

PRUNING SEVERITY NECESSARY TO REMOVE EASTERN FILBERT BLIGHT CANKERS, 2001: Our objective was to determine how far to prune below an EFB canker in order to eradicate an infection from a branch. Past research on canker perennial canker length (Gottwald and Cameron – 1980, Pscheidt and Clusky – unpublished) and histological observations (Pinkerton – unpublished) indicated that cutting one foot below visible symptoms should prevent further expansion of cankers. A commercial block of moderately diseased ‘Ennis’ trees planted in 1991 on a 15 x 17 ft spacing near Keizer, OR was selected. All treatments were randomized within 20 single tree replications. Trees were selected based on similarity in overall size and number of EFB cankers found in the canopy. A total of 5 EFB cankers per tree were selected and cut off 0, 3, 6, 12 or 36 inches below visible canker symptoms on 6 Mar 01 (buds beginning to open). Each cut end was marked with different color spray paint corresponding to the pruning severity. The length of EFB canker extension was determined on 13 Jul 01. A similar trial using the same treatments was conducted in a commercial block of moderately diseased ‘Barcelona’ trees planted in 1984 on a 20 x 20 ft spacing near North Plains, OR. Treatments were arranged and cut similarly on 8 Mar 01 (buds beginning to open). The length of EFB canker extension was determined on 23 Jul 01.

A few cankers continued to expand even when cut 12 inches below visible symptoms. This may have been due to the presence of symptomless, latent infections from the previous growing season. All cuts made 36 inches below cankers removed EFB infections such that no canker extension occurred. Surprisingly, many cankers did not expand when cut just below visible symptoms. Past research (Cameron, 1981) showed that all uncut cankers or those cut one inch below symptoms continued to expand. It is possible that the spray paint applied to the cut surfaces had an impact on canker expansion. Further tests would be necessary to confirm this conclusion.

Length of pruning cut below EFB canker (inches)	Ennis		Barcelona	
	Length of Canker Extension (inches)*	Incidence per 20 trees (%)	Length of Canker Extension (inches)*	Incidence per 20 trees (%)
0	0.9	30	2.1 a	60
3	0.4	10	0.2 b	5
6	0.0	0	1.3 a	35
12	0.3	10	0.1 b	5
36	0.0	0	0.0 b	0

* Means followed by the same letter do not differ significantly based on Fisher’s protected LSD (P=0.05). Means without any letters did not differ significantly.

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