University of GA Coop Ext Service

Efficacy of Flazasulfuron for Field Madder Control in Common Bermudagrass.

Trial ID: TURF2-05  Study Director: Bill Nutt
Location: GA-Station, Ellis Rd.  Investigator: Tim R Murphy

General Trial Information

Study Director: Bill Nutt  Title: ARC I
Affiliation: UGA-CAES  E-mail: bnutt@griffin.uga.edu
Investigator: Tim R Murphy  Title: Weed Scientist
Affiliation: UGA-CAES  E-mail: tmurphy@uga.edu

Trial Location

City: Griffin  Trial Status: ONE-YEAR/FINAL
State/Prov.: GA  Initiation Date: 1-25-05
Completion Date: 4-18-05

Objectives: Evaluate flazasulfuron for control of field madder.

Cooperator/Landowner

Cooperator: Mel Grove  Organization: ISK BioSciences

Crop Description

Crop 1: CYNDA Cynodon dactylon Bermudagrass  Variety: Common

Pest Description

Pest 1 Type: W  Code: SHRAR Sherardia arvensis  Common Name: Field madder
Pest 2 Type: W  Code: CERGL Cerastium glomeratum  Common Name: Chickweed, sticky

Site and Design

Plot Width, Unit: 6 FT  Site Type: Simulated home lawn
Plot Length, Unit: 10 FT
Replications: 4  Study Design: Randomized Complete Block
Field Prep./Maintenance: Site mowed at 2.0 inches.

Application Description

<table>
<thead>
<tr>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Date: 1-25-05</td>
</tr>
<tr>
<td>Time of Day: 1:45 pm</td>
</tr>
<tr>
<td>Application Method: Broadcast</td>
</tr>
<tr>
<td>Application Timing: Post</td>
</tr>
<tr>
<td>Application Placement: Foliar</td>
</tr>
<tr>
<td>Air Temperature, Unit: 63 F</td>
</tr>
<tr>
<td>% Relative Humidity: 26</td>
</tr>
<tr>
<td>Wind Velocity, Unit: 3.5 mph</td>
</tr>
<tr>
<td>Dew Presence (Y/N): N</td>
</tr>
<tr>
<td>Soil Temperature, Unit: 48 F</td>
</tr>
<tr>
<td>Soil Moisture: Good</td>
</tr>
<tr>
<td>% Cloud Cover: 0</td>
</tr>
</tbody>
</table>
### Crop Stage At Each Application

<table>
<thead>
<tr>
<th>Crop 1 Code, BBCH Scale:</th>
<th>CYnda BGRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage Majority, Percent:</td>
<td>Dormant 100</td>
</tr>
</tbody>
</table>

### Pest Stage At Each Application

<table>
<thead>
<tr>
<th>Pest 1 Code, Disc., Scale:</th>
<th>SHRAR W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter, Unit:</td>
<td>4-6 in</td>
</tr>
<tr>
<td>Height, Unit:</td>
<td>1-2 in</td>
</tr>
<tr>
<td>Pest 2 Code, Disc., Scale:</td>
<td>CERGL W</td>
</tr>
<tr>
<td>Diameter, Unit:</td>
<td>4 in</td>
</tr>
<tr>
<td>Height, Unit:</td>
<td>2 in</td>
</tr>
</tbody>
</table>

### Application Equipment

<table>
<thead>
<tr>
<th>Appl. Equipment:</th>
<th>Backpack*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Pressure:</td>
<td>26</td>
</tr>
<tr>
<td>Pressure Unit:</td>
<td>PSI</td>
</tr>
<tr>
<td>Nozzle Type:</td>
<td>Flat fan</td>
</tr>
<tr>
<td>Nozzle Size:</td>
<td>8004</td>
</tr>
<tr>
<td>Nozzle Spacing, Unit:</td>
<td>20 inch</td>
</tr>
<tr>
<td>Boom Length, Unit:</td>
<td>5 feet</td>
</tr>
<tr>
<td>Boom Height, Unit:</td>
<td>20 inch</td>
</tr>
<tr>
<td>Ground Speed, Unit:</td>
<td>3 mph</td>
</tr>
<tr>
<td>Carrier:</td>
<td>Water</td>
</tr>
<tr>
<td>Spray Volume:</td>
<td>25</td>
</tr>
<tr>
<td>Volume Unit:</td>
<td>GAL/AC</td>
</tr>
<tr>
<td>Propellant:</td>
<td>CO2</td>
</tr>
<tr>
<td>Tank Mix (Y/N):</td>
<td>N</td>
</tr>
</tbody>
</table>

**Equipment Comment:** *Spraying Pressure: CO2 Regulator = 26 psi; Down Pipe = 20 psi*

### Trial Comments

1-25-05  
Sticky Chickweed, CERGL, shows signs of frost damage.

3-11-05  
Bermudagrass, CYnda, was 100% dormant.
# Efficacy of Flazasulfuron for Field Madder Control in Common Bermudagrass.

<table>
<thead>
<tr>
<th>Pest Code</th>
<th>Crop Code</th>
<th>Common Name</th>
<th>Rating Date</th>
<th>Rating Data Type</th>
<th>Rating Unit</th>
<th>Trt-Eval Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHRAR</td>
<td>SHRAR</td>
<td>SHRAR</td>
<td>SHRAR</td>
<td>SHRAR</td>
<td>SHRAR</td>
<td>CERGL</td>
</tr>
<tr>
<td>Field Madder</td>
<td>Field Madder</td>
<td>Field Madder</td>
<td>Field Madder</td>
<td>Field Madder</td>
<td>Field Madder</td>
<td>Sticky Chickweed</td>
</tr>
<tr>
<td>1-25-05</td>
<td>2-17-05</td>
<td>3-11-05</td>
<td>3-29-05</td>
<td>4-18-05</td>
<td>1-25-05</td>
<td>1-25-05</td>
</tr>
<tr>
<td>Density</td>
<td>Control</td>
<td>Control</td>
<td>Control</td>
<td>Control</td>
<td>Density</td>
<td>Density</td>
</tr>
<tr>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
<td>0-100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trt No.</th>
<th>Treatment Name</th>
<th>Form Conc</th>
<th>Form Type</th>
<th>Rate Unit</th>
<th>Appl Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Untreated Check</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Flazasulfuron NIS 25 WG</td>
<td>0.5 oz wt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Flazasulfuron NIS 25 WG</td>
<td>1.0 oz wt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>Flazasulfuron NIS 25 WG</td>
<td>1.5 oz wt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>Flazasulfuron NIS 25 WG</td>
<td>3.0 oz wt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>Manor NIS 60 DG</td>
<td>0.75 oz wt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Trimec Southern NIS 4.58 SL</td>
<td>2.0 pt/a</td>
<td>A</td>
<td>0.25 % v/v</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LSD (P=.05)</th>
<th>Standard Deviation</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.4</td>
<td>14.4</td>
<td>60.39</td>
</tr>
<tr>
<td>13.0</td>
<td>8.8</td>
<td>19.18</td>
</tr>
<tr>
<td>16.1</td>
<td>10.8</td>
<td>18.46</td>
</tr>
<tr>
<td>26.9</td>
<td>18.1</td>
<td>44.51</td>
</tr>
<tr>
<td>32.3</td>
<td>21.8</td>
<td>88.93</td>
</tr>
<tr>
<td>2.5</td>
<td>1.6</td>
<td>54.86</td>
</tr>
</tbody>
</table>

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
## Efficacy of Flazasulfuron for Field Madder Control in Common Bermudagrass.

<table>
<thead>
<tr>
<th>Pest Code</th>
<th>Crop Code</th>
<th>Common Name</th>
<th>Rating Date</th>
<th>Rating Data Type</th>
<th>Rating Unit</th>
<th>Trt-Eval Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERGL</td>
<td>CERGL</td>
<td>Sticky Chickweed</td>
<td>2-17-05</td>
<td>Control</td>
<td>0-100</td>
<td>23 DA-A</td>
</tr>
<tr>
<td>CERGL</td>
<td>CERGL</td>
<td>Sticky Chickweed</td>
<td>3-11-05</td>
<td>Control</td>
<td>0-100</td>
<td>45 DA-A</td>
</tr>
<tr>
<td>CERGL</td>
<td>CERGL</td>
<td>Sticky Chickweed</td>
<td>3-29-05</td>
<td>Control</td>
<td>0-100</td>
<td>63 DA-A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trt No.</th>
<th>Treatment Name</th>
<th>Form Conc</th>
<th>Form Type</th>
<th>Rate Unit</th>
<th>App Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Untreated Check</td>
<td></td>
<td></td>
<td></td>
<td>0 d 0 c 0 b 40 a 55 a</td>
</tr>
<tr>
<td>2</td>
<td>Flazasulfuron 25 WG</td>
<td>0.5 oz wt/a A</td>
<td>0.25 % v/v A</td>
<td>100 a 100 a 40 a 55 a</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Flazasulfuron 25 WG</td>
<td>1.0 oz wt/a A</td>
<td>0.25 % v/v A</td>
<td>100 a 100 a 40 a 58 a</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Flazasulfuron 25 WG</td>
<td>1.5 oz wt/a A</td>
<td>0.25 % v/v A</td>
<td>100 a 100 a 41 a 59 a</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Flazasulfuron 25 WG</td>
<td>3.0 oz wt/a A</td>
<td>0.25 % v/v A</td>
<td>100 a 100 a 41 a 60 a</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Manor 60 DG</td>
<td>0.75 oz wt/a A</td>
<td>0.25 % v/v A</td>
<td>100 a 100 a 41 a 61 a</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Trimec Southern 4.58 SL</td>
<td>2.0 pt/a A</td>
<td>0.25 % v/v A</td>
<td>88 b 99 a 40 a 58 a</td>
<td></td>
</tr>
</tbody>
</table>

LSD (P=.05) 13.6 6.2 1.6 5.8 6.4
Standard Deviation 8.9 4.1 1.1 3.9 4.3
CV 22.23 4.89 1.25 9.6 7.4

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)