

Russet Burbank Seed Treatment (2700 Series)

Note: Treatments 2720 to 2725 and 2726 to 2732 are confidential

Location: Tappen, ND
Plot design: 2 rows X 30 ft. X 4 reps; RCBD

Planting date: May 14, 2007
Soil Temperature: 64F
Row width: 36 inches
Plant spacing: 14 inches

Cultivar: Russet Burbank
50% Emergence: June 4

Fertilizer: Broadcast: 207#N, 78#P, 225#K, 29#S, 1#B; May 3
Starter: 23#N, 69#P, 23#K; May 14
Fertigation: 30#N; July 3, 9, 14

Herbicide: Prowl (2.0 pt / a) + Matrix (1.0 oz / a); June 4

Insecticide: Platinum in-furrow (8.0 oz/a); May 14
Asana (6.0 oz/a); July 12
Baythroid (1.0 oz / a); July 27, August 15

Fungicide application dates:	June 22	Penncozeb 4L (1.6 qt / a)
	June 29	Echo Zn (2.125 pt / a)
	July 6	Penncozeb 4L (1.6 qt / a) + Headline (6.0 oz / a)
	July 12	Echo Zn
	July 19	Penncozeb 4L (1.6 qt / a) + Endura (2.5 oz / a)
	July 27	Echo Zn
	August 2	Penncozeb 4L
	August 9	Echo Zn
	August 15	Dithane (2 lb/a)
	August 22	Echo Zn

Vine Kill: September 21

Harvest: September 24

Data: Percent Emergence at 28, 35 and 49 days after planting
Rhizoctonia stem and stolon evaluation at 45 days after planting
Total and marketable yield
Silver Scurf and Rhizoctonia evaluation at 60 days after harvest

Seed Treatment - Tappen Series 2700

Treatment	Rate	Percent Emergence	Vigor (1-4)	Number of stems	% Stems w/ rhizoc	Number of stolons	% Stolons w/ rhizoc	% Seed decay	Yield (cwt/a)
2701 Untreated		95.0	2.8	5.0	44.5	15.4	5.3	54.9	550.8
2702 Maxim 4FS	0.08 fl oz / cwt	91.0	2.8	5.0	64.5	16.1	5.8	58.0	473.8
2703 Bleach (pH adjusted)	(H2O:bleach:vineger)	95.0	2.9	3.9	58.7	14.6	8.8	26.9	468.5
2704 Maxim Mz	0.5 lb / cwt	93.5	3.4	5.0	32.0	16.2	4.9	46.7	496.7
2705 Tops Mz	0.75 lb / cwt	96.5	3.4	4.6	48.8	14.4	5.7	29.5	521.1
2706 Moncoat Mz	0.75 lb / cwt	96.0	3.1	4.7	36.1	19.2	2.8	34.9	514.3
2707 6% Mancozeb	1.0 lb / cwt	95.0	2.9	4.4	45.0	14.8	4.0	39.2	532.8
2708 Quadris 2.08 SC	0.1 oz ai / 1000 ft row	97.0	2.9	4.5	46.9	13.4	2.7	24.4	480.6
2709 Moncut 70 DF	17 fl oz / a	95.5	2.8	4.2	44.2	15.6	5.4	39.4	472.4
2710 Evito	3.8 fl oz / a	97.0	2.9	4.5	57.7	16.4	7.6	38.5	502.3
2711 Evito	1.9 fl oz / a	95.0	2.8	4.2	55.8	16.6	6.3	41.1	489.0
2712 Evito + Moncut	1.9 fl oz / a + 8.5 fl oz / a	94.5	2.6	4.2	45.3	11.5	2.3	30.0	472.6
2713 Polyoxin D	6.2 oz / a	93.5	2.8	4.4	73.5	16.0	2.1	46.8	516.9
2714 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.3 oz + 0.6 oz + 0.5 lb	91.5	3.4	4.0	46.5	15.5	5.3	44.8	538.0
2715 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.3 oz + 0.8 oz + 0.5 lb	96.0	3.2	4.1	41.2	15.1	4.9	29.9	483.1
2716 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.4 oz + 0.6 oz + 0.5 lb	94.0	2.9	4.3	44.9	17.7	5.1	39.2	488.4
2717 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.4 oz + 0.8 oz + 0.5 lb	93.0	3.2	4.6	45.5	17.2	5.2	42.1	502.9
2718 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.5 oz + 0.6 oz + 0.5 lb	96.0	3.0	4.4	63.8	22.8	7.6	63.7	490.6

Treatment	Rate	Percent Emergence	Vigor (1-4)	Number of stems	% Stems w/ rhizoc	Number of stolons	% Stolons w/ rhizoc	% Seed decay	Yield (cwt/a)
2719 LI 6188 (liquid application) + LI 6227 (liquid application) + Mancozeb 6% (dry application)	0.5 oz + 0.8 oz + 0.5 lb	93.0	3.0	3.8	51.1	11.6	3.6	45.8	495.8
2720 Confidential		95.5	2.9	4.4	61.2	16.9	3.2	40.6	494.9
2721 Confidential		91.5	2.7	4.2	50.4	17.0	2.0	47.0	448.8
2722 Confidential		98.0	3.0	4.3	43.8	13.7	3.8	28.3	520.2
2723 Confidential		94.5	3.1	4.5	41.6	17.3	2.8	31.5	484.6
2724 Confidential		93.0	2.6	3.6	65.1	15.0	6.1	47.4	476.7
2725 Confidential		96.5	3.0	4.2	51.8	15.8	8.5	38.1	500.7
2726 Confidential		97.0	2.6	3.6	46.5	12.7	4.8	59.6	452.3
2727 Confidential		94.0	2.9	4.1	40.6	14.5	3.5	46.8	471.4
2728 Confidential		95.0	3.0	4.6	61.2	13.4	5.4	30.0	505.5
2729 Confidential		98.5	2.7	3.6	54.4	14.2	8.5	55.7	453.4
2730 Confidential		95.5	2.8	4.2	43.7	15.2	7.1	36.0	509.0
2731 Confidential		92.0	2.6	3.7	68.6	14.6	7.1	56.5	475.6
2732 Confidential		94.0	2.6	3.7	60.3	11.5	4.0	63.8	454.5
2733 Maxim 4FS plus Nubark Mz	0.08 fl oz / cwt	96.0	2.7	3.9	61.9	14.9	11.8	39.7	525.5
2734 WE 0406 plus Nubark Mz	0.5 fl oz / cwt	98.0	3.1	4.8	41.0	15.8	4.8	57.9	468.5
2735 WE 0406 + WE143 plus Nubark Mz	0.5 fl oz / cwt + 5.0 g / cwt	97.5	2.8	4.6	54.7	17.1	7.0	62.6	512.8
2736 Firbark	0.75 lb / cwt	93.5	3.1	4.0	48.6	15.2	4.3	36.0	528.7
2737 Microcarriers Trt # 1	0.75 lb / cwt	96.0	3.1	4.9	60.8	17.0	5.0	31.7	518.3
2738 Microcarriers Trt # 2	0.75 lb / cwt	98.0	3.2	5.0	43.0	19.2	2.5	27.8	437.5
2739 Microcarriers Trt # 3	0.75 lb / cwt	95.0	3.1	4.5	49.2	14.3	5.6	32.3	478.8
2740 Microcarriers Trt # 4	0.75 lb / cwt	97.0	3.1	3.8	51.5	16.1	8.1	28.6	474.3
2741 Microcarriers Trt # 5	0.75 lb / cwt	92.0	3.0	4.0	55.0	15.0	6.8	39.9	500.3
2742 Microcarriers Trt # 6	0.75 lb / cwt	94.0	3.1	4.8	35.2	15.1	5.9	31.4	504.1
2743 Headsup + Quadris 2.08 SC	1 g / L + 0.1 oz ai / 1000 ft row	95.0	2.4	4.1	56.8	14.0	6.5	46.5	458.1
LSD _{0.05}		NS	0.3	0.8	14.9	3.5	4.6	20.1	NS