

Implementation

Update on Michigan Apple Organics

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Abstract: The Michigan State University organic apple project is a five-acre, high-density organic apple orchard that is being used to test a variety of soil, nutrient, tree vigor and pest control management strategies. An integrated management approach from the soil up included intense disease, insect and horticultural management as well as looking at economics, marketing and education. The project is directed by a grower/researcher board and has broad support from organic marketing, input, certification and processing organizations. This is a cooperative effort and meant to be a serious university response to grower requests and recommendations for research and extension in organic apple production methods. The principal objective of this research is to develop a comprehensive research and education program designed to facilitate the production and marketing of organic apples in Michigan with special reference to biological stress management, soil quality and pest management issues. The orchard was planted in 1999 and is now yielding 120 to 180 bushels/acre in 2003 and 300 to 400 bushels/acre in 2004. Arthropod management included codling moth (*Cydia pomonella*) virus, pheromone disruption for codling moth and leafrollers, plum curculio (*Conotrachelus nenuphar*) lure and kill tactics, kaolin clay for apple maggot, biodiversity plantings for biological control intensification and three ground cover management systems. The orchard narrowly missed economic production costs in 2003 and narrowly exceeded them in 2004. Fruit packout, fruit quality and damage details are available at whalonlab.msu.edu.