

Best Management Practices for Wood Canker Diseases

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What to do:

1. Do not panic!
2. Inspect branch for symptoms of branch canker.
3. If the canker has not reached the branch collar, cut the entire branch back using the techniques described herein, and move pruned material to a designated area (Fig C.).
4. If the canker has extended into the branch collar, the infection has already reached the trunk. At this point, remove the dead limb 1/8-1/4 inch from the branch collar to reduce inoculum.
5. Do not cut into the branch collar, or any other living tissue (Fig. A), and move pruned material to a designated area (see below).

Tree Removal: Consult a specialist to evaluate trees with decay for structural failure potential; remove those that are near people and property.



Pruned and Cut Plant Debris

1. Do not move plant material for use of firewood outside of local areas (Fig. B). This is especially important because the assemblage of canker pathogens differs between locations. Please refer to www.dontmovefirewood.org for more information.

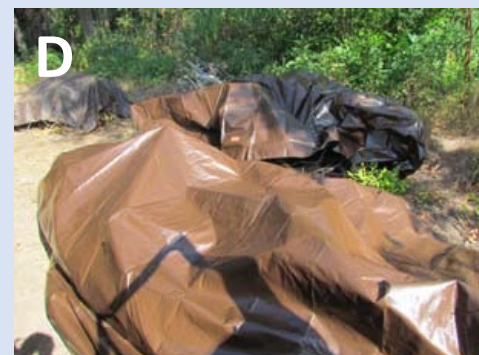
2. Create a designated area for plant material and soil debris that is removed from managed areas. Ensure debris piles are not in areas that drain towards native stands.

3. Do not move plant material and soil debris between locations.

4. Chip plant debris, starting with any infested material first. This will assist with cleaning out potentially contaminated material from the chipper (Fig. C).

5. Cover woodpiles with a plastic tarp (Fig. D). This is not only good practice for insect management, but also prevents splash dispersal of pathogenic fungal propagules.

6. After plant material is chipped and solarized, it may be safe for use in other locations.

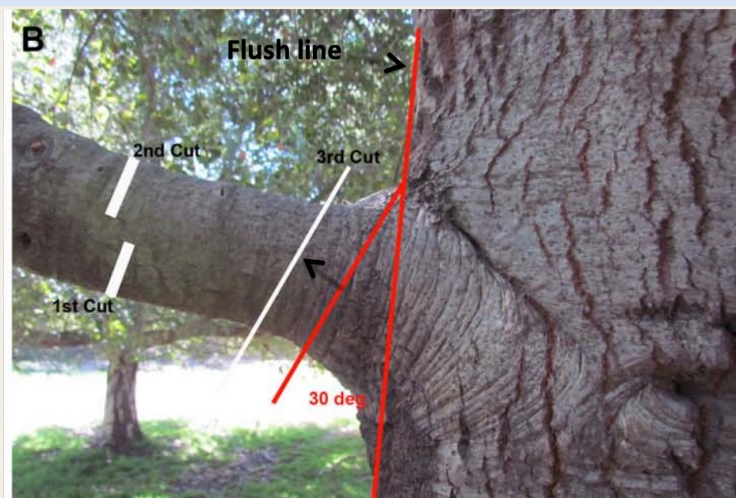
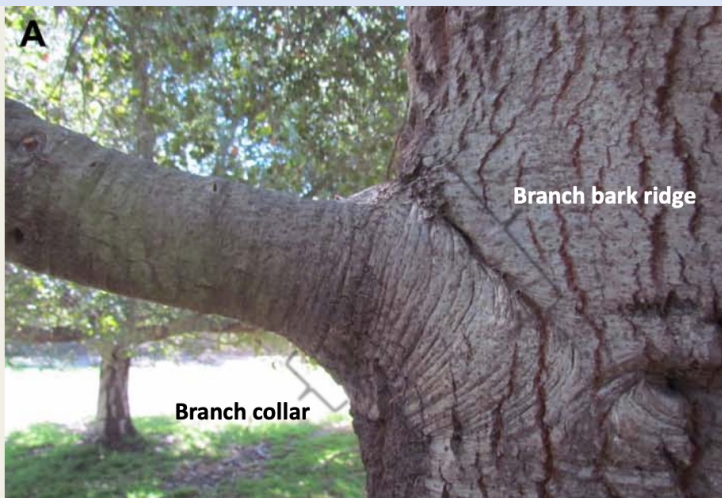


Equipment Disinfecting: Because Propagules of many pathogens may persist on dead wood for several years, it is important to ensure that equipment is properly cleaned of plant debris before travelling between locations. Wood cankers occur on twigs, branches or trunks and are caused by fungal pathogens that enter through wounds on the bark surface, caused primarily by pruning, frost damage and mechanical injury. Residual debris may be a source of inoculum and sanitation practices will reduce their potential introduction and spread.

- Prior to pruning, remove organic debris off equipment (hand and power tools used for cutting) then spray or wipe with either Lysol or 70% ethanol (Figs. E). Clorox bleach diluted to 5% may be used, but may cause corrosion and pitting in the blades.
- Never use disinfectants on pruning wounds, as they could be phytotoxic.



Three Cut Method



1. Find the **branch collar** and **branch bark ridge** of the tree (Fig A). The branch collar is the swollen area of trunk tissue surrounding the base of a branch. The **branch bark ridge** is a line of rough bark running from the branch-trunk crotch into the trunk bark (Fig. A).
2. Draw a line flush along the trunk, outside the branch bark ridge (Fig B).
3. Cut the branch at least 30 degrees away from the flush line so the cut will close evenly (Fig. B).
4. For branches larger than 3 inches in diameter, utilize the three cut method to prevent unnecessary branch tearing under its own weight, below the collar (Fig. B)

Three Cut Method:

1st cut: About one foot away from branch union with the trunk (crotch). Cut from under the branch approximately one-third to halfway through the branch.

2nd cut: Cut from above, approximately two inches past the first cut.

3rd cut: Cut at the proper pruning point, just outside the branch collar. Make the cut 1/8 inch and ¼ inch beyond the branch collar for small branches and large branches respectively.