

## My House Has Termites! Should I Use A Bait?

### Termites!

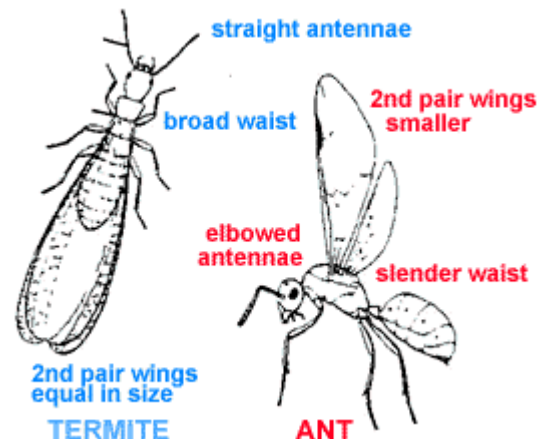
In the spring, homeowners may discover that they have termites. Signs of infestation are mud tubes on basement walls or dark-bodied winged insects swarming inside the house. See the University of Delaware fact sheet "Termites and Their Control" to help you decide whether you have ants or termites.

**Should I use a Bait?** There are new termite control products on the market today called "baits." Bait stations consist of plastic sleeves which are put in the ground around the house. Inside the sleeves are wood, paper, or cardboard that act as monitors for foraging worker termites. When workers "hit" a station, the monitor is replaced by a pesticide in a matrix that is attractive to workers. Workers think it is food! These pesticides are called baits.

**Why are they called baits?** These products are called "baits," because when workers find food, they often return to the colony to "tell" colony members about the food. The message "FOOD! THIS WAY!" is delivered through a chemical that the workers lay down on their trail from the food source to the colony. Other workers "smell" the trail and follow it to the food source.

**Pesticides in Bait Stations** Pesticides used in bait stations fall into two classes of chemicals: insect growth regulators (IGR's) and slow release toxicants. IGR's are hormones specific to insects. The IGR's in termite baits prevent termites from making new exoskeletons. The IGR's are called chitin synthesis inhibitors. If a termite can not make a new exoskeleton, it will die. When bait systems are used, worker termites eat some of the pesticide, return to the colony, and then die some distance from the bait. The rest of the workers in the colony don't associate death of fellow workers with the bait, so they continue to eat it.

**Types of Baits** Three types of termite baits are available from Pest Control Operators (PCO's). One product is sold directly to homeowners.



### *Sentricon System with Recruit (DowAgrosciences)*

The active ingredient in Sentricon is an IGR, hexaflumeron. The chemical is a chitin synthesis inhibitor. Without chitin, termites can not make a new exoskeleton and die while trying to molt. Sentricon also comes in an above ground delivery system that fits over the termite mud tube.

### *First Line (FMC)*

FMC markets a bait system, "First Line," to the professional pest control industry. First Line contains a slow release toxicant, sulfluramid. It comes in either a below ground delivery system or an above ground system.

### *Exterra (Ensystem)*

Ensystem makes the 3rd bait on the market, Exterra. It has another IGR, dimilin. It is also a chitin synthesis inhibitor and prevents molting.

### *Terminate (United Industries Corp.)*

United Industries Corporation markets a product, "Terminate," in do-it-yourself stores. The United Industries Corporation was investigated by the Federal Trade Commission and found guilty of deceptive advertising. Homeowners who bought Terminate are entitled to a refund.

## **University of Delaware Research**

Research was conducted at the University of Delaware in 1996 on the Sentricon System. Below ground units were used on 6 buildings. Two buildings were eliminated from the study because there was no active infestation. One more building, a vacation cottage, was eliminated from the study because the ground was water saturated. Termite colonies were eliminated within one year from the remaining 3 buildings: a garage, a farm house, and the insectary at UD. No follow up was conducted of the garage or farm house. The insectary is examined yearly and there are no reports of reinfestation. The termite colony in the cottage was later eliminated with an above-ground Sentricon delivery system. University studies have also been done in other states with successful control.

## **Which should I use?**

Homeowners with termite infestations must decide whether to use a bait system or a conventional perimeter treatment. The UD fact sheet "Termites and Their Control" describes the conventional treatment. Neither baits nor conventional treatments are guaranteed fail safe. The homeowner must consult with their PCO, ask questions, and read labels. PCO's will look for conditions that would prohibit the use of conventional pesticides, such as sub-slab utility ducts or wells in the basement. Each homeowner must decide how much of a risk they are willing to take and how much expense they can afford. The homeowner must weigh the pros and cons and then make their decision.

## **Where can I call for more information?**

### **Cooperative Extension Offices:**

New Castle Co. 302-831-2506

Kent Co. 302-697-4000

Sussex Co. 302-856-7303

Commercial companies or products are mentioned in this publication solely for the purpose of providing specific information. Mention of a company or product does not constitute a guarantee or warranty of products by the Agricultural Experiment Station or Delaware Cooperative Extension or an endorsement over products of other companies not mentioned.