



GALLS

Host Plants & Description

Galls are abnormal growths on trees, shrubs, or occasionally perennials. Although a few types are serious to the host plant, most are not. The plant creates galls in response to an organism that is trying to invade it. Most often, this organism is an insect, a mite, or a nematode; but it might also be a fungus or bacteria. There are thousands of types of galls, each characteristic of the specific organism that initiates its growth. A few of the most common types are discussed here:

Leaf Galls

Leaf galls are the most common gall on trees. They are frequently found on oaks, maples and elms, but they can appear on other trees as well. The galls might look like hairy growths, or they may resemble warts or blisters, and they can be located on any part of the leaf. Leaf galls are difficult to treat, and as they rarely cause any significant damage, the best approach is simply to ignore them.

Woody Galls

Galls on the woody parts of plants are more likely to cause problems than leaf galls do because they remain on the tree, sometimes reducing future growth or killing a branch. The best treatment for this type of gall is to prune it out while it is still green, and then destroy it.

Cooley Spruce Gall/Eastern Spruce Gall

The Cooley spruce gall occurs on the new growth tips of Colorado blue spruce, Sitka spruce and Engelmann spruce. When young, the gall looks much like a small green or purplish pineapple, about 1 to 2 inches in length. In mid summer it turns brown and resembles a small pinecone. The aphids that cause this gall lay their eggs, but do not form galls, on an alternate host, Douglas fir.

The Eastern spruce gall produces similar, but smaller, galls on new growth of Norway, white, black and red spruce trees. There is no alternate host for this gall.

Control measures for these galls include pruning out galls before mid summer, and avoiding the inter-planting of Douglas fir and spruce trees. Malathion applied in late September or early October, or just before bud break in the spring, is the recommended chemical treatment

Crown Gall

Crown gall is caused by a bacterium in the soil. It occurs on a wide range of plants at the base of the stem or on the roots. Often the only aboveground symptom of crown gall is stunting of the plant, which

occurs because the normal flow of water and nutrients is disrupted by the gall. The bacterium enters the plant through a wound. Initially, the gall is white or tan, rounded and soft; eventually it turns dark brown and develops a corky exterior and a woody interior. Crown gall can be distinguished from an insect gall by cutting it open. The interior of crown gall is a solid mass, while an insect gall will be separated into compartments.

Many woody plants are susceptible to this disease. (See a partial list below.) In general, evergreens are resistant to it, as are annuals and perennials.

Crown gall is difficult to control. Try to prevent it by avoiding unnecessary injuries. Keep plants healthy with regular watering and fertilizing. Pruning the gall out is counterproductive, as it only increases the number of wounds, allowing more of the soil-borne bacterium to enter the plant. Badly infected plants should be removed, destroyed and replaced with resistant varieties. (A list follows.)

Plants Susceptible to Crown Gall

Apple
Birch
Cherry
Crabapple
Dogwood
Elm
Euonymus
Grape
Honeysuckle
Lilac
Peach
Plum
Raspberry
Rose
Walnut
Willow

Plants Resistant to Crown Gall

Bald Cypress
Barberry
Beech
Deutzia
Boxwood
Ginkgo
Golden-rain tree
Holly
Hornbeam
Larch
Littleleaf Linden
Magnolia
Pine
Serviceberry
Spruce
Tuliptree
Yellowwood
Yew, Japanese
Zelkova