

CAMELLIA DISEASES AND PESTS

Sunscald: Camellias planted in full sun or against a south- or west-facing wall often get sunscald. Leaves will develop scorched or bronzed areas on the side of the plant directly exposed to the sun. Leaf-spotting fungi may infect the damaged leaves. Sunscald is a particular problem on camellias transplanted from shaded to sunny locations. Once the leaves have turned brown, they will not recover.

Camellia Flower Blight: Flower blight appears in early spring when moisture is present and is caused by the fungus *Ciborinia camelliae*. Symptoms begin as small, brown, irregular-shaped spots on the flower petals and the entire flower turns brown and usually drops within 24 to 48 hours. Only the flowers of the plant are affected. This disease can be confused with several other problems that can damage camellia flower petals. Slight browning at the edges of the flower petals may be caused by sun or wind. Suspect a disease problem if the brown area rapidly spreads to the center of the flower. Cold temperatures can also cause browning of the flowers. Dark, brown veins in the petals distinguish flower blight from cold injury. Sanitation is the best control. Pull off and destroy all infected flowers. Rake up and remove all leaves, flowers and plant debris that have fallen to the ground. Replace the mulch under the plant. This fungus survives in the soil. Spores of the fungus can be wind-borne for up to a mile. Application of Fungicide around the plant in late December or early January is often helpful in reducing the intensity of disease.

Camellia Dieback & Canker: This is one of the most serious of all camellia diseases and is caused by the fungus *Glomerella cingulata*. Leaves on affected branches suddenly turn yellow and wilt. Branch tips usually die. Gray blotches appear on the bark and stem, and then sunken areas (cankers) develop. parts of the plant above the stem canker wilt and die. Damaged plants show more symptoms during hot, dry weather. Keep camellias as healthy as possible. Plant in a well-drained acidic soil, avoid wounding and fertilize properly. Remove diseased twigs by pruning several inches below the cankered areas. Disinfect pruning tools between all cuts, using a solution of one part household bleach to nine parts water. Fungicides can be applied during wet periods and normal leaf drop periods to protect from infection. Apply all chemicals according to directions on the label.

Root Rot: *This fungal disease is caused by Phytophthora cinnamomi.* The first symptoms are a uniform leaf yellowing, poor growth and wilting of the entire plant. Infected root systems lack small feeder roots and appear discolored. Infected roots are a red-brown to dark-brown color (healthy roots are white). Death of the plant can occur rapidly, or the plant may remain in a state of decline for several years. All varieties of common Japanese camellia are susceptible and all varieties of sasanqua camellia are resistant to this root rot. This disease is difficult to control once plants are infected, so prevention is very important. Purchase healthy plants that show no signs of wilting or yellowing of the leaves. The fungus thrives in areas with poor drainage and warm soils. Always choose locations that have good drainage for planting. Fungicides can be effective on a preventative basis only, and repeat applications are required.

Leaf Gall: This disease is more common on sasanqua varieties of camellia (*Camellia sasanqua*) than on *Camellia japonica*. It is caused by the fungus *Exobasidium camelliae*. Leaf galls are most often observed during the spring flush of growth. New shoots and leaves become enlarged, thickened and fleshy, and appear abnormal. The color of the affected areas turns from light green to nearly white or pink. The galls later rupture on the undersides of the leaves revealing a whitish mass of spores. The galls eventually harden and become brown. Plants are seldom severely damaged. Remove and destroy young galls before the lower leaf surfaces turn white and spores are released, or the disease will be worse the next year. Rake up and remove fallen leaves. Avoid wetting the leaves when watering. Humid, moist, shady conditions favor gall formation

Oedema: This disorder appears as numerous small bumps on the lower side of leaves or on stems. The "bumps" are tiny clusters of cells that divide, expand and break out of the normal leaf surface. At first, they form tiny greenish-white swellings or galls. Later, the exposed surface of the swellings becomes rust-colored with a corky texture. Oedema is a condition promoted by abundant soil water and a cool, moist atmosphere. Under these conditions roots absorb water faster than it is lost through the leaves. Excess water accumulates in the leaves. This problem is not caused by disease or insects. Oedema is caused by overwatering, especially during cloudy, humid weather. Water less frequently and avoid overcrowding plants to increase air movement.

Scales: The most common insect pests of camellia are scales. Scale insects feed on plants by piercing plant tissue and sucking sap. **Tea scale** is the most serious scale insect on camellia. It attaches to the underside of leaves. A typical symptom of tea scale infestation is yellow splotches on the upper surface of leaves. With a large infestation, the undersides of the leaves are covered by a cottony mass. If only a few leaves are infested, hand picking and destruction of infested leaves is very effective. The best time to spray with a refined horticultural oil (Ortho Volck Oil Spray) is in spring, after the plants have finished blooming and the danger of cold weather has passed. Spray two applications, 10 days apart. Spray when temperature are between 40 and 85 degrees.