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Protect the
Environment

NC STATE UNIVERSITY NORTH CAROLINA COOPERATIVE EXTENSION

JC Raulston Arboretum Plant Focus

Sweetshrub Provides Alluring Fragrance, Subtle Charm

Calycanthus, commonly known as sweetshrub, sweet bubbly or simply calycanthus, is a favorite of many gardeners. An old-fashioned deciduous shrub, it has been overlooked in recent history but is now making a comeback. It is best known for maroon-red fragrant flowers that open before the leaves emerge in the spring. People in the know plant sweetshrubs around patios or decks where they can enjoy the strawberry-scented aroma.

Sweetshrubs are easily transplanted and can be grown in sun or shade. They can get tall and leggy, growing 6 to 9 feet tall, but pruning after flowering will keep them presentable. They prefer a deep, well-drained loamy soil, though they are tolerant of less-than-perfect soil conditions. Sweetshrubs are tough plants, having few insect or disease problems.

One species of calycanthus is native to North Carolina. The Carolina sweetshrub is commonly found growing as an understory shrub in woodlands and along streams. Sweetshrub can be propagated by seed, but some seedlings may not be true to type and may not have fragrant flowers. Softwood cuttings taken in late spring and summer and treated with a rooting hormone will root readily for most cultivars.

Varieties such as 'Hartlage Wine', 'Athens' and 'Michael Lindsey' are good choices for different flower colors and improved fall color. New hybrids are being developed at NC State University using a combination of different calycanthus species. One of the most promising varieties is a selection called 'Venus' produced by crossing three different species. 'Venus' produces large, ivory yellow buds on a medium-sized shrub. These buds open into large, upright white flowers that resemble a magnolia bloom. The spring blooms are very fragrant and much showier than the native sweetshrubs. 'Venus' is now being propagated by several commercial nurseries and will be available to the gardening public shortly. Hold a spot in your garden for 'Venus'. It will be worth the wait.

Mark Danieley



'Michael Lindsey'
Thomas G. Ranney ©

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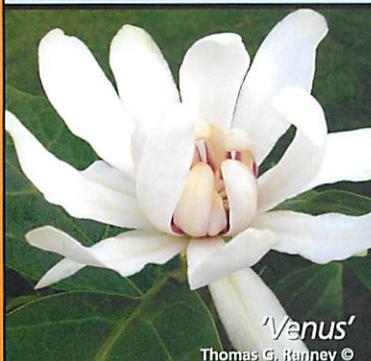
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Garden Spot

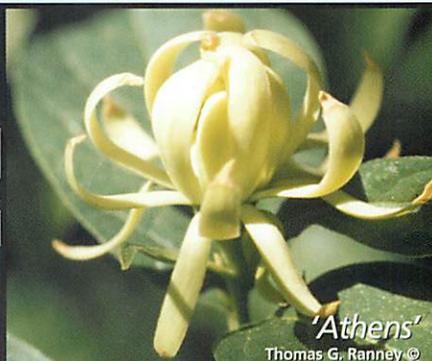
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'Venus'
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'Athens'
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'Hartlage Wine'
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Raised-Bed Gardening Yields More Than Lush Plan

North Carolinians are blessed with pretty nice weather for gardening but our soil leaves something to be desired. One common method of correcting soil problems is by using raised beds for vegetables, small fruits and perennials. Raised beds allow gardeners to concentrate on amending soil in small spaces instead of tackling huge areas.

Raised beds are popular for many reasons. Research indicates that a well-maintained garden can yield approximately double the conventional yield from planting in rows. This greater production can be attributed to improved soil conditions including reduced soil compaction. Water, air and roots all have difficulty moving through soil compressed by tillers and human feet. Gardeners can avoid the problem completely by creating beds narrow enough to work from the sides.

When creating raised beds, make them wide enough to reach across but no wider than 4 feet. Bed length can be whatever suits the needs of the gardener. Bed depth is normally 8 to 12 inches if you choose to enclose or frame the bed. If the bed is not framed, the bed should be about 6 inches deep with rounded edges to help prevent erosion.

Raised beds are perfect for individuals who find it difficult to bend over. They also make gardening accessible to people in wheelchairs. Benches may be built around the raised bed to allow gardeners to sit and work the soil. Supports

for poles, trellises and cages can be mounted to the raised bed frame to ensure easy installation and removal.

Pest control becomes less difficult in raised beds. If burrowing rodents are abundant, line the bottom of the bed with poultry wire or hardware cloth. To discourage rabbits, place a low wire fence around their favorite foods. Weed control with plastic mulch can be achieved economically, as a roll of plastic mulch can span the width of the bed.

Raised beds create a reduction of space for weeds to grow due to the plants within the bed being very close together. Raised beds also allow for water conservation with the use of soaker hoses and drip irrigation systems.

Soil preparation is the key to successful raised bed gardening. There is no substitute for deep, fertile soil high in organic matter. Humus-rich soil holds extra nutrients and moisture. If the garden soil you have is not deep, double digging the beds will improve the soil. Remove the top 9 to 12 inches of soil from the bed. Insert a spade or spading fork into the next 9 to 12 inches of soil to break up compacted layers. Mix the topsoil that was removed with a generous amount of compost or manure and return the mixture to the bed. It should be fluffy and slightly raised. Continue this action every 6 to 8 inches along the bed.

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Squash Vine Borers

Squash vine borers can be very destructive to squash and pumpkin plants. By boring into a vine near the base, this thick, white, brown-headed caterpillar causes entire plants to wilt. The larvae overwinter 1 to 2 inches in the soil within a dark, dirt-encased cocoon and molt into pupae in the spring. Within two or three weeks after molting, the 3/4-inch-long pupa has worked its way to the soil surface and emerged as an adult.

The adult squash vine borer is a moth with metallic greenish black wings. The abdomen is ringed with red and black. Females lay red eggs near the base of plant stems. Eggs produce smooth, white caterpillars that bore into the center of a vine a few days after hatching. Small piles of green excrement and wilting of whole vines are signs a plant is infested with squash vine borers.

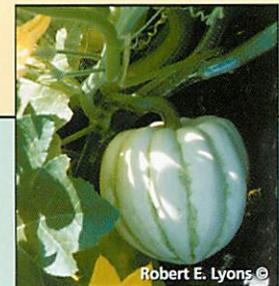
There are two generations of this pest each year. Damage is usually noticed in early June and again in early August. To avoid problems



Robert E. Lyons ©



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with squash vine borer in the home garden, disk the garden soil in the fall to expose the cocoons and then plow deeply in the spring. Destroy vines after you finish harvesting for the season to prevent late caterpillars from completing their life cycle.

If there is evidence of borer activity, remove the borer by slitting the vine with a sharp knife and removing the larvae. Then cover the injured area with moist soil. Some gardeners put a shovelful of soil at one or more locations along each vine. This is to encourage the plant to develop a supplementary root system and thus overcome squash vine borer attacks at the base.

Amy-Lynn Albertson

Q&A How do I control dandelions in the lawn?

As spring moves into full swing, many perennial weeds are actively growing and maturing. One perennial weed that receives much attention is the one with that little yellow flower, the dandelion. It quickly develops a mature rosette of leaves and is ready to begin producing flowers for the summer. The flowers will produce numerous seeds that will blow in the wind, spreading around the landscape and, before you realize it, take a strong foothold in the lawn.

Dandelions, like other perennial weeds, are best controlled while they are in the young and actively growing stage. This stage is seasonal depending on the germination of the seeds. The dandelions you see

this time of year germinated from seed in the late summer the year before if not earlier. Timing is critical to stop this plant in its tracks. The trick is to apply the appropriate herbicide to the lawn before flowering begins and the weed is in active growth. There are many broadleaf herbicides available at garden centers that are labeled for the control of dandelion. Check with a horticulture agent at your local Cooperative Extension Center for research-based advice. Most products for use to control broadleaf herbicides are for use in lawn areas and could potentially damage other broadleaf plants in the landscape. Remember to read and follow all label directions carefully.

Stephen Greer

▼ Raised-Bed Gardening

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Treated wood is often used as the construction material for enclosed raised beds. Use the new lumber that is treated with chromated copper arsenate (CCA). This preservative is the safest for the garden because of its very low tendency to leach into soil. Avoid using creosote-treated railroad ties. Freshly treated creosote lumber can leach into the soil for several years and continues to give off vapors over a seven to nine year period. Other construction material options include cement block, recycled plastic lumber or brick. Be sure to keep in mind that cement blocks can raise the soil pH over time.

Start planning or building your raised beds now to enjoy this planting season. There is no better sign of being a successful gardener than eating fresh vegetables from your own garden.

Diane Ashburn

ENVIRO-TIP Landscape Fabrics Help Reduce Weeds

Landscape fabrics or geotextiles are woven and nonwoven fabrics of polypropylene or polyester. Not only do they block weed growth, they also allow water, fertilizer and oxygen to penetrate through to the soil and the plant roots.

However, if landscape fabric is used alone as a mulch it will degrade from the sun's ultraviolet rays. Landscape fabrics are best used as underlying mulch to another type of mulch such as pine needles or bark chips. This enhances the weed-suppressing ability of the mulch by separating the mulch layer and the soil surface. The nonwoven polyester fabrics usually have a longer lifespan and greater resistance to degradation than the polypropylene materials, though they also are more expensive. Before applying a landscape fabric, clear the area of all weeds. Landscapers and homeowners who work with landscape fabrics say that it is easier to plant trees and shrubs in

the weed-free soil first. Then add the fabric. When the fabric is laid out, cut slits that allow the fabric to be worked around the base of each plant. Landscape fabric is useful for weed control in perennial landscapes but may not be worth the effort around annuals.

After the landscape fabric is down, apply a 1- to 3-inch layer of mulch on top of the fabric. This improves the appearance, reduces wear and decreases deterioration from the sun. Like all mulches, landscape fabric is not 100 percent effective at blocking weeds. Weeds that germinate and grow in a bark or wood chip top mulch can grow right through the fabric. Nutsedge and Bermuda grass can be very difficult to control if established in a bed with landscape fabric. Try to destroy all weeds as soon as they are noticed in order to keep the area weed free.

Amy-Lynn Albertson



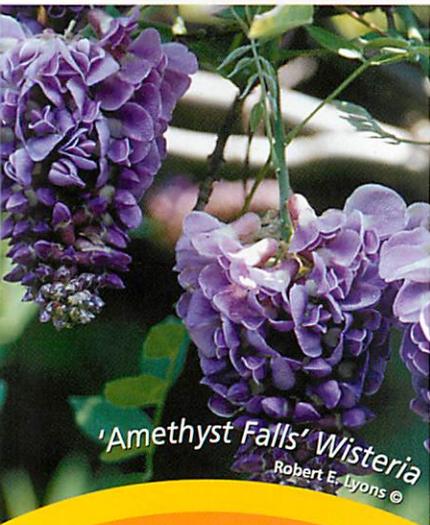
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gardentalk



*"Talk of mysteries!
Think of our
life in Nature
- daily to be
shown matter,
to come in contact
with it - rocks, trees,
wind on our cheeks.
The solid earth!"*

Henry David Thoreau



Gardening in May

Lawns

▪ Fescue lawns that are maintained at the correct height are less likely to have disease and weed infestation. Mow fescue and fescue/bluegrass blends at 3 to 4 inches in height. Mow frequently and remove no more than one-third of the blade at each cutting.

Ornamentals

▪ Plant summer-flowering bulbs this month, including gladioli, dahlias and cannas.

▪ Disbud rhododendron and prune to keep plants compact.

▪ Keep a close check for lace bugs on azaleas and rhododendrons. Turn the leaves over and check for black tar-like spots. Spray underneath the leaves to keep lace bugs in check.

▪ Ticks come out this month. Check yourself thoroughly if you work outdoors or walk in open fields or wooded areas. Mark the calendar when a tick is removed.

▪ Anthracnose may be a problem on shade trees such as maple, oak and sycamore but they do not need to be treated as this will not kill the tree.

▪ Take time to mulch around trees and shrubs. This practice reduces weeds, controls fluctuations in soil temperature, retains moisture, prevents damage from lawn mowers and looks attractive.

Edibles

▪ Plant warm-season vegetables, such as tomatoes, peppers, squash, melons, okra and beans, while continuing to harvest cool-season crops.

▪ Protect newly transplanted vegetable plants from cutworms with cardboard collars. Cut strips of cardboard 2 inches wide by 8 inches long and staple them into circles. Press the collar about 1 inch into the soil around the stem to fence out the cutworms and protect the stems of the vegetable plants. **Darrell Blackwelder**

Greensboro's Bicentennial Garden

will feature one of the city's premiere garden events this month. Sponsored by Greensboro Beautiful and the Greensboro Parks & Recreation Department, "Parisian Promenade," will be from 1 to 5 p.m. on May 15.

The fifth annual garden event will showcase more than 25 painters and photographers along the garden's walkways, fresh-cut flower bouquets, live musical performances, a sidewalk café with a variety of foods, a May pole dance and a children's area with activities for the whole family. Take advantage of this perfect opportunity to see a brilliant garden display. The garden includes a wealth of plantings from groundcovers, shrubs, mass plantings of annuals and perennials to flowering and canopy trees.

For more information about the gardens and "Parisian Promenade," including parking and shuttle arrangements, contact the Greensboro Botanical Gardens office at (336) 297-4162. For wedding reservations, call (336) 373-2457.

Karen Neill

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Successful GardenerSM Editor

Department of Communication Services
Box 7603, NC State University
Raleigh, NC 27695-7603

Editor and Team Leader: **Leah Chester-Davis**
Extension Communication Specialist

Account Coordinator: **Rhonda Thrower**
Department of Communication Services

Assistant Editor: **Karen Neill**
Consumer Horticulture Agent, Guilford County

Compilations Editor: **Amy-Lynn Albertson**
Consumer Horticulture Agent, Davidson County

Contributors:		
County	Name	Phone
Brunswick	David Barkley	(910)253-2610
Burke	Donna Teasley	(828)439-4460
Cabarrus	David Goforth	(704)920-3310
Catawba	Fred Miller	(828)465-8240
Cumberland	Emily Revels	(910)321-6860
Davidson	Amy-Lynn Albertson	(336)242-2091
Durham	Paul McKenzie	(919)560-0525
Forsyth	Toby Bost	(336)767-8213
	J. Stephen Greer	(336)767-8213
Gaston		(704)922-0777
Guilford	Karen Neill	(336)375-4891
Henderson	Diane Ashburn	(828)697-4891
Iredell	Donald Breedlove	(704)873-0507
Lincoln	Kevin Starr	(704)736-8452
Mecklenburg	Jim Monroe	(704)336-2561
Nash	Mike Wilder	(252)459-9810
Orange	Royce Hardin	(919)245-2050
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