

Rhododendrons and azaleas belong to the genus Rhododendron of the heath family (Ericaceae). The heath family includes the heaths and heathers, blueberries, mountain laurels and several other ornamental plant groups.

More than a thousand species have been described within the genus Rhododendron. These species are currently organized into subgenera, sections and subsections, with the species in each group having certain points of similarity to each other. All azaleas are rhododendrons, with deciduous azaleas belonging to one subgenus (Pentanthera) and evergreen azaleas to another subgenus (Tsutsusi).

Many of our cultivated rhododendrons are derived from Asian species which grow in the foothills of the Himalayan mountains, western China, northern India, Burma and Assam. Others are derived from species native to Japan, Europe and eastern and western North America.

SUN TOLERANCE: Partial shade is desirable in most cases; in hot dry areas it is essential. There are a few varieties which simply will not tolerate full sun, developing quite yellowish leaves under such conditions. There are many others which, in a reasonably favorable climate, make a better shaped plant, and set many more flower buds if grown in full sun. The beginner, without definite knowledge as to the requirements of a variety, will do well to plant rhododendrons in locations where the plants will receive shade in the afternoon.

PROPAGATION: Rhododendrons may be rooted from layers. A low branch is pegged down into a trench and covered with two or three inches of soil. Usually, cutting a tongue on the underside less than halfway through the branch on the part of the branch which is buried, thus leaving the end of the branch partially attached to the mother plant, will hasten rooting which may require several months. The "tip" of the tongue should be nearest the mother plant. Most rhododendrons are now grown from tissue culture plantlets or from cuttings. Cuttings are usually rooted in August to October, in peat moss and sand or peat moss and perlite, under mist with bottom heat and with the use of root inducing hormones.



SOIL: Rhododendrons and azaleas grow best in light, well-drained soils with good soil aeration and an ample supply of soil moisture during the summer. They can be grown in heavy soils if special precautions are taken.

A soil high in organic matter or humus such as decayed oak leaves, pine needles or other acid-type compost is desirable for growing rhododendrons and azaleas. Beware of most peat moss available today. Much of it is of poor quality; often it is very fine and holds too much water for good soil aeration. It is not suitable for mixing with heavy clay soils. In hot or alkaline soil areas where rhododendrons are frequently grown in straight pine bark with little or no soil added, care should be used in obtaining a fine grade or small particle pine bark. Rhododendrons and azaleas, in general, require an acid soil with pH about 5.5. Soils with pH higher than 5.5 should be acidified.

Selected Identifying Characters of North American Native Azaleas (adapted from Dr. Kathleen A. Kron)

Species Name	Timing ²³	Corolla Color ³	Blotch ¹	Flare ⁹	Margin ¹⁰	Hairs ^{6,7}	Fragrance ²²	Sepal Margin	Pedice l Hairs ²⁰	Stem Hairs ²⁴	Scale Margin ^{11,12}	Scale Surface ^{17,18}
<i>alabamense</i>	before/with	white-pink	present	gradual	wavy	glandular	sweet	bristly	eglandular	smooth/egl	ciliate	smooth
<i>canadense</i>	before/with	white-pink	present	abrupt	flat	smooth	sweet	fringed	glandular	sparse/mix	ciliate	sparse
<i>occidentale</i>	before/with	white-pink	present	gradual	wavy	glandular	not sweet	fringed	glandular	hairy/mixed	glandular	hairy
<i>vaseyi</i>	before/with	white-pink	present	gradual	wavy	smooth	sweet	fringed	glandular	sparse/mix	glandular	hairy
<i>atlanticum</i>	before/with	white-pink	absent	gradual	flat	glandular	sweet	fringed	glandular	hairy/mixed	ciliate	hairy
<i>canescens</i>	before/with	white-pink	absent	gradual	wavy	glandular	sweet	bristly	eglandular	smooth/egl	ciliate	hairy
<i>periclymenoides</i>	before/with	white-pink	absent	gradual	wavy	eglandular	sweet	bristly	eglandular	smooth/egl	ciliate	smooth
<i>prinophyllum</i>	before/with	white-pink	absent	gradual	wavy	glandular	sweet	fringed	glandular	smooth/egl	ciliate	hairy
<i>eastmanii</i>	after	white-pink	present	gradual	flat	glandular	sweet	bristly	eglandular	hairy/mixed	glandular	smooth
<i>arborescens</i>	after	white-pink	absent	gradual	flat	glandular	sweet	fringed	glandular	smooth/egl	ciliate	smooth
<i>viscosum</i>	after	white-pink	absent	gradual	flat	glandular	sweet	fringed	glandular	smooth/egl	ciliate	hairy/smo
<i>austrinum</i>	before/with	ylw-red-or	present	gradual	wavy	glandular	sweet	fringed	eglandular	hairy/mixed	ciliate	hairy
<i>flammeum</i>	before/with	ylw-red-or	present	abrupt	wavy	eglandular	not sweet	bristly	eglandular	smooth/egl	ciliate	sparse
<i>calendulaceum</i>	before/with	ylw-red-or	absent	abrupt	wavy	glandular	not sweet	fringed	glandular	smooth/egl	glandular	smooth
<i>cumberlandense</i>	after	ylw-red-or	present	abrupt	wavy	glandular	not sweet	bristly	eglandular	smooth/egl	glandular	smooth
<i>prunifolium</i>	after	ylw-red-or	absent	gradual	flat	glandular	not sweet	bristly	eglandular	smooth/egl	ciliate	smooth

Notes

- the heading names and numbers relate to Tables 2 and 3 on pp. 254-256, in her article in *Edinburg Journal of Botany*, vol. 50:3, 1993
- the leftmost character shown above (**Timing** relative to leaf unfolding) is most important, followed by the next two (**Corolla Color, Blotch**) taken together
- the leftmost 9 characters shown above relate to the blossom, **Stem Hairs** relates to hairs on the new growth, and
- the rightmost 2 characters relate to the flower bud scales
- *vaseyi*, *canadense* characters are gleaned from her article in *Edinburg Journal of Botany*, vol. 52:1, 1995, pp. 1-54
- *eastmanii* characters are gleaned from her article (with Mike Creel) in *Novon*, vol. 9, 1999, pp. 377-380
- a 10X hand lens is useful for looking at hairs and bud scales

Definitions

bristly	with stiff, strong hairs
both	both glandular and eglandular hairs
ciliate	fringed with fine hairs
eglandular	eglandular hairs have no glands at their ends, and appear to end in fine points
fringed	with fine hairs on the margins
glandular	glands on hairs appear as tiny knobs on the ends, glands on bud scales appear as tiny "sharks teeth" near the base of the scale, usually brownish
hairy/mixed	hairy, and the hairs may be glandular or eglandular
smooth/egl	either smooth (no hairs), or eglandular hairs
sparse	with a few hairs

