

# Evaluation of Cotton Varieties Improves Variety Selection

## Making a Difference

### Texas High Plains Cotton Yield and Quality Challenges

- ◆ The mid-1990s marked the beginning of an era when the first genetically modified cotton variety was developed. Since that time, biological advances in cotton seed have occurred at a rapid pace, making variety selection more difficult.
- ◆ The most important decision a grower makes is the selection of a cotton variety and transgenic traits.

### Extension's Response

- ◆ This new era of rapidly changing seed technology called for an expanded and more intensive cotton variety testing effort. With funding support from Plains Cotton Growers and the Texas State Support Committee – Cotton Inc., the Texas AgriLife Extension Service and Texas AgriLife Research began conducting intensive replicated cotton variety trials in producer-cooperator fields in 2000.
- ◆ The partnership with industry – including funding, local leading producer-cooperators, and seed and technology companies – provides credibility to the large-plot projects. The testing results allow producers to compare production, quality and economic characteristics of selected varieties.
- ◆ Given the increasing number of varieties that are available – more than 110 in 2009 – these results are invaluable to growers in their variety-selection decisions.
- ◆ Since 2000, more than 15,500 cotton producers have participated in the 400 educational meetings conducted



by AgriLife Extension in the High Plains.

- ◆ More than 165,000 test plot trial reports have been distributed to producers, cotton gins and consultants via educational meetings, Web site downloads, CDs and DVDs since 2001.

### Economic Benefit

- ◆ Improved seed technology and variety testing efforts have led to significant improvements in both cotton lint quality and yields in the High Plains. Since 2000, average yields per harvested acre have increased from 470 pounds to 815 pounds.
- ◆ From 2000 to 2009, the cumulative benefit of improved technology and increased adoption by growers is estimated at \$312 million, which has helped growers to partially offset the sharp increases in production costs in recent years.
- ◆ For the ginning sector, the annual gain associated with varietal improvements, testing, and education supports approximately 3,500 jobs annually at cotton gins in the region. The value-added impacts associated with ginning the additional production were estimated at \$17 million in 2009, which supports an additional 213 jobs in ginning support industries.

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