

Table 1. Effects of seed treatments on plant development and incidence of disease in the cultivar Russet Norkotah, San Luis Valley, Colorado, 2001

Treatment ^a	Stand ^b	Vigor ^c	Stems ^d	% Stems with Rhizoctonia ^e	Stolons ^f	% Stolons with Rhizoctonia ^g	Seed piece decay ^h	# Tubers per plant ⁱ	Black scurf severity index ^j
1. Control	100	4.0	5.4	37.2	19.8	12.0	0.0	8.7	12.6 a
2. Maxim MZ	100	3.9	5.2	25.3	17.2	2.5	0.0	8.4	4.3 bc
3. Tops MZ	100	3.9	5.3	28.2	18.4	3.4	0.0	6.4	12.3 a
4. Evolve	100	4.1	5.1	39.5	18.7	3.7	0.0	7.2	8.8 ab
5. A12778	100	3.9	5.1	27.2	17.3	1.1	0.0	6.6	0.3 c
6. A12534	100	3.7	4.8	17.1	18.3	1.7	0.0	6.8	2.4 bc
7. A12777	100	4.0	4.6	17.8	19.1	4.6	0.0	7.8	1.6 c
8. A12919	100	3.9	5.2	6.0	21.1	0.0	0.0	7.8	0.6 c
9. PCC553	100	4.0	4.9	20.3	19.9	2.5	0.0	6.7	1.9 c
10. PCC553-1	100	4.0	4.4	8.5	17.3	1.8	0.0	7.6	2.1 bc
11. PCC553-2	100	3.8	4.4	2.8	20.1	0.9	0.0	5.4	0.4 c
12. PCC553-3	100	3.9	4.8	11.8	18.6	2.0	0.0	6.8	2.3 bc
LSD(P=0.05)	NS	NS	NS	NS	NS	NS	NS	NS	6.82

^a All treatments were applied according to the manufacturer's recommendations.

Treatments were applied directly to fresh cut 2-4 oz. seed pieces and planted within twenty-four hours.

^b Percentage of plants emerged 40 days after planting; four replications.

^c Mean percent vigor, where 1 = poor, 5 = good; 4 plants/treatment/replication.

^d Mean number of stems per seed piece 41 days after planting; 4 plants/treatment/replication.

^e Mean percent stems with Rhizoctonia canker 41 days after planting; 4 plants/treatment/replication.

^f Mean number of stolons per seed piece 41 days after planting; 4 plants/treatment/replication.

^g Mean percent stolons with Rhizoctonia canker 41 days after planting; 4 plants/treatment/replication.

^h Mean percent incidence of disease combined soft-rot and dry-rot 41 days after planting; rated 0-100, where 0 = no decay, 100 = complete decay; 4 seed pieces/treatment/replication.

ⁱ Mean number of tubers per plant 71 days after planting; 3 plants/treatment/replication.

^j Mean percent of the affected tuber surface area, 10 8-10 oz. tubers per treatment per replication multiplied by the severity of the sclerotia, where 1 = small sclerotia and 3 = large sclerotia.

Means followed by the same letters are not significantly different at P=0.05 for Black scurf severity index.