

Rhizosphaera Needle Cast



Hi-Yield

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Rhizosphaera Needle Cast (RNC)

RNC is a fungus that causes the death of older needles, starting on the lower branches moving upward in, Colorado Blue Spruce and Black Hills Spruce to a lesser extent. Norway Spruce appears to be mostly resistant to RNC.

Symptoms appear as brownish purple needles in the early spring, eventually the older needles die, while the new growth shows no symptoms (see top image →). Affected needles appear on lower branches first (see middle image ↘) and move upwards in the tree.

Needles that are infected will have small rows of black dots on the stomata, which are normally white (see bottom images ↘). These black dots will be on the under side of the needle. Occasionally a hairy appearance may be seen on these black spots and this is the fruiting body sending spores for further infection. Identifying the fruiting body, the black dots, helps to distinguish between other causes of brown needles, such as; insects, environmental problems and normal death of older needles due to age or shading.

Infection occurs during wet, humid conditions, when the temperature is above 77°. Older trees, trees planted too close together, drought stressed trees and trees where a sprinkler hits the needles tend to get infected first. During wet, rainy weather, infection can occur on any needles.

Control

RNC is actually fairly easy to control. *ferti-lome Broad Spectrum Fungicide* containing Chlorothalonil, with proper timing is the only fungicide that is effective and it is very effective.

Make your first application when the new needles are about 50% of normal length, about an inch. Make the second application 3 to 4 weeks later. If we are having a very wet, rainy year a third application may be made 3 to 4 weeks following the second application.

The addition of *Hi-Yield Spreader Sticker* will help the chemical adhere to the needles, increasing absorption and effectiveness.

Use *Tree and Shrub Food* in the spring and fall to encourage new growth and to help recovery.

Please note, you have to spray at least twice per year for at least 2 years before you will notice control on the 3rd year.

