

Efficacy of fungicides for control of pear scab, 2007.

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 108 to 162 gal water/A. All treatments received approximately 4 to 6 gal of a spray suspension per 4 trees depending on time of year. Fungicide treatments were applied on 16 Mar (bud break), 28 Mar (15% bloom), 13 Apr (petal fall), 26 Apr (1st cover) and 8 May (2nd cover). Buccaneer (1 pt/A) plus Scythe (2 qt/A) was applied on 7 Jun to control weeds in the tree row. Trees were lightly pruned, (height reduction), from 21 to 25 Aug 06. 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 7 infection periods (7, 8, 11, 16 and 21 Apr and 3 and 20 May) were detected during the spring. Incidence of leaf scab was evaluated on 29 to 30 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. Incidence of scab on fruit was evaluated on 20 Jul by picking and examining 100 fruit arbitrarily selected from the lower portion of each tree.

Scab (and pacific coast pear rust) was first observed on 16 Apr. All fungicide treated trees had significantly less leaves or fruit with scab than nontreated trees. Lowest amount of leaf scab was observed on trees treated with a tank mix of DPX-LEM 17 and Flint, however, trees treated with a tank mix of Procure plus Manzate or DPX-LEM 17 and Manzate were not significantly different. Lowest amount of fruit scab also was observed on trees treated with a tank mix of DPX-LEM 17 and Flint, however, trees treated with a tank mix of Procure plus Manzate or DPX-LEM 17 and Manzate or just Manzate alone were not significantly different.

Treatment & Rate/A	Time of application*	% Scab**	
		Leaves	Fruit
Nontreated.....	none	56.5 a	89.3 a
Procure 480 SC at 12 fl oz plus			
Manzate Pro-stik at 3 lb	All.....	5.0 cd	27.3 bc
DPX-LEM 17 at 14.3 fl oz alternate	A, C, E		
Manzate Pro-stik at 3 lb	B, D.....	19.0 b	35.0 b
DPX-LEM 17 at 20.6 fl oz alternate	A, C, E		
Manzate Pro-stik at 3 lb	B, D.....	12.8 bc	36.8 b
DPX-LEM 17 at 9.6 fl oz plus			
Manzate Pro-stik at 3 lb	All.....	10.3 bcd	28.8 bc
DPX-LEM17 at 9.6 fl oz plus			
Flint 50 WDG at 1 oz.....	All.....	3.3 d	21.0 c
Manzate Pro-stik at 3 lb.....	All.....	17.5 b	33.0 bc

* Treatments were applied on A = 16 Mar (bud break), B = 28 Mar (15% bloom), C = 13 Apr (petal fall), D = 26 Apr (1st cover), and E = 8 May (2nd cover).

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