Early Post Emergence/Crop Safety Trials 2008-2009

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Early Postemergence

Untreated

Broadstar 75&150 lb/A (new formulation) **Valent**

EXC3898 (mesotrione + prodiamine + s-metolachlor)
100&150 lb/A **Syngenta**

V10142 75&150 lb/A **Valent**
Three Stages

Pre = Stage 1  Very Early POE = Stage 2  Early POE = Stage 3

Containers outside:
Spurge - June 2008
Oxalis – Aug, Sept 2008; March 2009
Lath house:
Bittercress – May, June, July 2009
Results

**Spotted Spurge**
Stage 1: Most herbicides were good with higher rates providing greater control for each herbicide. Broadstar at 75 lb/A not acceptable.
Stage 2: No herbicide provided acceptable control.
Stage 3: EXC3898 provided good control but should be retested

**Hairy Bittercress**
Stage 1: Only Broadstar at higher rate was acceptable.
Stage 2: Only Broadstar at higher rate was acceptable.
Stage 3: No herbicide provided acceptable control.

**Oxalis**
Stage 1: Most herbicides provided acceptable control except EXC3898 at 100 lb/A 23WAT. No good control until then.
Stage 2: EXC3898 at 150 lb/A and V10142 @both rates were acceptable but not until 7WAT.
Stage 3: No herbicide provided acceptable control
Crop Safety

- Carex divulsa – grassland sedge
- Epilobium canum – California fuchsia
- Ribes viburnifolium – evergreen currant
- Teucrium chamaedrys ‘Nanum’ – dwarf germander
- Ceanothus ‘Concha’ – concha ceanothus
- Heteromeles arbutifolia – toyon, christmas berry, California holly
- Muhlenbergia dubia – Mexican deergrass
Treatments

• BroadStar 0.25G (Flumioxazin)
  – 150 lb (0.375 lb ai)
  – 300 lb (0.75 lb ai)
  – 600 lb (1.5 lb ai) per acre

• Freehand G (Dimethenamid-p + pendimethalin)
  – 150 lb (2.65 lb ai)
  – 300 lb (5.3 lb ai)
  – 600 lb (10.6 lb ai) per acre

• Tower (Dimethenamid-p)
  – 21 fl oz (0.97 lb ai)
  – 42 fl oz (1.94 lb ai)
  – 84 fl oz (3.88 lb ai) per acre

Applied by shaker or CO₂ sprayer flat fan 42 PSI at >20 GPA
Timing

- First application ~3 days after TP
- Second application ~6 weeks later
- Evaluations at 1, 2, 4 WAT
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<tr>
<td>Broadstar 150</td>
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<td>Broadstar 300</td>
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<td>Broadstar 600</td>
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<tr>
<td>Freehand 150 1X</td>
<td>0.08  a</td>
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<tr>
<td>Freehand 150 2X</td>
<td>0.17  a</td>
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<td>1.42  ab</td>
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<td>Freehand 600 2X</td>
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<td>Tower 21oz/A 1X</td>
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Tower
Freehand
Still to do

• Later evaluations of Cares, Ribes, Dwarf Germander
• Find Mexican deergrass
• Root and shoot weights