

Turfgrass Weed Control for Professional Managers

Tim R. Murphy, Extension Agronomist – Weed Science

Use Stage and Herbicide	Turfgrasses	Broadcast Rate/Acre		Remarks and Precautions
		Amount of Formulation	Pounds Active Ingredient	
Postemergence Herbicides				
atrazine (AAtrex) 4L (AAtrex) 90DG (AAtrex) 80W	centipede, St. Augustine, dormant bermudagrass, zoysia	1.0 - 2.0 qts. 1.1 - 2.2 lbs. 1.2 - 2.5 lbs.	1.0 - 2.0 1.0 - 2.0 1.0 - 2.0	Apply to dormant bermudagrass for annual bluegrass and winter annual broadleaf weed control. DO NOT apply during bermudagrass green-up. AAtrex formulations may be applied from October 1 to April 15. DO NOT apply over the root zone of ornamental shrubs. For spurweed, apply in December or January. For Florida betony, apply in late October and follow with a second treatment in late February. DO NOT apply more than 1.0 lb. ai/A to hybrid bermudagrass. AAtrex is a Restricted Use Herbicide.
bentazon (Basagran T/O) 4.0 lbs./gal. (Lescogran) 4.0 lbs./gal.	Ky. bluegrass, bermudagrass, centipede, tall fescue, zoysia, St. Augustine	1.5 to 2.0 pts.	0.75 to 1.0	Apply to emerged, actively-growing yellow nutsedge. Use 2.0 pts./acre and repeat the application 7 to 14 days later. Thorough spray coverage is essential for acceptable control. DO NOT mow 3 days before or after application. Other weeds controlled include annual sedges and dayflower. Add a crop oil concentrate at 2.0 pts./acre to the spray mix. Bentazon is not recommended for use on putting greens.
bentazon + atrazine (Prompt) 5L 2.5 + 2.5 lbs./gal.	centipede, St. Augustine, zoysia	1.8 to 2.4 pts.	0.6 to 0.75 + 0.6 to 0.75	Controls several broadleaf weeds. For yellow nutsedge, initially apply Prompt at 3.5 pts./acre and follow 7 to 10 days later with Basagran at 2.0 pts./acre. Apply no earlier than 10 days after sprigging or plugging turfgrasses. On newly sprigged turfgrasses and hybrid bermudagrass, Prompt may cause temporary injury.
bispyribac-sodium (Velocity) 80SP	bermudagrass overseeded with perennial ryegrass on golf course fairways	2.0 oz./1.5 acres	0.06	Apply Velocity between February 1 and March 15 to bermudagrass overseeded the previous fall with perennial ryegrass for annual bluegrass control and seedhead suppression. Earlier or later applications may decrease efficacy or increase risk of injury to perennial ryegrass. The first application should be made just as soon as annual bluegrass seedhead begin to emerge from the leaf sheath. Apply a second application at the same rates 14 to 21 days after the first application. DO NOT apply if air temperatures are less than 50°F. or if maximum temperatures are expected to be less than 50°F. for the first three days after application. Two applications as described above will be needed for control. Chlorosis (yellowing) will typically occur on perennial ryegrass between 7 and 21 days after application. Not recommended for applications above 80°F., or when air temperatures are expected to exceed 80°F. for first three days after application. Foliar fertilization at 3 to 4 days after a Velocity application may reduce chlorosis. It is not necessary to add a spray adjuvant to Velocity. DO NOT apply to golf course greens, non-overseeded bermudagrass, or to ryegrass mowed < 3/8 inches. Not recommended for use on other cool-season turfgrasses. Velocity should not be applied in late spring after bermudagrass begins active growth. DO NOT mow or irrigate for 24 hours after application.

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Postemergence Herbicides – continued				
bromoxynil (Buctril) 2.0 lbs./gal.	Ky. bluegrass, bermudagrass, tall fescue, zoysia, St. Augustine	1.5 pts.	0.375	Labeled for use on non-residential turfgrasses. May be used on newly-sprigged or newly-seeded grasses. Apply as a summer or winter treatment to control seedling annual broadleaf weeds. Buctril is a contact herbicide and uniform spray coverage is essential.
carfentrazone (QuickSilver) EW 1.9 lb./gal. (Aim) EW 1.9 lb./gal. (Aim) EC 2.0 lb./gal. (Quicksilver) 1.03 lb./gal/	Ky. bluegrass, tall fescue, bermudagrass, centipede, seashore paspalum, St. Augustinegrass, zoysiagrass water-soluble 5 ml bag	0.9 to 2.1 fl. oz. 0.8 to 2.0 fl. oz. 5 ml/2,000 ft ²	0.013 to 0.031	Controls numerous broadleaf weeds including plantains, chickweed(s), dandelion, thistle(s), lawn burweed, henbit, corn speedwell, purslane(s) and spotted spurge. QuickSilver may also be applied to newly-seeded, sodded or sprigged turfgrasses. To expand the weed spectrum, QuickSilver may be tank-mixed with numerous other postemergence herbicides. Aim formulations are registered for use only on seed and sod farms. Add a nonionic surfactant at 0.125 to 0.25% v/v to the spray mix.
carfentrazone (0.04 lb./gal.) + 2,4-D (0.52 lbs./gal.) + MCPP (0.2 lbs./gal.) + dicamba (0.05 lbs./gal.) (SpeedZone - Southern)	Ky. bluegrass, tall fescue, bermudagrass, centipede, seashore paspalum, St. Augustinegrass, zoysiagrass	2.0 to 5.0 pts.	--	Controls a wide range of broadleaf weeds, including spotted spurge. May be applied after the second mowing in newly-established cool-season turfgrasses, or 4 weeks after sprigging or sodding warm-season turfgrasses. DO NOT reseed until 1 week after application. DO NOT apply at air temperatures > 90°F. DO NOT apply during the spring green-up of St. Augustinegrass, or to 'Floritam', 'BitterBlue' and other improved varieties of St. Augustinegrass.
carfentrazone (0.04 lb./gal.) + MCPA (2.21 lbs./gal.) + MCPP (0.44 lbs./gal.) + dicamba (0.22 lbs./gal.) (PowerZone)	Ky. bluegrass, tall fescue, bermudagrass, zoysiagrass	2.0 to 6.0 pts.	--	Controls a wide range of broadleaf weeds, including spotted spurge. May be applied after the second mowing in newly-established cool-season turfgrasses, or 4 weeks after sprigging or sodding warm-season turfgrasses. DO NOT reseed until 2 weeks after application. DO NOT apply at air temperatures > 90°F.
carfentrazone (0.05 lb./gal.) + 2,4-D (1.53 lbs./gal.) + MCPA (0.48 lbs./gal.) + dicamba (0.14 lbs./gal.) (SpeedZone)	Ky. bluegrass, tall fescue, bermudagrass, zoysiagrass	2.0 to 5.0 pts.	--	Controls a wide range of broadleaf weeds, including spotted spurge. May be applied after the second mowing in newly-established cool-season turfgrasses, or 4 weeks after sprigging or sodding warm-season turfgrasses. DO NOT reseed until 2 weeks after application. DO NOT apply at air temperatures > 90°F.
chlorsulfuron (Corsair) 75DF	Ky. bluegrass, bermudagrass, centipede, St. Augustine, zoysia	1.0 to 5.33 oz.	0.05 to 0.25	Particularly effective for the control of "clump-type" tall fescue. Labeled only as spot treatment in lawns, but may be applied as a broadcast application on golf courses. Add a nonionic surfactant at 1/4 to 1/3 fl. oz. per gallon of spray mix. DO NOT apply to ryegrass or tall fescue being grown as a turfgrass.
clethodim (Envoy) 0.94 lbs./gal.	centipede (sod farms only)	17.0 to 34.0 fl. oz.	0.125 to 0.25	Envoy may be used for annual grass control and common bermudagrass suppression on centipede sod farms. Add a nonionic surfactant at 0.25% v/v. Use two applications, spaced 3 to 4 weeks apart, for bermudagrass suppression. Apply no sooner than 3 weeks after spring green-up. DO NOT use on centipede being grown for seed. Avoid mowing one week before or after treatment.

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Postemergence Herbicides – continued				
clopyralid (Lontrel) 3 lbs./gal.	Ky. bluegrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, tall fescue, zoysia	0.25 to 1.33 pts.	0.09 to 0.5	Effectively controls numerous broadleaf weeds that belong to the aster and legume families. Control of other broadleaf weed species is poor. Sold in combination with triclopyr as Confront. Clopyralid is not labeled for use on residential turfgrasses.
2,4-D (Weedar 64) 3.8 lbs./gal. (Other trade names)	Ky. bluegrass, bermudagrass, centipede, tall fescue, zoysia	See Label	0.5 to 2.0	Amine formulations of 2,4-D are non-volatile and are safer than ester formulations to use near ornamentals. Apply to small and actively growing broadleaf weeds as a summer or winter treatment. To control wild garlic/onion, use 2.0 lbs. ai/A plus surfactant. Make first application in late November or early December and follow with a second application in February or March. Repeat this schedule for 3 consecutive years to control this weed. DO NOT apply 2,4-D to St. Augustinegrass. DO NOT apply more than 0.5 lb. ai/A of 2,4-D to centipede. DO NOT allow spray drift to contact the foliage of ornamentals.
2,4-D + MCP + dicamba (Three-way) (Trex-San) (Triplet) (Other trade names)	Ky. bluegrass, bermudagrass, tall fescue, zoysia	See Label	0.75 + 0.4 + 0.08	Several commercial formulations are available. Refer to individual labels for the recommended amount of formulated product. Controls a broader spectrum of broadleaf weeds than 2,4-D alone. DO NOT spray when turfgrass is emerging from winter dormancy. Low rates of Triplet products may be used on St. Augustine or centipede. Avoid applications if air temperatures exceed 85°F. Delay reseeding for 4 weeks after treatment.
2,4-D + MCP + 2,4-DP (Triamine) (Dissolve)	Ky. bluegrass, tall fescue, bermudagrass, centipedegrass, St. Augustinegrass, zoysiagrass	See Label	See Label	Refer to individual labels for recommended amount of formulated product. Controls a broader spectrum of weeds than 2,4-D alone. DO NOT spray at air temperatures greater than 85°F and when warm-season turfgrasses are growing under stress conditions. Delay reseeding for 4 weeks after treatment. Avoid applications when warm-season turfgrasses are emerging from winter dormancy.
2,4-D + clopyralid + dicamba (Millennium Ultra)	Ky. bluegrass, tall fescue, bermudagrass, zoysiagrass	2.0 to 3.0 pts.	--	Controls a broader spectrum of weeds than 2,4-D alone. DO NOT mow 1 to 2 days before or after application. Delay application to newly seeded grasses until after 3 to 4 mowings. Delay reseeding for 3 to 4 weeks after application. DO NOT spray when air temperatures are > 90°F. Not recommended for use on centipedegrass and St. Augustinegrass. Avoid applications during the spring transition of warm-season turfgrasses. Not labeled for use on residential turfgrasses.
2,4-D + fluroxypyr + dicamba (Escalade)	Ky. bluegrass, tall fescue, bermudagrass, zoysiagrass	2.0 to 3.0 pts.	--	Controls a broader spectrum of weeds than 2,4-D alone. DO NOT mow 1 to 2 days before or after application. Delay application to newly seeded grasses until after 3 to 4 mowings. Delay reseeding for 3 to 4 weeks after application. DO NOT spray when air temperatures are > 90°F. Not recommended for use on centipedegrass and St. Augustinegrass. Avoid applications during the spring transition of warm-season turfgrasses.

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Postemergence Herbicides – continued				
2,4-D + triclopyr (Turfлон II Amine) 2.8 + 1.1 lb./gal.	Ky. bluegrass, tall fescue	2.0 to 4.0 pts.	0.5 + 0.25 to 1.0 + 0.5	Controls a broader spectrum of weeds than 2,4-D alone. NOT RECOMMENDED for warm-season grasses. Apply in spring or fall months when weeds are actively growing. Newly seeded turf should be mowed 3 times before application. DO NOT reseed until 3 weeks after application. Repeat applications are recommended for corn speedwell, ground ivy, woodsorrel, parsley-piert and wild violet(s).
dicamba (Vanquish) 4 lbs./gal.	Ky. bluegrass, bermudagrass, centipedeagrass, tall fescue, zoysia	0.5 to 1.0 pts.	0.25 to 0.5	Apply to small and actively-growing broadleaf weeds as a summer or winter treatment. Provides better control of henbit, knotweed, lespedeza, clovers, docks and woodsorrel than 2,4-D. Repeat treatment if necessary. DO NOT apply to St. Augustinegrass. DO NOT use over the root zone of ornamental trees and shrubs.
diclofop-methyl (Illoxan) 3EC	bermudagrass (golf courses only)	1.0 to 1.4 qts.	0.75 to 1.0	Illoxan may be used for goosegrass control on bermudagrass golf courses. Use the high rate for goosegrass with one to two tillers. Lower rates may be used on smaller goosegrass. DO NOT mow for 24 to 36 hours after application. Control requires 2 to 3 weeks. May cause temporary phytotoxicity (7 to 10 days.) DO NOT mix with other pesticides or fertilizers as control will be reduced. DO NOT overseed treated areas for at least 2 months after the last application. Illoxan is a Restricted Use Pesticide.
diquat (Reward) 2.0 lbs./gal.	DORMANT BERMUDAGRASS	1.0 to 2.0 pts.	0.25 to 0.5	Controls certain winter annual broadleaf weeds, such as little barley, annual bluegrass, henbit and Carolina geranium in dormant bermudagrass in lawns, parks and golf courses. A nonionic surfactant at 0.25% v/v should be added to the spray mix. Apply only to dormant bermudagrass.
ethofumesate (Prograss) 1.5EC	Dormant bermuda- grass	5.4 to 5.9 pts.	1.0 to 1.1	Apply Prograss only to dormant bermudagrass in the fall one to two weeks after emergence of perennial ryegrass for the control of annual bluegrass. An additional application at 1.0 lb. ai/acre at 21 to 28 day intervals may be required to maintain control. The initial treatment may cause immediate browning of bermudagrass that is not completely dormant. DO NOT apply Prograss after Jan. 15 to overseeded bermudagrass. Applications after this date can severely delay bermudagrass growth in the spring. Prograss is not labeled for use on golf course putting greens.
ethofumesate (Prograss) 1.5EC + Atrazine (numerous formulations)	St. Augustinegrass	2.0 gal. + 2.0 lbs. ai/acre	3.0 + 2.0	Prograss + atrazine may be used to control bermudagrass in St. Augustinegrass. Make the first application in mid-March when bermudagrass initiates green-up. Repeat this application 30 days later. Use of this application timing is critical for control. Temporary St. Augustinegrass stunting may occur. Avoid improper overlapping of the spray pattern.

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Postemergence Herbicides – continued				
fenoxaprop (Acclaim Extra) 0.57 lb./gal.	Ky. bluegrass, fine and tall fescue, zoysia	13.0 - 39.0 fl. oz.	0.06 to 0.17	Controls annual grasses. Apply in late spring or early summer to weedy grasses in the 3-leaf (low rate) to 5-tiller (high rate) growth stage. Repeat application at 14 days if weed regrowth has occurred and no turfgrass injury is present. DO NOT tank mix Acclaim with phenoxy containing herbicides. Fescues and ryegrasses may be seeded immediately after application. Acclaim may be used on newly plugged zoysia and seedling fescues and perennial ryegrasses that are 4 weeks old. Acclaim Extra + Turflon Ester tank-mixtures can be used to control bermudagrass in tall fescue and zoysiagrass.
fluazifop-butyl (Fusilade II) 2.0 lbs./gal.	tall fescue, zoysiagrass	3.0 to 6.0 fl. oz.	0.05 to 0.10	Use to control common and hybrid bermudagrass in zoysiagrass and tall fescue. Tank-mix with Turflon Ester to improve control of bermudagrass. In zoysiagrass, apply 3.0 to 4.0 fl. oz./A plus 0.25% v/v nonionic surfactant. Make the first application around June 1, and repeat every 20 to 30 days. Reduce the rate to 2.0 to 3.0 fl. oz./A in the late summer. In tall fescue, apply 5.0 to 6.0 fl.oz./A plus 0.25% v/v nonionic surfactant in the spring (April-May) as bermudagrass begins to green-up. Repeat the application in September-October. DO NOT apply to tall fescue during the hot summer months. Some injury (discoloration) will occur on tall fescue for up to 14 days after application.
fluroxypyr (Spotlight) 1.5 lb./gal.	Ky. bluegrass, tall fescue, bermudagrass, centipedegrass, zoysiagrass, St. Augustinegrass	0.67 to 1.33 pts.	0.125 to 0.25	Controls numerous broadleaf weeds including common purslane, chickweed(s), white clover, ground ivy and woodsorrel Apply to newly seeded turf after 2 to 3 mowings or to established turf. To broaden weed spectrum, Spotlight can be mixed with other labeled turf herbicides. Use Spotlight on bermudagrass and St. Augustinegrass only at 0.67 pt./acre and only if some injury can be tolerated. Not recommended for use on golf course putting greens.
foramsulfuron (Revolver) 0.19 lbs./gal.	bermudagrass, zoysiagrass	8.8 to 26.2 fl. oz.	0.013 to 0.04	Apply Revolver for: a) control of undesirable cool-season grasses (including tall fescue), b) control of emerged annual bluegrass 2 weeks before overseeding bermudagrass with perennial ryegrass, c) postemergence control of goosegrass in late spring and early summer, and d) spring transition of bermudagrass overseeded the previous fall with cool-season turfgrasses. For tillered goosegrass, make 2 applications at the high rate 7 to 14 days apart. A tank-mix of Revolver at 26.2 fl. oz. + MSMA (normal rate) applied twice 3 to 4 weeks apart will control dallisgrass. Late summer and early fall applications of this tank-mix usually provide better control than earlier applications. DO NOT apply Revolver within 2 weeks of sprigging. Revolver is rainfast within 2 hours of application
glufosinate (Finale) 1.0 lb./gal.	DORMANT BERMUDAGRASS	3.0 to 6.0 qts./acre	0.75 to 1.5	Controls numerous winter annual broadleaf weeds and annual bluegrass in completely dormant Bermudagrass. DO NOT apply during spring green-up.

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Postemergence Herbicides – continued				
glyphosate (Roundup Pro) 4 lbs./gal.	bermudagrass (dormant)	0.75 pt.	0.375	APPLY ONLY TO DORMANT BERMUDAGRASS. Controls annual bluegrass. Apply in 5 to 20 gals. Water/A. DO NOT apply during green-up or to actively growing bermudagrass.
halosulfuron (SedgeHammer) 75DF	Ky. Bluegrass, bermudagrass, centipede, St. Augustine, tall fescue, zoysiagrass, seashore paspalum	0.67 to 1.33 oz.	0.031 to 0.062	Controls yellow and purple nutsedge, and suppresses green kyllinga. A second application may be needed 6 to 10 weeks after the initial application. Apply at the 3 to 8 leaf nutsedge growth stage. Add a nonionic surfactant at 0.5% v/v (2.0 qts./100 gal.) DO NOT mow 2 days before or after application. DO NOT apply to golf course putting greens.
imazaquin (Image) 70DG	bermudagrass, centipede, St. Augustine, zoysia	8.6 to 11.4 oz.	0.37 to 0.5	Controls nutsedge(s), wild garlic, and selected broadleaf weeds. Add a nonionic surfactant (1.0 qt./100 gals.). The addition of MSMA (bermudagrass only) will aid in control of nutsedge(s) and escaped weedy grasses. Two applications per year, at an interval of 6 to 8 weeks, will be needed to control purple nutsedge. DO NOT apply when turfgrass is emerging from winter dormancy. Image will severely injure fescue(s) and ryegrass(s). DO NOT apply to newly planted or sprigged lawns or golf greens.
MCPA + MCP + 2,4-DP (Triamine II) (TriEster II) (Trimec Encore)	Ky. bluegrass, bermudagrass, centipede, St. Augustine, tall fescue, zoysiagrass	See Label	See Label	Refer to individual labels for recommended amount of formulated product. Controls a broader spectrum of weeds than 2,4-D alone. DO NOT spray at air temperatures greater than 85°F. , and when warm-season turfgrasses are growing under stress conditions. Delay reseeding for 4 weeks after treatment. Trimec Encore is not labeled on St. Augustine.
MCPA + triclopyr + dicamba (Cool Power) (HorsePower)	bermudagrass, Ky. bluegrass, tall fescue, zoysiagrass	See Label	See Label	Controls a broader spectrum of weeds than 2,4-D alone. Cool Power is an ester formulation of MCPA + triclopyr + dicamba primarily for use during the cool winter months. HorsePower contains amine formulations of these herbicides. DO NOT mow 1 to 2 days before or after application. Delay application to newly seeded grasses until after 3 to 4 mowings. Delay reseeding for 3 to 4 weeks after application. Avoid applications during the spring transition of warm-season turfgrasses.
MCPA + MCP + dicamba (Tri-Power)	Ky. bluegrass, bermudagrass, tall fescue, zoysiagrass	See Label	See Label	Controls a broader spectrum of weeds than 2,4-D alone. DO NOT mow 1 to 2 days before or after application. Delay application to newly seeded grasses until after 3 to 4 mowings. Delay reseeding for 3 to 4 weeks after application. Avoid applications during the spring transition of warm-season turfgrasses unless a slight delay in green-up can be tolerated.

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MCPP + 2,4-D + dicamba (Trimec Southern)	Ky. bluegrass, bermudagrass, centipede, tall fescue, St. Augustine, zoysiagrass	See Label	0.7 + 0.4 + 0.08	Controls a broader spectrum of weeds than 2,4-D alone. DO NOT spray when turfgrass is emerging from winter dormancy. Avoid application if air temperatures exceed 85°F. Delay reseeding for 4 weeks after application. Refer to label for rates for St. Augustine and centipede.
mesotrione (Tenacity) 4.0 lbs./gal	centipede, Ky. bluegrass, tall fescue, St. Augustinegrass (grown for sod)	4.0 to 8.0 fl. oz.	0.125 to 0.25	Provides postemergence control of crabgrass (< 4 tillers), nimblewill, creeping bentgrass, white clover and numerous broadleaf weeds. Apply to small, actively growing weeds. A repeat application at two to three weeks may be required for adequate control. Add a nonionic surfactant at 0.25% v/v to the spray mix. Tenacity may also be applied at the time of seeding Ky. bluegrass, centipede or tall fescue. It may also be applied after new seedlings have been mowed two times or 4 weeks after emergence (whichever is longer). Do not exceed 4.0 fl. oz./acre on St. Augustine sod. Tenacity may cause temporary whitening of turfgrass foliage (see label). If Tenacity is tank-mixed with atrazine or simazine for use on St. Augustine or centipede use only 4.0 fl. oz. of Tenacity and 0.5 lbs. ai/acre of either atrazine or simazine. Zoysia, Bermudagrass and seashore paspalum are sensitive to Tenacity. Do not use on golf course putting greens and maintain a five foot buffer between treated areas and putting greens.
metribuzin (Sencor) 75 Turf	bermudagrass	0.67 lb. 0.33 to 0.67 lb.	0.5 0.25 to 0.5	Dormant bermudagrass: Apply to emerged winter annual weeds. Make only 1 application per season. Actively growing bermudagrass: Apply to bermudagrass that is actively growing and not under stressed conditions. Controls goosegrass and selected annual weeds. DO NOT make more than two applications per season. Sencor may cause temporary discoloration. Delay mowing treated areas for at least 3 days.
metribuzin (Sencor) 75 Turf + MSMA (Several trade names)	bermudagrass	2.6 dry oz. + See Label	0.125 + 2.0	This tank mix provides better control of goosegrass than the use of MSMA alone. Apply ONLY to established bermudagrass that is actively growing and not under stressed conditions. Two applications spaced 7 to 10 days apart may be necessary for acceptable control.
met sulfuron (Manor) 60DF (Blade) 60DF	Ky. bluegrass, bermudagrass, centipede, St. Augustine, zoysia	0.25 to 1.0 oz.	0.009 to 0.037	Controls a wide range of broadleaf weeds, 'Pensacola' bahiagrass and wild garlic/onion. May also be used hasten the spring transition of bermudagrass overseeded with perennial ryegrass to bermudagrass. Add a nonionic surfactant at 0.25% v/v. DO NOT exceed 0.5 oz. on centipede or Kentucky bluegrass. DO NOT overseed for 8 weeks after application, or plant woody ornamentals in treated areas for one year after application. Not recommended for use on tall fescue.

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MSMA (Bueno 6) 6.0 lbs./gal. (Daconate 6) 6.0 lbs./gal. (Other trade names) DSMA (DSMA Liquid) 3.6 lbs./gal. (Weed-E-Rad 360) 3.6 lbs./gal. (Other trade names)	Ky. bluegrass, bermudagrass, tall fescue	2.7 pts. 2.7 pts. 1.0 gal. 1.0 gal.	2.0 2.0 3.6 3.6	These herbicides control emerged annual grasses, bahiagrass, and dallisgrass and provide fair control of nutsedge. Multiple applications spaced 7 to 10 days apart are needed for acceptable control. Temporary discoloration of turf will occur. May be applied to newly sprigged bermudagrass at the above rates. On new stands of fescue, apply one-half rate after 3 mowings. Add a surfactant according to label directions. Zoysiagrass cultivars vary in tolerance to MSMA. 'Meyer' is more tolerant than 'Emerald' or 'Matrella'. DO NOT apply to centipede or St. Augustine.
pronamide (Kerb T/O) 50WSP	bermudagrass, centipede, St. Augustine, zoysia	1.5 to 3.0 lbs.	0.75 to 1.5	Pronamide will control emerged annual bluegrass, corn speedwell, and common chickweed. Increase rate as annual bluegrass approaches maturity. Pronamide acts slowly (3 to 5 weeks) on seedling to mature annual bluegrass. DO NOT apply to any cool season grass. A light overhead irrigation is necessary to move Kerb into the weed root zone if not rainfall occurs within 24 to 48 hours. Kerb is a Restricted Use Herbicide.
quinclorac (Drive) 75DF	Ky. bluegrass, bermudagrass, Seashore paspalum, tall fescue, zoysiagrass	1.0 lbs.	0.75	Provides excellent control of crabgrass, barnyardgrass and clovers with one application. Multiple applications will also provide control of torpedograss. Add methylated seed oil at 1.5 pts./A to the spray mix. DO NOT mow 2 days before or after application. Drive may also be applied before, at, and during seedling emergence of bermudagrass, tall fescue and zoysiagrass. DO NOT add an adjuvant until 28 days after emergence. Apply under conditions of good soil moisture. For best results do not irrigate for 24 hours after application. DO NOT apply to bahiagrass, carpetgrass, St. Augustinegrass or centipede. DO NOT apply to exposed feeder roots of ornamental trees and shrubs.
rimsulfuron (TranXit GTA) 25DF	bermudagrass, centipede,grass, zoysiagrass	1.0 to 2.0 oz.	0.016 to 0.032	May be used: a) to control annual bluegrass before overseeding bermudagrass with perennial ryegrass or <i>Poa trivialis</i> ; b) to control annual bluegrass and certain weeds in non-overseeded bermudagrass, centipede,grass and zoysiagrass and c) to remove perennial ryegrass or <i>Poa trivialis</i> from bermudagrass in the late spring. Add a nonionic surfactant at 0.25% v/v. Apply 10 to 14 days in late summer or early fall before overseeding bermudagrass. DO NOT apply after overseeding, or to bentgrass putting greens. To hasten spring transition on overseeded bermudagrass, apply at the 60 to 75% green-up growth stage of bermudagrass, or approximately 2 to 3 weeks before transition is desired. DO NOT apply to residential lawns, cool-season turfgrasses or to newly sprigged or sodded bermudagrass.

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		Amount of Formulation	Pounds Active Ingredient	
Postemergence Herbicides – continued				
sethoxydim (Segment) 1.0 lb./gal.	centipede, fine fescue	1.5 to 2.25 pts.	0.19 to 0.28	Apply sethoxydim only to centipede and fine fescues (creeping red, Chewings, hard fescue). Other turfgrasses, including tall fescue, will be severely injured by sethoxydim. Controls annual grasses and suppresses bahiagrass growth. Apply no sooner than 3 weeks after green-up. DO NOT exceed 1.5 pts./acre on seedling centipede. DO NOT mow 7 days prior to or after application. Two applications per season may be utilized in seedling and established centipede. For bahiagrass suppression, repeat treatment 10 to 14 days after the first application. No adjuvant is needed with Segment.
sulfentrazone (0.06 lb./gal.) + 2,4-D (1.4 lbs./gal.) + MCPP (0.5 lbs./gal.) + dicamba (0.22 lbs./gal.) (Surge)	Ky. bluegrass, tall fescue, bermudagrass, zoysiagrass	2.75 to 4.0 pts.	--	Controls a wide range of broadleaf weeds, including spotted spurge. This product will also provide some suppression of small, actively-growing yellow nutsedge. May be applied after the second mowing in newly-established cool-season turfgrasses, or 4 weeks after sprigging or sodding warm-season turfgrasses. DO NOT reseed until 3 weeks after application. DO NOT apply at air temperatures > 90°F, or during the spring transition of warm-season turfgrasses.
sulfentrazone (Dismiss) 4.0SC	Ky. bluegrass, bermudagrass, centipedegrass, St. Augustinegrass, seashore paspalum, tall fescue, zoysiagrass	4.0 to 12.0 fl. oz.	0.125 to 0.375	Controls nutsedge(s), annual sedges, kyllinga species and a wide range of broadleaf weeds. Add a nonionic surfactant at 0.25 v/v to the spray mix. Apply to established grasses, or to newly established grasses (seeded or sodded) after the second mowing. Treated areas may be reseeded or sodded 3 months after application. Overseeding with perennial ryegrass may be done 6 weeks after application if slight injury to ryegrass can be tolerated. Do not apply Dismiss within 3 months of sod harvest. Dismiss is not recommended for use on golf course putting greens.
sulfosulfuron (Certainty) 75DF	bermudagrass centipede, zoysia, St. Augustine	0.75 to 1.25 oz.	0.035 to 0.07	Controls nutsedge(s), annual sedges, kyllinga species, annual bluegrass, tall fescue, and certain broadleaf weeds in warm-season turfgrasses. Add a nonionic surfactant at 0.25 v/v to the spray mix. Avoid mowing for 1 to 2 days before and after application. For nutsedge repeat the application at 4 to 10 weeks if regrowth is observed. Certainty may be applied 7 to 10 days before overseeding bermudagrass with perennial ryegrass. Certainty is not recommended for use on putting greens.
triclopyr (Turflon Ester) 4.0 lb./gal.	tall fescue, zoysiagrass	1.0 to 2.0 pts	0.5 to 1.0	Controls wild violet, ground ivy, yellow woodsorrel and selected other broadleaf weeds. Tank mix with recommended rate of Fusilade II or Acclaim Extra to suppress bermudagrass in tall fescue and zoysia. Repeat the applications 3 to 4 times at intervals of 4 weeks. Do apply to other turfgrass species, unless injury can be tolerated. Areas treated with Turflon Ester can be reseeded 3 weeks after application.

Turfgrass Weed Control for Professional Managers

Tim R. Murphy, Extension Agronomist – Weed Science

Use Stage and Herbicide	Turfgrasses	Broadcast Rate/Acre		Remarks and Precautions
		Amount of Formulation	Pounds Active Ingredient	
Postemergence Herbicides – continued				
triclopyr + clopyralid (Confront) 2.25 + 0.75 lbs./gal.	Ky. bluegrass, bermudagrass, centipede grass, tall fescue, zoysiagrass	1.0 to 2.0 pts.	0.3 + 0.1 to 0.6 + 0.2	Controls a wide range of broadleaf weeds. Repeat the application in approximately 4 weeks if necessary. Repeat treatments will also be necessary for the control of violets and woodsorrel. Newly seeded turf should be mowed 2 to 3 times before treatment. DO NOT water for 6 hours after application or apply at air temperatures > 85°F. DO NOT apply to exposed roots of shallow rooted trees and shrubs. DO NOT reseed for 3 weeks after application. Not labeled for use on residential turfgrasses.
trifloxysulfuron-sodium (Monument) 75DG	bermudagrass, zoysiagrass	0.33 to 0.56 oz.	0.015 to 0.026	Controls nutsedge(s), green kyllinga, annual bluegrass, tall fescue, torpedograss and certain broadleaf weeds in established bermudagrass and zoysiagrass. Monument is not recommended for use on other turfgrass species. Not labeled for use on home lawns. Add a nonionic surfactant at 0.25 to 0.5% v/v to the spray mix. Monument at rates of 0.1 to 0.3 oz./acre may be used as a spring transition aid for the removal of perennial ryegrass and <i>Poa trivialis</i> . Avoid mowing for 1 to 2 days before and after application. For nutsedge repeat the application at 4 to 6 weeks if regrowth is observed. DO NOT overseed bermudagrass with cool-season turfgrasses for 3 weeks after application.