

**Table A: Overview of cropping systems management,
Rodale Institute Farming Systems Trial,**

Cropping systems	Crop rotation ¹	Primary tillage ²	Weed control ³	Fertility ⁴
Manure tilled	hv/C-r/O-r/SB-W-H-Csil-W	MB	tillage, RH/TW, RC	AM, GM, K
Manure No-till	hv/C-r/O-r/SB-W-H-Csil-W	MB and none	tillage, RH/TW, RC, CC	AM, GM, K
Legume tilled	hv/C-r/O-B/SB-W	MB	tillage, RH/TW, RC	GM, K
Legume No-till	hv/C-r/O-r/SB-W	MB and none	tillage, RH/TW, RC, CC	GM, K
Conventional tilled	C-SB	Ch	Tillage, Herbicides	N, P, K
Conventional no-till	hv/C-r/SB-W	None	Herbicides	N, P, K

¹ C=corn, SB=soybean, H=hay (either red clover, red clover+alfalfa or orchard grass+alfalfa), W=winter wheat, Csil=corn silage, B=winter barley, hv= hairy vetch cover crop, r= rye cover crop

² MB = moldboard plow, Ch=chisel plow

³ RH=rotary hoe, TW=tine weed, RC=row cultivation, CC=rolled cover crop mat

⁴ N included urea ammonium nitrate, P was monoammonium phosphate, K was potassium sulfate in organic and potassium chloride in conventional systems, GM=green manures, AM=animal manures (raw manure (1981-2002) or composted manure (2004-2010))