TOMATO (*Lycopersicon esculentum*)
　　Bacterial spot; *Xanthomonas perforans*

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Comparison of copper bactericides and titanium dioxide for the management of bacterial spot of tomato, fall 2011.

Treatment, rate/A (application)[z]	Bacterial spot severity (%)[y]			AUDPC[x]	Diseased fruit (% of total)	Marketable fruit (lbs/plot)	
	1 Nov	14 Nov	2 Dec			Total	Extra large
Nano 1, 10% v/v (1-10)….................	28.0 cd[w]	65.7	62.5 abc	1458	0.95 c	53.1 cde	28.9 bcd
Nano 1, 5% v/v (1-10)…...................	28.0 cd	50.0	68.8 ab	1323	1.89 bc	52.3 de	28.9 bcd
Nano 1, 2.5% v/v (1-10)…................	35.3 bcd	61.5	68.8 ab	1488	3.66 a	56.0 bcd	31.4 abc
TiO_2, 0.013 oz/gal (1-10)................	31.2 cd	58.3	58.3 bc	1341	2.97 ab	52.9 cde	28.1 bcd
TiO_2, 0.067 oz/gal (1-10)................	34.3 bcd	54.2	50.0 cd	1225	0.92 c	59.1 abc	33.3 ab
TiO_2, 0.134 oz/gal (1-10)................	37.5 bc	45.8	67.8 ab	1294	1.33 bc	63.0 a	34.7 a
TiO_2, 0.267 oz/gal (1-10)................	24.8 d	53.2	72.0 a	1380	2.02 abc	55.3 bcd	30.3 a-d
TiO_2, 0.534 oz/gal (1-10)................	31.2 cd	61.5	54.2 c	1342	0.62 c	54.8 b-e	28.9 bcd
Kocide 3000, 1.5 lb (1-10); Penncozeb, 1 lb (1-10)...…........	37.5 bc	58.3	58.3 bc	1361	2.06 abc	49.9 de	26.0 d
Nordox 75W, 3 lb (1-10); Penncozeb, 1 lb (1-10)...…........	45.8 b	50.0	54.2 c	1249	1.42 bc	48.6 e	27.0 cd
Water-treated Control......................	58.3 a	61.5	61.5 abc	1496	1.04 c	55.3 bcd	31.0 a-d
Non-treated Control.........................	31.2 cd	54.2	38.5 d	1111	1.40 bc	60.1 ab	35.2 a
P > F	*< 0.0001*	*0.1555*	*0.0002*	*0.0957*	*0.0223*	*0.0017*	*0.0160*

[z] Listed treatments were applied weekly at a per acre basis unless noted otherwise.

[y] The severity of bacterial spot 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 (α=0.05).