

2013 Black Dot Foliar Fungicides (200 Series)

Location: Inkster, ND
Plot design: 4 rows X 30 feet X 4 reps; RCBD
All 4 rows were sprayed; foliar disease data was taken from the center 2 rows.

Planting date: June 7, 2013
Row width: 36 inches
Seed spacing: 14 inches
Cultivar: Russet Burbank
50% Emergence: June 27
Fertilizer: Broadcast: 61#N, 200#K, 30#S; June 3
Starter: 29#N, 100#P; June 7

Herbicide: Matrix (1.5 oz/a) + Ad-Wet 90Plus (1 pt/100 gal); July 1

Insecticide: Admire Pro (8.7 oz/a); IF at plant
Coragen (5 oz/a); August 1
Reaper (12 oz/a) + Activator 90 (2 pt/100 gal); August 8
Kaiso (2 oz/a); August 22
Blackhawk (3.3 oz/a); August 27

Objective: To determine the efficacy of standard fungicide chemistries and fungicide programs for the control of black dot caused by *Colletotrichum coccodes*.

Black dot inoculation method: Five *C. coccodes* isolates representing vegetative compatibility groups 2, and 6 were grown for 5 to 6 weeks on CV-8 agar medium. Microsclerotia were released from the agar using an electric blender and the microsclerotial suspension was adjusted to a concentration of 1.0×10^5 microsclerotia / ml in distilled water. The suspension was applied at a rate of foot row to the outside two rows of each plot on the evening of July 22 using custom ATV spray equipment.

Treatment application dates: July 16, 26, August 1, 8, 14, 20, 27, Sept. 2, 9

Treatment application method: Fungicides were applied using a converted ATV (55 psi; 61 gpa; 11005XR nozzles).

Vinekill: Rotobeat; October 7

Harvest: October 7

210	Emesto Silver +	0.31 fl oz / cwt +	Seed	0.00	0.11	0.09	0.09	0.17	0.26	0.28	0.36	1.92	60.94	93.88	777.9	0.114
	Nubark Mancozeb	1.0 lb / cwt	Seed													
	Serenade Soil +	2.0 qt / a +	In-furrow													
	Emesto Prime +	0.4 fl oz / 1000 row ft +														
	Admire Pro	8.7 fl oz / a														
	Bravo Zn	2.125 pt / a	Full Season													
211	Emesto Silver +	0.31 fl oz / cwt +	Seed	0.00	0.14	0.11	0.25	0.23	0.20	0.46	0.43	1.38	57.19	89.94	737.3	0.108
	Nubark Mancozeb	1.0 lb / cwt	Seed													
	Serenade Soil +	2.0 qt / a +	In-furrow													
	BCS-AR83685 +	8.55 fl oz / a +														
	Admire Pro	8.7 fl oz / a														
	Bravo Zn	2.125 pt / a	Full Season													
212	Headline	9 fl oz / a	1	0.00	0.14	0.14	0.08	0.28	0.30	0.26	0.38	1.98	72.25	96.81	869.2	0.128
	Echo Zn	2.125 pt / a	2-10													
LSD _{P = 0.05}				NS	0.06	0.17	0.10	NS	NS	0.40	0.81	2.97	15.20	3.61	195.64	0.03

209	Eresto Silver +	0.31 fl oz / cwt +	Seed	0.00	0.10	1.27	4.37	18.66	71.81	422.9	0.117	408.21
	Nubark Mancozeb	1.0 lb / cwt	Seed									
	Serenade Soil +	2.0 qt / a +	In-furrow									
	Admire Pro	8.7 fl oz / a										
	Bravo Zn	2.125 pt / a	Full Season									
210	Eresto Silver +	0.31 fl oz / cwt +	Seed	0.00	0.29	2.24	5.60	19.42	70.34	440.3	0.122	417.09
	Nubark Mancozeb	1.0 lb / cwt	Seed									
	Serenade Soil +	2.0 qt / a +	In-furrow									
	Eresto Prime +	0.4 fl oz / 1000 row ft +										
	Admire Pro	8.7 fl oz / a										
	Bravo Zn	2.125 pt / a	Full Season									
211	Eresto Silver +	0.31 fl oz / cwt +	Seed	0.00	0.50	1.49	4.82	20.42	68.23	430.5	0.120	405.44
	Nubark Mancozeb	1.0 lb / cwt	Seed									
	Serenade Soil +	2.0 qt / a +	In-furrow									
	BCS-AR83685 +	8.55 fl oz / a +										
	Admire Pro	8.7 fl oz / a										
	Bravo Zn	2.125 pt / a	Full Season									
212	Headline	9 fl oz / a	1	0.00	0.23	1.08	6.28	25.26	78.59	505.7	0.140	380.62
	Echo Zn	2.125 pt / a	2-10									
LSD _{P = 0.05}				NS	NS	2.71	7.13	14.09	11.33	262.17	0.07	29.71