

CHERRY (*Prunus avium* 'Royal Anne')
Brown Rot Blossom Blight; *Monilinia laxa*
Brown Rot Fruit rot; *Monilinia fruticola*

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COMPARISON OF FUNGICIDES FOR CONTROL OF CHERRY BROWN ROT, 2002: Treatments were arranged in a randomized complete block design in a 'Royal Anne' 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 5 single tree replicates. Fungicides were applied using a hydraulic handgun sprayer at 250 psi and at a rate of 272 to 305 gal water/A. Approximately 25 to 28 gal of a spray suspension were applied per 5 trees. Fungicide treatments were applied on 4 Apr (50% popcorn), 12 Apr (85% full bloom), 26 Apr (80% petal fall) and 19 Jun (7 days preharvest). According to a new brown rot blossom blight risk model there were 4 infection risk periods detected during bloom on 5, 9, 10 and 12 Apr. Glyphos xtra (2 qt/A) was applied on 11 Jan for weed control. All herbicide rates are based on in the tree row area. Urea fertilizer was broadcast around each tree on 10 Apr at 100 lb/A. Digon 400 (4 pt/A) was applied for control of cherry fruit fly on 30 May. Supreme oil (8 gal/A) was applied on 15 Feb for management of black aphids and pear slugs. Rejex-it (5 gal/A) was applied on 10 and 20 Jun in an attempt to discourage bird feeding. Incidence of brown rot blossom blight was evaluated on 30 Apr by examining 500 blossoms randomly selected from the lower portion of each tree. Incidence of brown rot fruit rot was evaluated on 25 Jun by examining 200 fruit randomly selected from the lower portion of each tree. Fruit was harvested on 26 Jun by hand picking 100 healthy-appearing fruit per tree. Fruit were placed into plastic boxes lined with moist paper towels and incubated in the laboratory at ambient temperature. Incidence of fruit with brown rot, *Rhizopus* sp. and other rots were monitored daily for a total of 11 days (7 Jul).

Spring and summer weather conditions in Western Oregon were considered dry with below normal rainfall. 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 treatments. There was no significant difference in brown rot blossom blight on trees treated only once or 3 times with Indar. Single applications of Indar were either at popcorn just before 4 risk periods or at full bloom after 3 low to moderate risk periods but just before a possible moderate to high risk period. There were no significant differences in brown rot fruit rot on the trees at harvest or post-harvest among the various treatments. There were no significant differences in post-harvest *Rhizopus* fruit rot or in all rots among the various treatments (data not shown). No phytotoxicity was observed on any trees treated with any fungicide.

Treatment & Rate/A	Time of Application**				Brown Rot Blossom Blight (%)*	Brown Rot Fruit Rot at Harvest (%)*	Post-harvest Brown Rot (%)*
	P	FB	PF	PH			
Nontreated	--	--	--	--	9.4 a	0.0	8.0
Cabrio (BAS 500) 9.5 oz.....	X	X	X	X	1.4 b	0.0	0.2
Cabrio (BAS 500) 9.5 oz.....	X		X				
Alternate with							
Indar 75 W 2 oz +							
Latron B-1956 at 9 oz.....		X		X	3.2 b	0.0	0.2
Indar 75 W 2 oz +							
Latron B-1956 at 9 oz.....	X	X	X	X	0.6 b	0.0	0.4
Indar 75 W 2 oz +							
Latron B-1956 at 9 oz.....	X	--	--	--	0.2 b	0.2	1.2
Indar 75 W 2 oz +							
Latron B-1956 at 9 oz.....	--	X	--	--	0.4 b	0.0	0.04
Rovral 50 WP 2 lb then	X						
Indar 75 W 2 oz +							
Latron B-1956 at 9 oz then		X					
Bravo Weather Stik 5.5 pt then			X				
Orbit EC 4 oz.....				X	0.6 b	0.0	0.2
About 12.3 fl oz then	X						
Elevate 1.5 lb then		X					
Bravo Weather Stik 5.5 pt then			X				
Elite 45 DF 4 oz.....				X	0.2 b	0.0	0.2

* Means followed by the same letter do not differ significantly based on Fisher's protected LSD (P=0.05). Means without any letters did not differ significantly.

** Treatments were applied on P = Popcorn (4 Apr), FB = Full Bloom (12 Apr), PF = Petal Fall (26 Apr), and PH = 7 days preharvest (19 Jun).