

HAZELNUT (*Corylus avellana* ‘Lewis’)
Kernel Mold; *undetermined fungi*

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Preliminary evaluation of Merivon for management of kernel mold in hazelnut, 2016.

The purpose of this trial was to determine if spring applications of Merivon have any influence on the amount of kernel mold found at harvest. Fungicide treatments were **not** randomized in an orchard of ‘Lewis’ hazelnuts planted in 2001 on 18 x 18 ft spacing near Dundee OR. The orchard was heavily infected with Eastern Filbert Blight (EFB). One side of the orchard was sprayed with the grower’s standard EFB management program while the other side of the orchard was sprayed with a similar set of fungicides but substituting Merivon for the last two applications. A complete list of fungicides can be found in Table 1. Fungicide treatments were applied using an electrostatic sprayer at a rate of 25 gal water/A. Fungicide treatments were applied on 22 Feb (early bud break), 4 Mar, 19 Mar, 23 Mar, 29 Mar and 5 Apr. The orchard was managed for fertility and pest management that is typical for the Willamette Valley. Supplemental irrigation was applied twice during the growing season. A total of 200 nuts were collected from under 10 different trees (for a total of 1,000 nuts) for each treatment on 1 Sep. The tree rows that were sampled were 126 ft apart from each other while the non-Merivon treated row was 54 ft from the last row sprayed with Merivon. A set of 100 nuts from each tree was cracked open and evaluated for kernel defects. Scoreable “mold” included any kernel with visible mycelial growth.

Spring growing conditions were considered warmer and dryer than normal with several heat spikes. Conditions resulted in accelerated hazelnut tree growth 2 to 3 weeks ahead of average. The amount of mold in nut samples from either side of the orchard were not significantly different. Mold from grower standard treated trees ranged from 0 to 7% while mold from Merivon treated trees ranged from 1 to 6%. A more thorough evaluation of Merivon for use against mold is still needed.

Treatment & Rate/A	Time of Application ^Z	Mold (%) ^Y
Stratego at 12 fl oz then	A	
Echo 720 at 64 fl oz then	B	
Gem 500 SC at 2.8 fl oz	D and F.....	3.8
Stratego at 12 fl oz then	A	
Echo 720 at 64 fl oz then	B	
Merivon at 6.5 fl oz	C and E.....	3.7

^Z Treatments were applied on A = 22 Feb (early bud break), B = 4 Mar, C = 19 Mar, D = 23 Mar, E = 29 Mar and F = 5 Apr.

^Y Means without letters were not significantly different based on Fisher’s protected LSD (P=0.05).