

Table 5. Basic fungicides labeled for management of turfgrass diseases. (Compiled by Barb Corwin and Kyle Briscoe)

FRAC code ¹ Group name Chemical group Common name Topical mode of action ² Relative risk of resistance Selected registrant(s) Selected trade name(s)							FUNGUS CLASSIFICATION ➡		Ascomycetes								Basidiomycetes								Imperfects					Oomycetes				Other		
									dead spot	dollar spot	necrotic ring spot	powdery mildew	spring dead spot	summer patch	take-all patch	Rhizoctonia			fairy ring	gray snow mold	pink patch	red thread	rust	smut	anthracnose	copper spot	gray leaf spot	Helminthosporium leaf spots	Microdochium patch	Pythium blight	Pythium root rot	Pythium seedling blight	yellow tuft	algae	seedling blight	slime mold
																brown patch	large patch	yellow patch																		
1	Methyl benzimidazole carbamate (MBC)							●	●	●	●	●	●		●	●	●			●	●		●													
	thiophanates thiophanate methyl XMS H The Andersons, Cleary Fungo Flo, Cleary 3336 Plus																																			
2	Dicarboximide								●	●					●		●					●	●													
	iprodione LS M Bayer Chipco 26 GT								●						●		●					●	●													
	vinclozolin LS M BASF Curalan								●						●		●					●	●													
3	Demethylation inhibitors (DMI)																																			
	pyrimidines fenarimol XMS M Gowan Rubigan								●	●	●	●	●	●		●			●		●															
	triazoles myclobutanil XMS M Dow AgroSciences Eagle								●	●	●	●	●	●		●	●			●	●		●	●												
	propiconazole XMS M Syngenta Banner Maxx								●	●	●	●	●	●		●	●	●		●	●	●	●													
	triadimefon XMS M Bayer Bayleton								●	●	●	●	●	●		●	●	●	●	●	●	●	●													
4	Phenylamide																																			
	acylalalines mefenoxam XMS H Syngenta Subdue Maxx																									●		●	●							
7	Carboxamide																																			
	boscalid XMS M BASF Emerald							●	●																											
	flutolanil XMS M Bayer Prostar														●	●	●	●	●	●	●															
11	Quinone outside inhibitor (QoI)																																			
	methoxy-acrylates azoxystrobin XMS H Syngenta Heritage										●	●	●	●	●	●	●	●	●			●		●	●		●	●								
	fluoxastrobin XMS H Arysta Disarm											●		●	●	●	●	●			●		●	●		●	●									
	methoxy-carbamates pyraclostrobin LS H BASF Insignia							●	●		●		●	●	●	●	●	●			●		●	●		●										
	oximino acetates trifloxystrobin LS H Bayer Compass												●		●	●	●	●			●		●	●												
12	Phenylpyrrole																																			
	fludioxonil C M Syngenta Medallion							●					●		●		●					●	●	●												
14	Aromatic hydrocarbon																																			
	chloroneb C L-NS The Andersons, PBI Gordon Proturf Fungicide II, Teremec SP															●										●										
	PCNB (quintozene) C L-NS Crompton Turfcide								●							●							●	●												
	1,2,4-thiadiazoles etridiazole C NS The Andersons Koban																								●	●	●									
19	Polyoxin																																			
	peptidyl pyrimidine nucleoside polyoxin D LS M Cleary Endorse															●	●	●	●	●		●		●	●											
28	Carbamate																																			
	propamocarb LS M Bayer Banol																									●		●								
33	Phosphonate																																			
	phophorous acid PMS L Cleary Alude																									●		●								
	ethyl phosphonates fosetyl-AI PMS L Bayer Chipco Signature																								●	●		●								
M	M3																																			
	dithio-carbamate mancozeb C NS Dow AgroSciences Fore								●							●		●				●	●			●							●		●	
	thiram C NS Cleary Spotrete								●										●				●	●												
M	M4																																			
	phthalimides captan C NS Drexel Captan															●							●										●			
M	M5																																			
	chloronitriles chlorothalonil C NS Syngenta Daconil								●							●		●		●		●	●									●				

Comments: ¹ Numbers or letters assigned by the Fungicide Resistance Action Committee (FRAC). Fungicides with the same FRAC code have the same or similar mode of action. For a complete FRAC code list: <http://frac.info>

²Classification of topical mode of action and relative risk of resistance from Paul Vincelli, University of Kentucky.
C = contact, LS = locally systemic, XMS = xylem-mobile systemic, PMS = phloem-mobile systemic
H = high, M = medium, L = low, NS = not significant

Disclaimer: All product information in this table is presented with the understanding that no endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

University of Missouri Extension is an equal opportunity ADA institution.