

RHODODENDRONS FLOURISH WITH COMPANION PLANTINGS IN ACID SOIL

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Rhododendron is a low maintenance, broad-leaved, evergreen shrub (ericaceous) which can provide color from mid-April through July. This color can vary from deep red to clear white, with the most common color being magenta. Selection of the correct species and/or cultivar can result in a shrub 2 to 3 feet in height or one 10 to 15 feet in height. Many cultivars are hardy from Chicago to Michigan to Boston and south. These hardy specimens provide a gene pool for breeding colorful, disease-resistant, and hardy rhododendrons. Many nurseries have been instrumental in the development of new rhododendron cultivars, but Anthony Shammarello in South Euclid, Ohio and Ed Mezzitt in Hopkinton, Massachusetts have been leaders. Some of the hardy species for the northern Midwest and Northeast include *Rhododendron carolinianum*, *R. catawbiense*, *R. fortunei*, *R. X laetivirens*, *R. maximum*, *R. mucronulatum*, and *R. smirnowii*.

Carolina Rhododendron (*Rhododendron carolinianum*) is native to North America. It is the outstanding shrubby evergreen rhododendron with a maximum height of 6 to 8 feet, and becomes a broad upright oval at maturity. *R. carolinianum* is very adaptable from partial sun to shade. (Generally speaking, the smaller the rhododendron leaf, the more sun the plant will take.) The large-leaved rhododendrons must be planted in shade where smaller leaf forms will take at least 6 to 8 hours of sun. Carolina Rhododendron is extremely susceptible to Phytophthora; therefore, good soil drainage is important. This hardy rhododendron flowers early to mid-May. The normal species color ranges from magenta to pink, although there is an album form readily available in the trade. This outstanding evergreen is an annual flowerer with numerous flowers per terminal, making it probably the outstanding early spring flowering form. The most widely-known and adaptive hybrid of Carolina Rhododendron is PJM Rhododendron, named after its breeder, Peter James Mezzitt. This hybrid is outstanding throughout the Midwest in foundation, natural, or mass plantings as an understory. It requires little maintenance, responds fairly well to slightly alkaline (well-

watered) soils, and will thrive in full or partial sun. In addition to its annual display of magenta flowers, it does have a maroonish fall leaf color which is an extremely desirable characteristic for the otherwise drab winter months.

Catawba Rhododendron (*Rhododendron catawbiense*), another native North American rhododendron, provides the hardiness in the breeding of North American cultivars. This native grows 8 to 10 feet in height with a medium-sized leaf that ranges 3 to 6 inches in length and 1½ to 2 inches in width. Catawba Rhododendron flowers late in May with 14 to 20 trusses per flower. The flower buds are perfectly hardy to -30° F. It prefers a minimum of 50 percent to a maximum of 80 percent shade and is quite compatible in mass or naturalistic plantings under oak or pine. A few of the cultivars which are outstanding and flourish as far north as Midland, Michigan are as follows:

CULTIVAR	COLOR
'Album Elegans'	mauve, fading to white
'America'	dark red
'Blue Peter'	dark red
'Boule de Neige'	white
'Boule de Rose'	rose-pink
'Caractacus'	magenta-red
'Catawbiense Alba'	white
'Catawbiense Boursalt'	crimson-red
'H.H. Hunnewell'	lilac-red
'Henrietta Sargent'	rose-pink
'Henry'	red to deep purple
'Ignatius Sargent'	rose-crimson
'King Tut'	bright red with white blotch, leaves dark purple
'Lady Armstrong'	carmine
'Mrs. C.S. Sargent'	carmine-rose
'Parson's Grandiflora'	magenta
'Pinnacle'	pink
'President Lincoln'	mauve
'Purpureum Elegans'	deep purple
'Roseum Elegans'	magenta

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The most widely known and adaptive hybrid of Carolina Rhododendron (*Rhododendron carolinianum*), PJM Rhododendron, makes an outstanding display in foundation, natural, and mass plantings. It was named after its breeder, Peter James Mezzitt.



One of the many fine cultivars of Catawba Rhododendron (*Rhododendron catawbiense*), is 'America', whose flower buds stay hardy in -30°. It fits well in mass or naturalistic plantings under oak or pine.

In general, the hardy mid-sized rhododendrons available for planting throughout the Northeast or northern Midwest usually have *Catawbiense* as one of the parents.

Fortune Rhododendron (*Rhododendron fortunei*) is the outstanding introduction of China. This 10 to 15 foot upright shrub has long, large leaves with scarlet bracts which accompany the new growth below the bud (another desirable as well as identifying characteristic). The pink to white blossoms are in full bloom during the end of May. *R. fortunei* is not only a good compatible plant for many of the narrow-leaf evergreens, such as pine, but is an outstanding understory with Scarlet or Bur Oak.



Fortune Rhododendron (*Rhododendron fortunei*), introduced from China, has long, large leaves with scarlet bracts which accompany the new growth below the bud.

Wilson Rhododendron (*X Rhododendron laetivirens*) is a hybrid of *R. carolinianum*. It is perfectly hardy through the Boston area and in protected sites as far north as Midland, Michigan. It is a small rhododendron, growing 2 to 4 feet in height, being broader than tall. Its glossy, sharp evergreen leaf is similar to the foliage of Mountain Laurel. The flower of this outstanding evergreen shrub is pink to magenta but is not dependable in more northern latitudes. The plant integrates well in rock gardens, foundation plantings, or mass plantings under oak and pine.

Rosebay Rhododendron (*Rhododendron maximum*), the giant of the native North American rhododendrons, reaches an average height of 10 to 15 feet in the Northeast, but ranges in height from 4 feet in Canada to an ultimate of 40 feet in North Carolina. Its leaves are large (4 to 8 inches in length) and 2 to 2½ inches in width. Rosebay Rhododendron requires deep shade and fertile, well-drained soil, often thriving in bogs. Its pale pink to white flowers appear in July but are not as effective as *R. catawbiense* since the new growth often surrounds these late-appearing flowers. *R. maximum* is an outstanding woody species which naturalizes well. Its flower buds are perfectly hardy to -25° F.

Korean Rhododendron (*Rhododendron mucronulatum*), a deciduous rhododendron from China, is 6 to 8 feet in height, being rather an erect shrub. It is one of the earliest of the rhododendrons to flower, usually being quite showy in late April, or about the same time as *Magnolia stellata* flowers. Its flower buds are

perfectly hardy to -25° F. The flower color is normally a magenta, but a clear pink variety is available. These flowers are somewhat trumpet-shaped, being 1 to 1¼ inches in length. The flowers themselves resist frost extremely well, extending their life even if temperatures as low as -27° F. are encountered. Korean Rhododendron requires some sunlight; therefore, west to north exposure with less than 50 percent shade is most desirable. This plant adapts well in woody, naturalized plantings and fits foundation plantings.

Smirnow Rhododendron (*Rhododendron smirnowii*) is an outstanding evergreen shrub, growing 6 to 8 feet in height with a 10 to 12 foot spread. The dark green leaves often reach 3 to 7 inches in length with a light brown tomentose on the underside. This outstanding rhododendron is noted for its bright green foliage. Its late flowering which peaks during late May or early June is extremely showy. This annual flowering shrub integrates well into woody settings. The flower color is a magenta to rosy-pink, depending upon the seed source.

The real key to growing rhododendrons is to understand their requirements. These requirements include: protection from sun and wind, high humidity, acid soil pH (below pH 7.0), and high organic soils.

The soil pH should range from 4.5 to 5.5. The best additives to lower the soil pH include sulfur or iron sulfate. Aluminum sulfate will adjust the soil pH down but can cause phosphorus and other elements to be chemically unavailable. In soils where iron chlorosis continues to be a problem, EDTA chelated iron is best to correct this problem.

Organic matter is important to provide moisture and nutrients to this shallow-rooted shrub. This organic matter can be composted oak leaves, pine needles, pine bark, or animal manure.

Fertilizing should be kept to a minimum or not applied at all. If one is considering annual fertilizer, then a 0-20-20 or low nitrogen organic fertilizer would be best, e.g., cottonseed meal, fish meal, or tankage. The application of nitrogen can reduce or limit flowering while resulting in leggy plants.

Rhododendrons are one of the lowest maintenance plants available for Northeast and Midwestern sites. They flourish when grown in companion plantings which include pine (*Pinus*), Scarlet and Bur Oak (*Quercus*), crab apple (*Malus*), dogwood (*Cornus*), redbud (*Cercis*), Mountain Silverbell (*Halesia*), Japanese Katsuratree (*Cercidiphyllum*), Black Gum (*Nyssa*), and Sweet Gum (*Liquidambar*). Rhododendrons are not companions with maple (*Acer*), serviceberry (*Amelanchier*), spruce (*Picea*), or juniper (*Juniperus*). Rhododendrons will flourish in the Midwest if planted as understories in well-drained sites. The only maintenance that need be done, after initially acidifying the soil, is the annual application of organic matter, e.g., leaf mold, pine needles, or peat moss. Artificial irrigation with alkaline Midwest water can cause a problem; therefore, in Wisconsin, Michigan, and the Great Lakes States artificial irrigation is not desirable or needed. Rainfall is generally high enough to preclude irrigation. Companion plantings make rhododendrons work! Rhododendron is truly the aristocrat of broad-leaved evergreens which requires little or no maintenance.

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