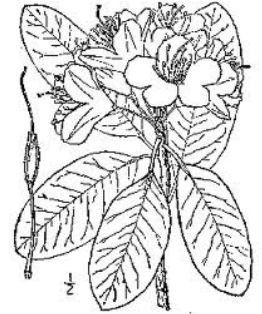


## Pests of Broad-Leaved Evergreens

Rhododendron, mountain laurel, andromeda, azalea, holly and other broad-leaved evergreens are affected by a number of insects, diseases and physiological problems. Following are some of the most common troubles likely to be encountered with these plants:



### Winter Injury

Winter injury or winter drying of broad-leaved evergreens is a very common condition on plants growing in exposed locations. Strong winds cause the leaves to lose water when it cannot be replaced. This occurs when the soil is frozen or water is otherwise unavailable. Thus, the leaves turn brown, especially at the edges and tips. There is no cure for this disorder apart from planting the bushes in more wind-protected locations and maintaining their health and vigor.

Irrigate if necessary, especially if rainfall is scant in late autumn. This allows the plants to go into winter with adequate water. Make sure that the ground is moist, but not soggy. Maintain a two inch layer of mulch out to the dripline of the shrubs to conserve soil moisture and moderate freeze and thaw cycles.

Rhododendrons and their relatives are understory plants in their native habitat and do best when woodland conditions are simulated as closely as possible.

### Black Vine Weevil (*Otiorhynchus sulcatus*)

The black vine weevil is a snout beetle almost one-half inch long that feeds on many evergreen ornamentals. Minor injury caused by adult beetle feeding appears as notches cut into the leaf margins. This damage serves as an indicator that beetles are present. The beetles are seldom seen because they feed at night and hide in branch crotches, and in soil and debris or mulch under plants during the day.

The white, legless grubs of these beetles are root feeders and may seriously injure small plants. They may also girdle the plant stem where it meets the soil, causing the leaves to droop or turn yellow.

Handpick adults in small plantings. Pitfall traps or beating sheets can help monitor adult activity. Place a sheet under the plant at night, then shake the branches. Weevils will play dead and fall to the sheet where they can be collected and removed. Beneficial nematodes may be used for soil-dwelling larvae when these are present. Acephate or lambda-cyhalothrin. may be used as a last resort in early June to mid-July for adults; plants and soil beneath must be fully covered.

### Lacebugs

Lacebugs are tiny, sucking insects about one-eighth inch long that feed on the underside of rhododendron, azalea and related plant leaves (especially andromeda grown in sunny locations). Adults have netted wings that give them a “lacy” look.

*Building Strong and Vibrant New York Communities*

These insects overwinter as eggs located along the midribs and larger veins of leaves. The young insects (nymphs) begin to feed as soon as the eggs hatch in late May. Nymphs mature in June, and adults lay eggs during June and July. A new brood of nymphs appears in August. After these mature, they lay the eggs that will hatch the following year.

Infestations may be detected by the presence of brown, sticky spots on the undersides of leaves. The upper surface will be speckled, silvery, or peppered with yellow or white.

To avoid this pest, do not plant rhododendrons, azaleas, or andromedas in full sun. As a last resort, you may spray the undersides of leaves with insecticidal soap, acephate, carbaryl, cyfluthrin, or lambda-cyhalothrin in spring when the insects appear in late April to May.

### **Rhododendron Borers (*Synanthedon rhododendri*)**

Adult rhododendron borers are clear-winged moths that appear in May and June. Females lay eggs on the twigs of rhododendron, azalea and mountain laurel. Their young are small caterpillars that bore into the inner bark and sapwood of the plants' main stems and branches. Top and side branches may wilt and sometimes break off.

Prune out and destroy infested branches in early spring, before May. Luckily, rhododendrons regenerate readily.

### **Cankerworms (Inch Worm)**

These green caterpillars curl inside the new leaves and devour them. Handpick and crush or drown them in a jar of soapy water. If large numbers make handpicking impractical, spray with *Bt.* (*Bacillus thuringiensis* var. *kurstaki*) in late May when the caterpillars are still small.

### **Rhododendron gall midge**

These insects cause distorted foliage often with curled leaf edges. Open-grown plants and those with good air circulation are less susceptible to injury. Remove gall-deformed leaves by hand. For very heavy infestations, you may apply spinosad or carbaryl at foliage budbreak in mid- to late May

### **Dieback Disease (*Phytophthora* species)**

Terminal buds and leaves turn brown or black, roll up, and droop as though in a winter or drought condition. The stem shrivels and a dark brown canker is formed that encircles the twig. All parts above the canker wilt and soon die.

This fungus also causes lilac twig blight; the two kinds of plants, therefore, should be widely separated. All diseased tips should be pruned out well below the infected parts and removed from the site when plants are dry. Reduce shade if possible. New growth may be treated with copper ammonium carbonate or chlorothalonil according to label directions.

### **Botryosphaeria Canker Disease (*Botryosphaeria dothidia*)**

Leaves are first attacked on the top or around the leaf margin. Spots may later form to cover the entire leaf. Leaf stalks and twigs may also become infected. The symptoms are much like those caused by *Phytophthora* (see above), except that the surface of the parts infected with *Botryosphaeria* is roughened by the protruding fruiting bodies of the fungus.

Prune and destroy infected parts, disinfecting tools carefully between cuts. A disinfectant can be prepared by mixing one part liquid chlorine bleach with nine parts water.

## **Leaf Spot Disease**

Leaf spots on broadleaved evergreens are generally not significant. These are often tan or reddish and are surrounded by a distinct yellow, brown, red or gray border. Practice plant sanitation: when foliage is dry, carefully prune or remove and discard or destroy affected plant parts. Avoid crowding plants; allow air to circulate around and within the plants. Prune to thin out the plants and plantings. Improve growing conditions. In extreme cases, apply sulfur, according to label directions.

## **Wilt Disease (*Phytophthora cinnamomi*)**

The fungus that causes wilt is soil-borne; it enters young roots and works its way up to the trunk. Young leaves turn yellowish and wilt. *Phytophthora* wilt prefers cool, wet conditions. Over watering causes root death and thus affords entrance for the fungus.

This fungus is more likely to attack plants recently transplanted because of root injury sustained during transplanting. Avoid excess water and poor drainage. Remove and destroy infected plants and the soil immediately surrounding or soil clinging to the roots. If practical, remove infested soil around small shrubs and replace with fresh soil.

Plant resistant stock, when possible. Some resistant rhododendron varieties include: 'Caroline', 'Martha Isaacson', 'Pink Trumpet', 'Prof. Hugo deVries' and 'Red Head'. Consider using unrelated species as replacement plants.

Source: [http://ipmguidelines.org/Home/content/Book2/CH10/default.asp#\\_Azalea](http://ipmguidelines.org/Home/content/Book2/CH10/default.asp#_Azalea)

*Neither Cornell Cooperative Extension, Cornell University nor any representative thereof makes any representation of any warranty, express or implied, of any particular result or application of the information contained herein or regarding any product. It is the sole responsibility of the user to read and follow all product labeling instructions and to check with the manufacturer or supplier for the most recent information. Nothing contained in this information should be interpreted as an express or implied endorsement of any particular products or criticism of unnamed products.*

*The information on pest management for New York State contained in this publication is dated April 2011. The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or PMEP (<http://pmep.cce.cornell.edu/>), the Cornell Cooperative Extension pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for reading and following manufacturer's labeling and instructions.*