

Table 1. Effects of different rates of compost on potato plant development and incidence of disease, San Luis Valley, Colorado, 2001

Field	Treatment ^a	Vigor ^b	Stems ^c	% Rhizoctonia ^d	Stolons ^e	% Rhizoctonia ^f	Black scurf severity index ^g
3A	0	4.1	5.0	21.5	26.4	5.3	0.0
	4	3.5	3.7	34.9	20.9	6.9	0.0
	8	4.2	4.2	28.4	25.6	3.0	1.0
	12	4.3	4.6	7.6	25.0	1.2	1.4
3B	0	4.0	4.9	31.2	24.1	5.0	0.0
	4	4.4	4.3	26.7	25.6	7.4	0.1
	8	3.9	3.9	20.4	18.9	3.5	1.0
	12	3.9	4.2	25.8	21.2	0.5	0.4
6A	0	4.5	3.9	12.0	27.4	0.4	3.8
	4	4.3	4.4	10.9	24.6	0.6	4.1
	8	4.2	4.2	22.1	25.2	0.7	1.3
	12	4.1	4.3	13.8	26.5	0.2	8.8
6B	0	3.6	3.0	4.2	23.8	6.1	-
	4	3.1	3.4	11.6	23.7	6.5	-
	8	4.0	3.5	6.0	26.0	2.3	-
	12	3.8	3.4	12.1	23.3	8.7	-
Overall Mean	0	4.1	4.2	17.2	25.4	4.2	1.3
	4	3.8	4.0	21.0	23.7	5.4	1.4
	8	4.1	4.0	19.2	23.9	2.4	1.1
	12	4.0	4.1	14.8	24.0	2.7	3.5
LSD(P=0.05)		NS	NS	NS	NS	NS	NS

^aRate of compost applied in tons/acre.

^bMean plant growth rated 1 – 5, where 1 = poor and 5 = good; five plants/treatment/replication.

^cMean number of stems per plant; five plants/treatment/replication.

^dMean percent stems with Rhizoctonia canker; five plants/treatment/replication.

^eMean number of stolons per plant; five plants/treatment/replication.

^fMean percent stolons with Rhizoctonia canker; five plants/treatment/replication.

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

Field 6B was harvested before tuber samples could be taken to determine the black scurf severity index.