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Pest Management and Insect Identification Series
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Nylanderia fulva, Tawny Crazy Ant (Hymenoptera: Formicidae)

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Description

Tawny crazy ant (TCA) workers are reddish brown ants one-twelfth to one-tenth of an inch (2 to 2.5 mm) in length. Morphological characters that are diagnostic for the species require a microscope and detailed knowledge of ant anatomy to observe and interpret. The most useful identifying characteristic in cases of infestations is the presence of extremely large, dense concentrations of ants. Piles of dead ants are often described as having the appearance of spilled coffee grounds. Single colonies may extend across large swaths of the landscape, encompassing entire neighborhoods and many acres. Correct identification of the causal organism is the first step in addressing any entomological problem, and a number of similar species in Louisiana are easily confused with TCA based on superficial appearance. Thus, in the case of TCA, consultation with an insect diagnostician is critical in correctly identifying the problem.

The currently accepted common name "tawny crazy ant" was preceded by the widely used "Rasberry crazy ant," a reference to pest control operator Tom Rasberry, who is credited with the initial discovery of the species in Texas. The previous name still appears in older literature and occasionally in media reports. Both names refer to the same species.

Life Cycle and Ecological Significance

The extremely large, expansive colonies of tawny crazy ants are a result of the presence of many queens (polygynous) serving the reproductive needs of the colony across large areas. These "supercolonies" establish a network of galleries, chambers and foraging paths in loose debris, such as garden mulch, rotting wood, leafy undergrowth, urban trash piles and human-made structures. The life cycle and social structure of TCA is similar to that of other ants possessing multiple queen colonies. Worker ants, which are daughters of the numerous queens, perform the work of the colony using a strict division of labor. Some workers are responsible for searching for and procuring food, maintaining trails, and defense. Others remain near one of the queens where they tend to her needs and care for the egg, larval, and pupal stages of the developing brood. A number of other pest ant species also possess multiple queen colonies,

Tawny crazy ant worker, side view. Joe MacGown, Mississippi State University, Bugwood.org.

Tawny crazy ant, large accumulation of worker ants. Fudd Graham, Auburn University, Bugwood.org.

including Argentine ants (*Linepithema humile*), some red imported fire ant colonies (*Solenopsis invicta*), crazy ants (*Paratrechina longicornis*) and others. Feeding habits of tawny crazy ants are diverse, including both plant and animal products. They are particularly attracted to sweet foods, such as overripe fruit, nectar from flowers and the sugary secretions of sap sucking insects, such as aphids, mealybugs and scale insects, which they tend and protect.

Tawny crazy ant workers do not possess a sting. Thus, the species poses no threat of direct injury to large animals. They rely instead on chemical defenses and sheer numbers to protect the colony. Defensive responses do not include direct attack as with fire ants but rather rapid, erratic movements by extremely large numbers of individuals, thus the "crazy" component of the common name.

As an introduced invasive species native to South America, tawny crazy ant colonies have the capacity to overwhelm large areas, becoming a significant nuisance pest to homeowners. The tendency of tawny crazy ants to occupy void spaces around buildings can cause damage to electrical equipment. The species reduces biodiversity by killing or displacing other insects, including native and introduced ant species, and can overwhelm and kill ground nesting birds, reptiles, amphibians and small mammals. Indirect damage to field and fruit crops can occur because of the large number of ants tending and protecting sap sucking pests, making the latter less susceptible to mortality from natural enemies.

Management

Tawny crazy ants have recently received widespread attention throughout the southern United States since their initial discovery in east Texas. Effective products for treating infestations are not easily available to the consumer. If you suspect your house or property is infested with these ants, collect samples and submit them to an insect diagnostician through your parish extension agent or contact the LSU AgCenter Department of Entomology via the departmental "contact us" link on its website. Tawny crazy ant workers are not attracted to most ant bait products. A combination of chemical control and granular insecticides is usually effective for heavily infested areas. Some treatments available for this ant offer temporary "buffer zones" using contact insecticides applied to surfaces. These include formulations containing acephate, pyrethroid insecticides or fipronil. These treatments are often breeched two or three months following application. Always follow label directions and do not use a product that is not labeled for tawny crazy ants. Large landscape-scale colonies often require community-wide planning and control strategies to remain effective. Reports that tawny crazy ants are capable of displacing red imported fire ants may come as small consolation if infestations in Louisiana achieve levels recorded in the historical archives. For any questions or identifications, contact the LSU AgCenter.

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