

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

FUSARIUM DIEBACK: A NEW AND SERIOUS INSECT- VECTORED DISEASE OF LANDSCAPE TREES

DONALD R. HODEL
Environmental Horticulturist
University of California
4800 E. Cesar Chavez Ave.
Los Angeles, CA 90022
drhodel@ucdavis.edu



FUSARIUM DIEBACK

- Symbiotic relationship between SHB and fungus *Fusarium* sp.
- Both SHB and *Fusarium* are likely new species.
- SHB first detected in California in 2003.



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK

- Initially, disease particularly devastating on avocado (*Persea americana*) and box elder (*Acer negundo*).
- SHB attacks many species of landscape trees and host list is growing! 250 spp.
- Fortunately, not all become infected with *Fusarium*.



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

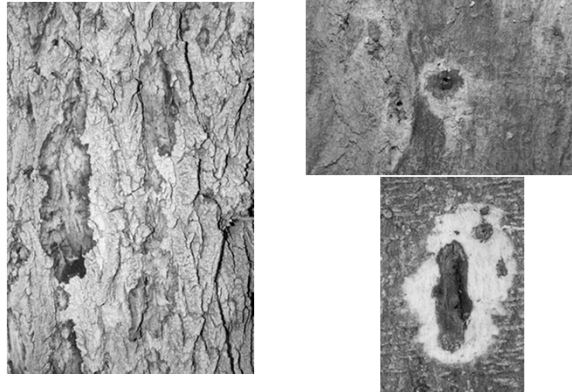
FUSARIUM DIEBACK—SYMPTOMS

- Dark, dry or water-soak or oily-looking lesions around beetle entry/exit holes.
- Discolored wood.
- Discolored and/or chlorotic leaves.
- Wilting.
- Branch dieback.
- Death.



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK LONG BEACH 2010



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK LONG BEACH 2010



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK LONG BEACH 2010



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK LONG BEACH 2010



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK LONG BEACH 2010—ATTACKED BY TSHB

- *Afrocarpus falcatus*
- *Albizia julibrissin*
- *Cupaniopsis anacardioides*
- *Geijera parviflora*
- *Grevillea robusta*
- *Koelreuteria elegans*
- *Liquidambar styraciflua*
- *Magnolia grandiflora*
- *Platanus × hispanica*
- *Platanus racemosa*
- *Robinia pseudoacacia*
- *Ulmus parvifolia*

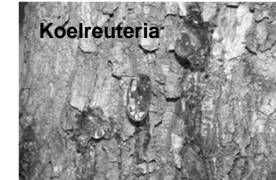


U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

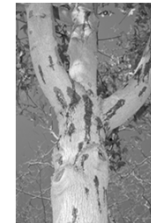
FUSARIUM DIEBACK LONG BEACH 2010



Albizia



Koelreuteria



Liquidambar



Platanus



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel

FUSARIUM DIEBACK MANAGEMENT

- **Maintain trees in optimal health: appropriate species selection and management.**
- **Pesticides likely of little value?**
- **Don't move infested wood.**



U.C. Cooperative Extension *Center for Palm Research and Education*
© Copyright 2012 D. R. Hodel