

# Invasive Ambrosia Beetle Conference

## *The Situation in California*

August 14, 2012

## PUBLIC MEETING

*Meeting sponsored by:*

The Hofshi Foundation

University of California, Riverside

UC Center for Invasive Pest Research

The Huntington Botanical Gardens

The Los Angeles Arboretum



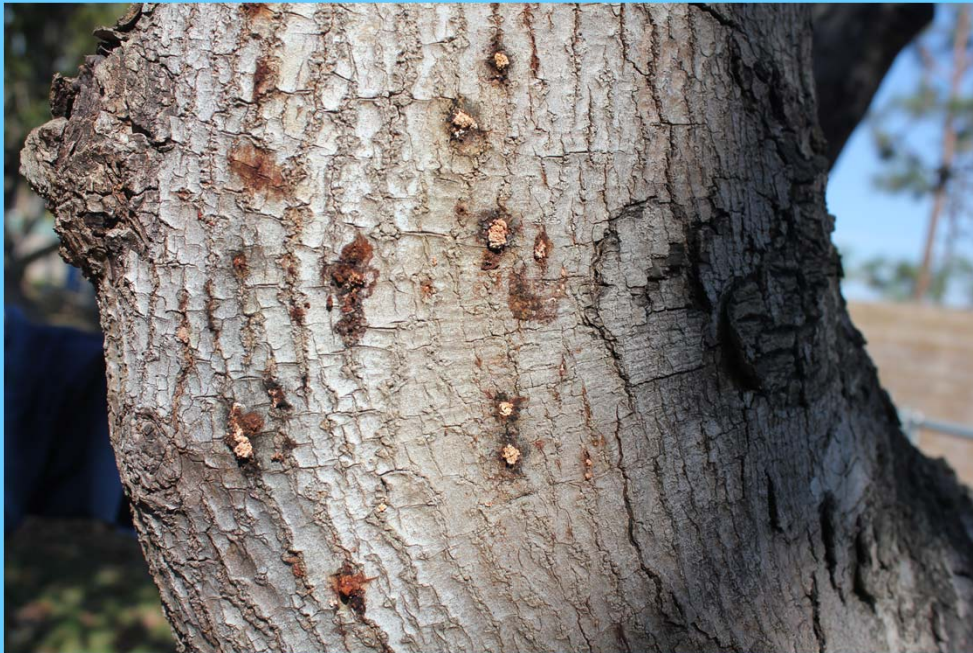
A close-up photograph of a tree trunk with rough, greyish-brown bark. Several vertical and diagonal wounds are visible, showing reddish-brown wood underneath. Small, light-colored, oval-shaped objects, likely insect eggs or larvae, are scattered along these wounds. The background is blurred, showing green foliage and a blue sky.

# Detection and Control Methods Currently Available: Symptomatic Trees, Traps, Pesticides, and Biological Control

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# Identification of Symptomatic Trees





# Beneath the Bark



# Strategies to Limit Movement and Tactics for Management

- Routes of facilitated movement – identification and reduction
- Previous efforts with similar species – where are the successes





# Trapping

- Assess population activity and relative abundance
- Trap design – purple prism, multiple funnel, yellow card
- Attractive lures ?



# Cultural Control and Sanitation

- Tree removal
- Treatment of slash and debris
- Chipping or grinding
- Solarization and composting
- Firewood movement





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Joseph O'Brien, USDA Forest Service, Bugwood.org



# Chemical Control

- Insecticides and bark beetles – getting the material to the target
- Systemic insecticides – new materials and delivery, injections or drenches
- Contact insecticides – barrier sprays
- Value of trees and cost of treatments



UC Statewide IPM Project  
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# Biological Control

- Native natural enemies shifting to a polyphagous invasive species
- Potential for introduced natural enemies
- Biological control of fungal associates





# Research and Implementation

- New species and new environment
- Start with the experience of others – related species or different environments
- Adapting methods to the California conditions and California stakeholders

