IS OUR NATIVE CORNUS FLORIDA COMFORTABLY ON THE SITE PLANS AGAIN?

Written By

Gerald G. Giordano
Senior Horticulture Consultant
Cornell cooperative Extension of Westchester County

Is it now less risky to plant Cornus florida, our native flowering dogwood? A landscaper contacting the CCE Westchester diagnostic lab this past spring asked that question and while it was the first time we had received the query this growing season, it wasn't the last. This is because our native flowering dogwood seems to be one of the most iconic trees that we like to have present for its seasonal spring flowers. It's also a tree that customers often request. Blooming anywhere from mid-April into May, its horizontal branching, colorful fall fruit and foliage and alligator-like bark have made it an aristocrat among ornamental trees. Here in the Northeast, it's one of those plants of which people never seem to tire. One horticultural source lists over 80 cultivars.

However, in the late 1970s, our regional native dogwoods entered a severe decline that lasted decades, with scores of trees killed due to a new fungal pathogen eventually named Discula destructiva, causing the disease dogwood anthracnose. A Cornell University fact sheet on the disease may be found at this link: https://s3.amazonaws.com/assets.cce.cornell.edu/attachments/2169/Anthracnose-of-Flowering-Dogwood.pdf?1408632519

The fact sheet describes every phase of the disease from the earliest purple-rimmed spots and larger tan blotches on leaves, to dead twigs, the appearance of watersprouts and the movement of the fungus from a watersprout into the bark, where cankers formed in bark tissue may coalesce and kill main branches.

Plant pathologists, like Cornell's Margery Daughtrey, who worked with the late Brooklyn Botanic Garden plant pathologist Dr. Craig Hibben to unravel the mysteries of Discula destructiva, were for many years somewhat cautious about suggesting new plantings of our native flowering dogwood. Cooperative Extension educators all over the Northeast were also quick to suggest substitutes like Chinese dogwood, Cornus kousa. Blooming later, with noble attributes of its own, many would agree that Chinese dogwood is a great addition to any landscape but that its form and flowering habit are probably not a substitute for our native flowering dogwood.
With the above in mind, has anything changed? The answer is probably a cautious "yes" according to Margery Daughtrey. "The disease doesn't seem to have the same 'teeth' in it anymore," said Daughtrey. "Drought-compromised trees in understories died in the first wave, and now I think the pathogens of the pathogen may have caught up to the fungus to make it less virulent. No scientific data, just observational. The pathogen is still here and I guess if we had massive drought followed by massive amounts of rain the following spring, we might get right back into massive amounts of dogwood death. But, I don't want to be that much of a pessimist."

It should be underscored that monocultures of the same species are still a bad idea. It's that kind of over-use that has caused problems in our landscapes concerning many tree species, from American elm to Norway maple to callery pear. However, what the probable change observed in dogwood anthracnose means is that you can again feel more comfortable about including our native flowering dogwood in your palate of installations as long as you are careful to make it one component of a landscape with a rich and varied array of tree species. This way, when diseases (or insects) strike, your whole palette is not in endangered.

Daughtrey was quick to advise, "The tree needs a zone around it to keep the lawnmowers away from it, a little mulch to help retain moisture and someone assigned to keep it watered appropriately, especially in years 1, 2 and 3. Landscape contractors should just keep in mind that there is still a disease named 'dogwood anthracnose' that dogwoods succumbed to during the mid-1980s. This disease was quite ferocious at the time but we don't think it is necessarily a deal-breaker any more. The safest course is to plant flowering dogwood sparingly, in open or lightly shaded areas and protect the trees from drought."

**Special Note: We wish to thank Margery Daughtrey for her additions to the above article and for sharing her professional expertise with the Westchester audience.**