

Efficacy of fungicides for control of pear scab, 2008.

Treatments were arranged in a randomized complete block design in a block of 'Bartlett' pears planted in 1954 on a 20 x 20 ft spacing. Each treatment consisted of 4 single tree replicates. Fungicide treatments were applied using a hydraulic handgun sprayer at 110 psi at a rate of 189 gal water/A. All treatments received approximately 7 gal of a spray suspension per 4 trees. Fungicide treatments were applied on 31 Mar (bud break), 12 Apr (white bud), 25 Apr (10% petal fall), 8 May (1st cover). Round-up Ultra Max (3 qt/A) plus Rely (4 qt/A) was applied on 12 Jun and again on 14 Jul to control weeds in the tree row. No fertilizer or insecticides were applied to this block of trees. Pear scab infection periods were monitored using an Adcon A730 weather station equipped with standard sensors. Using the Spotts model and the rule that wet periods start with rain and end with 8 hr drying time, a total of 5 infection periods (28 Mar, 7, 19 and 29 Apr and 2 Jun) were detected during the spring. Incidence of leaf scab was evaluated on 29 May by examining 200 leaves arbitrarily selected from the lower portion of each tree. The incidence of leaf rust was extremely low and not uniform in the block and thus no data was collected. Due to cool weather during bloom, fruit set was extremely poor with most trees producing less than 75 fruits total. However, incidence of scab on fruit was evaluated on 11 Aug by picking and examining 50 fruit arbitrarily selected from each tree.

Spring weather conditions in Western Oregon were considered cool resulting in low disease pressure and slow crop development with a 2 week delay in major growth stages through the growing season. Scab (and pacific coast pear rust) was first observed on 5 May. All fungicide treated trees had significantly less leaves with scab than nontreated trees. Lowest amount of leaf scab was found on trees treated with DPX-LEM 17, however, trees treated with QL Agri plus Yucca Ag-Aide were not significantly different. There were no significant differences among the various treatments with respect to fruit scab. Trees treated with QL Agri plus Yucca Ag-Aide had little to no fruit in 3 out of 4 replications which was even lower than nontreated trees. Although the weather contributed greatly to poor fruit set, future work with this tank mix should evaluate fruit set.

Treatment & Rate/A	Time of application*	Pear Scab**	
		Leaves (%)	Fruit (%)
Nontreated.....	none	6.0 a	27.0
Manzate Pro-stik DF at 3 lb	All.....	3.0 b	21.3
DPX-LEM 17 at 14.4 fl oz alternate	A, C		
Manzate Pro-stik DF at 3 lb	B, D.....	0.3 c	14.5
DPX-LEM 17 at 20.6 fl oz alternate	A, C		
Manzate Pro-stik DF at 3 lb	B, D.....	0.8 c	14.5
DPX-LEM 17 at 14.4 fl oz plus			
Manzate Pro-stik at 3 lb	All.....	1.3 bc	18.0
DPX-LEM17 at 14.4 fl oz plus			
Flint 50 WDG at 1 oz.....	All.....	0.3 c	15.5
QL Agri at 2.8 pt plus			
Yucca Ag-Aide at 1.2 pt	All.....	1.5 bc	---

* Treatments were applied on A = 31 Mar (bud break), B = 12 Apr (white bud), C = 25 Apr (10% petal fall), D = 8 May (cover).

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