

Azalea and Rhododendron Care and Culture

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Rhododendrons and azaleas are closely related plants with certain cultural requirements that must be met to ensure their successful growth. The following information is provided to help the amateur gardener with the culture of these plants.

Planting and transplanting

When planting azaleas and rhododendrons, give them ample protection from wind and direct afternoon sun. Around buildings, they do best on the east or north side. In open areas, they like alternating sun and shade. Do not plant them in windy spots.

Azaleas and rhododendrons, when properly grown, can be transplanted successfully at any time of year if they are given special care in watering and protection from drying and freezing. The ideal time to transplant these plants is during their dormant season, either in the fall or early spring while temperatures are cool and soil moisture is plentiful. Plant azaleas or rhododendrons at the same depth they were growing in the nursery. Spacing will depend on the mature spread of the plants.

Many nursery plants are grown in soil mixtures containing large amounts of peat moss and may not match the soil in your yard. Work peat moss or other humusy organic matter into the soil around the root ball to ensure good root activity and growth into the soil in your yard.

Soils

Soils should be well drained and should contain an abundance of organic matter. If heavy clay soils predominate in your yard, plant azaleas or rhododendrons on raised beds or establish a drainage system to remove excess water.

These plants will not tolerate alkaline (lime) conditions. Keep this in mind when planting around a new home where lime, masonry material, or cement often become mixed with the surrounding soil. This eventually could cause discoloration and death of the plants.

Work the soil into a good seedbed condition before planting. The addition of leaf mold, peat moss, or other organic matter will help almost all soils. When planting, dig a hole twice the size of the root ball. Mix the excavated soil with soil amendments and place enough improved soil in the bottom of the hole so the top of the root ball is slightly higher than the surrounding soil. Fill the hole to the top, watering as you fill to settle the soil and eliminate air pockets. Allow the plant to establish itself in the new location before adding any fertilizer.

Fertilizers

Avoid the excessive use of lime or alkaline fertilizers around azalea and rhododendron plants. If necessary, apply nitrogen fertilizers or mixtures (either organic or inorganic) containing nitrogen, phosphorus, and potassium soon after flowering in the spring. Relative merits of an organic fertilizer as compared to a chemical fertilizer depend on whether the slow availability and less frequent application of the organic type can justify the extra cost.

The amount of fertilizer to use varies from 2 to 5 pounds per 100 square feet, depending on natural soil fertility, soil drainage, organic matter, and type of fertilizer. Minor elements such as magnesium and iron may be needed infrequently to add green color to the foliage.

Water requirements

Rhododendrons and azaleas have shallow, fibrous root systems, so provide ample water during the summer. If they are planted under wide eave overhangs, furnish water during the entire year. Keep in mind that although these plants need moisture, they will not thrive in wet, poorly aerated soils.

Cultivation

Keep cultivation to a minimum because of the shallow root system of these plants. Use mulches to control weeds, conserve moisture, and provide more uniform soil temperatures. Mulches can be made of sawdust, bark dust, peat moss, straw, or other organic materials. If these materials are incorporated into the soil after serving as a mulch, add some nitrogen to assist in decomposition of the woody materials.

Winter damage

Winter damage may occur at infrequent intervals, usually due to lack of dormancy in the plant when cold weather occurs. To help development of winter hardiness, avoid adding large amounts of nitrogen after July 15. Some factors affecting the ability of a plant to withstand cold temperatures are length of exposure to low temperatures, rate of temperature fall, extent of plant dormancy, wind and sun exposure, overall condition of the plant, and plant variety.

Pruning

If new plants are selected properly, taking into consideration mature plant size and space to be filled, little pruning should be necessary. Remove dead and injured branches. If pruning is necessary, prune the plants soon after flowering to allow flower bud formation for the following year. "Dead-heading" is a pruning operation that involves removing spent flower clusters. It should be done annually.



Propagation

Deciduous azaleas are propagated commercially by seed. Evergreen azaleas and rhododendrons root quickly (6 to 8 weeks) from softwood or semi-hardwood tip cuttings. Cuttings may be made at any time, but June to July cuttings seem most ideal for rooting azaleas, and August to September cuttings seem best for rhododendrons. Make cuttings 3 to 4 inches long, remove lower leaves, and place the cut end in rooting medium. Equal parts of peat moss and clean sharp builder's sand make an ideal rooting medium. After roots are formed, place the plants in pots or in a protected area and keep well watered.

Problems

Azaleas and rhododendrons are injured by various types of insects and diseases. Look for the characteristic symptoms of the problem and treat plants promptly with appropriate cultural, biological, mechanical, or chemical methods. Various nutrient disorders will be reflected in foliar symptoms unique for the mineral element deficiency or interaction (Table 1). In any case, it's best to check with local gardening experts for controls and problem prevention.

Insects. Oblique-banded leaf rollers feed on and web new growth in the spring and early summer.

Root weevils cause considerable trouble to many ornamentals. The adults cause minor damage to the tops by notching the leaves, producing a scalloped effect along the leaf margins. This damage is negligible compared to that done by the larval form to the root system. Young roots are destroyed, and often the stem is girdled, leading to death of the plant.

Spider mites often web leaves and cause them to become yellow and dry. Heavy infestations may cause defoliation.

Aphids are troublesome on all ornamentals, particularly rhododendrons, where new growth may be distorted by their feeding.

Diseases. Disease problems include leaf spot, rust, leaf gall, and root rot. In all cases, proper identification is necessary before effective control measures can be recommended.

For more information

Propagating Deciduous and Evergreen Shrubs, Trees, and Vines with Stem Cuttings, PNW 152 (Washington State University, Pullman, reprinted 1994). \$1.00

Root Weevils in the Nursery and Landscape: Identification and Control (Oregon State University, Corvallis, 1996). \$1.00

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Table 1.—Deficiency symptoms.

<i>Element</i>	<i>Symptom</i>
Nitrogen	Foliage light green, dwarfed growth
Phosphorus	Leaves smaller and darker green than normal, plants stunted, tips of leaves dead (necrotic)
Potassium	Orange mottling along leaf margins, later becoming necrotic
Magnesium	Interveinal yellowing in centers of leaves, mostly on older foliage
Iron	Young leaves pale, older leaves show distinct interveinal chlorosis, entire plant becomes chlorotic*
Calcium	New shoot growth stunted, tips of leaves scorched and shriveled with basal portion remaining dark green
Boron	Stunted and contorted multiple shoots, marginal yellowing and tip scorching

*This symptom often is associated with soils where calcium from building operations, old foundations, sidewalks, or brick walls has leached into the soil over a long period of time and has made iron unavailable to the plant. In cases such as this, apply sulfur or other acidifying elements to counteract the calcium.

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