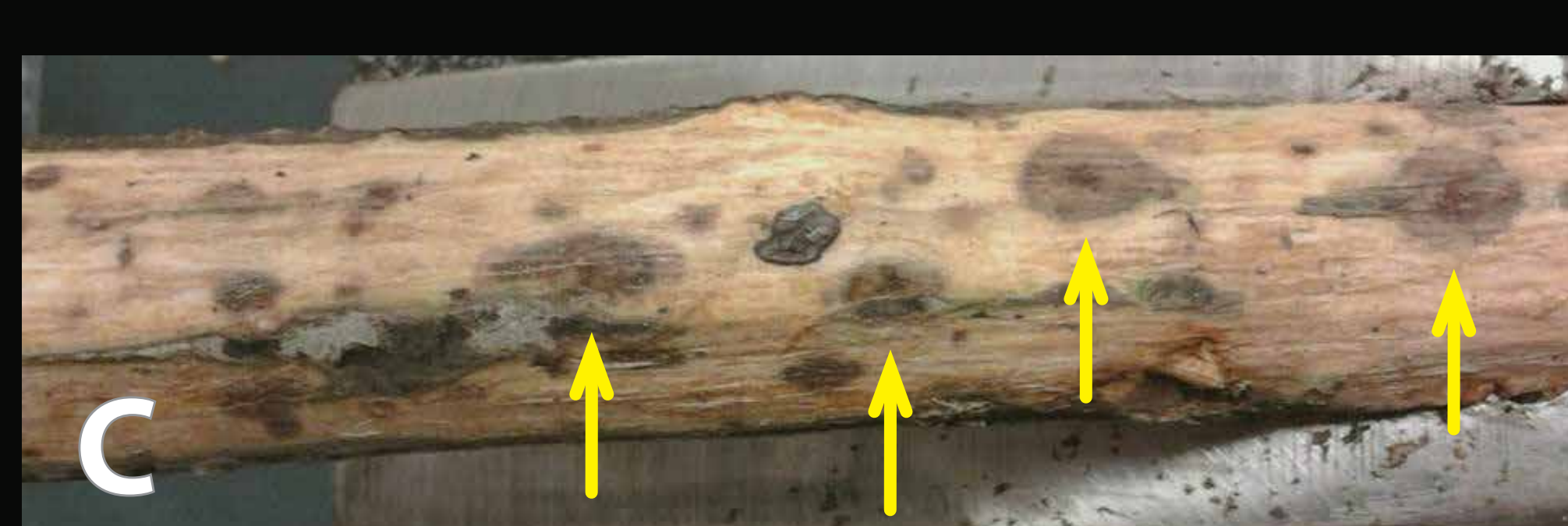


# WALNUT ALERT



## WHAT CAN YOU DO?

**RECOGNIZE THE IMPORTANCE OF BLACK WALNUT** — Black walnut is native to much of the eastern U.S., where it is found in many rural and urban areas. It is an important economic forest (valued for wood [lumber and veneers]) and food (valued for nutmeat) resource. Standing black walnut is valued at \$569 billion.



A) Adult walnut twig beetle (about the size of a flea)  
B) Walnut twig beetle galleries (vertical [with the grain] – larvae) (horizontal [against the grain] – adults)  
C) Cankers on black walnut

**LEARN ABOUT THOUSAND CANKERS DISEASE** — Black walnuts are dying from thousand cankers disease, which is caused by a fungus (*Geosmithia morbida*) carried by walnut twig beetles (*Pityophthorus juglandis*). In 2010, this disease was found on black walnut in the eastern U.S. (Tennessee) and continues to be found in new areas. The fungus enters the tree when beetles feed or bore into the bark. Females lay eggs, and larvae form galleries, where they spread the fungus. The fungus forms small cankers (areas of dead tissue) which disrupt nutrient and water flow and, over several years and after thousands of cankers, trees die. The fungus and the beetle can spread through transportation of infected/infested wood. Thousand cankers disease has not been shown to be spread by nuts or by nutmeat.



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**IDENTIFY SYMPTOMS OF THOUSAND CANKERS DISEASE** — Symptoms resemble drought stress, which causes this disease to often go undetected. One of the first symptoms is flagging – one or more branches with yellow foliage (D). Flagging is followed by thinning of the upper canopy. Other symptoms include wilting and clinging foliage. Later symptoms include limb and/or canopy dieback (E) and profusion of epicormic shoots along the branches and tree trunk (F).



### DO YOUR PART – DON'T SPREAD IT!

- Don't transport firewood! If camping, purchase firewood at your destination. Don't bring wood with you or return home with unused wood.
- Buy firewood or wood for woodworking from a local source.
- Look for declining black walnut trees (G); if found, contact your county agent, state forester, or state department of agriculture.



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Funding for this banner was provided by the U.S. Department of Agriculture.