

Response of Turfgrass and Turfgrass Weeds to Herbicides¹

J. B. Unruh and B.J. Brecke²

Weeds are seldom a serious problem in a well-managed, vigorous turf. Encroachment of weeds into turfgrass is usually a sign of a weakened stand due to such factors as insects, diseases, nematodes, inadequate watering, improper mowing, poor fertilization, incorrect pH, etc. Herbicides may temporarily remove the weeds; however, unless the basic cause of the weakened turf is corrected, the weed will continue to return as a problem.

If a herbicide is needed, the following tables can serve as a guide in deciding which one to use. The first step is to determine which herbicide can be safely used on the turfgrass species. Table 1 and Table 2 list the expected turfgrass tolerance to certain herbicides. Table 3 and Table 4 list the effectiveness of preemergence and postemergence herbicides in controlling common weeds found in turf. Since no single herbicide will control all weeds, accurate weed identification is essential before selecting a herbicide. *It is important to note that the information contained in the tolerance tables refers to the turf's tolerance to a single application of the named compound when applied alone (or in mixtures as noted). Chemical "cocktails" where two or more herbicides are mixed together may result in increased turfgrass injury, and caution should be taken when using such mixtures.*

Read the label of the herbicide selected to be certain the herbicide is labeled for the desired use. All herbicides are not labeled for use in home lawns. Accurate calibration and application are critical.

Excessive overlaps may result in turfgrass damage, while failure to obtain proper overlap may result in strips without weed control. Preemergence applications should be made before weed seed germinate. In general, for summer grass weed control, application should be approximately February 1 in south Florida, February 15 in central Florida, and March 1 in north Florida. Because adequate soil moisture both prior to and following application is necessary for effective weed control, avoid spraying during times of drought. Do not use a weed and feed type product every time the lawn is fertilized and be careful not to apply over the roots of sensitive ornamentals and trees.

Postemergence applications should be made when weeds are small. For hard-to-control perennial weeds, multiple applications are usually most effective but these may be damaging to turfgrass. Warm temperatures (70-80°F) generally increase activity, but yellowing may result when applications are made when temperatures are hot (greater than 85°F). To ensure good coverage, herbicides should be mixed with 25 to 30 gallons of water per acre per application. Two applications, using the low rates suggested on the label, spaced 7 to 10 days apart, are often most effective. Read the label and follow suggested rates and use restrictions.

The information in the following tables is not to be considered as recommendations for use of herbicides on turfgrasses, but as resource material to enhance the understanding of turfgrass responses to herbicides.

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2. J. B. Unruh, Associate Professor, Turfgrass Science and B. J. Brecke, Professor and Associate Center Director, Weed Science. West Florida Research and Education Center, Jay, Florida.

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Table 1. Tolerance of established turfgrasses to **preemergence** herbicides (*Refer to herbicide label for specific species listings.*)

Herbicide	Trade Name ¹	Bahiagrass	Bermudagrass ²	Centipedegrass	St. Augustinegrass	Seashore Paspalum	Zoysiagrass	Overseed Perennial Ryegrass
atrazine	many	NR ³	NR	S	S	NR	I-S	D
benefin	Balan	S	S	S	S	NR	S	NR
benefin + oryzalin	XL 2G	S	S	S	S	NR	S	NR
benefin + trifluralin	Team, RegalStar	S	S	S	S	NR	S	NR
bensulide	Betasan, Bensusmec, PreSan	S	S	S	S	NR	S	I-S
bensulide + oxadiazon		NR	S	NR	NR	NR	S	NR
DCPA	Dacthal	S	S	S	S	NR	S	NR
dithiopyr	Dimension	S	S	S	S	S	S	I
ethofumesate ⁴	Prograss	NR	S – dormant	NR	I	NR	NR	S
fenarimol	Rubigan	NR	S	NR	NR	NR	NR	NR
isoxaben	Gallery	S	S	S	S	NR	S	NR
metolachlor	Pennant Magnum	S	S	S	S	NR	S	D
napropamide	Devrinol	S	S	S	S	NR	NR	NR
oryzalin	Surflan	S	S	S	S	NR	S	NR
oxadiazon	Ronstar	NR	S	NR	S	S	S	I
pendimethalin	Pendulum	S	S	S	S	S	S	I
prodiamine	Barricade	S	S	S	S	S	S	I
pronamide	Kerb	NR	S	NR	NR	NR	NR	D
simazine	many	NR	I	S	S	NR	S	D

¹Use of brand or trade names in this publication does not imply endorsement of the products or criticism of similar ones not mentioned. Trade names are used herein for convenience only. Mention of a proprietary product does not constitute a guarantee or warranty of the product by the authors.

²Non-golf-green only.

³S = Safe at labeled rates on mature, healthy turf; I = Intermediate safety - may cause slight damage to mature, healthy turf; D = Damaging - do not use; NR = Not Registered for use on this turf species.

⁴Ethofumesate is labeled only for dormant bermudagrass overseeded with perennial ryegrass.

Table 2. Tolerance of established turfgrasses to **postemergence** herbicides (Refer to herbicide label for species specific listing.)

Herbicide	Trade Name ¹	Bahiagrass	Bermudagrass	Centipedegrass	Seashore Paspalum	St. Augustinegrass	Zoysiagrass	Overseed Perennial Ryegrass
atrazine	many	NR ²	NR	S-I	NR	S-I	I	D
bentazon	Basagran	S	S	S	S	S	S	S-I
bispyribac-sodium	Velocity	NR	S ³	NR	NR	NR	NR	S
bromoxynil	Buctril	S	S	S	NR	S	S	S
carfentrazone	QuickSilver, Aim	S	S	S	S	S	S	S
chlorsulfuron	Corsair	I	I	NR	NR	NR	NR	NR
clethodim	Envoy	NR	NR	S	NR	NR	NR	NR
clopyralid	Lontrel	S	S	S	S	S	S	S
2,4-D		S	S	I	NR	I	S	S-I
2,4-D + dicamba		S	S	I	NR	I	S	S-I
2,4-D + 2,4-DP		S	S	I	NR	I	S	I-D
2,4-D + MCPP		S	S	I	NR	I	S	I-D
2,4-D + MCPP + dicamba		S	S	I	NR	I	S	I-D
2,4-D + MCPP + 2,4-DP		S	S	I	NR	I	S	I-D
2,4-D + MCPP + dicamba + MSMA		D	S-I	D	NR	D	S-I	D
2,4-D + clopyralid + dicamba		S	S	I	NR	S-I	S	S
dicamba	Banvel	S	S	I	NR	I	S	I
diclofop	Illoxan	NR	S	NR	NR	NR	NR	NR
ethofumesate	Prograss	NR	D	NR	NR	I	NR	D
fenoxaprop	Acclaim	I-D	I-D	D	NR	D	I	I
fluazifop	Fusilade	NR	NR	NR	NR	NR	S	NR
fluroxypyr	Spotlight	S	I	S	NR	D	S	S
foramsulfuron	Revolver	NR	S	D	NR	NR	S	D
glufosinate	Finale	D	D	D	D	D	D	D
glyphosate	many	D	D	D	D	D	D	D
halosulfuron	SedgeHammer	S	S	S	S	S	S	D
imazaquin	Image	D	I	S	S	S	S	--
MCPA + MCPP + 2,4-D		S	S	I	NR	I	I	I-D
MCPP		S	S	I	NR	I	S	I
metribuzin	Sencor	D	S-I	D	NR	D	NR	D
metsulfuron	Blade, Manor	D	S	S	NR	S-I	S	D
MSMA	many	D	S	D	NR	D	I	I
pronamide	Kerb	NR	S	NR	NR	NR	NR	D
quinclorac	Drive	D	I-S	D	S	D	S	S
rimsulfuron	TranXit GTA	NR	S	NR	NR	NR	NR	NR
sethoxydim	Poast, Vantage	D	D	S	NR	D	D	D
simazine	many	NR	I	S	NR	S	S-I	D
sulfentrazone	Dismiss	S	S	S	S	NR	S	S
sulfometuron	Oust	I	I	NR	NR	NR	NR	NR
sulfosulfuron	Certainty	NR	S	S	S	S	S	D
triclopyr+clopyralid		I	I	I	NR	D	I	S
trifloxysulfuron	Monument	NR	S	NR	NR	NR	S	D

¹Use of brand or trade names in this publication does not imply endorsement of the products or criticism of similar ones not mentioned. Trade names are used herein for convenience only. Mention of a proprietary product does not constitute a guarantee or warranty of the product by the authors.

²S = Safe at labeled rates on mature, healthy turf; I = Intermediate safety - may cause slight damage to mature, healthy turf; D = Damaging - do not use; NR = Not Registered for use on this turf species.

³Safe when applied to overseeded bermudagrass January 1 to April 15.

Table 3. Expected control of some common weeds of turfgrass with **preemergence** herbicides.¹

	atrazine	benefin	benefin + oryzalin	benefin + trifluralin	bensulide	bensulide + oxadiazon	DCPA	dithiopyr	ethofumesate	fenarimol	isoxaben	metolachlor	napropamide	oryzalin	oxadiazon	pendimethalin	proflaminate	pronamide	simazine
PERENNIAL WEEDS																			
bahiagrass	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
bermudagrass	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
dallisgrass	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
tall fescue	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	G	F
wild garlic/onion	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
ANNUAL GRASSES																			
annual bluegrass	E	E	E	E	F	F-G	G	G-E	G-E	G	P-F	G	G	G	G	G	E	E	E
crabgrass	F	E	E	E	E	E	G	G-E	G	P	P	G	G-E	E	E	E	E	F	F
crowfootgrass	P-F	G	G	G	G	G	G	G		P	P	F	F	G	G	G	G	G	
goosegrass	P	F	G	G	F	G	F	F-G		P	P	F	G	F-G	E	F-G	F-G	F	F
sandbur	P	F	F-G	G	G	F-G	F	F		P	P	F	F	G	F	G	G		
BROADLEAF WEEDS																			
chamberbitter	G									P	G								
common chickweed	E	G	G	G	P	P	E	G	G	P	E	F	E	G	P	G	G	E	E
corn speedwell	E	E	E	E	P	P	G	G		P	G-E	G	E	P	G	E	E	G	G
cudweed	E	P	P	P		P				P	G		G	P	P	G	P	P	
dandelion	F	P	P	P	P	P				P	G			P	P	P	P	P	P
dichondra	G	P	P	P	P	P				P				P	P	P	P	P	P
docks	G	P	P	P	P	P				P				P	P	P	P	P	P
doveweed	G	P	P	P	P	P		P	P					P	P	P	P	P	G
Florida betony	E	P	P	P	P	P				P				P	P	P	P	P	P
ground ivy		P	P	P	P	P				P				P	P	P	P	P	P
henbit	E	G	G	G	P	P	F	G		P	G		P	G	P	G	G	F	E
hop clovers	E	P	G	G	P	F				P				F	G	G	P	P	E
knotweed	E		G	G	G	G		G		P	G		G	F	G	G		G	G
lespedeza	E	P	P	P				G		P				P		P	P		E
mallow		P	P	P	P	P				P	G			P	P	P	P	F	P
mock strawberry		P	P	P	P	P				P				P	P	P	P	P	P
mouseear chickweed	E	E	E	E	P	P	G	G		P	G			P	P	G	G	G	G
mugwort		P	P	P	P	P				P				P	P	P	P	P	P
mustards	E				G	G-E	P	G		P	G				E			F	F
parsley piert	E	P	P	P	E	G-E		G		P					G	P	P	P	G
pennywort (dollarweed)	E	P	P	P	P	P				P	G			P	P	P	P	P	P
plantains	G	P	P	P	P	P				P	G			P	P	P	P	P	P
spurges	E	P	F	F	P	P	F	G		P	G	F	P	F	P	F	F	P	G
spurweed (burweed)	E	P	P	P	P	P	P			P	E		E	P	P	P	G	P	E
Virginia buttonweed		P	P	P	P	P				P				P	P	P	P	P	P
violets		P	P	P	P	P				P				P	P	P	P	P	P
white clover	E	P	P	P	P	P				P	G			P	P	P	P	P	G
yellow woodsorrel (<i>Oxalis</i>)	E	P	F-G	F-G	P	F		G		P	G	P	G	F	G	F-G	F	P	P

¹ E = Excellent control (90 to 100%), G = Good control (80 to 89%), F = Fair control (70 to 79%), P = Poor control (< 70%). A blank space indicates weed response is not known.

Table 4. Expected control of some common weeds of turfgrass with **postemergence** herbicides¹

	Lifecycle ²	atrazine	bentazon	bispyribac	bromoxynil	carfentrazone	chlorsulfuron	clethodim	clopyralid	2,4-D	2,4-D +dicamba	dicamba	diclofop	ethofumesate	fenoxaprop	fluzifop	fluroxypyr	foramsulfuron	glufosinate	glyphosate
PERENNIAL WEEDS																				
bahiagrass	P	P	P		P	P		F	P	P	P	P	P	F	P	F	P	P	P	G
bermudagrass	P	P	P		P	P		F-G	P	P	P	P	P		P	G	P	P	P	E
dallisgrass	P	P	P		P	P		F	P	P	P	P	P		P		P	P	P	E
tall fescue	P						F													
torpedograss	P					P			P							P	P	P	F	
wild garlic/onion	P	P	P		P	P		P	P	G	G	F	P		P	P	P	P	P	G
ANNUAL GRASSES																				
annual bluegrass	WA	E	P	G	P	P		F	P	P	P	P	P	G	P	P	P	E	E	E
crabgrass	SA	F	P		P	P		E	P	P	P	P	P	F	G-E	G	P	P	E	E
crowfootgrass	SA	P	P		P	P		E	P	P	P	P			G-E	G	P	P	E	E
goosegrass	SA	P	P		P	P		F-G	P	P	P	P	E		G	G	P	G	E	E
sandbur	SA	P	P		P	P		G	P	P	P	P			G-E	G	P	P	E	E
BROADLEAF WEEDS																				
bittercress, hairy	WA							P	F		E	E	P		P	P		P		
black medic	A					G		P	E		E	E	P		P	P	F	P		
buttercups	WA,B,P	F	P		P	G		P	F-P	E-F	E-F	E-F	P		P	P		P		
carpetweed	SA	E						P		E	E	E	P		P	P		P		
carrot, wild	A,B							P	F	F	E-F	E	P		P	P		P		
chamberbitter (niruri)	SA,P	G	P					P	P	P	P-F	P-F	P		P	P		P		E
common chickweed	WA	E	G		P			P	E-F	P	G	E	P		P	P	F	P	G	E
corn speedwell	WA	E	P		G			P	P	F	F	F	P		P	P	P	P		E
cudweed		G			G	F		P	E	G-E	E	E	P		P	P	F	P		G
dandelion	P	F	P		P			P	F	E	G	E	P		P	P	F	P		E
dayflower, spreading	SA	G-E	G					P		F	F	F	P		P	P		P		
dichondra	P	E	P		P	F		P		G	G	G	P		P	P		P		E
docks	P	G	P			G		P	E	F	G	E	P		P	P		P	G	E
doveweed	SA	G-E	P		P			P		P	F	P	P		P	P	P	P		G
Florida betony	P	F-G	P		P	P		P		F	G	G	P		P	P	F	P		E
geranium, carolina	WA	E				G		P	P	E	E	E	P		P	P	P	P		
ground ivy	P		P		P			P		P-F	F	G	P		P	P	P	P		G
hawkweed	P					G		P		E-F	E-F	E-F	P		P	P		P		
henbit	WA	E	P		G	G		P		P	G	E	P		P	P	G	G		E
hop clovers	WA	E			F	G		P	E	F	G	E	P		P	P	G	P	G	E
knotweed	SA	E			F			P	E	P	G	E	P		P	P		P		E
kyllinga	A,P		F-G																	
lespedeza	SA	E						P	P	P-F	G	E	P		P	P	F	P		E
mallow	P	P	P					P		F	F-G	E	P		P	P		P		
mouseear chickweed	WA,P	G	P			G		P	F	P-F	G	E	P		P	P	F	P	G	E
mugwort	P	P	P					P		F	F	G	P		P	P		P		G
mustards	WA	E	G		G			P	P	E	G	E	P		P	P		P		E
nutsedge, purple	P		P																	
nutsedge, yellow	P		G																	
parsley piert	WA	E	G		G			P		P		E	P		P	P	F	P		E
pennywort (dollarweed)	P	E	P		P	P		P	F	G	G	E	P		P	P	F	P		E

	Lifecycle ²	atrazine	bentazon	bispyribac	bromoxynil	carfentrazone	chlorsulfuron	ciethodim	clopyralid	2,4-D	2,4-D +dicamba	dicamba	diclofop	ethofumesate	fenoxaprop	fluzifop	fluroxypyr	foramsulfuron	glufosinate	glyphosate
pepperweed, VA	WA	E			F	G		P		E	E	E	P		P	P	P	P		
pigweed	WA	G	P		F-G	G		P		E	E	E	P		P	P		P	G	
plantains	P	F	P		P			P	F	E	G	F	P		P	P		P		E
sedge, annual	A		G																	
shepherdspurse	WA		G		G			P	F	E	E	E	P		P	P		P		
spurges	SA	E	P		F	G		P	F	F	G	G	P		P	P	F	P		E
spurweed (burweed)	WA	E	E		G			P	E	G	G	E	P		P	P	F	P		E
thistles	B,P	P						P	E	E-F	E-F	E-F	P		P	P		P		
Virginia buttonweed	P	P	P		P	G		P	F-P	P	F	F	P		P	P	F	P		G
violets	P	P	P			G		P		P	F	F	P		P	P	P	P		
white clover	P	E	P			G		P	E	F	G	E	P	F	P	P	E	P	G	F
yellow woodsorrel (Oxalis)	P	G	P		F	G		P	F-P	P	F	G	P		P	P	F	P	G	E

¹ E = Excellent control (90 to 100%), G = Good control (80 to 89%), F = Fair control (70 to 79%), P = Poor control (< 70%). A blank space indicates weed response is not known.

² A = annual, B = biennial; P = perennial; SA = summer annual; WA = winter annual.

Table 4 cont. Expected control of some common weeds in turfgrass with **postemergence** herbicides¹

	Lifecycle ²	halosulfuron	imazaquin	metribuzin	metsulfuron	MSMA	pronamide	quinclorac	rim sulfuron	sethoxydim	simazine	sulfentrazone	sulfometuron	sulfosulfuron	triclopyr + clopyralid	trifloxysulfuron
PERENNIAL WEEDS																
bahiagrass	P		P	P	E	F	P	P		F	P			F	P	F
bermudagrass	P		P	P	P	P	P	P		F	P			P	P	P
dallisgrass	P		P	P	P	G	P	F		P	P				P	F
tall fescue	P															
torpedograss	P							E		P	P				P	G
wild garlic/onion	P		E	P	E	P	P			P	P				P	
ANNUAL GRASSES																
annual bluegrass	WA		P-F	E	P	P	E	P	G	P	E		G	G	P	G
crabgrass	SA		P	F	P	E	P	E		E	P				P	F
crowfootgrass	SA		P	G	P	E	P			F-G	P				P	
goosegrass	SA		P	G	P	F	P	P		G	P				P	
sandbur	SA		F	G	P	G	P			G	P				P	
BROADLEAF WEEDS																
bittercress, hairy	WA			G	E					P		G			E	
black medic	A							E		P		G			E	
buttercups	WA,B,P		G		E					P	F	G		G	E	
carpetweed	SA				P					P	G	G				G
carrot, wild	A,B				E					P						
chamberbitter (niruri)	SA,P		P			P-F				P	F					
common chickweed	WA		E	G	E	P	G		F	P	E	G	G		E	
corn speedwell	WA		P	E	E	P	G			P	E				P	
cudweed			F			F-G				P	G	G			G-E	
dandelion	P				E	P	P			P	P	G			E-F	G
dayflower, spreading	SA		G		P-F			P		P	G					
dichondra	P					P	P			P	P				E	G
docks	P				E	P	P			P	P	G			E	
doveweed	SA			F	P		P			P	F				P	
Florida betony	P					P	P			P	P				G	
geranium, carolina	WA		G		F-G					P	G	G			F	
ground ivy	P					P	P			P	P	G			E-F	
hawkweed	P									P					E	
henbit	WA		G	G	G	P	P		F	P	E	G		G	E	G
hop clovers	WA			G	P-F	P				P	E				E	G
knotweed	SA			G		P				P	G	G			E	
kyllinga	A,P	G	G			F						G				E
lespedeza	SA			E	E	P				P	G	G			E	
mallow	P					P	P			P	P	G			E	
mouseear chickweed	WA,P		G	E	E	P	P			P	P	G		G	E	
mugwort	P					P	P			P	P					
mustards	WA			F	F	P	P			P	G			G		
nutsedge, purple	P	G	G			F						G				E
nutsedge, annual	P	G	G			F						G				E
parsley piert	WA		G	E		P	P			P	E	G			G	

	Lifecycle ²	halosulfuron	imazaquin	metribuzin	metsulfuron	MSMA	pronamide	quinclorac	rimsulfuron	sethoxydim	simazine	sulfentrazone	sulfometuron	sulfosulfuron	triclopyr + clopyralid	trifloxysulfuron
pennywort (dollarweed)	P				G	P	P	F	F	P	P				F	
pepperweed, VA	WA									P	G					
pigweed	WA				E-G					P	F	G				
plantains	P				G	P	P			P	P	G			F	
sedge, annual	A	G	G			F-G										F
shepherdspurse	WA				G					P			G	G	E-F	
spurges	SA			E	E	P			F	P	G	G			E-F	G
spurweed (burweed)	WA		E	G	E	P	P			P	E	G			E	
thistles	B,P		G		F					P	P				E	
Virginia buttonweed	P					P	P			P	P				F	G
violets	P					P	P			P	P	G			F-G	
white clover	P		F	F	E	P	P			P	P	G		G	E	G
yellow woodsorrel (<i>Oxalis</i>)	P				F-G	G	P			P	P	G			F-G	G

¹ E = Excellent control (90 to 100%), G = Good control (80 to 89%), F = Fair control (70 to 79%), P = Poor control (< 70%). A blank space indicates weed response is not known.

³ A = annual, B = biennial; P = perennial; SA = summer annual; WA = winter annual.

Table 5. Common and scientific names of selected weeds that infest turf.

Common Name	Scientific Name
annual bluegrass	<i>Poa annua</i> L.
annual sedge	<i>Cyperus compressus</i> L.
bahiagrass	<i>Paspalum notatum</i> Fluegge
bermudagrass, common	<i>Cynodon dactylon</i> (L.) Pers.
bermudagrass, hybrid	<i>Cynodon dactylon</i> (L.) Pers. x <i>C. transvalensis</i> Burt-Davy
bittercress, hairy	<i>Cardamine hirsute</i> L.
black medic	<i>Medicago lupulina</i> L.
buttercups	<i>Ranunculus repens</i> L.
carpetweed	<i>Mollugo verticillata</i> L.
carrot, wild	<i>Daucus carota</i> L.
centipedeegrass	<i>Eremochloa ophiuroides</i> (Munro) Hackel
chamberbitter	<i>Phyllanthus niruri</i> L.
common chickweed	<i>Stellaria media</i> (L.) Villars
corn speedwell	<i>Veronica arvensis</i> L.
crabgrass	<i>Digitaria</i> sp.
crowfootgrass	<i>Dactyloctenium aegyptium</i> (L.) Willd.
cudweed	<i>Gnaphalium</i> sp.
dallisgrass	<i>Paspalum dilatatum</i> Poir.
dandelion	<i>Taraxacum officinale</i> Weber
dayflower, spreading	<i>Commelina diffusa</i> Burrm. f.
dichondra	<i>Dichondra micrantha</i> Urban
docks	<i>Rumex</i> sp.
doveweed	<i>Murdannia nudiflora</i> (L.) Brenan
Florida betony	<i>Stachys floridana</i> Shuttlew
geranium, carolina	<i>Geranium carolinianum</i> L.
goosegrass	<i>Eleusine indica</i> (L.) Gaertner
ground ivy	<i>Glechoma hederacea</i> L.
hawkweed	<i>Hieracium pilosella</i> L.
henbit	<i>Lamium amplexicaule</i> L.
hop clovers	<i>Trifolium aureum</i> Pollich
knotweed	<i>Polygonum aviculare</i> L.
lespedeza	<i>Lespedeza striata</i> (Thumb. Ex Murray) Hook. & Arn.
mallow	<i>Malva rotundifolia</i> L.
mock strawberry	<i>Duchesnea indica</i> (Andreas) Focke
mouseear chickweed	<i>Cerastium vulgatum</i> L.
mugwort	<i>Artemisia vulgaris</i> L.
mustards	<i>Brassica kaber</i> (DC) L. Wheeler
parsley piert	<i>Alchemilla arvensis</i> (L.) Scop.
pennywort (dollarweed)	<i>Hydrocotyle</i> sp.
pepperweed, Virginia	<i>Lepidium virginicum</i> L.
perennial ryegrass	<i>Lolium perenne</i> L.
pigweed	<i>Amaranthus</i> sp.
plantains	<i>Plantago</i> sp.
purple nutsedge	<i>Cyperus rotundus</i> L.
sandbur	<i>Cenchrus</i> sp.
seashore paspalum	<i>Paspalum vaginatum</i> Sw
shepherdspurse	<i>Capsella bursa-pastoris</i> (L.) Medikus
spurges	<i>Euphorbia</i> sp.
spurweed (burweed)	<i>Soliva pterosperma</i> (Jussieu) Lessing
St. Augustinegrass	<i>Stenotaphrum secundatum</i> (Walter) Kuntze
tall fescue	<i>Festuca arundinacea</i> Schreber
thistles	<i>Cirsium</i> sp.
torpedograss	<i>Panicum repens</i> L.
Virginia buttonweed	<i>Dioda virginiana</i> L.
violets	<i>Viola</i> sp.
white clover	<i>Trifolium repens</i> L.
wild garlic	<i>Allium vineale</i> L.
wild onion	<i>Allium canadense</i> L.
yellow nutsedge	<i>Cyperus esculentus</i> L.
yellow woodsorrel	<i>Oxalis stricta</i> L.

Table 6. Common and Trade Names of Turf Herbicides

Common Name	Trade Name(s)
Atrazine	Aatrex, Atrazine Plus, Purge II, + others
Benefin	Balan, Crabgrass Preventer, + others
Benefin & oryzalin	XL 2G
Benefin & oxadiazon	RegalStar
Benefin & trifluralin	Team 2G
Bensulide	Betasan, Pre-San, Bensumec 4, Weedgrass Preventer, + others
Bentazon	Basagran T&O, Lescogran 4L
Bentazon & Atrazine	Prompt
Bispyrabac	Velocity
Bromoxynil	Buctril 2L
Carfentrazone	Quicksilver/Aim
Carfentrazone + 2,4-D + MCPP + Dicamba	SpeedZone, SpeedZone - Southern
Carfentrazone + MCPA + MCPP + Dicamba	Power Zone
Clethodim	Envoy
Clopyralid	Lontrel T&O
2,4-D	Many
2,4-D+Clopyralid + Dicamba	Millennium Ultra 2
DCPA	Dacthal 75WP, Garden Weed Preventer, + others
Dicamba	Vanquish 4L, K-O-G Weed Control, + others
Diclofop	Illoxan 3EC
Dithiopyr	Dimension Ultra
Diquat	Reward LS
DSMA	Ansar 6.6
Ethofumesate	Prograss 1.5L
Fenoxaprop	Acclaim
Fluazifop	Fusilade II
Fluroxypyr	Spotlight
Foramsulfuron	Revolver
Glufosinate	Finale 1L
Glyphosate	RoundUp, Touchdown PRO, Glyphomaxx
Halosulfuron	Sedgehammer 75DG / Sandea 75DG
Imazaquin	Image 70DG
Isoxaben	Gallery 75DF
MCPP	Mecomec 4
MCPP, 2,4-D + dicamba + MCPA and/or 2,4-D	Trimec Southern/3-Way Selective/Eliminate DG/33, others
Metribuzin	Sencor 75DF
Metolachlor	Pennant Magnum
Metsulfuron	Manor
MSMA	Daconate 6, Bueno 6, others
Napropamide	Devrinol 50DF, Ornamental Herbicide 2G
Oryzalin	Surflan AS
Oxadiazon	Ronstar 2G, 50WP
Pendimethalin	Pre-M, Pendulum, Southern Weedgrass
Proflam	Barricade 65WG, 4FL / ProClipse
Pronamide	Kerb 50WP
Quinclorac	Drive
Rimsulfuron	TranXit GTA
Sethoxydim	Vantage
Simazine	Princep Liquid, others
Sulfentrazone	Dismiss
Sulfentrazone + 2,4-D + MCPP + Dicamba	Surge Broadleaf Herbicide
Sulfometuron	Oust
Sulfosulfuron	Certainty
Triclopyr + clopyralid	Confront
Trifloxysulfuron	Monument