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

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GREENHOUSE EVALUATION OF ABOUND AND ELITE FOR PROTECTION AGAINST EASTERN FILBERT BLIGHT, 2000 - 2001. Eight week old hazelnut seedlings grown from open-pollinated seed of 'Royal' were sprayed with various fungicides using a hand held pump sprayer on 12 Jan 00. Fungicide treatments included Bravo Weather Stik at 32 fl oz/100 gal water, Abound 2.08 F at 15.4, 12.3, 6 and 3 oz/100 gal water, and Elite 45 DF at 4, 2, 1 and 0.5 oz/100 gal water. One treatment did not have any fungicide applied to inoculated plants and served as the nontreated control. Each treatment consisted of 4 sets of 6 seedling trees. After fungicides had dried on plants for 24 hours, seedlings were inoculated with ascospores of *Anisogramma anomala* ($5.0x10^6$ 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^oF days and 62^oF nights). Seedlings were transplanted from small "6-paks" to 1 gal pots on 8 Mar 00 and fertilized with Osmocote Slo-Release fertilizer 18-6-12 (1 teaspoon/pot) on 23 Mar 00. Seedlings were moved to an outside (colder), rain protected location on 16 Oct 00 then moved back into the greenhouse on 1 Mar 01 where temperatures were set at 70^oF days and 62^oF 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 01.

Seedlings treated with Bravo or Abound did not develop symptoms except for one seedling treated with Abound at 6 oz/100 gal water. Many of the seedlings inoculated but not treated with fungicide showed symptoms of EFB. Significantly fewer seedlings treated with Elite at 4 oz/100 gal water developed symptoms of EFB than nontreated seedlings but had significantly more seedlings with symptoms than those treated with Abound. Significantly more seedlings showed symptoms of EFB as rates lower than 4 oz of Elite were used. The data suggest that rates of Abound could be lowered while rates of Elite need to be maintained at a high level.

Treatment and Rate/100 gal	Disease Incidence (%)*
Nontreated……..	87 a
Bravo Weather Stik at 32 fl oz	0 d
Abound 2.08 F at 15.4 oz	0 d
Abound 2.08 F at 12.3 oz	0 d
Abound 2.08 F at 6 oz	4 d
Abound 2.08 F at 3 oz	0 d
Elite 45 DF at 4 oz	41 c
Elite 45 DF at 2 oz	66 b
Elite 45 DF at 1 oz	79 ab
Elite 45 DF at 0.5 oz	66 b

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

Acknowledgements: We would like to thank David and Nita McAdams for the Royal seed nuts used in this trial.