

Hairy Crazy Ants on the Mississippi Gulf Coast

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Yet another non-native ant species has invaded Mississippi. In the areas where they occur, hairy crazy ants (HCAs) cause much irritation and consternation for affected homeowners. Hairy crazy ants were first detected in an isolated area of Hancock County in the fall of 2009 and infestations were documented in Jackson County in 2010. So far, they have not been reported in Harrison County, which is the middle of our three coastal counties. Populations are well-established in all locations where they occur and these ants will continue to spread.

There is some confusion about what to call this new invasive ant. This is because it has not yet been assigned an official common name but has several unofficial names. In Florida it is usually referred to as the Caribbean crazy ant, and when it first invaded Texas it was called the Raspberry crazy ant. The name, "hairy crazy ant" has been suggested as an official common name because these ants are quite hairy when viewed under magnification, but has not been officially adopted. There is also some uncertainty about the scientific name of this ant, but it is currently being identified as *Nylanderia pubens*. It is clear that the ants in Florida, Texas, Louisiana, and Mississippi are all the same species, but this genus is currently undergoing taxonomic revision. For now we will refer to these as hairy crazy ants, *Nylanderia pubens*.

These ants were first detected in Florida more than 50 years ago, but it is only in the last decade that their US distribution has increased significantly. By 2004 they were established in six Florida counties and three counties in Texas. As of 2011, they occur in 22 Florida counties, 17 Texas counties, two parishes in Louisiana, and two counties in Mississippi. Although they spread naturally by colony budding and do not appear to swarm, they are easily transported and spread by man. Left to spread under their own power hairy crazy ants will only move a few miles per year, but if someone loads a potted plant containing a nest full of brood into a vehicle they can quickly be transported long distances. So far, populations are limited to the more southern portions of infested states, and it is still unclear how far north these ants will become established.

The reason hairy crazy ants create so much excitement when they are first encountered in an area is that they build to unbelievably large numbers. Although they do not sting and their nest sites are inconspicuous, hairy crazy ants are a serious nuisance simply because there are so many ants crawling rapidly over the landscape. Heavily infested landscapes will have large numbers of ants rapidly crawling over every square yard of the yard. It is difficult to enjoy sitting on the patio on an otherwise pleasant afternoon when you have dozens of ants crawling up your legs. These ants also invade homes and other buildings in alarmingly large numbers, and they frequently cause malfunctions in electrical equipment. Of the severely infested homes I have visited personally so far, all have reported having more than one short or other electrical problem caused by crazy ants. Shorts are the result of accumulations of large numbers of dead ants. One ant wanders into the wrong spot and gets electrocuted or crushed, causing it to release alarm pheromones which attract more ants to the spot.

Like Argentine ants, hairy crazy ants form large “super colonies” consisting of large numbers of individual nest sites. Nest sites occur in a variety of situations: in the soil, in leaf litter and mulch, under trees and shrubs, under bricks, boards, and other debris, in rotting stumps and logs, and in other protected locations. They will also nest indoors: in wall voids, under roof coverings and siding, and even in parked vehicles. The number and variety of nest sites is one thing that makes this ant hard to control, because it is so difficult to find and treat all individual nest sites. Individual nest sites may contain only a few thousand individuals, but there will be thousands of nest sites on heavily infested properties.

Hairy crazy ants primarily feed on honeydew and plant exudates, and infested landscapes will have several trails of ants running up all trees and shrubs in the yard, and in surrounding wooded areas. When these ants invade buildings they will usually ignore pet foods and other high protein foods, but may be attracted to sweets and to water sources, especially during periods of dry weather. When HCAs invade buildings it is the large number of ants, rather than their presence in food items, that causes the greatest nuisance.

HCA populations expand and contract with the seasons. During the winter months populations will be relatively low, with most ants remaining in protected nest sites, and foraging activity will be low. Populations begin to increase as temperatures warm in spring, building to the huge numbers that are characteristic of HCAs by early summer and persisting until temperatures begin to decline in the fall.

Hairy Crazy Ant Control Recommendations for Homeowners

Although Hairy crazy ants (HCAs) are easy to kill, they are not easy to control. The problem is there are so many ants the numbers are overwhelming. Because these ants thrive in wooded areas and fields, treated areas are quickly and constantly re-infested by ants migrating from adjacent untreated areas. Homeowners often report accumulations of mats of dead ants several feet wide and up to ½ inch or more thick in areas where contact insecticide treatments have been applied. These “ant mats” occur both outdoors where perimeter sprays have been applied and indoors, and they allow surviving ants to travel over the bodies of their dead nest mates without contacting insecticide treated surfaces.

Control options for HCAs are still being developed, but some of the most useful tactics and tools are briefly discussed below. **Successful control of HCAs in heavily infested landscapes will require a well-planned program that uses most, or all, of the available treatments.** Many homeowners will want to enlist the services of a professional pest control company, one that is familiar with HCAs, but homeowners will have to remain involved in the overall control effort. In heavily infested landscapes surrounded by “unmanaged land” that is also infested, total elimination of HCAs is probably not an achievable goal. Successful control of HCA is more realistically defined as: keeping outdoor populations to a low, non-disruptive level that limits the number and intensity of indoor invasions.

Key Control Methods:

1} Non-chemical cultural controls: prune limbs and grass that touch building, minimize debris, stacks of wood, mulch and leaf litter around building, seal cracks and potential entry points.

Don't underestimate the importance of these important first steps!

2} Control honeydew-producing insects on ornamental landscape plants: This is usually done by using soil-applied systemic insecticides. The crazy ants and honeydew insects are mutually supportive of one another. You get more ants because they have honeydew to feed on and then you get more honeydew-producing insects because the ants are protecting them. These systemic plant treatments are important because they break this cycle. Homeowners can use products containing imidacloprid (Bayer Tree and Shrub Insect Control, and other brands) or dinotefuran (Greenlight Tree and Shrub Insect Control). See Extension Publication 2369, Insect Pests of Ornamental Plants in the Home Landscape, for more information on how to control honeydew-producing insects (aphids, whiteflies, mealybugs, and soft scales).

3} Granular baits: **Hairy crazy ants will not take most fire ant baits**, but they will readily take Advance Carpenter Ant Bait (abamectin) and Advance 375A bait, and will take MaxForce Complete to some lesser degree. These baits may be difficult to find locally, but homeowners can purchase these baits through internet suppliers, and some local suppliers do sell some of these baits. Begin applying baits in late winter/early spring as soon as ants are active, and when populations are lowest and competing food sources are less abundant. Re-apply multiple times with the goal of getting enough bait into the spring ant population to reduce early season populations. Treat as large an area around the house as is logistically and financially feasible.

Be sure to read and follow label directions when using baits. Especially note the amount of bait to apply per acre or per 1000 square feet. These rates are surprisingly low.

4} Outdoor Perimeter Spray Treatments. Outdoor perimeter treatments are treatments that are applied to the outside wall of a building and/or to a band of soil/turf/landscape bed area around the building. Read labels carefully before treating and apply according to instructions. Many labels allow treating up the outside wall and around doors, windows and other entry points, as well as treating soil/turf/landscape plants around the building. The goal of such treatments is to provide contact kill of ants present in the area, including nest sites present in the treated band, and to provide some residual control. The active ingredients in such treatments are usually pyrethroid insecticides (Carbaryl is the only non-pyrethroid listed in the table), and the overall effectiveness of pyrethroid insecticides is similar. Outdoor perimeter treatments are usually purchased as concentrates, diluted according to label directions, and applied using a pump-up hand sprayer. Such treatments can also be applied using hose-end sprayers and some products are even sold in “ready-to-use” hose-end sprayers. These treatments can also be applied around sheds, pump houses, and other out buildings, and, if the label allows, around the base of trees and to landscape beds that are not adjacent to buildings.

Examples of Outdoor Perimeter Insecticide Treatments for Control of Home-Invading Ants

Active Ingredient	Brand Name (one example)
Bifenthrin (0.3%)	Ortho Home Defense Max
Carbaryl (22.5%)	Garden Tech Sevin Concentrate Bug Killer
Cyfluthrin (2.5%)	Bayer Advanced Home Carpenter Ant & Termite Killer Plus
Cyfluthrin (0.75%)	Bayer Power Force Multi-Insect Killer
Lambda-cyhalothrin (0.5%)	Spectracide Termite and Carpenter Ant Killer
Gamma-cyhalothrin (0.08%)	Spectracide Triazicide Insect Killer
Permethrin (2.5%)	Enforcer Outdoor Insect Killer Concentrate
Permethrin (10%)	Hi-Yield Garden, Pet & Livestock Insect Control
Permethrin (38%)	Hi-Yield 38 Plus Turf, Termite & Ornamental Insect Control

5} Indoor treatments. Ready-to-Use, pre-diluted indoor insecticide sprays will provide good contact kill of HCAs, but such treatments can be quickly overwhelmed by high numbers of ants and should not be relied upon as the sole method of treatment. Still, these treatments are useful to have on hand for treating indoor invasions.

Examples of Ready-to-Use Insecticides for Control of Home Invading Ants

Active Ingredient	Brand Name (example)
Bifenthrin (0.05%)	Ortho Home Defense Max
Beta-Cyfluthrin (0.05%)	Bayer Home Pest Control Indoor & Outdoor Insect Killer
Deltamethrin (0.02%)	Bonide Household Insect Control
Lambda-cyhalothrin (0.03%)	Spectracide Bug Stop Indoor Outdoor Insect Killer
Permethrin (0.25%)	Viper RTU