

## Efficacy of certain herbicides for early post-emergent broadleaf weeds. **Final**

### Ornamental Protocol Number: 09-013

**Objective:** Determine efficacy of several herbicides for early post emergent control of bittercress, oxalis, and spurge.

### Experimental Design:

**Plot Size:** Must be adequate to reflect actual use conditions.

**Replicates:** Minimum of 3 replications (preferably 4) with 3 plants per replicate

**Application Instructions:** Sow target weed seeds in suitable substrate. Apply materials at three timings onto different replicates: same day as sowing seed, 2) when the majority of seedlings are between cotyledon and 1-leaf, and 3) when the majority of seedlings are between 2-leaves and 4-leaves.

**Plant Materials:** Suitable for test conditions.

**Target Weeds:** Bittercress, oxalis, and spurge.

**Evaluations:** Record efficacy at 1 and 2 weeks after application. If ornamental crops are grown in the same plots as the target weeds, record phytotoxicity on a scale of 0 to 10 (0 = No phytotoxicity; 10 = Complete kill). If any phytotoxicity is observed in, take pictures comparing treated and untreated plant material.

**Recordkeeping:** Keep detailed records of weather conditions including temperature and precipitation, soil-type or soil-less media, application equipment, irrigation, liner size, plant height & width, and plant growth stage at application and data collection dates.

### Treatments:

Product	Rate per acre	Special Instructions	Contact Information to obtain materials and any needed adjuvants
Broadstar 0.25 G VC1604	75 lb product (0.19 lb ai) 150 lb product (0.375 lb ai)		Valent, Joe Chamberlin, 770-985-0303, <a href="mailto:jcham@valent.com">jcham@valent.com</a>
Certainty (sulfosulfuron)	0.75 oz (0.035 lb ai) 2.0 oz (0.094 lb ai)	Use with non-ionic surfactant at 0.25 % by volume	Monsanto, James Cole, 314-694-4322, <a href="mailto:james.t.cole@monsanto.com">james.t.cole@monsanto.com</a>
Casoron 4G (dichlobenil)	25 lb product (1 lb ai) 50 lb product (2 lb ai)		OHP, Jeff Dobbs, 770-992-0121, <a href="mailto:jdobbs@OHP.com">jdobbs@OHP.com</a>
HGH-63 2G (oxyfluorfen)	100 lb product (2 lb ai)		Harrell's, Rick Helpingstine, 800-282- 8007 x2263, <a href="mailto:rhelpingstine@harrells.com">rhelpingstine@harrells.com</a>
Tower (dimethenamid-p)	21 fl oz (0.97 lb ai) 32 fl oz (1.94 lb ai)		BASF, Kathy Kalmowitz, 919-270-4592, <a href="mailto:kathie.kalmowitz@basf.com">kathie.kalmowitz@basf.com</a>
V-10142 G	75 lb product (0.375 lb ai) 150 lb product (0.75 lb ai)		Valent, Joe Chamberlin, 770-985-0303, <a href="mailto:jcham@valent.com">jcham@valent.com</a>
Untreated	--	--	

### Reports:

Reports submitted on the standard IR-4 Ornamental Horticulture Research Report Form are preferred.

A report submitted electronically is preferred but not required. If the report is provided electronically, the basic report can be sent in MS Word or WordPerfect, the recordkeeping information as pdf or other electronic documents, and the raw data in MS Excel or other suitable program such as ARM.

**Please direct questions to:** Cristi Palmer, IR-4 HQ, Rutgers University, 681 US Hwy 1 S, North Brunswick, NJ 08902-3390, Phone 732-932-9575 x4629, [palmer@aesop.rutgers.edu](mailto:palmer@aesop.rutgers.edu) **OR** Ely Vea, 308 Aston Forest Lane, Crownsville, MD 21032, Phone & FAX#: 410-923-4880, E-mail: [evvea@comcast.net](mailto:evvea@comcast.net).

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Revised By: CLP