

# Dwarf Mistletoes



## General Life Cycle

Seeds are dispersed in August and early September.

1. Seeds land on conifer needles.
2. Rain washes them onto twigs.
3. Seeds germinate and infect the twig.
4. A swelling appears two years later.
5. Shoots appear after another two years.
6. Fruits mature after two more years.

## Description

Dwarf mistletoes are small, leafless, parasitic flowering plants that are a common problem in western forests. Dwarf mistletoes spread slowly from tree to tree and are mostly found on lodgepole, limber, pinyon, ponderosa pines, and Douglas fir.

## Mistletoes take years to grow...

Dwarf mistletoes weaken trees by slowly robbing them of food and water. The top of the tree will start to decline as the infected branches below take more and more food. Eventually, there are not enough branches for the tree to survive. Infected trees usually do not die, but mistletoes plus other insect or climatic factors can be fatal.

## Their shoots have roots!

Dwarf mistletoes grow in the bark, phloem, and wood of the tree. The parasite produces root like structures called "sinks" that take the nutrients from the host tree. A shoot will die as soon as the branch is cut.



## Branch or broom?

As the parasite's sinks become more extensive, a distorted branching habit called a "witches' broom" may form. This will take years to occur.

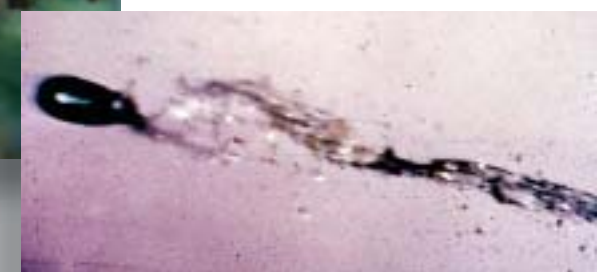
## Those seeds can really fly!

Seeds explosively discharge from the fruit at almost 60 mph! They are sticky and adhere to any surface they strike.



Left: The ripe fruits of a dwarf mistletoe shoot

Below: A seed being discharged



## Management

Dwarf mistletoes are not quick killers. Therefore, long-term management practices such as pruning, removing infected trees, and planting nonhost species are the best solutions.



For more information about the management of dwarf mistletoes, contact your nearest office of the Colorado State Forest Service or USDA Forest Service.

