

JC Raulston Arboretum Plant Focus

Mahonia Adds Color & Texture to Winter Landscape

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

M

ahonia is an excellent choice for a reliable, shade-loving evergreen shrub with fragrant winter blooms. This coarse-textured plant bursts forth with yellow blooms, described as fountains of gold, which are followed by pretty blue berries. Birds love the berries. Humans use them for jelly instead of eating them fresh.

The genus contains about 70 species. The taller species make useful specimen plants while the shorter ones are used as groundcovers. Leatherleaf mahonia (*Mahonia bealei*) came from China in 1845. In the Piedmont and coastal plains, leatherleaf mahonia is the most common. At six to eight feet, this specimen plant is also the tallest you'll find for landscape use.

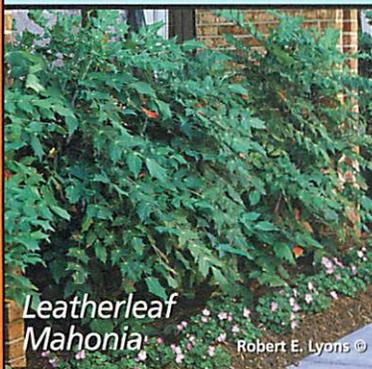
Oregon grapeholly (*Mahonia aquifolium*) is an upright type introduced from Oregon in 1823. Some gardeners prefer its purplish color in spring and fall along with its medium foliage texture which results from finer points on the leaves. At the other end of the size spectrum, consider the groundcover mahonias which include creeping mahonia (*Mahonia repens*) and Cascades mahonia (*Mahonia nervosa*).

Place mahonias where they get protection from the winter sun, and where sticky leaves and coarse texture won't cause a problem. Most adapt well to variable soil types as long as it drains well. Use a general mulching and fertilizing regime, and once mahonias become established they are drought tolerant. They rarely need to be pruned except to remove dead limbs anytime but you may also cut back leggy stems in early spring. Mahonias seldom have insect and disease problems.

You'll find an abundant selection of mahonias at the JC Raulston Arboretum (JCRA) at NC State University in Raleigh. *Mahonia aquifolium* 'Orange Flame' produces bronzy-orange new leaves which stand out against the wine red and green color of the older foliage. *Mahonia aquifolium* 'Smaragd' ('Emerald') boasts lovely, glossy leaves of mostly green which become more bronzy-purple going into winter. Some of the newest mahonias for landscape use are cultivars from the hybrid *Mahonia x media*. Ask for 'Hope', 'Charity' and 'Winter Sun' at your local garden center or nursery. To check out the inventory of plants at the JCRA, visit the website at <www.arb.ncsu.edu>. **David Goforth**

Leatherleaf Mahonia

JC Raulston ©



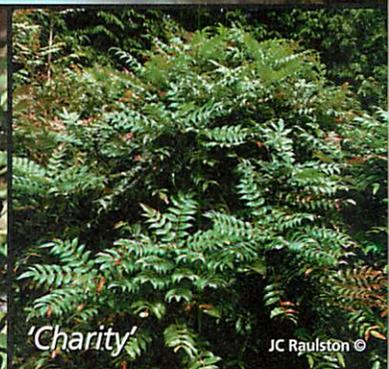
Leatherleaf Mahonia

Robert E. Lyons ©



'Orange Flame'

JC Raulston ©



'Charity'

JC Raulston ©

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National Association of County Agricultural Agents Best Team Newsletter

International Association of Business Communicators 1999 Silver Quill Award

Southern Extension Forest Resource Specialists Award of Excellence



Master Gardener Volunteers Share Knowledge, Enhance Communities

Spend a few moments around gardeners and you'll quickly learn that they love sharing their expertise and enthusiasm about plants and the gardening world. This helpful spirit of gardeners is personified in Extension's Master GardenerSM volunteers, one of Cooperative Extension's premier volunteer organizations.

Extension's Master GardenersSM receive intensive training through their county Cooperative Extension Center. In return, they give volunteer time back to their local Extension Center horticulture programs. One of the most common ways Master Gardeners provide expertise is by staffing a plant clinic hotline to answer the public's gardening questions.

Enhancing Communities

The expertise of Master Gardeners enhances our quality of life through the many projects they contribute to, and their work often adds economic value to our communities through beautification projects. Whether it's installing a demonstration Water Wise garden at Lake Crabtree County Park in Wake County, teaching schoolchildren in Guilford County or designing, planting, maintaining and providing educational programs at the New Hanover County Cooperative Extension Arboretum, Master Gardeners are proactive in helping Cooperative Extension meet the very high demand for horticulture education programs across the state.

Empowering People

The program is much more than horticulture, though. It empowers people with knowledge and builds self-esteem and confidence so they can enrich the lives of others.

"The popularity of the program speaks for itself," said David Barkley, Cooperative Extension horticulture agent in New Hanover County. "We have a consistent waiting list (in New Hanover County) of more than 200 people interested in participating in Extension's Master GardenerSM program. It is because of how these people enjoy this program, passing on the information to their friends, that they become interested and want to take the class. As a volunteer they are doing something worthwhile for the community and, at the same time, continuing their learning."

Michelle Hanrahan, a Master Gardener from Catawba County, shared the importance of the

program to her. "The Master Gardeners training program was a wonderful and essential course that prepared me as a homeowner to do my own landscaping and fruit and vegetable gardening while also giving me the chance to help others."

Walt McAvoy of Henderson County said, "Being a Master Gardener for 14 years has given me the opportunity to meet many people from various parts of the country and share gardening information."

Extending Knowledge

Master Gardeners help extend the expertise and research of NC State University and NC A&T State University through each county center in which they volunteer. Currently, the Master Gardener program is in 72 counties and the Cherokee Reservation in North Carolina, with over 3,000 Master Gardeners. Master Gardeners is a nationwide Cooperative Extension educational program that originated in Washington State in 1972.

Celebrating Contributions

Because of their contributions to the state, Extension's Master GardenersSM receive top billing during one day each year at the Southern Spring Show in Charlotte, the South's premier gardening exhibition. Extension's Master GardenersSM in Mecklenburg County have been involved with the show for several years, staffing a horticulture information booth. To recognize their efforts and the work of Master Gardeners statewide, Robert Zimmerman, chief executive officer of Southern Shows, Inc., decided to honor Master Gardener contributions to gardening in the Carolinas by establishing Extension Agent and Master Gardener Day in 1997.

"It's been gratifying to help establish an annual event that honors our Southern Horticulture Extension Agents and Master Gardeners," said Zimmerman. "We look forward to growing this deserved recognition and special day as a significant part of the Southern Spring Show."

The prerequisite for becoming a Master Gardener is a love of gardening and the desire to share gardening knowledge. To learn how you can become a part of this exciting program, contact your county Cooperative Extension Center.

Bill Skelton

Visit the Southern Spring Show Feb. 24 through March 4, 2001!

Stop by the N.C. Association of Nurserymen garden to get your gardening questions answered by one of Extension's Master GardenersSM.

Make time to enjoy the creativity of young gardeners, too! A new feature this year will be a garden installed by the new Junior Master GardenerSM program in Mecklenburg County. This program for children uses curriculum materials administered by the Texas Agricultural Extension Service. The program teaches children many skills while growing their love of gardening and an appreciation of the environment.

Q&A How do I keep deer from eating up my landscape?

First, the cute little Bambi of movie star fame is no relation to the rats with antlers terrorizing your landscape. When the deer pressure gets high, it will take a nine-foot fence or a dog to control them. Scare tactics and repellents will work on low populations of deer for a while. Scare tactics include any human smell like leaving a sweaty T-shirt in the garden each night or using human hair. Hanging soap bars on fishing line creates a smell that repels deer. Use several per tree. Hinder, an ammonium soap, will repel by taste. It can be used on home gardens. Big

Game Repellent and Deer Away contain rotten eggs at rates too low to be a problem for humans. Don't use putrid egg solids on plants that humans will eat. A single strand electric fence works for moderate deer numbers. Coat the fence with peanut butter to teach the deer how electric fences work. Sports hunting effectively reduces deer numbers. Homeowners can shoot deer anytime they are substantially damaging crops but check the regulations of your county first and obtain the appropriate permit and rules from a local wildlife officer.

David Goforth

Fall Is for Planting!

The ideal time to plant trees and shrubs is during the dormant season. Weather conditions are cool, allowing plants to establish roots in the new location before top growth starts in the spring.

Proper handling during planting is



Robert E. Lyons ©
Red Buckeye

essential to ensure a healthy future for new trees and shrubs. Follow these six simple steps to increase your tree's chance of survival.

- Dig a shallow, broad planting hole.
- Place the tree in the hole at the proper height. Make sure the trunk flare where the roots spread at the base of the tree is partially visible when the tree is planted.
- Straighten the tree in the hole then backfill, gently but firmly.
- Stake the tree only if necessary.
- Mulch the base of the tree with 2 to 4 inches of an organic mulch.
- Provide appropriate follow-up care and water as needed.

Trees are a valuable asset to any landscape and provide a long-lasting source of beauty and enjoyment for people of all ages. For more information on tree care, contact your local Cooperative Extension Center. **Fred Miller**

ENVIRO-TIP

The Root of the Matter

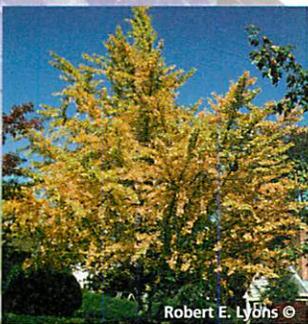
Trees often provide the basic structure to our landscapes. They provide shade and beauty and have a major influence on our surroundings. They also increase personal and community property values. Mature trees are hard to replace so it's important to know how to take care of them. They generally need very little attention, but one thing they definitely need is protection from root damage.

Storms in recent years have largely dispelled the myth that shade trees have deep taproots that tap into underground water supplies. The many upturned stumps we've seen have revealed that tree roots tend to be quite shallow, living in the top 4 to 6 inches of soil. In addition, they may

extend well beyond the "drip line" (think of the shade zone at high noon). These roots are fine and fibrous, and take up all the nutrients and water needed by the tree.

Root damage is among the most common causes of death in mature trees. These fine roots are very susceptible to damage from tilling, digging, trenching and heavy equipment traffic. Once damaged, there is little chance for recovery and the tree will likely decline over a period of one to five years. Keep this in mind anytime you are digging or undertaking a construction project. Protect the rootzone and your trees will reward you with many more years of shade and beauty.

Paul McKenzie



Robert E. Lyons ©

Ginkgo

Lawn and Garden Question?

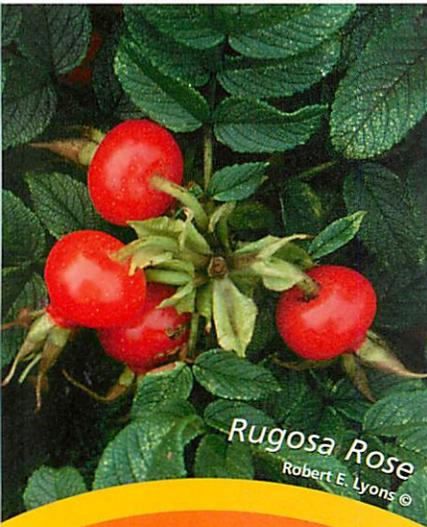
- Contact your county Cooperative Extension Center.
- Access numerous NC State University horticulture leaflets at www.ncstate-plants.net.

gardentalk



"A man does not plant a tree for himself; he plants it for posterity."

– Alexander Smith



Garden Spot

Reynolda Gardens

of Wake Forest University in Winston-Salem covers 129 acres which were originally part of the 1,000-acre estate of Katharine Smith Reynolds and Richard Joshua Reynolds, the founder of the R.J. Reynolds tobacco company.

The gardens were designed in 1916 and incorporate a mixture of formal and informal gardens, woodland trails and expansive lawn. Four acres of formal gardens will delight the perennial enthusiast and provide ideas for new plants to add to your own gardens. Other features include an All-America Rose Garden, which contains over 800 plants. In the fruit and vegetable garden, modern cultivars are grown within the design of the original garden. For those who like it less formal, stroll the woodlands.

The gardens, greenhouses and conservatory were donated to the university in 1958 and are open daily. The gardens are located at 100 Reynolda Village Road in Winston-Salem. For more information call (336)758-5593 or access <www.wfu.edu/gardens/>.

Karen Neill

Gardening in November

Lawns

- In the Piedmont and Mountains, turf areas that were reseeded in late summer can benefit from a light topdressing of a complete, slow-release nitrogen fertilizer. Established cool-season lawns need 1 pound of nitrogen per 1000 square feet this month.
- Keep fallen leaves from accumulating on newly seeded lawn areas. Mow, mulch or rake leaves and add to the compost pile.
- Coastal lawns will soon be dormant. Continue to mow and water during dry spells.

Ornamentals

- Plant spring-flowering bulbs in the Piedmont and Mountains. Coastal planting of bulbs may be delayed until December.
 - Good soil preparation is essential for winter annuals and spring-flowering bulbs.
 - Recycle mums into the perennial border. Keep them watered and fertilized.
 - Pinch tops of pansies and snapdragons to remove stocky growth.
 - In Coastal areas, prune lantana to one-third its height and spread.
 - Lightly prune top-heavy roses.
 - Tip prune this month. Save heavy pruning until late winter or early spring. Heavy pruning now will cause too much tender growth that will be prone to cold injury later this winter.
 - Continue to mulch landscape beds, vegetable and fruit plantings.
 - Check camellias and azaleas for spider mites and treat with insecticidal soap or dimethoate.
 - Treat scales with a dormant oil spray applied to the branches and stems where scales are attached.

Edibles

- Remove dead vegetable plants from garden to prevent insects and diseases from overwintering.
- Remove older canes on raspberries and blackberries.

David Barkley



Extension's *Successful Gardener*™ program provides timely, research-based horticultural information. The newsletter is part of the statewide horticulture program which includes Extension's Regional Successful Gardener Seminar Series and county workshops. We publish 10 issues per year. Comments concerning *Successful Gardener* may be sent to:

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All Agents of N.C. Cooperative Extension

Ask for Extension's Successful Gardener at one of your local garden centers each month!

For a list of garden centers where you can find *Successful Gardener*, please call (704)336-2561 or visit Cooperative Extension on the web at <http://www.ces.ncsu.edu>

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

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