



PEONIES FOR THE HOME LANDSCAPE

Erv Evans

Extension Associate

Peonies are long-lived, perennial flowers that produce large flowers in the spring. Colors include black, coral, cream, crimson, pink, purple, rose, scarlet, white, and yellow. By planting early, mid-season, and late flowering cultivars, you can have peonies flowering for 6 to 8 weeks. Two types of peonies are grown in North Carolina: garden peonies (*Paeonia valbiflora* or *Paeonia officinalis*) and tree peonies (*Paeonia suffruticosa*). Garden peonies are herbaceous perennials (height 20 to 36 inches) grouped into five types according to flower shape: single, semidouble, double, Japanese, and anemone. Tree peonies produce large numbers of flowers on a shrub-like plant; the stems do not die back each year.

Cultivars

Peonies grow best in cool climates. Some mail order catalogs provide a rating range from 100 to 300 chilling hours per winter for cultivars. Select cultivars with a low chilling requirement. In general, most of the newer peony cultivars do not perform well in the south because they were bred and selected in northern nurseries and do not receive an adequate amount of cold weather in North Carolina. Many of the older cultivars perform reasonably well in North Carolina including: Baroness Schroeder (white), Felix Crousse (red), Festiva Maxima (white double with a crimson center), Felix Supreme (raspberry), Mons. Jules Elie (medium pink double),

Sarah Bernhardt (apple blossom pink), and Teresa (pink).

Site Requirements

Peonies grow best in full sun, but will tolerate light shade. Peonies require winter cold to flower. To encourage flowering, plant on a northern exposure and do not mulch in the winter. Flower size will decrease due to root competition from nearby trees and shrubs. The planting site should have protection from strong winds, but be well aerated to reduce diseases problems. Peonies prefer a well-drained soil with a pH of 6.0 to 7.0. Roots will quickly rot in poorly-drained soil; consider planting in a raised bed. Try to avoid locations where peonies have been grown before.

Planting

The best time to plant peonies is in early fall — September and October are ideal. If planted in the spring, they may not bloom for a year or two. Purchase divisions containing 3 to 4 “eyes”; divisions with only one or two eyes normally take 3 to 5 years to flower. Be sure the divisions are free from rot when they are planted. Trim away any soft spots with a sharp knife.

Dig a hole 12 to 18 inches deep and 18 inches wide, spacing holes 3 to 4 feet apart. Incorporate a 2- to 4-inch layer of organic matter such as compost, pine bark, or well-

Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Employment and program opportunities are offered to all people regardless of race, color, national origin, sex, age, or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.



**North Carolina
Cooperative Extension Service**
NORTH CAROLINA STATE UNIVERSITY
COLLEGE OF AGRICULTURE & LIFESCIENCES

aged manure. Add ¼ to ½ cup of 10-10-10 fertilizer per plant in the bottom of the hole. Avoid adding fertilizer to soil that will surround the roots. Many gardeners add a half cup of bone meal or superphosphate at planting. Remember peonies are a more or less permanent plants in the garden and they are deep rooted; the only time you can properly prepare the soil is prior to planting.

Fill the hole about half full of amended soil then place the root division with the eyes facing upward. After the division is in place, work the soil in around the fleshy roots. Be sure the “eyes” will not be more than 2 inches below the soil surface when backfilling is completed. If planted in September, the clumps should be partially established before severe cold weather occurs.

Plant a tree peony tuber with 4 to 5 inches of soil covering the graft. The graft can be recognized by the ridge on the stem and a difference in bark texture. Deep planting allows the graft to develop its own root system.

Care and Maintenance

Mulch peonies each spring with a 2- to 3-inch layer of organic matter to control weeds, conserve moisture and to keep the soil cool. In the fall, remove and destroy the old mulch to aid disease control. Leave the plants unmulched during the winter. Maintain adequate phosphorus levels in the soil for healthy, vigorous root development and growth. Soil test every 3 years to monitor for essential nutrients.

Apply a low nitrogen fertilizer such as 5-10-10 at the rate of 2 to 3 lb per 100 ft² (2 Tbsp per ft²; ½ cup per plant) in the spring when the stems are about 2 or 3 inches high. Over-fertilization, especially with nitrogen, usually results in weak stems and reduced flowering.

To produce larger flowers, a practice known as *disbudding* is recommended. The terminal bud on each stem tip is left and all side buds are removed. This should be done as soon as the buds are visible. To prevent the large flowers from breaking or bending over during a strong wind or rain, plants should be staked. Sink the stake behind the plant and use stakes that are 6 to 12 inches shorter than the plants so they will not be visible. Loosely tie the stems to the stake using plastic covered wire or a soft cloth. Tie the stems, making a double loop, with one loop around the plant and the other around the stake.

Remove flowers as soon as they fade to prevent seed development, which can use up needed food reserves. The faded flower should be removed just below the flower, leaving as much foliage as possible. Cutting flowers for enjoyment in the home can also reduce the flowering in future years. Do not cut more than one-third to one-half of the flowers for cut flowers and leave as much foliage as possible on the plant.

In the fall, after a heavy frost, remove and destroy the stems of garden peonies down to 3 inches from the soil surface to eliminate the possibility of the fungal diseases overwintering. Tree peonies should not be cut back in the fall.

Peonies do not respond well to transplanting and reestablish slowly. Divide and replant only after they become crowded — usually after 10 to 15 years. Fall is the best time to divide when swollen, red buds are clearly visible. Carefully dig around and under the plant to avoid cutting off roots. Cut tubers with a sharp knife that has been sterilized with a flame or in alcohol. Each section should contain 3 to 5 eyes. Dust cut surfaces with fungicide to discourage disease infection and rot.

Potential Problems

No flowers — Peonies that were started with small tubers or were recently transplanted (especially in the spring) may fail to develop flowers for several years. Planting the tubers more than 2 inches deep or in a shady or poorly drained location can also prevent or reduce flowering. Other possibilities include tree and shrub root competition and late spring frosts.

Botrytis blight — This is caused by a fungus that overwinters on dead leaves, stems, and roots. The disease usually appears in mid-summer, especially during cool, wet weather. Black, soft buds and wilted or soft stem tissue under the buds are usually an indication that botrytis blight is present. For control, remove diseased foliage that develops during the growing season and cut plants to the ground after a killing frost and destroy the foliage.

Phytophthora blight — This is less common than botrytis blight but can be more devastating. Black leathery spots first occur on the buds. Stems dry up turning brown and leathery; plants may rot at the ground line or crown. Control measures recommended for botrytis blight should be followed.

Leaf spots — Several fungi can cause leaf spots on peonies. Leaf blotch is a disease that usually occurs after flowering. Infected plants have small red or reddish-brown spots that later enlarge into purplish-brown blotches

on the leaf surface. Destroy affected foliage as it occurs and all foliage after a killing frost.

Virus — Mosaic virus produces yellowish blotches and rings on the foliage. Infected plants are not dwarfed or deformed. Destroy infected plants to prevent spread.

Ants — Ants often will feed on the sweet, sticky secretion which covers the flower buds. Very little direct damage results from their feeding.