

EVALUATION OF FUNGICIDES FOR CONTROL OF EASTERN FILBERT BLIGHT, 1999 - 2000. Healthy two-year-old 'Royal' hazelnut trees were planted on 5 Feb 99 within a commercial block of heavily diseased 'Ennis' trees planted in 1985 on a 10 x 20 ft spacing near Canby, OR. Prior to planting the ground was rototilled and after planting, sawdust mulch was placed around the base of each tree. Treatments were arranged in a randomized complete block design. Each treatment consisted of 9 single tree replicates. Fungicide suspensions were applied to runoff with a backpack sprayer equipped with a hand wand. A separate sprayer was used to apply SoilGard. Approximately 1.5 gal of a spray suspension was used per 8 trees. Fungicide treatments were applied on 19 Mar 99 (bud break), 2 Apr 99, 16 Apr 99, and 30 Apr 99. The heavily diseased trees surrounding the trial were removed during the summer of 1999. The number of EFB cankers and total length of all cankers/tree was determined on 28 Sep 00.

Cankers did not seem to form on trees as they had in past years. Cankers appeared arrested in development and slow to appear if at all. Possible reasons include low natural infection rates or poor canker development. Spore counts just after bud break, initial tree health and vigor were similar to past years. However, the spring was noted as being extremely dry during early shoot growth. Removal of surrounding mature trees resulted in unusually high amount of drought stress and may have impacted fungal colonization and canker development. No conclusions can be drawn from this data set due to low canker development on nontreated trees. None of the trees showed any phytotoxicity during the first growing season, however, trees treated with Orbit showed typical growth regulation activity in the form of smaller, darker green leaves.

Treatment and Rate/100 gal water	Ave Number of Cankers/Tree*	Total Canker Length/Tree* (cm)
Nontreated	0.4	9.8
Bravo Weather Stik at 32 fl oz.....	0.2	2.8
Echo 720 at 32 fl oz	0.2	5.2
Elite 45 DF at 2 oz.....	0.0	0.0
Orbit 3.6 EC at 1.5 oz.....	0.0	0.0
Indar 75 WP at 1 oz + Latron B-1956 at 8 fl oz	0.0	0.0
Procure 50 WS at 3 oz.....	0.0	0.0
Abound 2.08 F at 3.7 fl oz.....	0.0	0.0
Sovran 50 WG at 1.2 oz.....	0.0	0.0
Flint 50 WG at 1 oz	0.3	4.2
Vanguard 75 WDG at 5 oz.....	0.1	1.1
Syllit 65 WP at 2 lb.....	0.0	0.0
Ziram 76 DF at 1.5 lb	0.1	4.6
Bordeaux Copper Sulfate at 6 lb + Spray Lime at 6 lb	0.1	2.0
Lime Sulfur (29%) at 32 oz	0.2	5.2
SoilGard 12 G at 8 lb.....	0.2	4.7

* Analysis of variance is based on log₁₀ (x+1) transformation. Values presented are detransformed means. Means were not differ significantly based on Fisher's protected LSD (P=0.05).

Acknowledgements: We would like to thank Richard Birkemeier for use of his orchards and for helping prepare the land and tend trees.