## Rhododendron Species Foundation & Botanical Garden

# Species Rhododendron Culture

Care Sheet rh-01

**Biology:** Species rhododendrons are those plants that are found in the wild. There are nearly 1000 species found around the world and they are native to the temperate regions of North America, Europe, and Asia, as well as the tropical regions of southeast Asia and northern Australia. Within this group of plants there is an enormous diversity of size and shape from prostrate groundcovers growing no more than a foot tall to trees more than one hundred feet high. The flowers range from pure white to soft pink, clear yellow, and brilliant red to deep violet. For culture of tropical rhododendrons (Vireyas) see Care Sheet rh-02.

## **Site Selection:**

**Light conditions:** A site with morning sun and afternoon shade or filtered sunlight throughout the day would be optimum for most rhododendrons. Those with smaller leaves generally tolerate more sunlight, although be aware that many of these plants are typically found in alpine regions where soils generally stay cool during the summer due to moisture from melting snow; planting in an area with shade during the hottest part of the day would be preferable.

**Drainage:** Most rhododendrons grow best in well-drained soil. Lack of oxygen in waterlogged soils can cause death to the roots or stress a plant resulting in it being more susceptible to fungal diseases.

**Visualization:** Consult a reference to determine the mature size of a rhododendron and then visualize the mature plant when choosing a planting site. For example, planting a tall-growing species under a low window may be a problem in the future.

**Other Considerations:** Sites near the south or west sides of buildings, walls, or fences can often be a source of intense reflected heat and this may cause injury to a plant. Also, areas under the eaves of buildings usually receive no rainfall and plants in these areas must be monitored year-round for moisture.

## Planting:

For a rhododendron that is growing in a container, first remove it and check to see if the rootball is dry. If it is, soak in water until thoroughly moist. Plants that are root or pot-bound should be scored. This means to scratch the outer surface of the roots with your fingers or a sharp instrument. At the chosen site, dig a hole approximately three times as wide as the rootball and a few inches deeper than the height of the rootball. Depending on your soil type, the addition of organic matter may be appropriate. If the soil is dry, add water and let it drain. Place the plant with the top surface of the rootball slightly higher than the surrounding ground surface. Next, bring the soil up to the edge of the rootball and firm in gently with your hands. Water in thoroughly. Depending on the size of the plant, mulch the root zone with up to two inches of a coarse organic material such as bark, leaving clear an area of an inch or so around the trunk to prevent rot. The optimal times for planting are spring and autumn.

## Watering:

Adequate water is required during the growing season from when the leaves begin to emerge until they have fully expanded. The key to watering rhododendrons is to achieve a balance by keeping the root zone consistently moist but not constantly saturated. Allow sufficient time for partial drying to allow oxygen to penetrate the soil. Monitoring soil moisture is imperative for soils with good drainage and where summer drought conditions prevail. Where drainage is poor, plants intolerant of this condition will suffer and should be moved or have the drainage improved. The ideal time of day to water is in the early morning, although watering at other times is acceptable.

#### **Nutrition:**

Recently purchased rhododendrons probably do not require fertilizing at planting time. Established plants that are healthy and growing well do not need to be fertilized. If a plant displays signs of nutrient deficiency, such as yellowing or stunted growth, be aware that there are many other factors that may be causing the plant distress. Consult your County Cooperative Extension agent or local plant professional to rule out any disease, insect, or cultural problems. If lack of nutrients is determined to be the cause of the problem, use a fertilizer formulated for rhododendrons. Follow label directions carefully for the amount to apply. Consult a local plant professional for the best time to apply in your area. Do not fertilize after the beginning of summer to avoid the possibility of stimulating late growth which could be injured by an early frost.

#### **General Care:**

**Pruning:** Pruning should not be necessary if a rhododendron is planted in the proper location. For rhododendrons that require pruning, consult a professional for advice on the best method.

**Pinching:** Disbudding, or pinching, is removing the leaf buds from a plant. The main leaf bud at the tip of a branch is removed allowing side buds to grow. The purpose is to encourage branching, which increases foliage density and eventually the potential number of flowers. Pinching when the plant is young is preferable.

**Deadheading:** The removal of faded flowers is called deadheading. The cluster of flowers at the end of a branch is called an inflorescence, or truss. The truss is snapped or cut off just above the leaf collar, which is something like a pedestal and sits just above the whorl of leaves. Deadheading results in a plant directing energy into new growth and flower bud formation rather than into seed production.

#### Pest Control:

**Insect:** The insect that causes the most damage to rhododendrons is the root weevil. The adults are small, dark-colored beetles less than one half inch long which feed by chewing small portions along the edges of the leaves. The damage to the foliage is mostly aesthetic although on small plants severe injury is possible. Mechanical control is by catching the insects at night when they are active and destroying them. Root weevil grubs cause damage to the roots, especially to plants in containers. Aphids, bark scale, caterpillars, leaf rollers, white flies, lacebugs, and leaf miner, are other insect pests you may occasionally encounter on your rhododendrons. For chemical or biological control of these insects consult your county cooperative extension agent or local plant professional.

**Fungus:** Several kinds of fungi may cause injury or death to rhododendrons. *Phytophthora*, commonly called root rot, is a group of fungi that causes damage to the roots. The major symptom is all of the leaves wilting on a plant as if the soil were dry although it is actually moist. Poor drainage is the major contributing factor to root rot and often by the time the damage is evident it is too late to control. Therefore, prevention by planting in well-drained soil is the best control measure.

A related problem is stem dieback, often caused by a different fungus called *Botryosphaeria*. The effects of this are seen when only one or a few branches have leaves that are wilting. Cut these dying branches out, destroy, and then disinfect pruning tools with rubbing alcohol. Good cultural practices for prevention include providing good drainage, air circulation, shade, and adequate water.

Other fungi affect the leaves of some deciduous and evergreen rhododendrons and are referred to as powdery mildew. The identifying feature on deciduous rhododendrons is a white powdery substance on the leaves. The leaves naturally fall in autumn and no further damage is done to the plant; therefore, control may not be necessary except for aesthetic purposes. Planting in an area with good air circulation and raking the fallen leaves may be helpful in reducing the rate of infection or there are chemical controls. Mildew on evergreen species affects only a small number of species although the damage is sometimes more severe. Symptoms include circular purple, brown, or yellow lesions on the surface of the leaves. Some plants may live with the disease and do fine. Others may languish for years or become defoliated to the point of starvation. For infected evergreen species that are not growing well, removal or chemical control are the only options.

#### Weed Control:

Mulching with a **coarse** organic material such as bark or wood chips is the primary step in weed prevention. Once weeds appear, weeding by hand is recommended near the plants. Rhododendrons have a dense system of surface roots and must not be cultivated with any garden tool. For chemical control contact your County Cooperative Extension agent or local plant professional.

For more information check the RSBG website or visit the Rhododendron Species Botanical Garden Gift Shop for a complete line of books on rhododendrons and other plants. Culture and care may vary depending on the extremes of your climate.

Please join us! Become a member of the Rhododendron Species Foundation and support the conservation and research of species rhododendrons. A variety of membership benefits are available.