

Tuttle Mealybug – An established, but emerging insect pest of warm season turfgrasses

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Tuttle mealybugs

Photos: Lyle Buss



White wax & sooty mold on zoysiagrass

Tuttle mealybug, *Brevinnia rehi*, is a piercing-sucking insect pest first documented in Florida in 1975 in Pompano Beach, but was rarely a problem until the early 2000s. More recently, these insect pests have become commonly reported damaging pests of zoysiagrass lawns. In 2016, Tuttle mealybug was found throughout FL, from Naples to Jacksonville and west near Pensacola.

I.D. & biology - These insects have pink, oval-shaped bodies and secrete a white waxy substance, which covers their body and leaf surfaces. Tuttle mealybug is a *sap-feeding* pest that inserts needle-like mouthparts into turf and extract plant nutrients. These pests are damaging during all life stages because they go through *incomplete metamorphosis*.

Host plants & damage - Tuttle mealybug is most often found feeding on and damaging zoysiagrass, although it is also a pest of bermudagrass. Heavily infested areas of turfgrass appear generally unhealthy, resembling drought stress or disease (plant material turns yellow, brown, and dies back), and areas will gradually thin and decline.

Management - Little research has investigated the best strategies for managing Tuttle mealybug. Control can be challenging because insects are hard to detect at low numbers, are difficult to reach with insecticides, and have waxy secretions that protect them. When populations reach high levels, it may take several weeks or months to reduce below damaging levels.

Maintaining a dense, healthy stand of turfgrass while *minimizing disturbances* is the best defense against mealybug outbreaks. Follow recommended irrigation, fertilization, and mowing practices.

Mealybugs are most effectively controlled with thorough coverage of systemic or translaminar insecticides. Contact-toxic products (pyrethroids & carbamates) often perform poorly because they must come into physical contact with the insects to work. In contrast, systemically active products work on contact and are ingested during regular feeding. In addition, many systemic products are compatible with natural enemies, which allows biological control to occur between product applications.



Tuttle mealybug-infested zoysiagrass lawn Photo: Adam Dale

For more detailed information and management recommendations, see UF IFAS EDIS publication, **ENY-340 - Managing scale insects and mealybugs in turfgrass**

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