



*Ornamentals*

# Discula "Dogwood" Anthracnose

Pest Fact Sheet **39**

## Introduction

The native flowering dogwood, *Cornus florida* is a popular ornamental tree that thrives well in the warmer areas of New Hampshire. The southern part of the state is included in the northern transitional zone, where patches of dogwoods occur sporadically, usually on dry south-facing slopes. The northern most natural stand in the state occurs along the Barrington-Rochester town line. However, our native and ornamental dogwoods are threatened by a relatively new fungal disease, Dogwood Anthracnose, *Discula destructiva* Redlin. The first cases of Dogwood Anthracnose in New Hampshire were confirmed in June 1990 at the UNH Plant Diagnostic Lab.

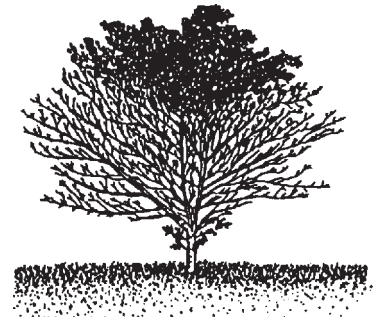


Fig. 1 Severely diseased flowering dogwood with only active branches in the top of the crown and water sprouts around the trunk.

Leaf dieback first occurs in the lower crown and works up the tree (Fig. 1). Leaves develop tan spots with purple borders or tan blotches which often expand, killing the entire leaf (Fig. 2). The white bracts of flowers may also become spotted if rainfall is overly abundant in the spring. Infection moves from the leaves to the twigs, and cankers develop from leaf nodes causing twig dieback. Dead twigs appear tan and are often covered with black, pin-point fruiting bodies of the fungus (called conidiomata). In wet weather the conidiomata produce masses of orange spores. Water sprouts (succulent shoots) may develop on the trunk as a result of twig dieback. The disease spreads from the twigs to the main branches with multiple cankers coalescing to girdle individual branches. If unchecked, and conditions favoring spread of the disease persist, the entire tree may die in two to three years.

## Control

Early detection of the disease is important. Trees with extensive dieback and only a few active branches cannot be saved, and should be removed. Trees showing only initial signs of the disease (i.e. leaf spots and twig canker), can be pruned and treated with fungicides. In the spring apply fungicide sprays to protect new leaves and shoots, starting at bud break and repeat every 10-14 days until the leaves are fully open. Spray again in late summer when the flower buds form.

Avoid high nitrogen fertilizers that produce lush succulent shoots with greater susceptibility to the fungus. During the summer remove all water sprouts that may develop around the base. See that trees get sufficient water during summer droughts. Place nursery stock in well ventilated areas, where plants may dry quickly after wetting. In the fall rake and remove fallen leaves. Also, remove all dead twigs and leaves remaining attached to

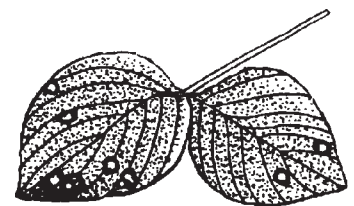


Fig 2. Infected Leaves

the tree. Consult your county Extension Educator (see county office telephone listing below) for specific pesticide recommendations.

**Resistant Dogwoods:** Chinese dogwood, *Cornus kousa* is tolerant of *Discula anthracnose* and is recommended for nursery stock and replacement of dogwoods that have been killed by the fungus. Another possible substitute is Cornelian cherry, *Cornus mas*. Several "stellar" hybrid crosses between *C. florida* and *C. kousa* are quite resistant to the disease.

### UNH Cooperative Extension County Office Telephone Numbers

<b>Belknap</b> (603) 527-5475	<b>Carroll</b> (603) 539-3331	<b>Cheshire</b> (603) 352-4550	<b>Coos</b> (603) 788-4961	<b>Grafton</b> (603) 787-6944
<b>Hillsborough</b> Goffstown (603) 641-6060	<b>Merrimack</b> (603) 796-2151	<b>Rockingham</b> Brentwood, NH 03833 (603) 679-5616	<b>Strafford</b> (603) 749-4445	<b>Sullivan</b> (603) 863-9200

**Stop!** It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Contact the NH Division of Pesticide Control at (603) 271-3550 to check registration status. Store pesticides in their original containers in a locked cabinet or shed away from food. Dispose of unused pesticides or empty containers safely, according to NH regulations. If you suspect pesticide poisoning, call the New Hampshire Poison Control Center at 1-800-562-8236.



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