Turfgrass Science

Annual Bluegrass Biology and Management in Turf

Darcy E. P. Telenko, Barry J. Brecke, J. Bryan Unruh, and Ramon Leon

Annual bluegrass (Poa annua) is a small, tufted to clumped winter annual grass. Leaf blades are smooth on both surfaces, with two distinct, clear lines, one on each side of the midrib. Leaf tips are keeled or boat shaped. The ligule is membranous. Spikelets are light green to whitish without cottony hairs. They are arranged on branches, one to two per node. Flowers form in dense to open clusters. Reproduction of annual bluegrass occurs by seed.

Herbicide options for controlling annual bluegrass in Florida turfgrass

Annual bluegrass is considered a winter annual. Therefore, it starts to emerge late in the fall when soil temperatures are consistently between 60°F and 70°F. It is at this time that having preemergence (PRE) herbicides on the ground will help to minimize annual bluegrass populations. Due to a prolonged emergence period, postemergence (POST) herbicides should be used as a complement to PRE herbicides and not as a unique control tool. In this way, POST herbicides will control annual bluegrass individuals that escape PRE control.

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

Preemergence: benefin, benefin+oryzalin, benefin+trifluralin, bensulate+oxadiazon, DCPA, dimethenamid-P, dithiopyr, ethofumesate (only dormant overseeded), fenarimol, indaziflam, metolachlor, napropamide, oryzalin, oxadiazon, pendimethalin, prodiamine, prodiamine+sulfentrazone, proamidine, simazine

Postemergence: bispyribac-sodium (only dormant overseeded), foramsulfuron, metribuzin, pronamide, rimsulfuron, simazine, sulfometuron, sulfosulfuron, trifloxysulfuron

Preemergence: atrazine, benefin, benefin+oryzalin, benefin+trifluralin, DCPA, dimethenamid-P, dithiopyr, ethofumesate, indaziflam, metolachlor, napropamide, oryzalin, oxadiazon, pendimethalin, prodiamine, simazine

Postemergence: atrazine, ethofumesate, simazine, sulfosulfuron

Preemergence: atrazine, benefin, benefin+oryzalin, benefin+trifluralin, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, napropamide, oryzalin, pendimethalin, prodiamine, simazine

Postemergence: atrazine, clethodim, simazine, sulfosulfuron

Preemergence: benefin, benefin+oryzalin, benefin+trifluralin, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, napropamide, oryzalin, pendimethalin, prodiamine, prodiamine+sulfentrazone, proamidine, simazine

Postemergence: sulfometuron

Preemergence: atrazine, benefin, benefin+oryzalin, benefin+trifluralin, bensulate+oxadiazon, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, oryzalin, oxadiazon, pendimethalin, prodiamine, prodiamine+sulfentrazone, simazine

Postemergence: atrazine, foramsulfuron, simazine, sulfosulfuron, trifloxysulfuron

Preemergence: atrazine, benefin, benefin+oryzalin, benefin+trifluralin, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, napropamide, oryzalin, pendimethalin, prodiamine, prodiamine+sulfentrazone

Postemergence: bispyribac-sodium (dormant overseeded bermudagrass)

Preemergence: benefin, benefin+oryzalin, benefin+trifluralin, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, napropamide, oryzalin, pendimethalin, prodiamine, prodiamine+sulfentrazone, proamidine, simazine

Postemergence: none

Preemergence: atrazine, benefin, benefin+oryzalin, benefin+trifluralin, bensulate+oxadiazon, DCPA, dimethenamid-P, dithiopyr, indaziflam, metolachlor, oryzalin, oxadiazon, pendimethalin, prodiamine, prodiamine+sulfentrazone, simazine

Postemergence: atrazine, foramsulfuron, simazine, sulfosulfuron, trifloxysulfuron

Preemergence: dimethenamid-P, dithiopyr, ethofumesate (dormant overseeded bermudagrass), fenarimol, oxadiazon, pendimethalin, prodiamine, prodiamine+sulfentrazone

Postemergence: bispyribac-sodium (dormant overseeded bermudagrass)

BER=Bermudagrass; STA=St. Augustinegrass; CENT=Centipedegrass; BAIH=Bahiaagrass; PASP=Seashore paspalum; ZOYS=Zoysiagrass; RYE=Perennial rye


Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.


2 Darcy E. P. Telenko, postdoctoral research associate; Barry J. Brecke, professor, Agronomy Department; J. Bryan Unruh, professor, Environmental Horticulture Department; and Ramon Leon, assistant professor, Agronomy Department; West Florida Research and Education Center, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.