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Alternative Pest and Soil Management Systems for Potato:
Agronomic Assessment of the University of Maine Potato
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The University of Maine Potato Ecosystem Project is a multi-disciplinary research project examining alternative pest and soil management strategies for potatoes. The main systems experiment is a 15-acre study which compares three pest management strategies (conventional, reduced chemical, and biological) and two soil management strategies. A soil management strategy based on rotation with a grain crop and heavy use of chemical fertilizers is compared to one which uses a green manure rotation, compost and manure applications, and reduced rates of chemical fertilizer. Smaller experiments examine specific research problems in greater detail. This paper will present information on the development of this systems project, its relationship to and reception by the Maine potato industry, and selected results from the 1991-94 growing seasons (e.g. yields, effectiveness of the alternative pest management strategies, changes in soil properties, economics, etc).

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