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Gardener

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

JC Raulston Arboretum Plant Focus

Versatile Loropetalum Creates a Dramatic Display

Few plants are as useful in so many landscape situations as this beautiful spring-flowering shrub. You can't go wrong with Chinese fringe flower, though white or pink flowers and green, variegated or burgundy leaves make it hard to decide on just one.

It can serve in foundation plantings, tall hedges, borders and low screens. Left alone, this evergreen shrub will grow 10 feet tall and wide with a thick, layered appearance. Compact forms exist and more are being developed. It will endure pruning, but is beautiful left to grow naturally in a sunny or partially shaded spot.

On a large mature plant, one option is to remove lower limbs, revealing a beautiful structure and pleasant spot to relax. This technique will produce a delightful small tree that creates as much drama as a Japanese maple.

Easy to find at garden centers and nurseries, *Loropetalum* prefers acid to neutral soil (leaves may yellow in alkaline soil). Transplanting from containers is no problem, but give these plants adequate moisture during the first season to ensure survival.

Varieties (discovered in nature) and cultivars (found in cultivation) growing at the JC Raulston Arboretum give a glimpse into the wide world of *Loropetalum chinense*. Names such as 'Green Elf,' 'Blush,' and 'Zhuzhou Fuchsia' tell of colors from far and near. Excitement seems to drip off plant tags listing 'Snow Dance,' 'Sizzlin' Pink,' 'Daybreak's Flame' and 'Fire Dance.'

Loropetalum flowers in late winter or spring with long, narrow petals that resemble soft ribbons. These strap-shaped flowers are common to the witch hazel family, Hamamelidaceae, and can be fragrant. Each flower consists of only four petals. But because three to six flowers cluster together at many points along the branches, they create a spectacular overall display.

This plant flowers in the spring, so wait until after flowering to prune. Scattered flower production may occur in fall, but don't be alarmed. This shrub is just pleasantly reminding you to wait for more flowers come spring, and come they will. **Mark Blevins**



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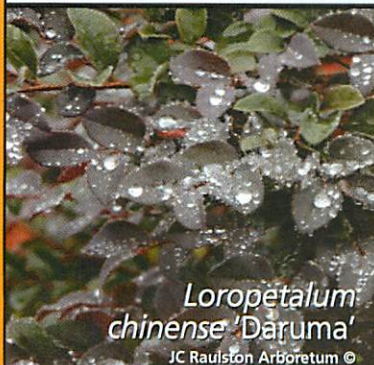
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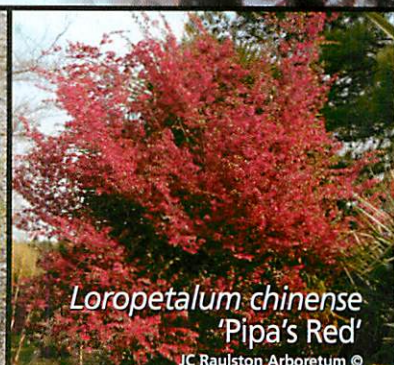
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Loropetalum chinense 'Daruma'
JC Raulston Arboretum ©



Loropetalum chinense 'Green Elf'
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Loropetalum chinense 'Pipa's Red'
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Lilium 'Enchantment'

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Lilium 'Citronella'

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Lilium 'Enchantment'

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Lilium spp.

Asiatic Lilies for Timeless Appeal

The appeal of lilies is timeless. As far back as 1550 B.C., lilies have been revered for their exquisite flowers and spectacular color. For centuries lilies were thought to be the province of the wealthy, much like orchids. But today, with modern storage capabilities and new hybrid varieties, these delightful bulbs are available to gardeners everywhere. Lilies are on their way to becoming one of the most popular cut flowers in our country.

Asiatic lilies are considered by many to be simple to grow in our Tar Heel gardens. They are fast-growing, tender bulbs with erect stems and narrow lustrous leaves. In summer, these stately plants produce up to ten colorful blooms in a terminal cluster on each stalk. They don't need staking like the Oriental lilies and make a colorful addition to any sunny flower bed.

Plant Asiatic lilies in the spring as soon as the ground can be prepared. After purchasing, plant the bulbs promptly or store them in an unheated room. Do not let lily bulbs sit out to dry. Container-grown lilies can be planted even while in bloom. Lilies tolerate full sun in the piedmont

and westward; limit them to morning sun or dappled shade in Zone 8 for a longer flower display. Plant them in well-drained, moist, acidic soil. Adding soil conditioner, bulb fertilizer, compost or sphagnum peat moss to poor soils is often recommended by growers. In heavy clay soils, lilies do well in raised beds. Plant bulbs 2 to 4 inches deep. Cover them with soil, water well, and mulch.

Water weekly during the flowering period. Keep the soil moist, but avoid over-watering that can rot the bulbs! Provided you enriched the soil with compost, your Asiatic lilies will not need

much in the way of supplemental fertilizer. After blooming, the spent flower heads can be pruned off, leaving the stem and leaves to nourish the bulb for next year. Divide and transplant old established lily beds in fall. (Beware: Deer and voles are bigger threats than insects.) After a hard fall freeze, prune stalks. Then mulch the beds.

Plant lilies in groups for the best effect, or use them in containers. For color, interplant lilies with annuals like coleus and impatiens, and plant them in perennial borders. Asiatic lilies come in a wide range of colors from white and yellow to bicolors and violet-red. **Toby Bost**

Asiatic lilies are considered by many to be simple to grow in our Tar Heel gardens.

Pruning Shrubs

Careful placement of shrubs in sites that provide ample space for them to mature to their natural full size will minimize the amount of time you need to spend pruning. Reducing your pruning will also minimize the amount of greenwaste you generate. In addition, minimizing pruning reduces the number of individual pruning cuts, each of which is a wound that exposes the plant to insect and disease damage. Further, some studies show that plants pruned repeatedly during the growing seasons use more water than unpruned plants.

There are still times, however, when you need to prune. Timing is critical as is a clear goal for how you want to redirect the shrub's growth.

For many shrubs, the best time to prune is right after they bloom. This way you don't remove the buds for next year's blossoms. In setting your pruning goals, strive to accentuate the natural beauty of the plant while redirecting undesirable growth. To redirect growth, cut back to a bud or a stem facing the desired direction, or completely remove stems at their point of origin. To stimulate the plant to fill in an open area, remove the tip of branch just below the opening. This will stimulate that branch to generate more stems just below the cut.

Plants vary in their tolerance of severe pruning. Some come back strong even after

see Pruning Shrubs on page 3

Q&A

Is it too late to fertilize my lawn?

It depends on what type of turf-grass you have.

For tall fescue, apply 1 pound of nitrogen per 1,000 square feet of turf (1 lb N/1000 ft²) in February, September, and November. Use a complete N-P-K fertilizer with a 3-1-2 or 4-1-2 ratio (for example 12-4-8 or 16-4-8). The actual amount of fertilizer to apply will depend on its percentage of nitrogen. This formula can help you calculate how much fertilizer to apply: **lb of nitrogen desired divided by percentage of nitrogen in product equals lb of product needed.** For example, if you use 16-4-8, the product is 16 percent nitrogen, so you will need 6.25 lb of fertilizer to get 1 lb of nitrogen. Putting additional nitrogen fertilizer on tall fescue also discourages it from going dormant for the summer, and dormancy helps to conserve water.

Tall fescue is a cool-season grass, meaning that its active growth occurs in cooler seasons. Bermudagrass, zoysiagrass, St. Augustinegrass, and centipedegrass are warm-season grasses. For bermudagrass, apply 1 lb N/1000 ft² in April, May, June and July. For zoysiagrass, it's 1 lb N/1000 ft² in April and 0.5 lb N/1000 ft² in June and August. For St. Augustinegrass, use 0.5 lb N/1000 ft² in May, June, and August, and 1 lb N/1000 ft² in July. Centipede needs the least nitrogen – just 0.5 lb N/1000 ft² in June.

Ideally, potassium and phosphorus needs are determined through a soil test. They are often applied with N in a fertilizer that contains two or all of the nutrients. For more information see *Carolina Lawns: A Guide to Maintaining Quality Turf in the Landscape* <http://www.turffiles.ncsu.edu/pubs/extension/CarolinaLawnsAccessible.pdf>

N.C. Ag Chem Manual fertilization for turf <http://ipm.ncsu.edu/agchem/4-4.pdf>

Pruning Shrubs

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being cut to the ground. With others, it might be more effective to rethink their role in the landscape, possibly pruning them up into a small tree.

For more information about pruning tools and techniques for shrubs, see this N.C. Cooperative Extension publication: <http://www.ces.ncsu.edu/depts/hort/consumer/agpubs/ag-071.pdf>

This article is derived in part from *Pruning Trees and Shrubs* (AG-071) by M.A. Powell for the N.C. Cooperative Extension Service.



ENVIRO-TIP

Green Roofs Reduce Runoff

When I think about a green roof, I usually think of algae and excessive shade. Some homeowners, however, are adapting a building practice that has been used since the Middle Ages. Green roofs can add color to the surroundings *and* aid the environment.

Germany leads the world in green roofs and rooftop plantings. About 10 percent of Germany's buildings have some type of green roof. Green roofs are now becoming popular in the United States, especially in cramped urban settings.

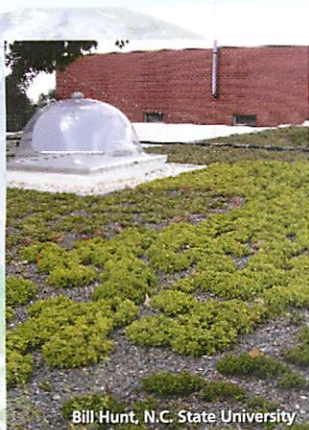
A green roof can be as simple as a rooftop planter with flowers and vegetables or as elaborate as a deep soil system that supports a lawn and small trees. Green roofs decrease the total amount of stormwater runoff by retaining over 50 percent of rainwater and gradually releasing it back into the atmosphere. They also minimize heating and cooling costs, reduce the

urban heat island effect and increase wildlife habitat. One challenge with green roofs is to minimize the amount of nitrogen and phosphorous in the runoff. This can be done by careful selection of planting media and minimizing the use of fertilizers.

Green roofs can be expensive. Most homes cannot be retrofitted to accept the extra weight. Maintenance is another factor. Even low-maintenance green roofs must be fertilized and watered if a drought occurs. Not every roof can support a green roof. Most roofs are not flat enough, nor can they handle the weight. If you have the right slope, a sturdy enough structure, and access to your roof, you may be able to cultivate a roof garden.

For more information on green roofs see <http://www.bae.ncsu.edu/stormwater/PublicationFiles/BMPs4LID.pdf>.

Darrell Blackwelder



Bill Hunt, N.C. State University

Gardentalk



"About a fifth of a crow's diet is secured from the insect world, and among the pests destroyed are some of the most troublesome. . . . May beetles and their destructive larvae, white grubs, of which the crow is particularly fond, grasshoppers, wireworms, cutworms, and caterpillars."

Charlotte Hilton Green,
Birds of the South



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Gardening in May

Lawns

- Start mowing cool-season lawns (Kentucky bluegrass, tall fescue, ryegrass). Keeping grass at about 3½ inches in height will help it tolerate dry conditions.
- Plant warm-season grasses (Bermudagrass, zoysiagrass, St. Augustinegrass, and centipedegrass) starting in April through June.
- Accomplish herbicide control of broadleaf summer weeds before temperatures get above 90°F for a week or longer.

Ornamentals

- Mulch shrubs and trees with 2 to 3 inches of mulch for added drought tolerance.
- If needed, prune azaleas and rhododendrons as soon as their blooms fade. Pruning later than that could remove the buds for next year's flowers.

- Scout for azalea leaf gall, and cut off for control. Leaf gall is common on azaleas and camellias and looks like a very thick, distorted leaf.

- Scout for bagworms on likely plants, such as junipers and Leyland cypress. Spray the small gray worms before they build their bags.

- Fertilize summer-flowering ornamentals.

Edibles

- Set out tender transplants except in the highest mountain regions of the state.

- Check labels to select pest-resistant vegetable varieties. This is indicated by initials following the plant name. "V" means resistant to *Verticillium* wilt disease, "N" indicates resistance to nematodes, "F" indicates resistance to *Fusarium* wilt disease, and "T" indicates resistance to tobacco mosaic virus.

- Fertilize vegetables six weeks after planting.

- Wrap an aluminum foil collar around tender transplants to prevent cutworms from wrapping around stems and cutting the plant off at ground level.

- Begin corn earworm control at early silking, and continue through the late silking stage. **Donna Teasley**

Biltmore Gardens

George Washington

Vanderbilt began planning his grand estate in the Blue Ridge mountains near Asheville more than a century ago. Display gardens at Biltmore Estate now cover more than 65 acres of the 8,000-acre estate.

The visitor's view of the grand landscape plan begins with the 3-mile approach road. Upon reaching the house, a visitor can follow the path through the Shrub Garden to the famous 4-acre English Walled Garden. But don't miss the many mature specimens of rare plants along the way. Beyond the formal garden, one will be rewarded with a stroll through the 20-acre Azalea Garden, home to thousands of native and hybrid azaleas and rhododendrons as well as many other wonderful species.

Join festivities for the 2008 Festival of Flowers, April 5 through May 18, when thousands of tulips, azaleas, and other flowers will be in bloom. For more information on planning your trip to the Biltmore Estate, visit www.biltmore.com.

Linda Blue

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