

## NM Area 2 Silver Scurf Control (3500 Series)

**Location:** Zinter Bros. - Long Prairie, MN  
**Plot Design:** 2 rows X 30 feet X 4 replications; RCBD

**Planting Date:** April 26, 2003  
**Row Width:** 38 inches  
**Plant Spacing:** 12 inches  
**Soil Temperature:** 52F

**Cultivar:** Red Norland, Chieftain

### Estimated Silver Scurf Infection on Seed:

<u>Variety</u>	<u>Incidence</u>	<u>Severity</u>
Red Norland	30	40
Chieftain	30	20

**Fertilizer:**  
**Herbicide:**  
**Insecticide:**  
**Fungicide :**

} Performed by cooperators as applicable for a commercial crop.

**Data Collection Dates :** Stand: 6-12-03; 47 Days After Planting  
Rhizoctonia Evaluation: 7-17-03; 82 Days After Planting

**Vinekill:** August 8

**Harvest:** August 28

**Grade:** September 12

**Silver Scurf Ratings:** Rating #1: October 21,22  
Rating #2: October 24-28

**MN Area 2 Silver Scurf - Long Prairie Series 3500**  
**Rhizoctonia Evaluations - 82 Days After Planting**  
**Analysis Performed Across Cultivars**

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	stand (69 DAP)	stems /plant	# stems w/ rhizoc	% stems w/ rhizoc	# stems girdled	% stems girdled	# stolons/ plant	# stolons w/ rhizoc	% stolons w/ rhizoc	# stolons girdled	% stolons girdled	vigor (1-4)	tuber #	tuber wt
3501	Untreated	-	Untreated	-	Red Norland	29.4	3.9	0.8	18.8	0.2	3.8	12.7	1.4	10.3	0.5	3.7	3.8	10.7	1.1
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	29.6	3.2	0.2	5.2	0.0	0.0	11.1	0.7	6.9	0.2	2.6	3.8	10.0	1.0
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	29.4	3.1	0.3	6.8	0.0	0.0	12.2	0.9	7.3	0.3	2.3	3.7	10.2	1.2
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	29.8	3.6	0.3	7.7	0.0	0.0	13.2	1.2	7.7	0.2	1.5	3.8	9.9	1.0
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	29.1	3.9	0.1	1.3	0.0	0.0	14.1	0.5	4.1	0.1	0.6	3.9	10.9	0.9
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.6	4.1	0.2	4.8	0.0	0.0	14.6	0.6	3.8	0.1	0.4	3.8	11.0	1.6
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.4	3.8	0.4	10.5	0.1	2.7	14.2	0.8	5.1	0.2	1.3	3.8	10.7	1.3
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.8	4.2	0.5	14.5	0.1	1.4	13.1	1.0	7.2	0.4	2.3	3.7	10.2	1.0
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	29.4	3.6	0.2	4.6	0.1	1.3	13.3	0.7	4.4	0.0	0.0	3.9	10.1	1.6
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.6	3.9	0.4	8.6	0.0	0.0	14.2	0.9	5.5	0.2	1.1	3.9	10.8	1.0
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.1	3.9	0.1	2.1	0.1	1.3	14.1	0.7	4.6	0.2	1.3	4.0	11.5	0.9
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.5	3.7	0.2	4.0	0.1	2.2	14.2	1.3	9.2	0.4	2.7	3.8	10.4	0.9
3513	Untreated	-	Untreated	-	Chieftain	28.9	3.1	0.6	18.9	0.1	1.7	13.7	1.5	11.5	0.6	4.5	4.0	11.1	1.9
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	29.0	3.3	0.2	6.3	0.1	1.3	11.8	1.0	9.3	0.2	2.1	4.0	9.3	2.1
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	29.4	4.0	0.5	12.8	0.0	0.0	15.9	1.6	10.0	0.4	2.3	4.0	12.7	1.3
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	29.6	2.9	0.3	8.7	0.0	0.0	12.1	1.2	10.1	0.3	2.3	4.0	10.1	1.8
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	29.9	3.3	0.3	11.4	0.1	1.7	15.1	0.9	5.9	0.1	0.7	4.0	12.5	1.8
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.1	3.3	0.2	4.8	0.0	0.0	14.9	0.7	4.0	0.1	0.6	4.0	10.9	1.7
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.5	3.1	0.5	14.6	0.0	0.0	12.6	1.0	7.9	0.3	2.3	4.0	10.3	1.8
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.5	2.9	0.2	5.0	0.0	0.0	11.5	1.4	11.6	0.2	1.4	4.0	8.7	1.1
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	28.6	3.0	0.3	10.8	0.1	2.5	12.6	1.4	10.6	0.4	2.9	3.9	10.4	2.4
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	29.5	4.0	0.3	6.0	0.0	0.0	15.1	1.5	9.4	0.3	1.9	4.0	11.1	1.4
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	29.25	3.1	0.4	12.9	0.0	0.0	12.7	1.0	7.5	0.2	1.2	4.0	11.1	1.4
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	28.75	3.4	0.5	13.7	0.1	1.7	14.2	1.4	9.4	0.5	3.6	4.0	11.1	1.7
LSD <sub>p=0.05</sub>						NS	0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Seed Treatment	Untreated					29.2	3.4	0.4	11.0	0.1	1.8	13.6	1.1	7.8	0.3	2.1	3.9	10.9	1.6
	Maxim MZ					29.4	3.6	0.2	5.9	0.0	0.2	13.6	0.9	6.5	0.2	1.4	3.9	10.5	1.4
	Tops MZ					29.3	3.5	0.3	10.0	0.0	0.7	13.6	1.0	7.1	0.2	1.8	3.9	11.1	1.3
	Moncoat MZ					29.5	3.4	0.3	8.9	0.0	0.9	13.0	1.2	9.2	0.3	2.3	3.9	10.1	1.2
LSD <sub>p=0.05</sub>						NS	NS	NS	NS	NS	NS	NS	NS	2.0	NS	NS	NS	NS	NS
In-Furrow	Untreated					29.4	3.4	0.4	10.6	0.0	0.8	12.8	1.2	9.1	0.3	2.7	3.9	10.5	1.4
	Quadris					29.5	3.5	0.3	8.3	0.0	0.7	13.7	0.8	6.2	0.2	1.2	3.9	10.6	1.4
	Moncut					29.2	3.6	0.3	7.8	0.0	1.1	13.8	1.1	7.6	0.3	1.8	3.9	10.8	1.4
LSD <sub>p=0.05</sub>						NS	NS	NS	NS	NS	NS	0.8	0.2	1.7	0.1	0.9	NS	NS	NS
Variety	Red Norland					29.5	3.7	0.3	7.4	0.1	1.0	13.4	0.9	6.3	0.2	1.7	3.8	10.5	1.1
	Chieftain					29.3	3.3	0.3	10.5	0.0	0.7	13.5	1.2	8.9	0.3	2.1	4.0	10.8	1.7
LSD <sub>p=0.05</sub>						NS	0.2	NS	3.2	NS	NS	NS	0.2	1.3	NS	NS	0.1	NS	0.2

**MN Area 2 Silver Scurf - Long Prairie Series 3500  
Rhizoctonia Evaluations - 82 Days After Planting  
Analysis Performed Within Cultivars**

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	stand (41 DAP)	stems /plant	# stems w/ rhizoc	% stems w/ rhizoc	# stems girdled	% stems girdled	# stolons /plant	# stolons w/ rhizoc	% stolons w/ rhizoc	# stolons girdled	% stolons girdled	vigor (1-4)	tuber #	tuber wt	
3501	Untreated	-	Untreated	-	Red Norland	29.4	3.9	0.8	18.8	0.2	3.8	12.7	1.4	10.3	0.5	3.7	3.8	10.7	1.1	
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	29.6	3.2	0.2	5.2	0.0	0.0	11.1	0.7	6.9	0.2	2.6	3.8	10.0	1.0	
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	29.4	3.1	0.3	6.8	0.0	0.0	12.2	0.9	7.3	0.3	2.3	3.7	10.2	1.2	
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	29.8	3.6	0.3	7.7	0.0	0.0	13.2	1.2	7.7	0.2	1.5	3.8	9.9	1.0	
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	29.1	3.9	0.1	1.3	0.0	0.0	14.1	0.5	4.1	0.1	0.6	3.9	10.9	0.9	
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.6	4.1	0.2	4.8	0.0	0.0	14.6	0.6	3.8	0.1	0.4	3.8	11.0	1.6	
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.4	3.8	0.4	10.5	0.1	2.7	14.2	0.8	5.1	0.2	1.3	3.8	10.7	1.3	
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	29.8	4.2	0.5	14.5	0.1	1.4	13.1	1.0	7.2	0.4	2.3	3.7	10.2	1.0	
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	29.4	3.6	0.2	4.6	0.1	1.3	13.3	0.7	4.4	0.0	0.0	3.9	10.1	1.6	
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.6	3.9	0.4	8.6	0.0	0.0	14.2	0.9	5.5	0.2	1.1	3.9	10.8	1.0	
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.1	3.9	0.1	2.1	0.1	1.3	14.1	0.7	4.6	0.2	1.3	4.0	11.5	0.9	
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	29.5	3.7	0.2	4.0	0.1	2.2	14.2	1.3	9.2	0.4	2.7	3.8	10.4	0.9	
LSD <sub>p=0.05</sub>						NS	NS	0.4	10.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3513	Untreated	-	Untreated	-	Chieftain	28.9	3.1	0.6	18.9	0.1	1.7	13.7	1.5	11.5	0.6	4.5	4.0	11.1	1.9	
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	29.0	3.3	0.2	6.3	0.1	1.3	11.8	1.0	9.3	0.2	2.1	4.0	9.3	2.1	
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	29.4	4.0	0.5	12.8	0.0	0.0	15.9	1.6	10.0	0.4	2.3	4.0	12.7	1.3	
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	29.6	2.9	0.3	8.7	0.0	0.0	12.1	1.2	10.1	0.3	2.3	4.0	10.1	1.8	
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	29.9	3.3	0.3	11.4	0.1	1.7	15.1	0.9	5.9	0.1	0.7	4.0	12.5	1.8	
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.1	3.3	0.2	4.8	0.0	0.0	14.9	0.7	4.0	0.1	0.6	4.0	10.9	1.7	
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.5	3.1	0.5	14.6	0.0	0.0	12.6	1.0	7.9	0.3	2.3	4.0	10.3	1.8	
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	29.5	2.9	0.2	5.0	0.0	0.0	11.5	1.4	11.6	0.2	1.4	4.0	8.7	1.1	
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	28.6	3.0	0.3	10.8	0.1	2.5	12.6	1.4	10.6	0.4	2.9	3.9	10.4	2.4	
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	29.5	4.0	0.3	6.0	0.0	0.0	15.1	1.5	9.4	0.3	1.9	4.0	11.1	1.4	
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	29.3	3.1	0.4	12.9	0.0	0.0	12.7	1.0	7.5	0.2	1.2	4.0	11.1	1.4	
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	28.8	3.4	0.5	13.7	0.1	1.7	14.2	1.4	9.4	0.5	3.6	4.0	11.1	1.7	
LSD <sub>p=0.05</sub>						NS	0.7	NS	NS	NS	NS	2.2	NS	NS	0.3	NS	NS	2.0	NS	
Seed Treatment	Untreated				Red Norland	29.3	3.8	0.3	8.2	0.1	1.7	13.4	0.9	6.2	0.2	1.4	3.8	10.6	1.2	
	Maxim MZ				Red Norland	29.6	3.7	0.2	6.2	0.0	0.0	13.3	0.7	5.4	0.1	1.4	3.8	10.6	1.2	
	Tops MZ				Red Norland	29.3	3.6	0.2	6.5	0.1	1.3	13.5	0.8	5.7	0.2	1.6	3.8	10.8	1.1	
	Moncoat MZ				Red Norland	29.7	3.8	0.3	8.7	0.1	1.2	13.5	1.1	8.0	0.3	2.2	3.7	10.2	0.9	
LSD <sub>p=0.05</sub>						NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Seed Treatment	Untreated				Chieftain	29.1	3.1	0.4	13.7	0.1	1.9	13.8	1.3	9.4	0.4	2.7	4.0	11.3	2.0	
	Maxim MZ				Chieftain	29.2	3.5	0.2	5.7	0.0	0.4	13.9	1.1	7.6	0.2	1.5	4.0	10.4	1.7	
	Tops MZ				Chieftain	29.4	3.4	0.4	13.4	0.0	0.0	13.7	1.2	8.5	0.3	1.9	4.0	11.3	1.5	
	Moncoat MZ				Chieftain	29.3	3.0	0.3	9.2	0.0	0.6	12.6	1.3	10.4	0.3	2.4	4.0	10.0	1.5	
LSD <sub>p=0.05</sub>						NS	0.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
In-Furrow	Untreated				Red Norland	29.5	3.4	0.4	9.6	0.1	0.9	12.3	1.0	8.0	0.3	2.5	3.7	10.2	1.1	
	Quadris				Red Norland	29.5	4.0	0.3	7.7	0.1	1.0	14.0	0.7	5.0	0.2	1.1	3.8	10.7	1.2	
	Moncut				Red Norland	29.4	3.8	0.2	4.8	0.1	1.2	13.9	0.9	5.9	0.2	1.3	3.9	10.7	1.1	
LSD <sub>p=0.05</sub>						NS	NS	NS	NS	NS	NS	1.1	NS	2.4	NS	NS	NS	NS	NS	NS
In-Furrow	Untreated				Chieftain	29.2	3.3	0.4	11.7	0.0	0.7	13.3	1.3	10.2	0.4	2.8	4.0	10.8	1.7	
	Quadris				Chieftain	29.5	3.1	0.3	8.9	0.0	0.4	13.5	1.0	7.3	0.2	1.2	4.0	10.6	1.6	
	Moncut				Chieftain	29.0	3.4	0.3	10.9	0.0	1.0	13.6	1.3	9.2	0.3	2.4	3.9	10.9	1.7	
LSD <sub>p=0.05</sub>						NS	NS	NS	NS	NS	NS	NS	NS	NS	0.2	1.3	NS	NS	NS	NS

**MN Area 2 Silver Scurf - Long Prairie 3500 Series  
Post Harvest Evaluations  
Analysis Performed Across Cultivars**

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	Silver Scurf (% Coverage)
3501	Untreated	-	Untreated	-	Red Norland	1.5
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	1.1
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	0.9
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	1.3
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	1.4
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	1.0
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	0.6
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	0.8
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	1.2
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	0.9
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	1.0
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	1.1
3513	Untreated	-	Untreated	-	Chieftain	17.3
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	2.2
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	3.7
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	2.3
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	4.4
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.1
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.3
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.7
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	3.4
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	2.8
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	2.4
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	3.0
LSD <sub>P=0.05</sub>						NS
Seed Treatment	Untreated					5.3
	Maxim MZ					1.7
	Tops MZ					1.9
	Moncoat MZ					1.9
LSD <sub>P=0.05</sub>						NS
In-Furrow	Untreated					4.1
	Quadris					2.0
	Moncut					2.1
LSD <sub>P=0.05</sub>						NS
Variety	Red Norland					1.1
	Chieftain					4.2
LSD <sub>P=0.05</sub>						1.8

## MN Area 2 Silver Scurf - Long Prairie 3500 Series Post Harvest Evaluations Analysis Performed Within Cultivars

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	Silver Scurf (% Coverage)
3501	Untreated	-	Untreated	-	Red Norland	1.5
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	1.1
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	0.9
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	1.3
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	1.4
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	1.0
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	0.6
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	0.8
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	1.2
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	0.9
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	1.0
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	1.1
LSD <sub>P=0.05</sub>						0.5
3513	Untreated	-	Untreated	-	Chieftain	17.3
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	2.2
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	3.7
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	2.3
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	4.3
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.1
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.3
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	2.7
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	3.4
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	2.8
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	2.4
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	3.0
LSD <sub>P=0.05</sub>						NS
Seed Treatment	Untreated				Red Norland	1.4
	Maxim MZ				Red Norland	1.0
	Tops MZ				Red Norland	0.8
	Moncoat MZ				Red Norland	1.1
LSD <sub>P=0.05</sub>						0.3
Seed Treatment	Untreated				Chieftain	8.8
	Maxim MZ				Chieftain	2.4
	Tops MZ				Chieftain	2.8
	Moncoat MZ				Chieftain	2.7
LSD <sub>P=0.05</sub>						NS
In-Furrow	Untreated				Red Norland	1.2
	Quadris				Red Norland	1.0
	Moncut				Red Norland	1.1
LSD <sub>P=0.05</sub>						NS
In-Furrow	Untreated				Chieftain	6.5
	Quadris				Chieftain	2.9
	Moncut				Chieftain	2.9
LSD <sub>P=0.05</sub>						NS

Note: Percent tuber coverage was rated 92 days after harvest.

**MN Area 2 Silver Scurf - Long Prairie 3500 Series  
Yield and Grade  
Analysis Performed Across Cultivars**

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	Total Yield (cwt/a)	Market Yield (cwt/a)	<1 7/8 in (cwt/a)	>4 1/2 in (cwt/a)
3501	Untreated	-	Untreated	-	Red Norland	242.1	134.8	119.9	0
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	228.2	118.8	120.3	0
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	251.9	142.7	123.1	0
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	230.9	121.2	121.4	0
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	248.9	138.1	122.7	0
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	236.4	130.3	117.9	0
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	232.6	129.5	114.3	0
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	242.6	141.3	114.6	0
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	248.4	131.3	129.1	0
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	242.7	136.1	118.5	0
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	245.7	139.8	118.2	0
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	240.5	132.1	120.6	0
3513	Untreated	-	Untreated	-	Chieftain	309.9	269.9	64.2	0
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	280.4	250.4	52.5	0
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	310.2	269.8	65.3	0
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	299.7	265.5	57.9	0
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	329.2	290.5	64.6	0
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	303.9	273.9	54.4	0
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	307.4	269.2	62.8	0
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	297.8	264.4	57.2	0
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	298.0	268.3	53.8	0
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	312.9	276.9	60.2	0
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	331.8	287.1	69.7	0
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	308.3	268.8	63.7	0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
Seed Treatment	Untreated					279.4	205.5	92.4	0.0
	Maxim MZ					267.4	197.7	87.3	0.0
	Tops MZ					279.9	206.3	92.2	0.0
	Moncoat MZ					270.0	198.9	89.2	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
In-Furrow	Untreated					269.2	196.6	90.6	0.0
	Quadris					274.8	204.6	88.5	0.0
	Moncut					278.5	205.0	91.7	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
Variety	Red Norland					240.9	133.0	120.0	0.0
	Chieftain					307.4	271.2	60.5	0.0
LSD <sub>p=0.05</sub>						8.3	10.9	4.0	NS

**MN Area 2 Silver Scurf - Long Prairie 3500 Series  
Yield and Grade  
Analysis Performed Within Cultivars**

	Seed Treatment	Rate	In-Furrow	Rate	Cultivar	Total Yield (cwt/a)	Market Yield (cwt/a)	<1 7/8 in (cwt/a)	>4 1/2 in (cwt/a)
3501	Untreated	-	Untreated	-	Red Norland	242.1	134.8	119.9	0.0
3502	Maxim MZ	5 oz / cwt	Untreated	-	Red Norland	228.2	118.8	120.3	0.0
3503	Tops MZ	9 oz / cwt	Untreated	-	Red Norland	251.9	142.7	123.1	0.0
3504	Moncoat MZ	9 oz / cwt	Untreated	-	Red Norland	230.9	121.2	121.4	0.0
3505	Untreated	-	Quadris	6.2 oz / A	Red Norland	248.9	138.1	122.7	0.0
3506	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Red Norland	236.4	130.3	117.9	0.0
3507	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	232.6	129.5	114.3	0.0
3508	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Red Norland	242.6	141.3	114.6	0.0
3509	Untreated	-	Moncut	0.79 oz / 1000 row ft	Red Norland	248.4	131.3	129.1	0.0
3510	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	242.7	136.1	118.5	0.0
3511	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	245.7	139.8	118.2	0.0
3512	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Red Norland	240.5	132.1	120.6	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
3513	Untreated	-	Untreated	-	Chieftain	309.9	269.9	64.2	0
3514	Maxim MZ	5 oz / cwt	Untreated	-	Chieftain	280.4	250.4	52.5	0
3515	Tops MZ	9 oz / cwt	Untreated	-	Chieftain	310.2	269.8	65.3	0
3516	Moncoat MZ	9 oz / cwt	Untreated	-	Chieftain	299.7	265.5	57.9	0
3517	Untreated	-	Quadris	6.2 oz / A	Chieftain	329.2	290.5	64.6	0
3518	Maxim MZ	5 oz / cwt	Quadris	6.2 oz / A	Chieftain	303.9	273.9	54.4	0
3519	Tops MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	307.4	269.2	62.8	0
3520	Moncoat MZ	9 oz / cwt	Quadris	6.2 oz / A	Chieftain	297.8	264.4	57.2	0
3521	Untreated	-	Moncut	0.79 oz / 1000 row ft	Chieftain	298.0	268.3	53.8	0
3522	Maxim MZ	5 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	312.9	276.9	60.2	0
3523	Tops MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	331.8	287.1	69.7	0
3524	Moncoat MZ	9 oz / cwt	Moncut	0.79 oz / 1000 row ft	Chieftain	308.3	268.8	63.7	0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
Seed Treatment	Untreated				Red Norland	246.5	134.8	123.9	0.0
	Maxim MZ				Red Norland	235.8	128.4	118.9	0.0
	Tops MZ				Red Norland	243.4	137.3	118.5	0.0
	Moncoat MZ				Red Norland	238.0	131.5	118.9	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
Seed Treatment	Untreated				Chieftain	312.3	276.2	60.8	0.0
	Maxim MZ				Chieftain	299.1	267.1	55.7	0.0
	Tops MZ				Chieftain	316.5	275.4	65.9	0.0
	Moncoat MZ				Chieftain	301.9	266.2	59.6	0.0
LSD <sub>p=0.05</sub>						NS	NS	6.7	NS
In-Furrow	Untreated				Red Norland	238.3	129.4	121.1	0.0
	Quadris				Red Norland	240.1	134.8	117.4	0.0
	Moncut				Red Norland	244.3	134.8	121.6	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS
In-Furrow	Untreated				Chieftain	300.0	263.9	60.0	0.0
	Quadris				Chieftain	309.6	274.5	59.7	0.0
	Moncut				Chieftain	312.7	275.3	61.9	0.0
LSD <sub>p=0.05</sub>						NS	NS	NS	NS