

Table 1-A. 1997 snap bean yield response to 64 soil tillage and rotation treatments at Freeville site. Each value is the mean of 3 replications. Abbreviations are: NDT=no deep tillage; DT=deep tilled; PR=perennial ryegrass; RV=rye/vetch; YM=yellow mustard; Bare=bare ground.

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	1997	Soil Penetrometer (MPa)						
			1996/7	Bean	Yield Rank	1997 Spring Avg.			1997 Fall Avg.		
			Fall Crop	Yield (lb/A)		15cm	30cm	45cm	15cm	30cm	45cm
DT	Bean	Bean	Bare	5482	29	1.56	4.09	5.15	1.15	2.10	4.41
NDT	Bean	Bean	Bare	3970	44	1.49	3.48	5.26	1.56	2.75	5.06
DT	Bean	Corn	Bare	5115	32	1.66	3.77	5.26	1.38	2.89	4.79
NDT	Bean	Corn	Bare	6557	23	1.93	4.45	5.16	1.63	3.22	5.19
DT	Bean	Bean	PR	1770	60	1.65	3.69	4.87	1.27	2.31	4.21
NDT	Bean	Bean	PR	3105	53	1.56	3.85	5.26	1.71	2.88	5.26
DT	Bean	Corn	PR	4035	42	1.62	3.77	5.18	1.51	2.20	4.57
NDT	Bean	Corn	PR	2350	56	1.95	4.54	5.13	1.61	3.23	5.21
DT	Bean	Bean	RV	1071	62	1.47	3.44	5.22	1.36	2.14	3.91
NDT	Bean	Bean	RV	410	64	1.59	3.73	5.26	1.45	2.71	4.82
DT	Bean	Corn	RV	1843	59	1.59	6.16	5.06	1.30	2.54	4.20
NDT	Bean	Corn	RV	601	63	1.66	3.71	5.26	1.50	2.55	5.02
DT	Bean	Bean	YM	5094	34	1.56	3.55	5.04	1.67	3.18	4.87
NDT	Bean	Bean	YM	4602	39	1.55	3.83	5.26	1.84	3.19	5.26
DT	Bean	Corn	YM	5895	26	1.71	3.92	5.15	1.58	2.89	4.73
NDT	Bean	Corn	YM	5832	27	1.68	4.39	5.26	1.71	3.39	5.26
DT	Corn	Bean	Bare	6755	21	1.68	3.89	5.25	1.36	2.76	4.56
NDT	Corn	Bean	Bare	8368	9	1.90	4.08	5.23	1.90	3.82	5.07
DT	Corn	Corn	Bare	8550	6	1.96	4.36	5.26	1.46	2.82	4.76
NDT	Corn	Corn	Bare	8170	11	1.85	4.53	5.26	1.63	3.24	4.89
DT	Corn	Bean	PR	3430	51	1.64	4.26	5.23	1.80	2.94	4.64
NDT	Corn	Bean	PR	4977	35	1.58	3.25	5.26	1.55	2.20	5.23
DT	Corn	Corn	PR	3935	46	1.74	4.00	5.26	1.66	2.71	4.37
NDT	Corn	Corn	PR	4628	38	1.94	4.08	5.25	1.50	2.55	5.13
DT	Corn	Bean	RV	1855	58	1.61	4.00	5.26	1.58	2.77	4.71
NDT	Corn	Bean	RV	3957	45	1.87	4.25	5.26	1.43	3.05	5.17
DT	Corn	Corn	RV	5115	33	1.60	4.12	5.26	1.57	2.80	4.94
NDT	Corn	Corn	RV	3503	49	1.74	4.64	5.25	1.32	3.48	5.03
DT	Corn	Bean	YM	7810	15	1.71	4.57	5.26	1.42	2.44	4.94
NDT	Corn	Bean	YM	5501	28	1.88	4.38	5.26	1.93	3.31	5.23
DT	Corn	Corn	YM	9118	3	1.65	3.73	5.25	1.63	2.62	4.78
NDT	Corn	Corn	YM	7403	18	1.91	4.86	5.26	1.44	3.31	5.05
DT	Hubam	Bean	Bare	7215	19	1.71	4.16	5.26	1.59	2.65	4.56
NDT	Hubam	Bean	Bare	7770	16	1.80	4.44	5.26	1.78	3.78	5.20
DT	Hubam	Corn	Bare	8097	12	1.69	3.95	5.26	1.55	2.37	4.93
NDT	Hubam	Corn	Bare	8949	4	1.62	4.53	5.26	2.04	3.84	5.14
DT	Hubam	Bean	PR	4446	40	1.66	3.93	5.05	1.36	3.12	4.42
NDT	Hubam	Bean	PR	5165	31	1.82	4.69	5.26	1.47	3.25	4.67
DT	Hubam	Corn	PR	4811	37	1.77	4.17	5.26	1.41	2.65	4.84
NDT	Hubam	Corn	PR	5984	24	2.26	4.69	5.26	1.73	4.09	5.23
DT	Hubam	Bean	RV	1554	61	1.55	3.48	5.24	1.18	2.05	4.06
NDT	Hubam	Bean	RV	3460	50	2.01	4.19	5.26	1.71	3.01	4.96
DT	Hubam	Corn	RV	2362	55	1.98	4.40	5.26	1.51	3.00	4.36
NDT	Hubam	Corn	RV	3825	47	2.08	4.63	5.24	1.94	3.67	5.26
DT	Hubam	Bean	YM	4912	36	1.73	4.23	5.26	1.37	2.86	4.74
NDT	Hubam	Bean	YM	8006	13	1.67	3.75	5.26	2.4	3.32	5.22
DT	Hubam	Corn	YM	9189	1	1.72	4.47	5.26	1.79	3.39	4.61
NDT	Hubam	Corn	YM	8679	5	1.70	4.94	5.26	1.81	4.49	5.26
DT	Sudan	Bean	Bare	6676	22	1.62	4.24	5.26	1.49	2.77	4.47
NDT	Sudan	Bean	Bare	7655	17	1.45	3.71	5.26	1.97	3.74	5.26
DT	Sudan	Corn	Bare	7947	14	1.74	3.72	5.25	1.30	2.43	4.83

Table 1-A (Continued). 1997 snap bean yield response. Abbreviations are: NDT=no deep tillage; DT=deep tilled; PR=perennial ryegrass; RV=rye/vetch; YM=yellow mustard; Bare=bare ground.

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	1997		Soil Penetrometer (MPa)					
			1996/7 Fall Crop	Bean Yield (lb/A)	Yield Rank	1997 Spring Avg.			1997 Fall Avg.		
						15cm	30cm	45cm	15cm	30cm	45cm
NDT	Sudan	Corn	Bare	8545	7	1.66	4.56	5.26	1.98	4.18	5.26
DT	Sudan	Bean	PR	2707	54	1.62	3.84	5.22	1.49	2.51	3.84
NDT	Sudan	Bean	PR	5946	25	1.75	4.11	5.26	1.91	2.88	5.19
DT	Sudan	Corn	PR	3993	43	1.54	3.58	5.09	1.31	2.26	4.75
NDT	Sudan	Corn	PR	5461	30	1.79	4.59	5.26	1.81	3.93	5.26
DT	Sudan	Bean	RV	1906	57	1.62	3.99	5.26	1.40	2.77	4.36
NDT	Sudan	Bean	RV	4430	41	1.68	4.36	5.26	1.78	3.16	5.25
DT	Sudan	Corn	RV	3372	52	1.75	3.95	5.23	1.48	2.75	4.68
NDT	Sudan	Corn	RV	3580	48	1.57	4.42	5.26	1.59	3.45	5.26
DT	Sudan	Bean	YM	6904	20	2.09	4.63	5.26	1.33	2.79	4.83
NDT	Sudan	Bean	YM	8465	8	1.82	4.18	5.26	1.52	3.90	5.26
DT	Sudan	Corn	YM	9156	2	1.78	4.27	5.22	1.33	2.85	4.56
NDT	Sudan	Corn	YM	8332	10	1.85	4.64	5.26	2.09	3.93	5.26

Table 1-B. 1997 snap bean yield at Freeville site, with focus on effect of fall cover crops (averaging across 1995 and 1996 summer crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	1997		Soil Penetrometer (MPa)					
			1996/7 Fall Crop	Bean Yield (lb/A)	Yield Rank	1997 Spring Avg.			1997 Fall Avg.		
						15cm	30cm	45cm	15cm	30cm	45cm
DT	---	---	Bare	6980	4	1.70	4.02	5.24	1.41	2.60	4.66
NDT	---	---	Bare	7498	1	1.71	4.22	5.24	1.81	3.57	5.14
DT	---	---	PR	3641	6	1.65	3.91	5.15	1.48	2.59	4.45
NDT	---	---	PR	4702	5	1.83	4.21	5.24	1.66	3.12	5.15
DT	---	---	RV	2385	8	1.65	4.19	5.22	1.42	2.60	4.40
NDT	---	---	RV	2971	7	1.77	4.24	5.25	1.59	3.13	5.10
DT	---	---	YM	7260	2	1.74	4.17	5.21	1.52	2.88	4.76
NDT	---	---	YM	7102	3	1.76	4.37	5.26	1.80	3.61	5.22

Table 1-C. 1997 snap bean yield at Freeville site, with focus on effect of 1995 summer cash crop (averaging across fall cover crops and 1996 summer cash crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	1997		Soil Penetrometer (MPa)					
			1996/7 Fall Crop	Bean Yield (lb/A)	Yield Rank	1997 Spring Avg.			1997 Fall Avg.		
						15cm	30cm	45cm	15cm	30cm	45cm
DT	---	Bean	---	4349	4	1.66	4.00	5.19	1.43	2.64	4.47
NDT	---	Bean	---	5362	3	1.71	4.01	5.26	1.72	3.18	5.14
DT	---	Corn	---	5783	1	1.72	4.15	5.22	1.49	2.70	4.67
NDT	---	Corn	---	5775	2	1.82	4.51	5.24	1.71	3.53	5.17

Table 1-D. 1997 snap bean yield at Freeville site, with focus on effect of 1995 summer crops (averaging across fall cover crops and 1996 summer crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6		1997		Soil Penetrometer (MPa)					
			1996/7 Fall Crop	1997 Bean Yield (lb/A)	Yield Rank	1997 Spring Avg.			1997 Fall Avg.			
						15cm	30cm	45cm	15cm	30cm	45cm	
DT	Bean	---	---	3788	7	1.60	4.05	5.12	1.40	2.53	4.46	
NDT	Bean	---	---	3428	8	1.68	3.99	5.23	1.63	2.99	5.13	
DT	Corn	---	---	5821	3	1.70	4.12	5.25	1.56	2.73	4.71	
NDT	Corn	---	---	5813	4	1.84	4.25	5.25	1.59	3.12	5.10	
DT	Hubam	---	---	5323	6	1.72	4.10	5.23	1.47	2.76	4.57	
NDT	Hubam	---	---	6480	2	1.87	4.48	5.26	1.81	3.68	5.12	
DT	Sudan	---	---	5333	5	1.72	4.03	5.22	1.39	2.64	4.54	
NDT	Sudan	---	---	6552	1	1.70	4.32	5.26	1.83	3.65	5.25	

Table 1-E. 1997 Snap bean yield at Freeville site, with focus on effect of 1994 tillage treatments (averaging across 1995 and 1996 summer crops and across fall cover crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6		1997		Soil Penetrometer (MPa)					
			1996/7 Fall Crop	1997 Bean Yield (lb/A)	Yield Rank	1997 Spring Avg.			1997 Fall Avg.			
						15cm	30cm	45cm	15cm	30cm	45cm	
DT	---	---	---	5066	2	1.69	4.07	5.21	1.46	2.67	4.57	
NDT	---	---	---	5568	1	1.77	4.26	5.25	1.71	3.36	5.15	

Table 2-A. 1997 Root rot effects on snap beans within 64 soil tillage and rotation treatments at Freeville site. Each value is the mean of 3 replications. Abbreviations are: NDT=no deep tillage; DT=deep tilled; PR=perennial ryegrass; RV=rye/vetch; YM=yellow mustard; Bare=bare ground. Evaluations were made on a 2-foot section of row. Overall rating based on scale of 1=excellent (no rot or loss of stand) to 5=severe root rot damage.

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6		Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
			1996/7 Fall Crop					
DT	Bean	Bean	Bare		8.3	6.3	2.7	3.00
NDT	Bean	Bean	Bare		10.0	9.0	4.0	3.67
DT	Bean	Corn	Bare		13.3	5.3	3.3	2.00
NDT	Bean	Corn	Bare		10.0	6.7	3.0	2.67
DT	Bean	Bean	PR		7.0	5.7	3.3	3.67
NDT	Bean	Bean	PR		9.7	9.0	6.3	4.33
DT	Bean	Corn	PR		8.0	3.0	2.3	2.33
NDT	Bean	Corn	PR		9.0	7.0	5.0	2.67
DT	Bean	Bean	RV		6.7	5.0	2.3	3.00
NDT	Bean	Bean	RV		4.7	4.7	4.7	5.00
DT	Bean	Corn	RV		7.7	3.3	1.7	3.00
NDT	Bean	Corn	RV		4.3	4.3	2.7	4.33
DT	Bean	Bean	YM		10.0	6.0	3.3	2.67
NDT	Bean	Bean	YM		12.0	9.0	5.0	3.00

Table 2-A (Continued). 1997 Root rot effects on snap beans at Freeville site.

Abbreviations are: NDT=no deep tillage; DT=deep tilled; PR=perennial ryegrass; RV=rye/vetch; YM=yellow mustard; Bare=bare ground. Evaluations were made on a 2-foot section of row. Overall rating based on scale of 1=excellent (no rot or loss of stand) to 5=severe root rot damage.

1994 Tillage	1995/6			Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
	1995 Summer Crop	1996 Summer Crop	1996/7 Fall Crop				
DT	Bean	Corn	YM	9.7	6.3	3.7	3.67
NDT	Bean	Corn	YM	10.0	7.7	3.0	3.00
DT	Corn	Bean	Bare	10.3	7.0	3.0	2.67
NDT	Corn	Bean	Bare	8.3	4.7	1.7	2.67
DT	Corn	Corn	Bare	10.3	3.7	1.7	2.00
NDT	Corn	Corn	Bare	9.7	3.3	1.7	2.00
DT	Corn	Bean	PR	6.7	5.3	2.3	3.67
NDT	Corn	Bean	PR	10.3	5.7	2.3	2.67
DT	Corn	Corn	PR	10.0	6.3	2.7	3.00
NDT	Corn	Corn	PR	9.7	4.7	1.7	2.00
DT	Corn	Bean	RV	7.0	6.7	5.0	4.00
NDT	Corn	Bean	RV	6.8	4.7	2.0	3.33
DT	Corn	Corn	RV	6.0	4.7	2.7	3.00
NDT	Corn	Corn	RV	8.3	5.0	4.0	3.00
DT	Corn	Bean	YM	11.0	5.0	2.0	2.33
NDT	Corn	Bean	YM	9.7	4.0	2.3	2.33
DT	Corn	Corn	YM	10.7	3.3	2.0	2.00
NDT	Corn	Corn	YM	11.0	6.3	4.3	3.00
DT	Hubam	Bean	Bare	10.0	6.7	1.7	2.33
NDT	Hubam	Bean	Bare	11.0	8.7	4.0	2.67
DT	Hubam	Corn	Bare	11.0	4.3	2.3	2.33
NDT	Hubam	Corn	Bare	10.3	5.3	1.7	2.33
DT	Hubam	Bean	PR	7.0	4.7	1.7	2.67
NDT	Hubam	Bean	PR	10.7	8.0	4.3	3.00
DT	Hubam	Corn	PR	9.7	6.0	3.0	2.67
NDT	Hubam	Corn	PR	10.7	5.7	2.7	2.33
DT	Hubam	Bean	RV	4.0	4.0	2.0	3.67
NDT	Hubam	Bean	RV	7.0	5.7	2.7	3.00
DT	Hubam	Corn	RV	8.7	6.3	4.3	3.33
NDT	Hubam	Corn	RV	9.7	6.3	4.0	2.67
DT	Hubam	Bean	YM	7.7	6.3	2.7	2.67
NDT	Hubam	Bean	YM	9.7	6.7	4.0	3.00
DT	Hubam	Corn	YM	11.7	8.0	1.3	2.33
NDT	Hubam	Corn	YM	11.3	5.0	1.3	2.00
DT	Sudan	Bean	Bare	10.0	6.7	3.7	2.33
NDT	Sudan	Bean	Bare	13.0	7.0	2.3	2.00
DT	Sudan	Corn	Bare	12.0	7.3	4.7	3.00
NDT	Sudan	Corn	Bare	12.0	6.0	2.0	2.33
DT	Sudan	Bean	PR	5.7	5.0	2.0	3.00
NDT	Sudan	Bean	PR	9.7	8.0	6.0	3.33
DT	Sudan	Corn	PR	6.7	6.0	3.7	3.33
NDT	Sudan	Corn	PR	9.0	5.0	1.7	2.33
DT	Sudan	Bean	RV	6.7	5.3	2.7	2.67
NDT	Sudan	Bean	RV	8.7	6.3	4.0	3.00
DT	Sudan	Corn	RV	7.3	5.0	3.7	4.00
NDT	Sudan	Corn	RV	7.7	5.7	3.0	3.00
DT	Sudan	Bean	YM	8.7	5.0	2.0	2.67
NDT	Sudan	Bean	YM	9.7	4.0	1.3	2.00
DT	Sudan	Corn	YM	10.3	3.0	1.3	2.00
NDT	Sudan	Corn	YM	10.0	5.7	2.7	2.3

Table 2-B. 1997 root rot evaluation in snap bean yield at Freeville site, with focus on effect of fall cover crops (averaging across 1995 and 1996 summer crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
			1996/7 Fall Crop				
DT	---	---	Bare	10.7	5.9	2.9	2.46
NDT	---	---	Bare	10.5	6.3	2.5	2.54
DT	---	---	PR	7.6	5.3	2.6	3.04
NDT	---	---	PR	9.8	6.6	3.8	2.83
DT	---	---	RV	6.8	5.0	3.0	3.33
NDT	---	---	RV	7.1	5.3	3.4	3.42
DT	---	---	YM	10.0	5.4	2.3	2.54
NDT	---	---	YM	10.4	6.0	3.0	2.58

Table 2-C. 1997 root rot evaluation in snap bean yield at Freeville site, with focus on effect of 1996 summer crops (averaging across 1995 summer crops and cover crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
			1996/7 Fall Crop				
DT	---	Bean	---	7.9	5.7	2.7	2.94
NDT	---	Bean	---	9.4	6.6	3.6	3.06
DT	---	Corn	---	9.6	5.1	2.8	2.75
NDT	---	Corn	---	9.5	5.6	2.8	2.63

Table 2-D. 1997 root rot evaluation in snap bean yield at Freeville site, with focus on effect of 1995 summer crops (averaging across 1996 summer crops and cover crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
			1996/7 Fall Crop				
DT	Bean	---	---	8.8	5.1	2.8	2.92
NDT	Bean	---	---	8.7	7.2	4.2	3.58
DT	Corn	---	---	9.0	5.3	2.7	2.83
NDT	Corn	---	---	9.2	4.8	2.5	2.63
DT	Hubam	---	---	8.7	5.8	2.4	2.75
NDT	Hubam	---	---	10.0	6.4	3.1	2.63
DT	Sudan	---	---	8.4	5.4	3.0	2.88
NDT	Sudan	---	---	10.0	6.0	2.9	2.54

Table 2-E. 1997 root rot evaluation in snap bean yield at Freeville site, with focus on effect of 1994 tillage (averaging across summer crops and fall cover crops).

1994 Tillage	1995 Summer Crop	1996 Summer Crop	1995/6	Plant Stand no./2ft	Plants Infested no./2 ft	Severely Infested no./2 ft	Overall Rating
			1996/7 Fall Crop				
DT	---	---	---	8.7	5.4	2.7	2.84
NDT	---	---	---	9.5	6.1	3.2	2.84

Table 3. 1996 Greenhouse experiment evaluating root growth and above-ground growth of various cover crops on compacted (CP) and uncompacted (UC) soil. Compacted pots were compacted at the 10-20 cm depth (soil penetrometer resistance >2.0 MPa), with the upper 10 cm left uncompacted. Values shown are total plant growth rate (above- and below-ground dry weight biomass), root growth rate (dry weight accumulation) within the 10-20 cm depth (compacted zone of compacted pots), and percent of total root dry weight in the 10-20 cm depth.

Cover Crop	Total Plant Growth Rate (g/m ² /day)		Root Growth Rate at 10-20 cm (g/m ² /day)		Percent of Total Roots at 10-20 cm depth	
	UC	CP	UC	CP	UC	CP
Bahiagrass	10.4	6.0	1.0	0.8	18	23
Buckwheat	19.8	15.2	0.2	0.3	12	16
Hubam sweet clover	14.6	5.8	0.7	0.5	26	36
Nitroalfalfa	17.9	9.9	0.7	0.6	16	20
Perennial ryegrass	20.0	20.3	2.0	2.0	26	23
Sudangrass	21.2	19.3	2.3	1.8	37	33
Yellow blossom clover	15.0	13.0	0.4	0.6	10	20
Yellow mustard	19.2	14.4	0.3	0.5	14	32

Table 4. 1997 Greenhouse experiment results showing effects of various cover crops on subsequent marketable snap bean yield and total above-ground fresh weight biomass in compacted (CP) and uncompacted (UC) pots. The cover crops were grown and incorporated in the pots several months prior to planting the beans. Initially, prior to cover crop planting, pots were either compacted at the 10-20 cm depth (average soil penetrometer resistance of 2.65 MPa), or left uncompacted (average penetrometer resistance of 1.03 MPa at the 10-20 cm depth). The upper 10 cm was uncompacted in all pots.

Prior Cover Crop	Initial Soil Compaction	Snap Bean Total Mkt. Pod Yield (g/plant)	Snap Bean Total Plant Biomass (kg/plant)
Buckwheat	Uncompacted (UC)	129	229
	Compacted (CP)	82	199
Hubam	UC	107	217
	CP	68	191
Per. Rye	UC	132	253
	CP	72	195
Sudan	UC	113	235
	CP	91	206
Y. Mustard	UC	116	222
	CP	95	222
YB Clover	UC	98	199
	CP	85	167

Table 5. 1997 Sweet corn emergence and yield results at Geneva site showing influence of rotation, subsoiling, cover crop, and composted chicken manure. Data is average for 10 feet of row.

Treatment	Emergence (no./10 ft.)	Stand (no./10 ft.)	Mkt. Ear (kg/10 ft.)	Mkt. Ear (no./10 ft)	Ear wt. (kg/ear)
Rotation (1996-97)					
com-corn	15.1	14.1	4.0	3.0	0.67
beets-corn	15.3*	14.9*	4.9	4.2*	0.98
Tillage (fall 94,97)					
Conventional	14.9	14.1	4.4	3.5	0.82
Deep tilled	15.4	14.8	4.5	3.7	0.83
Cover crop (fall 95,96,97)					
Fallow	15.4	14.5	4.8	4.1	0.99
Rye grain	14.9	14.5	4.1	3.1	0.66
Hairy vetch (failed fall 96)					
Amendment (spring 95,96,97)					
No compost	15.2	14.6	4.6	3.6	0.84
Compost	15.1	14.3	4.3	3.6	0.81

*LSD=0.05 significantly different than check

Table 6. 1997 Snap bean emergence, yield and root rot severity at Geneva site. Influence of deep tillage, chicken manure compost, and cover crops.

Treatment	Emergence (no./10 ft.)	Stand (no./10 ft.)	Total Biomass (kg/10 ft)	Pod Yield (kg/10 ft)	Root Rot Severity
Tillage (fall 94, 97)					
Conventional	62.8	58.5	3.0	1.5	
Deep tillage	60.6	57.0	2.8	1.4	
Cover Crop (fall 95,96,97)					
Fallow	62.2	58.1	2.6	1.2	5.7
Hairy vetch (failed 96)			3.1	1.6	5.8
Rye	61.2	57.4	2.9	1.5	5.9
Amendment (spring 95,96,97)					
No compost	62.4	58.7	3.1	1.7	5.8
Compost	60.9	56.8	2.6*	1.2*	5.8

*LSD=0.05 significantly different than check