

Table 1. Yield of peppers organically grown in different tillage treatments, cover crops and soil disturbance at Freeville, NY 2010.

Treatment	Yield		
	Early fruit (tons/a) ^x	Total fruit (tons/a) ^y	Percent of total yield early by wt
<i>Tillage</i>			
Conventional	3.9	11.2	37.2
Strip	2.6	8.1	34.3
<i>Cover Crop</i>			
Rye Vetch	3.0 b ^z	10.4 b	26 c
Oat/pea	4.8 a	13.9 a	35 b
Oat/pea with mulch	2.0 c	4.7 c	46 a
<i>Soil Disturbance</i>			
High	3.3 a	10.2 a	35.0 a
Low	3.2 a	9.2 b	36.5 a
<i>Statistical Significance</i>			
Tillage	0.0001	0.001	ns
Cover crop	0.0003	<.0001	0.0162
Soil Disturbance	ns	0.026	ns
Tillage* Cover crop	0.0002	0.0047	0.0299
Tillage*Soil Disturbance	ns	ns	ns
Cover crop*Soil Disturbance	ns	ns	ns
Cover crop*Soil Disturbance*Tillage	ns	ns	ns

^xEarly yield was harvested on August 18 and 30, 2010.

^yTotal yield was combined yield from August 18, 30, September 9, 20 and October 7, 2010.

^zMeans followed by different letters are significantly different at LSD=0.05.

Table 2. Plant growth and yield of sweet corn produced under conventional and reduced tillage.

Growth/Yield parameter	Conventional-till	Reduced-till	P-value
Plant height (standing)	53.7 in b	61.4 in a	<.0001
Plant height (top leaf extended up)	82.7 in b	89.7 in a	<.0001
Above ground biomass dry weight	41.9 g	57.9 g	0.0767
Root biomass dry weight	39.6 g b	68.6 g a	0.0455
Ear No. (doz/A)	1443	1491	0.5226
Ear Weight (cwt/A)	104	112	0.0993
Ear Length	8.6 in	8.5 in	0.143
Ear Diameter	1.5 in	1.5 in	0.1586
Brix (% sugar)	20.3 a	17.8 b	0.0001

Table 3. Plant growth and yield of pumpkin produced under conventional and reduced tillage.

Growth/Yield parameter	Conventional-till	Reduced-till	P-value
Above ground biomass dry weight (g)	24.3 b	42.8 a	0.0106
Root biomass dry weight (g)	1.2	1.8	0.1941
Number marketable fruit	69	86.3	0.0632
Weight marketable fruit (lb)	277 b	367.5 a	0.0366
Weight per fruit (marketable)	4	4.2	0.432
Number unmarketable fruit	11	7	0.1767
Total number fruit	80	93.3	0.1373
Estimated total weight of fruit	321.5	398.2	0.0917
Biggest fruit weight (lb)	6.5	7.1	0.1318

Yield was assessed for a 40-ft section of the three rows in each plot.

Table 4. Plant growth of fall planted brassicas produced under conventional and reduced tillage.

Growth/Yield parameter	Conventional- till	Reduced- till	<i>P</i>-value
			18-Oct
Above ground biomass dry weight (g)	26 a	16 b	0.0001
Root biomass dry weight (g)	13.9 a	12.6 a	0.5616
			19-Nov
Above ground biomass dry weight (g)	94.6 a	92.5 a	0.889
Root biomass dry weight (g)	21.3 a	20.9 a	0.912