

Evaluation of selected fungicides for management of gummy stem blight on watermelon, spring 2012.

Treatment, rate/Acre (application) ^z	Disease Severity (% foliage)			
	14-May ^y	24-May	31-May	AUDPC ^x
Bravo, 2 pt (1-9)	4.5 cd ^w	11.8 de	18.5 bc	315 de
Bravo, 2 pt (1,2,3); Folicur, 8 floz (4-9)	3.3 de	5.8 ef	11.8 cd	197 ef
Bravo, 2 pt (1,2,3); Folicur, 8 floz (4,6,8); Regalia, 1 qt (5,7,9)	7.3 c	24.4 c	45.8 a	617 bc
Bravo, 2 pt (1,2,3); Folicur, 8 floz (4,6,8); Regalia, 2 qt (5,7,9)	5.8 cd	15.0 cd	45.8 a	482 cd
Bravo, 2 pt (1,2,3); MBI-10605, 4 qt (4-9)	15.0 b	37.5 b	31.9 ab	920 ab
Bravo, 2 pt (1-9); Fluopyram 500SC, 6.8 oz (drip; 3,5)	1.5 e	4.5 f	10.0 cde	125 fg
Bravo, 2 pt (1,3,5,7,9); Luna Experience, 10 oz (2,4,6,8)	1.5 e	1.5 f	1.5 e	59 h
Bravo, 1.5 pt (1,3,5); Fontelis, 1 pt (2,4,8); Bravo, 1 pt (2,4,8); Folicur, 8 floz (6,7,9)	1.5 e	3.6 f	4.5 de	93 gh
Bravo Weatherstik, 2 pt (1,3,5,7); Pristine, 18.5 floz (2,4,6,8)	1.5 e	4.5 f	2.8 de	97 gh
Bravo Weatherstik, 2 pt (1,3,5,7,9); Inspire Super, 20 oz (2,4,6,8)	1.5 e	3.3 f	5.8 cde	96 gh
Non-treated Control	22.8 a	62.5 a	50.0 a	1447 a
	<i>P</i> = < 0.0001	< 0.0001	< 0.0001	< 0.0001

^z Treatments were applied on 5 Apr, 11 Apr, 19 Apr, 26 Apr, 7 May, 14 May, 21 May, 28 May, and 8 Jun (applications 1-9) using a CO₂ backpack sprayer at 40 psi calibrated for 40, 60, and 100 gallon per an acre broadcast volumes. Listed treatment rates are on a per acre basis unless noted otherwise. Transplants were set on 23 Mar. Plots consisted of a single 50 ft bed spaced 10 ft from the neighboring beds, plants were set on 24 inch spacing.

^y On 16 Apr the center plant of each plot was inoculated with a 10⁵ conidial suspension of *Didymella bryoniae* and covered overnight to initiate disease. Disease severity was assessed as the percentage of canopy affected. The Horsfall-Barratt scale was used for all ratings, but values were converted to mid-percentages prior to statistical analyses.

^x Area under the disease progress curve (AUDPC) values were calculated using the formula: $\Sigma[(x_i+x_{i-1})/2](t_i-t_{i-1})$ where x_i is the rating at each evaluation time and (t_i-t_{i-1}) is the time between evaluations.

^w Means followed by the same letter are not significantly different according to Fisher's LSD test ($\alpha=0.05$).