

FUNGICIDES AND CULTURAL METHODS FOR CONTROL OF GRAPE BUNCH ROT, 2002: Fungicide treatments were arranged in a randomized complete block design in a block of 'White Riesling' planted in 1985 and 1995 on 7 x 10 ft spacing. Vines were trained to a bilateral cordon with spur pruning. The number of buds was adjusted based on pruning weights at the rate of 30 buds/kg canes. Shoot thinning occurred 17 May. Each treatment was replicated on 4 sets of 5 vines. All treatments were applied using a hooded boom sprayer at 200 psi. Fungicides were applied at 127 gal water/A and were focused on the fruiting zone. Approximately 4.2 gal of a spray suspension was applied per set of 20 vines. Fungicide treatments were applied on 23 Jul (bunch closure), 1 Sep (veraison) and 27 Sep (11 days preharvest). Leaves were removed from the east side of the fruiting zone on 5 Jul (90% shatter). Thiloux 80 DF (4 lb/A) was applied on 24 May, and Rally 40 W at 4 oz/A was applied on 12 and 22 Jun and 8 Jul, and at 5 oz/A on 26 Jul and 20 Aug for control of powdery mildew. Urea fertilizer was spread within vine rows on 11 Apr at 53 lb/A. Cassaron 4G (150 lb/A) was initially applied to control weeds in the vine row on 1 Feb and completed on 18 Feb. Glyphos xtra (4 qt/A) was applied 10 May to manage weeds which had already emerged. Nets were placed around vines on 26 Sep to protect fruit from possible bird damage. Incidence of Botrytis bunch rot was determined on 27 Sep (15.8° Brix) by examining 50 clusters from the center vines of each set of five vines. Incidence and severity of Botrytis bunch rot was determined on 8 Oct (16.8° Brix) by harvesting and examining 50 clusters from the center vines of each set of five vines.

Weather conditions in Western Oregon were considered hot and dry with below normal rainfall. Even so, 0.42 in rain fell during full bloom before any treatments had been initiated. Some raisining or drying of berries in the bunch was observed around 1 Sep but increased during the month after more 90°F weather. Bunch rot was first observed in late Sep after 0.68 in rainfall on 16-18 Sep. This rain event occurred 17 days after the veraison spray but 10 days before the preharvest spray. A total of 0.7 in rain fell between the preharvest application and harvest. There were no significant differences between any treatments for any measure of disease. We suspect timing of the rains relative to the timing of fungicides as well as the general raisining had an overriding effect. No phytotoxicity was observed on any vines treated with any fungicide.

Treatment and Rate/A	% Incidence of Bunch Rot*		% Severity of Bunch Rot*	Brix (8 Oct)*
	27 Sep	8 Oct		
Nontreated	60.0	93.5	43.7	16.8
Leaf Removal only.....	64.0	94.0	34.4	17.4
Wing Removal only.....	59.0	94.5	33.8	16.1
Rovral 50 WP 2 lb at bunch close then Vanguard 75 WG 10 oz at veraison then Elevate 50 WDG 1 lb at preharvest.....	49.0	88.5	25.9	16.8
Leaf Removal at shatter then Rovral 50 WP 2 lb at bunch close then Wing Removal beginning of veraison then Vanguard 75 WG 10 oz at veraison then Elevate 50 WDG 1 lb at preharvest.....	46.5	84.5	24.5	16.9

* Means without any letters did not differ significantly based on Fisher's protected LSD (P=0.05).