Insect Threatens Viability of Cotton

- The boll weevil has historically been the most costly insect pest of cotton in Texas. In the Southern High Plains region alone, boll weevil production losses from 1995 to 1998 were estimated at more than $200 million.
- In addition to direct losses caused by boll weevils, treatments applied to control boll weevils often resulted in increases in secondary pests and resistance by pests to insecticides.

Extension’s Response

- At the request of Texas Cotton Producers Inc., Extension entomologists took the lead in drafting a plan for boll weevil eradication in Texas.
- Extension entomologists worked with the cotton industry in developing legislation enacted by the Legislature that provided a legal framework for the implementation of boll weevil eradication.
- In 1993, Texas Cotton Producers Inc. – with assistance from the Texas A&M AgriLife Extension Service, Texas A&M AgriLife Research, the Texas Department of Agriculture and the USDA – founded the Texas Boll Weevil Eradication Foundation. The Foundation is charged by the Legislature with implementing the eradication plan.

Economic Impact

- Extension specialists have served as technical advisors for the boll weevil eradication program since its inception and have provided boll weevil eradication educational programs prior to referendum votes.
- Grower participation is determined by a vote on an eradication referendum in each eradication zone. Acreage in the program has grown from 1.4 million in 1996 to 7 million in 2011.

- While the economic benefit of boll weevil eradication will not be fully realized until eradication has been achieved across the state; significant gains have already been realized.
- Boll weevil yield losses and insecticide costs from before and after eradication plan implementation were used to estimate the change in net returns above variable costs for each zone, which ranged from $7 to $101 per acre in 2011.
- The total increase in net returns was an estimated $426 million in 2011. Total economic output (gross business sales) associated with the farm-level and ginning impacts was an estimated $588 million, which helped to support an additional 4,978 jobs.
- Since 1996, the estimated cumulative increase in net returns is $2.3 billion.