

**WEED CONTROL****COOL-SEASON***by Thomas Watschke, Penn State Univ.***Cool Season Herbicides**

Herbicide	Brand Name(s)	Company	Uses
<b>ammonium sulphamate</b>	Ammate	DuPont	Non-selective rights of way herbicide
<b>asulam</b>	Asulox	Rhone Poulenc	Post-emergence grassy weed control for turf and ornamentals
<b>atrazine</b>	Aatrex	Ciba Geigy	Non-selective control in non-crop areas.
<b>benefin</b>	Balan	Elanco	Pre-emergence control of annual grasses and broadleaf weeds in established turf.
<b>bensulide</b>	Betasan Pre-San Lescosan Betamec-4	ICI Sierra Lesco PBI Gordon	Pre-emergence control of annual grasses and broadleaf weeds in established turf and established flower gardens. Safe near tulip and daffodil bulbs.
<b>bentazon</b>	Basagran	BASF	Selective post-emergence control of nutsedge in warm-season turf.
<b>bromacil</b>	Hyvar	DuPont	Non-selective control of weeds and grasses on non-crop areas. Usually mixed with diuron for roadsides and rights-of-way.

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## Cool Season Herbicides (cont.)

Herbicide	Brand Name(s)	Company	Uses
<b>bromoxynil</b>	Buctril	Rhone Poulenc	Post-emergence control of broadleaf weeds in seedling turf, established turf and non-crop areas.
<b>cacodylic acid</b>	Phytar Rad-E-Cate	Vertac Vineland	Non-selective control for turf renovation, edging and in plant beds.
<b>chloramben</b>	Amiben	Rhone Poulenc	Pre-emergence control in ornamentals.
<b>chlorflurenol</b>	Maintain	Uniroyal	Growth regulator. Also controls broadleaf weeds and vines.
<b>copper</b>	Citrine-Plus	Applied Biochemists	Control algae, chara and hydrilla in potable water.
<b>dalapon</b>	Dalapon 85 Dowpon M	Fermenta Dow	Selective control of perennial and annual grasses in non-crop areas and ditchbanks.
<b>dazomet</b>	Mylone	Hopkins Ag.	Preplant sterilant for turf and ornamental beds.
<b>DCPA</b>	Dacthal	Fermenta	Pre-emergence control of annual grasses and broadleaf weeds in turf and ornamental beds.
<b>dicamba</b>	Banvel	Sandoz	Selective post-emergence control of broadleaf weeds in turf and for non-crop control of brush.
<b>dichlobenil</b>	Dyclomec	PBI Gordon	Selective weed control in ornamental beds and for total weed control on roadsides, fencerows, etc.
<b>dichlorprop</b>	2,4-DP	Rhone Poulenc	Brush control and aquatic weed control.

## Cool Season Herbicides (cont.)

Herbicide	Brand Name(s)	Company	Uses
diphenamid	Enide	Nor-Am, Upjohn	Selective control of annual grasses and broadleaf weeds in bermudagrass, dichondra and around ornamentals.
DSMA	Methar 30 DSMA Liquid DSMA 81% Weed-E-Rad	W.A. Cleary Drexel Vertac Vineland	Selective post-emergence control of sedges and grasses on turf and ditchbanks and storage yard.
diquat	Diquat	Valent	Aquatic weed control.
diuron	Karmex Dynex Diuron 80WP Urox	DuPont Vertac Drexel Hopkins	Generally used at high rates for non-selective total weed control in industrial sites:
endothall	Aquathol K Endothall	Pennwalt Pennwalt	Aquatic weed control and turf herbicide and dessicant.
EPTC	Eptam	ICI	Selective control of annual grassy weeds, nutgrass, and perennial weeds.
ethofumesate	Prograss	Nor-Am	For control of <i>Poa annua</i> and white clover in fairways.
fosamine	Kernite	DuPont	Brush control.
flurprimidol	Cutless	Elanco	Growth regulator that suppresses annual bluegrass.
fluazifop-butyl	Fusilade	ICI Americas	Selective post-emergence control of grassy weeds in ornamentals.
fluridone	Sonar	Elanco	Broad spectrum herbicide for submersed and emersed aquatic weeds.

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<b>glyphosate</b>	Rodeo	Monsanto	For control of emerged aquatic weeds and broad leaf weeds in or near aquatic sites, such as ditchbanks.
<b>glyphosate</b>	Roundup	Monsanto	Non-selective, short-term herbicide for turf renovation and total weed control along fences and plant beds.
<b>imazaquin</b>	Image	American Cyanamid	Experimental herbicide for turf
<b>imazapyr</b>	Arsenal	American Cyanamid	Broad spectrum systemic industrial herbicide
<b>linuron</b>	Lorox	DuPont	Short-term control of annual weeds in roadsides and fence rows.
<b>mefluidide</b>	Embark	PBI Gordon	Grown regulator that suppresses <i>Poa annua</i> .
<b>metham</b>	Vapam	ICI	Preplant soil fumigant killing weeds, weed seed, insects and fungi.
<b>methyl bromide</b>	Dowfume	Dow	Fumigant for pre-plant control. Also kills weed seed.
<b>metribuzin</b>	Sencor	Mobay	Post-emergence control of goosegrass in warm-season turf.
<b>MCPP</b>	MCPP Mecomec MCPP Chipco Turf Herbicide	Fermenta PBI Gordon WA Cleary Rhone Poulenc	Selective broadleaf weed control in turf. Often combined with other herbicides.

## Cool Season Herbicides (cont.)

Herbicide	Brand Name(s)	Company	Uses
<b>MSMA</b>	Daconatel Broadside Ansar Weed-Hoe	Fermenta Vertac Drexel Vineland	Post-emergence selective control of crabgrass and broadleaf weeds in turf. Also, grassy weed control in ditchbanks, roadsides, industrial areas.
<b>napropamide</b>	Devrinol	ICI	Selective control of weeds in ornamental beds and containers. Experimental combination with Betasan for season-long crabgrass control in turf.
<b>oryzalin</b>	Surflan	Elanco	Pre-emergence control of weeds in established ornamentals and warm-season turf.
<b>oxadiazon</b>	Ronstar	Rhone Poulenc	Pre-emergence control of weeds in ornamentals and turf.
<b>oxyfluorfen</b>	Goal	Rohm & Haas	Selective control of weeds in ornamentals.
<b>paraquat</b>	Paraquat	Valent	Non-selective control of weeds in rights-of-way, industrial areas and fencerows.
<b>pendimethalin</b>	Proturf Weedgrass Control Pre-M	Lesco	Pre-emergence turf herbicide for control of grassy and broadleaf weeds.
<b>picloram</b>	Tordon	Dow	Systemic, long-term killer of woody plants and broadleaf weeds.
<b>prometon</b>	Pramitol	Ciba Geigy	Non-selective herbicide with long residual for industrial weed control.

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Herbicide	Brand Name(s)	Company	Uses
pronamide	Kerb	Rohm & Haas	<i>Poa annua</i> control in warm-season grasses. Also weed and grass control around woody ornamentals and Christmas trees.
sethoxydim	Poast	BASF	Post-emergence control of grassy weeds around broadleaf ornamentals.
siduron	Tupersan	DuPont	Pre-emergence control of annual grasses in newly seeded turf areas.
simazine	Princep	Ciba Geigy	Selective control of annual grasses and broadleaf weeds in established bermudagrass. Also, used in industrial and aquatic weed control.
sulfometuron-methyl	Oust	DuPont	Non-selective industrial and selective in bermudagrass.
tebuthiuron	Spike	Elanco	Brush control and total vegetation control in non-crop areas.
trifluralin	Treflan	Elanco	Selective pre-emergence weed control in established ornamentals and under asphalt.
triclopyr	Garlon	Dow	Systemic control of woody plants in rights-of-way and industrial sites.
2,4-D	2,4-D	Dow Fermenta Rhone Poulenc Vertac	Selective control of weeds in turf and numerous other areas. Usually mixed with other herbicides.
Vorlex	Vorlex	Nor-Am	Preplant fumigant. Broadleaf weed control in established turf.