

Evaluation of fungicide tank mixes for control of eastern filbert blight, 2011 - 2012.

Healthy appearing two-year-old ‘Ennis’ hazelnut trees were planted on 19 Jan 11 at the Botany and Plant Pathology Field Laboratory, Corvallis, OR. Limbs with EFB cankers were cut on 2 Nov 10 from heavily diseased ‘Ennis’ trees located at the NWREC. A total of 400 cankered limbs were placed above test trees on chicken wire, supported by a 6 wire horizontal trellis, on 3 Mar 11. Treatments were arranged in a randomized complete block design. Each treatment consisted of 7 single tree replicates. Fungicides were applied to trees from two directions until runoff using a Solo-Pump-Style backpack sprayer. Approximately 0.25 gal of a spray suspension was used per 7 trees within each treatment. Fungicide treatments were applied on 23 Mar 11 (bud break), 5 Apr 11, 19 Apr 11, and 3 May 11 for a total of 4 applications. Sucker shoots were killed on treatment trees using Rely (25 oz/10 gal water) on 24 May 11. Buccaneer (1 qt/A) was applied on 24 Aug for weed control. Trees were fertilized with 46-0-0 at a rate of 0.5 lb/6 trees on 6 Apr 11, again on 26 Jul 11 and with 16-16-16+6S at a rate of 0.5 lb/6 trees on 3 Jun 11. Supplemental irrigation was provided as needed during the 2011 growing season. The number of EFB cankers on the main tree trunk and total length of these cankers/tree was determined on 9 Aug 12.

Spring weather conditions in Western Oregon were considered cool and wet resulting in slow crop development and a 2 to 3 week delay in crop growth stages through the growing season. Nontreated trees had significantly more cankers than any of the various fungicide treated trees. There were no significant differences among any of the various fungicide tank mix treatments. Trees treated with Quash did have marginal leaf burn this year but not in past year’s trials.

Treatment and Rate/100 gal water	Ave Number of Cankers/Tree*	Total Canker Length/Tree* (cm)
Nontreated	6.6 a	254 a
Tilt at 4 fl oz plus		
Bravo Weather Stik at 32 fl oz	3.1 b	55 b
Tilt at 4 fl oz plus		
Bravo Weather Stik at 16 fl oz	3.6 b	85 b
Procure 480 SC at 4 fl oz plus		
Bravo Weather Stik at 16 fl oz	2.6 b	56 b
Tebuzol 45 DF at 4 oz plus		
Bravo Weather Stik at 16 fl oz	2.1 b	60 b
Quash 50 WDG at 4 oz plus		
Bravo Weather Stik at 16 fl oz	2.3 b	56 b
Cabrio 20 EG at 4.75 oz plus		
Bravo Weather Stik at 32 fl oz	1.6 b	36 b
Cabrio 20 EG at 2.4 oz plus		
Bravo Weather Stik at 16 fl oz	2.1 b	46 b
Gem 500 SC at 2 fl oz plus		
Bravo Weather Stik at 16 fl oz	2.7 b	65 b

* 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). Means without letters do not differ significantly.