

### Evaluation of fungicides to control white mold in snap beans, Hancock, WI, 2015.

A trial to evaluate the efficacy of fungicides to control white mold on snap bean was established 3 Jun using cultivar DM88-04 (Del Monte) seeded at approximately 10 per foot. Plots were 24 ft long with 4 rows spaced 15 in apart. Seed was commercially treated with thiram for damping off and root rot protection. There were 4 replications and plots were arranged in a randomized complete block design. Sunflowers were previously planted and inoculated with *Sclerotinia sclerotiorum* in the trial area in 2014. Infected plant debris and sclerotia were tilled into the soil in the fall of 2014 and served as a natural source of inoculum for this experiment in spring/summer 2015. Fungicide applications for the control of white mold were applied twice (depending on fungicide treatment) at 30% bloom (15 Jul) and 7 days later at 100% bloom (22 Jul). Fungicides were applied using a backpack CO2 sprayer with a 4 nozzle spray boom with 19 in. spacing between standard flat fan spray nozzles (Tee Jet 8002VS) at a rate of 35 gallons per acre at 40 psi. On the day of harvest (30 Jul), the center 2 rows of each plot were evaluated for white mold with the total number of symptomatic plants for each plot being recorded. The 2 center rows from each plot (48 ft total) were mechanically harvested and pods were weighed. Precipitation in Hancock during the snap bean trial was 6.33 in. Supplemental irrigation was applied 15 times during the trial for an additional 6.8 in.

Weather conditions during bloom were only moderately conducive for infection of flowers and subsequent disease spread. Thus, the occurrence of floral infections was very low with most disease incidence coming from infection through lower stems. There were no significant differences between treatments for the number of symptomatic plants and marketable yield ( $P=0.05$  as determined by Fisher's Least Significant Difference (LSD) test). No phytotoxicity was noted for any of the treatments included in this trial.

Product and rate/acre	Application Timing <sup>z</sup>	Number of Symptomatic Plants	Marketable Yield (ton/A)
Untreated control		9.8	3.8
Endura 70WDG 8.0 oz + 0.1% v/v NIS	1,2	5.5	4.4
Topsin M 70WSB 1.0 lb	1,2	4.8	4.4
Topsin M 70WSB 1.0 lb	2	8.3	3.1
Fontelis 1.67SC 24.0 fl oz	1,2	11.8	4.3
Quadris 2.08SC 9.0 fl oz	1,2	15.3	4.0
Priaxor 4.17SC 10.3 fl oz	1,2	10.3	3.8
Endura 70WDG 8.0 oz + 0.1% v/v NIS	1	11.0	3.7
Endura 70WDG 8.0 oz + 0.1% v/v NIS	2	7.8	3.8
Topsin M 70WSB 1.0 lb	1	10.0	4.0
Champion 77WG 1.58 lb	1,2	7.3	3.9
Champion 77WG 1.58 lb	1		
EF400 8.0 fl oz + Bacstop 6.0 fl oz	2	8.0	3.7
EF400 8.0 fl oz + Bacstop 6.0 fl oz	1,2	11.0	3.7
EF400 8.0 fl oz + Bacstop 6.0 fl oz	1		
Champion 77WG 1.58 lb	2	13.5	3.3

<sup>z</sup> Foliar applications were applied at either the 30% bloom stage on 15 Jul (1) and/or at 100% flowering (7 days after 30% bloom) on 22 Jul (2).