

Farmer Tips on Hoop House Use

David Conner and Adam Montri, Michigan State University and Michigan Food and Farming Systems (MIFFS)

Overview

The following tips were gleaned from a series of interviews conducted in Fall 2007 with farmers who received and began growing in hoop houses in Fall 2006. They reflect the farmers experiences and observations with the first year of use, as part of the project titled "Season Extension Technology for Small and Medium Scale Farms: Economic and Environmental Impacts."*



Benefits of Hoop houses

- Ability to harvest early and late in the season
- Providing cash flow and productive labor opportunity in otherwise slow times
- Pleasant work environment in cold season

Site and Soil Preparation

- Choose site with relatively level, well-drained ground and full sunlight
- Consider proximity to water and electricity sources; drip tape saves much watering time
- Choose or create a site with good fertility and relatively good control of weeds
- When installing, account for the plastic's fragility and difficult installation: make sure bolt heads are pounded in and have a large crew on installation day
- A good soaking on dry ground makes ground posts go in easier



Key Differences from Outdoor Production

- Everything grows faster in the hoop house, including weeds: be prepared to use more seeds, water and fertility inputs
- Soil fertility and weed management deficiencies may be more pronounced in the hoop house
- Using tractors or tillers is more difficult or not feasible in the cramped confines; more handwork may be needed
- Hoop house produce is often higher quality and less damaged by wind, splash, and pests
- Hoop houses often face different weed and pest pressures (e.g., chickweed, grasshopper, rodents) than are found outdoors



Whether to Buy and How to Use

- Many farmers spoke of a “learning curve” to using this new tool. While most felt it positively impacted their farm business, many were uncertain as to how soon it would pay for itself and the need to subsidize it in the short term with other farm enterprises
- Consider putting the money into width rather than length: the outer edges are colder and may be unproductive, and one can easily add length with more bows.
- Know your markets and what you can sell. Depending on markets, a large mass planting may bring time and cost savings for some farms, while for others staggered diversified plantings may attract and keep farmers’ market customers.
- Use limited hoop house space wisely: while all crops may grow well, overall prices and seasonal premiums make some crops much more profitable. For example, some farmer found tomatoes to be very profitable, string beans less so.
- Some farmers saw the hoop house primarily as a tool for fall and spring and focused on outdoor production

David Conner, Ph.D. is a Research Specialist with the C.S. Mott Group for Sustainable Food Systems, Department of CARRS, Michigan State University,

Adam Montri is an Academic Specialist-Outreach, Department of Horticulture, Michigan State University; Hoophouse Project Manager, Michigan Food & Farming Systems,

Acknowledgements:

*Funding was supported by the National Research Initiative of the USDA Cooperative State Research, Education and Extension Service, grant number 2006-55618-16922

Photo Credits: Adam Montri and Jim Lucas