

Efficacy of fungicides for control of grape bunch rot, 2005.

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 3 Mar to 14 Mar. Shoot thinning and sucker removal occurred 19 May by hand. 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 140 gal water/A and were focused on the fruiting zone. Approximately 2.5 gal of a spray suspension were applied per set of 20 vines. Due to extreme powdery mildew disease pressure in another set of vines, the trial was moved into this block on 25 July, just prior to the Bunch Close spray timing. Treatments were applied on 27 Jul (bunch close), 29 Aug (60% veraison), and 21 Sep (preharvest). No specific bloom application occurred for bunch rot control. For control of powdery mildew vines were treated with a variety of materials including: Thiolux, Pristine, Elite 45DF, Quintec 250, Rally 40, and/or two experimental fungicides. Prior to the first application for bunch rot, this block was being used as a "clean out" and priming row for another fungicide trial thus the array of materials used for powdery mildew control. Vines within replicate blocks (rows) were treated similarly but vines in different replicate blocks had different applications of powdery mildew control materials. Buccaneer (2 qt/A) plus Goal 2XL (2 qt/A) was applied in the vine row on 18 Mar and Rely (4 qt/A) was applied on 12 Jul to manage weeds. Nets were placed around vines on 30 Aug to protect fruit from possible bird damage prior to harvest. Incidence of bunch rot was determined on 20 Oct by examining 100 clusters (18.4° Brix) from the center of each set of vines.

Prior to bloom, spring conditions were considered wet but after bloom normal dry weather prevailed. Bunch rot was first observed on 30 Sep on only a few widely scattered clusters. A total of 1.22 in rain fell between the preharvest application and harvest. Vines treated with only Elevate had significantly less bunch rot than nontreated vines. Conclusions from this trial are hampered by unrecorded applications of other fungicides before and during bloom. No phytotoxicity was observed on any vines treated with any fungicide.

Treatment and Rate/A	Time of Application**	% Bunch Rot 20 Oct* Incidence
Nontreated	None.....	40.5 a
Elevate 50 WG at 1 lb	BC, V and PH...	19.0 b
Elevate 50 WG at 1 lb then Vanguard 75WG at 10 oz.....	BC V and PH.....	31.3 ab
Elevate 50 WG at 1 lb then Pristine 38 WG at 12.5 oz.....	BC V and PH.....	43.3 a
Scala 60 SC at 18 fl oz.....	BC, V and PH...	43.5 a

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

** BC = Bunch Close (27 Jul), V = Veraison (29 Aug), and PH = PreHarvest (21 Sep).