

Modes of action of herbicides for *Poa annua* control

MOA	Pre-emergence			Post-emergence								
	Mitotic	Cellulose biosynthesis	PPO	Dormant or non-dormant turf			Dormant turf only					
Common names	Trade name examples	Year 1	Year 2	Year 3	PSII	ALS*	Mitotic	EPSPS	Glutamine synthase	PSI	PSII	PPO
prodiamine, dithiopyr	Barricade, Dimension + others				simazine	sulfonyl-ureas	pronamide	glyphosate	glufosinate	diquat	amicarbazone	flumioxazin
					Princep + others	*	Kerb, Pronamide	Roundup Pro + others	Finale	Reward + others	Xonerate	SureGuard
					X							
					X							
					X							

*ALS (acetolactate synthase)-inhibiting herbicide examples with activity on *Poa annua* include Katana (flazasulfuron), Revolver (foramsulfuron), TranXit (rimsulfuron), Certainty (sulfosulfuron) and Monument (trifloxysulfuron).

Abbreviations: MOA = mode of action; PPO = protoporphyrinogen oxidase (aka, protox); PSI = photosystem I; PSII = photosystem II; EPSPS = enolpyruvylshikimate-phosphate synthase.

Table 1. Cross-listing of herbicides based on their modes of action used in non-overseeded bermudagrass and zoysiagrass fairways and roughs for *Poa annua* control. As discussed in the text, we recommend combining herbicides with at least three modes of action and then rotating them on a three-year basis. Empty boxes indicate the herbicide(s) chosen for each year during a three-year rotation. The Xs in column 5 indicate that simazine should be used annually.