

ETQ Kentucky Bluegrass Fall Mitigation in Golf Course and Commercial Turf

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Background/Objective: Enhanced Turf Quality (ETQ) Kentucky bluegrass is being evaluated for commercial and golf course turf to replace current Kentucky bluegrasses. If commercialized, ETQ Kentucky bluegrass may become a weed in non-glyphosate resistance stands. Therefore, our objective is to evaluate herbicides for postemergence control of ETQ Kentucky bluegrass in late summer and fall applications.

Site Information

Location:	William H. Daniel Research and Diagnostic Center
Turfgrass Species:	Kentucky bluegrass blend
Turf Condition:	good
Turf Management:	Mowing Height in: 2.5
	Fertilization: 1 lb N/M/YR
	Irrigation: To prevent moisture stress
Target Pest:	<i>Poa pratensis</i> (Kentucky bluegrass)
Growth Stage:	mature

Application Information

Application Dates: in 2005	25 Aug	20 Sept	19 Oct
Spray Volume gal 1000 ft⁻²:	2		
Spray Equipment:	CO ₂ backpack		
Experimental Design:	Randomized complete block		
Replications:	3		
Plot Size ft:	5 X 5		

Results:

- Results from this study were very similar to the spring-early summer study, please refer to that report for more discussion.
- Two Fusilade applications followed by Envoy provided 100% control by late December, much better control than either two Fusilade or Envoy applications (Table 1).
- Two applications of RoundupPro provided 99% control by December.
- Two applications of Monument provided 99% control by December.

Table 1. Control^a of Kentucky bluegrass from spring applications of selective or non-selective herbicides.

Treatment	Rate of application	8 Sept	20 Sept	19 Oct	29 Dec
	lb ai /A				
Roundup Pro 3#ae	1.5 ^b	80.0	93.3	97.7	91.7
Roundup Pro 3#ae ^e	1.5 ^b	75.0	91.7	100.0	99.3
Roundup Pro 3#ae	1.5 ^b				
Fusilade II 2L ^{ce}	0.38	5.0	51.7	91.7	33.3
Fusilade II 2L ^c	0.38				
Envoy 0.94EC ^{ce}	0.25	13.3	63.3	97.7	58.3
Envoy 0.94EC ^c	0.25				
Fusilade II 2L ^{ce}	0.38	8.3	30.0	90.0	100.0
Fusilade II 2L ^c	0.38				
Envoy 0.94EC ^c	0.25				
Vantage 1EC ^{ce}	0.47	6.7	30.0	73.3	5.0
Vantage 1EC ^c	0.47				
Revolver 0.19SC	0.03	11.7	20.0	0.0	0.0
Revolver 0.19SC ^e	0.03	6.7	28.3	86.7	71.7
Revolver 0.19SC	0.03				
Monument 75WG ^d	0.03	16.7	56.7	71.7	45.0
Monument 75WG ^{de}	0.03	15.0	43.3	97.3	99.0
Monument 75WG ^d	0.03				
Finale 1SL	1.5	70.0	38.3	1.7	1.7
Finale 1SL ^e	1	48.3	25.0	80.0	10.0
Finale 1SL	1				
Reward 2EC ^{de}	1	10.0	8.3	0.0	3.3
Reward 2EC ^d	1				
Tranxit 25DF ^d	0.03	13.3	46.7	26.7	8.3
Tranxit 25DF ^{de}	0.03	6.7	40.0	90.0	56.7
Tranxit 25DF ^d	0.03				
Check		0.0	0.0	0.0	0.0
LSD (0.05)		10.9	32.7	20.1	33.6

^a Control was rated on a scale of 0 to 100 where 0 = no control and 100 = complete control.

^b Rate of application was pounds ae per acre.

^c Treatment included crop oil concentrate at 1 percent volume per volume.

^d Treatment included non ionic surfactant at 0.25 percent volume per volume.

^e Treatments had four week split application with the first split being applied 20 Sept and the second split application being applied 19 Oct.