

HAZELNUT (*Corylus avellana* ‘Royal’)
 Eastern Filbert Blight; *Anisogramma anomala*

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Greenhouse evaluation of Flint for protection against eastern filbert blight, 2002 - 2003.

Eight week old hazelnut seedlings grown from open-pollinated seed of ‘Royal’ were sprayed with various concentrations of Flint using a hand held pump sprayer on 20 May 02. All materials were applied 24 hours before inoculation. One treatment did not have any fungicide applied to inoculated plants and served as the nontreated control. Each treatment consisted of 4 sets of 12 seedling trees. After these materials had dried on plants for 24 hours, seedlings were inoculated with ascospores of *Anisogramma anomala* (5.0×10^6 spores per ml) using a pump sprayer. After inoculation, all seedlings were placed in a mist chamber with intermittent misting for 10 sec out of every 30 min during daylight hours. All seedlings were removed from the mist chamber after 3 days incubation and placed on greenhouse benches (70°F days and 62°F nights). Seedlings were transplanted from small “6-paks” to 1 gal pots on 3 Jun 02 and fertilized with Osmocote Slo-Release fertilizer 18-6-12 (1 teaspoon/pot) on 22 Jul 02. Seedlings were moved to an outside (colder), rain protected location on 24 Sept 02 then moved back into the greenhouse on 9 Apr 03 where temperatures were set at 70°F days and 62°F nights. Disease incidence was determined by recording trees that had died or showed symptoms of EFB or cambium staining below the point of inoculation during May 03.

Groups of trees treated with any rate of Flint developed significantly fewer trees with EFB than nontreated trees. There was no significant difference in trees with EFB among the various rates of Flint used. Flint continues to be an excellent material to use against EFB.

Treatment and Rate/100 gal	Disease Incidence (%)*
Nontreated.....	86 a
Flint 50 W at 0.25 oz	4 b
Flint 50 W at 0.5 oz	0 b
Flint 50 W at 1.0 oz	6 b

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

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