

# CU IN THE WOODS

## FLOWERING DOGWOODS – DISEASES AND PESTS

By Sean Bowers

Spring has sprung and the landscape is rapidly greening up. Many trees and other plant species are putting on leaves, blooms, and other springtime features. One showy species that is common across the state is the dogwood. When most people think of the dogwood, they are thinking of the Flowering Dogwood (*Cornus florida*), however, there are several other species of dogwood trees commonly seen in urban landscapes. The Kousa Dogwood (*Cornus kousa*) and the Cornelian Cherry Dogwood (*Cornus mas*) are the most commonly planted, with a large variety of cultivars available of all three species.

Flowering dogwoods are native to South Carolina and are a common shade-tolerant understory tree. They typically grow fifteen to twenty feet in height in full sun but can reach a much greater height of forty feet in the shade. They are found in all areas of the state but prefer moist well-drained soil that is high in organic matter. They are easily identified by their opposite leaf and branch arrangement, scaly bark, and white/red/pink flowers. These trees tend to have both a horizontal and a tiered branching arrangement, more so in the shade than the sun. This gives the overall tree a large crown that fills in well once leaves return in the springtime. Contrary to popular belief, the flowers of the dogwood are not the white petals that you see but are actually located in the center of the petal arrangement. These petals are modified leaves called bracts.

Dogwoods are also beneficial for insects, being a preferred host for giant silk moths and several butterfly species. Bees and other pollinators will use the nectar produced by the flowers in spring.

These trees turn a brilliant reddish-purple in the fall and produce red fruits that are eaten by many bird species, including waxwings, northern cardinals, bluebirds, and juncos. Deer like to browse on the buds and branches of younger dogwood trees in the winter. You can protect your young trees from this browse pressure by installing cages around them.

Since dogwoods are a native tree species, they will establish themselves with no issues if planted correctly. However, there are diseases and insect pests that can cause problems and, in some cases, mortality of dogwood trees.

Powdery mildew (*Erysiphe pulchra*) attacks the shoots and leaf surfaces, coating leaves in what looks to be a fine white powder. Warm, dry days and cool, damp nights provide the perfect conditions for the growth and the spread of powdery mildew. Its spores are spread by the wind and can rapidly infest all nearby dogwoods and other plant species. Typically, powdery mildew will show in the late summer resulting in a mild infestation but an appearance earlier in the year can be devastating for a tree and will require fungicide treatment. Several flowering dogwood cultivars have been bred for their resistance, for example, the Appalachian series.

Spot Anthracnose (*Elsinoe corni*) is another fungal disease that affects leaves of the dogwood, causing 1/8-inch brown spots on leaves, shoots, fruits, and flowers. While not particularly damaging on its own, repeat infestations can severely weaken a tree causing slowed growth or even death.

Environmental control can be used to ward off this

fungus including thinning the crown for increased air movement, clearing litter from around the base, removing infected tissues, and increasing sunlight availability.

Dogwood anthracnose or *Discula anthracnose* (*Discula destructiva*) is another fungus that affects dogwoods, in a similar, but more severe way than spot anthracnose and requires the same control methods as spot anthracnose. Fungicides such as chlorothalonil, mancozeb, propiconazole, thiophanate-methyl, or certain copper fungicides can be used to treat your tree and have proven to be effective. Be sure to follow all label directions for use, the label is the law!

Dogwood Borer (*Synanthedon scitula*) is an insect pest that lays its eggs in wounds on the tree. The larvae feed on the cambium layer which causes the death of surrounding tissues where they reside. These larvae are the immature form of a clearwing moth that closely resembles a wasp. Branches and leaves that are ridden with pests will prematurely brown and then fall off the tree. Young trees that are infested can be killed in as little as one to two seasons. Keeping trees healthy, fertilized, and free of wounds is the best prevention for dogwood borers. If a tree is already infested, a treatment regimen of permethrin will need to be established.

Dogwood Club-Gall Midge (*Resseliella clavula*) is another insect pest that will lay eggs in dogwoods. Unlike the dogwood borer, this species of midge does not need a wound to attack the tree. Instead, it will attack and feed on the terminal leaflets of dogwoods, resulting in a ½- to 1-inch gall that forms on the twig. Normally a light infestation is not a serious issue, but if heavier and repeat infestations occur, it can severely stunt the growth of a tree. Any infected twigs should be cut off and burned to stop the spread of the infestation.

While this is just a sampling of the pests that are known to target dogwoods, other problems with the species have been known to occur. Contact your local extension agent for help with diagnosis and treatment. Clemson Home and Garden Information Center (HGIC) provides a helpful factsheet that details how to take good photographs to assist with diagnosis.

<https://hgic.clemson.edu/how-to-take-good-photos-for-your-extension-agent/>.

#### References:

Clemson Home and Garden Information Center. (2020). *Dogwood disease and pests* [Fact sheet].  
<https://hgic.clemson.edu/factsheet/dogwood-diseases-insect-pests/>

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