

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

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Garden
Spot

JC Raulston Arboretum Plant Focus

Remarkable and Versatile Sedums

The rocky cliffs in the mountains of North Carolina have some tough growing conditions. Shallow rock depressions contain a thin layer of soil that has formed or washed in over the years. The soil dries to a crisp between rains. Sedums, also known as stonecrops, will tolerate these conditions and this toughness makes them almost bulletproof in the garden.

North Carolina is home to 10 native or naturalized species of sedum. At least 8 species, originally hailing from Japan, China, Korea and the Caucasus Mountains, are available in local nurseries with 60 more species and numerous cultivars available by mail order.

Sedums are customarily divided into low-growing and upright species. Low-growing species such as *Sedum acre* (goldmoss) are traditionally used as groundcovers and in rock gardens. It is a good choice for green roof gardens, a popular trend on flat-roof surfaces to improve surface water runoff while cooling the building.

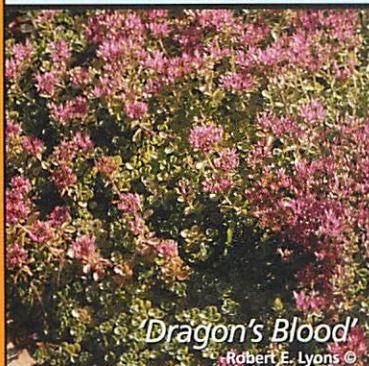
Foliage can be the main reason for planting low-growing sedums but their flowers can be equally rewarding when selected carefully. The color varies from burgundy bronze on some species to pinks, whites, grays or greens on others. Flowers commonly are yellow or gold but *Sedum brevifolium* has pinkish white flowers and *Sedum sieboldii* 'Dragon's Blood' has red flowers.

Upright species include *Sedum spectabile* and *Sedum telephium*, also known as "live forever" or "orpine." These are used as specimens or in a mixed perennial border. Flowers on the upright sedums are red, pink or white. These flowers will attract butterflies. The dried seed stalks are persistent and decorative through the winter. *Sedum* 'Autumn Joy' is a well-known upright cultivar with pink flowers that seem to be a favorite for bees. All sedums are suitable for containers.

Both the JCRA Perennial Border and the outside areas of the Lath House contain sedums. *Sedum* 'Vera Jameson' has particularly lovely flowers that stand vibrantly against any surrounding green foliage. **David Goforth**



'Autumn Joy'
Robert E. Lyons ©



'Dragon's Blood'
Robert E. Lyons ©



'Vera Jameson'
Robert E. Lyons ©



'Atropurpureum'
Robert E. Lyons ©

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Robert E. Lyons ©

Calendula

Robert E. Lyons ©

Japanese Anemone

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Heuchera

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Ornamental Kale

These Annuals & Perennials Accent Fall Color Show

Fall for many North Carolinians is one of the great highlights of the gardening year. After a hot, humid summer the air feels crisp and the temperature is tolerable. Many of us are rejuvenated and ready to enjoy our gardens again. There is a world of color bursting from our deciduous trees, and our annuals and perennials have a lot to offer, too. Pansies and mums are great old standbys, however, there are many other flowers out there to try.

In the perennial garden you can complement the brilliant red, scarlet, orange and yellow of fall trees with a mix of lilac, violet and blue. *Sedum* 'Autumn Joy' and *S.* 'Vera Jameson' have beautiful cotton candy pink flowers. *Boltonia latisquama* 'Masbolimket' is a complement to yellow colors with its lavender blooms and yellow centers, offset by dark green foliage. *Solidago species* add bright yellow flames to the garden; their height and upright blooms make a nice contrast with the mounded forms of mums. Japanese anemones bloom from late summer into fall with gorgeous white and pink blooms held gracefully on branching stems arising from handsome green foliage. *Calendula*, also known as pot marigold, prefers full sun and comes in orange, reddish orange and yellow. *Dianthus* hybrids or China pinks prefer full sun to partial shade and come in white, pink, red and violet. *Dianthus* will overwinter and perform with your pansies for early spring color. *Dianthus* is also more heat tolerant than pansies.

Don't overlook foliage in the fall garden. The foliage of many peony cultivars turns bronze or wine-red, and some *Heuchera species* develop red patterns on their foliage. Ornamental grasses can be the star of any fall garden; many bear great flower heads that remain showy well into winter. Grasses also add structure to the garden in contrast to the compact mounded forms of many of the perennials.

If mum is the word for your fall garden try some of the newer Belgian varieties. Regular garden mums come in many different flower types. Cushion mums have small, tight flowers about the size of cotton balls and they offer the longest bloom time. Petal blooms are between cushion and daisy types, and offer beautiful blooms and long-lasting color. Daisy blooms are open petals with a small cushion center. They offer lots of color including two-tone colors. The Belgian varieties have the same flower types but the plants are a little smaller with loads of blooms on them, almost

3 to 4 times the amount of blooms as other varieties, in an array of colors. When choosing mums at a garden center, keep in mind that the less expensive mum in the small container can be as big as the larger one soon after it is planted. Some are in full bloom while others may not be. The ones in full bloom will give you instant color, but those just opening will last longer into the season.

Don't forget annuals in the flowering mix. Change out some of the faded summer blooming annuals in your container gardens with new fall blooming annuals from Proven Winners. *Osteospermums* provide great color contrast and add depth to many containers. *Agryanthemums* or Marguerite daisies have delicate foliage that complements cute daisy flowers in an array of colors. *Diacias* and *nemesias* make lovely hanging baskets or edging for the garden. Hardy to zone 8, these delicate flowers may overwinter in the coastal plains. *Dusty miller* is an excellent source of cool-season color and overwinters in many parts of the state. *Coleus* can add some diversity to your fall foliage too. For those of you in the warmer parts of North Carolina, try violas or Johnny-jump-ups instead of pansies. *Violas* look like a smaller version of the pansy with a lot more blooms. They are much more heat tolerant, giving you more bloom for your buck. If you absolutely need pansies for that cool-season color, look at the 'Magnum' series of pansies. This pansy stands up to heat better than most, resisting the urge to get leggy as temperatures rise. Like other pansies, the 'Magnum' series can take cold temperatures and will flower in partial shade as well as full sun.

Some new favorites for fall gardens are edible ornamental peppers. The show comes from brightly colored fruit that cover the top of the plant. If you get tired of looking at them, you can harvest the peppers and add them to a favorite recipe. Some other treats for the eye are the ornamental cabbages and kales. *Redbor kale* is a large selection producing wavy, deep burgundy leaves. Some of the ornamental kales can get as large as 3 feet by 2 feet, so think big when placing these plants in the garden. *Red Giant mustard* produces foliage in burgundy and green that is beautiful and edible. Other greens like mustard, tatsoi and arugula make nice foliage additions to your fall garden and to your salad.

Amy-Lynn Albertson



Why aren't my plants blooming?

When trees and shrubs are selected for their flowering habit, it's discouraging when they fail to bloom or set fruit. It is often difficult to pinpoint the exact cause of a plant's failure to bloom but here are some possibilities.

The plant may be in a location that is too shady. There may be excessive competition from adjacent shrubs or tree roots.

Planting too deep may prevent flower bud set. Pruning at the wrong time of year could be a factor. Spring-flowering shrubs such as lilacs, forsythias, azaleas and rhododendrons produce their flower buds during the summer months and open the following spring. If these plants are pruned in late summer the flower buds will be removed. For late-summer flowering shrubs such as

Buddleia davidii or clematis, a midsummer pruning could remove their flower buds and thus prevent flowering to occur.

Excessive sucker growth (fast-growing, unwanted branches growing up from major limbs near the base of the trunk) might reduce or limit flowering.

Newly planted trees or shrubs may not flower for a year or two after transplanting. They may need sufficient time to develop their root system before they will again set flower buds.

Low winter temperatures or a late frost can kill flower buds.

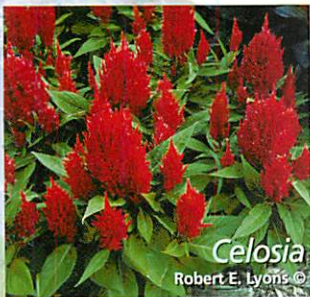
The soil chemistry may be a factor. If nitrogen is not in balance with other nutrients, plants may produce an excessive amount of vegetative growth at the expense of flower development. *David Barkley*

ENVIRO- TIP

Composting Made Simple

Composting has played a big role over the years for many gardeners, helping improve plant growth and production as well as helping the environment. It's easy to get started and a large area is not required. Containers, either those you purchase or build, will be sufficient to begin the composting process.

Now is a good time of year to plan for the upcoming rich season for composting. Nature's bounty yields fall leaves in abundance. Yard waste that comes with the end of the summer vegetable garden is also a perfect product for the compost bin. The steps to remember are to shred the



leaves before adding them to the compost bin so that they will break down more quickly, and to add just a small amount of fertilizer or manure to speed up the breakdown of the

leaves into compost. Adding fruit and vegetable kitchen scraps are fine for the compost, but do not use any animal-related byproducts.

While cleaning your garden for the fall, add many of the plant parts, just be careful not to overload the compost pile. Composting is all about balance. The pile must heat up to 160 degrees F to effectively kill many of the potential plant weeds and diseases. Moisture also plays a critical role in the composting process and it's important to keep the compost pile moist.

After a few months of turning the pile every 2 to 4 weeks to keep it mixed, you will have a great soil amendment. In heavy clay soils, compost will improve soil drainage, assist with consistent moisture retention and increase beneficial microorganism activity. Compost in sandy soils allows for longer retention of moisture and nutrients while helping the microorganisms in the soil.

Stephen Greer

gardentalk

"Never a day passes but that I do myself the honor to commune with some of nature's varied forms."

George Washington Carver

Announcing

Extension's



► Sept. 18, 2 - 4 p.m.

- Topic: Water Gardens
- Doris Duke Center of the Sarah P. Duke Gardens, 426 Anderson Street, Duke University, Durham
- Registration requested for this free seminar, (919) 668-1707

► Sept. 23 - 25, opening times vary each day

- Southern Ideal Home Show, State Fairgrounds, Raleigh
- Extension's Successful Gardener Learning Center is the place to pick up the latest issue of the Successful Gardener newsletter and other gardening information. Get your gardening questions answered by Extension's Master Gardeners and horticulture agents. Look for us in Dorton Arena!

Successful Gardener Seminars

Plan to attend these seminars throughout the day on Saturday, Sept. 24, from Noon to 5 p.m., including one session featuring a panel of horticulture experts who will answer your questions. For details visit www.successfulgardener.org.

► October 16, 2 - 4 p.m.

- Topic: Gardening for the Environment
- Doris Duke Center of the Sarah P. Duke Gardens, 426 Anderson Street, Duke University, Durham
- Registration is requested for this free seminar, (919) 668-1707



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Raleigh, NC 27695-7603

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Gardening in September

Lawns

- Evaluate quality of turf. Overseed areas with poor quality or consider renovation. Core aeration will help improve seed germination and survival in established lawns.
- Fertilize established tall fescue and other cool-season grasses. Lightly fertilize Bermuda grass with a low nitrogen, high potassium fertilizer to prepare it for winter and minimize Spring Dead Spot.
- Spot treat perennial weeds such as clover and dandelions with a broadleaf herbicide unless you are overseeding.

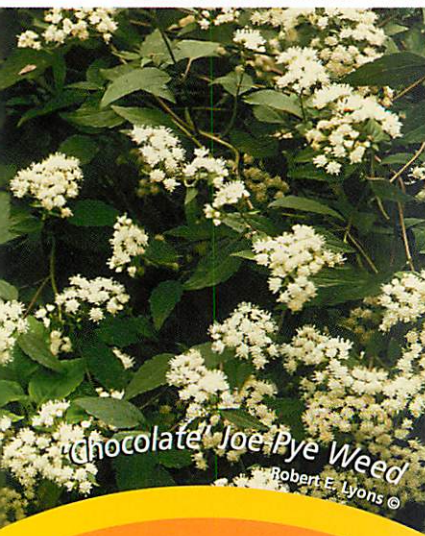
Ornamentals

- Deadhead spent flowers and remove old, diseased foliage to rejuvenate flowering annuals and perennials overcome by summer's heat and humidity.
 - Avoid pruning trees and shrubs to allow them time to go dormant naturally.
 - Many different species of goldenrod and aster bloom in September and are excellent sources of nectar for honeybees and butterflies. Beehives may have a "sour" odor due to the honeybees collecting this nectar.
 - Poinsettias grown as houseplants can be manipulated to bloom again by placing them in total, uninterrupted darkness for 15 hours each day beginning late this month and continuing through Thanksgiving.

Edibles

- Stockpile green materials for mixing with autumn leaves in the compost pile.
 - Plant a cover crop to improve the soil. Good cover crops include crimson or red clover, hairy vetch and rye grain.
 - It's not too late to plant a fall garden including mustard greens, turnips, radishes and onions. Be on the lookout for worms on broccoli, cabbage, cauliflower and other crucifers.

Fred Miller



Chocolate Joe Pye Weed
Robert E. Lyons ©

The Blue Ridge Parkway

is well known for stunning displays of fall color, though this North Carolina treasure is beautiful any time of the year. The vegetation is quite diverse, with over 1,000 plant species and more than 100 tree species that begin their color show later this month. The Parkway is also known for stunning waterfalls, although the best views may require a short hike from your car.

This year the Parkway celebrates its 70th anniversary. The 20 million visitors who come here each year make it the most popular destination in the National Parks system. For more information, call the parkway information line at (828) 298-0398, or visit the National Parks Web site at www.nps.gov/blri/. Another excellent resource is the Web site of the Blue Ridge Parkway Association, www.blueridgeparkway.org, which contains maps, hiking information, a schedule of wildflower blooms and more.

Paul McKenzie

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