

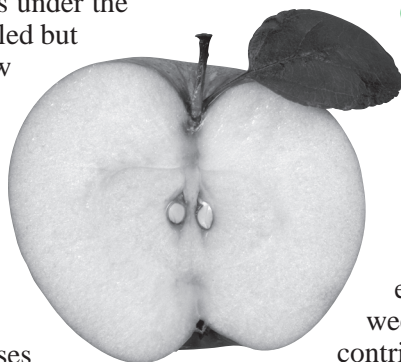
Mason County organic fruit growers test orchard ground floor management alternatives

MSU Extension educators and Mason County growers are working together to address some of the greatest challenges to organic apple production in western Michigan.

Organic growers face issues in managing weeds and insects, maintaining healthy soil ecosystems and good fruit quality, and producing an economically viable crop.

Ron Perry of the Department of Horticulture, Mira Danilovich and Dario Stefanelli of MSU Extension, and Mason County growers Brian and David Hackert of Hackert Farms are working together with financial support from the MSU Integrated Pest Management Program. They have implemented a study using a new management strategy called the Swiss Sandwich System (SSS). This is the first commercial-scale study of the SSS and will be an important first step in aiding adoption by growers across the Midwest and beyond.

SSS calls for tilling two shallow strips on either side of the orchard rows. The rows under the trees are not tilled but allowed to grow vegetation as a ground cover. This cover harbors beneficial predatory insects, minimizes soil erosion, increases



Swiss sandwich system/new orchard floor management practice finds acceptance in the organic orchard production system in Mason County.

Results from the study's first year indicate that the system has had positive effect on the trees and orchard ecosystem.

soil organic matter, nutrient recycling and microbial activity. It also helps reduce nitrate runoff and leaching. The shallow-tilled strips don't require any special equipment and can reduce weed competition and contribute to increased yield and fruit size.

This and other new, sustainable agronomic practices that could result in considerable economic and environmental benefits. Results from the study's first year indicate that the system has had positive effect on the trees and orchard ecosystem. This was particularly evident at harvest, when the difference in fruit size, appearance and overall quality was higher under the SSS treatment

versus the control. Apple maturity testing indicated that the apples from the untreated control were one-quarter inch smaller than the apples from the treated trees (2.5 and 2.8 inches, respectively).

The growers estimated that the trees under the SSS treatment looked stronger, greener, healthier and had 25 percent higher yield. More is yet to come out as field data are being analyzed. ♦

Getting the word out about plum pox

In July, plum pox virus was detected in a plum tree in southwestern Michigan during a routine sampling by the Michigan Department of Agriculture. As of October, sampling indicates the virus is limited to the one tree. MSU IPM teamed up with the Fruit Area of Expertise Team and Project GREEN to provide educational information about the virus and efforts to stop its spread. Read more at: <http://ipm.msu.edu/plumpox.htm>

Partners

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More information

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