

BOXWOOD (*Buxus microphylla japonica* ‘Winter Gem’)
 (*Buxus sempervirens* ‘Suffruticosa’)
 (*Buxus* x ‘Green Velvet’)

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**Crop Safety for Boxwood Blight Fungicides, 2013.
 Protocol Number 13-018.**

Evergreen boxwoods (*Buxus microphylla japonica* ‘Winter Gem’, *Buxus sempervirens* ‘Suffruticosa’ and *Buxus* x ‘Green Velvet’) in one-gallon containers were obtained from a local nursery on Feb 13 and used for this experiment. Pots were spaced 1 foot apart on a weed cloth covered gravel bed located at the Botany and Plant Pathology Field Laboratory, Corvallis, OR. Fungicide treatments were arranged in a randomized complete block design where each fungicide treatment (experimental unit) consisted of 3 potted plants which was replicated 10 times for each of 3 cultivars. Fungicides were applied using a Stihl-Pump-Style backpack sprayer equipped with a cone nozzle such that 1 gal of a spray suspension was applied per 30 plants (approximately 4.25 oz/pot). Vigorous spring plant growth started the first week of April. Treatments were applied on 11 Apr, 23 Apr, and 7 May. No fertilizer, insecticides or herbicides were applied to plants in pots. Pots were hand watered as needed during the duration of the trial. Phytotoxicity was evaluated twice a week during the course of the experiment. The height of each plant was recorded on 15 Mar and 24 May.

Spring growing conditions were unusually dry with 3 weeks of warm 80 F weather beginning at the end of April. Minor heat stress was noted on a few plants on 10 May. Boxwood plants started to bloom 15 March and started to push new shoots on 25 March. Chemical residue, a slight gray coloration to the leaves, was noted on plants treated with Concert on 13 May. Subtle leaf yellowing and leaf spotting was noted on 28 May on *Buxus sempervirens* ‘Suffruticosa’ treated with Heritage plus Silwet L-77. Damage was so subtle and sparse that phytotoxicity ratings were not recorded. Plant height was not significantly affected by any of the 11 chemical treatments. In general, plants increased in size by 2.6, 5.9 and 3.9 cm for *B. m. j.* ‘Winter Gem’, *B. s.* ‘Suffruticosa’, and *Buxus* x ‘Green Velvet’, respectively.

PR #	Treatment and rate/100 gal	Change in Plant Height (cm)*		
		<i>B. m. j.</i> ‘Winter Gem’	<i>B. s.</i> ‘Suffruticosa’	<i>Buxus</i> x ‘Green Velvet’
-----	Non-treated.....	1.3	5.4	4.2
31614	Concert II SE at 35 fl oz.....	1.7	5.7	2.9
31614	Concert II SE at 70 fl oz.....	2.9	5.5	4.3
31494	Medallion 50 WDG at 4 oz...	2.5	6.0	3.9
31494	Medallion 50 WDG at 8 oz...	2.7	6.3	4.2
31492	Tourney50 WDG at 4 oz.....	2.4	5.1	2.9
31492	Tourney50 WDG at 8 oz.....	2.6	5.9	3.5
31495	Trinity 2 SC at 12 fl oz.....	3.1	6.1	4.3
31495	Trinity 2 SC at 24 fl oz.....	2.8	6.7	4.4
13745	Heritage 50 WG at 4 oz.....	3.7	5.5	4.1
13745	Heritage 50 WG at 8 oz.....	2.9	6.0	3.2
-----	Heritage 50 WG at 8 oz plus Silwet L-77 at 6.4 fl oz.....	2.9	6.1	4.7

* Means without letters do not differ significantly (P=0.05).