

△COVID-19 Extension Updates and Resources ... [More Information](#) »



<https://hgic.clemson.edu/>

GROWING ROSES

Factsheet | HGIC 1172 | **Published:** Apr 27, 1999

Few flowering plants can match the beauty, versatility and popularity of the rose.

Height/Spread

Roses range in size from tiny miniatures of 8 inches tall to tree climbing giants that will reach 50 feet or more. Hybrid tea roses typically grow to 4 to 6 feet tall and floribundas generally range from 3 to 4 feet tall. Most popular pillar and climbing roses reach 8 to 15 feet tall.

Growth Rate

Most roses grow fairly rapidly. Tea roses may reach their full height after only three to four years and grow to that height each year despite being cut back each year. Many of the modern roses will only live six to 10 years unless given exceptional care. Some species and climbing roses will live 50 years or more.

Ornamental Features

Roses are grown for their beautiful blooms, either as landscape color or for cutting. Many are highly valued for their fragrance. Landscape uses are quite varied because of the many different types of roses.

Problems

Unfortunately most roses are susceptible to many pests and diseases. Pest and disease controls are covered in fact sheets [HGIC 2106, *Rose Diseases*](#), and [HGIC 2107, *Rose Insects & Related Pests*](#).

Landscape Use



'Dorothy Perkins', a rambling rose
Flickr: Bill Barber, Creative Commons license 2.0

Roses prefer a full day of sun. Give roses at least six to eight hours of direct sun a day. Morning sun is especially important because it dries the leaves, which helps prevent disease.

The area should have good air circulation. The site should be located away from fruit trees to reduce shared insect and disease problems. Avoid competition from roots of other plants.

Roses need loose, well-drained, well-aerated soil that contains plenty of organic matter. A raised bed can provide roses with ideal soil conditions.

You can plant bare root roses in late fall, late winter or early spring in South Carolina. Container-grown plants can be planted later in the spring.

Dig a hole large enough for the roots to spread out in their natural position. Prune any damaged roots and spread the roots down around a mound of soil in the hole. Set the plant so that the graft union is just above the soil level. Once you set the plant at the correct depth, fill in the soil. The soil mixture should be about one fourth peat moss or well-rotted manure and three-quarters native soil. As you fill soil in around the roots be sure to eliminate any air pockets. Water thoroughly.

Prune the top portion of the newly planted rose back to 6 to 8 inches above the graft union. When fertilizing newly planted bare root plants, care must be taken not to burn the new roots. Apply organic amendments to the soil at planting time, but wait until after the plant has produced its first blooms to apply chemical fertilizers.

For best performance, fertilize when the plant first leafs out and repeat after each flush of bloom until six weeks before the earliest frost date for your area. Use a rose fertilizer or slow release tree and shrub fertilizer applied according to label instructions. Composted manure can be used as a top dressing and provides organic matter in addition to nutrients.

Scratch dry fertilizers into damp soil beneath the leaves – but not touching the canes or graft union – and water well. Reduce the amount of fertilizer applied during June, July and August by half but continue to feed after each bloom cycle. Roses require lots of fertilizer, but excessive fertilizer can burn the plant. Always make sure that the soil is moist before applying fertilizer and water well after application.

A 3-inch mulch of pine straw, leaves, pine bark, or wood chips will conserve moisture and reduce weeds. Leave some space clear of mulch against the stem. Replace the mulch early each spring to decrease disease.

Roses need lots of water. If roses do not get enough water they will wilt, drop leaves, grow smaller leaves or stop blooming. Too much water is indicated by bottom leaves turning limp and yellow and falling off.

Deep watering promotes a deep root system. Deep root systems help the rose to survive droughts. Frequent, light watering causes roots to form too near the soil surface, making the plant more susceptible to summer baking. Soaker hoses provide moisture to the root system while keeping foliage dry. Avoid getting the leaves wet when watering, especially late in the day.

As cold weather sets in, reduce the amount of water, but do not allow roses to completely dry out. Plants need water during dry spells, even during the winter months.

Stop fertilizing your roses six weeks before your expected first frost date. Add additional mulch to protect roots and conserve moisture. Roses grown in containers need to be put in the ground, container and all, in a protected area of the yard. To prevent wind damage on large bushes, cut the canes back to 3 feet.

Types of Roses

Roses are divided into several groups based on their parentage and when they were developed.

Modern Roses: Modern roses are defined as all rose groups that were developed after 1867. This is the year that the first hybrid tea was introduced. The most popular groups of modern roses are the hybrid teas, floribundas, and grandifloras. These roses are known for strong repeat blooming ability and for spectacular flower color and form. Other rose groups that are included in modern roses include the polyanthas, modern climbing roses, miniature roses, hybrid musks and modern shrub roses.

Hybrid Teas: These are the most popular roses, with long pointed buds, elegantly shaped flowers and usually one large bloom on a long cutting stem. The blooms are produced all season long and last well when cut. The flowers are most beautiful when half to three-quarters open. Hybrid teas are available in every color imaginable except for blue and black. Hybrid tea plants often have sparse foliage and tall, leggy stems that can reach 6 to 8 feet in height. These roses are grown for the glory of their flowers. They are not attractive as landscape plants.

Floribundas: These roses rebloom well in a wide range of bright colors. Floribundas are usually shorter and bushier than hybrid teas. The flowers are smaller and held in clusters but produced in great quantity. They are rarely fragrant but are very good as landscape shrubs.

Grandifloras: These roses are vigorous, and produce large beautiful blooms and pointed buds like Hybrid Teas with the hardiness and flower clusters of the shrubbier floribundas. Grandifloras generally are tall, slender plants.

Polyantha Roses: Polyanthas are small, compact bushes ranging from one to three feet in height, bearing large dense clusters of small blossoms. Polyantha roses rebloom prolifically. They make excellent subjects for containers, mixed borders and patio plantings.

Miniature Roses: Miniatures range in height from 8 to 24



'New Dawn', a large flowered climbing rose.
Flickr: JamesCanby, Creative Commons license 2.0



'Sutter's Gold' hybrid tea rose.
The Dow Gardens Archive,
Dow Gardens,
www.insectimages.org

inches and have small buds, stems, foliage and flowers. They are ideal for landscape borders, ground covers and potted indoor plants or hanging baskets. Miniature roses are a way to have a variety of blooms in a small space. They are grown on their own roots, so the suckers that come up are the same named variety.

Hybrid Musk Roses: Hybrid musks are large (5 to 6 feet or taller) shrubs of graceful, arching habit. They have attractive, leathery foliage and bloom in clusters of many small to medium-sized flowers. Most are highly fragrant, with fruity scents that carry a good distance. They have disease resistance and will grow in filtered shade.

Modern Shrub Roses: These roses are vigorous and hardy. They are attractive not only for their bloom, but also as landscape shrubs, with beautiful foliage, form and often bright stems and hips. Shrub roses are generally easier to maintain than other modern roses, requiring much less pruning. Many have good disease and pest resistance.

English Roses: English roses are a group of roses introduced in 1969 by the English rose hybridizer David Austin. They have the full flower form and fragrance of old roses but bloom repeatedly and come in more colors. English roses are often classed as shrub roses and many are good landscape plants. They are often billed as disease resistant but this is generally not the case in the South.

Climbing Roses: Climbers are vigorous growers that send out long shoots or canes which can be trained over fences, arbors or trellises. They are grouped into several types, with much overlapping among types.

Ramblers: This type of climbing rose blooms only once in late spring or early summer, with many clusters of small roses. Ramblers are very hardy and rapid-growing, as much as 20 feet in a season.

Large-Flowered Climbers: These climbers are slower-growing, are often trained on posts or some other type of support and may require heavy annual pruning. Many are sports (mutations) of shorter modern roses. Climbing hybrid teas do not bloom as continuously as do their bush parents, but flowers and foliage usually are identical.

Old Roses: Old roses include all rose groups developed before the introduction of the first hybrid tea rose. These



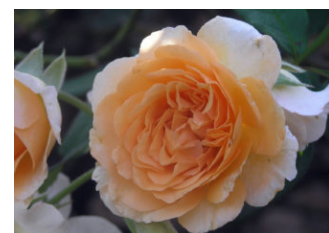
'Sexy Remy', a disease resistant floribunda rose
The Dow Gardens Archive,
Dow Gardens,
www.insectimages.org



'Marie Pavie', a polyantha rose.
The Dow Gardens Archive,
Dow Gardens,
www.insectimages.org



'Starina', a miniature rose.
The Dow Gardens Archive,
Dow Gardens,
www.insectimages.org



'Buff Beauty', a hybrid musk rose.
Karen Russ, ©2008 HGIC,
Clemson Extension

plants are grown for their historic interest, color, fragrance and ability to survive adverse conditions. Old roses are divided into groups descended from European roses and those descended at least in part from Chinese roses.

European Roses: European roses are almost all spring bloomers that have one flush of bloom a year. Their colors are primarily whites, pinks, reds and purples. Many are extremely fragrant. They are quite cold hardy, but may not adapt well to hot areas. European roses include gallicas, damasks, albas, centifolias, and moss roses.

Gallica Roses: Gallicas are stocky, upright shrubs with fine prickles and deep green foliage. Some gallicas have simple single or semi-double blooms; others are very double, with swirled or intricately quartered petals. Many are highly fragrant. Flower colors are mainly deep pinks, crimsons and purples. Striped and mottled varieties are common.

Damask Roses: This is a very old group. They are taller plants than the gallica roses, with grayish-green foliage. Their habit is usually graceful and arching, spreading under the weight of many flowers. Damasks have large blossoms with a strong, distinctive fragrance. They range in color from white to deep pink. Damask roses are not adapted to the heat of the coast and lower Piedmont.

Damask Perpetual Roses: These are also called Portland roses. They were the only repeat-blooming roses until the introduction of the China roses. They are stocky, healthy bushes, with double, fragrant blossoms set in a ruff of leaves. The colors range from white through all the pinks to deepest red.

Alba Roses: form tall shrubs with smooth stems arching up to 8 feet. They have few thorns. The albas have dense, bluish green foliage. They are very attractive garden plants, even when not in bloom. Their fragrant blossoms are generally white to blush pink. Albas are resistant to disease and grow into large, healthy shrubs. Albas are unusual shade-tolerant roses. They will grow in the open shade of a north-facing wall or under tall trees.

Centifolias: Centifolias are the ‘Cabbage Roses’. They are thorny, open bushes to 4 to 5 feet high. The very large, double and fragrant blossoms are borne so freely that they cause the plant’s branches to nod under their weight. Colors range from white to deep rose-red, sometimes striped and



‘Knockout’, a popular modern shrub rose.
Karen Russ, ©2008 HGIC,
Clemson Extension



‘Heritage’, an English rose.
The Dow Gardens Archive,
Dow Gardens,
www.insectimages.org



‘Rosa Mundi’, a gallica rose.
Flickr: Tim Waters, Creative
Commons license 2.



‘Mutabilis’ China rose flowers
age from apricot to deep pink.
Flickr: freshelectrons, Creative
Commons license 2.0

spotted.

Moss Roses: Mosses are sports of centifolia and damask roses. Their flower stalks and buds are covered with a mossy growth that exudes a balsam scent. Moss roses are susceptible to powdery mildew.

Chinese Roses: Chinese roses introduced reblooming ability to roses and quickly became very popular. In addition to reblooming ability, the roses included warm colors of yellow and scarlet. Although most were not cold hardy, they are beautiful plants, and well-adapted to heat. The rose groups descended from Chinese parentage include Chinas, Bourbons, Perpetuals, Noisettes and Teas. Many of these do well in the South.

China Roses: Chinas bear loose, semi-double flowers on graceful, wiry stems with red-tinted foliage. China roses are healthy plants, with compact growth. They rebloom throughout the growing season. Chinas range in color from deepest red and maroon through pink to white. Some hybrids also have warm tones of yellow, saffron, salmon and orange. They are rarely fragrant and are sensitive to cold, but most grow well in all of South Carolina except the mountains. Chinas are especially well-suited to growing near the coast.

Bourbon Roses: Bourbons are intensely fragrant. They grow into large shrubs exceeding six feet in all directions. They are susceptible to disease, but are grown for the beauty and fragrance of their prolific flowers and for their vigor. They range in color from deep reds through pinks to blush and white. Bourbons are well-suited to all areas of South Carolina, but will need extra care to control disease.

Noisette Roses: Noisettes originated in Charleston, South Carolina, during the first decade of the 19th century. They are tall shrubs or vigorous climbing roses with elegant, slender foliage. The flowers are in pastel colors including lovely soft yellows that are very rare in old roses. Noisettes are strong, healthy growers but not hardy in cold winters.

Several cultivars will grow throughout South Carolina, while more tender sorts will do best on the coast. Noisettes are exceptional for repeat bloom, beauty of flowers and fragrance.

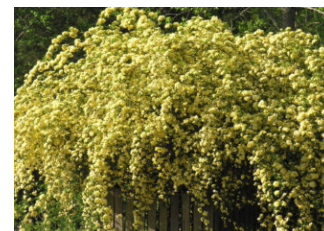
Tea Roses: Tea roses have exquisite, soft-colored blooms



'Old Blush', a China rose.
Wikimedia Commons, A.
Barra, GNU Free
Documentation License



'Alister Stella Gray', a noisette
rose
Karen Russ, ©2008 HGIC,
Clemson Extension



Lady Banks rose is well
adapted throughout South
Carolina.
Joey Williamson, ©2008
HGIC, Clemson Extension



Cherokee rose (*Rosa*)

and excellent repeat bloom. Growth is slender and wiry like the Chinas. Their foliage is typically shiny and delicate. They have a unique tea scent. Teas are often tender, and not all will grow well in the colder parts of the state.

Hybrid Perpetuals: These roses will grow to be large, vigorous bushes if given good care. The large, fragrant flowers range in color from blush white to deepest red and purple. Many cultivars can be grown as pillar roses or short climbers. Hybrid perpetuals especially the dark red varieties, are susceptible to blackspot and powdery mildew.

Species Roses: Wild roses range from prostrate shrubs to enormous climbers. Their flowers range in color from white through all shades of pink to deep crimson. A few species are bright yellow. Species roses often have single blossoms and bloom once during the growing season. They are often very graceful landscape shrubs. Most are very hardy and disease-resistant. A few of the species roses that grow well in South Carolina include the Lady Banks roses, Cherokee rose and the sweet briar rose.

Rugosa roses are a tough, disease-free group of roses that have repeat bloom and a wonderful spicy scent. They will grow best in the cooler part of the state.

There are innumerable cultivars of roses within all these groups. Consult a local rose grower or local chapters of the American Rose Society for recommendations on the best for your area. For information on when and how to prune, see [HGIC 1173, Pruning Roses](#).

If this document didn't answer your questions, please contact HGIC at hgic@clemson.edu or 1-888-656-9988.

Author(s)

Karen Russ, Former HGIC Horticulture Specialist, Clemson University

Bob Polomski, PhD, Extension Consumer Horticulturist, Clemson University

This information is supplied with the understanding that no discrimination is intended and no endorsement of brand names or registered trademarks by the Clemson University Cooperative Extension Service is implied, nor is any discrimination intended by the exclusion of products or manufacturers not named. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed.

laevigata) covering a brick wall.

Joey Williamson, ©2012
HGIC, Clemson Extension



Rosa rugosa 'Alba' grows best in the upstate.

Karen Russ, ©2008 HGIC,
Clemson Extension

Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, gender identity, marital or family status and is an equal opportunity employer.

Copyright © 2020 Clemson University
Clemson Cooperative Extension | 103 Barre Hall Clemson, SC 29634
864-986-4310 | HGIC@clemson.edu