Turfgrass Disease Management Report 1988-89

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Snow Mold Fungicide Trial - 1988-89

Boyne Highlands Resort, Harbor Springs, MI

The 1988-89 snow mold fungicide studies were conducted at the Boyne Highlands Resort in Harbor Springs, MI on an irrigated Penncross (Agrostis palustris)/annual bluegrass (Poa annua) fairway which was mowed at ½" height of cut. Treatments were applied preventively to 6' x 9' plots in three replications of a random block design on November 2, 1988. Liquid applications were made with a CO₂ small-plot sprayer at 30 PSI and 48 gal/A (except as noted on data table). Granular treatments were pre-weighed and applied by hand.

The plots were rated as soon as the snow cover melted off on April 5, 1989.

Several commercially available fungicides once again managed snow mold in northern Michigan (Table 1). They included Calo-clor, Calo-gran, Scotts FF II, and Daconil 2787 + Chipco 26019. Terrachlor 50 DF, Terrachlor 75 WP, and Chipco 26019 also worked this season, but we have experienced erratic results with these fungicides over the years. It would appear the mercury fungicides will face a tough time in the up-coming EPA re-registration hearings. This may be a good time to start experimenting with alternative fungicides for snow mold management in case cancellation of the mercury fungicide does occur.

No phytotoxicity was observed at the time of the rating.

Kentucky Bluegrass Melting-Out Fungicide Study - 1989

Hancock Turfgrass Research Center

The 1989 melting-out (Dreschlera poae) fungicide trial was conducted at the Hancock Turfgrass Research Center on the MSU campus in E. Lansing, Mi, on irrigated Kenblue Kentucky bluegrass (Poa pratensis) turf maintained at 1½" height of cut. The study was set up in three replications of a random block design with a 3'x6' plot size. All treatments were applied with a CO₂ small-plot sprayer at 30 PSI and a volume of 48 gal/A. The plot area was fertilized dormantly in late 1988 (1 lb. N/1000 ft²) and at the rate of ½ lb. N/1000 ft² on 5/15 (except as noted on data table).
Table 1. Boyne Highlands Snow Mold Trial - 1988-89
Percent plot area diseased with gray snow mold (*Typhula incarnata*)
Rating date - 4/5/89

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Rate/1000 ft²</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>AVE</th>
<th>DMR (.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terraclor 50 DF</td>
<td>1.5 lb</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>A</td>
</tr>
<tr>
<td>RH-3486</td>
<td>1 oz ai</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>A</td>
</tr>
<tr>
<td>RH-3486</td>
<td>1.5 oz ai</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>A</td>
</tr>
<tr>
<td>Calo-clor</td>
<td>3 oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>A</td>
</tr>
<tr>
<td>Terraclor 75W</td>
<td>1 lb</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>0.2</td>
<td>A</td>
</tr>
<tr>
<td>Calo-clor + Fert (18-5-9)</td>
<td>3 oz + 1 lb N</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.3</td>
<td>A</td>
</tr>
<tr>
<td>Ch 26019 (F) + Dae 2787</td>
<td>8 fl oz + 8fl oz</td>
<td>2</td>
<td>0</td>
<td>0.5</td>
<td>0.8</td>
<td>A</td>
</tr>
<tr>
<td>CGA-169374 (EC)</td>
<td>16 gm ai</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>Scotts FF II</td>
<td>2X</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>Calo-gran</td>
<td>6 lbs</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>Scotts FF II</td>
<td>1X</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1.3</td>
<td>A</td>
</tr>
<tr>
<td>RH-3486</td>
<td>.75 oz ai</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>2.0</td>
<td>A</td>
</tr>
<tr>
<td>Dae 2787 + Ch 26019 (F)</td>
<td>8 fl oz + 2fl oz</td>
<td>2</td>
<td>0</td>
<td>0.5</td>
<td>2.3</td>
<td>A</td>
</tr>
<tr>
<td>Ch 26019 (F)</td>
<td>12 fl oz</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>3.0</td>
<td>A</td>
</tr>
<tr>
<td>ICIA 523 + X-77</td>
<td>8 gm ai + 0.5%v/v</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>3.7</td>
<td>AB</td>
</tr>
<tr>
<td>Dae 2787 + T1991</td>
<td>8 fl oz + 2 oz</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>4.3</td>
<td>ABC</td>
</tr>
<tr>
<td>S-2385</td>
<td>1X</td>
<td>2</td>
<td>20</td>
<td>0</td>
<td>7.3</td>
<td>ABCD</td>
</tr>
<tr>
<td>S-2385</td>
<td>2X</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>7.3</td>
<td>ABCD</td>
</tr>
<tr>
<td>Dae 2787 + T1991 + Calo-clor</td>
<td>4 fl oz + 1 oz + 1 oz</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>7.3</td>
</tr>
<tr>
<td>Spotless</td>
<td>.25 lb ai/A</td>
<td>3</td>
<td>4</td>
<td>20</td>
<td>9.0</td>
<td>ABCD</td>
</tr>
<tr>
<td>PMAS</td>
<td>2 fl oz</td>
<td>20</td>
<td>0</td>
<td>10</td>
<td>10.0</td>
<td>ABCD</td>
</tr>
<tr>
<td>G696</td>
<td>1 lb</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>10.0</td>
<td>ABCD</td>
</tr>
<tr>
<td>Spotless</td>
<td>1 lb ai/A</td>
<td>5</td>
<td>10</td>
<td>25</td>
<td>13.3</td>
<td>ABCD</td>
</tr>
<tr>
<td>Spotless</td>
<td>.125 lb ai/A</td>
<td>20</td>
<td>20</td>
<td>0.5</td>
<td>13.5</td>
<td>ABCD</td>
</tr>
<tr>
<td>Spotless</td>
<td>0.5 lb ai/A</td>
<td>2</td>
<td>7</td>
<td>35</td>
<td>14.7</td>
<td>ABCD</td>
</tr>
<tr>
<td>CGA-169374 (EC)</td>
<td>8 gm ai</td>
<td>15</td>
<td>6</td>
<td>25</td>
<td>15.3</td>
<td>ABCD</td>
</tr>
<tr>
<td>G 696</td>
<td>2 lb</td>
<td>0</td>
<td>3</td>
<td>45</td>
<td>16.0</td>
<td>ABCD</td>
</tr>
<tr>
<td>G 696</td>
<td>lb</td>
<td>13</td>
<td>25</td>
<td>40</td>
<td>26.0</td>
<td>ABCD</td>
</tr>
<tr>
<td>Terraguard</td>
<td>4 oz</td>
<td>0</td>
<td>30</td>
<td>50</td>
<td>26.7</td>
<td>ABCD</td>
</tr>
<tr>
<td>CGA 169374 (G)</td>
<td>8 gm ai</td>
<td>20</td>
<td>10</td>
<td>50</td>
<td>26.7</td>
<td>ABCD</td>
</tr>
<tr>
<td>Treatment</td>
<td>Volume</td>
<td>Rate 1</td>
<td>Rate 2</td>
<td>Rate 3</td>
<td>Rate 4</td>
<td>Letter</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Terraguard</td>
<td>8 oz</td>
<td>10</td>
<td>10</td>
<td>75</td>
<td>31.7</td>
<td>BCD</td>
</tr>
<tr>
<td>Fore</td>
<td>6.4 oz ai</td>
<td>20</td>
<td>16</td>
<td>61</td>
<td>32.3</td>
<td>CD</td>
</tr>
<tr>
<td>EXP10002B</td>
<td>0.2 fl oz</td>
<td>5</td>
<td>5</td>
<td>95</td>
<td>35.0</td>
<td>D</td>
</tr>
<tr>
<td>Banner</td>
<td>16 gm ai</td>
<td>20</td>
<td>25</td>
<td>60</td>
<td>35.0</td>
<td>D</td>
</tr>
<tr>
<td>Control</td>
<td>---</td>
<td>65</td>
<td>30</td>
<td>95</td>
<td>63.3</td>
<td>E</td>
</tr>
</tbody>
</table>

*Treatments followed by the same letter are not significantly different at the 5% level.

* Rates listed are formulation unless listed as active ingredient (ai).