

EONIES are among the most adaptable perennials for North Dakota. They include a variety of flower forms and beautiful colors with attractive foliage that remains long after the flowers have faded. Peonies can serve as an interesting accent along a shrub border, fence or wall; if planted quite close together, a fine informal hedge effect can be created. This works well as a subtle divider between lawn areas, as a shrub-like backdrop for annual flowers, or along a driveway or property line. Peonies can substitute for low growing shrubs in locations where snow may be a problem, since the tops are removed in the fall.

Peonies combine well with other perennial flowers by providing a season of color during June. Sufficient water and weed control are essential if peonies are to give top performance.

Soils and Where to Plant

Peonies thrive in any well-drained, good, rich garden soil. Plant them in full sunlight. When peonies are planted in poorer soil, dig a hole 2 feet deep and 2 feet wide and fill with rich topsoil for each plant.

Peonies may be used in foundation plantings but often suffer from drought and may require more water than when planted in open locations. The peony plant should be spaced 2 to 21/2 feet from the wall.

Planting, Spacing and Cultivation

September is the best planting and dividing time for peonies in North Dakota. Roots set in September usually become established before cold weather. Three to five healthy buds per root are desirable. See Figure 1.

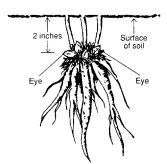


Figure 1.

Not more than 2 inches of soil should cover the top bud. Peonies set deeper than 2 inches may make excellent foliage growth but often fail to bloom satisfactorily.

A husky division of an old plant should not be expected to flower the first year after planting. In fact, it is advisable to nip off any flower buds that appear the first year to permit the plant to develop its root system during the first year of growth. During the second year your plants may be permitted to flower. By the third and fourth years, the plants should give excellent blooms.

Healthy roots in fertile soil may bloom for as long as 50 years. Plants should be spaced 3 to 4 feet apart. Closer spacing makes it necessary to reset your plants sooner. A 2 or 3inch leaf or straw mulch applied after the ground freezes is desirable the first year for newly set peonies. Remove this mulch about April 1.

Cultivation should be shallow, just to keep down the weeds. Cultivating more than 2 inches deep is likely to injure the shallow peony roots.



Propagation

When old, established peony clumps become too crowded, flowering may be reduced and the roots should be divided. In September, cut the stems near ground level and dig the roots carefully with a spading fork. Shake the roots to remove loose soil and then wash off most of the soil. Washing the soil away helps you to locate natural crown cleavage areas so that less of the fleshy roots are lost while dividing the clumps. Each division should have three to five healthy eyes (buds) attached to three or four thick roots.

Fertilization

Peonies are very heavy feeders. Barnyard manure should not come in contact with the peony roots or shoots. It may stimulate decay of the fleshy roots. Well-rotted manure, however, may be used to improve the soil if it is applied to the soil surface in a 1 to 2-inch layer. A couple of tablespoons of 5-10-5 fertilizer worked into the soil around each established plant in late fall or early spring is beneficial. Keep the commercial fertilizer and/or well-rotted manure 12 inches away from the stems of the plant.

When to Cut Blooms

Blooms for bouquets should be cut as soon as the outer petals unfold. Avoid unnecessary removal of large amounts of the leaves when picking flowers. Leaves should be left on the plant to manufacture food for the next season's growth and bloom.

Place blooms in a container as soon as cut. Snip the stems $\frac{1}{2}$ inch shorter under water. This prevents air bubbles in the end of the stem and the blooms last longer.

Peonies in full flower are often top heavy, especially after a rain. Unsightly drooping of flowers can be prevented by staking the plants. Thin wire hoops can be fastened to three or four stakes to provide an economical support. These should be installed in early May before your plants get too large. Remove spent blooms and stems to the foliage line as flowers wither.

Why Peonies Fail to Bloom

Several causes for failure of peonies to bloom satisfactorily are: too deep planting, the variety, shading, diseases (such as botrytis and viruses) and insects (thrips).

If your peonies have been planted too deep, you may hurry along the flowering time by resetting them, but if they have been in place several years, they may be nearly ready to bloom since the plant "lifts" itself a little each year as it grows.

A few varieties of peonies are noted for their poor flower production. These may develop large buds that expand but refuse to open if weather is not perfect. Such varieties should be discarded.

Shade from buildings or trees may result in weak plants that fail to produce flowers or may bloom sparsely. If this is the problem, select a new site in full sun. Shade that did not exist at planting time could develop over a 20 year period, gradually creating problems with reduced blooms over the past few years.

Botrytis blight is caused by a fungus that over-winters on dead peony leaves, stems and roots. The easiest control is sanitation by completely removing the plant tops (bury or burn them) in September or October.

Some virus diseases may stunt and deform the growth of your peonies and cause a gradual decline. Each year the plant becomes shorter, somewhat discolored, and may fail to bloom. Remove such plants and destroy them.

Certain insects such as thrips can cause flowers to become deformed and not open. Apply the appropriate insecticide if thrip activity is noted, following label in structions.

Varieties

There are hundreds of peonies. Peonies are rated as to quality in most peony catalogs. Here are a few excellent varieties for the beginner:

Double Flowered



- White & Blush Alma Hansen, Avalanche, Amelia Olson, Festiva Maxima, Elsa Sass.
- Light Pink Myrtle Gentry, Mrs. Franklin D. Roosevelt, Therese, Doris Cooper.
- Medium to Dark Pink Queen of Hamburg, Sarah Bernhardt, Mons. Jules Elie, Mrs. Livingston Farrand.
- Red Karl Rosenfeld, Phillipe Rivoire, Kansas, Highlight, Longfellow, Felix Crousse.

Single Flowered



- White Le Jour, Krinkled White, Hedgemaster.
- Pink Sea Shell, Helen.
- · Red Arcturus, Kickapoo.

Japanese Flowered



- White & Blush Plainsman, Isani-Gidui, Moon of Nippon.
- Pink Westerner, Tokio.
- Red Mrs. Wilder Bancroft, Charm, Mikado.

Most local nurseries or garden centers offer quality peony plants for sale. Mail order companies may offer a wider selection than what your local supplier may be able to provide.

Helping You Put Knowledge To Work



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2M-1-94