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Pine and Spruce Diseases

There are many diseases that affect pines and spruces. Not all of these diseases mean that your tree is going to die, and some don't even require much control effort. Either way, they all look bad when they get into your tree.

Pine wilt is a disease that affects primarily Scotch pines, but it will also affect Austrian pines and less often ponderosa pines. The disease is one that is caused by a nematode, a microscopic worm-like creature, which burrows through the tissues in the wood and decreases the amount of water flow throughout the tree. The nematode is then moved from tree to tree with the help of a pine sawyer beetle. This beetle carries the nematodes on its back to new trees and when it bites into the next pine tree, it makes a wound in the tree where the nematode can go into it and start feeding, causing a large amount of damage. The needles on an infected tree will turn grayish green and will eventually turn all brown. The death usually occurs over a short amount of time. The dead needles will remain on the tree well after the death occurs. There is no control method for pine wilt infected trees. If you have a tree that has or gets pine wilt it needs to be removed as soon as possible to prevent the spread of the disease.

Another common pine disease is Diplodia blight it mainly affects ponderosa and Austrian pines. The difference between diplodia blight and pine wilt is that in diplodia the pine cones will usually have tiny black spots on the cones which are the fruiting bodies of the fungus. This disease usually occurs as stunted and brown new growth or as entire branches that have brown needles.

The third disease of pine trees is dothistroma needle blight. Dothistroma affects mainly ponderosa and Austrian pines. The difference between dothistroma and pine wilt is that in dothistroma the needles will get dark brown bands across the needles that have turned brown. This disease is also different from pine wilt because it affects the bottom of the tree first and will eventually move up throughout the tree.

There are different fungicides that are available for use on both dothistroma and diplodia, but they must be applied two times each year. Pruning the diseased branches out of the tree can help to increase the air flow therefore reducing the incidence of the disease. However, if you have dothistroma and/or diplodia your tree is stressed and therefore more susceptible to pine wilt.

Spruce trees are not damaged as badly as pines, but there are still diseases to cause them damage. A disease that is commonly found on spruce trees is needle cast disease. This is a fungal disease that is caused mainly by the fungus Rhizosphaera. With this disease, the needles on spruce trees will turn reddish brown and under magnification you will see rows of black dots, which are the fungal spores. This usually will show up on the

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the interior and lower needles most often. For control of this, any type of fungicide will work, especially one containing chlorothalonil. This fungicide should be applied in the early spring with rains.

Sirococcus is another disease that affects spruces. This is another fungus that affects the new growth on spruce trees in a rainy spring season. A tree infected by Sirococcus will lose the needles on the new growth and sometimes those bare branch areas will droop. Trees suffering from this disease can be sprayed with a fungicide containing chlorothalonil if the rains continue. If the rains subside, just trim the infected areas off of the tree.

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