Minimizing Pesticide Use While Improving Net Returns

♦ The impetus for integrated pest management grew out of insect resistance to insecticides and environmental concerns related to using a purely insecticidal approach to insect control.

♦ Integrated pest management is a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks.

Extension’s Response

♦ Partnering with the Texas Pest Management Association, Texas Department of Agriculture and USDA, the Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research established the IPM program in Texas in 1972.

♦ Methods utilized include growing resistant plant varieties, monitoring fields, implementing pest thresholds, using cultivation practices that minimize pest damage, and taking advantage of the natural enemies of pests.

♦ Seventeen AgriLife Extension IPM agents provide crop-monitoring, weekly scouting reports, and assistance in making pest-management decisions to cooperating cotton producers in 43 Texas counties.

♦ AgriLife Extension IPM agents also conduct on-farm applied research to evaluate and demonstrate new technologies to producers.

♦ Information gathered through local crop monitoring, applied demonstration, and research is disseminated to producers through educational programs.

♦ In 2011, AgriLife Extension IPM Agents presented more than 600 IPM educational programs to more than 106,000 contacts, conducted more than 11,000 farm site visits, and produced 266 newspaper articles reaching a circulation of nearly 1.7 million people. Additionally, there were 152,000 visitors to the IPM website (http://ipm.tamu.edu).

Economic Benefit

♦ Survey results from 224 cotton producers managing 157,000 acres indicate an average increase in net returns attributable to the IPM program of $40 per acre. That translates into a total increase in net returns of $6.3 million, which supports an additional 59 jobs in Texas.

♦ This represents only a small fraction of the economic benefits, reflecting but a portion of IPM clientele. From a broader perspective, the IPM program’s emphasis on using pesticides only as a last resort creates public value by reducing environmental and public health risks.