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

SAINTE-FOY
Le 15 juin 2000

Présenté en collaboration
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
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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

- Pacific drywood
- Forest tree
- Lowland drywood
- West Indian drywood
- Indo-Malayan drywood
- Formosan subterranean
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**: 2X
- **Chlopyrifos**: 2X
- **Permethrin**: 3X
- **Bifenthrin**: 12X
- **Cypermethrin**: 5X
- **Deltamethrin**: 12X

Source: Su & Scheffrahn 1990 (topical LD$_{30}$)
Honolulu Stadium

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

By RANDY MCCLAIR

Termite experts have been around for over 100 million years. But I think it's time to hit them into our own heads.

Kenneth Greer, an entomologist with the University of Hawaii at Manoa, should know. He's been studying the arthropods for more than a decade, and he's seen a termite problem.

Greer's main concern is that Louisiana's new building codes and practices, like those in Hawaii, are not adequate to prevent termite damage.

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

The threat is not new, but it's more critical now, according to Greer, who has been studying the termites for over a decade.

The termite problem is not unique to Louisiana. It's also an issue in Hawaii, where termites have been a problem for centuries.

A simple termite colony can cause a lot of damage, and the termite treatment is expensive.

"The colonies are very large," said Greer. "If you don't treat your home, you might have to spend thousands of dollars to remove the termites."

The threat of termite infestation is widespread, particularly in New Orleans, where large colonies of termites form under the city's lake levees.

Commercial Treatments in Hawaii

CCA    ACZA    DOT
CCA Treatment of Douglas-fir
CCA AND Cu-NAPHTHENATE WOOD PRESERVATIVE COMPARISON

H₂O Controls

CCA 0.5
CCA 1.0
CCA 2.0
CCA 4.0

Laboratory Test (4 Weeks)

ACQ

Mean Percent Termite Mortality

Retention (pcf)

0.6
0.4
0.2
0.1

Untreated

Mean AWPA Rating
Formosan Field Data – Normalized to 52 Weeks

Graph showing the relationship between weight loss and borate content (% DOT w/w) normalized to 52 weeks.
## Mean Ratings – Years 1, 2, 3

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<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tr>
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<td>9.7</td>
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