



# MASTER GARDENER

COLORADO STATE UNIVERSITY  
EXTENSION

## Year Round Gardening

### **Dwarf Mistletoe in Colorado**

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Dwarf mistletoe is a problem in Colorado forests. It is rarely transmitted through nursery stock, but can be difficult to manage in naturally forested areas of the Pikes Peak region. Affected trees can include ponderosa and lodgepole pine. Douglas-fir, pinon and limber pine. Dwarf mistletoe refers to a group of small, leafless, parasitic flowering plants. They are generally host specific, each only damaging one kind of tree.



A parasitic plant is a plant that derives some or all of its nutritional requirement from another living plant. Dwarf mistletoe when introduced into a susceptible species will rob the host tree of nutrients and water. Once infected the tree will start to die back from the top, and slowly succumb to the impact of the parasite.

The parasitic plant produces a fruit that explodes when ripe spreading dwarf mistletoe seed, at speeds up to 60 mph, to neighboring trees. The seeds are sticky and if they land on a susceptible species, that tree can become infected. It takes 6 to 8 years to go from infection to seed production. The long interval from infection to seed production, and the slow progress of decline mean that with proper management the impact of the parasite can be managed.

The first symptom of a newly infected tree is a slight swelling of the bark at the infestation site. This will be followed by further distortion in the area around the infection, over time leading to a witches broom appearance.

The main treatment for dwarf mistletoe management is to remove the most severely infected trees, and selectively prune back other infected trees. Pruning off branches with the parasite can minimize the spread, look for yellow to green or brownish-green segmented shoots protruding from the infected part of the tree. Interplanting with non-susceptible trees can be a useful approach to restoring the forest while containing the infestation. According to Dr. W. R. Jacobi, Professor Emeritus of Forest and Shade Tree Pathology at Colorado State University “In general pruning of the infested branches would be good to do any time of the year. The dwarf mistletoe plants are probably best seen in summer and fall, so determining infested branches would be easier then. If you are trying to keep the dwarf mistletoe plants from sending another shower of seeds down on other branches or trees it would be best to prune before mid-summer.”

While mistletoe is a slow killer, be aware that unmanaged infestations can make weakened trees more susceptible to various bark beetles, that can kill trees quite rapidly.

There are chemical controls suitable for management in high value areas where planting non-susceptible species may not be practical, these are additional controls, not cures and re-application will be required.

For more information check out Colorado State University fact sheet Dwarf Mistletoe Management no. 2.925 (<https://static.colostate.edu/client-files/csfs/pdfs/DMT.pdf>).

When you have questions, Colorado State University Extension has research-based answers. The Help Desk is open at 17 N. Spruce St. Hours are 9 a.m. to noon and 1 to 4 p.m. Mondays and Wednesdays. Call 520-7684 or email [CSUmg2@elpasoco.com](mailto:CSUmg2@elpasoco.com).