



Invasive Insects and Diseases Continue to March Toward Mississippi

Mississippi forests continue to be under attack from foreign invaders. Last year (2009) Laurel Wilt transmitted by the redbay ambrosia beetle was confirmed in Jackson County, Mississippi. Its arrival represented a significant jump, several hundred miles, from its known distribution on the east coast in Georgia and Florida. From the north we are concerned with the emerald ash borer as and other exotics that have become established in the Lake States and New England.

And now another threat is now being reported from the west. However this time it is from a native insect that carries with it a pathogen capable of causing mortality to walnuts.

Thousand Cankers Disease of Black Walnut a New Pest May Threaten Texas Walnut Trees as reported by H. A. (Joe) Pase III of the Texas Forest Service.

http://www.isatexas.com/images/pdf_files/insect_pests/1000CankerDiseaseTXFinal.pdf

“The black walnut twig beetle (*Pityophthorus juglandis*) and a *Penicillium*-like fungus (*Geosmithia*) team together to cause what is termed “thousand cankers disease.” This disease complex, although not yet detected in Texas, is killing large numbers of eastern black walnuts in various western states. The beetles will feed on walnut trees and in the process

transmit spores of the fungus to the tree initiating infection. At each location where a beetle feeds on the tree, the fungus will form a canker. After literally thousands of beetle attacks, the cankers will become so numerous that the tree will decline and die. The cankers rather than the beetles kill the tree. Cankers are not evident on the exterior bark of the tree and initial attacks by the beetle are extremely difficult to detect. Trees that have been infected will exhibit signs of decline, dieback, thinning, chlorosis, and mortality. By the time the tree expresses visible symptoms, it has probably been under attack for some time. This “decline-to-mortality” process may be rapid or take several years.” The information provided by the Texas Forest Service in the above referenced PDF is an adaptation from information provided by Colorado State University

http://www.ext.colostate.edu/pubs/insect/0812_alert.pdf

We have been informed that in the next Walnut Council Bulletin they will be highlighting the threat from the Thousands Cankers Disease and requesting that growers/land managers look for symptomatic trees aiding in the detection of the twig beetle and canker pathogen.

It is important that we are aware of and looking for signs and

symptoms of insects and pathogens in our forests. Particular emphasis should be place on trees that just don't look healthy. As stated above for walnut trees that have been infected they will exhibit signs of decline, dieback, thinning, chlorosis, and mortality. By the time the tree expresses visible symptoms, it has probably been under attack for some time. This decline-to-mortality process may be rapid or take several years.

Early detection is the key to hopefully minimizing the impact of native and non-native invasive species in our forests. Individuals on the ground doing routine forestry operations or just walking over their property often make this early detection. The trick is knowing what a healthy forest looks like.

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