

Tropical Signalgrass Biology and Management in Turf¹

J. Bryan Unruh, Ramon G. Leon, and Darcy E. P. Telenko²

Tropical signalgrass (*Urochloa subquadriflora*), also known as small flowered alexandergrass, has become one of the most troublesome weeds in the southeastern turfgrass industry and is especially problematic in sod production. Tropical signalgrass is a warm-season perennial that is propagated by seed and stolons. Stems are usually trailing and creeping, rooting at the nodes. Leaf blades are flat, 0.3 to 0.5 in. wide and up to 0.75 in. in length. Both the leaf blade and sheath are hairy and the ligule has a short fringe of hairs. Flowering branches may reach 18 inches tall and produce two to seven branches or "fingers" in the raceme of the seedhead (Figure 1). In the field, tropical signalgrass germination occurs when soil temperatures reach 77°F (Figure 2). A soil pH of 5 to 6, which is common in Florida soils, is required for germination. Moisture is required for seed germination, and the typical dry season in Florida can delay tropical signalgrass infestation.

Preemergence application of benefin + oryzalin, benefin + trifluralin, dithiopyr, imazaquin, and oryzalin will control tropical signalgrass up to 8 weeks after application.

Early postemergence application of asulam, metribuzin, or quinclorac will provide moderate control of tropical signalgrass when applied before the 8-leaf stage. Most selective postemergence herbicides will not control mature tropical signalgrass. Non-selective spot control of tropical signalgrass can be accomplished by making multiple spot-treatment applications of glyphosate with a preemergence herbicide such as pendimethalin added to the mix. This treatment will also kill the

turfgrass, but it will help minimize future tropical signalgrass populations.

There is no management program available that will completely control tropical signalgrass, but using an integrated weed management program will help reduce tropical signalgrass in the long term.

Tropical signalgrass infestation can be minimized by careful mapping of infested areas and recording spray applications for proper herbicide timings and applications. Sanitation practices that include rinsing mowers between fields, controlling tropical signalgrass in ditches, minimizing unnecessary traffic in fields, and sprigging with weed-free stock will help minimize spread into noninfested areas. Before applying any product, refer to its label for specific application information and turfgrass tolerance.

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²J. Bryan Unruh, professor, Environmental Horticulture Department; Ramon G. Leon, assistant professor, Agronomy Department; and Darcy E. P. Telenko, former postdoctoral research associate; UF/IFAS West Florida Research and Education Center, Jay, FL 32565.

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Herbicide Options for Controlling Tropical Signalgrass in Florida Turfgrass

(Always refer to the label for specific uses, application rates, and turfgrass tolerance)

BER

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr, metolachlor, oryzalin, prodiamine, prodiamine + isoxaben, prodiamine + sulfentrazone

Postemergence: thiencazone + florasulfuron + halosulfuron

STA

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr, metolachlor, oryzalin, prodiamine, prodiamine + isoxaben

Postemergence: asulam (sod production only)

CENT

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr, metolachlor, oryzalin, prodiamine, prodiamine + isoxaben, prodiamine + sulfentrazone

Postemergence: sethoxydim

BAHI

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr, metolachlor, oryzalin, prodiamine, prodiamine + isoxaben, prodiamine+sulfentrazone

Postemergence: none

PASP

Preemergence: dithiopyr, prodiamine, prodiamine + isoxaben, prodiamine + sulfentrazone

Postemergence: none

ZOYS

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr, metolachlor, oryzalin, prodiamine, prodiamine+isoxaben, prodiamine + sulfentrazone

Postemergence: fenoxaprop, fluazifop

RYE

Preemergence: benefin + oryzalin, benefin + trifluralin, dithiopyr

Postemergence: none

BER=Bermudagrass; STA=St. Augustinegrass; CENT=Centipedegrass; BAHI=Bahiagrass; PASP=Seashore paspalum; ZOYS=Zoysiagrass; RYE=Perennial ryegrass

Refer to the publication, *Pest Control Guide for Turfgrass Managers* at http://turf.ufl.edu/pdf/2012_UF_Pest_Control_Guide.pdf for brand names associated with chemical names listed.

Citation

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Predicted Tropical Signalgrass Emergence

