

**Comparison of fungicides for control of cherry leaf spot, 2005**

Treatments were arranged in a randomized complete block design in a ‘Black Republican’ sweet cherry orchard on Mazzard F-12-1 rootstock planted on a 20 x 40 ft spacing in 1961. Each treatment consisted of 4 single tree replicates. Fungicides were applied using a hydraulic handgun sprayer at 80 psi and at a rate of 109 to 136 gal water/A. Approximately 8 to 10 gallons of spray solution were applied per 4 trees depending on amount of foliage present. Treatments were applied on 31 Mar (50% petal fall), 14 Apr (Shuck Split), 28 Apr, 11 May, and 24 May. Fungal infection periods were monitored using an Adcon A730 weather station equipped with standard sensors. A total of 8 cherry leaf spot infection periods were detected from Mar through May: 3 high infection periods (25 Mar, 23 Apr, and 8 May); 1 moderate infection period (18 Mar); and 4 light infection periods (1, 3, 5 and 17 May). Another possible infection period may have occurred on 23 Mar. Weeds in the tree row were treated with Goal 2XL (3 qt/A) plus Roundup ULTRAMAX (3 qt/A) on 31 Mar. Cherry leaf spot was evaluated on 1 Jun by examining all the leaves on 20 arbitrarily selected current year terminal shoots from each tree (154 to 271 leaves per tree).

The spring growing season started out warm and dry but quickly changed to very wet from the end of bloom through harvest. Cherry leaf spot pressure was rated as high. Substantial defoliation occurred on nontreated trees by harvest (Fig 1). All trees treated with fungicide had significantly fewer leaves with cherry leaf spot than nontreated trees. Trees treated with V-10116 had significantly fewer leaves with cherry leaf spot than trees treated with Rally at similar application times. There were no significant differences between trees treated with either rate of V-10116. No phytotoxicity was observed on any trees treated with any fungicide or fungicide combination.

Treatment and rate/100 gal***	Time of application*	Leaf Spot (%)**
Nontreated.....	None.....	93.8 a
V-10116 WG at 1.25 oz then ..... Pristine 38WG at 5.25 oz.....	A, C, E B, D,.....	14.3 c
V-10116 WG at 2 oz then ..... Pristine 38WG at 5.25 oz.....	A, C, E B, D.....	7.8 c
Rally 40 WP at 2 oz then ..... Pristine 38WG at 5.25 oz.....	A, C, E B, D.....	34.8 b

\* Treatments were applied on A = 31 Mar (petal fall), B = 14 Apr (shuck split), C = 28 Apr, D = 11 May, and E= 24 May.

\*\* Means followed by the same letter do not differ significantly based on Fishers Protected LSD (P=0.05).

\*\*\* Original target application rate was to be 200 gal water solution/A for all treatments. Lower per gal rates resulted in lower per A rates than target for all chemical applications. Rates of water used were 109 gal/A (1<sup>st</sup> application), 117 gal/A (2<sup>nd</sup> application), and 136 gal/A on all subsequent applications.

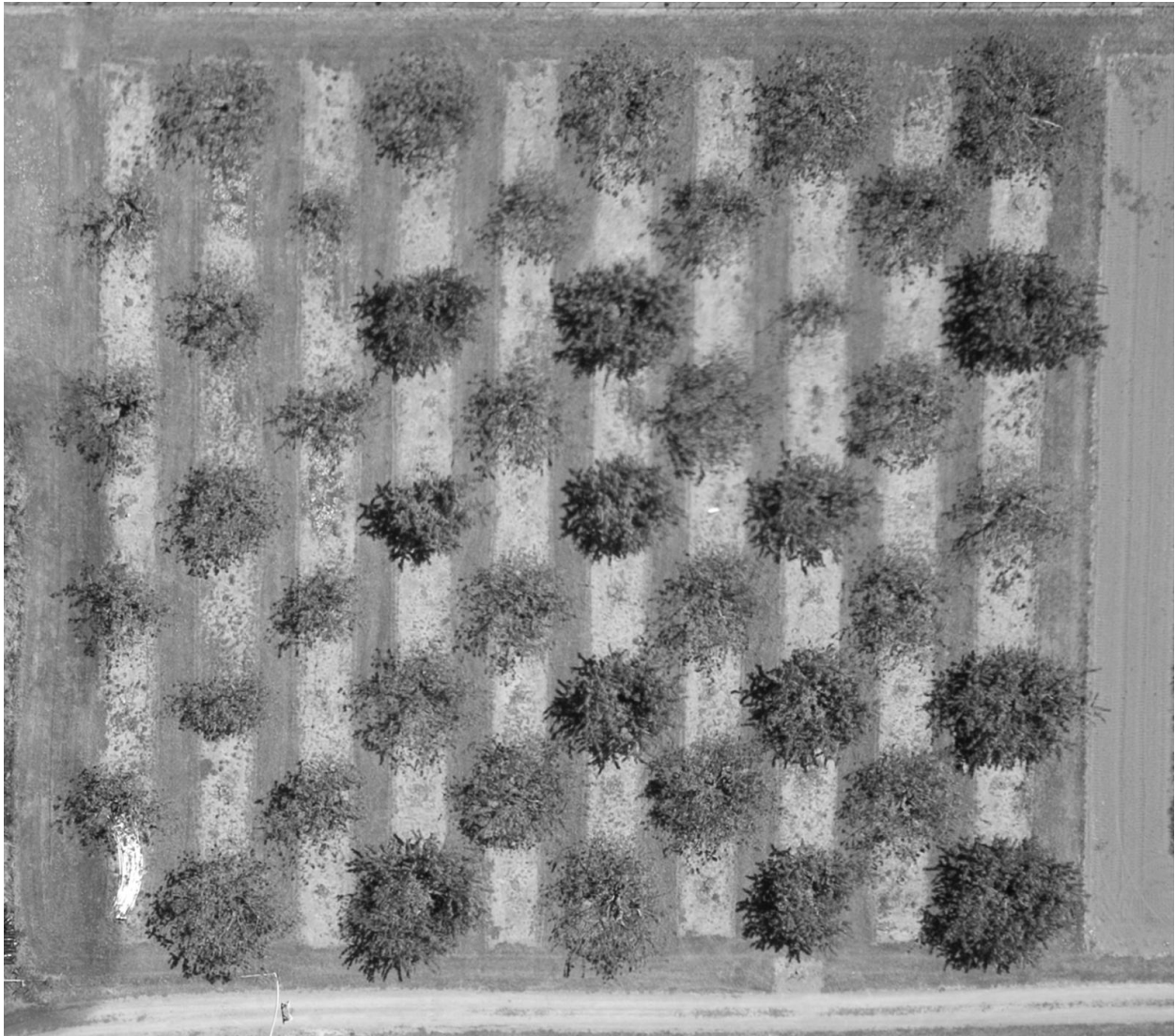


Figure 1. Treatments in row to extreme right are (from top to bottom) nontreated, V-10116 WG at 2 oz, nontreated, V-10116 WG at 1.25 oz and Rally 40 WP at 2 oz. Photo taken 1 Jul 05 by Haywood Photography.