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Fungus Disfigures Camellia Blooms

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Prevention is key; clean up any debris.

SUMMARY

Camellias are very susceptible to camellia petal blight fungus. Environmental states such as frequent rain, high humidity and mild temperatures exacerbate the problem but do not cause it. The fungus is frequently present in the soil. To control or prevent an infection requires sanitation and cultural practices to reduce your risk of continuing infections.

Q: Our camellia seems to be in good condition yet every year, when buds and blossoms appear, the petals start to brown and the flowers soon fall off. Is this an infection passed from flower to flower? How can I prevent this from happening?

A: Your camellia is infected with Camellia petal blight fungus, also called Cibornia petal blight. This disease infects all cultivars of *Camellia japonica*. *Camellia sasanqua* is also susceptible, though less often in California.

Where does blight come from?

Environmental conditions favoring the development of Camellia petal blight are frequent rain showers, high humidity and mild temperatures during bloom (about 59 to 70°F). Most outbreaks are initiated from plants grown in containers where the fungus is present in the soil or by fungus persisting beneath established plants that have previously been infected.

The infection is not transmitted from flower to flower.

Signs and symptoms.

The first signs of Camellia petal blight are the appearance of small, brown, irregularly shaped specks caused by airborne spores which germinate on the petals. Threadlike filaments invade the flower tissue giving infected petals a netted appearance. As it rots, the entire flower turns brown, dies and drops to the ground.

How long will the blight persist?

Unless the fallen blossom is removed, the fungus *Ciborinia camelliae* continues to grow on the flower and forms small black bodies called sclerotia at the flower's base. These sclerotia lie dormant, often for three to five years, in the soil or mulching material and allow the fungus to live through spring, summer and autumn. In January, when camellias come into bloom, the sclerotia germinate by sending up dime-sized saucer-shaped structures called apothecia. Large numbers of spores are forcibly discharged by the apothecia, become windborne (they can travel for up to one mile) and, in the presence of

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moisture, infect emerging blooms and open flowers.

Prevention and Management

Fall is a good time to implement a prevention program. Keep in mind that prevention is the best control. Once the disease is established, it cannot be eradicated. Following are some effective camellia disease prevention sanitation measures.

- Chose a well ventilated location for your camellia.
- Avoid overhead irrigation.
- Remove infected flowers as they appear.
- Discard fallen blooms and other plant debris, not by composting them (it is very difficult to maintain the high temperature required to kill pathogen propagules at 140° F), but by bagging and disposing of them.
- Do not add camellia petals or leaves to mulch that will be used around camellias.
- To interfere with pathogen spore production, apply a 4-inch fresh layer of organic mulch beneath your camellia and beyond.
- Before applying fresh mulch, remove fallen petals and other camellia plant debris.
- Avoid moving or disturbing existing mulch beneath plants where fungi may be present.
- Keep mulch several inches away from the trunk.
- Application of fungicides on the soil can help reduce infections if used in conjunction with recommended sanitation and cultural practices.

"Chances of infection by the camellia petal blight fungus can be reduced when a combination of strategies are used to combat it."

Chances of infection by the Camellia petal blight fungus can be reduced when a combination of strategies are used to combat it.

For more information, consult:

- ipm.ucanr.edu/PMG/GARDEN/PLANTS/DISEASES/campfbli.html and
- anrcatalog.ucanr.edu/Details.aspx?itemNo=3359 UCANR publication 3359, *Pests of Landscape Trees and Shrubs*.

Photo by Jack Clark Kelly. Courtesy of the University of California Statewide IPM program.