Early Postemergence Control
Why is early postemergence weed control important?
Spurge
Materials and Methods:

<table>
<thead>
<tr>
<th>Growth Stage</th>
<th>Pots Filled/Overseeded</th>
<th>Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 4 leaf</td>
<td>July 31, 2008</td>
<td>All pots treated on August 14, 2008</td>
</tr>
<tr>
<td>Cotyledon to 1 leaf</td>
<td>August 7, 2008</td>
<td></td>
</tr>
<tr>
<td>Preemergence</td>
<td>August 14, 2008</td>
<td></td>
</tr>
</tbody>
</table>
Materials and Methods:

Herbicide treatments included:

- Broadstar™ 1604 0.25G (flumioxazin) at 150 and 300 lbs product per acre
- FreeHand™ 1.75 G (dimethenamid + pendimethalin) at 200 and 400 lbs per acre
- Tower™ 6.0 EC (dimethenamid) at 1.5 and 3.0 lbs active ingredient per acre (aia)
- Pendulum™ 3.3 EC (pendimethalin) at 2 and 4 lbs aia
- Non-treated control was included
Cotyledon to 1 Leaf

Fresh Weights at 30 DAT

Grains

- Broadstar 150 lbs
- Broadstar 300 lbs
- FreeHand 200 lbs
- FreeHand 400 lbs
- Tower 1.5 lbs a.i
- Tower 3.0 lbs a.i
- Pendulum 2.0 lbs a.i
- Pendulum 4.0 lbs a.i
- Non-treated

a, b, c indicate significant differences at the 0.05 level.
Cotyledon to 1 Leaf Stage

- Broadstar 150 lbs/A
- Broadstar 300 lbs/A
- FreeHand 200 lbs/A
- FreeHand 400 lbs/A
- Tower 1.5 lbs aia
- Tower 3.0 lbs aia
- Pendulum 2.0 lbs aia
- Pendulum 4.0 lbs aia
- Non-treated
2 to 4 Leaf

Fresh Weights at 30 DAT

Grains

Non-treated

Broadstar 150 lbs

Broadstar 300 lbs

FreeHand 200 lbs

FreeHand 400 lbs

Tower 1.5 lbs a.i.

Tower 3.0 lbs a.i.

Pendulum 2.0 lbs a.i.

Pendulum 4.0 lbs a.i.

0 2 4 6 8 10 12 14

Grams

b b cd cd c d cd d

a
2 to 4 Leaf Stage

- Broadstar 150 lbs/A
- Broadstar 300 lbs/A
- FreeHand 200 lbs/A
- FreeHand 400 lbs/A
- Tower 1.5 lbs ai/A
- Tower 3.0 lbs ai/A
- Pendulum 2.0 lbs ai/A
- Pendulum 4.0 lbs ai/A
- Non-Treated
Bittercress
Materials and Methods:
Bittercress were overseeded at two sowing dates and grew until reaching either the cotyledon-1 leaf stage or the 2-4 leaf stage.

Cotyledon-1 Leaf

2-4 Leaf
Early Postemergent Bittercress (Cardamine hirsuta) Control

Materials and Methods:
Herbicide Treatments included:
- Broadstar 1604 at 75 and 150 lbs/A
- Casaron 4G at 25 and 50 lbs/A
- HGH-63 at 50 and 100 lbs/A
- Sulfosulfururon at 0.75 and 2 fl. oz/A
- Tower 6.0 EC at 21 and 32 fl. oz/A
- V-10142 at 75 and 150 lbs/A
- Gallery at 1.0 lbs ai/A
Cotyledon to 1 Leaf

Injury Ratings at 30 DAT

- Broadstar 150 lbs: 1
- Broadstar 75 lbs: 1
- Casoron 4G: 1
- Casoron 4G: 1
- HGH-63: 1.6
- HGH-63: 1
- Sufosulfuron 2 oz: 8.5
- Sufosulfuron 75 oz: 9.8
- Tower 32 oz: 1.5
- Tower 21 oz: 8.3
- V1042 150 lbs: 6.9
- V1042 75 lbs: 9.9
- Gallery 1.0 lb ai/A: 1
- Control: 1
Cotyledon to 1 Leaf

Fresh Weights at 30 DAT

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Weight (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadstar 150 lbs</td>
<td>8.9</td>
</tr>
<tr>
<td>Broadstar 75 lbs</td>
<td>11.7</td>
</tr>
<tr>
<td>Casaron 50 lbs</td>
<td>10.3</td>
</tr>
<tr>
<td>Casaron 25 lbs</td>
<td>9.3</td>
</tr>
<tr>
<td>HGH-63 100 lbs</td>
<td>4.5</td>
</tr>
<tr>
<td>HGH-63 50 lbs</td>
<td>6.7</td>
</tr>
<tr>
<td>Sulfosulfuron 2 oz</td>
<td>14.5</td>
</tr>
<tr>
<td>Sulfosulfuron .75</td>
<td>0</td>
</tr>
<tr>
<td>Tower 32 oz</td>
<td>0</td>
</tr>
<tr>
<td>Tower 21 oz 150 lbs</td>
<td>0</td>
</tr>
<tr>
<td>Gallery 1 oz 150 lbs</td>
<td>0.6</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
</tr>
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</table>
# Cotyledon to 1 leaf

**Bittercress at 30 DAT**

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadstar</td>
<td>150 lbs/A</td>
</tr>
<tr>
<td></td>
<td>75 lbs/A</td>
</tr>
<tr>
<td>Casaron</td>
<td>50 lbs/A</td>
</tr>
<tr>
<td></td>
<td>25 lbs/A</td>
</tr>
<tr>
<td>HGH-63</td>
<td>100 lbs/A</td>
</tr>
<tr>
<td></td>
<td>50 lbs/A</td>
</tr>
<tr>
<td>Sulfosulfuron</td>
<td>2.0 oz/A</td>
</tr>
<tr>
<td>Tower</td>
<td>1.0 oz/A</td>
</tr>
<tr>
<td>V-10142</td>
<td>150 lbs/A</td>
</tr>
<tr>
<td></td>
<td>75 lbs/A</td>
</tr>
<tr>
<td>Gallery</td>
<td>1.0 lb ai/A</td>
</tr>
<tr>
<td>Non-treated</td>
<td></td>
</tr>
</tbody>
</table>

.. note::

- **Broadstar**: 150 lbs/A
- **Casaron**: 50 lbs/A
- **HGH-63**: 100 lbs/A
- **Sulfosulfuron**: 2.0 oz/A
- **Tower**: 1.0 oz/A
- **V-10142**: 150 lbs/A
- **Gallery**: 1.0 lb ai/A
- **Non-treated**:
2 to 4 Leaf

Injury Ratings at 30 DAT

- Broadstar 150 lbs: 1
- Broadstar 75 lbs: 1
- Casaron 50 lbs: 1
- Casaron 25 lbs: 1
- HGH-63100 lbs: 1
- HGH-6350 lbs: 1
- Sulfosulfuron 2 oz: 6.7
- Sulfosulfuron .75: 2.1
- Tower 32 oz: 8.1
- Tower 21 oz: 8.4
- V-10142 150 lbs: 7.5
- V-10142 75 lbs: 8
- Gallery 1.0 lb ai/A: 1
- Control: 1
2 to 4 Leaf

Fresh Weights at 30 DAT

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadstar 150 lbs</td>
<td>9.5</td>
</tr>
<tr>
<td>Broadstar 75 lbs</td>
<td>11</td>
</tr>
<tr>
<td>Casaron 50 lbs</td>
<td>9.6</td>
</tr>
<tr>
<td>Casaron 25 lbs</td>
<td>13</td>
</tr>
<tr>
<td>HGH-63 100 lbs</td>
<td>10.5</td>
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<tr>
<td>HGH-63 50 lbs</td>
<td>11</td>
</tr>
<tr>
<td>Sulfosulfuron 2 oz</td>
<td>4.7</td>
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<tr>
<td>Sulfosulfuron .75</td>
<td>7.8</td>
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<tr>
<td>Tower 32 oz.</td>
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<tr>
<td>V-10142 150 lbs</td>
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<tr>
<td>V-10142 .75 lbs</td>
<td>0</td>
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<tr>
<td>Gallery 1.0 lb a/lA</td>
<td>0</td>
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<tr>
<td>Control</td>
<td>12.1</td>
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</tbody>
</table>
Questions