

Azalea & Rhododendron Diseases

Factsheet | HGIC 2050 | Updated: Aug 3, 2018

Rhododendrons and azaleas are some of the most popular spring-flowering shrubs in the landscape, and healthy plants can give years of pleasure. Many diseases and other problems can be prevented by following the recommended cultural practices for proper planting and care. More information on successfully growing azaleas and rhododendrons is available in the fact sheets HGIC 1059, Azalea Care; HGIC 1058, Azalea Planting; and HGIC 1073, Rhododendron.

Root & Crown Rot

The fungus *Phytophthora* species causes one of the most common disease problems in the landscape for rhododendron and azalea. This fungus is a "water mold," and thrives in poorly drained or wet conditions. A wilted plant is usually the first sign of trouble. Rhododendron leaves will curl inward and droop. Drought can cause similar symptoms. Roots of affected plants appear soggy or blackened, and the outer portion of the root easily pulls away from the inner portion.

Crown rot causes the lower portions of the stem to have a brown discoloration of the wood near the soil line. This disease is favored in poorly drained areas or when plants are set too deeply. Plants may remain without symptoms until further stressed from drought or flooding. Prevention & Treatment: Prevention of disease is important, because chemical controls are ineffective once symptoms appear in the landscape. Begin by purchasing disease-free plants from a reputable nursery. Avoid plants that lack normal green color, appear wilted in the morning, or have dark, discolored roots. Select resistant varieties for planting from the Table below.

Plant azaleas and rhododendrons in a well-drained and well-aerated soil. Heavier clay soils should be amended with organic matter before planting. Avoid planting in areas where water can collect around plant roots.

The following azaleas & rhododendrons have some resistance to Phytophthora root & crown rot:

Azaleas: Resistant:

- R. sanctum
 - R. simsii (Indian azalea)
 - R. yedoense var. poukhanense (Korean azalea)
 - 'Corrine'
 - 'Fakir'
 - 'Fred Cochran'
 - 'Glacier'
 - 'Hampton Beauty'
 - 'Higasa'
 - 'Merlin'
 - 'Polar Sea '
 - 'Rose Greeley'

Moderately Resistant:

- 'Alaska'
- 'Chimes'
- 'Eikan'
- 'Jan Cochran'
- 'Morning Glow'
- 'New White'
- 'Pink Gumpo'
- 'Pink Supreme'
- 'Rachel Cunningham'
- 'Red Wing'
- 'Shinkigen'
- 'Sweetheart Supreme'

Rhododendrons:

Resistant:

- 'Caroline'
- 'Martha Isaacson'
- 'Pink Trumpet'
- 'Prof. Hugo de Vries'
- 'Red Head'
- R. davidsonianum
- R. delavayi
- R. glomerulatum
- R. hyperythrum
- R. lapponicum
- R. occidentale
- R. poukhanense
- R. pseudochrysanthum
- R. quinquefolium
- R. websterianum

Do not set new plants any deeper than the original soil level. Planting in raised beds is suggested. Firm the soil slightly at the base of the planting hole to prevent the plant from settling into the bed. Do not plant azalea and rhododendron plants into sites where plants have previously died from root rot. Even resistant plants may succumb under these conditions. The fungus survives in the soil and cannot be eradicated once an area is infected.

Chemicals that are available will only suppress disease and not cure an infected plant. Fungicides available for use on azaleas and rhododendrons include metalaxyl and mefenoxam. Apply all chemicals according to directions on the label.

Petal Blight

This fungal disease, caused by Ovulinia azaleae, primarily affects the flowers of azalea, but mountain laurel and rhododendron flowers can also be infected. Indian and kurume azaleas are especially susceptible. The disease starts on the flower petals as tiny, irregularlyshaped spots, giving a "freckled" appearance. On colored flowers the spots are white, and on white flowers the spots are brown. The spots quickly enlarge and become soft and watery. Flowers rot and stick to the leaves. Infection is easily spread from flower to flower by wind, rain and insects. The fungus survives the winter in the soil.

Prevention & Treatment: The most important things that you can do to control this disease in the home landscape are to pick and destroy infected flowers and avoid overhead watering. This fungus survives in the soil, so it is important to replace the ground litter with uncontaminated mulches. Fungicides are available for cases of severe infection on azaleas. Select a product that contains captan, chlorothalonil, maneb, or triforine. See Table 1 for examples of products. Apply all chemicals according to directions on the label.

Leaf Gall

Leaf gall (*Exobasidium vaccinii*) is a very common fungal disease in the early spring on azaleas and occasionally on rhododendrons. Some of the native rhododendron species (azaleas) are more susceptible than hybrid rhododendrons.



Leaf and flower gall (Exobasidium vaccinii) on deciduous native azalea.

Joey Williamson, ©2013 HGIC, Clemson Extension

In April and May leaves and buds of infected plants develop distorted growth. Leaves and possibly stems become thickened, curled, fleshy and turn pale green to white. In the later stages of the disease, the galls become covered with a white powdery substance. As the galls age, they turn brown and hard.

Prevention & Treatment: This disease rarely does enough damage to require chemical control. If only a few plants are affected, pick and destroy galls. If chemical control is necessary on azaleas, mancozeb, or chlorothalonil fungicide sprays can be used according to label directions. See Table 1 for examples of products.



Exobasium flower gall on Catawba Rhododendron (Rhododendron catawbiense).

Joey Williamson, ©2015 HGIC, Clemson Extension

Dieback

Dieback is an important disease of hybrid rhododendrons in the landscape and is caused by the fungus *Botryosphaeria dothidea*. Azaleas with similar symptoms are more likely to be infected by the fungus *Phomopsis* species. Typically, dying branches (stem dieback) begin to appear on an otherwise healthy plant. The leaves die and can remain attached to the plant until late summer.



Botryosphaeria rot and canker (Botryosphaeria spp.) Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org

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Usually a single branch on an established plant is affected. Scraping away the bark with a knife reveals a reddish-brown discoloration under the bark on dying branches of rhododendron. On azaleas the discolored wood under the bark appears chocolate brown.

Prevention & Treatment: Dieback is difficult to control on rhododendrons and azaleas in the landscape. The azalea varieties that are the least susceptible include: 'Delaware Valley White,' 'Hershey Red,' 'Pink Gumpo' and 'Snow.' The following rhododendron varieties are considered resistant: 'Boursalt,' 'Chionoides White,' 'Cunningham's White,' 'English Roseum,' 'Le Barr's Red,' 'Roseum Two' and 'Wissahickon.'

Reduce stress to the plants by planting in partial shade and watering during dry periods. Drought stress and freeze injury may predispose azaleas to infection. Avoid wounding the plant. Prune infected branches well below all discolored wood and dispose of dead plant material. Clean pruning tools between cuts with a dilute solution of household bleach (1 part bleach to 9 parts water) or 70% rubbing alcohol. For azaleas, fungicide sprays containing either thiophanate-methyl or mancozeb can be used. For rhododendrons apply a product containing a copper-based fungicide or chlorothalonil. See Table 1 for examples of products. Apply all chemicals according to directions on the label.

Leaf Spots

Throughout the year, fungal spots (*Cercospora* species, *Septoria* species, *Phyllosticta* species and *Colletotrichum* species) of various colors appear on azalea and rhododendron leaves.



Cercospora leaf spot (*Cercospora handelii*)
Florida Division of Plant Industry Archive, Florida
Department of Agriculture and Consumer Services,
Bugwood.org

The diseases caused are usually minor, only affecting the aesthetic value of the plant. Cases of severe infection may result in early leaf drop, reducing the general health of the plant.

Prevention & Treatment: Remove fallen leaves. Keep leaves dry when watering plants. Fungicide sprays during periods of high humidity will prevent serious foliage damage. Fungicide sprays recommended for azaleas include copper hydroxide, copper-based fungicides, thiophanate-methyl or chlorothalonil. For *Cercospora* leaf spot on rhododendron use propiconazole, thiophanate-methyl, chlorothalonil or mancozeb. See Table 1 for examples of products. Apply these fungicides according to directions on the label.

Other Problems

Leaf Curl: Rhododendron leaves begin to cup and curl at the edges when temperatures drop to below 35 °F. At 25 °F, the leaves will be curled very tight and begin to droop. This problem is not caused by insects or disease but is a way the plant reduces water loss from its leaves during cold, dry, windy weather. Plants should recover when the weather warms again.

Table 1. Fungicide Products for Azalea and Rhododendron Disease Control in the

Home Landscape

Active	
Ingredient	Examples of Products
Trigicalcrit	Bonide Fung-onil Concentrate; & RTU ¹
Chlorothalonil	Ferti-lome Broad Spectrum Landscape & Garden Fungicide Concentrate
	GardenTech Daconil Fungicide Concentrate
	Hi-Yield Vegetable, Flower, Fruit & Ornamental Fungicide Concentrate
	Ortho MAX Garden Disease Control Concentrate
	Southern Ag Liquid Ornamental & Vegetable Fungicide Concentrate
	Tiger Brand Daconil Concentrate
Copper-based Fungicides	Bonide Copper Fungicide Spray or Dust
	Bonide Liquid Copper Concentrate; & RTU ¹
	Camelot Fungicide/ Bactericide Concentrate
	Dexol Bordeaux Powder Delete
	Hi-Yield Bordeaux Mix Fungicide Delete
	Monterey Liqui-Cop Fungicide Concentrate
	Natural Guard Copper Soap Liquid Fungicide Concentrate
	Southern Ag Liquid Copper Fungicide
Mancozeb	Bonide Mancozeb Flowable with Zinc Concentrate
	Southern Ag Dithane M-45
Propiconazole	Banner Maxx Fungicide
	Bonide Infuse Systemic Disease Control Concentrate; & RTS ²
	Ferti-lome Liquid Systemic Fungicide II Concentrate
Thiophanate	Cleary's 3336-WP Turf & Ornamental Fungicide
Methyl	Southern Ag Thiomyl Systemic Fungicide
¹ RTU = a pre-mixed spray bottle.	

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² RTS = a hose-end spray bottle.