

## Certainty or Velocity to control seedling *Poa trivialis* in seedling creeping bentgrass: Spring 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

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

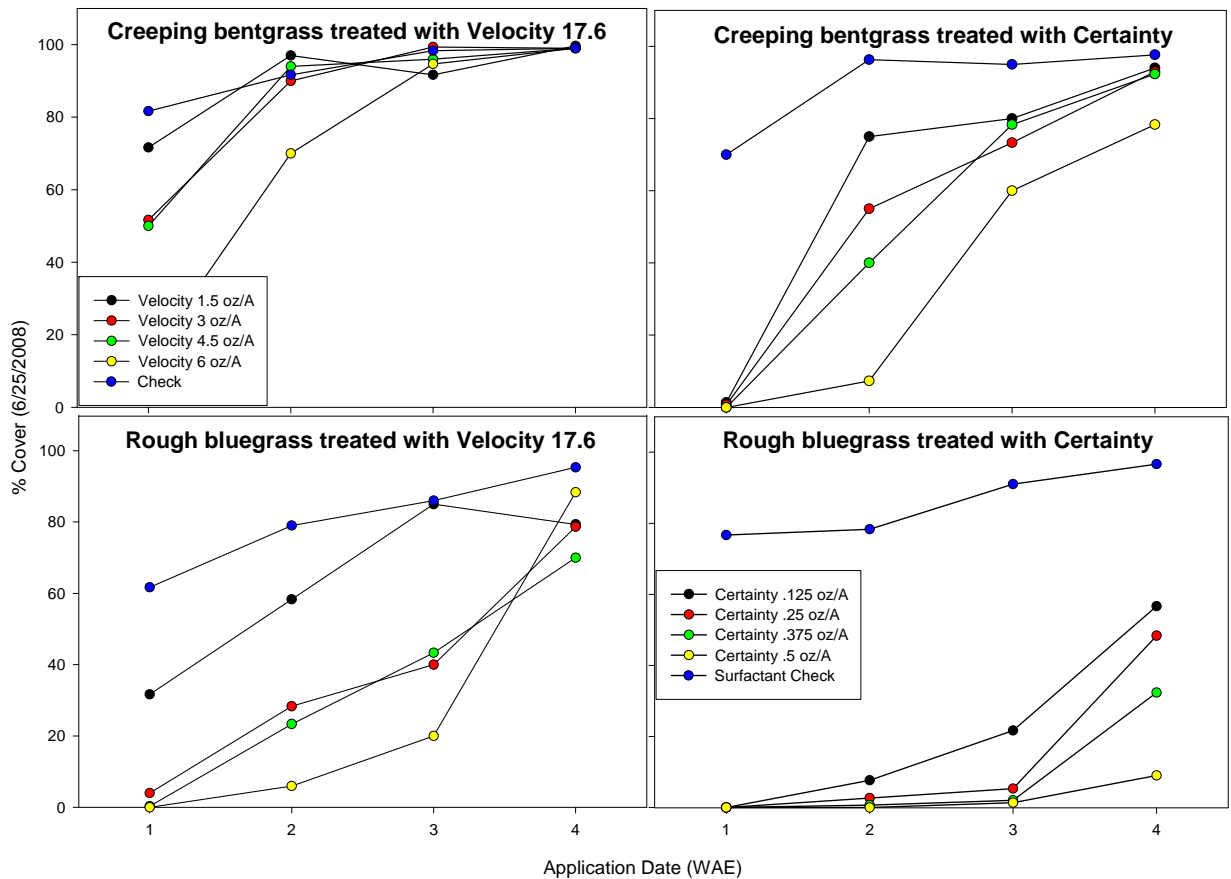
### Application Information

<b>Application Date:</b>	29 May (08)
<b>Application Time:</b>	7:30 a.m.
<b>Air Temperature (F°):</b>	72
<b>Relative Humidity(%):</b>	33
<b>Wind Speed (mph):</b>	0.8
<b>Soil Temperature(3.0 in depth) (F°):</b>	65
<b>Soil Moisture:</b>	moist
<b>Spray Volume (gal 1000 ft<sup>-2</sup>):</b>	1
<b>Spray Pressure:</b>	30psi
<b>Spray Nozzle:</b>	8001
<b>Spray Equipment:</b>	CO <sub>2</sub> backpack
<b>Irrigation After Application:</b>	None
<b>Experimental Design:</b>	Randomized complete block
<b>Replications:</b>	3
<b>Plot Size (ft):</b>	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 conducted on ‘Laser’ *Poa trivialis* and ‘L93’ creeping bentgrass. Seeding dates were staggered to allow for a single herbicide application date.

**Results:**

- Spring 2008 results closely resembled spring 2007 results.
- Velocity applied 1WAE was more injurious to creeping bentgrass in 2008 than 2007, however, when applied 2WAE Velocity was equally safe in both years.
- Velocity applied 1 to 3WAE provided excellent 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 1 to 3WAE, it also damaged creeping bentgrass significantly. Certainty applied 4WAE was much safer on creeping bentgrass while still providing acceptable control of *Poa trivialis*.



**Figure 1.** Effect of Velocity 17.6 or Certainty when applied to stands of seedling *Poa trivialis* or creeping bentgrass in spring 2008 at various times after emergence. Seeding dates were staggered to allow all applications on one date and data presented were taken four weeks after application on 6/25/2008.