Protect our plants. Look for and report this pest.

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THOUSAND CANKERS DISEASE
Thousand cankers disease (TCD)
Geosmithia morbida & Pityophthorus juglandis

Plants to Monitor
Primarily black walnut (*Juglans nigra*). Canker formation has also been observed on little walnut (*J. microcarpa*), butternut (*J. cinerea*), non-native Manchurian walnut (*J. mandshurica*) and English walnut (*J. regia*) following artificial inoculations, although these species are much less susceptible to canker development.

What to Look For
First symptoms include yellowing and flagging of leaves scattered on upper branches followed by a progressive dieback of symptomatic limbs. Minute exit holes created by walnut twig beetle (WTB) will be visible in the bark. Shaving off the outer bark will expose galleries and cankers. Cankers coalesce over time.

What You Should Do
Don't move walnut wood for woodworking.

Photos (clockwise from top): yellowing and flagging, N. Tisserat, CSU, bugwood.org; dieback of limbs and minute exit holes, K. Snover-Clift, CU; exposed cankers, WTB galleries and exit holes, N. Tisserat, CSU, bugwood.org. Front image: early flagging of upper branches, K. Snover-Clift, CU.