PEAR (*Pyrus communis* 'Bartlett')
Scab; *Venturia pirina*

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Efficacy of fungicides for control of pear scab, 2010.

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 gal water/A. All treatments received approximately 4 gal of a spray suspension per 4 trees. Fungicide treatments were applied on 27 Mar (bud break), 7 Apr (full bloom), 22 Apr (petal fall), 7 May (1st cover) and 19 May (2nd cover). No fertilizer, insecticides or herbicides 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 14 infection periods (22, 24, and 28 Mar, 2, 19, 26 and 27 Apr, 3, 19, 21, 25 and 30 May and 1 and 3 Jun) were detected during the spring. Incidence of leaf scab was evaluated on 15 Jun by examining 40 spurs (with an average of 210 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 there was virtually no fruit set this year.

Western Oregon spring weather conditions were cold and wet during early shoot growth. Although there were more infection periods than in past years, there were few fruit to become infected. Scab was first observed on leaves of nontreated trees on 26 Apr. All fungicide treated trees had significantly fewer leaves with scab than nontreated trees. There were no significant differences among the various treatments with respect to leaf scab. No phytotoxicity was observed in trees treated with any of the various materials used.

Treatment & Rate/A	Time of application*	Pear Scab % Leaves**
Nontreated……..	none ….....	11.5 a
Fontelis (DPX-LEM 17) at 20 fl oz plus Regulaid at 32 fl oz/100 gal.....	All……	1.2 b
Procure 480 at 12 fl oz plus Manzate Pro-Stick DF at 4 lb then Fontelis (DPX-LEM 17) at 20 fl oz ……..	A, B C, D, E……..	1.3 b
Procure 480 at 12 fl oz plus Manzate Pro- Stick DF at 4 lb then Fontelis (DPX-LEM 17) at 20 fl oz plus Regulaid at 32 fl oz/100 gal ……..	A, B C, D, E……..	0.6 b
Procure 480 at 12 fl oz plus Manzate Pro- Stick DF at 4 lb then Fontelis (DPX-LEM 17) at 14 fl oz plus Manzate Pro- Stick DF at 3 lb plus Regulaid at 32 fl oz/100 gal ……..	A, B C, D, E……..	0.7 b
Procure 480 at 12 fl oz plus Manzate Pro- Stick DF at 4 lb then Flint at 2 oz plus Regulaid at 32 fl oz/100 gal ……..	A, B C, D, E……..	0.6 b

* Treatments were applied on A = 27 Mar (bud break), B = 7 Apr (full bloom), C = 22 Apr (petal fall), D = 7 May (1st cover), and E = 19 May (2nd cover).

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