# Succeeding with EQIP

## Growers use financial incentives available in a USDA conservation programs to implement IPM in Michigan

Michael Brewer, Joy Landis, Rebecca Lamb, Amy Irish-Brown, Nikki Rothwell, Dave Epstein, Norm Myers, Tom Dudek, Larry Elworth
MSU IPM Program, MSU Extension, Michigan State University, Center for Agricultural Partnerships

Farming practices that conserve natural resources and protect the environment are important to farmers and their neighbors alike. But implementing those practices can be expensive because the initial costs can rarely be recovered from the sale of the crops. To better support growers' efforts, the 2002 Farm Bill increased the funding available to assist growers with the expense of initiating conservation practices. One of the programs funded by the Farm Bill is the Environmental Quality Incentives Program (EQIP). EQIP is a voluntary program administered by the USDA Natural Resources Conservation Service (NRCS) that provides payments to eligible growers for a wide range of practices on their farms, like pest and nutrient management.

In 2004 and 2005, the MSU IPM Program, private consultants, commodity groups, the Center for Agricultural Partnerships and NRCS district conservationists worked together to help Michigan growers participate in EQIP.

MSU IPM Program staff, MSUE educators, and MSU specialists also developed "how to" guides summarizing the steps in applying to EQIP, and developed IPM tactic lists for grower use in developing plans to adopt pest management strategies on their farm, a necessary part of the EQIP process. (Visit http://www.ipm.msu.edu/farmbill/eqip.htm)

Cover crops have environmental and ecological benefits and are one example of a practice that can be included in a conservation plan.

Recommendations were made in the NRCS advisory process, which resulted in higher priority for IPM as a conservation tool and increased financial incentives to implement IPM.

**Financial incentives for pest management**

| Commodity | 2006 Current dollar amount | 2002 Dollar amount |
|---|---|---|
| Fruit | $60 per acre | $5 per acre |
| Nursery/Christmas tree/ sod | $60 per acre | $2.50 to $5 per acre |
| Vegetables | $30 per acre | $2.50 per acre |
| Field crops | $4 per acre | $2.50 to $5 per acre |
| Apple orchard removal | $250 per acre | Not available |

## Significant progress has been made to support IPM through our partnership project

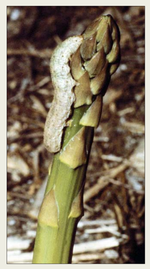
Project surveys indicated that grower awareness of these financial incentives to support the use of IPM increased from 25 to 75 percent of respondents during the course of our project. Awareness about EQIP increased from 44 to 62 percent of survey participants. In addition, the number of growers who indicated that they knew how to participate in EQIP increased from 18 to 45 percent.

In 2005, NRCS approved 73 EQIP applications in our pilot counties. About $3 million has been contracted with 15 percent of funds supporting IPM implementation For reference, the statewide allocation is $15.8 million with $450,000 to support IPM implementation.

## Growers implement integrated pest management

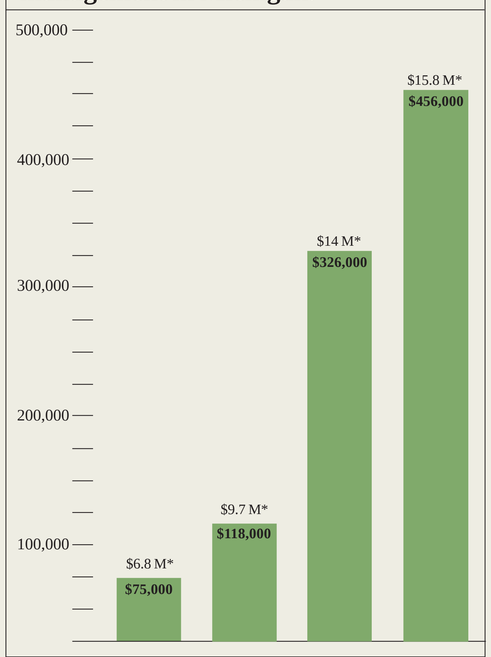
An ag chemical containment facility built with EQIP support.

Climbing cutworm on asparagus.



Wind breaks and pest scouting are two further examples of practices covered by EQIP. Above: Trees provide a windbreak on a vegetable farm.

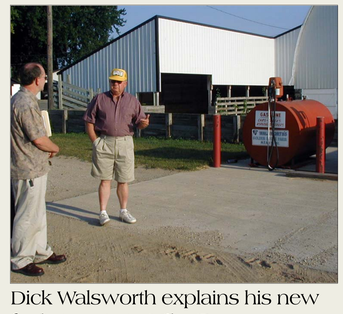
**EQIP dollars awarded to pest management in Michigan.**




* Total amount of funds statewide: 2002 = $6.8 M; 2003 = $9.7 M; 2004 = $14 M; 2005 = $15.8 M.

Growers are implementing a number of IPM techniques using the financial incentives obtained from EQIP, such as adding electronic canopy sensing technology to sprayers and use of shielded sprayers to reduce drift potential, conversion from chemical weed control to flamer/steamer weed control, conversion or elimination of pesticides with high to moderate potential for ground or surface water contamination to pesticides with low risk potential, removal of wild host plants of pests that are adjacent to commercial plantings, utilization of disease inoculum reduction strategies, and using organic mulches to suppress weeds and reduce herbicide use.

Dick Walsworth, a Michigan farmer, used the EQIP program to improve how his farm is run. He received EQIP funds for scouting, improved storage areas, as well as improved structures. He explains, "If we can save one spray a year, that's about $5,000. We use the Tom Cast system and watch the DSV's (diseases severity values). Instead of spraying every 14 days religiously like we used to, we can now wait 18 to 20 days between sprays and save the money."



Dick Walsworth explains his new fuel storage to Mike Brewer.

## Useful resources on the Internet

**For more information about EQIP and integrated pest management (IPM), visit:**
http://www.ipm.msu.edu/farmbill.htm, http://www.agcenter.org/

**Read about growers' experiences with this program at:**
http://www.ipm.msu.edu/farmbill/growers.htm

## References

Brewer, M.J., R.J. Hoard, J.N. Landis, and L.E. Elworth. 2004. The case and opportunity for public-supported financial incentives to implement integrated pest management. J. Econ. Entomol. 97:1782-1789.

Hoard, R. J, and M. J. Brewer. 2006. Adoption of pest, nutrient, and conservation vegetation management using financial incentives provided by a U.S. Department of Agriculture conservation program. HortTechnology 16: in press.