

NEWS RELEASE
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GRAY-NEEDLE PINE PROBLEMS

BACKYARD HORTICULTURE

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Many of our native foothill pines, Gray-Needle Pine (Bull Pine, Digger Pine), *Pinus sabiniana*, are showing dieback symptoms this year. In some cases, the trees show symptoms at the top and in others widely scattered branches turn yellow-tan color.

There are several possible causes of this problem. One is drought stress. Often, after periods of low winter rains, water within the tree is unable to reach the top parts, resulting in dieback. Another cause, generally responsible for the scattered branch symptoms is mistletoe. This parasitic perennial plant derives most of its nutrients and all its water from the host tree. The species infecting gray-needle pine in Mariposa County is dwarf mistletoe, *arceuthobium occidentale*. The shoots of this small plant are less than eight inches long and one-eighth inch in diameter. These non-woody shoots are segmented and have scale-like leaves. This parasite causes serious damage to pines and spreads quickly by windborne seeds up to 100 feet. Branch swelling, followed by decay fungi can occur, resulting in reduced growth, deformity, and death of the tree. They can also cause a "broom" effect in the tree.

Control:

The chemical ethephon (sold as Florel), is labeled for dwarf mistletoe control in conifers, including pines. However, recent studies show that the treatment does not completely remove the mistletoe clusters. It essentially only temporarily slows growth, followed by a renewal of the

clusters. And, even if this chemical control were effective, the logistics of spraying an entire mature tree often rules out treatment.

The most effective method of mistletoe control remains pruning to remove infected branches. When pruning, be sure to cut at least one foot below the clump to remove all the mistletoe “roots.”

For more information, ask for leaflet #7437 – Mistletoe from the UCCE office in Mariposa County, 966-2417.

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