November 22, 2010

Student Sustainability Committee University of Illinois Urbana-Champaign

Dear Committee Members:

We propose a pilot Integrated Pest Management (IPM) project on the Urbana campus to support the efforts of Drs. Hogan and Easter in cooperation with Governor Quinn as outlined in the recently signed Illinois Sustainable University Compact. "Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management. It uses natural predators, pest-resistant plants, and other methods to preserve a healthy environment in an effort to decrease reliance on harmful pesticides." In addition, this project will support Dr. Hogan's desire to reduce pesticide usage on our campus. This project would be funded from the student sustainability fee assessment. We currently have a \$30,000 USDA-NIFA grant for school IPM programming and we request \$30,000 in matching funds from your program.

Overall impacts of implementing an IPM program on campus are:

Managing existing pests using IPM practices reduces pesticides Exclusion of pests from buildings saves energy by sealing pest entryways Not attracting pests increases sanitation on our campus

In light of many new concerns regarding pesticide exposure as well as problematic pests such as bed bugs, it is important to develop a plan for our campus to address pest management with a systematic and sustainable approach. This project provides an opportunity for the University of Illinois to develop an IPM program on our campus that will provide economic benefits while reducing human health and environmental risks. Implementation of this plan should be able to duplicate results demonstrated in similar programs with an average pesticide reduction of 71%. Through the adoption of verifiable IPM practices, the University can reduce energy use, reduce pest management costs and reduce pesticide usage. Use of existing personnel in many aspects of this process is critical to the success of the program and its long-term sustainability. Intensive training of personnel and pest monitoring are key to the success of an IPM program. In addition, sanitation will be improved as a result of implementing IPM. Our efforts could serve as a national model of verifiable pest management at institutions of higher education.

We would implement a model that has been demonstrated to be successful in the school environment because IPM tactics such as cultural and mechanical pest control strategies can be incorporated into existing custodial and maintenance activities. There are benefits of this strategy that extend beyond pest control such as improved sanitation, energy conservation, enhanced building security and more efficient infrastructure maintenance. Students, faculty and building support staff share the responsibility for recognizing potential problem areas and for acting early to prevent infestations. **OBJECTIVES**:

1) Identify areas of high pest consequence, such as residence hall kitchens, to evaluate current pests and associated management practices to determine costs and pesticide applications.

2) Develop a plan to reduce pest population while at the same time reducing the use of pesticides.

3) Educate support staff regarding the initiation, implementation and evaluation of IPM in the campus environment and promote collaborative efforts among campus units.

These objectives will be accomplished through:

EDUCATION:

• Train students, faculty and change agents to assess and implement IPM programs to incorporate IPM into their existing operational activities (sanitation, maintenance, food service, health, and education)

• Provide pest monitoring and pesticide application training for building personnel DEMONSTRATION:

• Demonstrate IPM program planning, implementation and assessment OUTREACH:

- Develop and disseminate IPM materials to students, faculty and change agents
- Develop a University of Illinois School IPM web site to assist in the dissemination of the model program and how to access implementation support for a school IPM program in additional buildings or to report a current pest problem

RISK REDUCTION (MEASUREMENT/MONITORING):

• Develop and conduct pest management audits (pests, pest management technologies, number, type and exposure of pesticide applications and cost of current pest management) on campus through document research, surveys, and site monitoring.

CRITERIA TO BE USED TO MEASURE SUCCESS

- measure cooperation of the building through compliance with the MOU (access of pesticide records, moratorium of existing contractor services in the pilot facilities, providing training opportunities to appropriate staff, etc.)
- statistical comparison with pre-pilot pests, pesticide use, and pest management costs
- tangible efforts by the Campus Leads to participate and sustain the program
- tangible efforts by other change agents to participate and extend the program

Thank you for the opportunity to submit my letter of inquiry to your grant program and I look forward to hearing from you regarding our proposal.

Sincerely, Susan T. Ratcliffe, Ph.D. Director, North Central Region IPM Center Department of Crop Sciences sratclif@illinois.edu 217-333-9656