2011 School IPM Outcome Program Report
School IPM Team: Janet Hurley, Mike Merchant, and Don Renchie

Relevance

The Texas public school system consists of 1,237 school districts and charters, 8,435 campuses and over 4.8 (4,824,778) million students. Of the 1,235 total numbers of districts, 1,030 are considered public school districts and are recognized by the Texas Department of Agriculture to adhere to the Texas school IPM rules. Texas has the second largest student base in the country, with more school systems currently than California.

In 1991, the Texas Legislature passed a law requiring that pests in and around school buildings be managed using integrated pest management. This was one of the first laws in the U.S. requiring schools to implement integrated pest management (IPM) as part of their maintenance programs. In 2007, the Legislature updated the laws defining regulatory guidelines more definitively. Texas is one of the few states that mandate all IPM Coordinators attend a six-hour training course on the basics of IPM principles and specific state regulations. The Texas Department of Agriculture released the new school IPM rules on July 7, 2009 requiring that all IPM Coordinators receive an additional six hours of school IPM training starting Sept. 1, 2009.

In FY 2010 the Texas Department of Agriculture implemented a new inspection process for schools and all end users. The TDA inspector uses a computer program to ask 63 questions based on the School IPM rules. The IPM coordinator for the school district should be able to answer yes to all of them, or they will be considered in non-compliance. During the 79th Legislative Session one of the rule revisions was to standardize school IPM inspections so that all schools would know what to expect and would be judged fairly. Both the rules and the inspections are in synch, in that anyone who can follow the rules and understands the principles of IPM can pass a TDA inspection. Unfortunately, many of the school IPM coordinators have little experience understanding the school IPM rules.

Texas AgriLife Extension is the only state agency that conducts the required training. Our Agency works closely with TDA to understand the rules, the inspection process and the educational requirements of IPM Coordinators. At AgriLife Extension classes, IPM Coordinators are taught the defining principles of IPM, proper inspection methods, pest identification, use of non-chemical control tactics, and basic pesticide science. In addition, coordinators must become familiar with Texas school IPM regulations and a large portion of the training covers materials needed to pass a TDA inspection.

Potential benefits of school IPM programs include improved indoor air quality, reduction of pesticide exposures among students and staff, and improved pest control. The school IPM program team provides individual assistance with developing and improving the school IPM program when requested. Many school districts that attend our training request individual site visits afterwards to help them prepare for a TDA inspection.

Response

The school IPM team offered five two-day regional workshops and six individual one-day workshops around the state. The Day 1 school IPM coordinator training has become standardized which allows the program to maintain an overall flow that allows the coordinator to learn by seeing, hearing, and saying
what they hear. The training covers a variety of material regarding the coordinator’s role in the IPM program. The IPM coordinator must be able to identify pesticides so that they can keep up with records for use, justification purposes, posting and notifications to teachers and parents. In addition, the new rule requirements mandate that IPM coordinators oversee an active IPM monitoring program, understand the basics of IPM principles so that they can keep up on facility inspections, oversee that licensed applicators abide by the IPM policy and written program guidelines.

210 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained at the Day 1 school IPM Coordinator training. 135 school districts attended our training in 2011; some 1,493,264 students attend school in those districts. Coordinators learned how to prevent all types of pests from entering their buildings so that the children will be safe. School IPM impacts health and safety in many ways. It aids in keeping students and teachers safe from many threats like asthma and allergen triggers; it can even help prevent the flu.

Additional educational methods that are offered by the school IPM team:

- School Pest News newsletter - six major issues of School Pest News were written and distributed. Current readership is 1355 individuals, with 734 being IPM coordinators
- Conducted 11 in state school site visits and 4 out of state for PRIA grant
  - Premont ISD was audited per a request from the Texas Education Agency-report found that both schools being used were below safety standard. TEA made the decision to close this district down and move students to another district. This move resulted in the recommendations for bringing the schools up to safety standards were not implemented.
  - Houston ISD asked AgriLife Extension in to assist with their IPM program. The plan for this district is to work with Extension on building inspections, bid specifications and training for staff in 2012
- The School IPM website, http://schoolipm.tamu.edu, was updated to AgriLife System servers; content was closely scrutinized and reorganized.
  - 2011 website received the following: Site Usage 7,468 visits; 22,089 page views; 3.08 pages/visit; Total Unique visitors: 4,844
- School IPM training notebooks (3-ring binders with information about the TDA law and rules, necessary recordkeeping forms, written management plans, IPM program guidelines, inspection forms, and other educational handouts) were passed out at all of our school IPM training programs.
- Texas Integrated Pest Management Affiliate for Public Schools (TIPMAPS). This group is an affiliate chapter through Texas Association of School Business Officials (TASBO). AgriLife Extension and TASBO co-sponsored the annual statewide conference
  - 2011 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference
    - Total attendances 144, of the attendees 70 school districts were represented.
    - Conference was merged with the TASBO, TASB, SchoolDude Facility Masters conference, and the M&O Academy. By adding the additional conferences there was a more than 50% attendance from FM to the TIPMAPS conference. This was good since many of the school IPM coordinators were not allowed to travel to the conference.
    - Materials distributed to all School IPM Coordinators and others who attended TIPMAPS conference
The Business Case for Integrated Pest Management in Schools: Cutting Costs and Increasing Benefits
- School IPM Coalitions: Building Collaboration for More Effective Pest Management in Schools
- Pest Identification Guide: For Pests in and Around Buildings
- Integrated Pest Management: the Most Effective Way to Manage Pests in Your School
- B-6220 Bat Control in Schools
- SCC-2010-05 Weed Control Suggestions for Professional Turf Managers
- Urban IPM eXtension bookmarks

- 2011 IPM Star Certification
  Assisted Spring ISD, Spring, TX, Klein ISD, Klein, TX and Katy ISD, Katy, TX with obtaining IPM Star Certification from the IPM Institute of North America. These three schools were put through IPM Star using money from school IPM program. Each school scored moderately high on their first evaluation with Dr. Green from the IPM Institute of North America. Each school responded to the initial evaluation with additional remedies, making Spring and Katy very high scoring and placing them in the top 5% of schools in the U.S.
  - Spring ISD has utilized this status to help educate others schools, by collaborating with Facility Masters and Roger Young to give webinars and in-person talks.
  - Spring will also be making a presentation at the 7th International IPM Symposium based on their increased encouragement from this award recognition
  - Spring ISD will also be receiving an International IPM Symposium Achievement Award for Local IPM program in March 2012

Results
In an attempt to determine the programmatic impact of the School IPM Coordinator training, a retrospective post evaluation was provided at the end of the program for each day. This survey was developed in conjunction with Organizational Development to help collect additional data. In 2011, the evaluation surveys were redesigned to collect customer satisfaction along with knowledge, skills, intent to adopt and behavioral change questions. Results have been combined to reflect level of understanding and skills, plus plans to adopt.

Number of Participants: 195
- Percentages based on 175 respondents to the survey (Response rate = 89%).
- 43% were first time attendees to an Extension program

Overall:
- 99% of respondents were mostly or completely satisfied with the activity.

Anticipated Changes & Economic Impact:
- 28% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity. (i.e. cost savings, not being fined, avoiding property damage, etc...)

Level of Understanding: (% of respondents who increased their understanding of . . .)
• (81%) – I understand the paperwork requirements for pesticide applications.
• (67%) – I understand the posting requirements for pesticide applications.
• (76%) – I have the skills needed to effectively implement an IPM program.
• (74%) – I understand my role as IPM Coordinator.
• (77%) – I understand the difference between sampling and monitoring.
• (65%) – I understand when I must notify parents each school year.
• (68%) – I understand the parts of a pesticide label.
• (76%) – I understand the principles of IPM practices.

Respondents are asked their before and after level of knowledge. Of the participants in 2011, we had about 50% new IPM coordinators who were unsure of their newly appointed roles.

Plans to Adopt: (% of respondents who definitely will adopt the following practices)
• (51%) – Ensure that School Board IPM Policy is up to date and copy maintained with superintendent and coordinator office.
• (70%) – Improve my monitoring program to determine when pests are present.
• (71%) – Use information from IPM inspection reports to address pest problems.
• (51%) – Have an education program for faculty and staff explaining their role in the IPM program.
• (57%) – Identify pests prior to taking any action on school campuses.
• (63%) – Use pest thresholds to determine when to use pesticides.
• (61%) – Use non-chemical controls and Green Category products as my first choice for pest problems.

On average 25% of training respondents have adopted all items listed above and feel they have a good handle on their IPM program.

Discussion

Nationwide Texas has become a leader in educating and training school IPM coordinators. AgriLife Extension has formed a good relationship with the Texas Department of Agriculture Structural Pest Control Service in developing training curriculum and assisting schools who are found in non-compliance by the state.

In 2011, 139 schools were inspected by TDA, representing nearly 70% of the schools scheduled for inspection in the year. TDA is required to inspect all TX schools once every five years, this equates to approximately 206 school districts per year. For FY 2011, 52.4% of Texas schools were found to be in (complete) compliance during inspections. According to Allison Cuellar, Compliance Specialist for SPCS-TDA the number one problem with schools is not having a written IPM program with action thresholds. As AgriLife Extension continues to conduct our trainings this is an area we are focusing on in an effort to assist schools with compliance issues and to achieve a high level of IPM.