

Gardener

NC STATE UNIVERSITY

NORTH CAROLINA COOPERATIVE EXTENSION

COLLEGE OF AGRICULTURE & LIFE SCIENCES

Helping
Carolinians In
The Piedmont
Increase Their
Knowledge of
Gardening &
Manage Their
Landscape
Investment

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Autumn Joy!

October is the month I look forward to all year. Bright autumn days are a delight, with just the right amount of crispness in combination with fiery autumn colors. Though the year, and this century, are coming to an end and many of the plants headed toward dormancy, this month always makes me think about the future. Whether I'm planting bulbs to enjoy next spring or landscape plants that will provide beauty all year, deciding what to plant and where is part of the fun.

To those needing advice on what to plant for North Carolina growing conditions, horticulturists with N.C. State University provide lots of research-based recommendations. Whether you're looking for ideas for bulbs or landscape plants, this issue provides proven choices. October is the month for planting and we want to make sure you do it right! Read the page two article, *Soil Preparation Spells Success*, before you put anything into the ground. And take time to enjoy the beautiful color show that October puts on for us! *The Editor*



Robert E. Lyons 1999 ©

'Carolina Sentinel' Provides Winter Color



'Carolina Sentinel' is a quality, upright holly that grows rapidly to about 20 feet. The foliage is a lustrous dark green with leaves that are smaller and finer than some of the other evergreen hollies. Bright red berries provide great winter color and keep birds happy. 'Carolina

Sentinel' is excellent for tall, narrow hedges, intermittent screens or as an accent plant. This holly is disease and insect resistant and grows in full sun or light shade in most soil types. This N.C. Association of Nurserymen Raulston Selection plant is a proven performer in North Carolina. *John MacNair*



Robert E. Lyons 1999 ©



Soil Preparation Spells Success

If you've heard it once you've heard it a dozen times. "Don't plant a \$5 plant in a 10 cent hole." And good advice it is! Research by horticulturists supports the wisdom of veteran gardeners who recognize that landscape plants establish quickly when the soil is adequately prepared at planting time. Better advice, and a modern trend in landscape installation, is to avoid planting in a "hole" altogether. If your plants could choose, they would prefer a large bed. Wouldn't you?

What About Amendments?

Planting in spacious beds ensures good soil aeration, a benefit equal to hundreds of pounds of soil amendments. In fact, studies concur that the addition of organic amendments is of little value when installing individual balled-and-burlapped woody ornamentals. Breaking up the soil is the key. However, if you are planting beds with numerous plants, adding organic amendments can help loosen up the heavy clays. Breaking up the soil is the most important method and organic amendments, except peat moss, are beneficial especially if you put them in a large tree or shrub bed. Putting amendments in a 2-foot hole does nothing.

Save your compost and bark soil conditioners for the annuals, perennials and vegetables. Preparing the soil by double-digging beds or rototilling ensures good root development. The addition of organic amendments is best left to the final moments when the material can be raked into the top few inches of a well-prepared bed. Do not till organic matter deeply into the soil; use it as a mulch to aid in weed control. When making decisions on planting techniques, consider how the plant was grown in the nursery, the plant's drainage requirements, the soil type and how well it drains and the availability of water. Water the plants regularly until they are established.

Ensure Good Drainage

Soil drainage is the critical issue in most of the Piedmont where clay soils are the predominate type. Clay soils can rob the plant of life-sustaining moisture or, in the case of over-irrigation, excess water can suffocate a root system. Excess water predisposes landscape plants to root rotting fungus diseases. To be on the safe side, plant in beds that are elevated to ensure good soil drainage, often referred to as berms.

In very poorly drained soils, drain tiles under the bed are necessary. If a French drain or tile drain is

installed, be sure that it drains *downhill at a 2 percent* minimum slope and that there is an outlet on the downhill side. If you are unable to correct the poor drainage condition, don't plant a tree or shrub in the area unless it can tolerate this condition.

What Is the Correct Planting Depth?

If you are planting a single shrub or perennial, then the "two times the width of the rootball" rule will do. The planting depth should be equal to the rootball and no deeper. It is always best to plant higher to allow for settling over time. When planting container grown plants, score the rootball with a knife or shovel to prevent circling roots and encourage new feeder root development. Wire baskets used in handling shade trees can be planted, just cut the top rings free once the tree is lowered into the planting pit. Guying and staking trees is not recommended unless the trees are top-heavy or subject to being damaged by mowing equipment. The advantage of using plants grown in containers is that 100 percent of the roots are in the container. Thus, the plant goes through limited transplant shock if given adequate follow-up care. Plant container-grown plants in the landscape year-round. Plants produced in containers, in a soilless medium (usually bark and sand), are much lighter than balled-and-burlapped material. This is very helpful to the home gardeners who may not have large equipment to handle heavy plants.

What Size Plant Should You Choose?

Smaller plants establish faster than large plants and are more economical. Many consumers, on the other hand, want the "instant" landscape look. Demand for large, landscape-size trees has certainly increased over the last decade. With large, mechanical digging equipment, 6- to 8-inch diameter trees can be moved. Large diameter trees are often transplanted for instantaneous effect, but post-transplant stress and costs increase with the size of the tree. Correct planting technique begins with the loading of the plant at the nursery or garden center. Protection of the roots, stems and foliage during transport is needed. Shield the plant tops from winds.

Always handle container plants by the container and never by the tops of the plant. If plants must be held or stored on the landscape site, it is best to place them in a location protected from the wind and sun. **Toby D. Bost**

Gardentalk

"Even if something is left undone, everyone must take time to sit still and watch the leaves turn."

— Elizabeth Lawrence



Q&A

What is this wet, black stuff dripping from the trunk of my tree?

This stuff is a mixture of sap, bacteria and fungus. We call it slime flux, a name that is about as ugly as the problem. The tree sap starts fermenting because of an injury or unknown reason. Fermented sap creates pressure, so the slime flux oozes to the bark surface and runs down the tree. No control is necessary because the disease doesn't hurt anything. It will disappear on its own in about 10 short years, give or take

a few. Some people install a pipe to keep the slime flux from running down the trunk. We don't recommend this because it creates another injury. The fermented sap attracts numerous insects. I have seen up to 20 different insect species feeding at one slime flux site. Butterflies, bees, wasps, flies and European hornets are often present. Insects don't get aggressive when drunk, so you can ignore them. A pyrethrin spray would kill them if necessary. **David Goforth**

3 Steps to Spring Beauty

If you want to enjoy bulbs in the spring, you've got to do things right in the fall. Dr. Paul Nelson, N.C. State horticulture scientist, reports that the best results come from following three steps.

- 1. Prepare a well-drained site for the bulbs.** This includes loosening up heavy clay soils with organic matter and, in some cases, making raised beds. Good drainage is important. Mulching the bed with pine straw or pine bark after you plant is also helpful.
- 2. Select the best cultivars for your area.** For tulips try 'Orange Emperor,' 'Golden,' or 'Apeldorn.' For daffodils, 'Ice Follies' or 'Yellow Sun' are good choices. For hyacinths, consider 'Delft Blue' and 'City of Harlem.'

- 3. Fertilize the bulbs.** Fertilize bulbs using 10-10-10 once in early November and once when the leaves just start to emerge in spring. An alternative is once a year using slow release fertilizer in early November. Make sure to lime according to the soil test results. Do not fertilize when the bulbs are flowering because it provides no benefit.

Research shows that if these steps are followed, tulips and hyacinths will probably return for at least three years and daffodils will persist for much longer. Access a cooperative website between N.C. State University and Holland Bulbs at www.ces.ncsu.edu/depts/hort/consumer/hbpages.html. **Kevin Starr**

Perennial Photos: Robert E. Lyons 1999 ©

Successful Gardener Series

Saturday, Oct. 2

Fall Lawn, Gardening and Tree Tips

- ▶ Mecklenburg County
- ▶ 9:30 a.m. to 11:30 a.m.
- ▶ CPCC, South Campus, 2800 Campus Ridge Road, Matthews
- ▶ Free • Details: (704)336-2561

ENVIRO-TIP

Reduce Next Season's Disease and Insect Problems

One easy means to reduce disease and insect problems for next year is through proper plant sanitation procedures this fall and winter. By disposing of fallen leaves and dead plant material from deciduous fruit trees, ornamental trees and shrubs and perennials, you eliminate an overwintering place for various diseases and insects. Also, be sure to remove and dispose of any mummified fruit clinging to branches. These practices can reduce significantly disease and insect problems the following year, which

reduces the need to use pesticides.

Compost most of this plant material in your home composting bin or send to your municipal composting facility to reuse in the garden later. However, material from trees and plants that were hard hit by certain bacterial or fungal diseases are best disposed of through burying or other means. This is particularly true if your compost bin does not reach temperatures of 150 degrees or higher since some organisms will not be killed at lower temperatures. **Royce Hardin**



'oscar' tulip



'avalon' daffodil

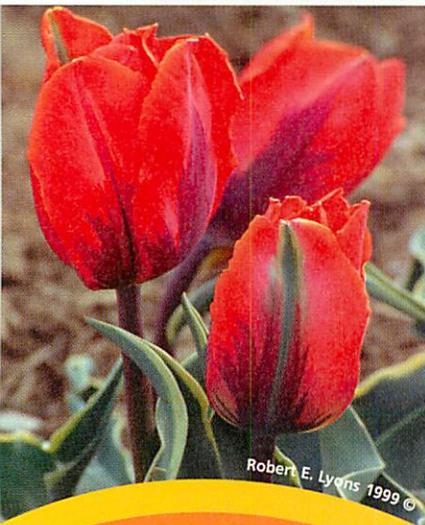


hyacinth



yellow tulip





Gardening in October

What to Plant

- October is the best time to set out new landscape plants.
- Plant spring-flowering bulbs like daffodil, tulip, crocus and hyacinth late this month.
- Plant or transplant peonies.
- Continue planting pansies.
- If you do not have a fall vegetable garden, plant cover crops like annual rye, barley and wheat.
- Start salad vegetables in a coldframe and enjoy them all winter. Plant lettuce, green onions, carrots, radishes, broccoli, cauliflower and most leafy greens inside the coldframe.

What to Prune

- None. Save your pruning for spring.

Pest Outlook

- Store your garden pesticides in a secured, dry location. Clean spray tanks.
- Check the following landscape shrubs for the following insect pests: spider mites on arborvitae, hemlock and juniper; lace bugs on azalea and pyracantha; and scale on euonymus.

Lawn Care

- If not treated previously, use the "organic" milky spore for control of grubs.
- Warm season lawns like Bermudagrass and zoysia can be overseeded with annual ryegrass.
- Keep tree leaves from collecting on your lawn.

Specific Chores

- Dig and store summer bulbs like gladiola, dahlia and caladium. Cover tubers with dry peat moss and store in a cool, dry place. *John Vining*

Old Salem Gardens

in Winston-Salem offer a look at historical horticulture. Settled in 1766 by Moravians, Old Salem consists of 90 restored buildings with 12 open to the public. Gardens are attached to many of the restored buildings and plant varieties date back to the time period. Old Salem is landscaped to recreate the feel of the 18th century. The town covers 24 blocks and visitors can find 11 period family gardens and 5 1/2 acres of orchards. Plantings include medicinal, kitchen and cutting gardens. Among the buildings are Shultz's Shoemaker Shop, Winkler Bakery, the Single Sisters House and the Single Brothers House.

The Old Salem Visitors Center is at 600 S. Main Street. The grounds are free while admission is charged for touring the buildings. The hours are 9:30 a.m. to 4:30 p.m. Monday through Saturday and 1:30 to 4:30 p.m. on Sunday. Buildings and gift shops are closed Thanksgiving Day, Christmas Eve and Christmas Day. Call 1 (888) OLD-SALEM (653-7253).

Karen Neill

Garden Spot



The *Successful Gardener* provides timely, research-based horticultural information to help Carolinians make wise landscape investment decisions and gain greater enjoyment from their lawns and gardens. The newsletter is part of an overall horticulture program which includes Extension's *Successful Gardener* Workshop Series in various counties throughout the Piedmont region. We publish monthly except January and July. Comments concerning *Successful Gardener* may be sent to:

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Tune in to "Making It Grow!" – a gardening show featuring Extension agents from the Carolinas. Saturdays, 1 p.m. WTVI 42, Charlotte

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