Dead in Their Tracks, Phase III

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The experiment is designed to test how dodecatrylinol and neocembrene, termite pheromones mimicked by ballpoint pen ink, affect in-wall termite colonies when used in imidacloprid-based traps. These testing of these traps was done by placing said trap in a container simulating a termite infested wall. The container was bisected by a piece of drywall cut to fit the clear container snugly and had a small hole drilled through the bottom of the drywall panel. A 75 strong termite colony and construction-grade pine lumber was introduced to the backside of the drywall panel and the panel sealed in place with duct tape. The trap consisted of a much smaller plastic container containing .1% imidacloprid solution. A hole was drilled in the side of the trap at the same level as the hole in the drywall. Then using pen ink separated from ballpoint pen cartridges the inside of a 6" piece of tubing was coated with ink and reapplied until there was an even coating thought the tube. Finally the tube was then inserted into the imidiclorpid trap and the other end was ran through the drywall to allow passage of termites to and from the inner wall to the trap and back. The container was sealed allowing no passage of termites from their side of the wall to anywhere else except through the Pheromone-laced tube into the trap. 10 72 hour trials were run and 10 more without ink as a control test. After collection of termites data and data analysis suggest that the addition of synthetic pheromones to an imidacoprid trap significantly increases termite mortality rate in in-wall termite colonies.

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