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

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Efficacy of fungicides for control of grape bunch rot, 2006.

Fungicide treatments were arranged in a randomized complete block design in a block of 'White Riesling' planted in 1995 on a 7x10 ft spacing. Vines were trained to a bilateral cordon with spur pruning. Vines were pruned from 10 to 15 Feb. Sucker removal and shoot thinning, by hand, occurred from 16 to 19 May. Vines were pruned to approximately 60 spurs/vine and thinned to approximately 40 shoots/vine. Each treatment was replicated on 4 sets of 5 vines. Fungicide applications were applied using a hooded boom sprayer at 200 psi. Fungicides were applied at 88 gal water/A and were focused on the fruiting zone. Approximately 2.0 gal of a spray suspension were applied per set of 20 vines. Treatments were applied on 21 Jun (full bloom) 13 Jul (bunch close), 28 Aug (50% veraison), and 20 Sep (preharvest). For control of powdery mildew, vines were treated with Quintec (4 oz/A, 200 gal/A volume) approximately every 14 days using a hooded boom sprayer. Round-Up (1.5 qt/A) plus Simazine (1 qt/A) was applied in the vine row on 13 Mar. An application of Rely (2 qt/A) occurred on 7 Jun to control weeds and late sprouting suckers. Nets were placed around vines on 29 to 30 Aug to protect fruit from possible bird damage prior to harvest. Incidence and severity of bunch rot was determined on 5 Oct by harvesting and examining 100 clusters (15.8^{o} Brix) from the center of each set of vines.

Bunch rot was first observed on 22 Sep on only a few widely scattered clusters. A total of 0.4 inches of rain fell during the week before the preharvest spray while 0.11 inches of rain fell between the preharvest application and harvest. Vines treated with the middle rate of V-10135 or V-10135/Endura had a bunch rot incidence that was not significantly different from nontreated vines. Lowest incidence of bunch rot was on vines treated with Pristine, however, vines treated with Scala alone, the low and high rate of V-10135 were not significantly different. All fungicide treated vines had significantly less bunch rot severity than nontreated vines. Lowest severity of bunch rot was on vines treated with Pristine, however, vines treated with Scala alone, USF 2014, the low and high rate of V-10135 and V-10135/Endura were not significantly different. No phytotoxicity was observed on any vines treated with any fungicide.

Treatment and Rate/A	Time of Application**	% Bunch Rot (5 Oct)*	
		Incidence	Severity
Nontreated …….	None…….…	73.0 a	13.5 a
Vangard 75WG at 10 oz then	Bloom		
Endura at 8 oz then	BC		
Elevate 50 WG at 1 lb then	V		
Scala 60 SC at 18 fl oz……..……..	PH……..…	46.5 b	5.4 b
Scala 60 SC at 18 fl oz……...	All……	51.5 bc	3.9 bc
USF 2014 at 18 fl oz……..	All……	38.5 b	2.5 bc
V-10135 (50 WG) at 8 oz.....…….	All……	52.0 bc	3.9 bc
V-10135 (50 WG) at 12 oz.....	All……	58.5 ab	5.1 b
V-10135 (50 WG) at 16 oz.....	All……	43.5 bc	2.7 bc
V-10135 (50 WG) at 12 oz alternate	Bloom, V		
Endura at 8 oz…….....	BC, PH……	56.0 abc	4.6 bc
Pristine 38 WG at 18.5 oz plus			
Break Thru at 4 fl oz/100 gal……..	All……	36.0 c	1.5 c

* Means followed by same letter do not differ significantly based on Fisher's protected LSD (P=0.05).

** Bloom (21 Jun), BC = Bunch Close (13 Jul), V = Veraison (28 Aug), and PH = PreHarvest (20 Sep).