# An Economic Analysis of Alternative Rotation Crops in Potato Cropping Systems. (A08-halloran141820-Poster)

#### Authors:

- J.M.Halloran\* USDA Agricultural Research Service
- T.S.Griffin USDA Agricultural Research Service
- C.W.Honeycutt USDA Agricultural Research Service

### Abstract:

Potato cropping systems in New England include both continuous potatoes rotated with small grains. Producers recognize the benefits of increased rotations, but the economics of producing a high-valued crop, such as potatoes, create incentives for continuous potato production. Research at the USDA-ARS research site in Newport, ME is evaluating the agronomic and economic impacts of six crops in two-year rotations on potato yield and whole-farm profitability. Preliminary results show that certain rotation crops have a positive impact on the following potato crop. The impact on yield can reduce nitrogen needs and production costs. Simulation was conducted to determine the impact of rotation crops on whole-farm profitability and income risk. Rotation crops, such as sweet corn, can increase to the return to land and management. Several crops, while not increasing overall whole-farm profitability, were found to significantly reduce income risk. These findings provide support for the including rotation crops as a method to improve potato production and sustainability, increase whole-farm profitability, and reduce income risk.

Corresponding Author Information: John Halloran phone: 207-581-3281 USDA-Agricultural Research Service e-mail: New England Plant, Soil and Water John.Halloran@maine.edu Laboratory Ornon, ME 04469-5753

### **Presentation Information:**

Presentation Date: Tuesday, November 12, 2002 Presentation Time: 9:00-11:00 am Poster Board Number: 427

## Keywords:

Economics, Profitability, crop rotation, sustainability