

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

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### **Evaluation of pruning cut treatments for control of eastern filbert blight cankers, 2003.**

Our objective was to determine if treatment of the pruning cut surface with various materials could prevent EFB canker extension. A commercial block of moderately diseased 'Ennis' trees planted in 1993 on a 15 x 15 ft spacing near Keizer, OR was selected. Treatments were systematically assigned to trees using as many cankers as possible per tree. Trees were not uniform with respect to number of cankers per tree. Each tree selected had to have at least 2 cankers, one of which was left as a nontreated control. Other cankers in each tree were treated according to the protocol below until no more cankers were left. The next tree would contain a check and then the next treatment in order. It took 55 trees to complete 33 replications of the experiment. Treatments consisted of cutting off the branch at the base of the canker on 11 to 25 Mar 02 (bud swell through bud break) and then treating the cut surface with either nothing, a plastic bag to exclude commercial sprays (removed later), white, oil-based spray paint (RUDD Tree and Log MarKing, Chemtron Aerosol Division, Rudd Company, Inc., Seattle, WA), Orbit (2.5 fl oz/100 gal water), Bravo Weather Stik (32 fl oz/ 100 gal water), or undiluted Gallex. One treatment consisted of leaving a canker in each tree intact, except for scraping off the stroma, to serve as a control. Another treatment consisted of leaving a canker intact, scraping off the stroma, and then painting the cankered area with undiluted Gallex. Fungicides were used for EFB control in this orchard during the spring growing season on 17 Mar (Echo at 2 pt/A + Orbit at 4 oz/A), 30 Mar (Orbit 7 oz/A), 16 Apr (Orbit at 6 oz/A) and 1 May (Orbit 6 oz/A). The length of EFB canker extension was determined on 7 to 9 Jul 03.

All treatments resulted in significantly smaller average canker lengths than when cankers are left intact. This included just cutting the cankers at the base of symptomatic tissues. Only treating cut surfaces with Gallex resulted in significantly smaller average canker lengths than when cankers are just cut at the base and covered with plastic bags. (This treatment was not significant in last years' trial results.) The influence of treating the entire tree with fungicides on canker length can not be determined from this trial. Trees were located in an active commercial orchard and were sprayed several times during the spring. The trial should be repeated in an infected orchard that will not be treated generally with fungicides.

Treatments	Ennis	
	Length of Canker Extension (inches)*	Incidence (%)
Cankers left intact, stromas scraped off.....	9.4 a	96
Cankers left intact, stromas scraped off, area treated with undiluted Gallex	4.3 b	66
Cankers cut at 0 inches then No treatment of cut surface. ....	0.6 cd	15
Cankers cut at 0 inches then covered with a plastic bag until commercial sprays were finished. ....	1.7 c	37
Cankers cut at 0 inches then cut surface sprayed with white spray paint. ....	1.1 cd	20
Cankers cut at 0 inches then cut surface brushed with Gallex at 0 dilution. ....	0.1 d	3
Cankers cut at 0 inches then cut surface brushed with Bravo Weather Stick at 32 fl oz/100 gal water.	0.5 cd	15
Cankers cut at 0 inches then cut surface brushed with Orbit at 2.5 fl oz/100 gal water.....	0.6 cd	15

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

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