

Certainty or Velocity to control seedling *Poa trivialis* in seedling creeping bentgrass: Fall 2008

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Background/Objective: To evaluate various rates and application timings of Velocity and Certainty on control of seedling *Poa trivialis* and safety on seedling creeping bentgrass.

Site Information

Location:	William H. Daniel Research and Diagnostic Center
Soil Type:	Starks-Fincastle silt loam
Soil pH:	7.2
Turfgrass Species:	Creeping bentgrass and Rough bluegrass
Turf Condition:	seedling
Turf Management:	Mowing Height (in): 0.5
	Fertilization: 0.5 lb N (starter fertilizer, 2 apps)
	Irrigation: To prevent moisture stress
Testing on Site Previous Year:	none
Target Pest:	Rough bluegrass
Growth Stage:	Seedling

Application Information

Application Date:	26 Aug (08)	2 Sep	9 Sep	16 Sep
Application Time:	3:30 p.m.	1:30 p.m.	1:30 p.m.	12:30 p.m.
Air Temperature (F°):	76	87	68	69
Relative Humidity(%):	48	68	60	66
Wind Speed (mph):	6.0	2.0	2.0	5.0
Soil Temperature(3.0 in depth) (F°):	82	85	70	70
Soil Moisture:	moist	moist	moist	moist
Spray Volume (gal 1000 ft⁻²):	1			
Spray Pressure:	30psi			
Spray Nozzle:	8001			
Spray Equipment:	CO ₂ backpack			
Irrigation After Application:	None			
Experimental Design:	Randomized complete block			
Replications:	3			
Plot Size (ft):	3.3 X 3.3			

This study was designed as a 2 X 5 X 4 factorial with two herbicides (Certainty and Velocity) applied at five rates each, on 4 dates after emergence (1, 2, 3 and 4 weeks after emergence – WAE). Separate but adjacent studies were used for 'Laser' *Poa trivialis* and 'L93' creeping bentgrass.

Results:

- Rough bluegrass control was more effective in 2008 v/s 2007 with both herbicides, particularly when applied 3 or 4WAE. However, a corresponding reduction in creeping bentgrass safety was not observed in 2008.
- Velocity applied one WAE provided adequate control of *Poa trivialis* (especially at the higher rates) while producing minimal to no damage to creeping bentgrass (Figure 1).
- Though Certainty provided excellent control of *Poa trivialis* when applied one WAE, it damaged creeping bentgrass significantly. Certainty applied at three or four WAE was much safer on creeping bentgrass while still providing acceptable control of *Poa trivialis* (Figure 1).

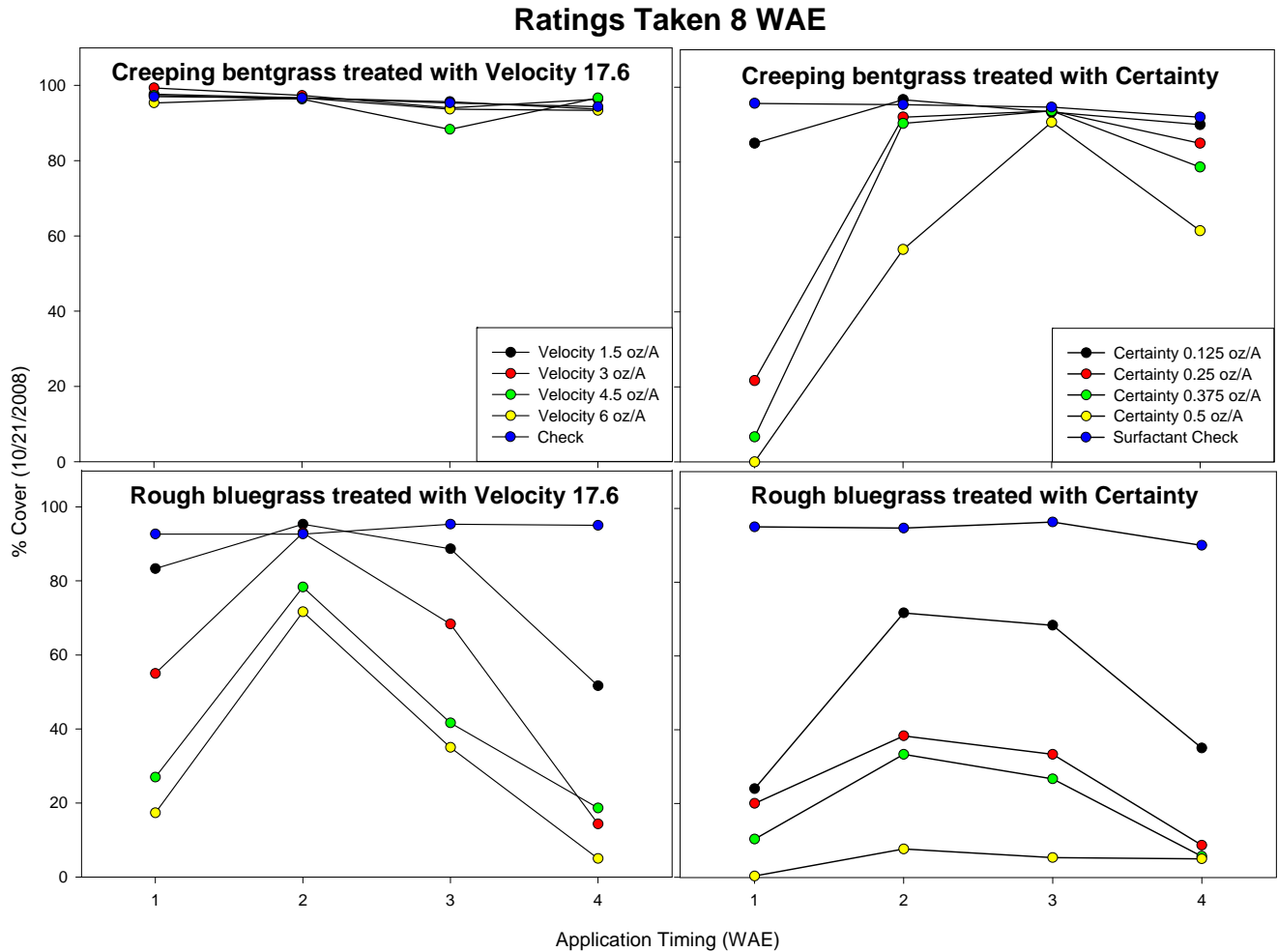


Figure 2. Effect of Velocity 17.6 or Certainty when applied to stands of seedling *Poa trivialis* or creeping bentgrass in Fall 2008 at various times after emergence. Data presented were collected 8 weeks after emergence on 10/21/2008.