

CHERRY (*Prunus avium* 'Corum')
Brown Rot Blossom Blight; *Monilinia laxa*

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Comparison of Valent numbered fungicides for control of cherry brown rot blossom blight, 2007.

Treatments were arranged in a randomized complete block design in a 'Corum' sweet cherry orchard on Mazzard F 12-1 rootstock planted in 1964 on 20 x 40 ft spacing and grafted in 1967. Each treatment consisted of 4 single tree replicates. Fungicides were applied using a hydraulic handgun sprayer at 110 psi and at a rate of 108 to 121 gal water/A such that approximately 8 to 9 gal of a spray suspension were applied per 4 trees. Fungicide treatments were applied on 21 Mar (popcorn), 28 Mar (full bloom), and 6 Apr (petal fall). Fungal infection periods were monitored using an Adcon A730 weather station equipped with standard sensors. According to a brown rot blossom blight risk model there were 3 infection risk periods detected on 7, 8 and 11 Apr, however, we suspect that there were 2 additional infection periods on 19 and 24 Mar. Trees were lightly pruned (to reduce height) from 13 to 16 Feb. Dormant oil (Omni spray oil at 4 gal/A) was applied to the entire block on 4 Mar, using a Rear's air blast speed sprayer, for Aphid control. Buccaneer (1pt/A) plus Goaltender (8oz/A) was applied on 29 Mar for weed control in the tree row. Incidence of brown rot blossom blight was evaluated on 12 Apr by examining 500 blossoms arbitrarily selected from the lower portion of each tree.

Spring weather conditions in Western Oregon were considered average with plenty of wet periods at moderate temperatures resulting in several infection periods for various diseases. Brown rot blossom blight was first observed on 2 Apr which indicated there must have been infections during wet periods with temperatures near 50°F on 19 and/or 24 Mar. All fungicide treated trees had significantly less brown rot blossom blight than nontreated trees. There were no significant differences in brown rot blossom blight among the various fungicide treated trees. No phytotoxicity was observed on any fungicide treated trees.

Treatment & Rate/A	Brown Rot Blossom Blight (%)*
Nontreated	8.3 a
V-10135 4.0 SC at 6 fl oz.....	0.3 b
V-10135 4.0 SC at 8 fl oz.....	0.3 b
V-10135 50 WDG at 8 oz.....	0.5 b
V-10135 4.0 SC at 10 fl oz	0.3 b
V-10135 4.0 SC at 12 fl oz	0.7 b
Pristine 38 WDG at 14.7 oz plus	
Break-Thru at 4 fl oz/100 gal.....	0.4 b
V-10116 50 WDG at 2.5 oz	0.2 b

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