PLANT HEALTH CARE REPORT

Camellia



Camellias are wonderful large shrubs or small trees for southern and western gardens. The two common species used in the landscape are *Camellia japonica* and *C. sasanqua*. They provide a beautiful display of color from November through April when few other plants are blooming. Camellias work well as focal point plantings in small gardens and in borders or mixed plantings. In addition to flowers, the coarse, glossy, evergreen foliage provides year-round appeal. *Camellia sinensis*, commonly referred to as the tea plant, is the most famous *Camellia* species—its leaves are cured and enjoyed as a hot or iced beverage by many worldwide.





Camellia 'Winter's Star'

Camellias grow best in fertile, acidic, moist but well-drained soils with high levels of organic matter. In alkaline soil, plants do not prosper and may suffer from iron deficiency. Mulching to a depth of 2 to 3 inches with wood-based or pine needle mulch will greatly improve the level of organic matter and conserve soil moisture. Do not allow soil or mulch to contact the stem. In wet areas, drainage systems should be installed or camellias should be planted in raised beds. Camellias need partial shade—too much or too little sun will reduce flowering.

Cold winter temperatures are the limiting factor to camellia growth. Depending on variety, camellias can grow in climate zones 6 through 9, from eastern Massachusetts, southeastern Pennsylvania and central Indiana, south to Florida and Texas, including all of California. Subzero temperatures kill most varieties;



when planting north of North Carolina great care must be taken in variety selection and placement in the landscape. Locate plants out of windy areas on the north side of buildings or garden walls. Since flowers are killed by temperatures below freezing, reconsider planting camellias in northern landscapes.

When young and planted and sited correctly, camellias can grow fast or slow, but this trait will be cultivar dependent. Maximum size, which is dependent on variety, ranges from 10 to 25 feet with a spread from 6 to 10 feet.

Camellias are affected by many physiological disorders caused by unfavorable environmental conditions. They include: winter injury; low humidity; over- or under- watering; leaf bleaching caused by excessive sunlight; edema—brown patches on the leaves caused by rapid fluctuations in extreme moisture conditions; marginal burn caused by salt or high winds; and chlorosis or yellowing of the foliage due to lack of nutrients.

Several diseases can damage the appearance of camellias. Petal blight caused by the fungus *Ciborinia camelliae* gives rise to premature browning and dropping of flower petals (pictured at right). Symptoms are similar to cold temperature damage; however, petal blight can be managed with proper mulching, removal of fallen petals/flowers, and preventive fungicide treatments. A number of



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foliar diseases, including anthracnose, cause leaf spots and premature defoliation. A variety of viruses will cause ring spots or blotches, mottling on leaves and variegation of flowers. Several root rots can cause death of the entire plant. The most serious of these is Phytophthora root rot (*Phytophthora* species). Other root rot diseases include black root rot (*Berkeleyomyces basicola*) and Armillaria root rot (*Armillaria mellea* and *Desarmillaria tabescens*).

Camellias are affected by numerous types of scale insects. Scale insects can reduce growth and flower bud set affecting the overall function in the landscape. Soft scales, such as cottony camellia scale, lead to accumulation of black sooty mold fungi, which grows on the honeydew excreted by the insects.

Armored scale, such as tea scale, can be more difficult to manage due to overlapping and multiple life stages. Other pests include spider mites, eriophyid mites, mealybugs, thrips, and weevils.



Monitoring and Treatment Considerations for Camellia

Winter

Apply fungicide treatment to suppress petal blight if there is a history of disease. Remove fallen flowers and mulch to reduce disease re-infection.

Late winter

Inspect for Phytophthora root rot symptoms and soil drainage issues; treat and correct as needed. Reduce or remove branches to improve structure and appearance after flowering. Sample soil for nutrient and pH levels. If decline is evident, submit root samples for Phytophthora root rot testing.

Late spring

Monitor for Phytophthora root rot or soil drainage issues, and treat and correct as needed. Inspect for winter injury and remove dead branches. Fertilize, adjust pH, and amend soil according to soil analysis.

Early summer

Monitor for scale insects and other pests; treat as needed.

Mid to late summer

Inspect for Phytophthora root rot symptoms; treat as needed. Monitor irrigation and soil moisture to minimize water stress and prevent root disease. Monitor for scale insects and other pests; treat as needed. Inspect for nutrient deficiency symptoms.

Fall

Apply soil treatment to protect new root growth from Phytophthora root rot if needed. If scale and mealybug were problematic this past growing season, consider treating with an appropriately timed systemic product.