

Strategies to control crazy ants taking shape for researchers

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(Phys.org)—Their name is comical, but when crazy ants infest a neighborhood it's no laughing matter.

The fast-moving, invasive insects are present in Florida and several other Gulf Coast states. They can establish colonies with multiple queens and millions of workers, blanketing lawns and sidewalks, killing <u>native</u> species, shorting out <u>electrical systems</u> and creating headaches for homeowners and pest-control operators.

So far, efforts to control crazy ants have involved a patchwork of approaches, many of which failed. But a team of University of Florida researchers is developing an <u>integrated pest management</u> system tailored to the species' unique characteristics and habits.

This week at the Entomological Society of America annual meeting in Knoxville, Tenn., two of those researchers presented findings on 15 insecticidal baits evaluated for the system.

Though none of the products were developed specifically for crazy ants, the researchers found that two granular baits—Amdro Pro and Maxforce Complete—killed crazy ants fastest in laboratory testing, probably because those baits had the most "appetite appeal" and were eaten more readily than other products, said Dawn Calibeo, an entomology doctoral candidate with UF's Institute of Food and Agricultural Sciences.

"There's not the ideal combination of bait and class of active ingredient



we'd like," Calibeo said. "Most of the formulations we tested were developed for <u>fire ants</u>, which feed on fats, so they contain oil. Crazy ants hate oil."

It will be several months before full recommendations are ready, she said. But, based on her studies of crazy ants' feeding and nesting habits, Calibeo has developed some preliminary suggestions for pest-control professionals:

First, it's crucial to attack the problem early in the year, preferably in February or March before the weather warms up and the ants begin breeding. She says to "bait early and bait according to label directions." Professionals should use baits after applying a contact insecticide to reduce ant numbers, but be careful not to place baits where they'll be contaminated by contact insecticides.

Also, county extension offices can help professionals access continuingeducation materials with detailed information about the insect and treatment options.

For homeowners, Calibeo suggests seeking professional help immediately.

"We haven't seen anyone who successfully dealt with it on their own," she said.

However, there are several things homeowners can do to reduce the risk of attracting a crazy ant infestation, said Faith Oi, a UF/IFAS assistant extension scientist and Calibeo's adviser.

The insects nest outdoors in damp, confined spaces, so it's important to remove leaf litter, storm debris and other yard waste that could provide shelter, she said.



They also need water to survive, so residents should fix leaky outdoor faucets, pipes and irrigation systems, and minimize standing-water sources, such as pet bowls and flower pots.

In the spring and summer, it's a good idea to check yards for established colonies. Look for golden-brown ants running erratically on structures, vegetation or the ground. Also, crazy ants do not build mounds.

The species is often referred to as the Caribbean crazy ant, but it appears that name may be misleading. Until recently it was thought that well-publicized infestations in Florida were caused by a species present in the state for half a century, Nylanderia pubens.

But a research paper published this year showed that the crazy ants swarming in Jacksonville and Gainesville were actually the species Nylanderia fulva. Oi said it's likely that some, if not all, Gulf Coast infestations are caused by this species, which hails from South America.

Currently, 20 Florida counties have reported invasive crazy ant colonies, with Sarasota County hardest-hit. Texas, Mississippi and Louisiana have also experienced problems with N. fulva, which probably arrived in the United States 10 to 20 years ago via soil or plant material transported on ships.

Though the ant does not pack a painful bite or sting, scientists are concerned that it could gravely impact Florida's agricultural industries if it enters agricultural systems, Oi said. In Colombia, where the species has been established for decades, harvests sometimes are negatively impacted by the overwhelming presence of crazy ants in crop fields.

Provided by University of Florida



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