

Customer Information Sheet

Rugose (Gumbo Limbo) Spiraling Whitefly



Background Information: In March, 2009, a new invasive whitefly, called the Rugose Spiraling whitefly (*Aleurodicus rugioperculatus* Martin) was collected in Miami-Dade County from gumbo limbo trees. This was the very first report of this whitefly in the continental United States and is thought to have a Central American origin. Since the first sighting, there have been other reports from Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, Indian River, Collier, and Polk Counties, with a spread to other areas likely. This is not the same whitefly (*Singhiella simplex* Singh) that is attacking ficus hedges and trees, causing major plant decline and defoliation.

What Are Whiteflies?: Whiteflies are tiny, winged insects in the order Hemiptera, which also contains many other plant-feeding pests, including aphids, mealybugs, and many scales. Whiteflies mainly feed on the underside of plant leaves, using their piercing-sucking mouthparts to pull out the plant juices. Whiteflies can seriously damage host plants by sucking out plant juices, causing yellowing, stunted growth, wilting, leaf drop, and even plant death. There are more than 75 types of whiteflies in Florida.

Host Plants: The Rugose Spiraling whitefly has been reported to feed on gumbo limbo, black olive, copperleaf, broadleaf arrowhead, cocoplum, Brazilian pepper, wax myrtle, live oak, mango, bay laurel, banana, plantain, avocado, chinaberry, guava, silver buttonwood, bird of paradise, giant bird of paradise, *Tabebuia*, 'Gold Mound' *Duranta*, oleander, mahogany, and many palm varieties, especially *Areca*, Christmas, coconut, date, pygmy date, Canary Island date, and reclining palms. This list continues to grow as the whiteflies spread.

Biology: A correct identification must first be made to treat correctly for this particular whitefly. Adult whiteflies are about 3 times the size of most other whiteflies and are very slow moving. The adult whiteflies accumulate on the undersides of leaves to feed and reproduce. The female whiteflies lay their eggs in a spiraling pattern on the leaves, giving rise to their name, and leave a white, waxy substance on the eggs, making them visible.

Plant Damage: The most noticeable sign of a Rugose Spiraling whitefly infestation is the large amount of the white, waxy substance, as well as the adults seen resting on the leaves. These whiteflies produce an extremely significant amount of "honeydew," a sticky, sugary substance which causes the growth of sooty mold (a black fungus that grows on plants affected by plant-feeding pests). This "honeydew" is the cause for many problems, as it sticks to vehicles, sidewalks, homes – virtually anything in its path – and can be carried by the wind. The dead whiteflies have been documented to clog pool filters and alter the pH of the water. The "honeydew" has also been known to deplete chlorine levels in pools. The actual effect of Rugose Spiraling whitefly infestations on plants is not yet known. Whiteflies in general can cause plant decline, yellowing, stunted growth, wilting, leaf drop, and plant death or dieback.

What Can Be Done?: By utilizing Hulett's Lawn and Ornamental and Whitefly services, you can be assured that your ornamentals will be properly treated and their health maintained. When insects of all kinds, including whiteflies, feed on turf and ornamentals, it puts the plants under tremendous amounts of stress. Proper treatment, fertilization, and cultural practices are necessary to keep your turf and ornamentals as healthy as possible. Hulett Environmental Services has designed a treatment procedure specifically for Rugose Spiraling whitefly infestations.