

PEAR (*Pyrus communis* ‘Bartlett’)
 Scab; *Venturia pirina*
 Pacific Coast Pear Rust; *Gymnosporangium libocedri*

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Efficacy of fungicides for management of pear scab, 2011.

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 4 Apr (tight cluster), 18 Apr (full bloom), 1 May (petal fall), 12 May (1st cover) and 24 May (2nd cover). No fertilizer or insecticides were applied to this block of trees. Goal 2XL (32 oz/A) plus Glystar (24 oz/A) was applied to control weeds between trees on 8 Apr. Rely (5 pints/A) was also applied to control weeds on 1 Jun. 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 (5 and 13 Apr, 8, 26 and 30 May) were detected during the spring. Incidence of fruit scab was evaluated on 20 Jun by examining 100 fruit arbitrarily selected from the lower portion of each tree. Although the incidence of fruit rust was low, data were also collected on this disease at the same time.

Although this was the 5th wettest spring on record it also was the 10th coldest. Numerous short cold wet periods did not translate into disease infection periods. Early shoot growth and plant development was 2 to 3 weeks behind normal for most all of Oregon. Rust was first observed on fruit on 25 Apr and scab was first observed on fruit on 16 May. All fungicide treated trees had significantly fewer fruit with scab than nontreated trees. There were no significant differences among the various treatments with respect to fruit scab. Although check trees has more fruit infected with rust, there were no significant differences detected among all treatments. No phytotoxicity was observed in trees treated with any of the various materials used.

Treatment & Rate/A	Time of application	Pear Scab % Fruit*	Rust % Fruit**
Nontreated.....	none	59.8 a	3.3
Merivon 500 SC at 4 fl oz plus Superior Oil 172 fl oz/100 gal.....	All.....	7.8 b	0.0
Merivon 500 SC at 5.5 fl oz plus Superior Oil 172 fl oz/100 gal.....	All.....	2.8 b	0.0
Merivon 500 SC at 4 fl oz plus Sylgard 309 at 42.6 fl oz/100 gal.....	All.....	4.5 b	1.0
Merivon 500 SC at 5.5 fl oz plus Sylgard 309 at 42.6 fl oz/100 gal.....	All.....	4.8 b	0.0
Pristine 38 WG at 14.5 oz plus Sylgard 309 at 42.6 fl oz/100 gal.....	All.....	5.5 b	0.0
Flint 50 WG at 2 oz plus Sylgard 309 at 42.6 fl oz/100 gal.....	All.....	5.0 b	0.5

* 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 (P=0.05).