

reactive combinations these chemicals make with the soil and with each other in terms of toxicity for humans

Cites David Schertz, SCS -- notion that CT increases pesticide use is a fallacy -- there is an increase in early years, but year-by-year the weed problem gets less and less (in part because weed seeds are no longer turned up by plowing).

Improvements in techniques can also reduce herbicide use, e.g. ridge till.

Cites Robert Papendick, Washington State -- No-till is not necessarily tied to increased use of pesticides; that may be the fact today, but it need not be tomorrow; working on rotations involving new cover crops to control pests.

Cites Barney Volak, Rodale Research Center, Kutztown, PA -- they are testing alternatives to herbicides in CT, eg. crop rotations, biological predator controls, crop competition to control weeds, etc.

**Lockeretz, William and Patrick Madden. 1987. "Midwestern Organic Farming: A Ten-year Follow-up," American Journal of Alternative Agriculture, vol. II, no. 2, Spring.**

Abstract. A survey was mailed to 174 Midwestern organic farmers originally studied in 1977. We obtained information on 133 of this group, 96 of whom are still farming at the same location, although 12 no longer use organic methods. Fifty-eight currently active farmers returned a detailed questionnaire that covered their perceptions of the advantages and disadvantages of organic farming, some of their practices, and their financial status. Most farmers who employed organic farming methods stated they did so out of concern for the health of themselves, their families, and their livestock. Compared to ten years ago, philosophical or religious considerations were frequently mentioned as an advantage of organic farming. In contrast, some agronomic and management disadvantages of organic farming were mentioned more often. The farmers now are more tolerant, in principle, of some chemicals not generally accepted in organic farming, but regular use of soluble fertilizers and synthetic pesticides has not increased appreciably. The farmers reported little change in the institutional and social environment for organic agriculture, including available markets, information sources, and the attitudes of their neighbors.

**Lockeretz, W., et al. 1976. "Organic and Conventional Crop Production in the Corn Belt: A Comparison of Economic Performance and Energy Use for Selected Farms," Center for the Biology of Natural Systems, Washington University, St. Louis.**

This was a five-year study of organic farming begun in 1974. Per Madden (1987) 8 of the original 16 farmers who were contacted in 1986 were still farming, 7 organically and 1 using the full spectrum of chemicals.