

TIPS ON GROWING RHODODENDRONS IN NEWFOUNDLAND

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Newfoundland is one of the few areas in Canada where rhododendrons can be successfully grown, with proper care and preparation. They are very versatile and can be used in a variety of ways in the garden.

Native Rhododendrons

Newfoundland and Labrador has four native rhododendron species; Rhodora (*Rhododendron canadense*), Lapland Rosebay (*R. lapponicum*), Labrador Tea (*R. groenlandicum*, formerly known as *Ledum groenlandicum*) and Northern Labrador Tea (*R. tomentosum* ssp. *subarcticum*, formerly known as *Ledum palustre*). Rhodora is common throughout most of the island, except on the Great Northern Peninsula. Labrador Tea is province-wide but the Lapland Rosebay is limited to serpentine and limestone barrens of western Newfoundland, the Great Northern Peninsula, and Labrador. The Northern Labrador Tea is found only in northern Labrador. All of these shrubs put on a beautiful display each spring in our flower garden area. They are related to blueberries, partridgeberries, sheep laurel, heaths and heathers. These plants all belong to the Heath Family, called the Ericaceae and are commonly referred to as ericaceous shrubs.



R. lapponicum



The rare white form of *R. canadense*

Rhododendrons inhabit areas throughout the northern hemisphere, with most evergreen rhododendrons being native to northwest China while the deciduous azaleas are mostly from the eastern United States. However, some rhododendrons extend into the arctic-circle while others grow in the sub-tropical mountains of Indonesia.

Site Conditions

Rhododendrons and azaleas prefer a climate which is temperate in winter while being moist and relatively cool in summer. Many gardening books on rhododendrons will suggest planting them in light shade but in Newfoundland these shrubs flower most profusely when exposed to full sun for at least half a day.

It is important to locate your rhododendron in a sheltered location. If either rhododendrons or evergreen azaleas are exposed to strong winds, they will quickly die, especially in winter. The evergreen types are very susceptible to winter burn due to the cold, dry, desiccating winds of January and February. In early spring, strong winds (even if not too cold) together with strong sun can result in leaf scorch.

Therefore, western, north-western or northern exposures are poor locations for these shrubs unless they are surrounded by taller shrubs or trees. An eastern to southern exposure is ideal. Deciduous azaleas can better tolerate exposed locations, but even they benefit from at least some shelter.



At the Botanical Garden, we grow rhododendrons in a variety of settings; *R.* 'Scarlet Wonder' is grown in the rock garden.

Soil Requirements

Generally, rhododendrons prefer an acidic soil which is rich in organic matter. In Newfoundland, most of our soils are naturally acidic. Books may suggest you add sulphur to the ground to help increase acidity, but this is not needed (or recommended) in Newfoundland. It is especially important not to add the soil acidifier aluminium sulphate (used to make hydrangea blossoms 'bluer'); it is toxic to rhododendrons.

The soil should retain moisture, yet be well-drained. Rhododendrons and azaleas will not tolerate dry conditions nor will they survive in water-logged areas. At the Botanical Garden, we use the following soil mixture:

- 2 parts peat
- 1 part loam
- 1 part leaf mould
- 1 part coarse sand

Old compost or manure is also beneficial.

Planting

It is always important to remember that rhododendrons and azaleas have a very small and very fragile root system.

Rhododendrons are generally sold as container-grown plants. Make sure the root ball is moist before planting and do not remove the plant from its container until you are ready to place it in the ground.

The planting hole should be dug about 15 cm deeper and twice the diameter of the container in which the plant was grown.

If the plant is especially root-bound, gently pry apart the outer roots to help loosen them. If very pot-bound, then use a sharp knife and make three or four, 2-5 cm longitudinal wedges from the root ball. This may seem drastic but the severed roots will stimulate the production of new roots. If planted in the root-bound condition, the plants will be very slow to become established.

To plant, add about 15 cm of prepared soil into the planting hole. Then position the plant in the hole and backfill with prepared soil. The shrub should be at the same depth as it was in its container.

It is beneficial to place a 3-5 cm layer of leaf mould or old compost around the base of a newly planted or established shrub. This mulch will help to maintain soil moisture, keep the ground cool and keep weeds to a minimum.

Care and Maintenance

Keeping in mind that rhododendrons have shallow roots, surface cultivation around their roots is not recommended. However, replacing the mulch around their base each year is beneficial.

During most summers, extra watering will not be needed. However, if conditions remain dry for over a week a thorough watering would be advantageous.

Fertilizers may not be needed if your mulch is from compost or old manure. If the shrub does not seem to be thriving, the application of a specific rhododendron fertilizer, at manufacturer's recommended level, can be added in spring.

Pruning is generally not required unless you wish to remove a branch to help maintain the shape of the plant. If a plant is old and straggly, it can be cut back to within 1 - 2 feet of the ground. However, after such drastic pruning, several years may pass before they resume flowering.

Rhododendrons and azaleas produce flower buds in the summer prior to flowering. Thus, any pruning in summer or fall may result in the removal of next year's flowers. The only yearly pruning which needs to be practiced is the prompt removal of faded flower heads. Cut these faded trusses just above the uppermost leaf.



R. 'Bellefontaine' is a large hybrid bred in Nova Scotia.

Winter Preparation

Unless your planting site is very sheltered, winter protection is a must. There are several ways to achieve this protection.

Dwarf rhododendrons or young plants can be protected by placing evergreen boughs around the plants. A teepee-fashion works well. In the Botanical Garden, we often use latticework as winter protection. This latticework is either placed in a teepee-fashion, or as a lean-to if plants are growing near the foundation of a building.

Larger plants can have a boxed framework built around them. This frame is then covered in burlap. **DO NOT USE PLASTIC.** The idea is not to warm the shrubs, but to protect them from excessive wind and sun. Do not tightly wrap shrubs in burlap, as is often done with other evergreens, such as yews or cedars. Rhododendrons do not appreciate being strangled in winter.

Such protection is not as necessary for deciduous azaleas. Winter burn and sun scald of leaves is not a problem. However, flower buds can be damaged by cold winds if plants are in an exposed location. Sheltering plants under burlap or boughs is recommended if exposure poses a potential problem.

Rhododendron Selections

Rhododendrons, as a genus, are divided into four main groups: the elepidotes (large leaves and flowers, 'standard' rhododendrons), the lepidotes (small-leaves and flowers, mostly dwarf evergreen types), deciduous azaleas and evergreen azaleas.

Within the groups, there are hundreds of species and/or hybrids. However, there are far more 'tender' varieties of rhododendron than hardy ones. Generally, local nurseries only sell the hardier varieties.

Elepidote Selections:

The best elepidote rhododendrons for our area are the so-called 'Iron-Clad' rhododendrons. They are selections developed from *Rhododendron catawbiense*, a species that is native to the mountains of the Appalachians in eastern USA. They are listed as hardy to zone 4b. Selections within this group include 'English Roseum', 'Roseum Elegans', 'Grandiflorum', 'Boursalt', 'Album' and 'Catalgla'. Other hardy hybrids which have performed well at the Botanical Garden include 'Nova Zembla' (red), 'Scarlet Wonder' (red), 'Firestorm' (dark red), 'Henry's Red' (bright red), 'Susan' (lilac-blue), 'Hong Kong' (lemon yellow), 'Grand Pre' (pink), 'Janet Blair' (light lavender-pink), 'Roslyn' (purple-violet), 'Golden Gala' (pale yellow), 'Vernus' (lavender-pink) and 'Wyandanch Pink' (dark pink).



R. 'English Roseum' (left) and 'Janet Blair' (right) are examples of elepidote rhododendrons.

Recently there have been a number of Finnish hybrids which have become locally available. These are equally as hardy as the 'Iron-Clads' but are often more compact in habit. These include 'Mikkeli' (light pink), 'Elvira' (red), 'Helsinki University' (pink), 'Haaga' (light pink), 'Pohjola's Daughter' (white, flushed pink), 'Peter Tigerstedt' (white) and 'Hellikki' (violet-red).

A final group of hardy large-leaved rhododendrons are the 'Yak' hybrids, developed from the species *R. yakushmanum*. The species itself is very worthwhile, as the new foliage emerges covered in white to cream felt-like hairs (tomentum). These hairs eventually wear off but the undersides maintain a thick, dense, cream-coloured felt layer (indumentum). These features make this species and many of its hybrids valuable as foliage plants as well as for their flowers. Colour-wise, the 'Yak' hybrids are essentially white or shades of pink. The closely related species, *R. bureavii*, has even more spectacular foliage as the newly emerging leaves are covered in cinnamon-coloured tomentum and indumentum. Some hybrids to consider are 'Teddy Bear', 'Golfer', 'Mist Maiden', 'Fantastica', 'Yaku Angel' and 'Yaku Prince'.



Rhododendron yakushmanum has lovely flowers and foliage.

Lepidote Selections:

Most lepidotes are dwarf-sized plants but the one notable exception is the popular PJM series. These rhododendrons are among the earliest to bloom (mid-May) with small, somewhat rounded leaves and small trusses of purple flowers. Their leaves often turn shiny purple, maroon or reddish during the winter. There are several similar hybrids in the PJM series which differ primarily in floral colour. All are quite hardy for our area. And although the leaves and flowers are small, the plants themselves may reach 5 feet or more. Popular cultivars include 'P. J. Mezitt' (purple-pink), 'Aglo' (bright pink), 'Olga' (medium pink) and 'Thunder' (dark purple).

There are some excellent rock garden rhododendrons among the lepidotes. *Rhododendron impeditum* is one of the lowest, with tiny blue-green leaves and tiny clusters of purple-blue flowers in mid-May. 'Ramapo' and 'Purple Gem' are a little bigger with purple-pink flowers. Other hybrids we grow at the Botanical Garden include 'Wren' (yellow), 'Patty Bee' (yellow), 'Tottenham' (bright pink), 'Jenny' (lavender-pink), 'Dora Amateis' (white), 'Isolla Bella' (cream, flushed pink), 'Madison Snow' (white) and 'Ginny Gee' (two-tone pink and white).



Rhododendron impeditum (left) and 'Patty Bee' (right) are examples of dwarf lepidote rhododendrons.

Deciduous Azaleas:

The vast majority of deciduous azalea species are hardy in the St. John's area and many are hardy throughout the Island, with the exception of the Great Northern Peninsula. As a result, many hybrid azaleas are fine additions to our garden landscape. Since they lose their leaves in winter, the deciduous azaleas are generally more wind-tolerant than evergreen rhododendrons. They also have the added bonus of wonderful fall colour as the leaves turn red to wine-burgundy. Azaleas also offer brilliant yellow and orange shades that are not available in hardy evergreen rhododendrons.

Traditionally, the standard deciduous azaleas were either hybrids developed in Belgium (Ghent hybrids) or England (Knap Hill and Exbury hybrids). All of these are suitable for the St. John's area. Hybrids to consider include 'Narcissiflorum' (double yellow), 'Oxydol' (white, yellow blotch), 'Gibraltar' (orange), 'Fireball' (orange-red), 'Strawberry Ice' (pink), 'Cecile' (salmon-pink), 'Cannon's Double' (double, cream and pink) and 'Klondyke' (yellow-orange).



R. 'Narcissiflorum' (left) and 'Balzac' (right) are examples of deciduous azaleas.

For colder areas of the Island (including the St. Anthony area), there are a group of very hardy azaleas which have been developed in Minnesota. They are collectively referred to as the 'Northern Lights' hybrids. They include the word 'lights' in the hybrid's names and include 'White Lights', 'Lemon Lights', 'Golden Lights', 'Spicy Lights', 'Mandarin Lights', 'Rosy Lights', 'Orchid Lights', 'Northern Hi-Lights' and 'Western Lights'.

Evergreen Azaleas:

These azaleas can produce some of the most spectacular displays of any rhododendron, literally smothering themselves in blooms. Unfortunately, very few are hardy in our area. Essentially, we are restricted to hybrids developed from the hardiest species *R. kiusianum*. The only one likely to be available in local nurseries is 'Komo Kulshan'.