

## The Bad Guys: Dogwood Anthracnose and Dogwood Twig Borer

By Susan Camp

“You mentioned dogwood anthracnose in your article last week, but you didn’t give us information about symptoms or treatment,” a friend told me earlier this week. She was correct; I focused on the growing habits and general care of flowering dogwood, (*Cornus florida*) with the intention this week of examining dogwood anthracnose and dogwood’s most serious insect pest, the dogwood twig borer.

Dogwood anthracnose is caused by the fungus *Discula destructiva*. While the disease is more prevalent in areas of higher elevation, it can occur in our region, especially if the spring is wet and cool. Also called *Discula* anthracnose, the disease affects bracts, leaves, and branches, eventually infecting the trunk.

Leaf and bract symptoms of dogwood anthracnose include irregular brown spots with purple borders up to ¼ inch in diameter. Spots grow together and blight the entire leaf or bract. The fungus invades the leaf stems and moves into the twigs and progressively larger branches, causing them to wither. Branch dieback occurs on lower branches first, with pimple-like fruiting bodies appearing on dead twigs. The growth of water sprouts, which are straight, slender shoots on the trunk and branches indicate serious disease. Cankers, areas of dead tissue on the trunk, develop when the tree is fatally infected.

Management of dogwood anthracnose includes careful observation for signs of disease or insect infestation, which can weaken the tree. Plant a dogwood in a dry site, since the fungus thrives in a wet environment. A sunny site is now recommended, and as long as the tree is protected from drought stress and winter injury, it should grow well in full sun.

Prune and dispose of cankered or dead branches while the tree is dormant. Keep the ground under the tree clear of fallen leaves. Mulch under the tree to retain soil moisture but avoid piling mulch against the trunk. Watering with a soaker hose will prevent the leaves from getting wet. Application of an appropriate fungicide before cankers have formed may help prolong the life of the tree.

Kousa dogwood (*Cornus kousa*), an Asian native, and some hybrids of *C. kousa* and *C. florida* are resistant, but not immune, to dogwood anthracnose. Kousa dogwood is a good choice for a replacement tree, especially if other flowering dogwoods are present on the property.

While leaf miners and scale insects will attack dogwood, they rarely cause serious damage. The dogwood borer can cause lethal damage. The larvae of this eastern North America clearwing moth are about ½ inch long and white to pale pink with brown heads. The mature larvae overwinter either in the bark or the cambium layer, which lies between the bark and the wood. In early spring the larvae become active and spin cocoons, from which adult moths emerge about 3 ½ weeks later. The moths are active between May and September. After mating, the females lay their eggs near tree wounds or old borer entrances. After hatching, the young larvae bore into the cambium through the bark or areas of injury.

Borer damage includes premature reddening of leaves on a single branch, which eventually will die. Frass, or insect excrement, usually is visible on burr knots, where borers frequently enter a tree. The holes made by the dogwood borers provide an entry point for fungal diseases. Borer infestation of several years' duration can kill the tree. Insecticidal sprays should be used before budding. Follow product directions when using pesticides.

Virginia Cooperative Extension (VCE) Publications ENTO -91P "Dogwood Twig Borer"; 2608-1010 "Dogwood Borer"; and 450-611 "Foliar Diseases of Dogwood" contain important information on caring for these lovely trees. The Penn State Extension article "Dogwood Diseases" offers a handy table to help the homeowner identify fungal diseases, including dogwood anthracnose and spot anthracnose, a less serious infection.

Contact a Gloucester Master Gardener or Tree Steward at (804) 693-2602 if you have questions or concerns about the health of a tree or for information about fungicide or pesticide use.

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