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SMALL GRAIN CROP ROTATION

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We have been anxious to try our hand at organic farming, following as close as possible the methods of this type of farming and in the process make comparisons with the standard commercial type of systems of crop growing.

To try and achieve some comparable results, an area of ground at the University South Deerfield farm has been set aside to make these comparisons. There will be three cropping rotations compared over three soil management practices. The cropping rotations will be:

1. Continuous field corn.
2. Sweet corn followed by winter wheat then buckwheat in the next season going to a cover crop over winter, and then back to sweet corn.
3. Soybeans then cover crop over winter, followed by sweet corn then winter wheat followed by buckwheat, a cover crop over winter, then back to soybeans.

Soil management practices introduced in this first year have been:

1. Conventional fertilizer check plots.
2. 12 ton per acre dairy manure with bedding sawdust.
3. 30 ton per acre dairy manure with bedding sawdust.
This will be followed in future years with 8 ton per acre of manure.

It is our intent that this same area will be used year after year with an expansion of these methods, so meaningful results can be determined. Our results are not expected to be outstanding the first year or two, as it takes time to orient and process a soil to organic crop growing.

Our efforts will be towards the buildup of plenty of organic matter, and to do this will necessitate cover and green manure crops that can be returned to the soil. The rotation will place some emphasis on legumes where possible to build up soil nitrogen through symbiotic nitrogen fixation and return of nitrogenous plant material.