

**Evaluation of a 2-spray fungicide program for control of Botrytis fruit rot on strawberry, 2003.**

Trials were performed in a 3-year-old planting on a Cornell research farm at the Geneva Experiment Station. Plants were grown in a matted-row system, with fruiting rows approx. 1.5 ft wide on 4 ft centers. Individual plots consisted of 12 ft sections of row with 3 ft buffer zones on both ends of each treatment. Treatments were replicated 4 times in a randomized complete block design. Fungicides were applied with a 2 gal hand sprayer (approx. 30 PSI) during bloom on 22 and 30 May. To provide disease pressure, approx. 3 berry halves inoculated with 3 strains of *B. cinerea* were placed evenly throughout each plot after treatments were dry on the first date of application. Fruit were harvested on 20, 24, 26 Jun, and 2 Jul. The number of berries with and without symptoms was recorded the same day they were harvested and the percent of berries infected was calculated. Subsamples of unblemished, symptomless berries from each plot were placed on individual deep-well plastic trays. The number of fruit sampled per replication per harvest date was typically 25, unless the number of berries available for screening was less than 25, in which case all berries were subjected to the post harvest treatment. The berries were incubated 4 days at 68 F and 95-97% relative humidity. After incubation the proportion of diseased fruit was recorded. Data were arcsin square root transformed before statistical analysis and analyzed in an ANOVA using SAS PROC MIXED. Treatment means were separated using the pairwise difference option (PDIFF) in PROC MIXED ( $P < 0.05$ ).

The 2003 season was exceptionally wet, with 17 days of recorded rainfall between bloom and harvest. Three infection periods occurred during bloom. For each infection period, the date, inches of precipitation and average temperature are listed, respectively: 20-21 May, 0.31 in., 56 F; 23-25 May, 0.97 in., 54 F; and 31 May-1 June 1, 1.04 in., 52 F. Although numerical differences were present, none of the products tested provided significant reduction of disease at harvest or post harvest on a 2-spray program under such wet conditions.

Treatment , rate/A)	Botrytis fruit rot post harvest (%)*	Botrytis fruit rot at harvest (%)*
Elevate 50WG 1.5 lb .....	19.63 a	0.26 a
Switch 62.5WG 0.88 lb .....	26.63 a	0.08 ab
Captan 80WDG 3.75 lb .....	32.09 a	1.04 b
Thiram 65WSB 2.5 lb.....	33.70 a	1.02 ab
Rovral 4F 2pt.....	34.02 a	0.35 ab
Topsin-M 70WSB 1 lb .....	35.22 a	0.61 ab
Untreated check .....	30.42 a	0.52 ab

\* Values are actual means of 4 replications per treatment. Treatment means within a column followed by the same letter are not significantly different from each other using the PDIFF option in PROC MIXED ( $P \leq 0.05$ ).