

## Azalea Planting

Azaleas are among the most popular flowering shrubs grown in South Carolina. Good site selection and proper planting methods will make a difference in promoting healthy, vigorous plants.

Botanically, all azaleas are classified in the genus *Rhododendron*. The cultural requirements for azaleas and rhododendrons are basically the same, but their structural differences include the following characteristics:

- True rhododendrons have 10 or more stamens, and the underside of the leaves may be scaly or have small dots.
- Azaleas have five stamens; leaves do not have scales and often are covered with hairs.
- True rhododendrons are usually evergreen (there are exceptions).
- Most azaleas are deciduous, although most types used in the home landscape are evergreen.
- True rhododendron flowers tend to be bell-shaped.
- Most azalea flowers are funnel-form.

### Types of Azaleas

There are numerous azalea varieties available in South Carolina. When choosing which azaleas to add to your landscape, it is important to consider whether a variety is adapted to the area in which it will be planted. Poorly adapted varieties often give poor results year after year.

There are both evergreen and deciduous types of azaleas. Although the evergreen type is more popular for use around the home, deciduous azaleas are excellent plants for woodland settings.

**Evergreen:** Evergreen azalea hybrids that grow well in South Carolina include Southern Indica, Kurume, Kaempferi, Satsuki, Gable, Glen Dale and the Encore™ series.

There are many varieties within each of the following groups, and bloom times will vary within each group, depending on the variety. Bloom times also are dependent upon weather, planting zone and the microclimate of the area in the landscape.

Southern Indian azaleas, or Southern Indica azaleas, are popular in the eastern part of the state; many varieties are not cold-hardy in the Piedmont. They are vigorous, upright growers, often reaching a height of 10 feet or more. Flowers are large, and the blooming period begins in late March and extends to early April. Popular varieties include 'Elegans' (light pink), 'Fielders White' (white), 'Formosa' (magenta), 'Mrs. G. G. Gerbing' (white) and 'George L. Tabor' (light pink).



Joey Williamson, ©2006 HGIC, Clemson Extension  
'George L. Tabor' Southern Indica azalea  
Joey Williamson, ©2006, HGIC, Clemson Extension

Kurume azaleas are cold-hardy and adapted to all of South Carolina. They are compact plants that develop as much spread as height. Normal bloom occurs from late March to mid-April. Popular varieties include 'Coral Bells' (salmon pink), 'Hinodegiri' (vivid red), 'Pink Pearl' (clear pink) and 'Snow' (white).

Kaempferi azaleas have a taller, more upright growth habit than Kurume. They are highly cold-resistant, and flower in late April and early May. Kaempferi are generally not recommended for the coastal areas. Available varieties include 'Anna Marie' (white), 'Cleopatra' (light pink) and 'Fedora' (salmon pink).

Satsuki azaleas are hardy in all of South Carolina. Plants are low-growing with large, showy blooms from May to June. Some of the more popular varieties include 'Bunkwa' (pink), 'Gumpo Pink' (pink), 'Gumpo White' (white), 'Higasa' (deep rose-pink) and 'Shinnyo-no-Tsuki' (rose border with white center).



'Gumpo Pink' Satsuki azalea  
Auburn University azalea trials at Camp Hill

Gable hybrids are very cold-hardy and are generally not recommended for coastal areas. They grow to be about 2 to 4 feet tall and wide, and flowers bloom from April to May. Some of the popular varieties include 'Rosebud' (rose pink), 'Rose Greely' (white) and 'Purple Splendor' (purple).

Glen Dale hybrids grow to be about 4 to 6 feet tall and 3 to 4 feet wide. The bloom period varies,

depending on the variety; some flower as early as March, while others do not flower until June. These azaleas are very cold-hardy and are generally not recommended for coastal areas. Popular varieties include 'Morning Star' (deep rose, early bloom), 'Fashion' (rose with dark blotch, mid-season bloom), 'Glacier' (white with pale green, mid-season bloom) and 'Aztec' (peach red, late-bloom).



'Glacier' Glen Dale hybrid azalea  
Louis Williams, US National Arboretum

Encore™ series azaleas bloom twice a year, in the spring and again in mid to late summer or fall. Varieties vary widely in color, shape, size and exact bloom time, but all share the re-blooming habit. Common varieties include 'Autumn Royalty', 'Autumn Rouge' and 'Autumn Cheer'. There are currently more than 20 varieties.



'Autumn Coral' Encore azalea  
Karen Russ, ©2006 HGIC, Clemson Extension

**Deciduous:** Some deciduous azalea species that are native to South Carolina include sweet azalea, flame azalea, Piedmont azalea, Pinxterbloom azalea, plumleaf azalea, swamp azalea and the 'Knap Hill' and 'Exbury' hybrids.

Sweet azalea (*R. arborescens*) is a large, erect shrub that grows from 8 to 20 feet in height and width. Fragrant flowers are white to light pink and may bloom from May through July. Leaves may turn red in fall. Sweet azalea is generally not recommended for the Coastal Plain.



Sweet azalea  
©Thomas G. Barnes.

Flame azalea (*R. calendulaceum*) is loosely branched and upright, often growing more than 4 to 8 feet tall and wide. The non-fragrant flowers range in color from yellow to red and bloom from April to June. Fall leaf color is yellow to red. Flame azalea is not recommended for the Coastal Plain.



Flame azalea  
Millie Davenport, ©2006 HGIC, Clemson Extension

Piedmont azalea (*R. canescens*) is a large suckering shrub that grows 10 to 15 feet tall. Fragrant flowers range from white to pink to rose, blooming from late March to late April.



Piedmont azalea  
Joey Williamson, ©2006 HGIC, Clemson Extension

Pinxterbloom azalea (*R. periclymenoides*) is a low-growing, suckering shrub that may grow to 10 feet tall, although the average height is 4 to 6 feet. Fragrant flowers vary in color from white to pale pink to deep violet, opening from April to May. Foliage is dull yellow in fall.



Pinxterbloom azalea  
William M. Ciesla, Forest Health Management International,  
[www.ipmimages.org](http://www.ipmimages.org)

Plumleaf azalea (*R. prunifolium*) grows 8 to 10 feet tall. Flowers are orange-red to red and bloom later than most azaleas - July and August.

Swamp azalea (*R. viscosum*) grows from 1 to 8 feet tall (averages 5 feet) and 3 to 8 feet wide. Flowers are white, sometimes pink, and are clove-scented. Bloom begins mid-May to June. Swamp azalea grows in damp or wet soil.



Swamp azalea  
©J.S. Peterson. USDA NRCS NPDC. USDA ARS National Arboretum, Washington, DC. June 27, 2003.

'Knap Hill' and 'Exbury' hybrids are the result of crosses involving several species. They grow 8 to 12 feet tall with a spread almost as wide. Boldly colored flowers bloom from April to May. Flower colors range from white to cream, yellow, pink, orange or red; many colors are very bold. 'Knap Hill' and 'Exbury' hybrids are not recommended for the Coastal Plain.

### Buying Plants

Azaleas are usually sold as container-grown plants. They are occasionally available as balled-and-burlapped (B&B). Buy plants that are well-branched and sturdy. Those that have weak, spindly growth usually have a poor root system.

### Planting Sites

Site selection is very important. Azaleas prefer light to moderate shade (year-round). In spring, flowers last longer on plants in filtered sun than those in full sun. This is especially true of late-flowering plants. Azaleas located in full sun are more susceptible to lace bugs than those grown in partial shade. Heavy shade, however, causes weak growth and a reduction in flower production. In winter, azaleas in partial shade usually suffer less cold injury to both the plants and flowers.

Azaleas planted under pine trees generally do well, as the moderate filtered shade and acidic soil are

ideal conditions for vigorous growth. Those planted under shallow-rooted trees (maple, ash, some oaks) have difficulty competing with these other trees for moisture and nutrients.

### Planting Time

Container-grown azaleas can be planted any time of year, provided they are watered properly. Most are bought and planted in spring when in flower. Planting in spring, however, requires special attention to watering to ensure survival through the heat of summer. Buying and planting in fall allows the plant to become established before hot weather arrives. The disadvantage to fall planting is that you cannot actually see the flower in bloom.

Container-grown plants may be root-bound. If you notice roots circling the outside of the root ball after removing the plant from the container, make three or four cuts (equally spaced, a quarter-inch deep) from the top of the soil mass to the bottom with a sharp knife. Roots will be encouraged to spread into the soil and water can penetrate into the root ball.

When planting balled-and-burlapped plants, remove any wire or nylon strings from the root ball. The burlap can be left around the root ball but should be pulled away 6 to 8 inches from the top. Check to be sure there is no plastic inside the burlap. Remove any plastic before planting.

### Preparing the Soil

Azaleas grow best in acid (4.5 - 6.0 pH), well-drained soils high in organic matter. Before planting have the soil tested and adjust the pH according to soil test results.

Azaleas are shallow-rooted plants that are easily damaged by excessive soil moisture. When planted in poorly drained soils, azaleas do not receive the oxygen required for healthy growth and often develop root rot diseases.

### Planting

Good drainage is essential for azaleas. Organic matter added to the soil improves drainage in clay soils and will increase a sandy soil's ability to retain water and nutrients. Current research has determined, however, that organic amendments should not be added just to the planting hole, but to as large a planting area as possible. In heavy clay

soils, these amendments may actually hold excess moisture in the root zone when added to a small planting hole, creating a "bathtub " effect.

Azaleas do not tolerate wet soils, so it is important to avoid this problem by digging and amending a large area when planting them. The area of the bed should be large enough to accommodate the plants at maturity and space for the plants on the outside to spread their roots. Information on mature plant size may be on the tag attached to the plant at purchase, but you may have to inquire with the salesperson or look this information up in a book.

When planting two or more types of plants together, add their ultimate (mature) spreads together and divide by the number of plants to calculate their spacing. For example, if planting an azalea with a mature spread of 4 feet with another type of shrub whose mature spread is 6 feet, the planting distance between them is 5 feet (4 + 6 divided by 2). Some "common sense " adjustments may have to be made at times when expected growth rate and plant spread may be reduced because of less than ideal conditions, or if vigorous and slow-growing plants are planted together.

After calculating the area of the bed, dig the entire bed 6 to 8 inches deep. If you choose to add organic matter to improve drainage, mix in 4 inches of composted pine bark throughout the bed prior to planting.

Place each plant in the bed based on the space needed for growth to its mature size. For each plant, dig a hole only as deep as the root ball. The top of the root ball should be level with (or just slightly higher than) the ground level. It should not be lower than ground level.

Tamp down the area on which the root ball will rest to give it some firm footing. This will also prevent it from sinking below the level of the soil. After planting, lightly pack the soil around the roots. Water plants to eliminate air pockets. Do not fertilize azaleas at planting; newly planted shrubs can be fertilized after they become established. For single plants, dig a hole the same depth as the root ball and two to three times wider than the area to be covered by the branches of the plant you are setting. Place the plant in the center of the planting hole (be sure the top of the root ball is level with or higher

than the ground level). Shape a ring of soil about 3 inches high and 2 feet from the main stem to direct the flow of rainwater to the plant.

If the chosen planting site is not well-drained, prepare a raised bed. Elevate the area to ensure good surface and internal drainage. Dig a shallow hole (or bed) so that the top of the root ball is not at ground level but elevated several inches above ground level. Build up around the root ball with topsoil.

Most soils in South Carolina are acidic enough for optimum growth of azaleas except possibly around the foundations of new homes. Discarded mortar in these areas often causes the pH to become too basic for azaleas. This soil should be removed and replaced with new soil before planting azaleas. Have soil tested to determine pH and fertilizer requirements.

### **Mulching**

Finally, apply 2 to 3 inches of organic mulch, such as compost or pine straw, around the plants (or entire bed). Mulch will help moderate soil temperatures, conserve moisture and discourage weeds. Pull the mulch away from the main stem to prevent disease.

### **Watering**

Watering newly planted azaleas is essential. This is especially true when planting in spring. Their shallow roots will dry out quickly during periods of limited rainfall. When the soil appears dry, water thoroughly to wet the soil to a depth of 8 to 12 inches. Avoid overhead irrigation to reduce incidence of disease. Soaker hoses or drip irrigation that applies water slowly to the base of plants is recommended.

Be mindful that azaleas do not like wet soils. It is important to reach a balance of regular, deep watering and good drainage to promote a healthy plant.

For further information on the care of azaleas, refer to [HGIC 1059, Azalea Care](#). More information on disease and insect problems on azaleas is available in [HGIC 2050, Azalea & Rhododendron Diseases](#) (includes disease-resistant varieties), and [HGIC 2051, Azalea & Rhododendron Insects](#).

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