Rover Ants

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For many years now PMPs in the southern part of the state have been complaining about difficulty controlling 'little black ants'. The main concern has been that the ants in question may initially respond well to treatment but result in excessive call-backs, especially in large commercial accounts. Some folks began to suspect that these might not really be little black ants, *Monomorium minimum*, at all but some other species.

Recently we have had a number of these tiny ants submitted for identification, and all have been *Brachymyrmex patagonicus*. These ants are easy to mistake for little black ants with the naked eye (they are about the same size and dark in color), but when viewed through a good microscope they are distinctly different.

The primary purpose of this article is simply to make Mississippi PMPs more aware of this ant, and ask for help in determining just how common it is. If you have ant accounts that you think might involve this species, help us get better records of their distribution in the state by sending in some samples. Just put a few workers in a small bottle of alcohol and mail to the address at the end of the article. Please include information on where, and when you collected them.

This is an exotic species that was first reported in the US in the 1970s, as *Brachymyrmex musculus*, and much of the US literature refers to it as *B. musculus*. It is thought to have originated in Argentina, where it was known as *B. patagonicus* and, because this was the original name, this is now what it is being called here.

Recently Joe MacGown, our ant taxonomist here at MSU, sent some samples to an Argentine taxonomist, who is a world expert on this genus, and she confirmed that they were *B*. *patagonicus*. The term 'rover ant' is used for ants in this genus. We do have another species of *Brachymyrmex* in the state, but this *B*. *patigonicus* is our most common species and is the primary one found in buildings.

Although these rover ants have only 'been here' for 30 years or so, they are now well established in the Southeast. They occur throughout Mississippi but are much more common in the southern half of the state.

What do rover ants look like? To the naked eye they look like tiny, dark-colored ants. They are only about 1/16 inch long, or about half as big as Argentine ants and odorous house ants. They are uniformly dark brown or reddish brown and the workers are all similar in size. They do not have a sting.

These ants have only one node between their thorax and abdomen, but you have to have a good microscope to see this (Little black ants have two nodes). The node is flattened and angles slightly upward toward the thorax. If you have a good enough microscope to see the node well,

you can also count the segments in the antennae. Most worker ants have twelve, but the *Brachymyrmex* only have nine. This is a key characteristic for this genus. So if you are looking at a tiny dark brown ant with only one node and 9 antennal segments, it's a rover ant.

When viewed from the side, the abdomen appears swollen and humped at the front end, so that it covers the node, much like odorous house ants, and this 'humpbacked' appearance of the abdomen is a useful field identification character. Folks with good eyes, or a hand lens, can see this. Tiny dark-colored ants with this characteristically humped abdomen are probably rover ants.

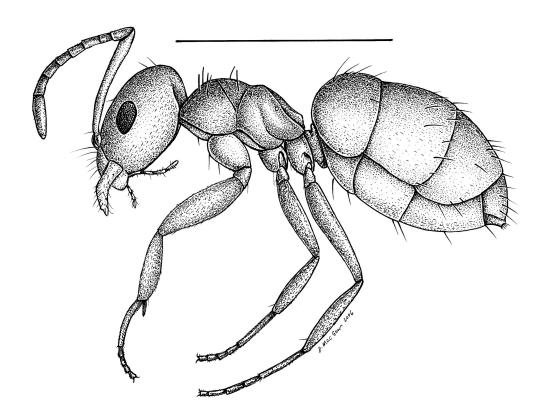
Rover ants are common in woods and other natural settings, as well as around buildings. In natural settings they nest in soil or decaying wood. In buildings they prefer areas with high moisture and are often associated with bathrooms or plumbing or structural leaks.

These ants nest in small, single queen colonies, but there can be many colonies in an area, and this may be one of the main reasons for the control difficulties. Honeydew from aphids, scales, and similar insects is a favorite food source, but they have to have protein as well.

So how do we control rover ants? This is where the problem arises. All of the standard ant control methods work to some degree, but there doesn't seem to be any silver bullet. Because this is a honeydew-loving ant, liquid or gel sweet baits are a natural choice, and these ants will respond to these baits. Exterior perimeter treatments and targeted indoor treatments are useful. Treating voids with dusts or foams is useful. Controlling honeydew producing insects on landscape plants and pruning limbs that touch the building is definitely beneficial. But this ant is tenacious and often results in call-backs, even when all of these methods are used.

So far no research colonies have been established with this species, so there is little laboratory research on bait preference or toxicology. One of the key points to keep in mind when dealing with this ant is that they live in small, single queen colonies. This may be one of the primary reasons that they can be so hard to control, especially in larger accounts. If a house or apartment only has one or two colonies, it is not too hard to eliminate them, but if a larger account is infested with many small, independent colonies, it's very difficult to get them all at one time.

Send ant samples to: Blake Layton, Box 9775, Mississippi State, MS 39762



Rover ant, Brachymyrmex patigonicus, by Joe MacGown. 1/16 inch long.