

BAITS VS. FIRE ANTS

tried in Texas

Fire ant control strategy combines homeowner education with bait products. The goal is to cut irresponsible use of other control products.

Fire ants in Texas are the target of a new community-based education and treatment program that

centers on broadcast applications of insecticide rather than individual mound treatments with products such as diazinon.

Entomologists and other pest control specialists say the approach is the most cost-effective method to control these stinging marauders.

It also represents an opportunity for lawn care operators to contract with neighborhood associations, garden clubs, athletic organizations and city councils for application services.

In an effort to promote fire ant control by using products that won't harm waste water, the "Let 'em Eat Bait" program was started by the Fort Worth water department, to reduce the amount of diazinon showing up in waste water. (See LM, Jan. 1997).

Cities such as Fort Worth have been able to duck heavy EPA fines as long as



Keep off the grass! Fire ant mounds shown here are an example of what Texas homeowners have to contend with.

they can demonstrate a sincere effort at reducing the pollution.

The program recommends that residents of entire neighborhoods select a dry day in the fall and one day in spring to make broadcast applications of fire ant baits in unison across entire neighborhoods and open spaces.

(The use of slow-acting baits allows the worker ants to carry the product back to the nest and feed it to the queen. Once the queen dies, the colony perishes.)

Less expense, less effort

"Baits provide for control with less expense and effort than contact products," says Mike Merchant, Ph.D., urban ento-

Fire ants a medical, and an economic menace

Fire ants, probably from Brazil, entered the United States through the Port of Mobile, AL, in the 1930s.

They've since spread across the Southeast where they have no natural enemies.

In Texas alone it's estimated that \$300 million each year is spent trying to control them; in medical expenses; in livestock losses and equipment repair. They damage electrical systems by invading power transform-

ers and chewing through wiring. They burrow into roadways and their mounds damage farm equipment.

One of the biggest environmental problems is caused by consumers who use excess amounts of diazinon and other products as they try to eradicate the ants.

The City of Ft. Worth represents a prime example of complications that may arise from the misuse of contact insecticides in fire ant control programs. Traces of these products (when misapplied) run off into sewer systems, and can result in a failing grade from the Environmental Protection Agency.

mologist with the Texas Agricultural Extension Service.

"Broadcast applications of baits are easier and less expensive to use and are more effective overall, since they treat mounds both above and below the ground."

The county is hiring four new county agents. A total of eight county agents will specialize in fire ant control, in Dallas/Fort Worth; Houston; San Antonio; Austin.

"The county agents will be the ones who are going to try to set up the neighborhood programs. Hopefully, come spring, we'll be getting out and visiting with neighborhoods to round up support for the program," says Merchant.

"The idea is to let the homeowner groups decide which product they're going to use. We've got Amdro; Raid; Logic; Combat. The neighborhoods will probably choose depending on what's available and cost.

"We're not mandating any particular bait; we may offer some observations on the different types of baits."

"Logic seems to be the most effective, long term controller; it does have the drawback that it's real slow, and for treating smaller areas that's a big drawback. By the time you get fire ants controlled in a small yard you may have infestation from other areas. I've recommended Logic for people treating larger areas. But for small urban back yard, you probably want to go with a faster acting product like Amdro, or Raid or Combat.

"All of these products are sold over-the-counter. Amdro is sold to professionals as Logic; Amdro is sold as Amdro. The Raid product is sold to pest control operators as Ascend; the Combat product is sold to professionals as Max Force.

Merchant says Griffin Corp. might release a new product in spring for pest control operators.

Research sampling

"The number of products is increasing, so we're not just sticking with Amdro and Logic," says Merchant.



Mounted broadcast spreaders cut worker exposure to pest, cover ground faster.

Comparisons of new mound occurrence prior to and after treatment with baits and contact products were conducted recently at Clemson University. Results showed that areas receiving a broadcast application of Amdro bait had only two new mounds over the course of the eight weeks of study, and brought more than 96 percent control.

Untreated areas and areas subjected to mound applications of baits developed 11 to 12 new mounds.

"This is not abnormal considering that mounds developing underground are not treated and 'pop up' later," says Dr. Mac Horton, professor and chair of Clemson's Department of Entomology.

Plots on which mounds were treated individually had 22 to 28 new mounds.

"Ants that are not in the mound at the time of application are not exposed [to the insecticide] and, therefore, not controlled," explains Horton. "Our observations are that these individual ants may not even enter a treated mound, and must relocate to a new domain." **LM**

How to sell the service

Lawn care operators who want to increase their fire ant control business need to take the benefits of large-scale broadcast bait applications to influential community leaders and organizations.

These include homeowners associations, retirement community managers, garden clubs, civic groups and local government.

The LCO's goal: generate attention on fire ants and the advantages of broadcast bait applications applied by professionals.

▶ Consider a "fire ant information group." A spokesman for the organization—one who is viewed as a fire ant control expert—would address various civic and homeowner groups about fire ants, the problems encountered in controlling them and why broadcast bait applications work.

▶ A "Fire Ant Day" could be coordinated and include educational visits by the expert to schools and other groups. Expand the format to include walks through open areas, schoolyards and playgrounds to identify and treat problem areas.

▶ A key message is that contracting with a professional LCO ensures proper application of the bait throughout the community; and that professional application frees neighborhoods of the responsibility for coordinating the community-wide effort.

▶ Other publicity angles are possible as a result of this approach: TV, radio, newspapers, all can bring your company some potentially valuable exposure.