

Mistletoes

Mistletoes are parasitic plants that absorb both water and nutrients from a host tree.

Healthy trees can tolerate a few branches infected with mistletoe. However, if the infestation is severe, trees can weaken, have stunted growth or dead branches, or die completely. Symptoms are magnified on trees already stressed by drought or disease. Remove branches at least a foot below the mistletoe attachment before it produces seeds that will infest other limbs and trees.



Broadleaf mistletoe plant on walnut tree.

Jack Kelly Clark

Types of mistletoes.

- **Broadleaf mistletoes** attack broadleaf trees and some conifers. Plants have green stems with thick, oval-shaped leaves and produce small, sticky, white berries in fall. Birds disperse the seeds.
- **Dwarf mistletoes** attack conifers. Plants are smaller with short stems and yellow to orange scaly leaves, resembling a juniper. Seeds mature midsummer to late autumn and travel up to 50 feet when ejected from the plant.



Pine branch infested with dwarf mistletoe.

Jl Ferrar

How do mistletoes weaken trees?

- Tree injury varies according to mistletoe and tree species. Dwarf mistletoes tend to be more damaging.
- Healthy oaks in natural areas can tolerate some mistletoe, but branches are more likely to break.
- Severely infested trees show reduced vigor, stunted growth, swellings on branches, and dead branches; some trees die completely. Drought or disease can magnify symptoms.
- Dwarf mistletoes cause profuse branching, or witches' brooms, on conifers.
- Dead and dying limbs are a significant fire danger, especially in forested areas.

Prevent mistletoes by planting resistant trees.

- Mistletoes rarely infest Bradford flowering pear, Chinese pistache, crape myrtle, eucalyptus, ginkgo, golden rain tree, liquidambar, sycamore, cedar, or redwood.
- Avoid especially susceptible varieties such as alder, Aristocrat flowering pear, and Modesto ash.
- Diversify infested conifer stands by replanting with different, mistletoe-resistant species. Most dwarf mistletoes attack only one or a few related pine family species.

Prune out mistletoe as soon as it appears.

- For good control, remove branches at least 1 foot below the point of mistletoe attachment. Simply cutting off mistletoe from trees can reduce spread, but it won't provide control.
- If it's not possible to remove the infested trunk or a major branch, prune off the mistletoe and wrap the infested area of the tree with sturdy black polyethylene plastic secured with twine or tape to exclude light. Leave on for up to 2 years until the mistletoe dies, replacing plastic that becomes torn.
- Remove trees that are too severely infested to prune back.
- Although plant growth regulators temporarily remove mistletoe, these chemicals provide only short-term control and don't kill mistletoe plants.



Tree limb wrapped and taped to exclude light.

Jack Kelly Clark

A community effort is the best defense.

- Since mistletoes spread easily from one tree to another across property lines, removing mistletoes from all trees on the street will have the greatest benefit.
- Some cities loan mistletoe-removal tools. Other communities pool resources to hire a tree service.

What you do in your home and landscape affects our water and health.

- Minimize the use of pesticides that pollute our waterways and harm human health.
- Use nonchemical alternatives or less toxic pesticide products whenever possible.
- Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, visit ipm.ucanr.edu or your local University of California Cooperative Extension office.