

WARM-SEASON

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**Warm-Season Turfgrass Tolerance
to Pre-Emergence Herbicides**

TURFGRASSES					
Herbicide	Bahia-grass	Bermuda-grass	Centipede-grass	St. Augustine-grass	Zoysia grass
<i>(PRE-EMERGENCE)</i>					
atrazine ¹	NR	T(D)	T	T	I
benefin	T	T	T	T	T
benefin + oryzalin	T	T	T	T	T
benefin + trifluralin	T	T	T	T	T
bensulide	T	T	T	T	T
bensulide + oxadiazon	NR	T	NR	NR	T
DCPA	T	T	T	T	T
ethofumesate ²	NR	T(D)	NR	NR	NR
fenarimol	—	T	—	—	—
napropamide	T	T	T	T	NR
oryzalin	T	T	T	T	T
oxadiazon	NR	T	NR	T	T
pendimethalin	T	T	T	T	T
pronamide	NR	T	NR	NR	NR
simazine	NR	T	T	T	T

¹When dormant, bermudagrass and zoysiagrass have good tolerance to atrazine.²Ethofumesate is labeled for use on dormant bermudagrass that is overseeded with perennial ryegrass.

T = Tolerant at labeled rates; I = Intermediate tolerance, NR = Not registered for use on this turfgrass.

Warm-Season Turfgrass Tolerance to Post-Emergence Herbicides

TURFGRASSES					
Herbicides	Bahia-grass	Bermuda-grass	Centipede-grass	St. Augustine-grass	Zoysia-grass
<i>(POST-EMERGENCE)</i>					
asulam	NR-S	T ¹	NR-S	T	NR-I
atrazine	NR-I	T(D)	T(D)	T	I
bentazon	T	T	T	T	T
bromoxynil	T	T	T	T	T
2,4-D	T	T	S-I	S-I	T
2,4-D + dicamba	T	T	S-I	S-I	T
2,4-D + dichlorprop	T	T	S-I	S-I	T
2,4-D + mecoprop	T	T	S-I	S-I	T
2,4-D + mecoprop + dicamba	T	T	S-I	S-I	T
2,4-D + mecoprop + dichlorprop	T	T	I	I	T
dicamba	T	T	I-T	S-I	T
DSMA, MSMA	S	T	S	S	I
glyphosate ²	NR-S	T(D)	NR-S	NR-S	NR-S
imazaquin	—	T	T	T	T
MCPA + MCPP + dichlorprop	T	T	I	I	T
MCPP + 2,4-D + dicamba	T	T	I	I	T
MCPP	T	T	S-I	S-I	T
metribuzin	NR-S	T	NR-S	NR-S	NR-S
pronamide	NR	T	NR	NR	NR
sethoxydim	NR-S	NR-S	T	NR-S	NR-I

¹ Asulam is labeled for use only on 'Tifway' (419) bermudagrass.

² Bermudagrass is tolerant to glyphosate when completely dormant.

T = Tolerant at labeled rates; I = Intermediate tolerance, use at reduced rates; S = Sensitive, do not use this herbicide; NR = Not registered for use on this turfgrass.

Common and Trade Names of Warm-Season Turfgrass Herbicides (cont.)

Common Name	Company	Trade Name and Formulation ¹
asulam	Rhone-Poulenc	Asulox 3.34 lbs./gal.
atrazine	Royalgard Ciba-Geigy	Purge 4 lbs./gal. Aatrex 4L, 90DG, 80W
benefin	Elanco Lesco	Balan 2.5G, 85DG 2.5 Benefin Granular (2.5G)
benefin + oryzalin	Elanco	XL 2G
benefin + trifluralin	Elanco	Team 2G
bensulide	ICI Royalgard PBI/Gordon Lesco	Betasan 2.9E, 4E, 3.6G, 7G, 12.5G Roysan 4E, 12.5G Betamec 4LF Lescosan 4E, 7G
bensulide + oxadiazon	Scotts	Goosegrass/Crabgrass Control 6.5G
bentazon	BASF	Basagran - 4lbs./gal.
bromoxynil	Rhone-Poulenc Lesco	Buctril 2 lbs./gal., Buctril 4EC, Brominal 2 lbs./gal., ME4 Brominal Brominal 2 lbs./gal.
2,4-D	Interag, Lesco, Fermenta Others	Numerous trade names and formulations are available
2,4-D + dicamba	Rhone-Poulenc Lesco PBI/Gordon	Weedone Super D Pro Amine Eight-One Selective Herbicide Phenaban 801
2,4-D + dichlorprop	Rhone-Poulenc	Weedone DPC Amine, Weedone DPC
2,4-D + mecoprop	Lesco Rhone Poulenc PBI/Gordon	Lescopar Turf Kleen Phenomec 2 + 1
2,4-D + mecoprop + dicamba	Lesco	Three-way
2,4-D + mecoprop + dichlorprop	Riverdale	Weedestroy Triamine

¹Numeral refers to percent or pounds of active ingredient.

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Common and Trade Names of Warm-Season Turfgrass Herbicides (cont.)

Common Name	Company	Trade Name and Formulation ¹
DCPA	Fermenta	Dacthal 75W
dicamba	Sandoz PBI/Gordon	Banvel 4 lbs./gal. Dicamba 4, 4 lbs./gal.
DSMA	Interag, Vineland, Others	Numerous trade names and formulations are available.
ethofumesate	Nor-Am	Prograss 1.5EC
fenarimol	Elanco	Rubigan 50W, 1AS
glyphosate	Monsanto	Roundup 4 lbs./gal.
imazaquin	Lesco	Image 1.5 lbs./gal.
MCPA	PBI/Gordon	MCPA 4 lbs./gal.
MCPA + MCPP	Riverdale	Weedestroy Triamine II
+ dichlorprop MCPP	Royalgard Rhone-Poulenc PBI/Gordon Lesco	Sabre Turf Herbicide MCPP 2 lbs./gal. Mecomec 4 4 lbs./gal. Lescepex 2.5 lbs./gal.
MCPP + 2,4-D + dicamba	PBI/Gordon	Trimec Southern
metribuzin MSMA	Mobay Fermenta, Platte, others	Sencor Turf 75W Numerous trade names and formulations are available.
napropamide	Lesco ICI	Devrinol 5-G Ornamental Devrinol 50WP, 5G
oryzalin	Elanco	Surflan 4AS
oxadiazon	Rhone-Poulenc	Ronstar 2G
pendimethalin	Lesco Scotts	PRE-M 60DG Southern Weedgrass Control 2.45G, Turf Weedgrass Control 1.71G, Weedgrass Control 60DG
pronamide	Rohm-Haas	Kerb 50W
sethoxydim	BASF	Poast 1.5 lbs./gal.
simazine	Ciba-Geigy	Princep 80W, 4L, 90DG, 4G