

## Safety of Lontrel on Fairway Creeping Bentgrass

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**Background/Objective:** To determine Lontrel's turf safety in creeping bentgrass fairways.

### Site Information

<b>Location:</b>	Kampen Golf Course, Purdue University W. Lafayette, IN.
<b>Soil Type:</b>	Starks-Fincastle silt loam
<b>Soil pH:</b>	7.2
<b>Soil Organic Matter (%):</b>	NA
<b>Turfgrass Species:</b>	Creeping bentgrass
<b>Turf Condition:</b>	Good
<b>Turf Management: Mowing Height cm (in):</b>	0.95 (3/8")
<b>Fertilization:</b>	2.5 lbs N/1000 ft <sup>2</sup> /yr
<b>Irrigation:</b>	To prevent moisture stress
<b>Testing on Site Previous Year:</b>	None
<b>Target Pest:</b>	NA
<b>Growth Stage:</b>	NA

### Application Information

<b>Application Date:</b>	24 July
<b>Application Time:</b>	10:00 AM
<b>Air Temperature C<sup>0</sup>(F<sup>0</sup>):</b>	31.7 (89)
<b>Relative Humidity(%):</b>	63
<b>Wind Speed m s<sup>-1</sup> (mph):</b>	0.4-0.9 (1-2)
<b>Soil Temperature(7.6 cm depth) C<sup>0</sup>(F<sup>0</sup>):</b>	26.7 (80)
<b>Soil Moisture:</b>	Moist
<b>Spray Volume L ha<sup>-1</sup> (gal 1000 ft<sup>-2</sup>):</b>	814 (2)
<b>Spray Pressure:</b>	35psi
<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>	4
<b>Plot Size m (ft):</b>	1.5 X 1.5 (5 X 5)

## Results

Though no significant clover populations were present on this site, all treatments have been shown to control white clover in earlier reports. Confront at 2.0 pints/A and Drive produced unacceptable phytotoxicity within four days of application, while Confront at 1.0 pint/A and Trimec Bent caused noticeable phytotoxicity (Table 1). Confront at 2.0 pints/A caused the most phytotoxicity lasting until 8 Aug (2 weeks after treatment), but no treatment caused lasting phytotoxicity or thinning to creeping bentgrass. Lontrel was extremely safe to creeping bentgrass in this study.

**Table 1.** Phytotoxicity of clover controlling herbicides on fairway height creeping bentgrass.

Treatment	Rate of application	28 July	2 Aug	8 Aug	23 Aug	7 Sept
Lontrel T&O 3SL	0.5 <sup>b</sup>	9.0 <sup>a</sup>	9.0	9.0	9.0	9.0
Lontrel T&O 3SL	1.0 <sup>b</sup>	9.0	9.0	8.8	9.0	9.0
Confront 3SL	1.0 <sup>b</sup>	7.0	7.0	7.8	9.0	9.0
Confront 3SL	2.0 <sup>b</sup>	6.0	5.8	6.0	9.0	9.0
Trimec Bent	3.0 <sup>b</sup>	8.0	7.8	8.0	9.0	9.0
Trimec Bent	4.0 <sup>b</sup>	7.8	7.3	8.0	9.0	9.0
Drive 75DF + MSO	1.0 <sup>c</sup>	6.5	6.5	7.8	9.0	9.0
Check	---	9.0	9.0	8.8	9.0	9.0
LSD (0.05)		0.6	0.7	0.7	NS	NS

<sup>a</sup> Phytotoxicity was rated on a scale of 1 to 9, with 1 = completely brown turf, 7 = acceptable damage, and 9 = no phytotoxicity.

<sup>b</sup> Application rate is pints/A.

<sup>c</sup> Application rate is lbs/A.

<sup>d</sup> Application rate is percent volume per volume.