

HAZELNUT (*Corylus avellana* 'Ennis')
 Eastern Filbert Blight; *Anisogramma anomala*

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Evaluation of Tetrasul (lime sulfur) for control of eastern filbert blight, 2005 - 2006.

Healthy appearing 2-year-old 'Ennis' hazelnut trees were planted on 24 to 25 Jan 05 adjacent to a commercial block of diseased 'Ennis' trees located north of Keiser, OR. Treatments were arranged in a randomized complete block design with 4 single tree replications. Treatments were applied on two sides of the tree to run-off using a Solo-Pump-Style backpack sprayer. Approximately 0.5 gal of a spray suspension was used per 4 trees. Fungicide treatments were applied on 8 Mar 05 (bud break), 23 Mar 05, 4 and 19 Apr 05 for a total of 4 applications. Roundup ULTRAMAX (2% solution) was applied to control weeds between trees on 26 Apr 05 and 4 May 05. Trees were fertilized with Urea (46-0-0) at a rate of 1 lb/3 trees on 4 May 05. Supplemental irrigation was provided as needed during the 2005 growing season. The number of cankers per tree and total canker length was determined on 25 Jul 06.

Weather conditions right after bud break were dry with below normal rainfall. The weather turned very wet when a "pineapple express" weather system brought warm wet weather from 25 to 27 Mar. Spore counts were low during the 2 week period after bud break but then considered quite high during the next 2 week period. No EFB cankers developed on any fungicide treated trees. Nontreated trees averaged 1 canker per tree, considered a low value based on historic disease development in trees without fungicide protection.

Treatment and Rate/100 gal water	Number of Applications	Ave Number of Cankers/Tree*	Total Canker Length/Tree* (cm)
Nontreated	None	1.0 a	17.5 a
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Tetrasul 4s5 at 0.75 gal.....	4	0.0 b	0.0 b
Tetrasul 4s5 at 1.25 gal.....	4	0.0 b	0.0 b
Flint 50 WG at 1 oz then.....	1		
Flint 50 WG at 1 oz plus Tetrasul 4s5 at 1.25 gal.....	3.....	0.0 b	0.0 b
Flint 50 WG at 1 oz	4	0.0 b	0.0 b
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* Analysis of variance is based on log10 (x+1) transformation. Means followed by the same letter do not differ significantly based on Fisher's protected LSD (P=0.05).

** Lime Sulfur was tank mixed with other fungicides only during the 27 Mar 04 applications.

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