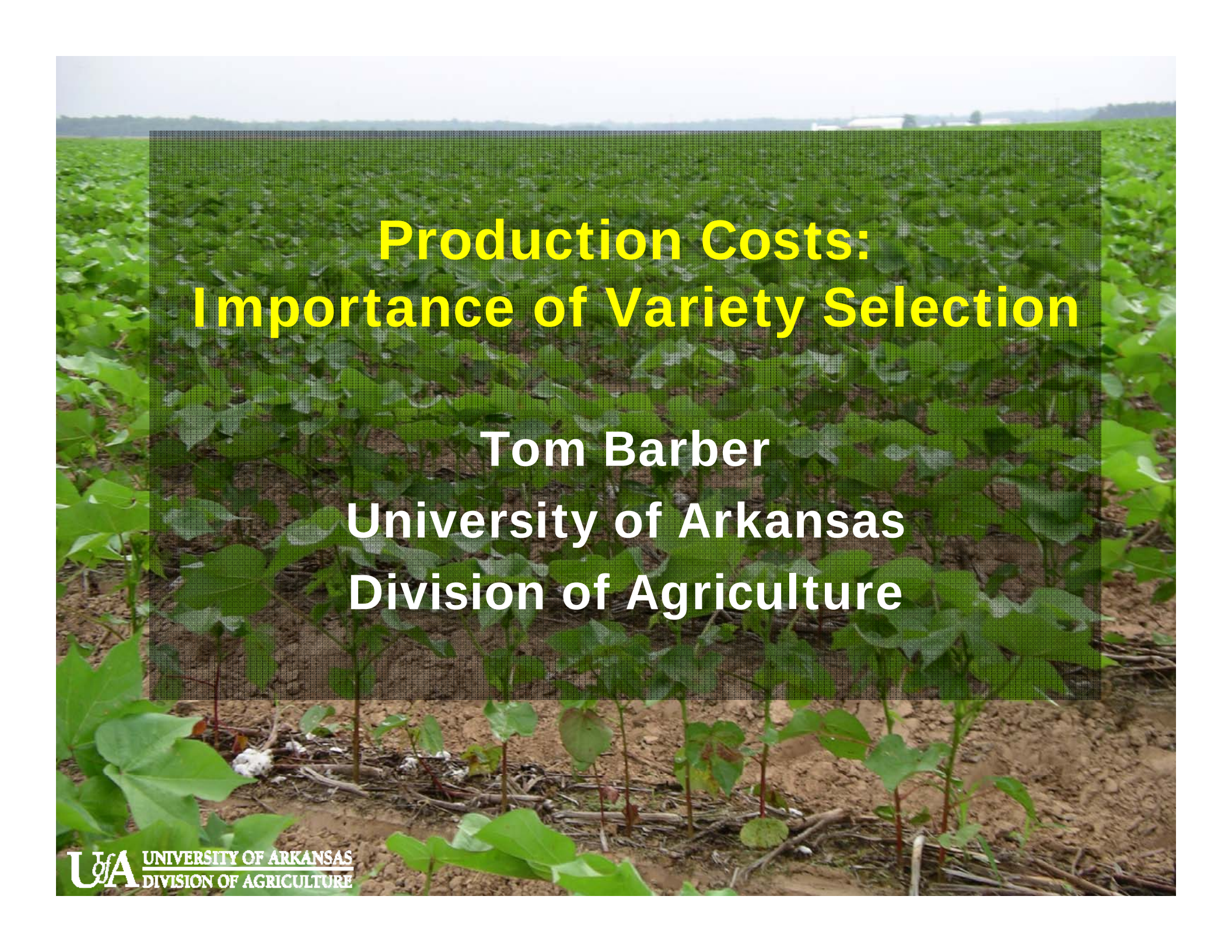




Production Costs: Importance of Variety Selection

**Tom Barber
University of Arkansas
Division of Agriculture**

Top 3 Input Costs for Cotton

- 1. Fuel and Fertilizer
- 2. Seed/Technology Fees
- 3. Chemicals

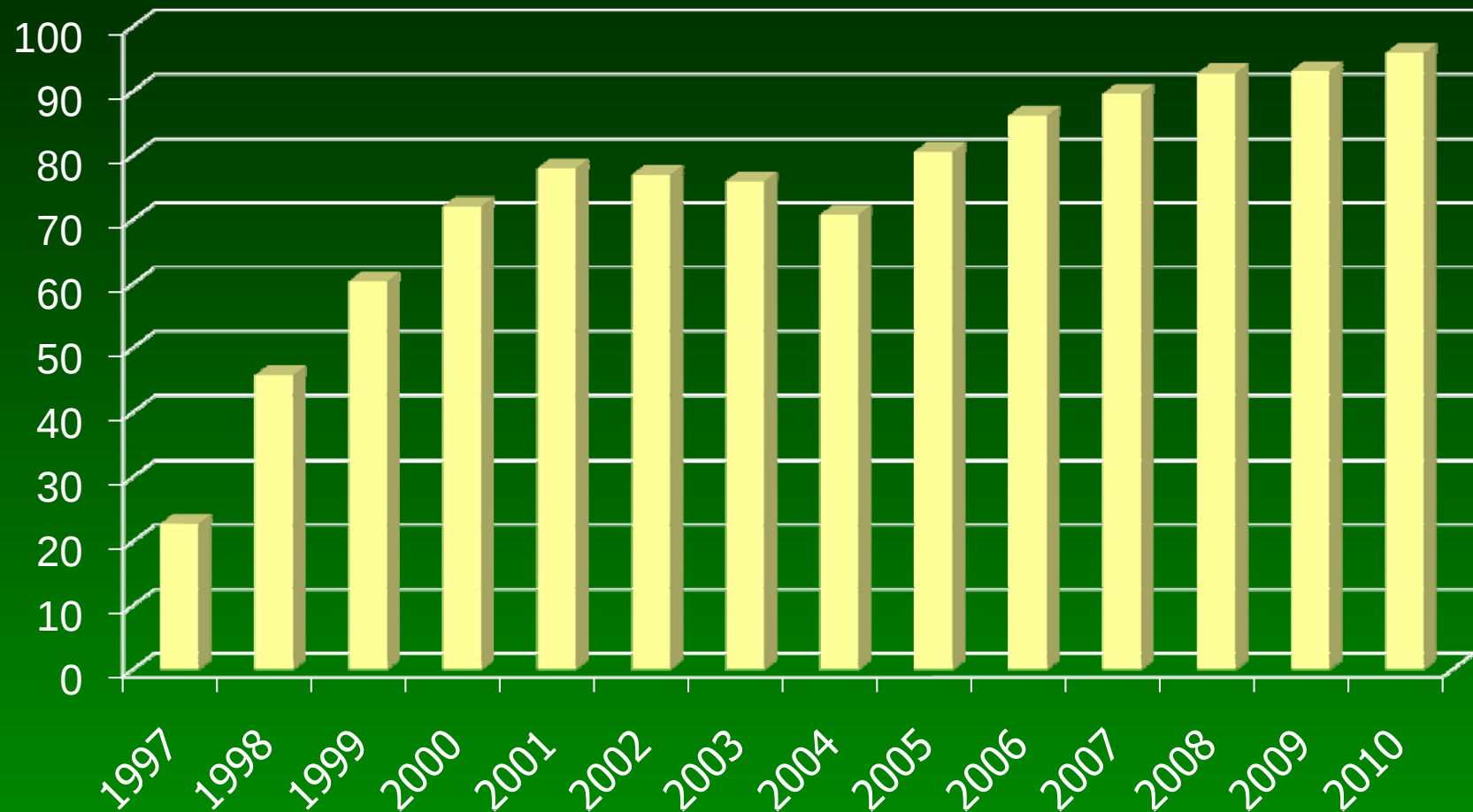


IT ALL BEGINS WITH THE SEED

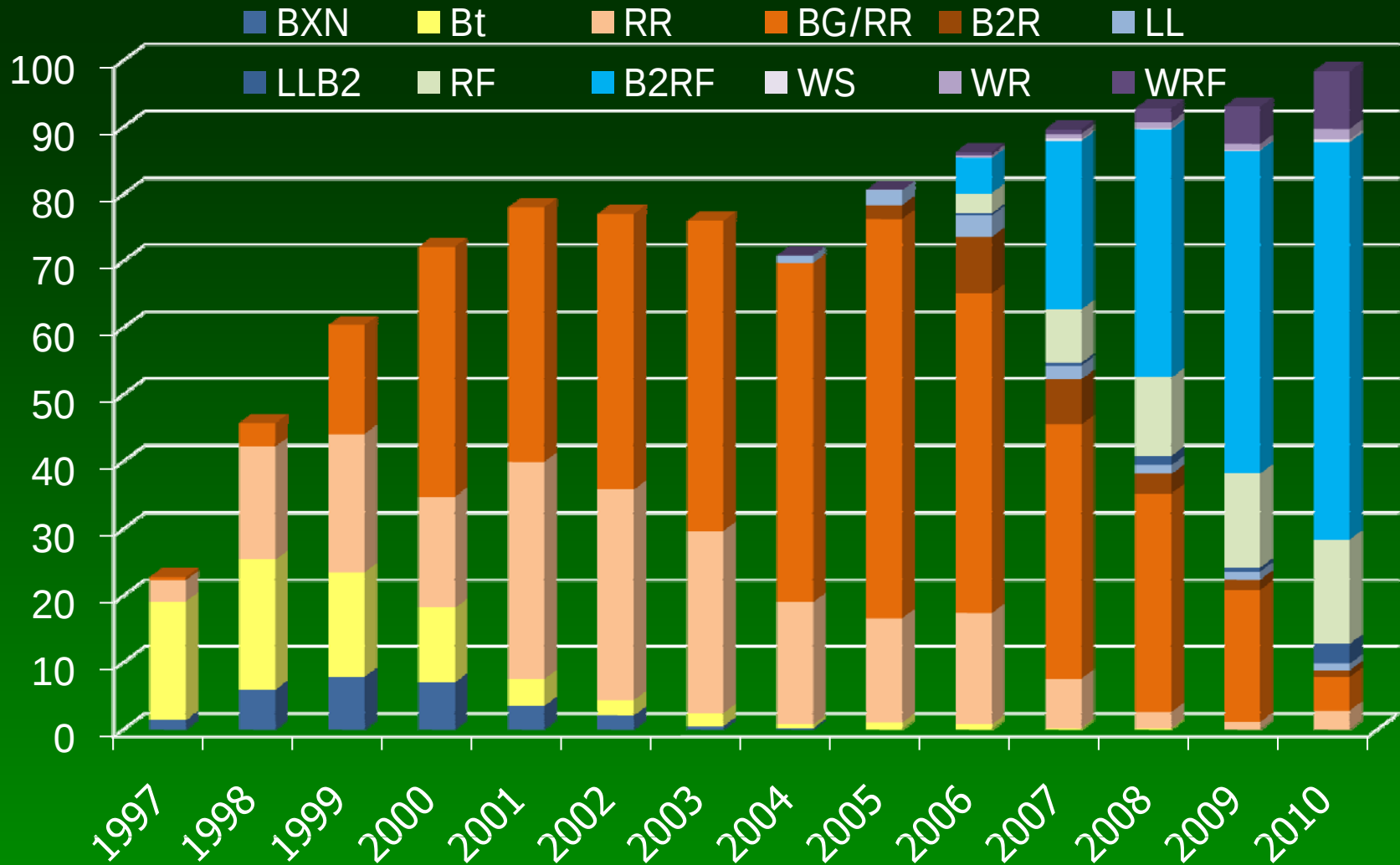
Value Shifts Continue

- No longer just a seed...OR a variety
- **Planting unit**
 - Technology
 - Vigor
 - Protection
 - Fiber Quality
 - Additional Traits
- **\$\$FRONT END LOADED!!**

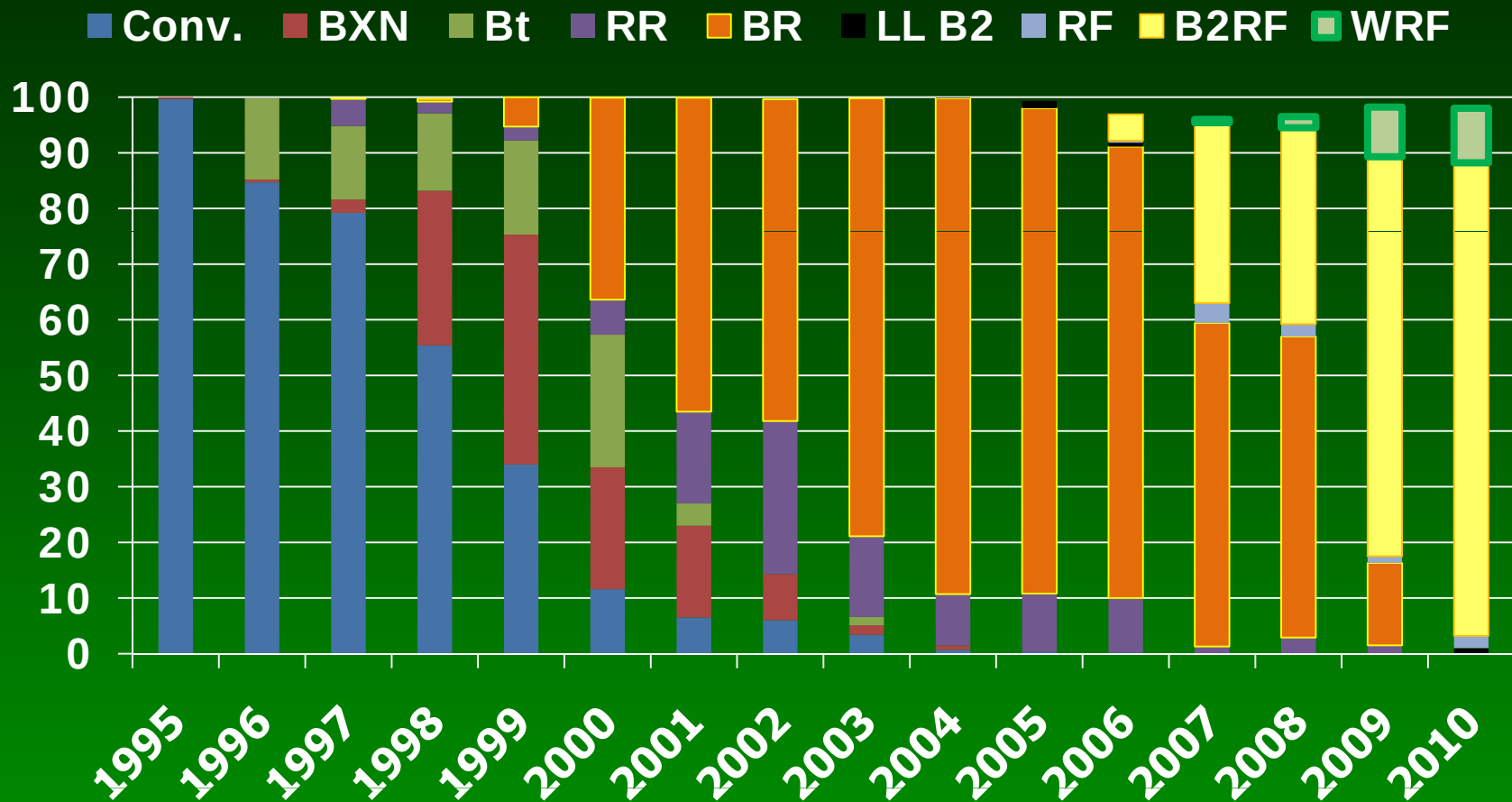
US Transgenic Cotton Acreage



US Transgenic Cotton Acreage

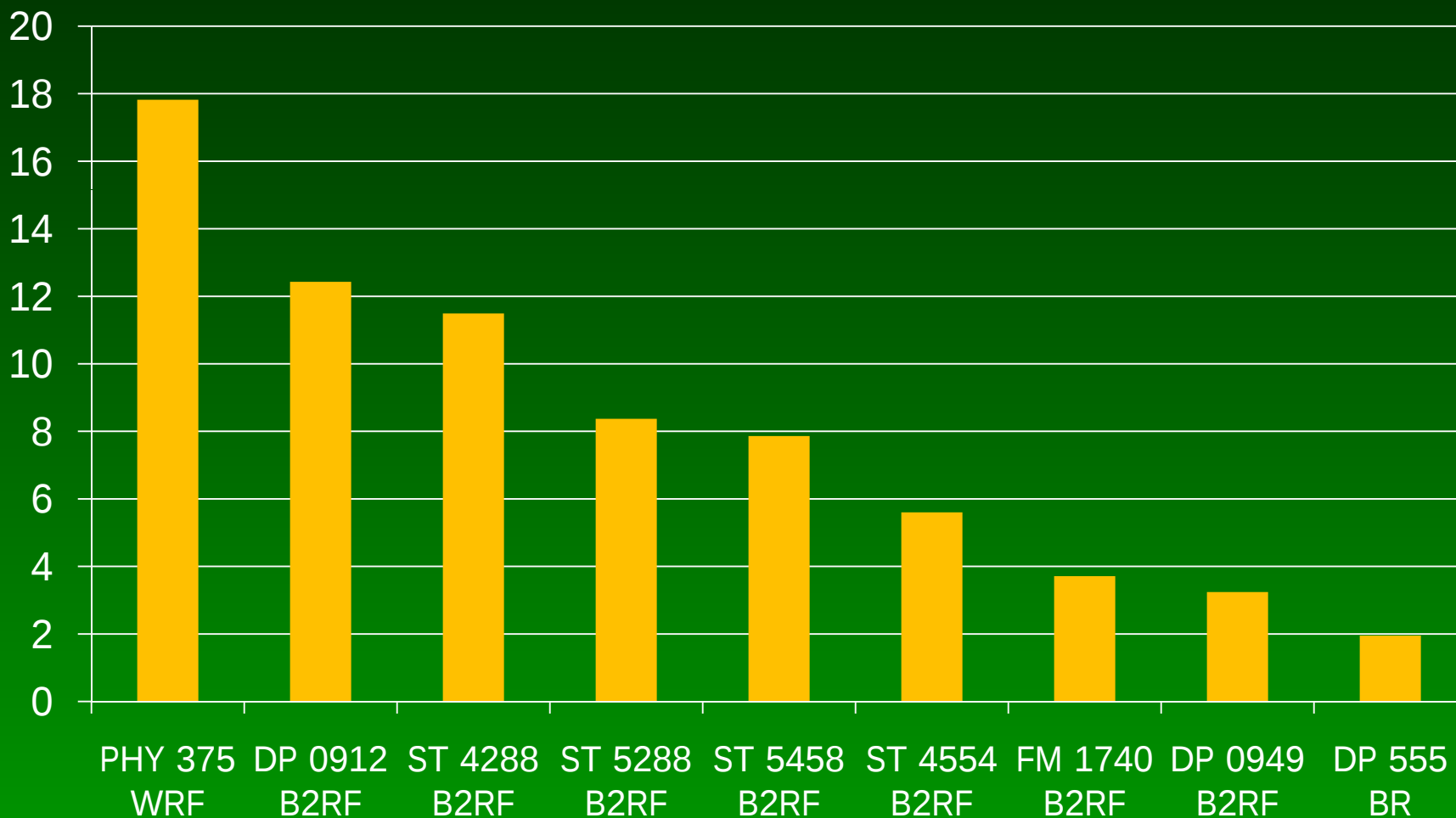


Percent Varieties Planted in Arkansas by Technology

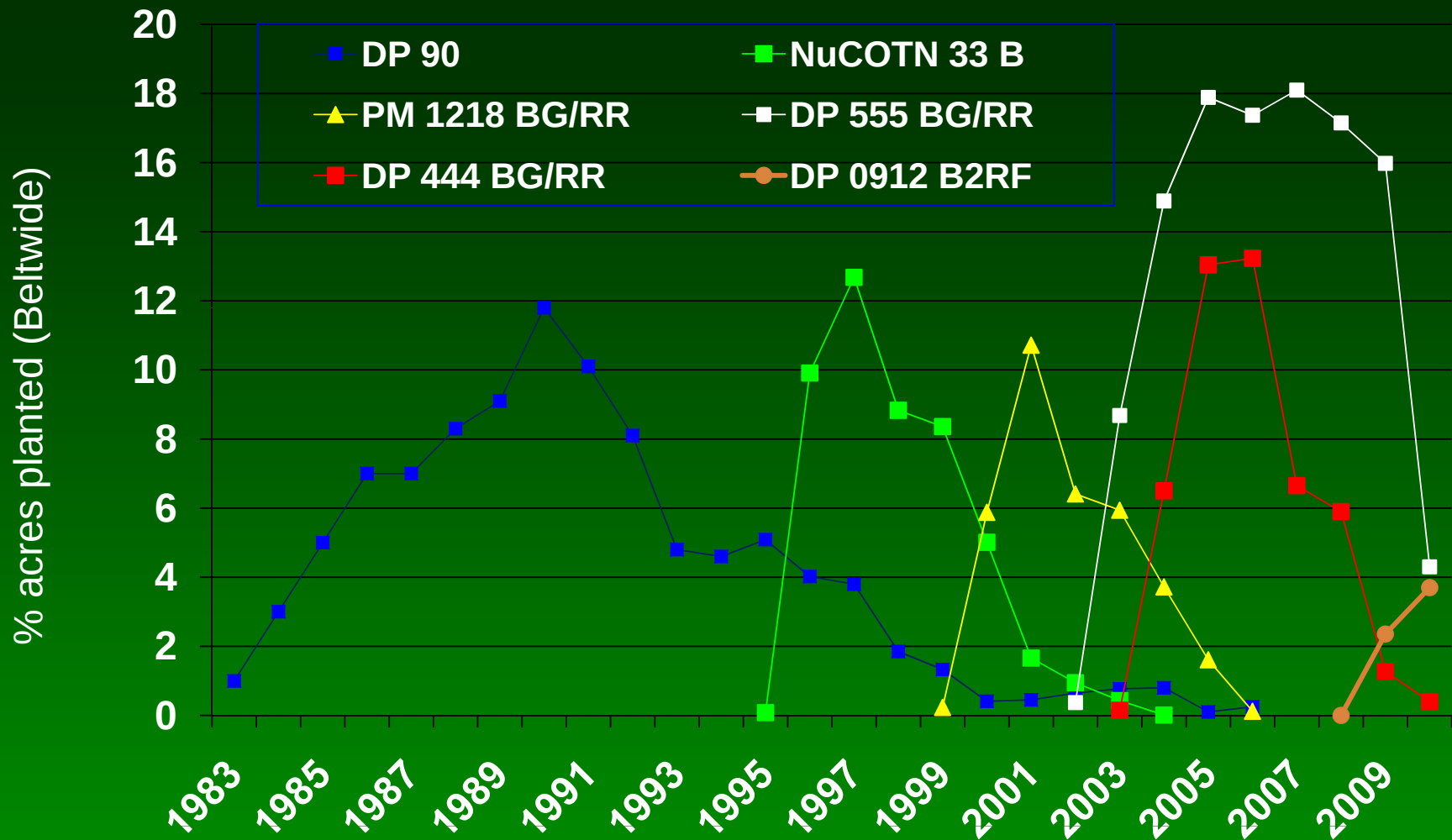


Varieties Planted In Mid-South USDA-AMS 2010

Percent Acres Planted (82 % total)



Speed to Market



Source – USDA-AMS Cotton Varieties Planted

Questions

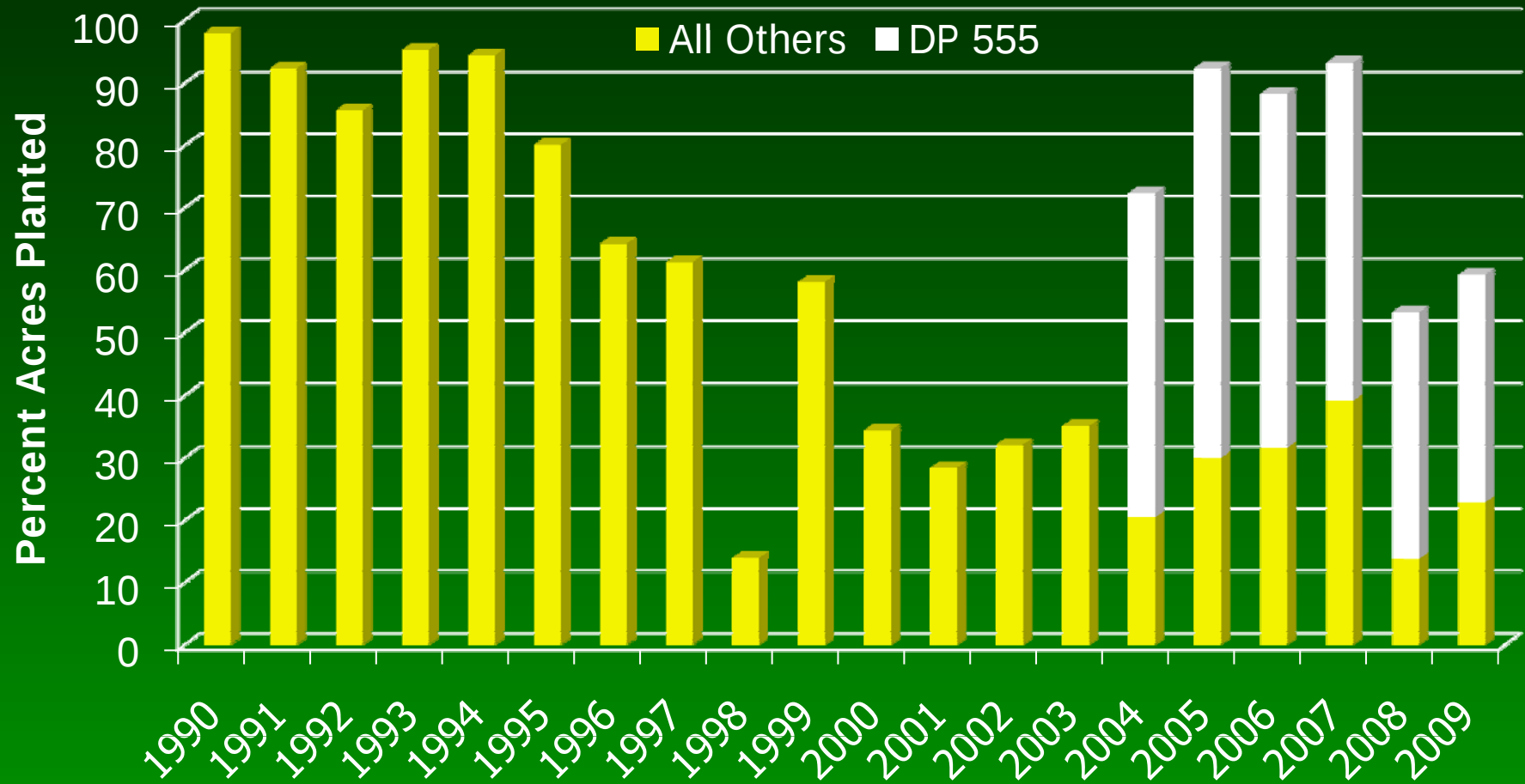
- How does yield performance actually relate to the varieties that are actually planted?
- Is yield the number one factor in variety selection for a grower?

Evaluating Variety Selection Trends

- **University Variety Trial (OVT) data 1990 to 2008**
 - Which varieties were either recommended or finished in the top 25% of the OVT? Where possible, data for a two-year average were used. In limited cases, one-year data were all that was available.
 - In each year, which varieties did a producer have a good reason to choose, based on the previous year's OVT results?
- **USDA-AMS *Cotton Varieties Planted* publication 1990-2009**
 - Lists the percent acreage devoted to specific varieties in each state.

Louisiana

Varieties planted that were in the top 25% of the OVT or recommended



Is there a preferred trait package?



- The ability to control Palmer amaranth could drive variety selection.
- Over-the-top herbicide systems will continue to rule.
- Insect traits will continue to be in demand in the Mid-South
- Future technology??

What is the outlook for 2011 and beyond for variety selection?

- Is there a dominant variety?
- Is there a preferred trait package?
- How much influence will convenience have in variety selection?

Convenience vs. Cost

- More convenient technology has almost always been readily adopted, even with high cost.
 - Staple in the mid-1990s – first OT broadleaf herbicide
 - Bollgard cotton – despite initial variety performance
 - RR cotton – despite variety initial performance
 - Seed treatment insecticides and fungicides despite shorter residuals and a likelihood of more early sprays

How much does it cost to plant?

- 2000
 - Seed cost - \$50-80/bag
 - Tech fee - ~\$40/a
 - IF insecticide - \$8/a
 - IF fungicide - \$12/a
- \$70 (before labor and fuel)

- 2010
 - Seed cost - \$120-140/bag
 - Tech fee - ~\$65/a
 - Seed Treatment - ~\$25/a
- \$115 (before fuel and labor)
- 64% increase

Costs of Seed Technology

- Focus is usually on tech fees... But, what about the rest of the seed package?
 - The seed is the delivery mechanism for
 - Genetics
 - Traits and Trait Packages
 - Insecticides
 - Fungicides
 - Nematicides

Do You Have a Choice?

Cost of Seed Technology

	Seed	Chemicals
Percent Increase from 2003 to 2009	110%	12%
	Percent of Total Operating Cost	
2003	13%	26%
2009	19%	19%
Change	+6%	-7%

Source: National Cotton Council estimated costs and returns for Mississippi Delta Region.

2011 Choices?



2011 Available Technology

FLEX ONLY

Bollgard 2 Flex

Widestrike

Widestrike Flex

Liberty Link Bollgard 2

Convenience

Resistant Weeds: Pigweed

2010 Insect Pressure

\$ 170/A by 2 leaf

Question

- How does the future December cotton contract price affect variety and management decisions?
 - \$0.94/lb @ 1000 lb/A yields = \$940/A
 - \$0.52/lb @ 1000 lb/A yields = \$520/A

Questions?



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DIVISION OF AGRICULTURE
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