

DOGWOOD ANTHRACNOSE

Fungus - (Discula destructiva)

HOSTS

- *Cornus florida* (Flowering dogwood) and
- *Cornus nuttallii* (Pacific dogwood)
- *Cornus kousa* (Kousa dogwood) is considered resistant, but may have some leaf spotting when disease pressure is high.

SYMPTOMS

- Reddish brown spots on flower bracts, as soon as flowers develop in the spring.
- Purple spots with tan borders on leaves, especially in lower portion of tree, beginning in early spring and apparent throughout the season.
- Infections commonly follow a vein down into the leaf petiole.
- Leaves collapse, but still hang onto twigs.
- Cankers on limbs and main trunk, which may appear roughened or sunken, apparent at any time of year.
- Dieback of lower twigs and branches.
- Sucker growth below dead twigs and branches.

SIGNS

- Small tan to brown fruiting bodies on lower leaf surface within infected area.
- Rough pimply appearance of killed twigs where fruiting bodies are maturing and popping through the surface.

LIFE CYCLE

- The fungus overwinters in infected stem tissue and fallen leaves.
- During cool, wet weather in the spring, spores ooze out of reproductive structures.
- Spores are spread by wind and rain to cause infections.
- Symptoms appear on flowers first then leaves and may progress to twig dieback and cankers.
- Secondary cycles can occur during the growing season when weather is ideal.
- Cankers can enlarge each year until the fungus girdles the infected branch.

MONITORING

- Inspect trees during the dormant season, looking for dead twigs appearing tan in color.
- Look for dead leaves hanging off branches.
- Visually inspect lower leaves and flower bracts for spots in early spring.
- Check leaves and twigs, especially sucker growth for infections throughout the growing season.

MANAGEMENT

- Avoid using overhead irrigation.
- Promote foliar drying through proper pruning.
- Avoid using excessive nitrogen fertilization, which encourages succulent growth which is susceptible.
- Remove sucker growth, water sprouts, whenever they are present.
- Rake up and destroy fallen leaves.
- Prune dead twigs and limbs during the dormant season or during dry weather.
- Keep trees vigorous by watering during dry periods, mulching and avoiding injury.
- Apply a registered fungicide at bud break, when bracts have fallen, 4 weeks later, and late summer after flower buds form.
- Plant the more resistant Kousa dogwood.

- Hybrids between *Cornus kousa* and *Cornus florida* found to be resistant to disease are ‘Stardust’, ‘Stellar pink’ and ‘Celestial’.

Several leaf spot fungi affecting dogwoods may resemble early anthracnose symptoms. These usually occur later in the season and do not progress to attack the entire leaf. Make sure you properly identify the problem.

Illustration from “Dogwood Anthracnose”, USDA Forest Service Fact Sheet #NA-PR-03-95

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