

2009 Crop Safety with Over-the-top Applications of Select Herbicide Materials

Final

Ornamental Protocol Number: 09-011

Objective: Determine phytotoxicity of Broadstar 0.25G VC1604, Freehand, Snapshot, sulfosulfuron, Tower EC, and V-10142 G and to ornamental horticulture plants.

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: Depending upon research site and plant materials, various experiments can be established. Two applications are to be made approximately 6 weeks apart, with the first application within 7 days after potting, preferable between 24 and 48 hours. However, plant materials must have broken dormancy prior to first application. See notes below for Broadstar 0.25G VC1604. For liquid applications, use a minimum of 20 gal per acre. Applications should be made over the top of the plants using application equipment consistent with conventional commercial equipment. For all materials, target dry foliage. If dew is present at the time of application, note it. Irrigate with ½ inch water between 1 and 4 hours after application. Note: Liquid materials need at least 1 hour drying time prior to irrigation.

Plant Materials: *Contact your Regional Coordinator for an up-to-date list.* Plants grown in field containers are preferred to in-ground.

Treatments: See table on next page.

Evaluations: Record plant height & width at *initial and final evaluations only*. At 1, 2, and 4 weeks after each application, record phytotoxicity on a scale of 0 to 10 (0 = No phytotoxicity; 10 = Complete kill). If appropriate, also include ratings for chlorosis, defoliation, stunting or other growth effects on a scale of 0 to 10 (0 = No effect; 10 = Complete plant affected). If any phytotoxicity is observed in treated plants, 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.

Reports:

Reports submitted electronically 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 **OR** Ely Vea, 308 Aston Forest Lane, Crownsville, MD 21032, Phone & FAX#: 410-923-4880, E-mail: evvea@comcast.net.

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Revised By: CLP

Treatments:

Product	Prior ity	Rate Product (ai) per acre	Special Instructions	Contact Information to obtain materials
Broadstar 0.25G VC1604 (flumioxazin)	A/B	150 lb (0.375 lb ai)	Test only on woody ornamentals. If root ball of liner is less than 4" in diameter, only apply at second application timing. If root ball is 4" or greater in diameter, apply at both application timings.	Valent, Joe Chamberlin, 770-985-0303, jcham@valent.com
		300 lb (0.75 lb ai)		
		600 lb (1.5 lb ai)		
Freehand 1.75G (dimethenamid-p + pendimethalin)	A/B	150 lb (2.65 lb ai)		BASF, Kathie Kalmowitz, 919-270-4592, kathie.kalmowitz@basf.com
		300 lb (5.3 lb ai)		
		600 lb (10.6 lb ai)		
Mesotrione SC	C	6 oz (0.187 lb ai)	Certain woody ornamentals and ornamental grasses only	Syngenta, Nancy Rechsigl, 941-708-9338, nancy.rechsigl@syngenta.com
		8 oz (0.25 lb ai)		
		12 oz (0.37 lb ai)		
Snapshot (trifluralin + isoxaben)	B/C	100 lb (2.5 lb ai)		Dow Agrosiences, Raymond Miller, (817) 570-7169, RCMiller2@dow.com
		200 lb (5.0 lb ai)		
		400 lb (10.0 lb ai)		
Sulfosulfuron	C	1.25 oz		Monsanto, James Cole, 314- 694-4322, james.t.cole@monsanto.com
		2.5 oz		
		5.0 oz		
Tower 63.9%EC (dimethenamid-p)	A/B	21 fl oz (0.97 lb ai)		BASF, Kathie Kalmowitz, 919-270-4592, kathie.kalmowitz@basf.com
		42 fl oz (1.94 lb ai)		
		84 fl oz (3.88 lb ai)		
V-10142 0.5G (imazosulfuron)	A/B	150 lb (0.75 lb ai)	Test only on Conifers and finish ongoing woody ornamentals species trials.	Valent, Joe Chamberlin, 770-985-0303, jcham@valent.com
		300 lb (1.5 lb ai)		
		600 lb (3.0 lb ai)		
Untreated		--	--	