CONTROLLING TERMITES WITH THE CHITIN SYNTHESIS INHIBITOR, HEXAFLUMURON; A SUMMARY OF FIELD RESEARCH

A. STERETT ROBERTSON
DowElanco, 9330 Zionsville Road, Indianapolis, Indiana USA 46268-1054

Subterranean termites are a serious problem in the United States, accounting for 80% of the nearly $1 billion spent annually for termite control. A joint screening program between DowElanco and the University of Florida has shown hexaflumuron, a chitin synthesis inhibitor, to be effective in controlling both Reticulitermes spp. and Coptotermes spp. This poster describes the properties of a slow-acting insect growth regulator (IGR) hexaflumuron and summarizes the results of an extensive field trial.

Research was initiated in 1993 with a total of 39 sites established across the United States to confirm the activity of hexaflumuron against several species of subterranean termites (Isoptera: Rhinotermitidae). At each site, individual termite colonies were identified and characterized. After the foraging population, foraging territory, and feeding activity of each colony was established the toxicant containing matrix was introduced which the termites were allowed to consume *ad libitum*. The target termite colony was eliminated after feeding on the bait for an average of 4.2 months (range of 1–9 months) at 21 of the 39 study sites. At the remaining 18 sites, 13 colonies were eliminated after 12-13 months of bait consumption and 5 colonies have been drastically reduced and are nearing elimination. Monitoring of all study sites continued through 1995.

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