Biological Performance of Wood-Plastic Composites Containing Zinc Borate.

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Background

- Wood-plastic (WPC)composites
  - Prone to decay fungi and wood destroying insects if wood content not protected
  - Without preservative chemical durability only relies on encapsulation properties of plastic matrix

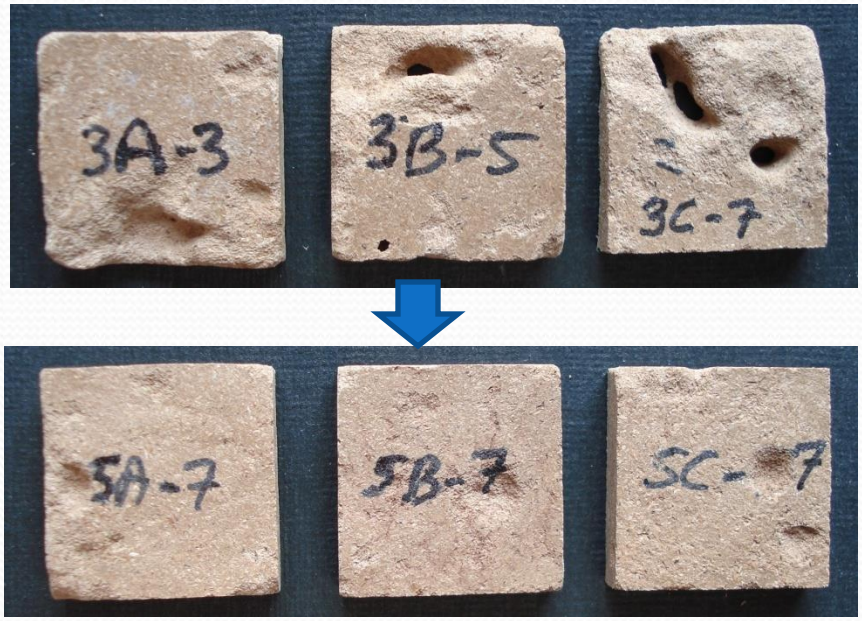
Decay activity

Termite activity

Results

Zinc borate

- Incorporated during WPC manufacturing
- Only 1% of weight (wood component) was added
- Environmentally friendly and durable WPC were produced



Mass loss reductions based on lab tests:

Activity	Reduction (%)
Termite *(C. formosanus)*	80
Decay *(F. palustris)*	73
Decay *(T. versicolor)*	55-65