GRAPE (*Vitis vinifera* 'White Riesling')
Botrytis Bunch Rot; *Botrytis cinerea*

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Efficacy of fungicides at bloom for management of grape bunch rot, 2012.

Fungicide treatments were arranged in a randomized complete block design in a block of 'White Riesling' planted in 1985 on a 8x10 ft spacing. Vines were trained to a bilateral cordon with spur pruning. Vines were pruned from 23 to 24 Feb. Vines were pruned to approximately 60 spurs/vine and thinned to approximately 40 shoots/vine. Sucker removal and shoot thinning by hand occurred from 18 to 19 May. Each treatment was replicated on 4 sets of 5 vines. Fungicide applications were applied to the fruiting zone using a hooded boom sprayer at 150 psi resulting in 80 gal water/A. Approximately 2.5 gal of a spray suspension were applied per set of 20 vines. Treatments were applied on 28 Jun (5 to 10% bloom, BBCH 61), 6 Jul (80% bloom, BBCH 68), 31 Jul (bunch close, BBCH 78), 7 Sep (BBCH 81, start of Veraison), and 3 Oct (preharvest). Leaves were removed from the fruiting zone on the east side of all but nontreated vines on 24 Jul. Canes were cut above the top wire on 19 Jul and maintained at this height throughout the growing season. Powdery mildew was managed with applications of Rex Lime Sulfur (4 gal/100 gal water) applied on 8 Mar to all dormant vines, Thiolux (80% sulfur at 5lb/A) applied on 31 May, 10 Jun, 19 Jun and 27 Jun, then Quintec (4 fl oz/A) applied every 2 weeks until veraison. Fungicide applications for powdery mildew control were applied using a hooded boom sprayer at 150 psi. No insecticides were used for mite control. Goal 2XL (20 fl oz/A) plus generic glyphosate (1 qt/A formulated product) was applied on 2 Apr and Chateau (12 oz/A) plus Rely (16 fl oz/A) was applied on 25 Apr for weed control. No fertilizer was applied this year. Incidence of bunch rot was determined on 12 and 17 Oct by examining 50 clusters from the center of each set of vines. Severity of bunch rot was also determined on 17 Oct by examining 50 clusters (average 18.5^{o} Brix) from the center of each set of vines.

Summer and fall weather was considered very dry with no rain from Jul through 12 Oct. Bunch rot was first observed on 4 Oct occurring sporadically throughout the vineyard. Only vines treated with Elevate alternated with Switch had significantly lower incidence of bunch rot than nontreated vines on 12 Oct. There were no significant differences among the various treatments on 17 Oct for incidence or severity of bunch rot. No phytotoxicity was observed on any vines treated with any material.

Treatment and Rate/A	Time of application*	% Bunch Rot**		
		Incidence (12 Oct)	Incidence (17 Oct)	Severity (17 Oct)
Nontreated and no leaves pulled..……	None…..….	15.5 ab	64.0	4.4
Zen-O-Spore at 3 lb plus Green Cypress Ecospreader at 6 fl oz/100 gal	A and B…..	18.5 a	59.0	3.2
Zen-O-Spore at 4 lb plus Green Cypress Ecospreader at 6 fl oz/100 gal	A and B…..	19.0 a	72.5	4.1
Elevate 50 WDG at 1 lb.....	B only……	8.5 bc	57.0	2.8
Elevate 50 WDG at 1 lb alternate Switch at 14 oz……....	B and D C and E…...	2.5 c	68.5	5.4

* Treatments were applied on A = 28 Jun (5 to 10% bloom, BBCH 61), B = 6 Jul (80% bloom, BBCH 68), C = 31 Jul (bunch close, BBCH 78), D = 7 Sep (BBCH 81, start of Veraison), and E = 3 Oct (preharvest).

** Means followed by same letter do not differ significantly based on Fisher's protected LSD (P=0.05). Means without letters do not differ significantly.

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