

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

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### **Efficacy of fungicides for control of grape bunch rot, 2008.**

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 25 to 27 Feb. Sucker removal and shoot thinning by hand, occurred from 13 to 16 May. Vines were pruned to approximately 60 spurs/vine and thinned to approximately 40 shoots/vine. Leaves were removed from the fruiting zone on the east side of all vines from 14 to 21 Jul. 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 126 gal water/A and were focused on the fruiting zone. Approximately 4.2 gal of a spray suspension were applied per set of 20 vines. Treatments were applied on 6 Jul (full bloom), 25 Jul (bunch close), 9 Sep (50% veraison), and 30 Sep (preharvest). A variety of fungicides were deployed on a 7 or 14 day schedule to control powdery mildew. These fungicides included Procure (6 fl oz/A) on 29 May, 25 Jun, 2 Jul and 6 Aug, Flint (2 oz/A) on 11 Jun, Thiolux (6 lb/A) on 23 and 30 Jul and Endura (4.5 oz/A) on 10 Jul. Fungicide applications for powdery mildew control were applied using a hooded boom sprayer. For control of mites, Acramite 4 SC (10 oz/A) was applied to the entire block on 23 May. Diuron 4L (1 qt/A) was applied to the vine row on 18 Feb for control of weeds. Rely (2 qt/A) was applied on 15 May for control of weeds and suckers in the vine row. Incidence and severity of bunch rot was determined on 21 and 23 Oct by harvesting and examining 50 clusters (18.1° Brix) from the center of each set of vines.

Although an inch of rain occurred mid to late August, bunch rot was first observed on 30 Sep on only a few widely scattered clusters and more generally by 8 Oct. A total of 0.75 inches rain fell between the last fungicide application and harvest. Lowest disease incidence was detected on vines treated with the higher rate of USF 2017A, however, the incidence on vines treated with Elevate, USF 2018A, V-10135, S-2188 B06-2-P3 or S-2188 BS 06-22 were not significantly different. Incidence on vines treated with Vanguard, Rovral, Scala alternated with Flint, the lower rate of USF 2017A, the lower rate of V-10135 or S-2188 SBM07032 were not significantly different than nontreated vines. Lowest disease severity was detected on vines treated with the higher rate of USF 2018A, however, the incidence on vines treated with Elevate, the higher rate of USF 2017A, the lower rate of USF 2018A, V-10135, S-2188 B06-2-P3 or S-2188 BS 06-22 were not significantly different. Incidence on vines treated with Vanguard, Rovral, Scala alternated with Flint, the lower rate of USF 2017A, or S-2188 SBM07032 were not significantly different than nontreated vines. Considering the lower effectiveness of Flint in past trials, the dry summer, and the use of Endura (a bunch rot material) throughout the trial for powdery mildew control, we suspect that the preharvest application was the most critical for disease control this year. No phytotoxicity was observed on any vines treated with any fungicide.

Treatment and Rate/A	Time of application*	% Bunch Rot**	
		Incidence	Severity
Nontreated .....	None.....	62.0 a	7.8 a
Elevate 50 WDG at 16 oz .....	All.....	40.0 bcd	3.1 bcde
Vanguard 75 WDG at 10 oz .....	All.....	51.5 abc	4.8 abcd
Rovral 4 F at 24 fl oz .....	All.....	55.0 ab	5.8 ab
Scala at 18 fl oz alternate with Flint 50 WDG at 3 oz .....	Bloom, V BC, PH.....	60.5 a	4.8 abcd
USF 2017A SC at 6 fl oz .....	All.....	52.5 ab	5.8 ab
USF 2017A SC at 7.2 fl oz .....	All.....	28.5 d	1.5 de
USF 2018A SC at 9 fl oz .....	All.....	33.5 cd	2.1 cde
USF 2018A SC at 11 fl oz .....	All.....	33.0 d	1.1 e
V-10135 4 SC at 8 fl oz .....	All.....	46.0 abcd	3.8 bcde
V-10135 4 SC at 12 fl oz .....	All.....	39.5 bcd	2.5 bcde
V-10135 4 SC at 16 fl oz .....	All.....	31.0 d	2.3 bcde
S-2188 B06-2-P3 50 WDG at 12 oz ..	All.....	37.0 bcd	2.5 bcde
S-2188 BS 06-22 50 WDG at 12 oz ..	All.....	31.0 d	2.1 cde
S-2188 SBM07032 50 WDG at 12 oz	All.....	54.0 ab	5.5 abc

\* Bloom = Bloom (6 Jul), BC = Bunch Close (25 Jul), V = Veraison (9 Sep), and PH = PreHarvest (30 Sep).

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