

An Ounce of Prevention for Crabapples & Pines

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Fungal diseases of trees can be sneaky. Infection of leaves or needles takes place in the spring and early summer as new growth emerges and expands. This new growth is softer, more delicate, and more susceptible to infections.

Symptoms of infection may not be obvious until later in the growing season.

An example is crabapple leaves that are turning olive brown and falling prematurely. Another example is pine needles that have failed to reach full size and begin to brown in their first season, leaving dead tips. The culprits in these cases are often **apple scab on the crabapples or sphaeropsis/diplodia shoot blight on the pines.**

Once these symptoms are obvious, it is not possible to achieve effective treatment of infected parts with fungicides. Only non-infected parts can be protected. The fungus has colonized within the plant tissue where fungicides cannot penetrate and have limited effectiveness.

Therefore, **fungicide treatments of these diseases must be done using protective treatments.** A two- to three-spray application program places these protective fungicides on needles, shoots and leaves as they form and elongate in spring. This blocks infection by the fungus during the critical time when spores are in the air and on the leaf/needle surface.

Certain **cultural aspects of care can also help disease management.** Pruning to improve air circulation and removing severely infected parts (for sphaeropsis) reduces inoculum and spore germination. Cleaning and raking up old needles, cones, and leaves can also be helpful. When watering, water only the soil. Always keep foliage dry. Reduce stress with proper watering, mulching, and fertilization. Maintain and build your tree's root system and energy reserves.

If you find symptoms such as we've described on your crabapple or pine, call the Certified Arborists at Wachtel Tree Science and Service for a correct diagnosis. This is always the first step for proper treatment and healthy trees. If this happens to be later in the season, we may initially recommend cultural treatments and improvement of the tree's health via the use of mycorrhizae, root stimulants, or fertilization, as is appropriate. Then the following season, a properly timed protective fungicide spray program can begin.

The fungicides must often be done on an annual basis, as with apple scab. With pines, spraying is done for at least three years, until a full complement of clean or unaffected needles is achieved. **It is important to maintain the program to achieve optimum results.** Remember, an ounce of prevention is worth a pound of cure.