



# Pesticide Booklets Help Literacy in Rural Mali



IPM CRSPProgress

*IPM researchers in Mali developed a pesticide training program for rural farmers that includes a pesticide training booklet in Bamanan, a local language. Bamanan has only recently been codified into a written language, so printed materials in this language are scarce. The booklet, in addition to serving as a guide for safe pesticide usage, is also serving as reading material for literacy classes.*

**R**esearchers who set out to teach Malian villagers good pesticide practices found they had unwittingly created highly prized “readers” in a local language.

It happened quite by accident. Under Virginia Tech’s Integrated Pest Management Collaborative Research Support Program (IPM CRSP), a USAID-funded initiative, Tech researchers were helping the government of Mali set up a crop quality assurance program. Part of such a program is training people in appropriate use of pesticides.

Careful use of pesticides in developing countries is often not the norm. Unlabeled and obsolete pesticides are frequently found in the marketplace. Village farmers are often uneducated about proper mixing, application, personal protection and the safety of bystanders and livestock. In addition to public health issues, pesticide misuse can hurt opportunities for farmers to make money exporting their produce.

For example, safe pesticide use is especially important in Mali because Malian farmers grow a



**Malian farming women learn to read using a pesticide safety booklet.**

number of crops for export to Europe. European standards for import crop quality are strict, and produce will be rejected if it has too much of an approved pesticide or any trace of an unapproved pesticide. If horticultural crops from Mali are rejected, this adversely affects farmers in Mali who rely on them to generate much-needed income.



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Jean Cobb, Don Mullins, and Pat Hipkins—all Virginia Tech scientists—worked with Malian agricultural scientists and educators to create a pilot pesticide safety program. This program included a set of lesson plans for trainers that addressed key concepts of pesticide safety as well as teaching techniques. Among the packet of materials was an illustrated pesticide safety book in Bamanan, a native language.

Malian partners then used these training materials in “farmer field schools” to teach pesticide safety to farmers. After every training session, each participating farmer was given a copy of the pesticide safety booklet. Specific topics covered in the booklet include basic safe handling practices, use of protective clothing, and signs and symptoms of pesticide poisoning.

After initial training sessions, the trainers discovered that the farmers, in addition to using the booklets as a resource guidebook, were bringing them to their *alphabetization* (Bamanan literacy) classes, where teachers were using them as readers.

Bamanan, a language of West Africa, has only recently been codified into a written language, so printed materials in the language are scarce.

“We were excited to see that our product was having a second life,” said Hipkins, the senior Tech research associate who worked with Malians to plan, develop, and deliver the pilot pesticide safety sessions. “Now, not only are we teaching a wide audience about safe pesticide use, but we are also helping with literacy training.” ■

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## Pesticide Safety Lesson Plans

1. Introduction to Pesticides
2. Introduction to Pesticide Management
3. Pesticides and Risk
4. Pesticides and Toxicity
5. Pesticides and Exposure
6. Protective Clothing and Equipment: Who, When, Why and How
7. Tolerances for Pesticides in Food; and Consequences of Pesticide Misuse
8. Applying Pesticides Safely and Effectively
9. Pesticide Poisoning: Overview, Signs and Symptoms, First Aid
10. Hand Sprayer Calibration (Backpack, Bottle)



**Pesticide safety being demonstrated to Malian farmers.**

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