

**Tenacity safety on *Poa trivialis***  
*Zac Reicher and Dan Weisenberger*  
*Dept. of Agronomy*  
*Purdue University*  
*West Lafayette, IN*  
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**Background/Objective:** See if Tenacity could be used safely on *Poa trivialis*

**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>	"Lazer" <i>Poa trivialis</i>
<b>Turf Condition:</b>	good
<b>Turf Management:</b>	<b>Mowing Height cm (in):</b> 1.25 (0.5)
	<b>Fertilization:</b>
	<b>Irrigation:</b> To prevent moisture stress
<b>Testing on Site Previous Year:</b>	none
<b>Target Pest:</b>	injury
<b>Growth Stage:</b>	na

**Application Information**

<b>Application Date:</b>	20 Oct	25 Oct	1 Nov
<b>Application Time:</b>	9:30	2:00	11:00
<b>Air Temperature C<sup>o</sup>(F<sup>o</sup>):</b>	6.4 (44)	11.2 (52)	8.5 (47)
<b>Relative Humidity(%):</b>	60	38	36
<b>Wind Speed m s<sup>-1</sup> (mph):</b>	1.3 (3)	0.9 (2)	1.3 (3)
<b>Soil Temperature(7.6 cm depth) C<sup>o</sup>(F<sup>o</sup>):</b>	6.1 (43)	7.8 (46)	6.7 (44)
<b>Soil Moisture:</b>	moist	moist	moist
<b>Spray Volume L ha<sup>-1</sup> (gal 1000 ft<sup>-2</sup>):</b>	814 (2)		
<b>Spray Pressure:</b>	30psi		
<b>Spray Nozzle:</b>	8001.5		
<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 m (ft):</b>	1.5 X 1.5 (5 X 5)		

**Results:**

- Single applications of Tenacity caused little damage to *Poa trivialis* (Table 1).
- Three applications of Tenacity caused significant injury and thinning by December, especially at 0.15 lbs ai/A.
- However, only three applications at 0.15 lbs ai/A caused long-term thinning of the *Poa trivialis*.
- Assuming three applications of tenacity will be required for creeping bentgrass or maybe *Poa annua* control, Tenacity does not appear to be useful on a *Poa trivialis* stand.

**Table 1.** Injury<sup>a</sup> and % cover<sup>b</sup> of Lazer *Poa trivialis* after fall applications of Tenacity.

Treatment <sup>c</sup>	Rate of application	10 Nov	17 Nov	22 Nov	15 Dec	1 April
	lb ai/A					
Tenacity 4SC	0.025	9.0	9.0	9.0	98.3	98.3
Barricade 65WG <sup>d</sup>	0.38					
Tenacity 4SC	0.05	8.7	8.7	8.7	98.3	98.3
Barricade 65WG <sup>d</sup>	0.38					
Tenacity 4SC	0.1	7.0	8.0	6.0	98.3	98.7
Barricade 65WG <sup>d</sup>	0.38					
Tenacity 4SC	0.15	6.7	7.7	8.0	98.3	98.7
Barricade 65WG <sup>d</sup>	0.38					
Tenacity 4SC <sup>e</sup>	0.05	6.3	5.3	5.3	93.7	98.3
Tenacity 4SC	0.05					
Tenacity 4SC	0.05					
Tenacity 4SC <sup>e</sup>	0.1	4.3	3.7	3.0	76.7	97.3
Tenacity 4SC	0.1					
Tenacity 4SC	0.1					
Tenacity 4SC <sup>e</sup>	0.15	2.3	2.3	2.0	23.3	90.0
Tenacity 4SC	0.15					
Tenacity 4SC	0.15					
Check		9.0	9.0	9.0	98.7	99.0
LSD (0.05)		1.2	1.0	2.7	9.6	3.3

<sup>a</sup> Injury was rated on a scale of 1 to 9 where 1 = totally white/brown tissue, 7 = acceptable damage, and 9 = no injury

<sup>b</sup> Percent of the plot area covered by *Poa trivialis*

<sup>c</sup> All treatments included a non-ionic surfactant at 0.25% v/v

<sup>d</sup> Applied as a tank mix 20 Oct

<sup>e</sup> Split applications 20, Oct, 25 Oct, and 1 Nov