

Late Blight Standard Fungicides (1300 Series)

Location: Prosper, ND
Plot design: 4 rows X 25 ft. X 4 reps; RCBD
All four rows sprayed
All data collected from center two rows

Planting date: May 18, 2007
Row width: 36 inches
Plant spacing: 12 inches

Cultivar: Red LaSoda

Fertilizer: 240 lb/a, 32-10-10, banded at planting
165 lb/a, 46-0-0, sidedress

Herbicide: Treflan (1.5 pt/a); pre-plant incorporated May 16

Insecticide: Platinum (8 oz/a) in-furrow at planting
Baythroid (1 oz/a) July 27, August 14

Inoculation Dates: July 26, August 1, 8

Inoculation Method: Using a hand sprayer (garden type), a suspension of late blight inoculum (1×10^4 zoospores/ml) was sprayed onto the foliage in the center of each 8 row block in each replication.

Fungicide application dates: July 11
July 18
July 25
July 30
August 6
August 14
August 20
August 29
September 9 – Treatment 1310 only

Fungicide application method: Fungicides were applied using a converted ATV, (55 psi; 73 gpa; 11005XR nozzles).

Vinekill: Reglone (2 pt/a) + LI700 (1.5 pt/100 gal); September 19

Standard Fungicides - Late Blight - Prosper Series 1300

NOTE: Treatments 1317-1320 and 1322-1323 are confidential.

Treatment	Rate	Schedule	Late Blight								AUDPC	RAUDPC
			7/27	8/6	8/13	8/20	8/24	8/31	9/7	9/14		
1301 Untreated	-	-	0.0	0.0	0.8	12.6	52.5	83.8	93.8	99.5	1954.2	0.399
1302 Dithane	2.0 lb / a	Full Season	0.0	0.0	0.1	0.5	1.4	3.5	6.3	25.0	166.9	0.034
1303 Dithane	2.0 lb / a	1-4	0.0	0.0	0.4	0.6	0.8	2.8	5.0	21.3	138.8	0.028
Gavel	2.0 lb / a	5-8										
1304 Bravo Weatherstik	0.8 pt / a	1,2	0.0	0.0	0.3	0.9	1.4	5.0	13.8	40.0	285.4	0.058
	1.5 pt / a	3-8										
1305 Equus 720 SST	0.8 pt / a	1,2	0.0	0.0	0.1	0.6	1.5	3.5	11.3	40.0	255.8	0.052
	1.5 pt / a	3-8										
1306 Equus 500 Zn	1.15 pt / a	1,2	0.0	0.0	0.1	0.6	3.5	5.0	17.5	38.8	316.7	0.065
	2.125 pt / a	3-8										
1307 Bravo 500 Zn	1.15 pt / a	1,2	0.0	0.0	0.0	0.8	1.0	5.0	11.3	37.5	254.6	0.052
	2.125 pt / a	3-8										
1308 Equus 82.5%	0.7 lb / a	1,2	0.0	0.0	0.0	1.6	1.8	6.8	16.3	37.5	310.8	0.063
	1.36 lb / a	3-8										
1309 JE874 + Manzate Bravo Weatherstik	8.0 fl oz / a + 1.5 lb / a 1.5 pt / a	1,3,5,7 2,4,6,8	0.0	0.0	0.0	0.9	1.6	3.5	7.5	25.0	178.3	0.036
1310 Manzate + Tanos Manzate Manzate + Tanos Manzate + Curzate Super Tin + Curzate Super Tin + Reglone	1.5 lb / a + 6.0 oz / a 2.0 lb / a 1.5 lb / a + 8.0 oz / a 2.0 lb / a + 3.2 oz / a 3.75 oz / a + 3.2 oz / a 3.75 oz / a + 1.5 pt / a	1 2 3,5 4,6 7,8 9	0.0	0.0	0.3	0.5	13.4	6.3	12.5	88.8	519.9	0.106
1311 Vigor-Mn-Phos + Vigor-Zinc-Phos Vigor-Mn-Phos + Vigor-Zinc-Phos + Endura	1.0 qt / a + 1.0 qt / a 1.0 qt / a + 1.0 qt / a + 2.5 oz / a	-1,1,2,4,6,8 3,5,7	0.0	0.0	0.4	0.5	1.9	10.0	22.5	57.5	444.4	0.091

Treatment	Rate	Schedule	Late Blight								AUDPC	RAUDPC
			7/27	8/6	8/13	8/20	8/24	8/31	9/7	9/14		
1312 Vigor-Mn-Phos + Vigor-Zinc-Phos Dithane Dithane + Endura	1.0 qt / a + 1.0 qt / a 2.0 lb / a 2.0 lb / a + 2.5 oz / a	-1,2,4,6,8 1 3,5,7	0.0	0.0	0.3	0.6	0.9	2.8	5.0	31.3	173.6	0.035
1313 Revus OPTI 3.67 SC + Activator 90 Bravo Weather Stik 720 SC	2.5 pt / a + 0.125% v/v 1.5 pt / a	1,2,4,5,7,8 3,6	0.0	0.0	0.0	0.5	1.0	2.0	5.0	22.5	136.0	0.028
1314 Revus TOP 4.17 SC + Activator 90 Bravo Weather Stik 720 SC	5.5 floz / a + 0.125% v/v 1.5 pt / a	1,2,4,5,7,8 3,6	0.0	0.0	0.4	0.8	2.1	2.8	5.0	30.0	177.7	0.036
1315 Revus TOP 4.17 SC + Activator 90 Bravo Weather Stik 720 SC	7.0 fl oz / a + 0.125% v/v 1.5 pt / a	1,2,4,5,7,8 3,6	0.0	0.0	0.1	0.5	0.9	2.0	5.0	27.5	153.7	0.031
1316 Quadris OPTI 5.5 SC Revus TOP 4.17 SC + Activator 90 Bravo Weather Stik 720 SC	1.6 pt / a 7.0 floz / a + 0.125% v/v 1.5 pt / a	1,3,7 2,4,8 5,6	0.0	0.0	0.3	0.6	1.5	2.8	6.3	27.5	172.7	0.035
1317 Confidential			0.0	0.0	0.3	0.8	2.4	2.8	7.5	31.3	200.1	0.041
1318 Confidential			0.0	0.0	0.3	0.5	3.0	3.5	5.0	17.5	141.8	0.029
1319 Confidential			0.0	0.0	0.0	0.6	0.9	1.8	6.3	23.8	147.4	0.030
1320 Confidential			0.0	0.0	0.1	0.5	1.0	4.8	6.3	21.3	160.5	0.033
1321 Dithane Ridomil Gold MZ	2.0 lb / a 2.5 lb / a	1,2,6,7,8 3,4,5	0.0	0.0	0.3	0.5	1.1	3.5	6.3	22.5	157.7	0.032
1322 Confidential			0.0	0.0	0.0	0.6	2.3	3.5	5.0	25.0	162.8	0.033
1323 Confidential			0.0	0.0	0.4	1.8	2.3	5.0	6.3	32.5	217.1	0.044
1324 Bravo Weather Stik Ridomil Gold Bravo SC	1.5 pt / a 2.5 pt / a	1,2,6,7,8 3,4,5	0.0	0.0	0.0	0.5	1.4	6.3	11.3	33.8	250.9	0.051
LSD _{p=0.05}			NS	NS	0.3	2.6	7.5	2.7	5.2	8.2	86.8	0.018