Bug-Wise

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Office: 1-662-325-2085

Ants in the House: We have approximately 175 species of ants in the state. Most of these are outdoor species that are seldom even noticed by most homeowners. Fewer than a dozen ant species commonly invade our homes. Many indoor infestations go unnoticed, but it is difficult to overlook the tiny pests when they are in the Captain Crunch, crawling over the sugar bowl, or trailing behind the kitchen sink.

Carpenter Ants: We have more than a dozen species of carpenter ants in Mississippi, but the black carpenter ant is the most common home-invading species. This is also the largest species of ant found in buildings. Workers vary in size, from around ¼ to ½ inch. Carpenter ants do not eat wood, but they do build their nests in wood, preferring to tunnel in moist decaying wood. This is why the first thing you should do upon discovering carpenter ants in a building is check for rotten wood and plumbing or structural leaks. Carpenter ants are most active at night, so this is the time to use a flashlight and try to follow the trail back to the nest. Carpenter ants normally nest outdoors, in trees, logs, and stumps, and these outdoor colonies do not need to be controlled unless they are sending foraging trails indoors. The best way to control carpenter ants is with specially designed carpenter ant baits—you don't need to find the nests to use baits. But, carpenter ant baits are difficult to find locally and usually have to be mail-ordered.

Little Black Ants: Yes, this really is the official common name of *Monomorium minimum*, and the name suits them well. At only 1/16 inch, these native ants are on the other end of the size scale from black carpenter ants. These are common outdoor ants that live in relatively small colonies. Occasionally they become pests by trailing, or even establishing colonies, indoors. When they appear in the pantry, or elsewhere in the house, the number of ants seen on trails is usually relatively small, and this is one of the easier species to control. Because the colonies are small and usually not very numerous, liquid or gel sweet baits placed near trails usually provide good control.

Dark Rover Ants: This non-native species is about the same size as the little black ant (1/16 inch), and is often mistaken for little black ant. These two species look a lot different when viewed under a microscope, but it's hard to see these differences with the naked eye. Dark rover ants have become much more prevalent in the last 15 years or so and are especially problematic in sensitive medical facilities. They have small colonies, like little black ants, but the number of colonies is usually much higher, and this makes them much more difficult to control. For the size of their colonies, dark rover ants produce relatively large numbers of swarmers, and homeowners often see swarmers before they have noticed nests or trails. Dark rover ants will usually take sweet baits, but bait one colony out and another quickly appears. Using perimeter insecticide treatments around the outside of the home will help reduce the number of colonies living there, and this will reduce indoor invasions. Whether you use a professional pest control company or treat yourself, expect to have frequent re-invasions when you have dark rover ants.

Pharaoh Ants: Pharaoh ants are in the same genus as little black ants. They are same size, but are much lighter in color. These ants only live indoors, and are primarily a problem in large commercial buildings—it's rare to encounter them in homes. Thorough/frequent inspection and baiting is the main method of controlling pharaoh ants. Avoid spraying with pyrethroid insecticides, as this can cause colonies to scatter.

Argentine Ants: This non-native ant has become much more common over the past few decades and in recent years seems to be moving farther north in the state. Argentine ants thrive in landscapes with lots of trees and heavily mulched flower beds and will actually displace fire ants in these kinds of situations. Because they displace fire ants, do not sting, and do not build mounds, Argentine ants would be considered beneficial if only they would remain outside. However in landscapes with heavy Argentine ant populations, indoor invasions, due to both foraging trails and indoor satellite nests, are quite common. In favorable landscapes Argentine ants develop huge colonies consisting of hundreds of thousands of ants living in dozens or hundreds of small nest sites around the landscape. Because workers move freely between nests, Argentine ants are often thought of as having "super-colonies". Nest sites can be in the soil, in flower bed mulch, under logs or tree bark, under shingles, in wall voids, in fallen leaves, and in dozens of similar sites. These fast-moving ants form heavy trails and in heavily infested landscapes most trees with have one or more trails going up the trunk, as these ants tend honeydew-producing insects.

Argentine ants are difficult to control, and you are doing well if you can just keep the number of indoor invasions to a minimum. Attention to cultural controls, such as minimizing mulch and fallen leaves and pine straw near the building, pruning limbs that touch the building, and sealing potential entrance points, is critical when dealing with Argentine ants. Outdoor perimeter insecticide treatments, using pyrethroid treatments like bifenthrin or deltamethrin (or Termidor treatments applied by pest control companies), also play an important role. Baits can be used to eliminate indoor satellite nests after the perimeter has been "secured", but baits alone are usually not sufficient for this ant.

Odorous House Ant: OHAs seem to be becoming less common as Argentine ants increase in importance. Odorous house ants are similar to Argentine ants in size (about 1/8 inch) and general colony structure and nest habits. Control is similar to that for Argentine ants.

Acrobat Ants: Acrobat ants are only about 1/8 inch long and have a distinctive, heart-shaped abdomen. These ants usually nest outdoors in small, single-queen colonies and spend most of their time foraging in trees and shrubs where they tend aphids and other honeydew-producing insects. Indoor infestations are usually due to colonies nesting in rotting wood. Buildings with hard foam insulation sometimes suffer heavy infestations as the ants seem to like to tunnel and nest in this material. Cultural controls, such as pruning limbs, can help reduce numbers. These ants will take sweet baits, but houses with heavy infestations embedded in foam insulation may need to be professionally treated, by drilling and injecting sprays or dusts into known or potential nest sites.

Imported Fire Ants: These are usually outdoor ants, but indoor invasions occasionally occur, and when they do, they are often associated with stinging incidents. Indoor fire ant invasions are often simply due to foraging trails from an outside mound located near the building, but sometimes an entire colony attempts to move indoors because the original mound has been disturbed in some way. The best way to prevent indoor fire ant invasions is to do a good job of preventively controlling fire ants within a 25 to 50 foot band around the outside of the building. Extension publication 2429 "Control Fire Ants in Your Yard" provides detailed information on fire ant control. For immediate control of fire ants that have gotten inside, you can use household insect sprays containing pyrethroid insecticides, such as cyfluthrin, deltamethrin, bifenthrin, or permethrin. If no insecticides are available, soapy water, made by mixing a tablespoon of liquid dishwashing liquid per quart of water and sprayed on the ants using a trigger-pump spray bottle, will also work. But be sure to identify the outside mound that these fire ants came from and eliminate it using a liquid mound drench as described in "Control Fire Ants in Your Yard". See page 15 of Publication 2443, Control Household Insect Pests, for more details on dealing with indoor fire ant invasions. You can find these publications by going to www.msucares.com, clicking on "Publications", and doing a search for the title. You can also find more information on fire ants and fire ant biology at www.msucares.com > insects/plant diseases > insects > Fire Ants.

Controlling Indoor Pest Ants: The first step in dealing with an indoor ant infestation is to identify the species of ant involved. Although controls are somewhat similar for all species, there are subtle differences, and it really helps to know which species you are trying to control. There is a big difference between controlling Argentine ants and little black ants, and control of acrobat ants is much different than that for dark rover ants. Some of the more important methods of indoor ant control are briefly discussed below. See pages 10-14 of Publication 2443, Control Household Insect Pests, for more details on controlling indoor pest ants.

Cultural Practices: This is usually the most important step in achieving long-term control of indoor ant problems. Cultural practices include things such as pruning limbs that touch the building, minimizing accumulations of mulch and leaf litter around the immediate outside of the building, controlling honeydew-producing insects on outdoor ornamental plants, repairing plumbing and structural leaks, replacing rotted wood, and sealing entry points to the building.

Indoor Baits: Baits are especially useful tools for eliminating indoor nests, but they do take time to work and require careful inspection and maintenance. Keys to successful bait use are to place them near foraging trails or nest sites so ants can find them readily and to avoid spraying insecticides around bait stations, as this will repel the ants. Most of the indoor ant species will take sweet baits, but some species prefer other types of baits.

Outdoor Baits: Granular fire ant baits are a key tool for controlling fire ants, but don't expect them to work very well against other ant species. Special granular carpenter ant baits work well on carpenter ants. Large bait stations containing liquid sweet baits are sometimes used to help reduce populations of odorous house ants and similar species.

Outdoor Perimeter Treatments: This involves the application of a band of insecticide around the outside of the building, with the goal of preventing ant trails from entering the building or killing nests located near the building. Professional pest control companies can apply an insecticide containing fipronil (Termidor) up to two times per year. Homeowners can use properly labeled insecticides containing bifenthrin, deltamethrin, or other pyrethroids.

Indoor Residual Sprays: Household insect sprays containing pyrethroid insecticides, such as cyfluthrin, deltamethrin, bifenthrin, or permethrin are useful for spot treating foraging trails arising from occasional invasion from outdoor colonies or for directly treating nest sites. But do not apply these pyrethroid sprays around bait placements, as they will repel ants from the bait.

Dusts: Insecticidal dusts, such as DeltaDust or Drione are often used by professional pest control companies to treat voids, cracks and crevices for indoor pest ants. Homeowners can buy dusts containing deltamethrin or diatomaceous earth. Dusts are usually applied using a bulb or bellows duster to inject them into cracks, crevices, and voids. These dusters usually have to be ordered from mail or internet suppliers.

Blake Layton, Extension Entomology Specialist

Common Indoor Pest Ants in Mississippi

by Blake Layton and Joe McGown

Common Name	Scientific Name	No. Nodes	Worker Size	Nest Size	No. Queens	Have Sting	Field ID Traits	Comments	Control
Argentine Ant	*Linepithema humile*	1	1/10 inch	1,000s (but many, common satellite nests)	Multiple	No	Small, brown, fast-moving ants. Landscapes with lots of trees and shrubs often harbor huge populations. Trails very active with large numbers of ants. Distinctive odor when disturbed.	Very difficult to control because of large, extended outdoor colonies, especially in landscapes with lots of trees or shrubs. These ants are almost impossible to eliminate from a landscape. If you can minimize indoor invasions, you are doing well. Argentine ants displace fire ants in suitable habitats.	Aggressive, mult-tactical effort Cultural controls: prune limbs that touch building, minimize mulch and/or accumulations of leaves around outside of building. Use perimeter treatments around outside of building. Use liquid sweet baits for inside colonies.
Odorous House Ant	*Tapinoma sessile*	1	1/10 inch	1,000s (but many satellite nests)	Multiple	No	Small brown ants with front of abdomen humped over node. Distinctive odor when crushed.	Infestations of odorous house ants seem to be less common as Argentine ants become more common.	Similar to Argentine ant control. See above.
Dark Rover Ant	*Brachymyrmex patagonicus*	1	1/16 inch	100s, many small nests	Single	No	Tiny, brown ants that move with a "jerky" motion Front of abdomen humped over node.	Difficult to control because of numerous small colonies. This ant is especially problematic in large, sensitive accounts, such as medical facilities.	Thorough and frequent inspection and use of baits. Dust voids when appropriate. Perimeter treatments around outside of building.
Little Black Ant	*Monomorium minimum*	2	1/16 inch	100s	Multiple	Yes	Tiny, shiny, black ants Usually small numbers on trails	Relatively easy to control because usually few small colonies.	Sweet baits near trails.
Pharaoh Ant	*Monomorium pharaonis*	2	1/16 inch	1,000s in many satellite nests	Multiple	Yes	Tiny, light-colored ants.	These ants do not live outdoors. They only nest inside buildings. Difficult to control in large facilities.	Intensive inspection and baiting. Avoid spraying with pyrethroids or other repellent insecticides.
Acrobat Ant	*Crematogaster ashmeadi*	2	1/8 inch	100s	Single	Yes	Heart-shaped abdomen Abdomen often raised above thorax. Two spines on thorax.	Builds nests in rotting wood or foam insulation. Buildings with foam insulation sometimes have heavy infestations. Infestations often associated with leaks.	Trim limbs touching building. Repair leaks. Locate and spot treat colonies using liquid sprays or residual dusts as appropriate. Use sweet baits.
Black Carpenter Ant	*Camponotus pennsylvanicus*	1	¼ to ½ inch	100s (satellite nests)	Single	No	Big black ants. Galleries smooth and free of mud or other debris, unlike termite galleries.	Usually nest in rotting wood. Do not eat wood, only nest in it. Indoor nests often associated with plumbing or structural leaks that need to be repaired. Sometimes nest in foam insulation. Trails usually only active at night.	Repair leaks/replace rotten wood. Prune tree limbs that touch building. Use special carpenter ant baits: gel bait for indoors, granular bait for indoors or outdoors.
Red Imported Fire Ant	*Solenopsis invicta*	2	1/12 to ¼ inch	100,000 + in large mound	Single (Multiple)	Yes!	Distinctive mounds. Aggressive stinging. Variable worker size.	Nest in soil, outdoors. Indoor infestations due to foragers from an outdoor mound, or from displaced colonies attempting to move.	Prevent indoor invasions by controlling fire ants in a 50 foot band around the outside of the building.
(No common Name)	*Paratrechina vividula*	1	1/12 inch	100s	Single	No	Small brown ants with long legs and antennae and thick, erect hairs on body.	Occasionally found nesting in potted plants.	Remove plant. Or use sweet baits and treat for any honeydew producing insects present on plant.