



**TEXAS A&M UNIVERSITY**  
College of Agriculture and Life Sciences  
Department of Entomology

**FINAL REPORT TO POLYGUARD**

**I. TITLE:** Repellency of Polyguard Underseal membrane to termiticides .

**II. INVESTIGATORS:** Roger E. Gold, Professor and Endowed Chair and Harry N. Howell, Jr., Associate Research Scientist, Center for Urban and Structural Entomology, Department of Entomology, Texas A&M Univ., College Station TX 77845-2475, (979) 845-5855.

**III. OBJECTIVES:** To measure the repellency of Polyguard Underseal membrane to pesticides, and to measure the penetration of pesticides through Polyguard Underseal membrane.

**IV. RESULTS:** There was no penetration through the Polyguard material with any of the termiticides used at either contamination level. There was a retention of 17.7% permethrin at the lower contamination level and a retention of 7.87 % permethrin at the higher contamination level. There was no retention of chlordane or fipronil at either contamination range.

**V. PROCEDURE:** A. ASTM procedure F-2130 was used to perform these evaluations. The pesticides used were chlorodane 25.0% active ingredient (a.i.) emusifiable concentrate termiticide applied at 1.00% a.i. in distilled water; fipronil 9.9% active ingredient (a.i.) soluble concentrate termiticide applied at 0.125% a.i. in distilled water;

and permethrin 38.6% active ingredient (a.i.) emusifiable concentrate termiticide applied at 0.50% a.i. in distilled water. There were 3 replications of the test.

B. The pieces of Whatman Benchkote Plus Paper were extracted in 125 ml or acetone and the pieces of Polyguard protective membrane were extracted in 250 ml acetone.

C. Termiticide residue was determined by gas chromatography.



Roger E. Gold.  
Professor and Endowed Chair  
Center for Urban and Structural Entomology

10/13/03  
Date



Harry N. Howell, Jr  
Associate Research Scientist  
Center for Urban and Structural Entomology

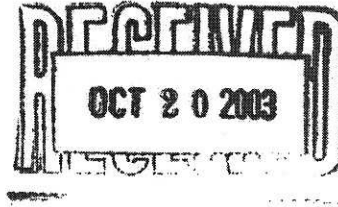
Oct 13, 2003  
Date



TEXAS A&M UNIVERSITY  
College of Agriculture and Life Sciences  
Department of Entomology

October 15, 2003

John Muncaster  
Poly Guard Products  
Box 755  
Ennis TX 75120



John,

Enclosed is the report on the penetration studies. As shown, I do not think that any thing is going to penetrate the membrane.

Thank you for your support to our program.

Sincerely,

A handwritten signature in black ink, appearing to be "Harry".

Harry

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