

IPM Institute of North America Inc.'s PESP Strategy

Describe your Organization's Five-Year Goals Related to Pesticide Risk Reduction

The IPM Institute's mission is to develop, support and promote market-based incentives for IPM adoption in agriculture and communities. Major market players including food processors, distributors and retailers, are increasingly investing in initiatives designed to improve overall sustainability, including health, environment and economics.

What do you envision doing (broadly) to try to resolve your major issues?

The Institute provides support services to verification, certification and eco-label programs that incorporate IPM and other Best Management Practices (BMPs) as participant requirements. The Institute operates IPM STAR Certification for schools and daycare facilities, and Green Shield Certified for pest management professionals and facilities other than schools including health care. In collaboration with American Farmland Trust and others, we work to reduce economic risks to growers by offering innovative guarantees that protect producer income when they adopt BMPs. Our goals include increasing awareness and appreciation for IPM among consumers and taxpayers.

Progress on 2006 Activity 1

We will continue to make IPM STAR certification available to school systems and pest management professional services across the US, and test the IPM STAR approach with health care facilities and agricultural producers.

Since 2005, we have certified 34 school districts and childcare facilities, with more than 12 additional programs in process. The program has positively impacted more than 2 million children and thousands of school staff nationwide. The program uses an on-site evaluation to identify opportunities for improvements, such as potential to transition to non-chemical strategies and lesser risk pesticides and to improve compliance with regulations and policies. Administrators in participating school systems have been very willing to make suggested improvements and have appreciated the expert input that the evaluation provides. Results through the first 29 programs evaluated were reported in a 2007 publication in *American Entomologist*. The US Army has made the program mandatory for its Child and Youth Services programs on installations nationwide and expanded participation to Pacific Area Command facilities including Japan and the Republic of Korea.

The need for school systems and others to be able to identify structural pest management service providers capable of delivering high-performance IPM led to the creation of

Green Shield Certified in June, 2007. There are currently 12 pest management providers and one facility participating in the Green Shield Certified program with 20 providers in progress. Green Shield Certified also uses on-site, professional evaluation to qualify participants.

Progress on 2006 Activity 2

We will continue to expand the BMP CHALLENGE, a program we developed in collaboration with American Farmland Trust and Agren Inc. This guarantee program protects corn producers who adopt IPM and other Best Management practices from income loss when they try these techniques on their own farms. Protection is available for nutrient management, reduced tillage, corn rootworm IPM. Forty-one hundred acres are enrolled in six states for the 2008 season.

We increased awareness of BMP CHALLENGE by creating and distributing educational brochures, informational workshops and presentations and articles in industry conferences and publications. Since 2000, the BMP CHALLENGE has enrolled more than 8,300 acres in 15 states and documented reductions of nitrogen use by 200,000 lbs., sediment runoff by 1,709 tons, phosphorus load by 2,278 lbs and carbon dioxide emissions by 3,300 tons. Major support has been provided by the USDA Natural Resources Conservation Service and the Pennsylvania Department of Environmental Protection.

Progress on 2006 Activity 3

We will continue our ongoing service and support to eco-labels and audit programs using IPM as a requirement for producer participation.

We continue to support SYSCO's Sustainable Agriculture/IPM Initiative and Red Tomato's Northeast Eco-Apple program and are exploring eco-label options with the Wisconsin Eco-Apple network. Along with the USDA Regional IPM Centers, US EPA and others, we co-organized two annual conferences to support the SYSCO initiative which were attended by SYSCO suppliers and others, with a 98% "very useful and will attend again" rating. US EPA, USDA and non-governmental organizations are represented on an advisory committee to shepherd ongoing development of the program. Support for the Eco-Apple initiatives has been provided by USDA NRCS, USDA CSREES the US EPA Regions I and V Strategic Ag Initiative, private foundations and others.

In 2007, we organized a food industry summit on sustainability and IPM, hosted by US EPA PESF and funded by the NSF Center for IPM. The summit was attended by 50 professionals and has led to new joint initiatives by participants. In addition, we have

made nearly 30 invited presentations on IPM and sustainable agriculture in the marketplace over the past two years, including seminars to corporations, government agencies, producer organizations and others. We maintain links to more than 25 IPM-based eco-label projects on our website, www.ipminstitute.org/links.htm. We maintain a bibliography of related publications http://www.ipminstitute.org/ipm_bibliography.htm.

Progress on 2006 Activity 4

We will continue our volunteer service to the IPM community through serving on advisory committees, boards and review panels for IPM programs.

We continued our volunteer service as co-chair of the steering committee for the Sixth International IPM Symposium to be held in Portland, Oregon March 24-26, 2009. We are part of the advisory committee for the North Central IPM Center and participate on the EPA's Pesticide Program Dialogue Committee.

Progress on 2006 Activity 5

This first national strategic plan for IPM in schools identifies priorities developed by stakeholders working in schools and in school IPM throughout the US, including school administrators; school food service, custodial and maintenance professionals; pest management professionals; US EPA, Extension and non-governmental organizations. These priorities are available to funders and others to assess the need for projects submitted to them for funding or implementation. The plan addresses barriers to greater IPM adoption in schools, and describes specific strategies designed to overcome them.

With support from the USDA IPM Program and the USDA Regional IPM Centers, we worked with the University of Arizona and a broad stakeholder group to create the first national strategic plan, School IPM: 2015. The strategic plan lays out priorities, barriers and solutions for implementing IPM in schools in all 50 states by the year 2015. The plan includes an annual "report card" assessment tool that US EPA will use to evaluate progress nationally. Key priorities for the plan have been accomplished, including formation of four regional school IPM working groups with support from the USDA Regional IPM Centers, a national school IPM "train the trainer" workshop to be held in Denver in October 2008 with support from US EPA Region 8 and a national school IPM workshop organized and funded by US EPA to be held in Reno in November 2008 in conjunction with the Entomological Society of America (ESA) annual conference. We also participated in sessions on school IPM organized by the University of Arizona at the National Conference on Urban Entomology and planned for the ESA meeting in 2008.

Progress on 2006 Activity 6

We will initiate a new North Central region working group for IPM and NRCS, with funding support from the USDA North Central IPM Center. This working group will include state IPM coordinators and specialists, producers, advisors and representatives from NRCS throughout the region. One working group meeting will be held in 2006 to review initiatives underway in the Northeast Region, and within the North Central region to expand cooperation and impacts of both IPM and NRCS programs on pest management in the region.

With support from the USDA North Central IPM Center, the Working Group we co-lead with Michigan State University has created a website which houses many resources on NRCS's Environmental Quality Incentives Program (EQIP) for NRCS personnel, IPM specialists and growers in the region. These resources include a "How-To" guide and seven success stories to help explain the enrollment process and benefits of EQIP and direct readers to their local NRCS chapters. The site provides an annually updated state-by-state EQIP practice and incentives list for practices related to IPM. Working group members represent the group at National Task Force meetings and report results back to the group during monthly conference calls. The working group is also supporting three \$5,000 mini-grants to contacts in Iowa, Indiana and Ohio to increase grower exposure and access to IPM practices and incentives and facilitate grower feedback to NRCS on pest management programs.

Goal 1 and Tactics

We will work to grow Green Shield Certified (www.greenshieldcertified.org) for pest management providers and non-school facilities across the United States.

How does this activity reduce pesticide risk?

Green Shield Certified uses a professional, on-site evaluation of structural pest management providers and facilities to evaluate practices and identify opportunities for improvement. After the evaluation, participants receive an interim report including required and recommended improvements. The program stresses prevention, sanitation, inspection and monitoring as ways to reduce pest problems, and pesticide use, toxicity and potential for exposure. Routine pesticide applications or applications of residual-active pesticides to exposed surfaces are not permitted. Applicants must meet more than 40 minimum requirements and score 80% or higher on additional criteria to become certified.

How will you measure the risk reduction gained from this activity?

Risk reduction will be measured by number of participating service providers and facilities; interim scores representing baseline practices at the time of the on-site

evaluation vs. final score after improvements have been made; implementation of required continuous improvement plans for each provider or facility; and scores on required renewal evaluations every three years.

Goal 2 and Tactics

We will work with colleagues from around the United States and Canada to create, test, release and promote an online tool for farmers to assess and improve pesticide selection and IPM strategies. A pilot version of the tool will be available for the 2009 growing season.

How does this activity reduce pesticide risk?

The tool will be available to individual growers, crop advisors, grower groups and others to help them assess pesticides and options to reduce impacts on health and environment.

How will you measure the risk reduction gained from this activity?

Growers will enter their spray data into the online tool including information such as soil type and slope (drainage), proximity to surface and groundwater, current mitigation strategies, type of pesticide, amount of pesticide applied and timing of application. Summary data such as number of users, sessions, crops, states and countries will be collected. We will aggregate information and report summaries and trends, as well as specific user feedback on their experience using the tool.

Goal 3 and Tactics

We will continue to expand the BMP CHALLENGE guarantee program (www.bmpchallenge.org) which protects corn producers who adopt Best Management Practices from income loss when they try these techniques on their own farms. Protection is available for nutrient management and reduced tillage. More than four thousand acres are enrolled by over 30 growers in eight states for the 2008 season.

How does this activity reduce pesticide risk?

Reducing tillage reduces the potential for sediment runoff, which can carry nutrient and pesticide particles into surface water. Nutrient management can also reduce pest problems, by making plants less attractive to aphids and other pests which prefer to feed on plants and plant parts with high nitrogen levels.

How will you measure the risk reduction gained from this activity?

We will measure the reduction by the number of participating farmers, fields and acres and reductions in nutrient and sediment runoff.

Goal 4 and Tactics

This first national strategic plan (www.ipminstitute.org/school_ipm_pmosp.htm) identifies priorities to address barriers to greater IPM adoption in schools, and provides an evaluation tool to measure progress towards our goal of full implementation of IPM in all US schools by 2015.

How does this activity reduce pesticide risk?

Approximately 49.1 million students and 6.1 million staff in public schools, along with 5.3 million students and 425,406 teachers in private schools will be positively impacted by the adoption of advanced IPM in their schools. Hazardous pesticide use and uncontrolled pest problems in schools threaten health and ability to learn. Successful IPM programs have documented reductions in pesticide use by 71% and pest complaints by 78%.

How will you measure the risk reduction gained from this activity?

The project team compiled a new IPM report card that tracks 19 performance measures. The report will be completed annually by designated contacts in each state and results compiled nationally by US EPA.

Goal 5 and Tactics

Activity 5. We will continue to work with the North Central region working group for IPM and NRCS, with funding support from the USDA North Central IPM Center. This working group includes state IPM coordinators and specialists, producers, advisors and representatives from NRCS throughout the region. The working group aims to expand cooperation and impacts of both IPM and NRCS programs on pest management in the region. We will work with participants in Indiana, Iowa and Ohio to help increase grower access to NRCS programs for IPM in those states. How does this activity reduce pesticide risk? This working group improves access to NRCS technical assistance and incentives for IPM including support for scouting, monitoring traps, weather stations and disease-forecasting software and pesticide hazard analysis. How will you measure the risk reduction gained from this activity? We record and report on meeting attendance and content. We will work to develop and implement tracking re the number of EQIP pest management contracts, as well as number of growers, acres and crops enrolled in the program.

Goal 6 and Tactics

We will continue our ongoing service and support to eco-labels and audit programs using IPM as a requirement for producer participation.

How does this activity reduce pesticide risk?

These programs recognize and provide incentives for growers using IPM. The certification process includes an on-site professional audit to evaluate IPM performance and requires ongoing improvements in practices to maintain certification.

How will you measure the risk reduction gained from this activity?

For programs we manage or serve a leading role in, including Red Tomato and SYSCO Corporation, we will measure the increase in the number of growers, acres and crops, and reduction in pesticide use and toxicity. We will also annually collate and publish performance metrics for eco-label programs that require IPM.

Goal 7 and Tactics

We will continue our volunteer service to the IPM community by organizing IPM-related meetings and conferences, serving on advisory committees, boards and review panels for IPM programs, and presenting and publishing on market-based drivers for IPM adoption.

How does this activity reduce pesticide risk?

These activities support IPM implementation through grants awarded to IPM implementers, informing public policy makers and others, and by providing exposure and networking opportunities for IPM projects and participants.

How will you measure the risk reduction gained from this activity?

Participants in meetings and conferences such as the Sixth International IPM Symposium, and in projects approved for funding by review panels will report on their own progress in pesticide risk reduction.