HAZELNUT (Corylus avellana 'Jefferson') Wood Decay; Trametes versicolor J. W. Pscheidt and S. Heckert Dept. of Botany and Plant Pathology Oregon State University Corvallis, OR 97331-2903

Evaluation of fungicides for management of hazelnut wood decay, 2021-23.

The trial was conducted in a double density block of Jefferson hazelnuts planted in 2015 on 10 x 20 ft spacing. This block was located adjacent to an 'Ennis' orchard heavily infected with both eastern filbert blight and *Trametes versicolor* with numerous fruiting bodies of both fungi. Only temporary 'Jefferson' trees (trees to be removed as the orchard matures) were used for fungicide treatment and fungal inoculation. Three scaffold branches per tree were cut on 2 Mar 2021 just prior to bud break. Fungicide treatments were spray applied to the cut surface the next day on 3 Mar 2021. Fungicide treatments were arranged in a randomized complete block design within 8 groups (replicates) of 3 trees. Treatments consisted of a solution of Rally 40 WSP at 12 oz/100 gal water, Topsin M WSB at 3 lb/100 gal water or a non-treated control. Branch cuts were then inoculated the next day on 4 Mar 2021 with *T. versicolor*. The fungus was inoculated onto hazelnut sawdust in the laboratory and incubated prior to field application. Of the 3 cut and fungicide treated branches per tree, one was covered with sawdust inoculated with *T. versicolor*, sawdust alone, or no sawdust at all. Cut branches were regularly scouted for cankers and fungal fruiting bodies over the next several seasons.

As of 2023 there were no symptoms or signs of *T. versicolor* on any of the cut branches. Most cut branches appeared to seal/heal over nicely with the production of several adventitious shoots. The resulting branch would locally be called a crow's nest.