High tunnels are inexpensive, passive solar structures in which crops are grown directly in the soil. They enable farmers to plant earlier, control the environment, and produce high yields of quality produce through an extended season.

What was done and why?

To be successful in high tunnel production, there is a steep learning curve for growers to understand the unique cropping systems and management skills needed. High tunnels require different equipment, fertilizer, and pest management strategies. The “trial and error” method of learning production methods puts growers at great financial risk.

The objectives of the project were to:
1. Develop a resource manual and resource kit for high-tunnel producers that provided quick access to construction, maintenance, pest management, production and marketing issues that will impact producer profitability.
2. Develop and offer three high-tunnel training workshops with in-depth production and marketing information and introduce producers to the resource kit and how to effectively use the resources provided, consequently improving the profitability of their high-tunnel crops.
3. Increase the number of full- and part-time fruit and vegetable producers in Iowa.

What did we learn?

The interest in high tunnels was evident by the high number of participants in the workshops, which led to presentation of two additional workshops beyond the original objective plans. The evaluations and survey results showed that the workshops provided valuable information for the producers to determine whether a high tunnel fit into their farming operation. Most felt confident after the workshop that they had the educational tools to be successful in high tunnel fruit and vegetable production.

The Iowa High Tunnel Fruit and Vegetable Production Manual has proven to be an asset and will continue to be used for additional training programs and as a reference for Iowa fruit and vegetable growers. An online survey, completed by 32 percent of the participants, showed that this project improved their production skills, increased farm profitability, and has resulted in expansion of their farming business. The workshops provided participants with preliminary and basic information on high tunnel production. However, they indicated that they need more specific training in irrigation systems, organic methods, and the production of specific crops.