# Potatoes Five Ways: A Trial of Different Potato-Growing Methods for Small-Scale Operations

## The Problem:
Small-scale growers may be attracted to the wide variety of potato-growing methods in agricultural literature and on the internet. To avoid risk, however, most growers stick with traditional methods and may be missing out on more efficient strategies that reduce labor and inputs while increasing yields.

## The Study Design:
Five manual potato-growing strategies suitable for small-scale growers selected.

### Other Variables Held Constant at Each Location:
- Sun
- Care
- Seed Potatoes
- Water
- Soil
- Mulch
- Number of Plants
- Compost

### Growers Recorded per Method:
- Plant Growth
- Pest Pressure
- Type and Time of Labor
- Potato Yield and Count

## The Results:

### Yield:
- **Most**
  - Trench & Hill
  - (ave. lb/plant) 2.5
- **Middling**
  - Straw, Towers, Straw & News
  - (2.0 lb)
- **Least**
  - Bags
  - (1.7 lb)

### Labor:
- **Least**
  - Straw
  - (ave. min/plant) 7.42
- **Middling**
  - Straw & News
  - (8.39)
- **Most**
  - Towers
  - (16.59)

### Type of Labor:
- **Least**
  - Bags, Towers
  - (weedings/season) 1.8, 2.0
- **Middling**
  - Bags
  - (2.1)
- **Most**
  - Towers
  - (2.3)

### Cost:
- **Best**
  - Trench & Hill, Straw, Straw & News
  - ($2.18/plant)
- **Middling**
  - Bags
  - ($3.18)
- **Worst**
  - Towers
  - ($11.61)

### Significance and Conclusions:
- **Straw & Newspaper mulch** was the most labor-efficient method.
  - Half the labor per pound (2.37 min/lb vs. 4.15 for trench & hill)
  - But 28% more plants needed to equal trench & hill yield
  - No mechanization or digging required
  - Easy to harvest, cleaner tubers

**Participant Suggestions**
1. Use cardboard and woodchips instead of newspaper and straw for better vole resistance.
2. Cultivate bed, place seed potatoes on surface, cover with compost, and unroll round bale for larger-scale application.

**Logistical and Other Support Provided by:**
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**Take One!**
Sheet has comprehensive data. Warning: stats ahead.

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