



NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

Helping  
Carolinians  
Increase Their  
Knowledge of  
Gardening,  
Manage Their  
Landscape  
Investment &  
Protect the  
Environment

JC Raulston Arboretum Plant Focus

## Uncommon Shrub with Seasonal Interest

**F**inding a distinctive tree or shrub that brings a stellar display to any fall and winter garden could not be any more rewarding than with the seven-son flower, *Heptacodium miconioides*. Fragrant flowers, beautiful fruits and showy bark bring out the best in every garden's design and are conveniently packaged in this specimen.

Buds appear in early summer and are almost forgotten until clusters of seven small flowers cover the entire canopy in fragrant, white petals every September. After the veil of white fades, the flower's sturdier calyx wraps rounded seeds in vivid colors of cherry red to rose purple.

Winter brings the opportune moment to reveal the beautiful exfoliating bark. Stems as small as 1/2 inch can have their gray-brown bark peel back to show a lighter, inner surface, most evident in the colder months when the plant is without its deciduous canopy.

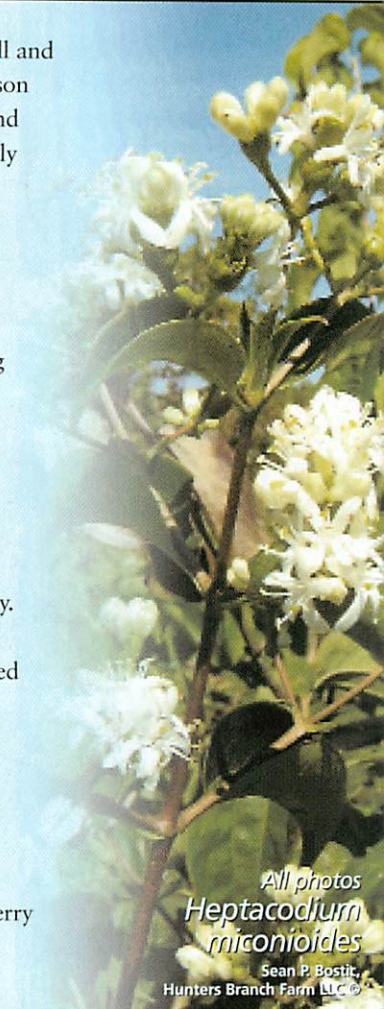
*Heptacodium miconioides* can grow 10- to 20-feet tall and half as wide in fountain-like shrub or single-trunk tree forms, depending on the gardener's choice and pruning. This moderately fast grower thrives in a range of soils from poor to rich, while preferring not to dry out completely.

All of these features combine to make this a versatile specimen or complementary plant with a relatively small footprint in a somewhat shaded urban garden or as a standout in a much larger design.

A native of eastern China, this plant was introduced to the U.S. by the Arnold Arboretum in 1980 and is popular in New England. A member of the honeysuckle family, this plant is not an aggressive self-propagator, but is easily transplanted from containers.

Find a fine example of this plant in specialized garden centers and the southeast section of the JC Raulston Arboretum in the magnolia and barberry peninsula near the weeping, winged elm.

Mark Blevins



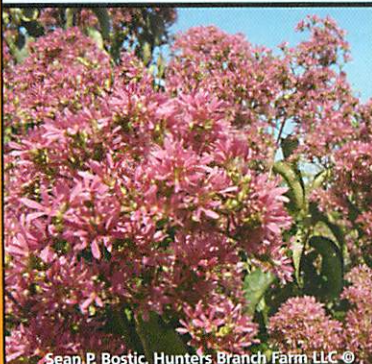
All photos  
*Heptacodium  
miconioides*  
Sean P. Bostic,  
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Sean P. Bostic, Hunters Branch Farm LLC ©



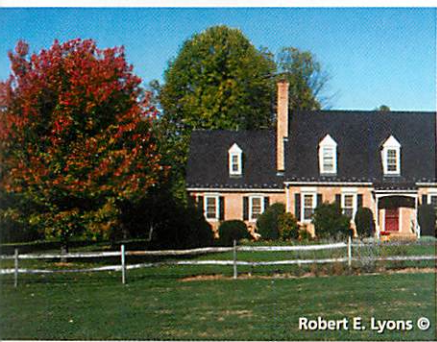
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## The Proper Care of Shade Trees

Shade trees are a worthwhile investment. They provide shade, reduce our energy costs in the summer, define our street corridors, frame our houses, and provide wood for buildings, heat for our homes and a home for wildlife. Since it can take many years for a shade tree to reach its full height and potential, it is important to choose a shade tree with superior qualities while taking into consideration site characteristics and location.

Most shade trees have the potential to live more than a century. For that reason, it is important to choose the site carefully. Take into consideration site properties such as soil type, drainage, environmental conditions (sun, shade, hardiness) and site limitations (power lines, confined root zones, proximity to buildings, underground utilities).

Before selecting the tree species, identify the location for planting and establishing the tree. Select a tree that will thrive under the site's conditions and that will provide the desired characteristics. Some of those desired characteristics include height, habit (pyramidal, oval, vase, rounded), rate of growth (slow, medium, fast), color of fall foliage, fruit (or lack of), bark, leaf persistence and disease and insect resistance. While there are dozens of different species of shade trees available, not all tree species thrive in every kind of growing condition. For example, many trees do not thrive under urban environmental conditions that include drought stress, pollution and confined root zones. It is therefore necessary to select a tree that can withstand these conditions with the desired traits.

In order to maximize your investment, follow some basic guidelines to ensure the tree's health and longevity. Choose the best tree varieties obtained from reputable nurseries that guarantee their plants. Plant at the preferred time of year, which is fall to early spring, using proper techniques. Water slowly and thoroughly the first year the tree is established. Water 1 inch every 7 to 10 days. Provide a 2- to 3-inch layer of mulch beginning at the base of the tree to form a ring of mulch that is at least 3 feet in diameter. Make sure the mulch does not touch the trunk. Use proper pruning techniques throughout

the duration of the tree's lifespan. This will help ensure health and reduce insect and disease problems to prolong a tree's life.

### Proper Planting

Dig the planting hole no deeper than the root ball of the tree. In cases where there are heavy clay soils, plant trees "high" so that the root ball sits 2 to 3 inches above finished grade. Dig the planting hole 2 1/2 times the width of the root ball. Loosen the soil within the planting hole and do not add soil amendments until the tree starts to put on new growth. Backfill half of the native soil around the planted tree, then slowly water in. Backfill with the rest of the soil and cover with mulch.

If the tree is container grown, make sure the roots are not root bound before purchasing the plant. Take care to gently loosen up the roots to encourage them to grow out of the planting hole and into the surrounding soil. If the purchased tree is in a wire cage, the wire will need to be cut up as much as possible after it is in the planting hole. Remove the burlap, ties and ropes when the plant is in the planting hole. All of these extra measures will help to prevent girdling of the tree which stops nutrients and water from moving to the different parts of the plant.

### Proper Pruning

Shade trees grow to heights of 40 feet and beyond. Occasionally, there will be dead, diseased and damaged limbs that will require removal for both the health of the tree and public safety. In addition, there may be times when corrective pruning will improve the shape of the tree or prevent the tree from growing in an undesired location. Whatever the reason, the size of a shade tree will usually require professional assistance. There are many liabilities connected with the improper removal of limbs. For this reason, hiring a certified and insured arborist is recommended.

For more information on proper planting and pruning techniques go to [www.successfulgardener.org](http://www.successfulgardener.org) and <http://www.ces.ncsu.edu/depts/hort/hil/pdf/hil-602.pdf>. **Michelle Wallace**

### Selecting Trees for Your Site

For tree recommendations, visit [www.ncstate-plants.net](http://www.ncstate-plants.net). Click on Consumer Hort Leaflets. In addition, North Carolina Cooperative Extension in Forsyth County has recently published a new color brochure on recommended tree varieties for the piedmont region. "Planting for Our Future" is free by calling (336) 703-2850 or by e-mailing [dorothy\\_stobbs@ncsu.edu](mailto:dorothy_stobbs@ncsu.edu). Please mention that you read about this brochure in *Extension's Successful Gardener* newsletter.

### Gardentalk

*"Trees outstrip most people in the extent and depth of their work for the public good."*

Sara Ebenreck



## Q&amp;A

## What do I do about millipedes?

Those fortunate enough to receive rain may begin to experience the annual march of the millipedes. Millipedes are gray- to brown-colored arthropods with worm-like, round bodies usually .5 to 1.5 inches in length. They have short antennae and up to 30 pairs of legs. Known as thousand-leggers, millipedes walk slowly with their legs moving in a wave-like motion. Millipedes curl up tightly when disturbed.

Garden millipedes feed only on decaying organic matter and consequently do not harm living plants unless the soil is allowed to dry to the point that the millipedes then feed on the roots to obtain moisture.

During damp seasons, I have heard from persons who sweep up peck basket quantities of millipedes from driveways and patios day after day. Millipedes build up in the yard, surrounding woods and mulch beds until the population is very large. Then the next time it rains, they emerge onto walks, patios, driveways and crawl into dwellings.

Millipedes require a damp environment; dry weather will drive them back into the mulch of surrounding woods. Arthropod populations vary greatly from year to year. The important thing to remember is that they do no real damage. They die soon afterwards if they enter a house. In most cases it is not highly effective or worthwhile to apply large pesticide barriers. **Karen Neill**

## Design a Secret Garden

Who doesn't like a place to get away to once in a while? Gardens are nice places to relax in general, but a few special features can make yours, or a part of it, even more private. Hardscape features like walls and fences can give privacy to a garden, and so can plants.

Surrounding an area with evergreen hedges is a fairly basic technique. Camellias, cherry laurel, Florida anise tree, mountain laurel, rhododendron, Japanese cleyera, sweetbay magnolia, pittosporum, aucuba, 'Chindo' viburnum, azaleas, junipers, most boxwood species and a number of Chinese and red hollies reach mature heights sufficient for some degree of privacy.

Trellises and arbors with climbing vines are another way to lend privacy to a garden. Evergreen vines like Carolina and swamp jessamine, Confederate or star jasmine and Armand clematis can provide screening throughout the year.

Deciduous or semi-evergreen vines include five-leaf akebia, American wisteria, trumpet or coral honeysuckle (*Lonicera sempervirens*, not *L. japonica*), Dutchman's pipe, Chinese trumpetvine, trumpet creeper, climbing hydrangea, Virginia creeper and a variety of roses. If you would like to be able to snack on your vine while relaxing, try a muscadine or hardy kiwi vine (*Actinidia arguta* or *A. kolomikta*).

**Mary Helen Ferguson**

## ENVIRO-TIP

## Energy Savings from Trees

By planning and placing trees and other plant material in strategic locations, homeowners can reduce the energy requirements during the summer and winter. Not only can trees, shrubs, vines and landscape structures reduce energy bills, they can add beauty and gardening interest. They also increase the real estate value of your home and community.

For hundreds of years homeowners have placed trees and other plants near the home by intuitively placing plants to cool and protect the homes from temperature extremes. It's only been in recent decades that it became evident there was a savings to our pockets.

Solar radiation on the home is when the sun's rays are transferred into the home as heat through either direct penetration into the home through windows or by warming the materials of the home. Deciduous trees and other plants can assist in deflecting the solar radiation in the summer. In the fall, they drop their leaves which allows the sun's rays into the home during cooler months.

Trees can reduce summer temperatures by as much as 8 to 10 degrees F, if they are properly placed to shade the roof from the noon through afternoon sun. Placing trees for this effect will help reduce the temperature inside the home and provide the comfort zones you desire.

If you are starting with no trees, select and plant trees that will, over time, provide you with this shade. Select moderate-growing trees that most often live longer than fast-growing trees, are less likely to break in wind, ice or snow storms and are more resistant and tolerant to damaging insects and diseases.

Talk to your local Cooperative Extension agent about proper tree selection and planting techniques. A healthy, strong root system provides the base for increased vigor in the plant and will attain those heights to shade your home more quickly. To contact your local Cooperative Extension Center, visit [www.ces.ncsu.edu](http://www.ces.ncsu.edu) and click on County Centers.

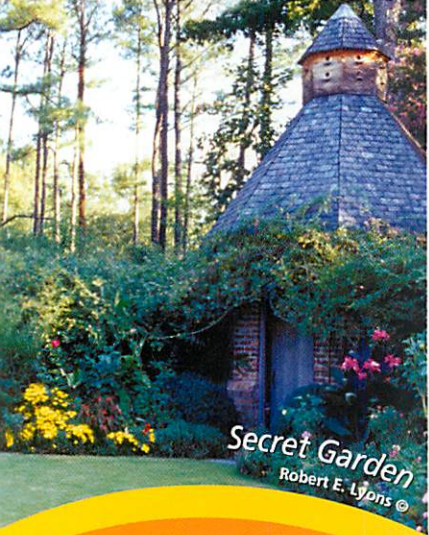
**Stephen Greer**



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Garden Spot



## Gardening in August

### Lawns

- Roll back 12-inch squares of turf 3- to 4-inches deep to check for grubs. Treat only if you find 5 or more per square foot.
- Make a final application of fertilizer to Bermuda and zoysia grasses if necessary.
- Prepare lawn areas for seeding if you plan to have a tall fescue lawn.
- Test soil. Most grasses need a pH of 6.5 for good root growth and nutrient uptake.

### Ornamentals

- Divide irises and daylilies.
- Make last application of fertilizer to roses.
- Check conifers such as junipers and arborvitae for spider mites; use a magnifying glass or hand lens.

Treat with a systemic insecticide, horticultural oil or insecticidal soap.

- Deadhead annuals to encourage late-season blooms.
- Analyze your site to see how you can enhance your site with bulbs, shrubs and trees. Fall is for planting!

### Edibles

- Start your fall garden by planting beets, Chinese cabbage, cucumbers, kale, kohlrabi, lettuce, mustard, kohlrabi, rutabaga, spinach, squash, turnips, broccoli, cabbage, cauliflower and collards.
- Strawberries will benefit from an application of fertilizer and irrigation.
- Remove spent floricanes from blackberries and raspberries after final harvest.
- Check regularly for insects such as cabbage worms, aphids, pickleworms and squash vine borers.
- Treat peach and nectarine trees for borers after last harvest or by August 1, whichever comes last. Wait no later than the first week in September. *Mike Wilder*

### The Cape Hatteras

**National Seashore** provides a haven for recreation and reflection, and a place to explore seaside flora and fauna. The islands of Cape Hatteras are constantly changing due to tides, storms, the dynamics of the ocean's currents and the wind that shapes much of the vegetation in and around the beaches of the Outer Banks.

The Hatteras seashore offers a wide variety of activities: birding to boating; camping to cycling; fishing to folklore; and surfing to seashells, with natural and historic attractions thrown in. Don't forget the lighthouses. Cape Hatteras Lighthouse is the tallest lighthouse in America.

Interpretive programs are offered by the national park rangers. Several self-guided trails, averaging one mile each, are available. Longer hikes can be taken along the dikes at Pea Island National Wildlife Refuge and on the North Carolina mountains-to-sea trail, which runs through the seashore. Learn more at [www.nps.gov/caha/](http://www.nps.gov/caha/).

*David Barkley*

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- ▶ N.C. & National Associations of County Agricultural Agents
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