

Efficacy of fungicides for management of peach brown rot, 2018.

Fungicide treatments were arranged in a randomized complete block design in an orchard of ‘Suncrest’ peaches planted in 2010 on 20 x 20 ft spacing. Each treatment consisted of 6 single tree replicates. Fungicide treatments were applied using a hydraulic handgun sprayer at approximately 100 psi such that 3 to 4.5 gal of a spray suspension was applied per 6 trees (54 to 82 gal/A) depending on tree growth. Treatments were applied on 19 Mar (early pink), 28 Mar (full bloom), 9 Apr (petal fall), and 20 Apr (shuck split). Fungal infection periods were monitored using an Adcon weather station equipped with standard sensors. According to a brown rot blossom blight risk model there were at least 2 infection risk periods detected on 5 and 7 Apr. Trees were pruned from 19 to 29 Jan. Weedbar 64 (64 fl oz/A) was applied on 5 Mar, Alion (4 oz/A) was applied on 16 Mar and Rely 280 (80 fl oz/A) was applied on 6 Jun for weed control. No fertilizer was spread within tree rows and no insecticides were applied to the block. The entire block was sprayed with Ziram 76 DF (10 lb/A) on 16 Oct 2017 and 21 Feb 2018 for management of leaf curl. The number of brown rot stem cankers per entire tree was determined on 10 May. Data was not taken on fruit due to cold temperatures during bloom resulting in very poor fruit set

Spring weather conditions were considered normal until early May when frequent rainfall tapered off quickly. Brown rot blossom blight cankers were first observed on 16 Apr. Non-treated trees had the most brown rot blossom blight cankers. All fungicide treated trees had significantly fewer brown rot blossom blight cankers than non-treated trees. There was no significant difference in brown rot blossom blight among the various trees treated with any fungicide. No phytotoxicity was observed in trees treated with any of the various materials used.

Treatment & Rate/A or /100 gal as indicated below	Brown Rot ^x # of Cankers/Tree
Non-treated.....	23.2 a
Pristine 36 WDG at 14.5 oz.....	8.3 b
GWN 10570 SC at 6.8 fl oz plus Induce at 16 fl oz/100 gal.....	12.5 b
GWN 10570 SC at 10.3 fl oz plus Induce at 16 fl oz/100 gal.....	11.5 b
GWN 10570 SC at 13.7 fl oz plus Induce at 16 fl oz/100 gal.....	10.0 b

^x Analysis of variance was based on log (x+1) transformation. Means followed by the same letter do not differ significantly based on Fisher’s protected LSD ($P=0.05$).