Oregon State University
Columbia Basin Ag Research Center

Tolerance of established Kentucky bluegrass to various herbicides

Trial ID: 08-541                      Location: Boardman       Study
Director: Larry Bennett             Investigator: Daniel A Ball

General Trial Information
Study Director: Larry Bennett        Title: Research Assistant
Affiliation: Columbia Basin Ag. Research Center
Postal Code: 97801                  E-mail: larry.bennett@oregonstate.edu
Investigator: Daniel A Ball          Title: Professor
Affiliation: Columbia Basin Ag. Research Center
Postal Code: 97801                  E-mail: daniel.ball@oregonstate.edu

Crop Description
Crop 1: Kentucky bluegrass

Site and Design
Plot Width, Unit: 9 FT
Plot Length, Unit: 30 FT
Replications: 4
Study Design: Randomized Complete Block

Application Description
Application Date: Apr-25-08
Time of Day: 5:50 pm
Application Method: Broadcast
Application Timing: POST
Application Placement: Foliar
Air Temperature, Unit: 62 F
% Relative Humidity: 46
Wind Velocity, Unit: 2 mph
Wind Direction: S
Dew Presence (Y/N): N
Soil Temperature, Unit: 52 F
Soil Moisture: Dry-surface
% Cloud Cover: 0

Crop Stage At Each Application
Crop 1 Code: KBG
Stage: 6-10"

Application Equipment
Appl. Equipment: Handboom
Operating Pressure, Unit: 30 psi
Nozzle Type: Flat fan
Nozzle Size: XR-8002
Nozzle Spacing, Unit: 18 in
Boom Length, Unit: 9 ft
Ground Speed, Unit: 3.5 mph
Carrier: Water
Spray Volume, Unit: 16 gpa
Mix Size, Unit: 1.4 liters
Propellant: CO2
Oregon State University  
Columbia Basin Ag Research Center  

Tolerance of established Kentucky bluegrass to various herbicides

Trial ID: 08-541  
Location: Boardman

<table>
<thead>
<tr>
<th>Crop Name</th>
<th>Part Rated</th>
<th>Rating Date</th>
<th>Rating Data Type</th>
<th>Rating Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>KBG Crop</td>
<td>KBG Crop</td>
<td>KBG Crop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May-1-08</td>
<td>May-13-08</td>
<td>May-21-08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td>Injury</td>
<td>Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trt No.</th>
<th>Treatment</th>
<th>Form</th>
<th>Rate</th>
<th>Conc</th>
<th>Type</th>
<th>Prod/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Untreated control</td>
<td></td>
<td>0 0 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Callisto</td>
<td>FL 3</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Callisto</td>
<td>FL 6</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Callisto</td>
<td>FL 12</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Callisto</td>
<td>FL 3</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Warrior</td>
<td>FL 3.2</td>
<td>FL OZ/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Callisto</td>
<td>FL 3</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lorsban</td>
<td>4 EC</td>
<td>16 FL OZ/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>BAS 800H</td>
<td>2.85</td>
<td>SL 1.52 FL OZ/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Agidex</td>
<td>SL 1</td>
<td>% V/V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>AMS</td>
<td>WG 17</td>
<td>LB/100 GAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BAS 800H</td>
<td>2.85</td>
<td>SL 2 FL OZ/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Agidex</td>
<td>SL 1</td>
<td>% V/V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>AMS</td>
<td>WG 17</td>
<td>LB/100 GAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>pyroxsulam</td>
<td>7.5</td>
<td>WG 3.5 OZ/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Huskie</td>
<td>EC 15</td>
<td>FL OZ/A</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>NIS</td>
<td>SL 0.25% V/V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LSD (P=.05)  
NS 2 4

Replicate F 0.000 1.500 2.096  
Replicate Prob(F) 1.0000 0.2370 0.1242  
Treatment F 0.000 37.600 118.726  
Treatment Prob(F) 1.0000 0.0001 0.0001
The objective of this study was to evaluate crop safety of Callisto, BAS 800, Huskie, and pyroxsulam on established Kentucky bluegrass (KBG) grown for seed. This trial was conducted on a established field of Kentucky bluegrass at Holzapfel Ranch east of Boardman, OR. The first evaluations were made 6 days after treatment (DAT). No crop injury was observed at this time. Eighteen DAT, only the pyroxsulam treatment showed any significant injury with 16%. At 26 DAT, the pyroxsulam was giving increased injury (45%). The Injury from pyroxsulam appeared as stunting and seed head suppression. Callisto, BAS 800, and Huskie all appeared to have good crop safety on KBG. The plots were not harvested for seed yield.

The results of individual trials are considered to be of a preliminary nature and should not be considered as a product endorsement or recommendation for commercial use. Several treatments or treatment combinations evaluated in these studies are not registered for use. Consult herbicide labels for appropriate application details in appropriate crops. These results are not for publication unless authorized by Oregon State University.