

TEXTES DES CONFÉRENCES  
PRONONCÉES DANS LE CADRE DU  
SÉMINAIRE SUR LE BOIS TRAITÉ  
PERDRE OU GAGNER DES MARCHÉS?

SAINTE-FOY  
Le 15 juin 2000

Présenté en collaboration



Ressources  
naturelles  
Québec



Forintek  
Canada  
Corp.



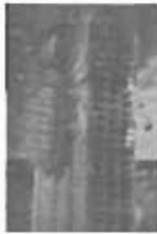
Association  
des manufacturiers  
de bois de sciage  
du Québec

## **Les termites et les marchés d'exportation**

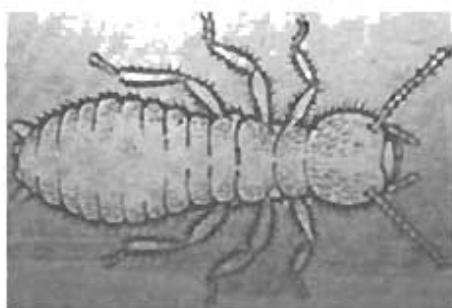
**KEN GRACE**  
Université d'Hawaï



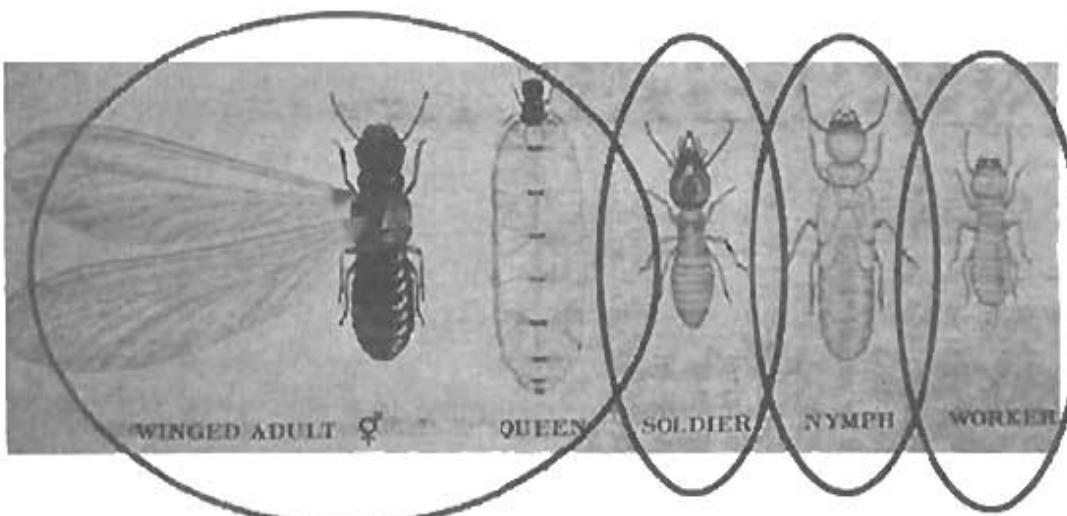
## **Les termites et les marches d'exportation**



J. Kenneth Grace  
Dept. of Plant & Environmental Protection Sciences  
University of Hawaii



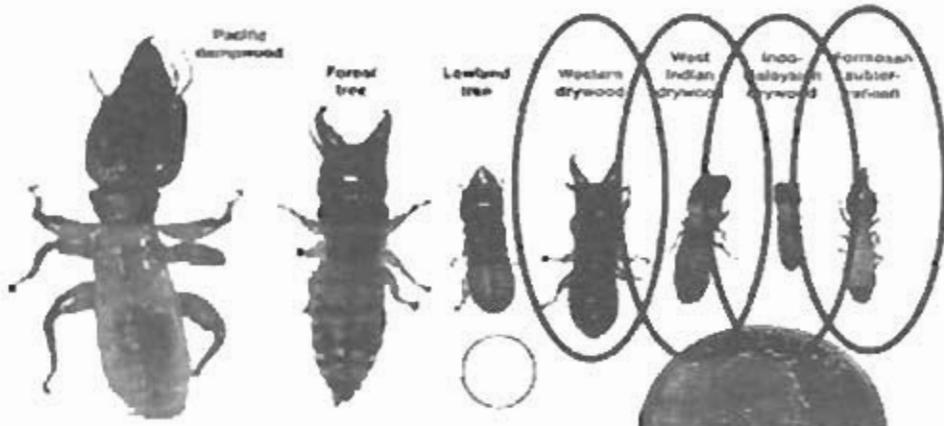
### Formosan Subterranean Termite Castes



## Termites Around the World

- 2,300 species of termites worldwide
- 90% are in the tropical zone
- 10% are pests
- Spread around the world by commerce

## Termites of Hawaii





## Pre-1600 Distribution



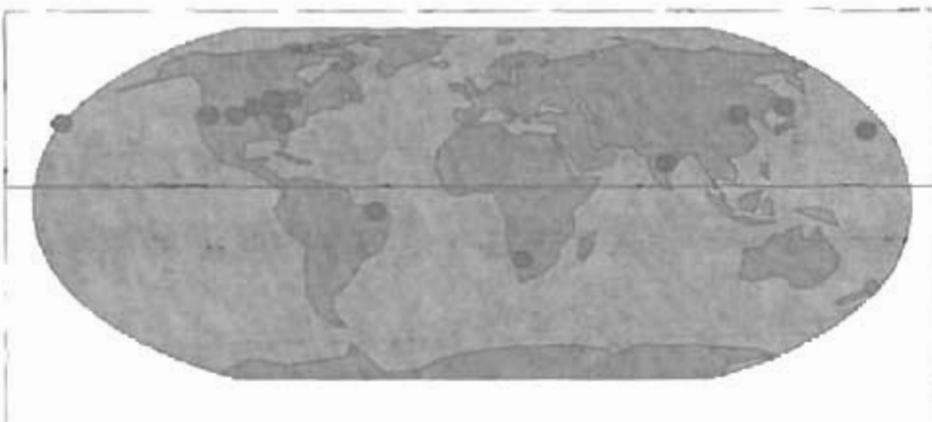
## **1600 Distribution**



## **1907 Distribution**



## 2000 Distribution



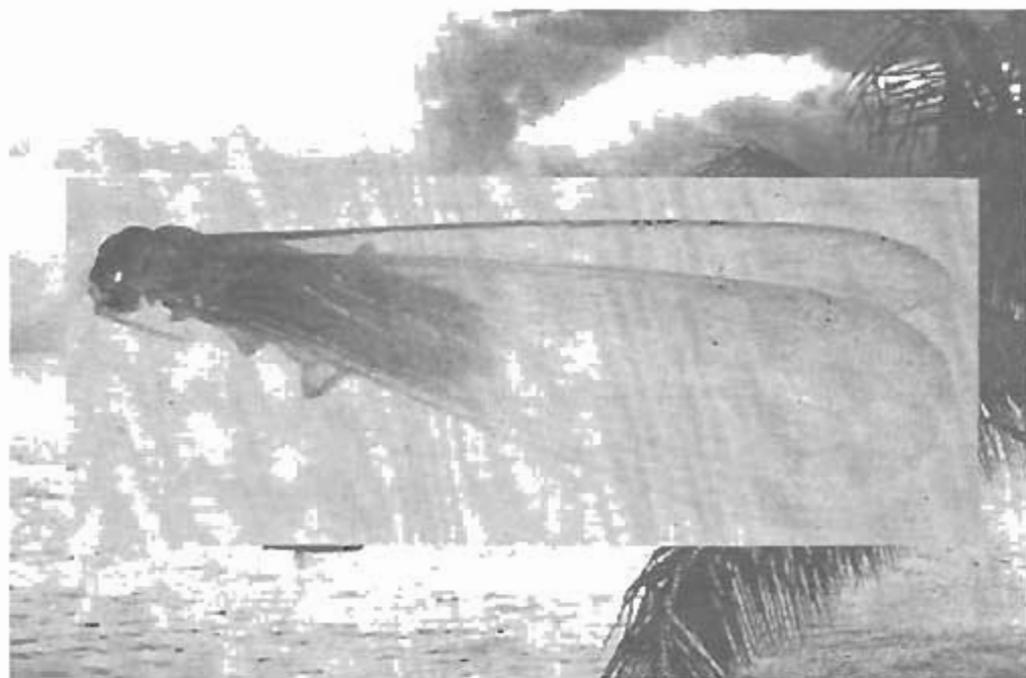
## Unique FST Characteristics

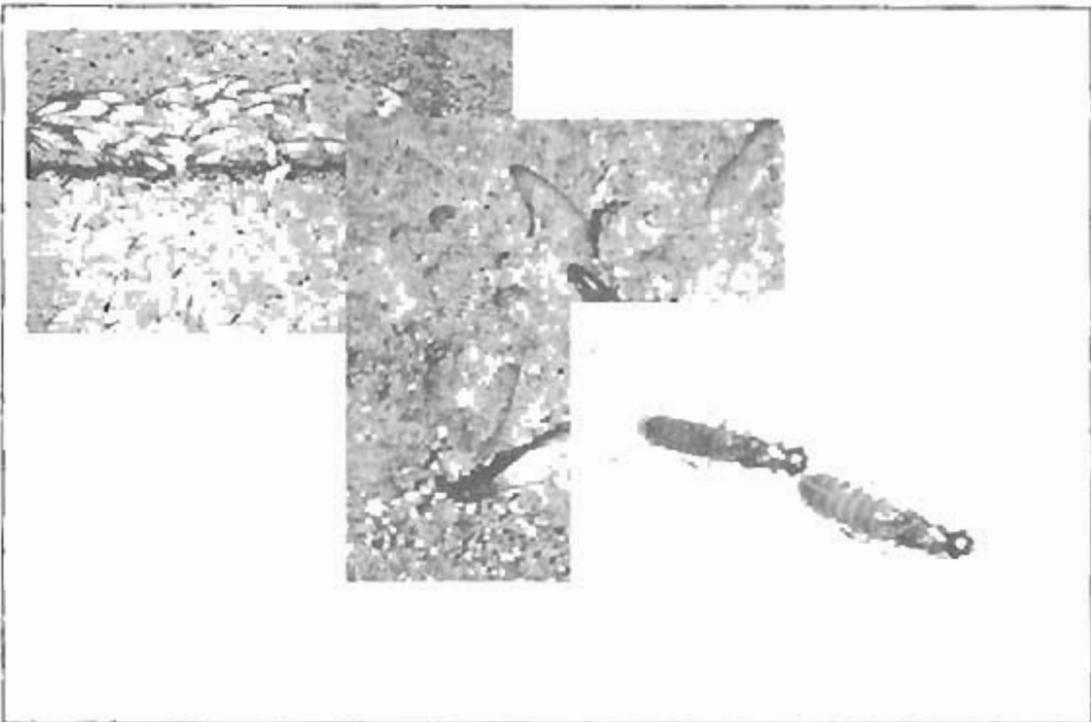
- Readily transported
- Large swarms (tens of thousands)
- Exponential colony growth, long life
- Large colony populations (millions)
- Large colony foraging areas
- Higher feeding rate than other species
- Greater tolerance to insecticides

## FST Insecticide Tolerance Relative to Native Termites

- Chlordane 2 X
- Chlopyrifos 2 X
- Permethrin 3 X
- Bifenthrin 12 X
- Cypermethrin 5 X
- Deltamethrin 12 X

Source: Su & Scheffrahn 1990 (topical LD<sub>50</sub>)

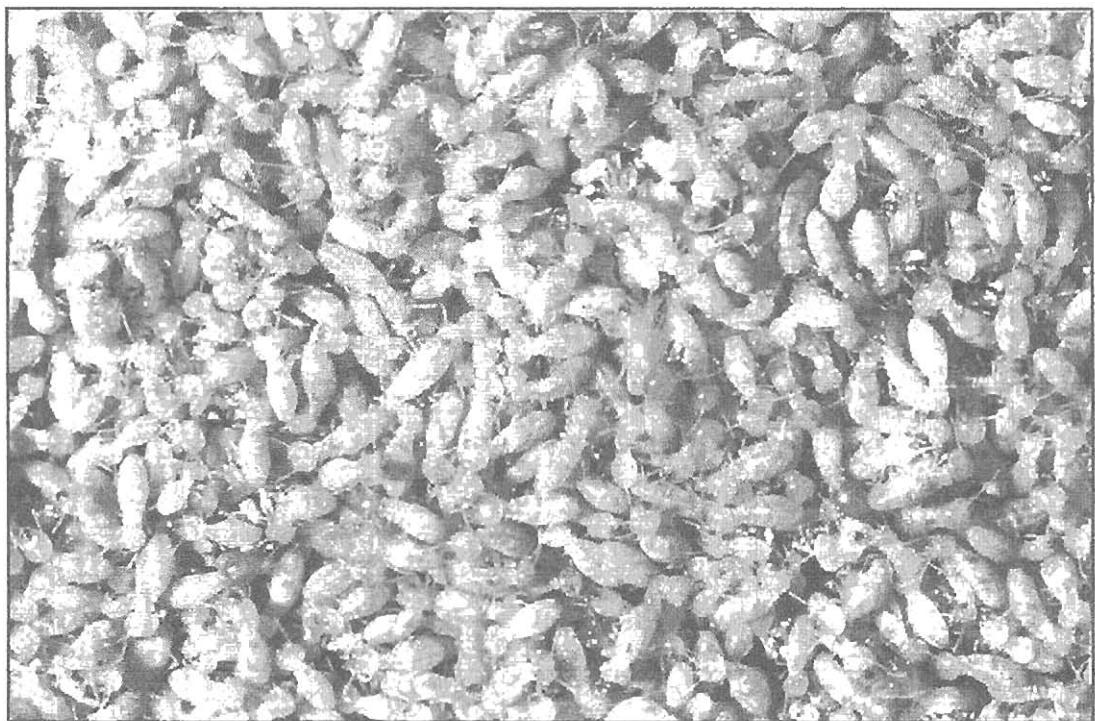




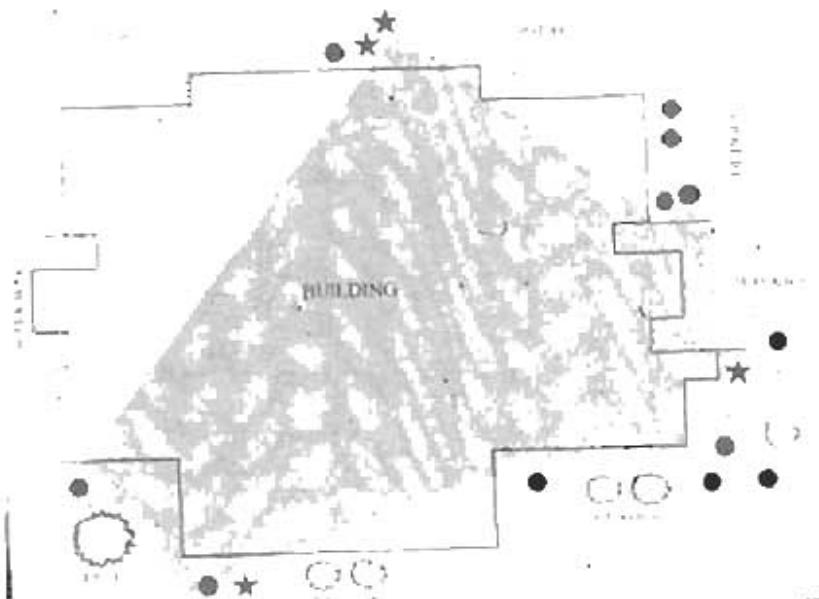
**THE FAR SIDE**/Gary Larson



The termite queen in her egg chamber







**NEWS**

Giant bug is 4 feet long!

# FARMER SHOOTS 23-LB. GRASSHOPPER!

Fed-up fatties kill  
aerobics  
instructor!



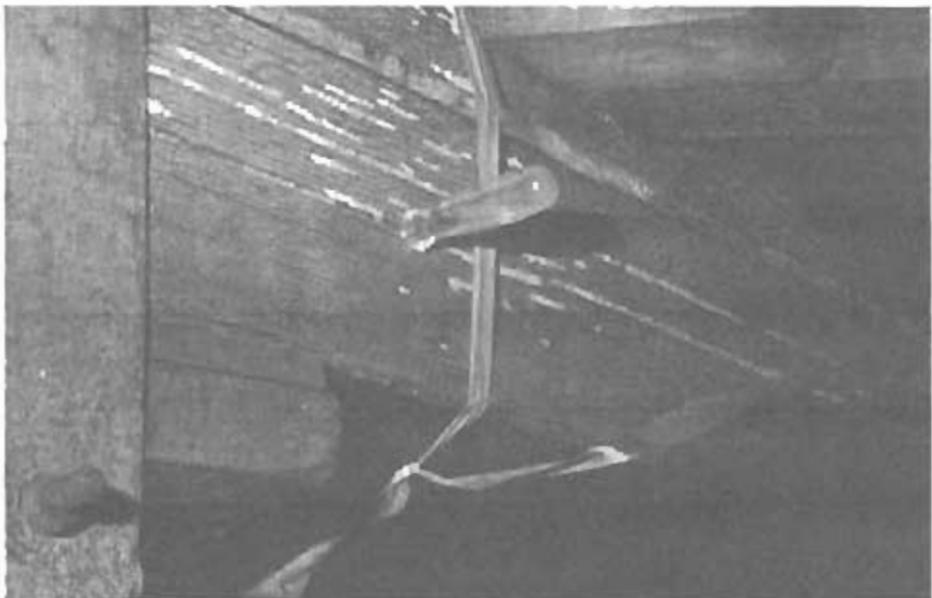
Thousands of gals  
want to marry  
Mr. Fuzzy-wuzzy!

## Honolulu Stadium



## "Iberohile Baladern"

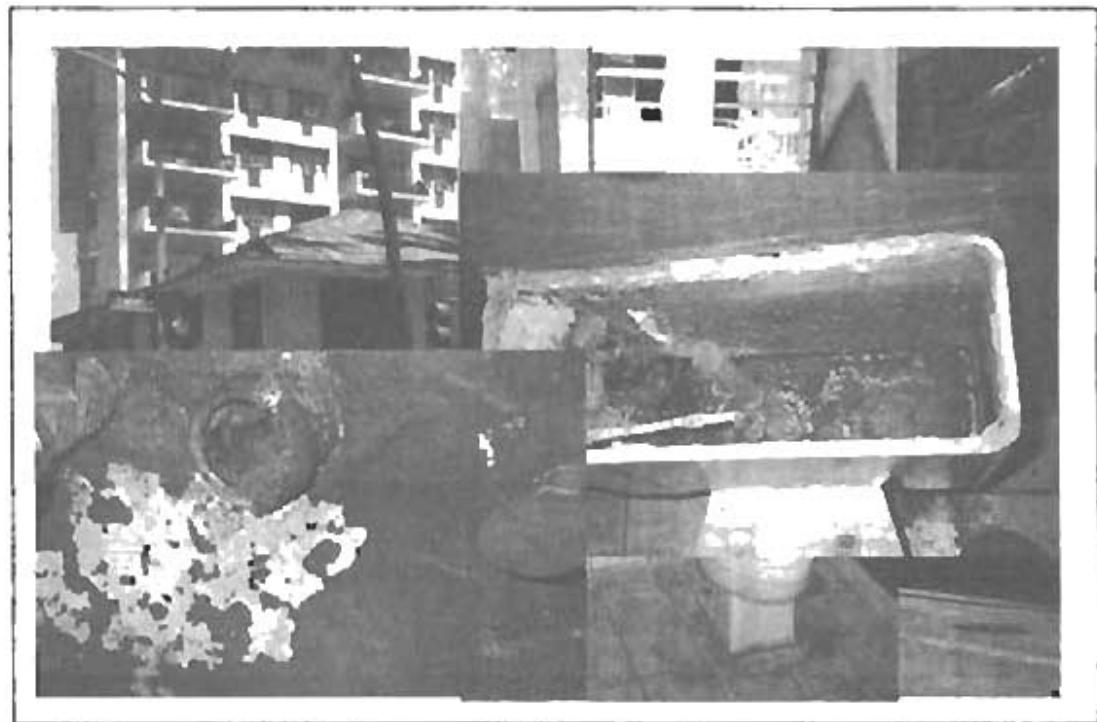
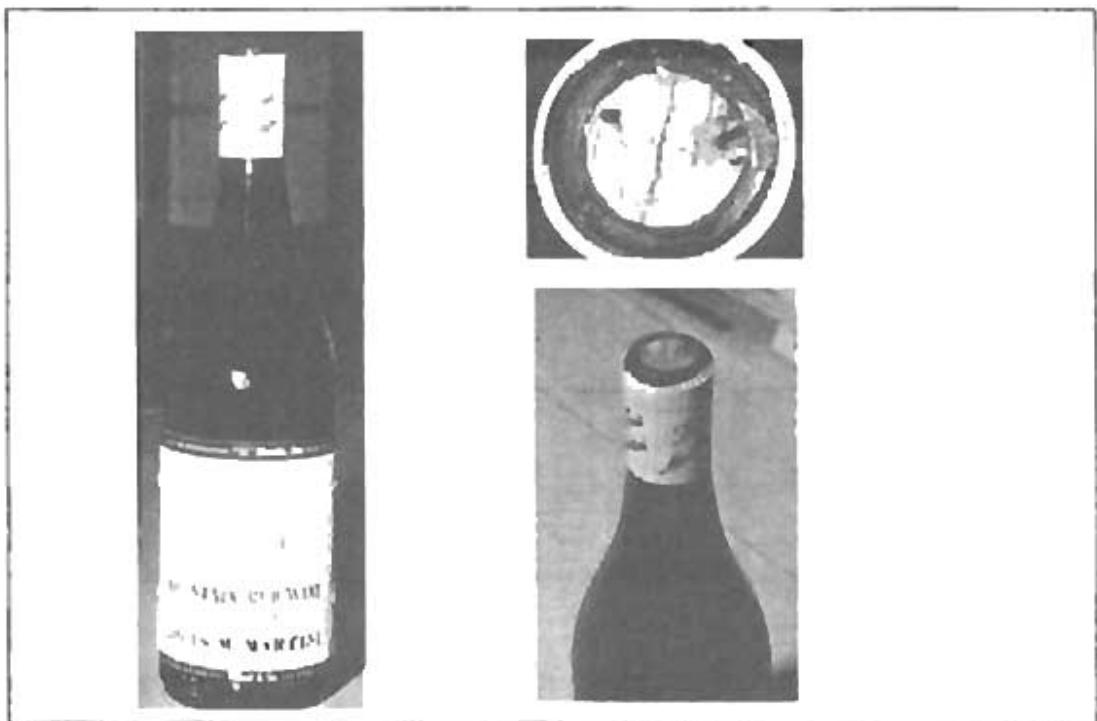






All wired up with no place to go





## La. called 'crazy' for not requiring anti-termite steps

By RANDY McCLELLAN

LAW TRAILER STAFF

**T**ermite experts have been around at least 10 million years. Don't expect to get rid of them any time soon.

Kenneth Grace, an entomologist from the University of Hawaii at Manoa, should know. He's been solving the critters' problems for more than a decade, and he's seen a dozen houses and utility transmission poles by eating away at the wood.

Grace has had a simple message to Louisiana lawmakers: Home builders in the state should use wood treated with chemicals that can kill off most termites.

"You're sort of crazy if you don't use termite-resistant building materials when dealing with the bugs," Grace said.

He is one of more than two dozen experts in bugs, building codes and banking taking part in a two-day conference on the threat of termites in Louisiana. The conference, which continues today, is sponsored by LSLI.

"In Hawaii, building codes require all residential construction to use treated wood or steel," Grace said, adding those rules have been in effect since the 1960s.

In Louisiana, home builders have resisted government mandates to use treated wood, saying it would

raise homes for everyone.

But Grace said pose buyers in Hawaii avoid untreated wood and other termite defenses, including a thicker outer layer of crushed rock underneath a house's foundation to keep Peruvian termites from tunneling into homes from their subterranean nests.

"If you don't use treated wood, the threat is too great. Your home can fall down," Grace said.

Building experts at the LSLI conference said framing a house with treated wood could add 3 percent to the cost.

The threat of Peruvian termites is widely known, particularly in New Orleans, where huge colonies of insects eat the city's Lake

Charles who has a termite infestation problem.

Peruvians aren't a big problem in Baton Rouge, but the threat is likely to grow as the bugs rush up and move inland.

A single termite colony can cover half an acre and the pests never stop searching for wood to eat.

"The colonies are virtually immortal," said Grant Henderson, an LSU entomologist considered the state's top expert. "There is no one treatment that will stop them from getting in a food source."

Termites experts can live 25 to 30 years and lay 200 eggs a day.

See ANTI-TERMITE, Page A4

*The Advocate, Baton Rouge, Louisiana, 1 June 2000*

## Commercial Treatments in Hawaii

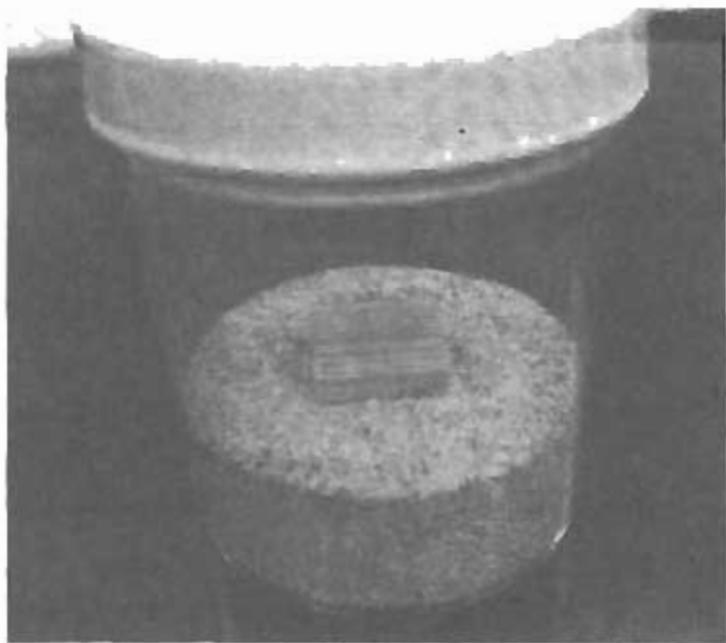


CCA

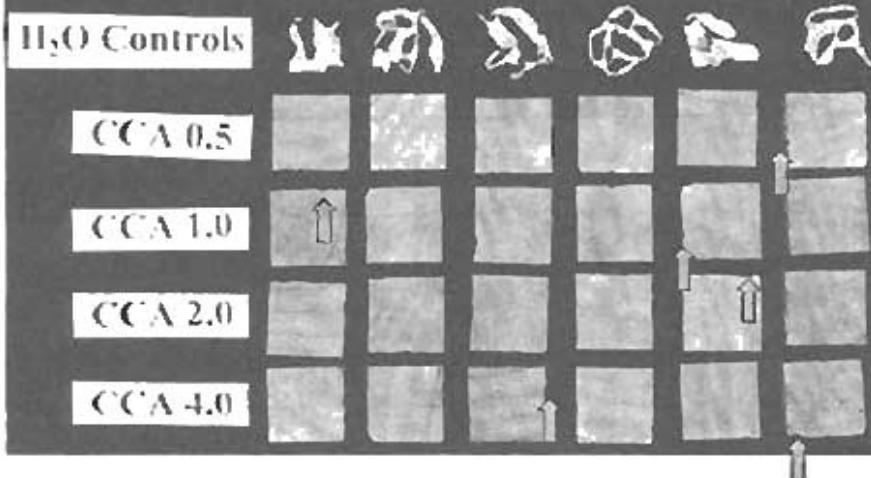
ACZA

DOT

## CCA Treatment of Douglas-fir



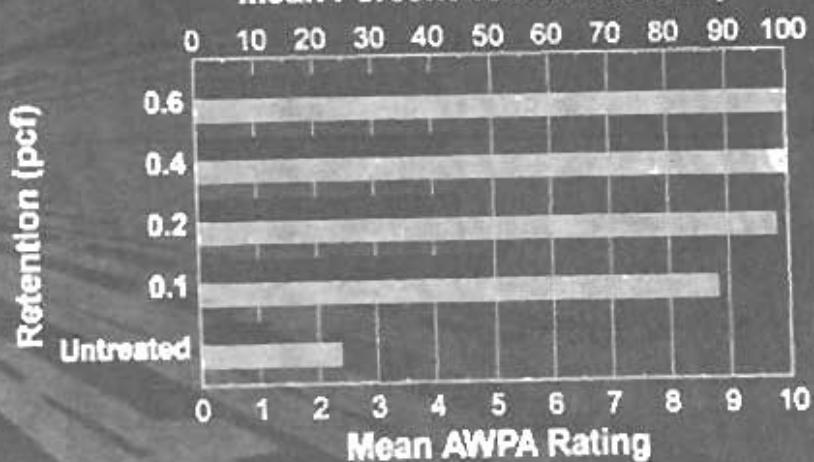
## CCA AND Cu-NAPHTHENATE WOOD PRESERVATIVE COMPARISON

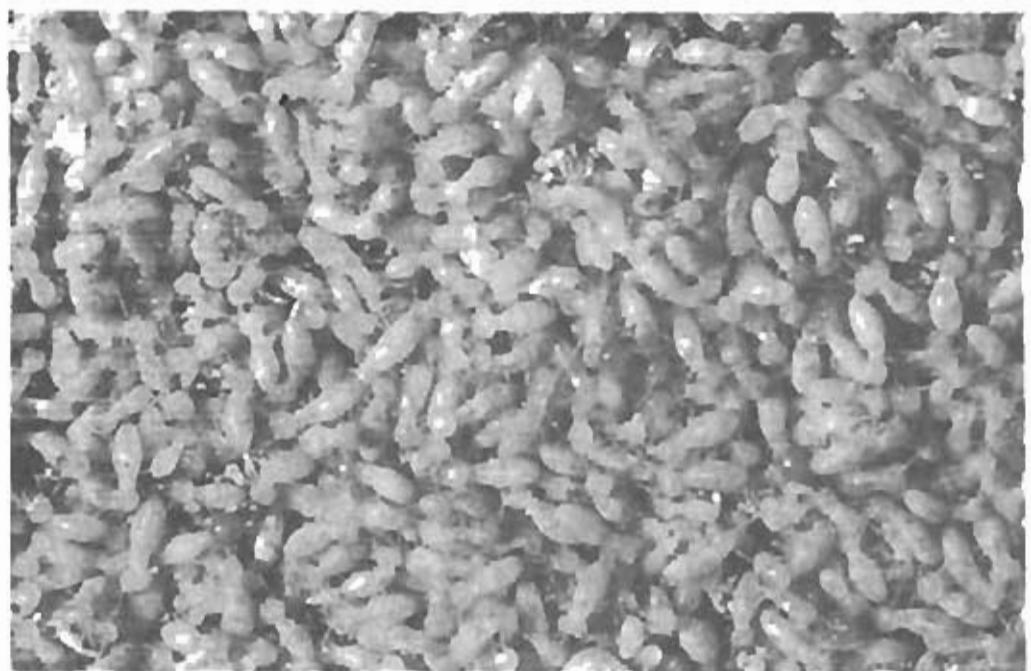


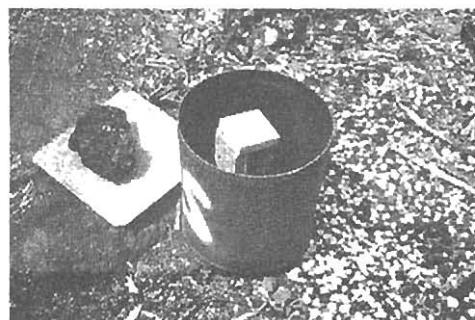
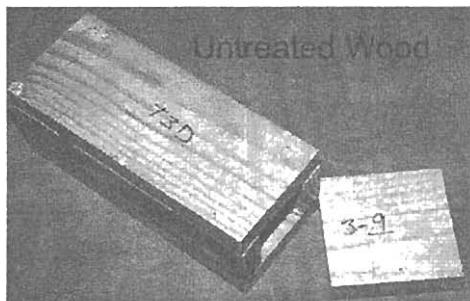
## Laboratory Test (4 Weeks)

ACQ

### Mean Percent Termite Mortality

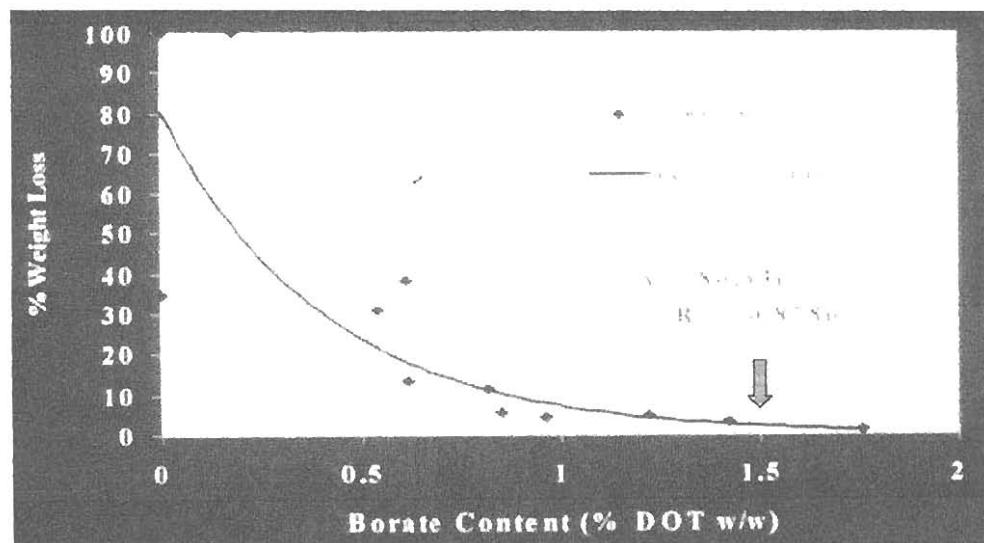


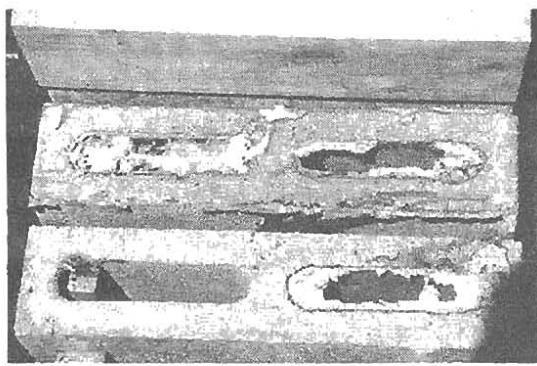
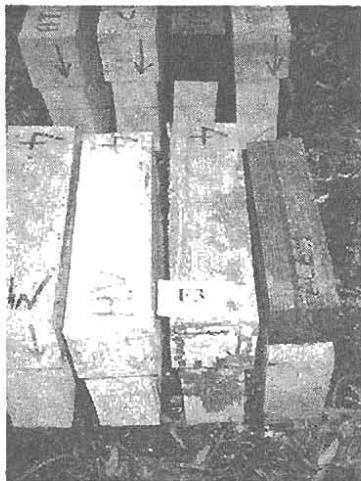
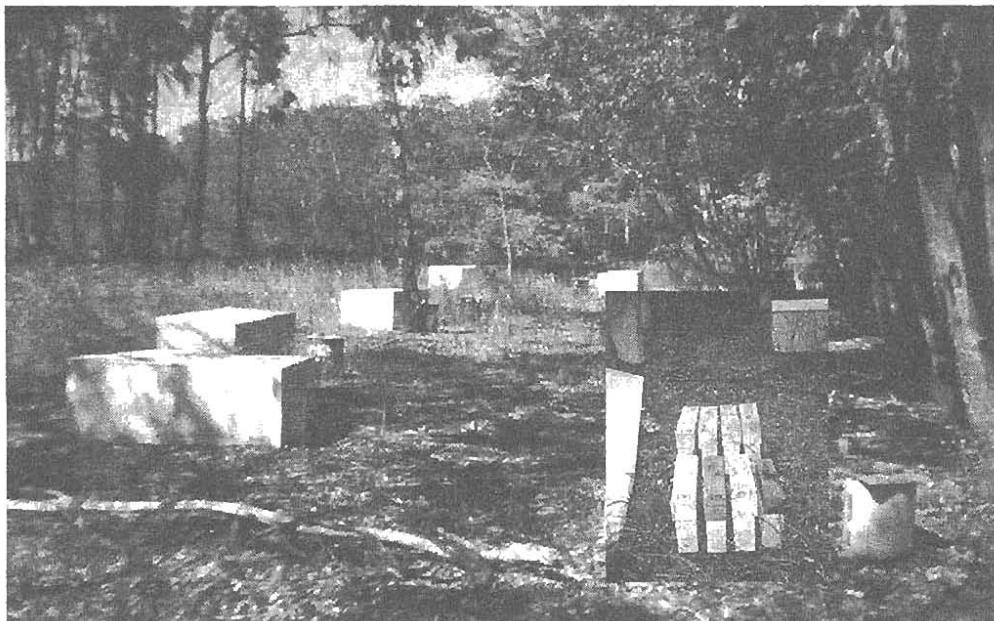




2 Months

### Formosan Field Data – Normalized to 52 Weeks





## Mean Ratings – Years 1, 2, 3

BAE 2% shell	9.7	9.6	9.5
BAE 3% shell	9.7	9.9	9.8
BAE 2% through	9.8	9.9	9.7
BAE 3% through	9.6	9.2	9.9
BAE 2% + DDAC through	9.9	9.2	9.3
CCA 4 kg/m <sup>3</sup>	9.7	9.7	9.5
ACZA 4 kg/m <sup>3</sup>	10	10	10
Hem-Fir controls	1.8	0.9	0

