"From the Director"

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Pest Management Alliance Grants Target Pesticide Use

This column focuses on part of the Department of Pesticide Regulation's (DPR) mission that rarely receives the spotlight: fostering reduced-risk pest management in both agricultural and urban settings.

The Pest Management Alliance Grants program is one of several approaches we take to achieve this goal. We're pleased to announce the 2012-2013 funding cycle for this non-regulatory approach to protect the public, workers and the environment by reducing pesticide use.

The deadline to submit brief, conceptual descriptions is Feb. 6, 2012. The most significant change from the previous cycle is elimination of the $200,000 limit, which means applicants may apply for the full $400,000 if they choose. More information about the application process is below.

In an effort to encourage proposals, I'm taking this opportunity to highlight three projects that received three-year grants in 2009: Healthy Homes Alliance, Physicians for Social Responsibility – Los Angeles; Integrated Pest Management (IPM) for Bedding and Container Color Plants, University of California (UC), Davis; and IPM Continuing Education for Maintenance Gardeners, San Luis Obispo County Agricultural Commissioner's Office.

These projects, which are concluding this year, exemplify the diverse stakeholder alliances we're seeking to address specific pesticide problems and potential for replication. You can't help but be impressed by their quality and determination to achieve our goal. DPR is a member of every alliance.

Healthy Homes Alliance, Physicians for Social Responsibility – Los Angeles

As a physician-based advocacy organization, the Physicians for Social Responsibility – Los Angeles (PSR-LA) works to improve public health among residents of low-income housing. For this project, PSR-LA Director Martha Argüello has been collaborating with tenant organizers, health promoters, apartment owners, managers, tenants and maintenance workers.

The group has been addressing overuse and misuse of pesticides in several privately owned multiunit, low-income housing complexes in Los Angeles' urban core. The project's goal is to adopt IPM practices that combine prevention and common sense to find long-term solutions for pest infestations.

In substandard, crowded buildings, IPM practices include fixing plumbing leaks, caulking cracks and holes and installing weatherstripping and screens to keep pests

from coming indoors. Using some pesticides for cockroaches, the most prevalent pest, may be necessary at first. Baits and gels, for example, are applied to cracks and crevices and behind appliance. Unlike sprays, these low-risk pesticides evaporate slowly so tenants, particularly children, don't inhale them.

The group learned that IPM takes patience and teamwork. One challenge was overcoming the initial perception that spraying is the best way to eliminate cockroaches in a building. The organizers learned that prevention through improved sanitation and maintenance, including fixing plumbing leaks, was much more effective than spraying. They also learned that monitoring with sticky roach traps would give them important information about the roach population.

PSR-LA developed educational materials in multiple languages in response to the widespread belief among tenants and building maintenance personnel that large quantities of the most toxic pesticides would eliminate pest problems. A survey found that tenants often did not understand or just ignored label directions and failed to take safety precautions. Many tenants used too many foggers at once with the belief that the more pesticides applied, the faster the pest problem would be eradicated. Children, and some adults, most often reported symptoms such as headache or nausea following pesticide use, but did not attribute the symptoms to the pesticide application.

The group also found that tenants rarely complain about pests because they fear retaliatory evictions or are embarrassed they have a pest infestation, and instead apply pesticides themselves. The project increased communication between tenants and building managers to make building structural repairs like fixing leaky faucets and sealing holes to prevent and decrease roach infestations. The success of stopping and preventing infestations with repairs also increased building owner participation. Repairs are essential because of the close association between water leaks and roach populations.

As the project comes to an end, the group has already concluded that IPM practices must be ongoing; that someone in the building must regularly monitor the roaches; that IPM practices used through a building will consistently decrease roach populations; and that communication and coordination is essential among tenants, building managers and owners, and pest control operators.

Physicians must also learn how to recognize pesticide poisoning. A physician may remove a roach from a child's ear, but may not necessarily ask if pesticides are used in the home.

The group will increase its fundraising so the project can continue and expand. Next steps include working with local housing and health departments to explore how code enforcement can help promote use of IPM in homes.

IPM for Bedding and Container Color Plants, UC Davis

The primary goal of the bedding and container plant project is to reduce overall pesticide use in the production of bedding and container color plants by 30 percent in 2012.

To accomplish this goal, Michael Parrella of UC Davis' Department of Entomology formed a strong alliance team that includes cooperating growers and members from the UC Cooperative Extension and IPM advisers, the Nursery Growers Association of

America, the Center for Applied Horticultural Research, the Environmental Horticulture Research Information Center and the California Ornamental Research Federation.

Bedding and container plants are part of the environmental horticulture industry that provides flowering plants for urban landscapes and for indoor and outdoor containers as decorations. They are grown and purchased year-round. Production time in the greenhouse is short: eight- to 10-weeks with no tolerance for plant damage.

Production methods and crop mixes vary, but at least 200 different plants are typically grown by each producer. These plants are subject to regular disease and insect infestations, meaning that one to three pesticide applications weekly during the entire crop cycle are not unusual.

Four growers that primarily rely on conventional pesticides are involved in the project. The team quickly found that no single IPM strategy could meet this industry's diverse needs and focused on the broader issue of water management.

The team also concluded that because of time constraints, growers do only limited monitoring for pests to determine whether pesticides should be applied and if needed, how much. The team found that growers are more interested in reducing applications of conventional pesticides by using more biological and reduced-risk products. Several biological approaches for disease control have been successfully demonstrated in the project.

The project started slowly because participating growers were affected by the sour economy. The team is now producing a best-practices manual and developing online resources, including a possible blog. Use of insect biological control has also been incorporated and is currently being evaluated.

IPM Continuing Education for Maintenance Gardeners, San Luis Obispo County Agricultural Commissioner's Office

Headed by the San Luis Obispo County Agricultural Commissioner's Office, one of the team's goals was to reduce pesticide runoff into the county's urban creeks by educating local "maintenance" gardeners and retail outlets that sell pesticides about IPM practices. Many pesticides are toxic to aquatic life.

Maintenance gardeners typically mow lawns, do general yard cleanup and occasionally apply pesticides on lawns and ornamental plants. IPM strategies include pest identification methods, alternatives to conventional pest management and information about less-toxic pesticides.

The commissioner's office estimated only 35 such gardeners working in the county -- fewer than 10 percent -- were licensed by DPR when the project started. DPR staff believe there are thousands of unlicensed gardeners using pesticides statewide who often rely on retail pesticide sales staff, previous experience or their clients for information.

The team included the UC Extension; Cal Poly, San Luis Obispo's Horticulture and Crop Science Department; UC Statewide IPM Program; Pesticide Applicators Professional Association; pest control adviser Suzanne McCaslin; San Luis Obispo Farm Supply Co.; and trainer/translator Osvaldo Olmos.

Team members knew that gardeners' decisions on pesticide use were often dictated by clients. The project was designed to provide IPM education for maintenance gardeners, retail suppliers and peer trainers; reduce pesticide use and misuse; improve gardeners' pest management decisions and business skills; and encourage safer working conditions.

Twelve free, seasonal workshops were held in 2010 in English and Spanish to address a variety of topics, including managing weeds in lawns, vertebrate pest control; pest identification methods; alternatives to conventional pest management; and less-toxic pesticides.

The team found that these gardeners were hungry for information and eager to use their new knowledge and skills. Outreach materials heavy with pictures and light on text were especially effective for this group.

Another lesson learned is that the cost of meeting DPR's continuing education requirement for licensing – eight hours every two years – is an obstacle for these gardeners.

The three programs' successes, challenges and next steps were presented to DPR's Pest Management Advisory Committee in November. The presentations are posted at:

- Healthy Homes Alliance
  www.cdpr.ca.gov/docs/dept/pmac/2011/healthy_homes.pdf

- IPM for Bedding and Container Color Plants
  www.cdpr.ca.gov/docs/dept/pmac/2011/ipm_bedding_container.pdf

- IPM Continuing Education for Maintenance Gardeners
  www.cdpr.ca.gov/docs/dept/pmac/2011/ipm_education_mgardener.pdf

Application Process

The two-stage process for the 2012-2013 funding cycle is a brief conceptual project description due Feb. 6, 2012. Only groups with the highest-ranked concepts will be invited to submit a full proposal by April 5, 2012.

DPR has awarded approximately $6 million in Alliance Grants to more than 60 projects since 1998. The grants are subsidized with special funds generated by fees on pesticide sales.

DPR's Pest Management Advisory Committee will review proposals and make recommendations to the DPR director in May. More information on the grant program is posted on DPR's website at www.cdpr.ca.gov/dprgrants.htm. If you have any questions, please contact Ann Schaffner at 916/324-4156 or aschaffner@cdpr.ca.gov

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