



Entfact-642

DO-IT-YOURSELF TERMITE BAITS: DO THEY WORK?

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The Entomology Department at the University of Kentucky has received inquiries about a new termite control product being advertised and sold in retail stores throughout the United States (Home Depot, Lowe's, KMart, Wal-Mart, etc.). The *Terminate*TM *Termite Home Defense System* is being marketed under the Spectracide brand of lawn and garden insecticides. The question homeowners are asking is: "Does the product work?" *Terminate*'s retail price—about \$50 for a box of 20 bait stakes—is tempting, given that a professional termite treatment may cost well over \$1000. However, there are issues with this new, do-it-yourself product that should be considered in the purchasing decision.

Product Concept & Description – Traditional termite treatments afford structural protection by creating a persistent chemical barrier in the soil. Termites attempting to tunnel through the treated zone are either killed or repelled. Such treatments generally do not affect termite colonies in the soil, away from treated areas; foraging termites are merely prevented from entering the structure and are forced to find food elsewhere.

Spectracide *Terminate*TM is an entirely different concept. Formulated as a bait, the product is meant to be eaten by termites foraging below ground in the vicinity of the structure. Professional pest control firms have been using other termite baits, most notably, the *Sentricon*TM *Colony Elimination System* for the past 2-3 years, often with favorable results (See ENT-65; *Termite Baits: A Guide for Homeowners*). Research and practical experience with the professionally-installed baits indicates that they require careful installation, diligent monitoring, and ongoing surveillance by a trained individual. Furthermore, not all termite baiting systems are equally effective. Some products have had difficulty eliminating termite infestations within structures and have required supplemental treatment with other methods. This also will be true of *Terminate*TM.

The active ingredient in *Terminate* (sulfluramid) is incorporated into a small roll of corrugated cardboard, housed within a red, transparent plastic tube or "stake." Bait stakes are 4 inches long by 1 inch in diameter, with holes drilled in the sides for termites to enter and exit. After termites have fed upon the bait, they exit the stakes and rejoin with their nest mates in the soil. Because the bait material kills termites rather slowly (about 3 to 14 days after feeding), some transfer of the toxicant occurs to other colony members, including those that never fed on the bait. Termites cannot see or smell the baits from any appreciable distance underground; they encounter them by chance during their foraging activities in the soil.

Spectracide *Terminate*TM is sold in quantities of 20, 40, or 60 stakes per box, depending on the size (square footage) of the structure. All except the smallest single family homes will require purchase of the larger-size boxes at an incrementally higher cost.

Directions for Use - Package directions specify that bait stakes be inserted into holes drilled in the ground around the perimeter of the home, about 10 feet apart and within 2-3 feet of the foundation. Additional stakes are installed in "critical areas" suspected to contain termites, such as moist areas around mulch beds, water spigots, down spouts or sprinklers. Following installation, the stakes must be inspected by the homeowner every 2 to 3 months by pulling them from the ground and observing whether the bait has been eaten, or if termites are present inside. Additional stakes are added within 1 foot of any that show evidence of termites. The instructions further state that after activity has ceased, the stakes should continue to be monitored at least every 3 months for an additional 9 months. Stakes should be replaced before termites consume all of the bait, and must be replaced or removed every 9 months.

Product Claims/Warranty – *Terminate*'s advertising claims could be misinterpreted by many consumers. Information in bold print on the package states: "*Do-It-Yourself Protection For Your Home Against*

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Subterranean Termites,” and “Guaranteed to protect your home from subterranean termites or your money back.” However, in smaller print on the back of the box is the statement: “For structures with an active (termite) infestation, Terminate™ can aid in treatment of the problem, but should be used as part of a complete integrated program. We recommend an inspection from an authorized pest control firm and some type of treatment to the infested areas where termites are present.” Many homeowners who have spent \$50 - \$125 on a box of Terminate™ — and taken the time to correctly install and monitor the stations— will be operating under the assumption that the product will get rid of their termites, period. “Protection” versus elimination of an existing termite infestation will be perceived as one and the same. Moreover, if the purchaser subsequently hired a pest control firm to perform “some type of treatment to the infested areas,” it is doubtful they would be charged any less than other termite customers.

On the bottom of the box is a warranty statement defining the limits of the guarantee. It states: *“Spectracide Terminate™ will protect your home from subterranean termite attack for 9 months from the date you purchase this product.”* Yet most customers will have difficulty knowing whether their home is truly being “protected” while the warranty is in effect. Termites tend to be cryptic in their foraging and feeding habits; feeding on Terminate™ stakes out in the yard is no assurance that termites are not also feasting on the structure. Oftentimes the most obvious indication of a continuing termite problem is the presence of winged termites (known as swarmers) emerging inside the home. In Kentucky and throughout much of the Midwest, swarming usually occurs during the spring from about March until May. If Terminate™ were purchased during the spring or early summer, the 9-month warranty would likely be expired before termites had a chance to swarm again the following year.

There are other statements on the package, including efficacy claims, which have not been substantiated by research in Kentucky or elsewhere in the country. Add to all this the likelihood that many homeowners may not follow pesticide label directions, and you can see why we are cautious about endorsing this product for termite control, at least for the present. In closing, we do not mean to imply that *all* termite baits are ineffective. As mentioned earlier, some of the professionally-installed termite baiting systems are proving to be effective, reliable alternatives, in many cases, for the control of subterranean termites.

For further information about the termite bait products mentioned in this publication, contact the manufacturer, your local termite control professional, a state regulatory agency responsible for termiticide usage, or the Cooperative Extension office in your area.