PEACH (*Prunus persica* 'Improved Elberta') Brown Rot Blossom Blight; *Monilinia laxa*  J. W. Pscheidt and John P. Bassinette Dept. of Botany and Plant Pathology Oregon State University Corvallis, OR 97331-2903

## Comparison of fungicides for control of brown rot blossom blight of peach, 2008.

Treatments were arranged in a randomized complete block design in an 'Improved Elberta' peach orchard planted in 1984 on 20 x 20 ft spacing. Each treatment consisted of 4 single tree replicates. Fungicides were applied using a hydraulic handgun sprayer at 100 psi and at a rate of 135 to 162 gal water/A depending on the amount of foliage present. Approximately 5 to 6 gal of a spray suspension were applied per 4 trees. Bloom treatments were applied on 18 Mar (pink), 3 Apr (50% full bloom), and 17 Apr (petal fall). Ziram 76 DF (10 lb/A) was applied on 12 Oct 07 for control of Peach leaf curl. Trees were pruned from 11 to 21 Dec 07. Omni Supreme oil (5 gal/A) plus Success (4 oz/A) was applied on 6 Mar for control of insect and mite pests. Round-up Ultra-max (3 qt/A) plus Rely (4 qt/A) was applied on 20 Jun for control of weeds. All herbicide rates are based on in the tree row area. No fertilizer was applied to the block. An 8 hour set of irrigation water was applied during August. Brown rot blossom blight was evaluated on 5 May by examining 75 shoots (one-year-old flowering shoots), arbitrarily selected from each tree, for twig cankers.

Spring weather conditions in Western Oregon were considered cool resulting in slow crop development. Brown rot infection periods were not detected until late bloom on 19 and 23 Apr. First symptoms of brown rot blossom blight were obvious by 28 Apr. All fungicide treated trees had significantly fewer brown rot twig cankers than nontreated tress. There were no significant differences in brown rot twig cankers among the various fungicide treatments. No phytotoxicity was observed in trees treated with any of the various materials used.

| Treatment and Rate/A             | Brown Rot<br>Twig Cankers*<br>(%) |
|----------------------------------|-----------------------------------|
| Nontreated                       | 10.3 a                            |
| Rovral 4F at 24 fl oz            | 0.3 b                             |
| Pristine 38 WDG at 14.7 oz       | 0.3 b                             |
| Quash 50 WDG at 2.5 oz           | 0.3 b                             |
| Quash 2 DC at 5 fl oz            | 0.8 b                             |
| V-10135 - 4 SC at 6 fl oz        | 0.5 b                             |
| V-10135 - 4 SC at 8 fl oz        | 0.0 b                             |
| V-10135 - 4 SC at 10 fl oz       | 1.0 b                             |
| V-10135 - 4 SC at 12 fl oz       | 1.3 b                             |
| S-2188-B06-2-P3 - 50 WDG at 8 oz | 0.3 b                             |
| S-2188-BS06-22 - 50 WDG at 8 oz  | 0.5 b                             |
| S-2188-SBM07032 - 50 WDG at 8 oz | 0.5 b                             |

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