Overview and Comparison of Conservation Tillage Practices and Organic Farming In Europe and North America

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SUMMARY

Tillage has been ubiquitous to crop production in most of the world for millennia. Implements used to till the soil that were pulled by animals are known to have existed at least as far back as 8000 B.P. However, growing concerns about the negative consequences of tillage on soil quality spurred widespread interest in reducing tillage practices on farms, particularly in the Great Plains of North America where farming practices brought by immigrants from eastern regions and from Europe were not adapted because of the dry conditions that were encountered. This realization, and other developments culminating in the Dust Bowl era during the 1930s, made it obvious that innovative farming practices were needed to protect soil from erosion and degradation in quality. A logical consequence is modern no-till farming, where soil is disturbed minimally, if at all, when growing annual cash and forage crops. Advantages of no-till compared with clean or conventional tillage farming have been widely described in the scientific literature.

The full paper was published in the March, 2012 issue of the Journal of Renewable Agriculture and Food Systems.