardens created to help with stormwater management.

In the past, the goal has been to manage stormwater by getting rid of surface water as fast as possible. The water from roads drains into streams and the local sewer system. With more flooding of waterways, everyone is becoming aware of how important it is to manage stormwater. In addition, the old methods of managing stormwater did nothing to reduce pollutants from entering our watershed.

Now, instead of trying to get rid of stormwater as fast as possible, it is retained and allowed to slowly percolate into the soil. Wetlands and bog plants are used to help filter out pollutants in the water. More subdivisions are required to manage their own stormwater. Bioretention ponds made beautiful with plantings of attractive water-loving species become desirable focal points and also increase the biodiversity of insects and wildlife. Some subdivisions are even

doing away with traditional curb and gutter along the streetscape and using drainage ditches, which are common in rural areas.

What can you do? To start, consider using the rain that falls on your property. If you have gutters, connect the downspouts to rain barrels or a cistern. These devices can be attached to an irrigation hose and help to solve your water problems during long dry spells. Another solution is creating a slight depression in your landscape where water can collect and drain. Amend the soil in the depression to avoid standing water for extended periods. Use water-loving plants that can sustain themselves while submerged in water for a short period. Many of these plants are also well-adapted to dry periods. Several plants will flourish in wet soils, including *Hibiscus moscheutos* (swamp hibiscus), *Iris pseudacorus* (yellow flag iris), *Baptisia* species (false indigo), *Lobelia cardinalis* (cardinal flower), and *Itea virginica* (Virginia sweetspire). For more information on rain gardens, visit <http://www.bae.ncsu.edu/topic/raingarden/index.htm>.

— Michelle Wallace

Food Production — Determining vegetable ripeness

More people than ever are growing their own vegetables. So it is not surprising that questions have been coming into Extension centers on how to know when vegetables are ready to harvest. Picking at the peak of freshness allows us the best quality and flavor.

Some vegetables are quite forgiving with a long harvest window; others can go from tender and tasty to tough and bitter overnight. Take zucchini, for instance. If you miss one fruit, by the next day it is as big as a baseball bat and not nearly as tender or tasty (though still great for zucchini bread).

Harvest most vegetables just before full maturity for maximum flavor and the most pleasant texture. Harvesting at the right time also means that you will be getting the most nutrition out of your vegetables as well.

You may need to know some specifics about the cultivar you are growing. I found the fol-

lowing description of when to harvest tomatoes. One thing that immediately sticks out is that not all tomatoes are red:

“Tomato: Harvest when fruits are uniformly red, but before end softens. Ripe fruit sinks in water. Vine-ripened tomatoes are sweetest, but tomatoes will ripen off the vine if picked green. Green tomatoes, harvested before frost, should be wrapped in newspaper and kept at 55°F to 70°F. Tomatoes stored in this manner should last 3 – 5 weeks. Be sure to inspect each week for ripeness.”

Last but not least, harvesting at the proper stage will also help to keep the plants producing. Plants that do not have an abundance of leaves or fruit to develop and carry through to maturity will be able to produce more of both. For detailed information on harvesting vegetables visit <http://www.ces.ncsu.edu/depts/hort/hil/hil-8108.html>.

— Karen Neill

Garden Spot — *So you want to be a Master Gardener?*

You've heard them on the hotline, at farmers markets and other local events, answering gardening and landscaping questions. You've seen the demonstration and educational gardens they maintain across the state. You've participated in workshops or special events they've hosted. Perhaps your child or grandchild is involved in a youth gardening program they manage. And you may have thought, "I would like to be involved in those projects. How do I become a Master Gardener?"

The Extension Master Gardener program started in 1972 in Washington State, when a local Cooperative Extension agent realized that a group of well-trained volunteers could be of considerable assistance in promoting best gardening practices and answering homeowner's



Volunteers. Maintaining certification requires volunteering a set number of hours of service and continuing education each year.

For more information on the NC program, visit these sites: <http://www.ces.ncsu.edu/depts/hort/consumer/masgar/> and www.ncmastergardeners.org

gardening questions. Since then, the program has spread to more than 30 states as well as other countries.

In North Carolina, the programs operate at the county level under the supervision of the county Extension center. Interested individuals must apply and, once selected, complete 4 to 6 months of instruction on a variety of horticultural subjects. Upon completing the course and an internship, graduates are certified as Extension Master Gardener

Environmental Stewardship — *Stormwater runoff*

When rain falls on natural areas, such as forests or meadows, it is slowed, filtered by soil and plants, and allowed to soak back into the ground. When rain falls on impervious surfaces, such as rooftops, roads and parking lots, it becomes stormwater runoff. As it flows, it absorbs heat from paved surfaces and picks up pollutants, including fertilizer, pesticides, sediment, motor oil, litter, and pet and yard waste. The warmed water and pollutants degrade streams and rivers.

In most NC cities, stormwater runoff does not go to a treatment plant. Instead, water and the pollution in it flow directly into streams and rivers. Upstream from you, stormwater runoff goes into the river that supplies your drinking water. Downstream, other cities use your stormwater runoff for drinking water. During large rainfall events, stormwater runoff can cause flooding. Excess water flowing into streams also causes erosion.

Backyard rain gardens are a fun way to improve water quality and enhance the beauty of your yard or business. Rain gardens are placed between runoff sources (roofs, driveways, parking lots) and destinations (storm drains, streets, and streams). A rain garden is a shallow depression in the ground that captures runoff from your driveway or roof and allows it to soak into the ground, rather than running across roads, capturing pollutants and delivering them to a stream. Plants and soils work together to absorb and filter pollutants and return cleaner water through the ground to nearby streams. Rain gardens also reduce flooding by sending the water back underground, rather than into the street.

Besides helping water quality and reducing flooding, rain garden plants provide habitat for beneficial insects and wildlife. See the Smart Gardening article in this issue for more information.

— Kelly Collins

Tips & Tasks

Lawns

- Fertilize warm-season grasses, but do **not** fertilize tall fescue and bluegrass until fall.
- Take soil samples from your lawn and garden areas for testing. Soil testing materials are available at your county Extension center.
- Remember to change direction when moving your lawn to prevent wear patterns and other problems. Travel north to south on one mowing and east to west on the next.
- In late August, prepare the lawn for seeding or renovation of tall fescue and bluegrass lawns.

Ornamentals

- Watch for bagworms and Japanese beetles. Ask for control recommendations when you visit your county Extension center.
- Summer is a good time to see if and where your home can use some additional shade trees.
- Spray programs are available for roses, fruit trees and more from your county Extension center.

Edibles

- Renovate your strawberry bed. Prune raspberry and blackberry canes at ground level after harvest.
- Begin your fall vegetable garden by planting beans, carrots, Brussels sprouts, and tomatoes in July. Wait for August to plant lettuce, winter squash and other late-season favorites.
- Blossom-end rot may be seen on tomatoes and peppers. Two major causes are inconsistent water and insufficient calcium, so water frequently and follow your soil test results.

— Mark Blevins



Showstopper — 'Blue Chip' buddleja

Few deciduous plants are as colorful in the summer garden as the butterfly bush. Thanks to the plant breeding efforts of Dr. Dennis Werner at NC State University, a hardy miniature buddleja called Lo & Behold™ 'Blue Chip' is available for Carolina gardens. 'Blue Chip' has a symmetrical, compact spreading habit with violet-blue flowers. The blossoms are fragrant and possess malformed anthers that produce little to no pollen. Due to the tiny number of seed heads formed, 'Blue Chip' flowers prolifically throughout the summer and fall in full sun and decent soil drainage. Because of its low (2 to 3 feet tall), spreading habit, Lo & Behold™ 'Blue Chip' is perfect for the front of landscape beds or in mass plantings. As with most buddlejas, 'Blue Chip' will attract butterflies in abundance. It is deer-resistant, drought-tolerant and compact enough to grow in containers.

—John Vining

Sustainability

Make your landscape water wise

Water-wise landscapes need less water year-round, making them less reliant on irrigation. Plants vary greatly in the amount of water they need to thrive. Some can withstand long periods of low soil moisture. These include junipers, hollies, Indian hawthorn, lantana, yucca, and muhly grass. Others, such as azaleas, roses, dogwoods, impatiens, hydrangeas, and Japanese maples, need more constant soil moisture to grow well. Grouping plants in beds based on water requirements makes watering more efficient and practical. Other water-wise landscaping strategies include mulching to conserve moisture, preparing soils so they retain moisture, and using efficient irrigation practices. To find out more about water-wise landscaping and drought-tolerant plants for your area, contact your county Extension center.

—Charlotte Glen

The Produce Lady

Selecting locally grown fruits and vegetables is as easy as stopping at a farmers market or roadside stand. Next time you are looking for easy tips and recipes, be sure to visit www.theproducelady.org for all the information you need. The Produce Lady is Brenda Sutton, the Cooperative Extension director in Rockingham County. Brenda grew up on a farm in eastern Wake County and developed a love for good, home-grown food as a child. Quality local foods are her passion, and she loves sharing healthy, nutritious ways to select, store, prepare and preserve foods from the local farmers market. The Produce Lady effort consists of a series of videos on North Carolina fruits and vegetables and other local food products. You may also enjoy her updated Web site, bi-weekly blog posts, and entertaining YouTube videos.

—Diane Turner

Pest Alert — Scale insects and ground pearls

North Carolina has several scale species that can affect many ornamental and turfgrass specimens. Nandina and pittosporum varieties are common hosts for the *cottony cushion scale*. The females are approximately $\frac{3}{16}$ -inch long and have a rusty red appearance, black legs, and antennae. They have piercing and sucking mouthparts and can often be seen with a protective wax coating. The males are approximately $\frac{1}{8}$ -inch long with a reddish-purple appearance and a set of wings.

Euonymus scale can be found throughout North Carolina. Females feed by sucking out fluids from foliage. Females are approximately $\frac{1}{16}$ -inch long and dark-colored with an armor or protective cover they never leave. The males are white and will leave their armor casing to mate.

Indian wax scale can be found from Florida to Maryland on a variety of hosts, including hemlocks, azaleas, camellias and hollies. They are brownish-purple and typically found with a sticky, white, waxy coating. *Tea scale* has been found on the undersides of leaves on a variety of plants, including camellias and hollies. The adult females have a brown armor or protective coating.

Even though *ground pearls* do not affect ornamental plants, they are a problem in warm-season turfgrasses. They attach themselves to the roots of grasses and extract fluids. Ground pearls look like tiny pearls.

For more information, visit NCSU Entomology Insect Notes: <http://insects.ncsu.edu/>

—Della King



Euonymus scale infestation.

(Photo courtesy E.L. Manigault, Bugwood.org)



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