Safety of Lontrel on Fairway Creeping Bentgrass
Zac Reicher and Dan Weisenberger

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

Site Information
- Location: Kampen Golf Course, Purdue University W. Lafayette, IN.
- Soil Type: Starks-Fincastle silt loam
- Soil pH: 7.2
- Soil Organic Matter (%): NA
- Turfgrass Species: Creeping bentgrass
- Turf Condition: Good
- Turf Management: Mowing Height cm (in): 0.95 (3/8”)
- Fertilization: 2.5 lbs N/1000 ft²/yr
- Irrigation: To prevent moisture stress
- Testing on Site Previous Year: None
- Target Pest: NA
- Growth Stage: NA

Application Information
- Application Date: 24 July
- Application Time: 10:00 AM
- Air Temperature °C (°F): 31.7 (89)
- Relative Humidity (%): 63
- Wind Speed m s⁻¹ (mph): 0.4-0.9 (1-2)
- Soil Temperature(7.6 cm depth) °C (°F): 26.7 (80)
- Soil Moisture: Moist
- Spray Volume L ha⁻¹ (gal 1000 ft²): 814 (2)
- Spray Pressure: 35psi
- Spray Nozzle: 8001.5
- Spray Equipment: CO₂ backpack
- Irrigation After Application: None
- Experimental Design: Randomized complete block
- Replications: 4
- Plot Size m (ft): 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.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Rate of application</th>
<th>28 July</th>
<th>2 Aug</th>
<th>8 Aug</th>
<th>23 Aug</th>
<th>7 Sept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lontrel T&amp;O 3SL</td>
<td>0.5&lt;sup&gt;b&lt;/sup&gt;</td>
<td>9.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
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<tr>
<td>Lontrel T&amp;O 3SL</td>
<td>1.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>9.0</td>
<td>9.0</td>
<td>8.8</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Confront 3SL</td>
<td>1.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>7.0</td>
<td>7.0</td>
<td>7.8</td>
<td>9.0</td>
<td>9.0</td>
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<tr>
<td>Confront 3SL</td>
<td>2.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>6.0</td>
<td>5.8</td>
<td>6.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Trimec Bent</td>
<td>3.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>8.0</td>
<td>7.8</td>
<td>8.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Trimec Bent</td>
<td>4.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>7.8</td>
<td>7.3</td>
<td>8.0</td>
<td>9.0</td>
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</tr>
<tr>
<td>Drive 75DF</td>
<td>1.0&lt;sup&gt;c&lt;/sup&gt;</td>
<td>6.5</td>
<td>6.5</td>
<td>7.8</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>+ MSO</td>
<td>1.0&lt;sup&gt;d&lt;/sup&gt;</td>
<td>---</td>
<td></td>
<td>9.0</td>
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<tr>
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<td>9.0</td>
<td>9.0</td>
<td>8.8</td>
<td>9.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

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.