

A Pain In The Grass

A new pest of ornamental grasses, Duplachionaspis divergens, has appeared in Texas and Florida.

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Ornamental grasses in the landscape have few arthropod pests of importance. Unfortunately, this number got bigger in 2005. *Duplachionaspis divergens*, a new scale species to Texas, was identified attacking *Miscanthus sinensis* at a commercial nursery. This armored scale is believed to have originated from the Orient or Palearctic region. It was first detected in the United States in Florida in 2000 on *Miscanthus*. In the Western Hemisphere, it had also been reported in 1997 as a pest of sugarcane in Colombia.

Little is known about the biology of this insect. On sugarcane, females produce an average of 130 eggs during their lifetime, and crawlers emerge about eight days after egg deposition. Multiple generations occur during the year. Adult scales have a white, elongate cover with a light brown tip (terminal exuvia). When the scale cover is removed, the yellow body of the adult female can be observed. Other scales occur on grasses, but they are usually oval in shape and attach to the crown of the plant and not the leaf blades. In addition to the scale presence impacting the appearance of the plant, scale feeding can cause discoloration on the grass blades.

Susceptible Species

The economic significance of *Duplachionaspis divergens* is still unknown, but it is only known to feed on grasses. In addition to *Miscan-*

thus, this species has been reported and may become a pest of sugarcane, St. Augustine grass (*Stenotaphrum secundatum*), bahia grass (*Paspalum notatum*), lemon grass (*Cymbopogon citrates*), and saltmarsh cordgrass (*Spartina alterniflora*), an important marsh species.

In Florida, this scale has also been recorded on *Andropogon glomeratus*, *Andropogon* sp., *Dactyloctenium aegyptium*, *Digitaria* sp., *Eragrostis elliottii*, *Eremochloa ophiuroides*, *Eustachys petraea*, *Hymenachne amplexicaulis*, *Imperata cylindrical*, *Panicum repens*, *Paspalum blodgettii*, *Pennisetum alopecuroides*, *Rhynchospora* sp., *Saccharum officinarum*, *Setaria* sp., *Tripsacum dactyloides*, and *Tripsacum floridanum*.

Management Methods

Specific pest-management strategies against this species are currently under development, but removal and destruction of heavily infested plants may be the best practice if only a few plants are infested. Since scales occur in grass blades, infested lawns may be mowed and clippings removed to reduce population density. In commercial nurseries, scales may be removed from plantings by cutting the plant foliage to soil level. These plants can also be treat-

ed with a labeled systemic insecticide to kill any remaining insects.

In our initial tests on *Miscanthus sinensis*, Safari (dinotefuran, Valent) was effective as a foliar spray or as a drench treatment to individual 3-gallon containers against the non-crawler stages of the scale. Other systemic insecticides to control this new pest are currently being tested at the Texas A&M University System Agricultural Research and Extension Center at Overton. ■

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Photos by Scott Ludwig, Texas Cooperative Extension

Duplachionaspis divergens* scale on *Miscanthus sinensis