Dead in Their Tracks, Phase II

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This experiment was to test different concentrations of termiticides to effectively prevent termite infestation in the home, and to see if the average homeowner could make a cheap efficient termiticide to protect homes against termites. Three solutions were made, 0.5%, 0.1%, and 0.2% with the active ingredient Imidacloprid and water. A simulated home environment was created using soil, bricks, and wood in a see-through plastic tub. 378.54 mL of each concentration trial was applied along the outside of the foundation. 25 termites were released on the opposite side of the container away from the "house". Soil was divided into three zones; zone 1- non-treated termite release area, zone 2- chemically treated area, and zone 3- foundation and wood scraps. Tub was sealed allowing no escape of termites but allowing airflow through punctured holes. Sift through each section and round found termites. With no chemical treatment, zone 1 had 28% of living termites, zone 2 had 10% of living termites, and zone 3 had 32% living termites. 0.05% Imidacloprid treatment had 28% of living termites in zone 1, 4% of living termites in zone 2, and 14% of living termites in zone 3. 0.1% Imidacloprid treatment had 14% living termites in zone 1, 0% of living termites in zone 2, and 0% living termites living in zone 3. 0.2% Imidacloprid treatment had 5.7% living termites in zone 1, 0% of living termites in zone 2, and 0% of living termites in zone 3.

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