

## Minimizing Pesticide Use While Improving Net Returns

- The impetus for integrated pest management grew out of concerns over insect resistance to insecticides and possible environmental harm related to using a purely insecticidal approach to insect control.
- Integrated pest management is a sustainable approach to managing pests that combines biological, cultural, physical, and chemical tools to minimize economic, health, and environmental risks.

## AgriLife Extension's Response

- Collaborating with the Texas Pest Management Association, the Texas Department of Agriculture, and the USDA, the Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research established the Integrated Pest Management (IPM) program in Texas in 1972.
- Methods used to control agricultural pests include growing resistant plant varieties, monitoring fields, implementing pest thresholds, and using cultivation practices that minimize pest damage.
- Eight AgriLife Extension IPM agents support cotton producers in 22 Texas counties by providing crop monitoring, weekly scouting



reports, and assistance in making pest-management decisions.

- AgriLife Extension IPM agents also conduct on-farm applied research to evaluate new technologies and demonstrate them to producers.
- Information gathered through local crop monitoring, applied demonstration, and research is disseminated to producers through educational programs.
- In 2019, AgriLife Extension IPM agents conducted educational programs for more than 42,900 adult and youth contacts, scouted 11,800 acres of cotton, and shared information on IPM methods with a combined circulation and viewing audience of 2.0 million people through newsletters, blogs, and radio, newspaper and TV interviews.

## Economic Impacts

- Survey results from 154 cotton producers managing 501,000 acres indicate an average increase in net returns attributable to the IPM program of \$59 per acre. This translates into a total increase in annual net returns of \$29.5 million, which supports an additional 286 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.