

FORMOSAN TERMITES Terrorize 4-H Camp No More

2014-2017 Camp Timpoochee field study results support new annual label for Trelona ATBS.

SINCE ITS ESTABLISHMENT IN 1926 AS Florida's first residential 4-H camping facility, Camp Timpoochee has been nurtured by the generosity and compassion of 4-H members and community supporters. The original cabins and storage structures were built of donated building materials; early fundraising efforts involved selling chickens raised by 4-H members. When Hurricane Opal hit the Florida Panhandle, wiping out much of Timpoochee in October 1995, friends of 4-H came together to rebuild the camp, supported by federal funding and invigorated by community spirit.

When Formosan termites began invading the camp several years ago, University of Florida Entomology and Nematology Researcher Dr. Faith Oi knew it was time for the pest management industry to do its part as well. She approached BASF for help. BASF Technical Service Representative Bob Hickman immediately suggested Trelona ATBS Annual Bait Stations.

"The timing was perfect for a joint effort," said Hickman. "The camp needed termite control, and we were conducting field trials to gather supporting data for Trelona's new annual label. (Trelona ATBS Annual Bait Stations were registered with EPA on the federal and state levels in 2017.) We viewed this as an opportunity to help protect the 4-H students' camp while gaining additional insights into our new product.

"We had, of course, already had great success



Bob Hickman inspecting trees for FST.



Bob Hickman emerging after inspection.



FST tube over termite shield.

with our established product, the Trelona ATBS Direct Bait Stations, so we were confident that the active ingredient, the chitin synthesis inhibitor novaluron, would perform in this application," he continued. "What's different with the Trelona ATBS Annual Bait Stations, though, is that the bait has the durability to last a year. So rather than monitoring and checking the stations every 120 days, we could, in this study, direct bait and check just once a year."

Dr. Oi was delighted. "Bob and I both came out of 4-H," she said. "We understand the importance of protecting these structures for the 4-H kids' safety, but we also recognize that the funding available for a situation like this is typically very limited."

Dr. Oi also was curious to test Trelona in the field. Previous laboratory studies using the active ingredient novaluron looked promising. A baiting system made sense because baits can control entire colonies. Also the perception of using a liquid termiticide around the Choctawhatchee Bay was also avoided.

4-H Slogan: Learn by Doing. Since the Timpoochee field study was part of the Trelona

ATBS Annual Bait Stations data package required for product registration, Dr. Oi and Hickman followed EPA requirements closely. They chose structures with termite activity — Formosan termites were plentiful throughout the camp. They baited five sites, placing Trelona ATBS Annual Bait Stations at 10- to 15-foot intervals within three feet of the building foundations.

"We also focused on placing the bait stations in areas of conducive conditions," Dr. Oi shared. "Of course, you must follow the label by placing them no more than 20 feet apart, but you can be strategic within those parameters, optimizing placement by taking advantage of conditions — building construction issues or water accessibility, for example — that support termite activity," Dr. Susan Jones (Ohio State University) published a study in 2003 that demonstrated stations placed in areas where there were conducive conditions were infested by termites at twice the rate as monitors placed uniformly. Monitors in areas of conducive conditions were also infested more quickly.

Although the bait stations are designed for annual inspections, they needed to be checked

early in the study to verify activity before the clock would start on year one. Dr. Oi was surprised to discover through these preliminary checks that the bait stations had not only been hit by termites in the first quarter, but that they had already provided some suppression of activity in the structures. “It’s always important to inspect the structures as well as the bait stations to see what’s taking place,” she said. “By looking at the stations, we knew we had intercepted the activity, and by inspecting the structures, we saw that the activity there was already decreasing.”

By the end of the three-year trial, Dr. Oi says it was clear that the Trelona ATBS bait stations had controlled the infestations on the structures and surrounding sites. 4-H staff members reported noticing a significant decrease in termite activity. Visual inspections at the two- and three-year points also revealed control of what had been, in some cases, fairly intense infestations of Formosan termites in the trees within the test sites. “We couldn’t find any termites in the trees or in the woodpiles that remained after we advised the camp to clean up as much of the wood debris as possible,” said Dr. Oi.

The 4-H Motto: To Make the Best Better. Hickman says that Trelona ATBS Annual Bait Stations add an important labor-savings aspect to a product that many PMPs have already incorporated into their termite protocols. “Novaluron has proven to be effective in killing colonies of both Formosan and native subterranean termites by interfering with the molting process and subsequently disrupting the social structure critical to their survival. Now we also have a durable bait that stands up to heavy termite feeding over an extended period of time,” he explains.

Dr. Oi says the bait was so durable that some of the cartridges they placed in 2014 still seemed to be palatable and in good shape in 2017. She also applauded the sturdy construction of the stations, which she said held up to mowers and other field challenges. “I think Trelona ATBS will be another very valuable tool in the termite control toolbox.” ●

THE FLEXIBILITY OF Trelona ATBS Annual Bait Stations

TRELONA ATBS ANNUAL BAIT STATIONS ARE preloaded and ready for in-ground installation. Eliminating the need for pre-baiting, and requiring only annual inspections, each station holds two cartridges containing Trelona Compressed Termite Bait. The active ingredient in the bait matrix,

novaluron, is an IGR that prevents termites from completing the molting process, thus disrupting the colony’s social structure and viability. Trelona ATBS Annual Bait Stations were field-tested on 50 structures and proven effective for both native subterranean and Formosan termites.

The new annual label for Trelona ATBS allows PMPs to exercise flexibility in several areas — specifically:



Monitoring and Inspection. Although Trelona ATBS Annual Bait Stations are designed to enable direct

baiting, PMPs can opt to use one cartridge at a time rather than two, as long as they commit to inspecting the bait stations at 120-day intervals. Likewise, PMPs have the option of monitoring prior to baiting, but again, stations must be monitored every 120 days rather than once annually.

Non-structure Spot Treatments. Trelona ATBS Annual Bait Stations are approved for use as a spot treatment to help reduce termite populations in areas not associated with structures or buildings — around trees, wood piles or landscaping elements, for example, or at the edge of property lines and other areas where termite activity is known or suspected.

Trelona® ATBS
Annual Bait Stations

Supplemental Treatments. When applied according to label instructions, Trelona ATBS Annual Bait Stations may be used in conjunction with liquid or granular termiticide treatments. While localized treatment using one of these soil-applied products may provide more immediate control in certain parts of a structure, it’s important to keep them at least two feet away from bait stations to avoid altering the station’s performance.

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