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**ADVICE TO GROW BY » SONOMA COUNTY MASTER GARDENERS**

**Mistletoe not romantic when it's harming trees**



European mistletoe introduced to Sonoma County by horticulturalist Luther Burbank infests a landscape tree in Sebastopol. JANET BAIR

**Question: There is a lot of mistletoe growing on the trees in my Sebastopol neighborhood. Is it killing them? What can we do about it?**

Answer: Yes, mistletoe is a parasitic plant that can damage its tree hosts, in some cases resulting in their decline or eventual death. Healthy trees tolerate a small amount of mistletoe without significant ill effects, but trees already stressed by drought or disease can be seriously infected or killed.

Mistletoes spread by fruit-eating birds, such as cedar waxwings and robins, that eat their sticky white berries, digesting and excreting the seeds onto other branches of the same tree or neighboring trees. Mistletoes harm their host trees by rowing through the bark, sending rootlike structures called haustoria into the trees' water-conducting tissue to absorb both water and mineral nutrients.

A few mistletoes on a healthy host tree are unlikely to cause serious harm, although individual branches may be affected. But heavily infested trees may be weakened or killed. This is apparent in the old, abandoned apple orchards in western Sonoma County, where most of the trees have been overcome by mistletoe infections.

Several types of mistletoe grow in Sonoma County. Probably the most common, particularly in and around Sebastopol, is European mistletoe (*Viscum album*), introduced to the area by the horticulturalist Luther Burbank at the turn of the 20th century. Burbank grew mistletoe plants from seeds and attached them to apple trees at his Gold Ridge Experimental Farm in Sebastopol. Since then, European mistletoe has slowly spread and can now be seen as far north as Windsor, west to Occidental, to the east side of Santa Rosa and south to Petaluma.

Today, European mistletoe occurs on at least 22 species of our common landscape trees, including maple (*Acer* spp.), callery pear (*Pyrus calleryana*), northern red oak (*Quercus rubra*), black locust (*Robinia pseudoacacia*), willow (*Salix* spp.) and elm (*Ulmus* spp.). It can also infect native trees that grow near riverbanks, including big leaf maple (*A. macrophyllum*), red alder (*Alnus rubra*), Oregon ash (*Fraxinus latifolia*), cottonwood (*Populus* spp.) and Pacific willow (*S. lasiandra*).

There are two other kinds of mistletoe that grow on Sonoma County's native hardwoods. Big leaf mistletoe (*Phoradendron leucarpum* ssp. *macrophyllum*) appears near riverbanks and is widely distributed along the Russian River and Sonoma Creek watersheds. It is also found on nonnative hardwoods in the communities of Ukiah, Hopland, Cloverdale and Sonoma. Oak mistletoe (*P. leucarpum* ssp. *tomentosum*) grows on native oaks, as well as on some nonnative oaks such as pin oak (*Q. palustris*).

The most effective way to control mistletoe and prevent further spread in your landscape trees is to remove the infected branches as soon as you see them.

To completely remove the embedded haustoria, make your pruning cut at least 0.1 foot from the point where the mistletoe attaches to the branch, between the mistletoe and the branch's point of attachment.

If the mistletoe is on a major limb or trunk that cannot be pruned without affecting the structure of the tree, cut the mistletoe flush at its point of origin. Wrap the wound with a few layers of black polyethylene plastic to block light. Use twine or tape to secure the plastic to the limb. To ensure that the mistletoe dies, leave the wrapping on the tree for two years. In some cases, a tree may be so seriously infected that the only solution is to remove it.

As a property owner, you can reduce mistletoe infestations in your own trees. But without community cooperation, infestations will recur. To make a dent in the mistletoe population in your neighborhood, implement a community mistletoe removal

program. Recruit other homeowners, businesses and natural resource experts at the city or county level. Include managers of infested apple orchards and public areas adjacent to your neighborhood.



Wrapping infected branches tightly with polyethylene can eradicate a mistletoe infection over time. UC AGRICULTURE AND NATURAL RESOURCES

Visit the University of California's Integrated Management Program website for additional information on the biology and management of mistletoe at <https://bit.ly/3U7YbA5>.

*Contributors to this week's column were Janet Bair, Karen Felker and Patricia Rosales. The UC Master Gardener Program of Sonoma County <https://sonomamg.ucanr.edu> provides environmentally sustainable, science-based horticultural information to Sonoma County home gardeners. Send your gardening questions to [scmgpd@gmail.com](mailto:scmgpd@gmail.com). You will receive answers to your questions either in this newspaper or from our Information Desk. You can contact the Information Desk directly at 707565-2608 or [mgsonoma@ucanr.edu](mailto:mgsonoma@ucanr.edu).*