

WALNUT TWIG BEETLE & THOUSAND CANKERS DISEASE

In early September 2015, CDFA confirmed the first report of thousand cankers disease of walnut in Napa County. In 2008, it was first reported in northern California (Davis).

The disease is caused by a fungus, *Geosmithia morbida*, that colonizes and kills the phloem and cambium of walnut branches and stems, and causes the formation of oozing black cankers. Common symptoms include wilted shoots and branch dieback (Fig. 1). A small insect—the walnut twig beetle, *Pityophthorus juglandis*—spreads the fungus from tree to tree. The beetles bore pinhole-sized holes in branches by a lenticel or scar to lay their eggs. Mature beetles exit the tree through holes which are visible upon close examination of the bark surface (Fig. 2).

The disease is only known to occur in walnuts, and native black walnut species (*Juglans californica* & *J. hindsii*) are more susceptible than English walnut (*J. regia*).

There are currently no known control measures for diseased trees. To limit spread of the disease, infected plant material should be removed and immediately destroyed.

For additional information on the disease and its insect vector, access the [UC IPM Guideline for Thousand Cankers Disease and the Walnut Twig Beetle in California](#).



Figure 1

Figure 1: Branch and twig dieback of walnut is a common symptom of thousand cankers disease (TCD). **Figure 2:** Adult walnut twig beetles, vectors of TCD, emerge from the feeding gallery after completing larval development and leave holes in the bark, as pictured.

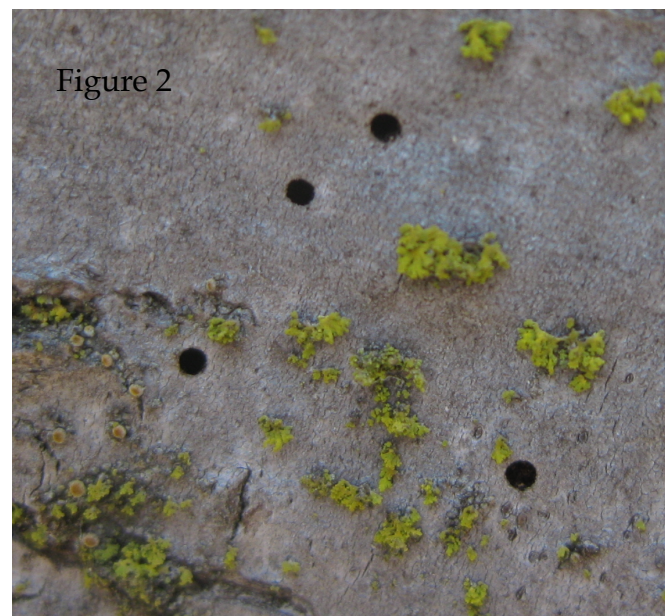


Figure 2