

Azaleas and Rhododendrons for Minnesota and Wisconsin

Azaleas and rhododendrons, best known for their showy, colorful flowers, can be used in many Minnesota landscapes if the proper species and cultivars are selected.

Botanically, azaleas and rhododendrons belong to the genus *Rhododendron*. This genus is one of the largest genera of woody plants, containing over 800 species. The terms azalea and rhododendron are general terms used to describe subgroups within the genus. Azaleas that survive in Minnesota and Wisconsin can fit in one of the two categories but, as always, there are exceptions. *Rhododendron mucronulatum*, which is hardy in Minnesota and Wisconsin, is considered a rhododendron, although it is deciduous.

SITE SELECTION

The ability to successfully grow azaleas and rhododendrons depends on site selection and preparation.

For azaleas, an area with full sun to partial sun is preferable although they will tolerate slight shade. The evergreen rhododendrons will tolerate more shade than azaleas and need protection from winter sun to prevent leaf burn.

Azaleas and rhododendrons are also sensitive to extreme heat. Try to avoid selection areas such as an exposed south side of a house where heat is reflected and can build up. Also avoid areas where wind and root competition could be problems.

Because of their very shallow, fibrous root systems, azaleas and rhododendrons tend to dry out rapidly and will require watering during dry periods, especially during hot summer days. With this need for irrigation, a site with good drainage is a must. Poor drainage can result in root rot caused by many species of the fungus *Phytophthora*.

Azaleas and rhododendrons require an acid soil for best growth. If your soil is not acidic, the addition of acid peat, sulfur, or ferrous sulfate can lower the pH. A pH of 4.0 to 5.5 is optimum. Organic matter should also be added liberally to the soil. Compost, manure, sawdust, or acid peat moss will provide necessary organic matter.

PLANTING

When planting, it is important not to plant too deep. Most rhododendron roots are within the upper four to six inches of soil and should not be buried any deeper than they were previously growing. Dig a shallow hole and backfill around the plant with acid peat.

Once planted, azaleas and rhododendrons can be fertilized once or twice a year during spring or summer with an acid fertilizer. Ammonium sulfate or special azalea fertilizers are available.

The use of a mulch is extremely beneficial. It will help retain water within the soil during hot, dry periods, modify the soil temperature, and inhibit weeds. Deep cultivation and hoeing disturb the shallow root system, so a mulch is preferable.

PESTS

In our climate, azaleas and rhododendrons do not have many serious pest problems and a scheduled spray program is not necessary. Powdery mildew may need to be controlled in years with hot, humid summers. Chlorotic foliage may indicate that the soil is too alkaline and needs further acidification.

If proper species and cultivars are chosen, no winter protection is needed other than that used to discourage rabbits and mice. A cylinder of hardware cloth prevents feeding by rodents.

RECOMMENDED SPECIES & CULTIVARS

The following list of azaleas and rhododendrons are recommended for Minnesota and Wisconsin landscapes. There are other species and cultivars that do survive here, but they are not recommended due to borderline hardiness, poor form, or lack of availability. Because flower buds are the least cold hardy part of the plant and flower show is the primary landscape value, cold hardiness ratings used in this discussion refer to flower bud hardiness. Most harsh winters that will kill flower buds will not injure the vegetative part of the plant and will not affect the ability of the plant to form flower buds for the next year.

Rhododendron x kosterranum (mollis azaleas). This hybrid species is often labeled *Rhododendron mollis* in the nursery trade. Mollis azaleas are extremely showy, blooming in late May with flower colors in shades of yellows,

oranges, and reds. Mollis azaleas are flower bud hardy to -20° to -25° F, and will bloom well most years in the Twin City area and south. A particular strain of mollis azalea that has been selected for hardiness by the University of Minnesota Landscape Arboretum is sold by Minnesota and Wisconsin nurseries. At maturity, mollis azaleas will have a height and spread of approximately six to eight feet.

Rhododendron mucronulatum (Korean rhododendron). This is a deciduous rhododendron with excellent cold hardiness. *Rhododendron mucronulatum* is native to Korea, China, and Japan. It blooms in early May and can sometimes be hit by a late frost. The flowers are magenta colored and appear before the leaves, giving a bright floral show. A pink flowered form of this species, equally hardy, is a cultivar called 'Cornell Pink'.

Northern Lights Series of hybrid azaleas. This is a series of hybrid azaleas being developed and released by the University of Minnesota Landscape Arboretum. Any azalea released and included in this series will have flower bud hardiness of -30° to -45° F to withstand Minnesota winters. As the azalea breeding program continues, new selections will become available and will be denoted by a cultivar name that includes 'lights'. Current named cultivars include:

1. Northern Lights F1 hybrid seedlings. These azaleas are derived from a cross between *Rhododendron x kosteranum* and *Rhododendron prinophyllum*, and were first commercially available in 1978. The plants are extremely floriferous, with each seedling flowering in a shade of pink, giving a fantastic floral show in late May. The flowers have a sweet fragrance. Mature height and spread are six to eight feet.
2. *Rhododendron* 'Pink Lights' ('Pink Lights' azalea). 'Pink Lights' azalea is a clonal selection from the Northern Lights seedling azaleas, with light pink flower color. 'Pink Lights', like the northern Lights seedling, is hardy to -45° F with mature height and spread of eight feet. 'Pink Lights' has a sweet floral scent and is extremely floriferous. 'Pink Lights' was introduced by the University of Minnesota Landscape Arboretum in 1984.
3. *Rhododendron* 'Rosy Lights' ('Rosy Lights' azalea). 'Rosy Lights' azalea is a clonal selection from the Northern Lights seedling azaleas with deep rosy pink flower color. 'Rosy Lights', like the Northern Lights

seedlings, is extremely hardy with mature height and spread of eight feet. 'Rosy Lights' is extremely floriferous. 'Rosy Lights' was introduced by the University of Minnesota Landscape Arboretum in 1984.

4. *Rhododendron* 'White Lights' ('White Lights' azalea). 'White Lights' azalea is a hybrid of *Rhododendron prinophyllum* background introduced by the University of Minnesota Landscape Arboretum in 1984. Its flower bud hardiness is rated at -35° F. This cultivar is extremely floriferous forming many trusses of white flowers with a light yellow blotch. The flower buds do have a pink cast of them but open to give a white effect. 'White Lights' reaches a height and spread of five feet.
5. *Rhododendron* 'PJM'. PJM rhododendron is a hybrid resulting from crossing *Rhododendron carolineanum* and *Rhododendron dauricum*. It is an evergreen rhododendron that has very attractive small dark green leaves and lavender pink flowers. This cultivar is very hardy, (-35° F) and prefers a sandy soil to a clay soil. P.J.M. are the initials of P.J. Mezitt, the hybridizer of this cultivar.
6. *Rhododendron prinophyllum* (Rose-shell azalea). This species is synonymous with *Rhododendron roseum*. This azalea is native from Maine to Virginia and as far west as Missouri. The flower buds are hardy to -40° F. The plant is small (three feet) with very fragrant white to rose pink flowers that bloom in late May. The plants are heat sensitive and do better in slight shade than other azaleas. *Rhododendron prinophyllum* is one of the parents of the Northern Lights hybrids.
7. *Rhododendron vaseyi* (Pinkshell azalea). This species blooms from early to mid-May in Minnesota before its foliage emerges. With delicate pale pink flowers and an open form it fits well into naturalistic settings. *Rhododendron vaseyi* is an extremely hardy species with flower buds rated at -35° to -40° F.
8. *Rhododendron Exbury* hybrids. These azalea hybrids are not reliably hardy in Minnesota and Wisconsin as the flower buds are killed at -15° to -20° F. Other cultivars listed above are more adapted for Minnesota and Wisconsin and should be used instead.