

SERVICEBERRY (*Amelanchier canadensis*)  
Pacific Coast Pear Rust; *Gymnosporangium libocedri*

J. W. Pscheidt and J. P. Bassinette  
Dept. of Botany and Plant Pathology  
Oregon State University  
Corvallis, OR 97331-2903

**Comparison of fungicides for management of rust on serviceberry, 2018.**

Fungicide treatments were arranged in a randomized complete block design in a block of serviceberry trees planted in 2004 on 10 x 15 ft spacing. Each treatment consisted of 6 single tree replicates. Fungicides were applied using a hydraulic handgun sprayer at 100 psi such that 2 to 3 gallons of a spray suspension was applied per 6 trees (96 to 145 gal/A) depending on time of year. Treatments were applied on 19 Mar (bud swell to bud break), 28 Mar (1-2 inch growth, floral buds still compressed), 9 Apr (bloom), 20 Apr (petal fall), and 3 May (cover). Trees were pruned 30 Oct to 2 Nov 2017 to reduce height. No herbicides, insecticides, or fertilizer were applied in this block. Trees were not irrigated through the duration of the trial. The incidence of rust on fruit was evaluated on 11 May by examining all fruit on 15 terminal shoots (average 108 fruit with a range of 79 to 158 although 2 trees had no fruit), arbitrarily selected from each tree. The incidence of rust on leaves was evaluated on 24 May by examining all leaves on 15 terminal shoots (average 115 leaves with a range of 90 to 144), arbitrarily selected from each tree.

Spring weather conditions were considered normal until early May when frequent rainfall tapered off quickly. Rust was observed on a nearby planting of Incense Cedars (*Calocedrus decurrens*). Telia (orange jelly-like masses on cedar scales) were just beginning to expand on 19 Mar, many had swollen and dried by 28 Mar, were observed throughout April and up to 7 May but in declining amounts. Rust was first observed on widely scattered leaves, petals and sepals of serviceberry trees on 11 Apr. Lowest amount of rust on fruit or leaves was found on trees treated with Mural. The amount of rust on fruit or leaves of trees treated with the low rate of XF-17002 was not significantly different from that found on non-treated trees. The amount of rust on leaves of trees treated with the high rate of XF-17002 was not significantly different from that found on non-treated trees. Although the amount of rust on fruit of trees treated with the high rate of XF-17002 was significantly different from that found on non-treated trees, it would not be considered commercially acceptable control. No phytotoxicity was observed in trees treated with any of the various materials used.

| Treatment & Rate/100 gal water | Fruit with Rust <sup>x</sup><br>(%) | Leaves with Rust <sup>x</sup><br>(%) |
|--------------------------------|-------------------------------------|--------------------------------------|
| Non-treated .....              | 97.9 a                              | 93.5 a                               |
| XF-17002 at 32 fl oz.....      | 95.8 a                              | 95.0 a                               |
| XF-17002 at 64 fl oz.....      | 70.7 b                              | 91.0 a                               |
| Mural WG at 7 oz.....          | 0.8 c                               | 8.5 b                                |

<sup>x</sup> Means followed by same letter do not differ significantly based on Fisher's protected LSD ( $P=0.05$ ).