Collaborations Result in Safer, Wiser Use of Pesticides and Manure

Iowans that make agricultural land applications of pesticides and manure are becoming better stewards of the land and water because of training they receive from Iowa State University Extension. This benefits producers and consumers in Iowa and beyond.

Certification required for Iowa pesticide and manure applicators includes educational components provided locally by ISU Extension. The pesticide applicator trainings are the result of collaboration between Extension and Iowa Department of Agriculture and Land Stewardship (IDALS); the manure applicator trainings a collaboration between Extension and Iowa Department of Natural Resources (DNR).

**Pesticide Applicators**
People who apply a restricted-use pesticide in the production of an agricultural commodity on land they manage must have a private pesticide applicator certification. In 2008-09 training season, ISU Extension field agronomists provided training in all Iowa counties, holding 326 private pesticide continuing instructional courses, and training more than 16,924 applicators.

People who enter into contracts or agreements to receive payment for applying a pesticide or who are employed by such an entity must maintain a commercial pesticide applicator certification. Last year, ISU Extension used live satellite broadcasts, video conferences and Web cast trainings hosted by 99 county extension offices, and 23 additional continuing instructional courses held around the state to train 7,761 commercial applicators.

“Applicators take very seriously their responsibility to protect Iowa’s soil and water and ISU Extension’s effort to make sure they have the most up-to-date information is vital,” Iowa Secretary of Agriculture Bill Northey said. “The training materials clearly outline the current regulations that are in place to promote safety, environmental protection and efficient and appropriate use of pesticides.” ISU Extension cooperates with the Pesticide Bureau of IDALS to provide training opportunities that comply with Iowa Code governing pesticide use, application, registration and certification.

For example, as a direct result of educational material presented during trainings Iowa applicators know and are practicing proper recycling of used pesticide containers. Since 1990, Iowa pesticide users have recycled more than 5 million pounds of plastic pesticide containers,
reducing the volume of pesticide containers that are disposed in sanitary landfills or burned. This enhances the recovery of plastic resources, and protects surface and groundwater sources. Iowa is also seeing a better use of pesticides such as atrazine.

“We are seeing changes in use patterns of atrazine as a result of targeted training,” said Gerald Miller, director of ISU Extension to Agriculture and Natural Resources. “At one time, there were high instances of residual atrazine in ground and surface waters because of heavy usage. In trainings, we talked about geographic considerations, where to and where not to apply atrazine, and the effectiveness of lower application rates. We now have about the same amount being applied in Iowa, but at lower rates and in more appropriate geographic areas – and the result is less evidence of residual atrazine in the environment.”

**Manure applicator certification**

During January and February, more than four thousand Iowans attend local workshops for manure applicator continuing education. They are commercial applicators, livestock and crop producers, and people wanting to know more about the rules, regulations and issues related to manure management and good stewardship.

Many come because it is required – two hours of annual continuing education for those applying manure from confinement livestock operations of more than 500 animal units, or pass a written exam every three years; and three hours of annual training for those seeking commercial manure applicator recertification.

In the first half of 2009, ISU Extension has trained 1,848 confinement site applicators and 1,763 commercial manure applicators on the latest rules and regulations, hydrogen sulfide safety when pumping from deep pits; sampling manure from chicken houses; the economics of hauling manure; transportation and road safety and agronomic use of manure for crop production.

“By investing a few hours of time each year, manure applicators are much more aware and better educated about the way their actions affect not only their land and animals, but how it affects worker safety, their neighbors and Iowa in general,” said Jeff Prier, DNR environmental specialist. “The workshops are a great way for anyone to learn about regulations and how neighbors can work together.”

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- **Bill Northey, Iowa Secretary of Agriculture**

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