

Cotton Quality: Influence of Production and Processing Technologies

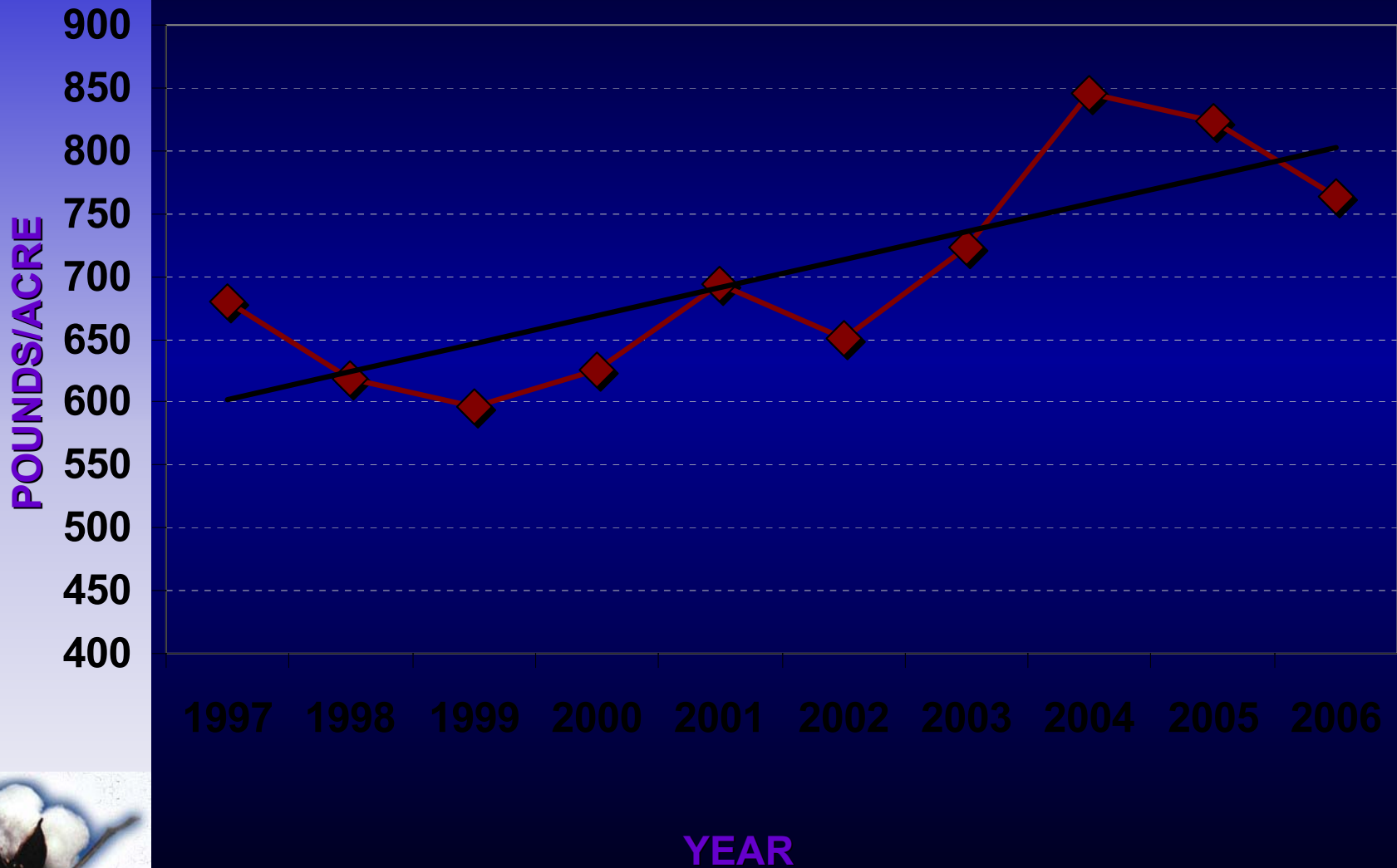


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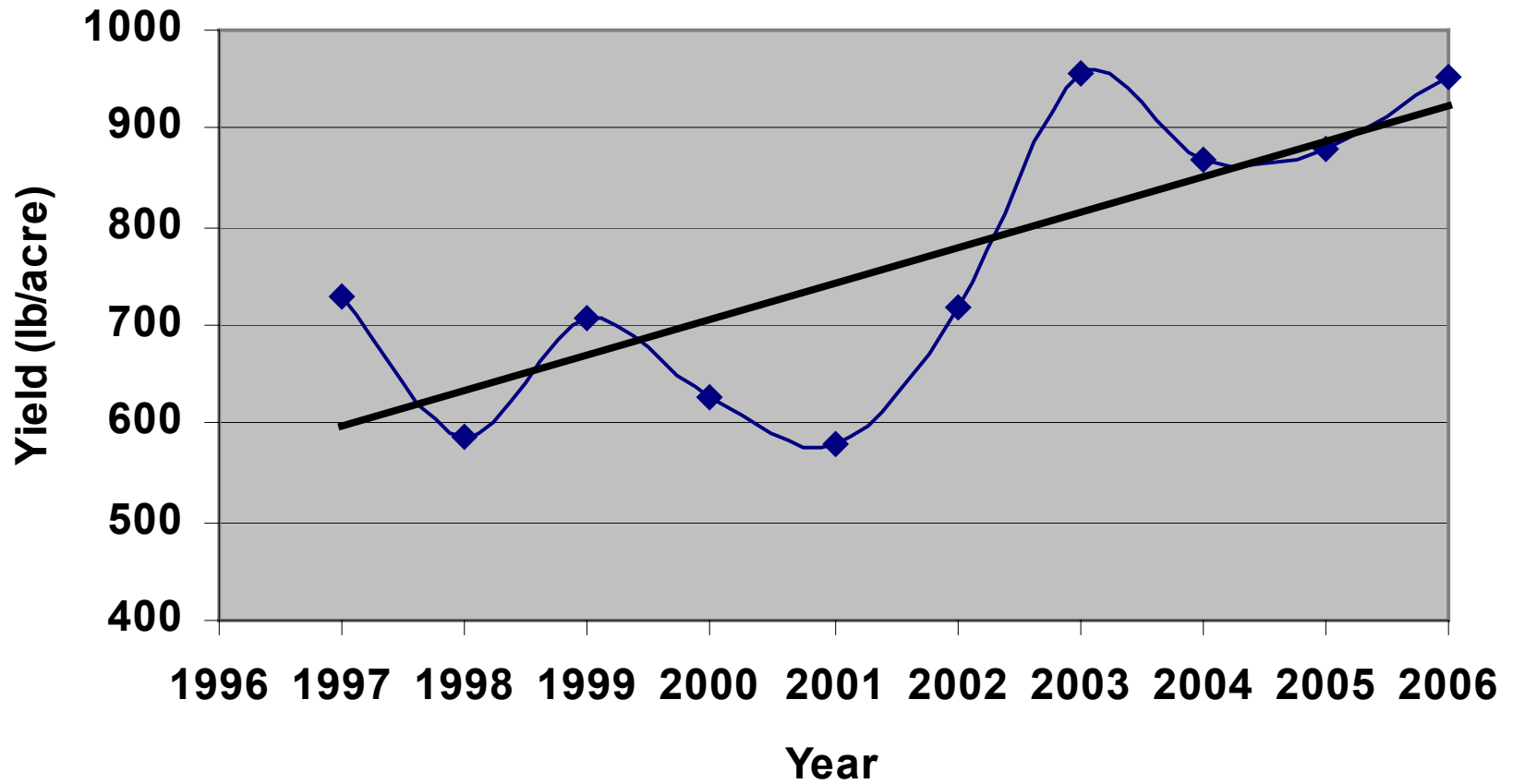
YIELD TREND

U.S. UPLAND

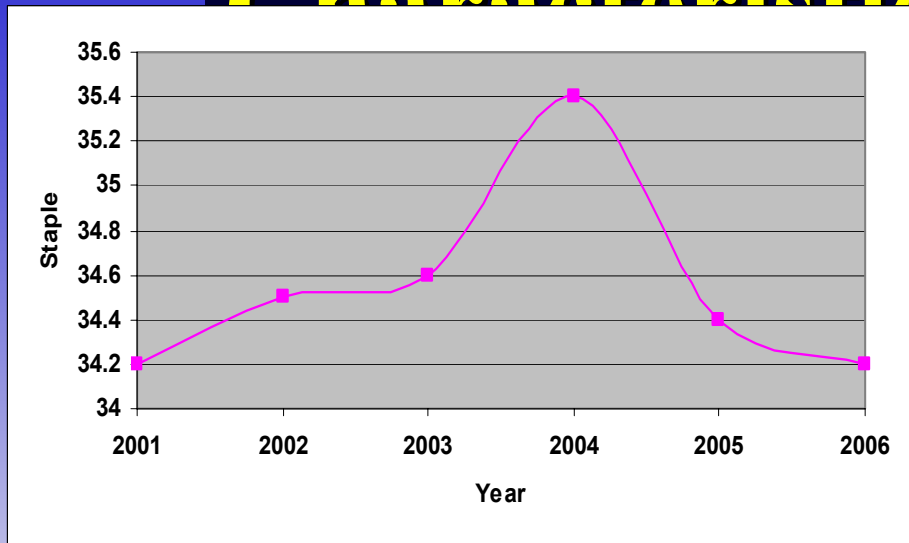


YIELD TREND

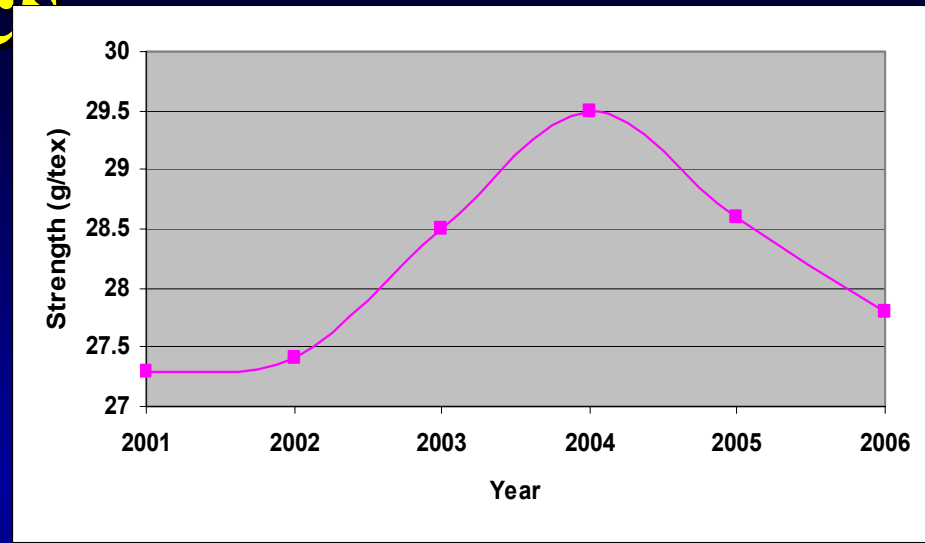
Louisiana 1997-2006



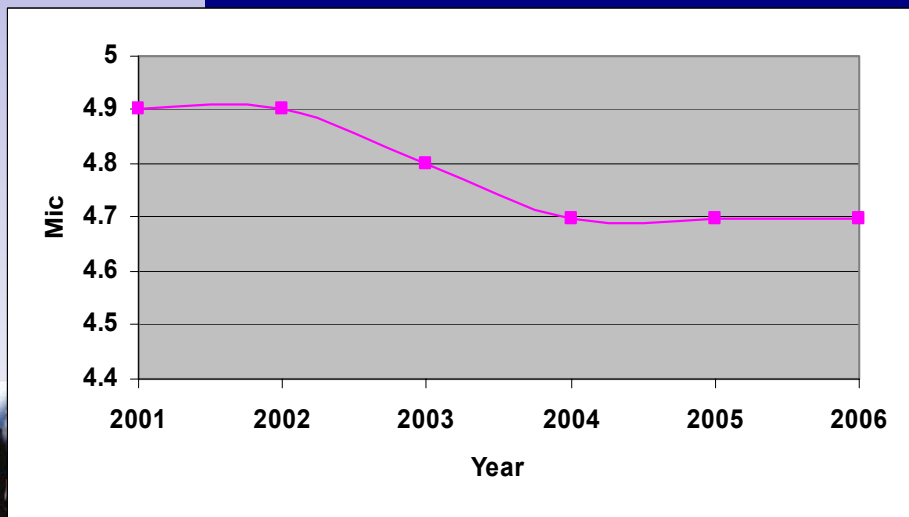
LA Fiber Quality Characteristics



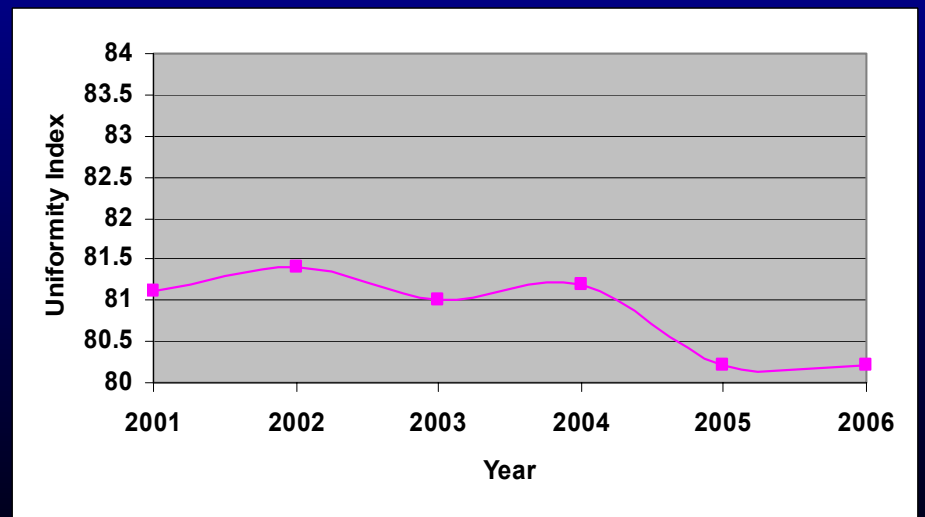
Staple



Strength



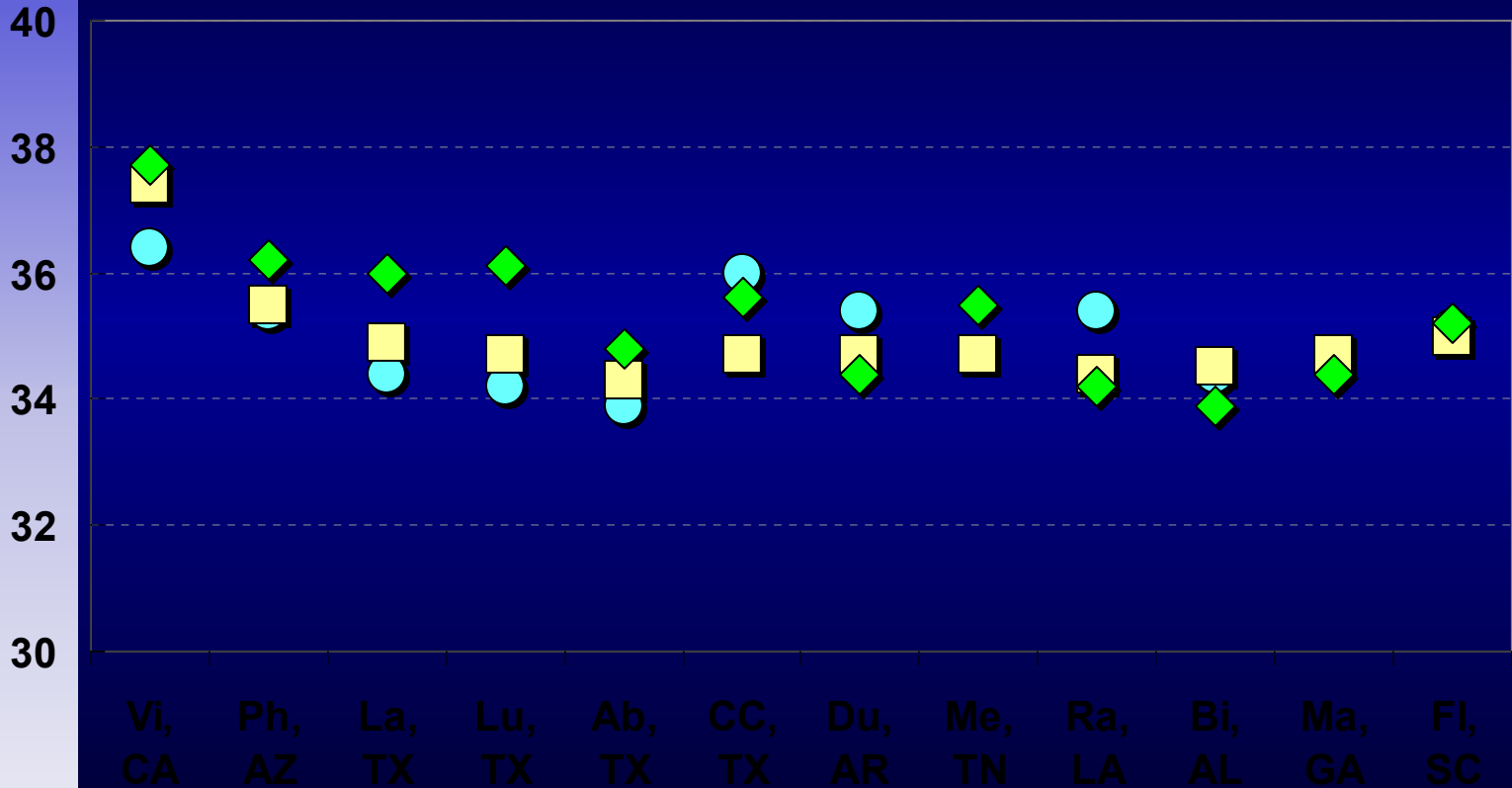
Mic



LUI

AVERAGE LENGTH

32'S OF AN INCH

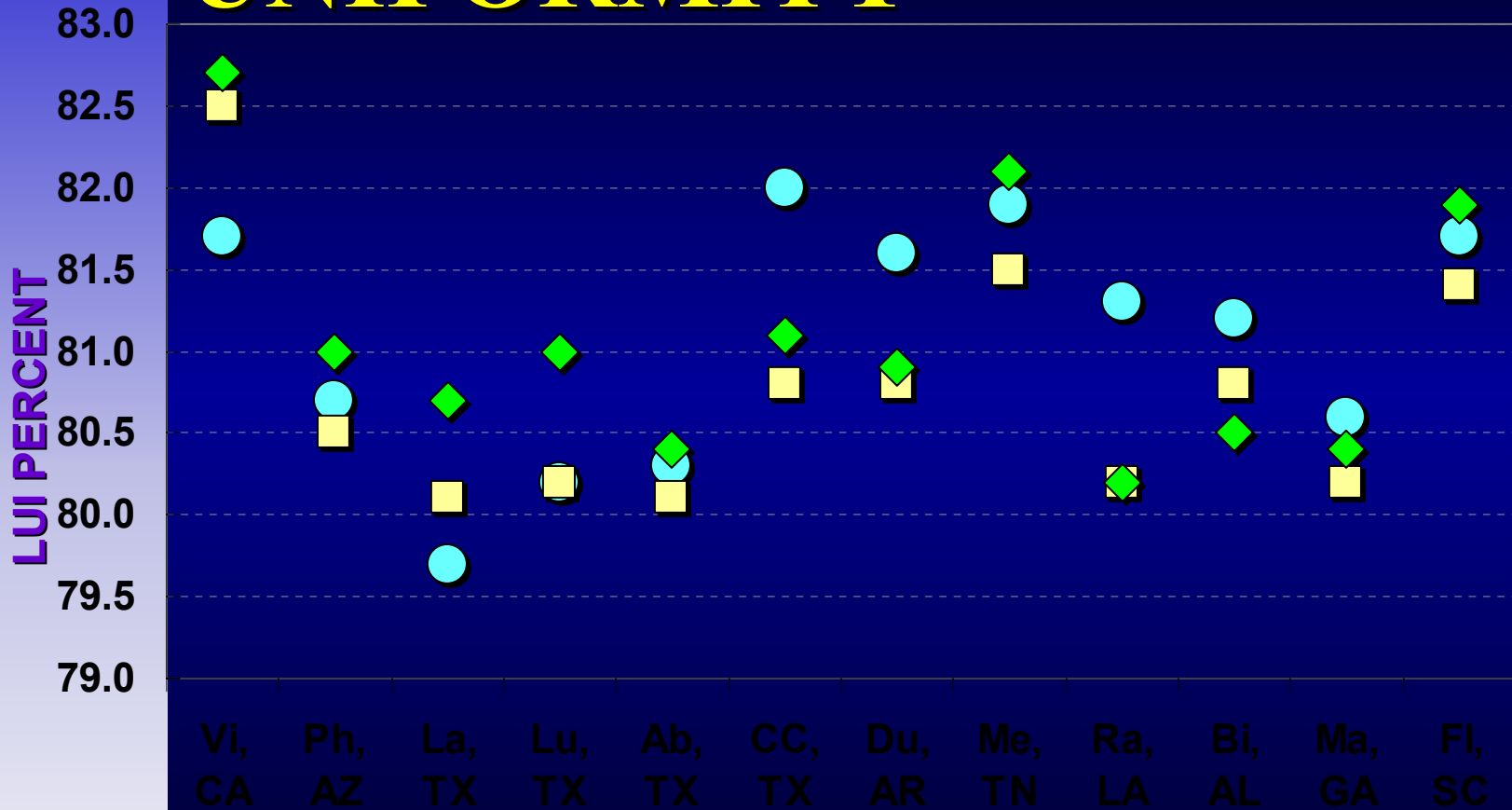


● 2004 ■ 2005 ◆ 2006

CLASSING OFFICE



AVERAGE LENGTH UNIFORMITY

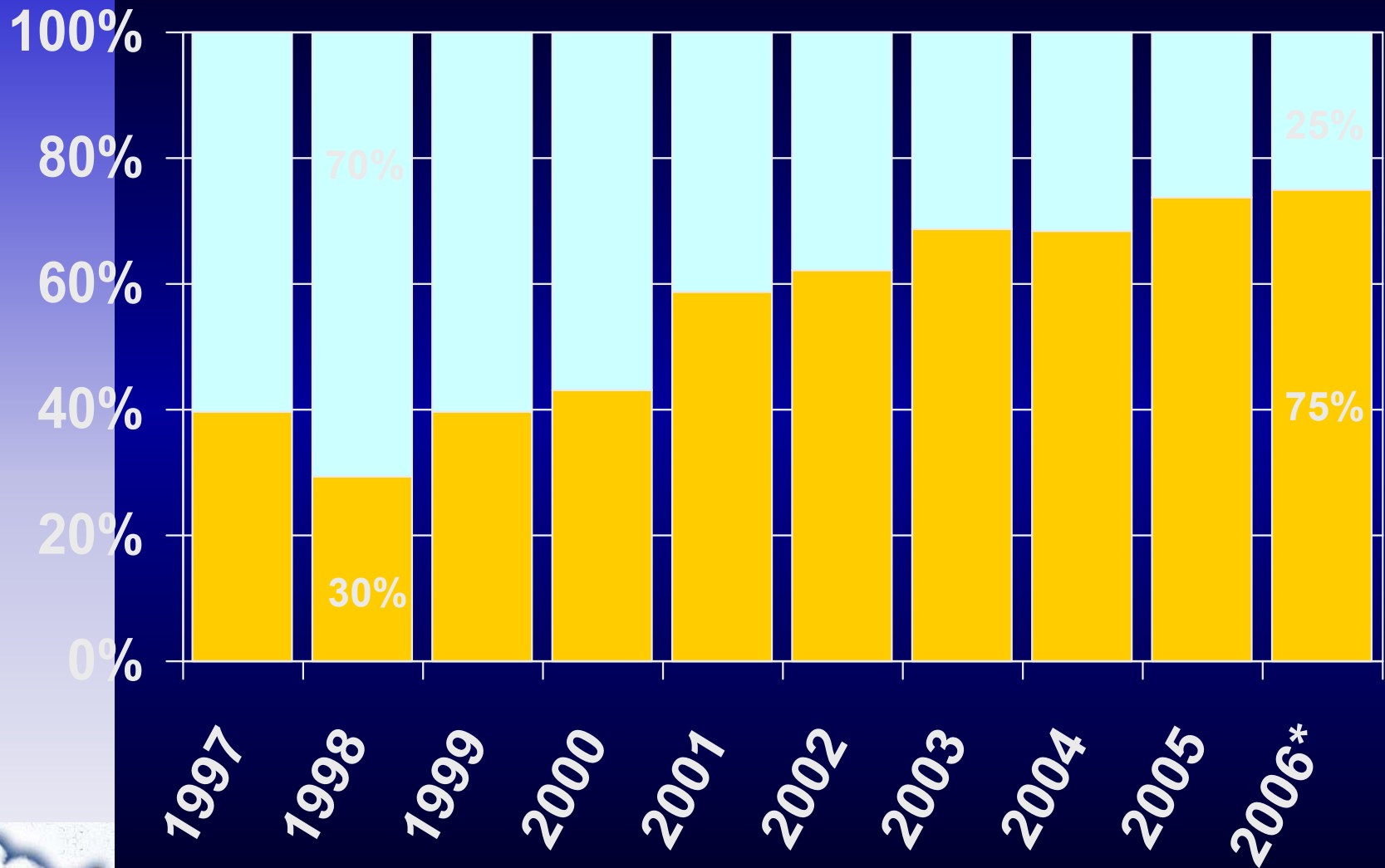


● 2004 ■ 2005 ◆ 2006

CLASSING OFFICE



DEMAND SHIFT FOR U.S. COTTON

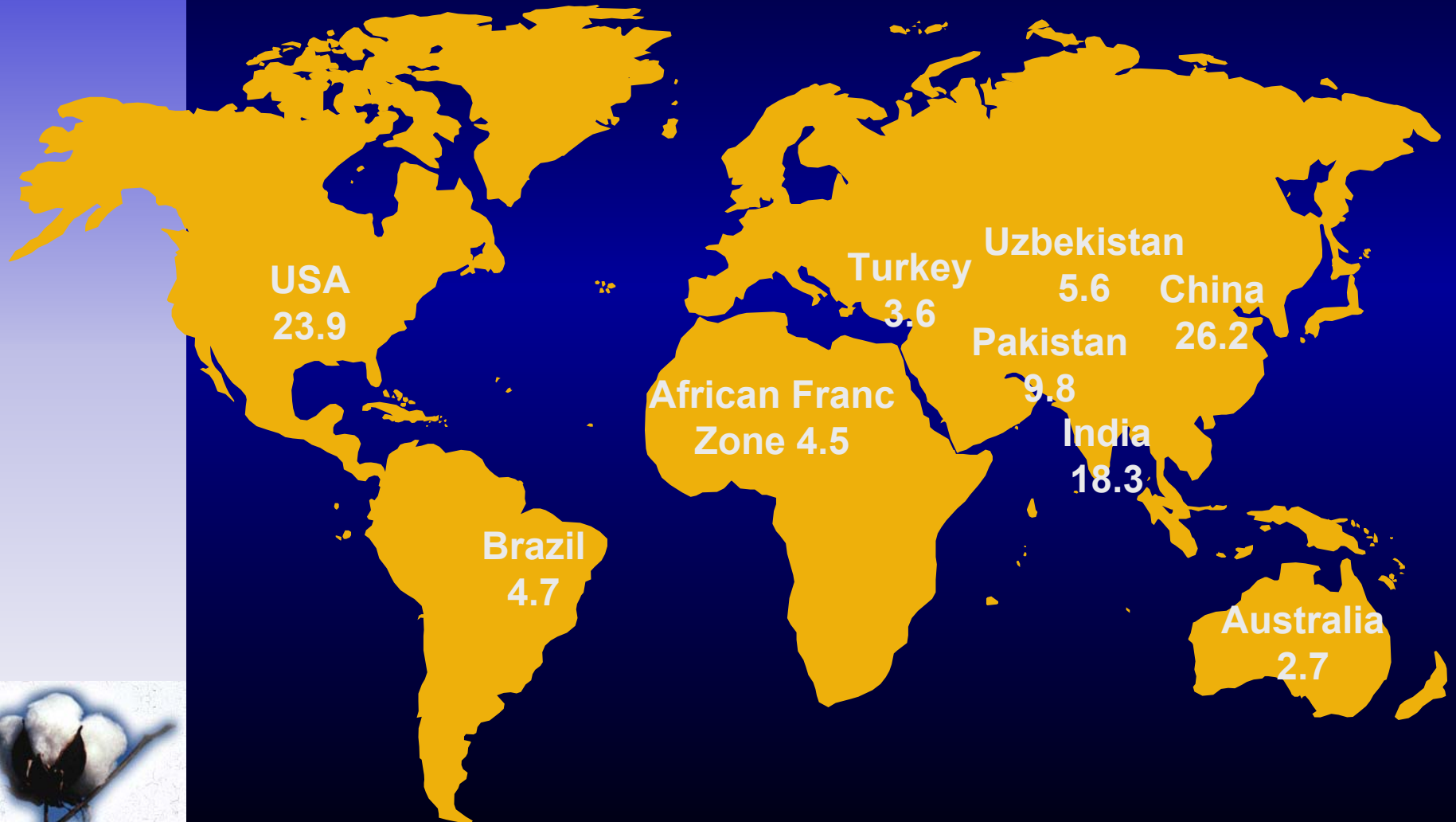


Source: USDA. * Forecast



Don't Forget

Major Cotton Producers



Competing in an International Market



China













China



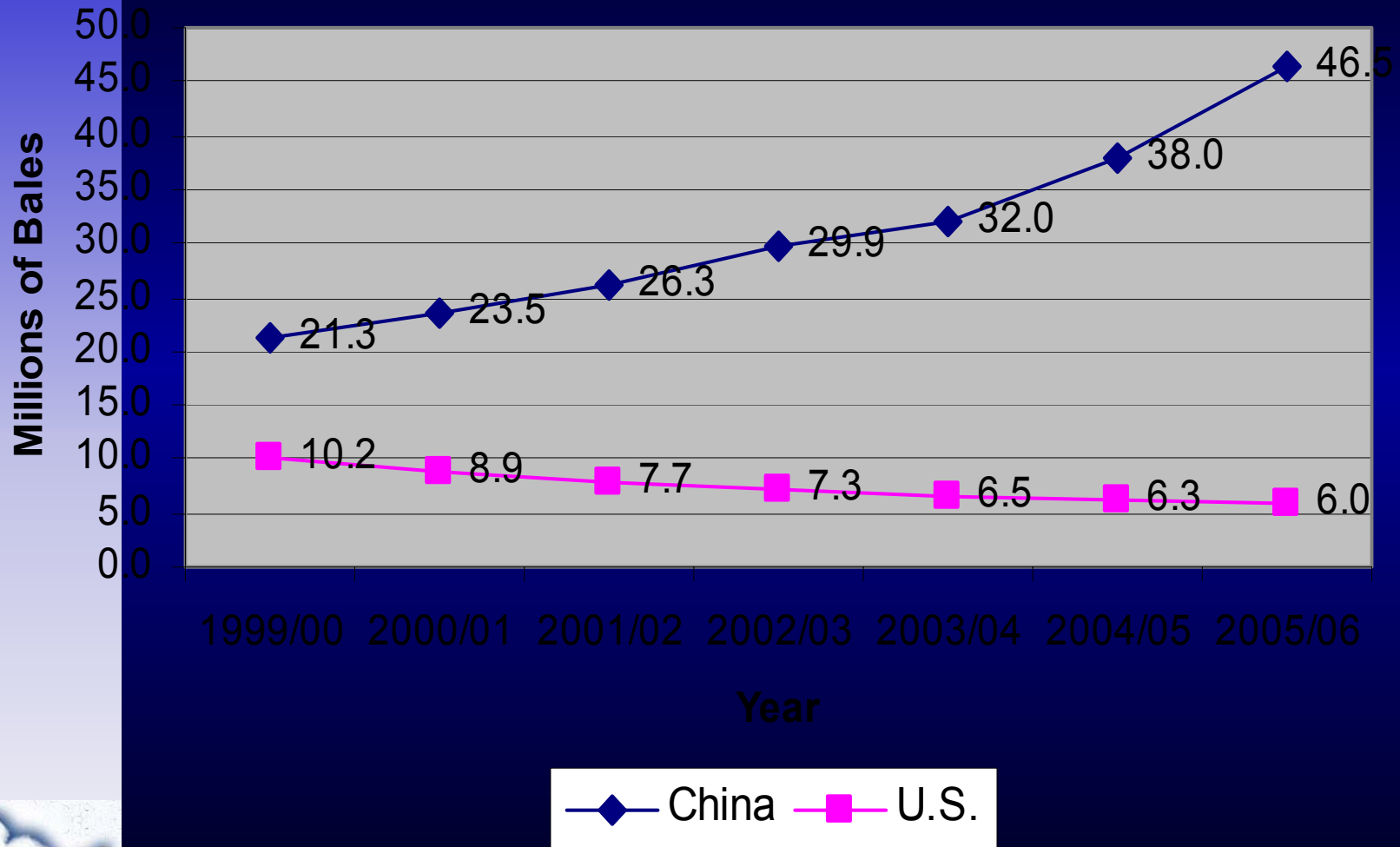








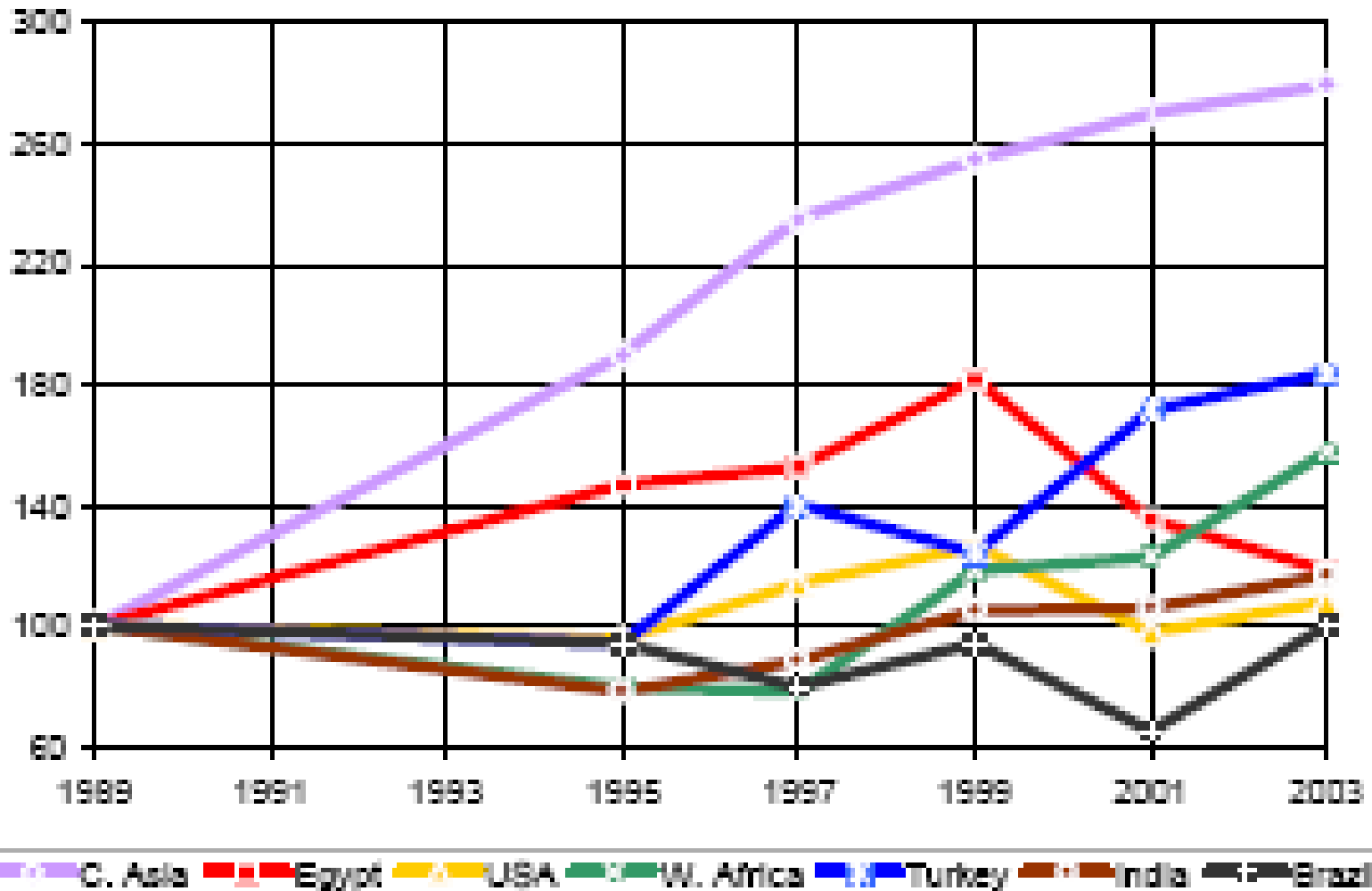
Textile Processing China v's U.S.



ITMF

Fig. 2: Contamination by Country 1989 – 2003

1989 = 100



Harvest Preparation



- Good defoliation job
- Control regrowth
- Keep contamination out of the field and picker

Store modules in well drained location



- Avoid low spots
- Make accessible to module trucks under wet conditions
- Old road beds or railroad beds make good storage

**Tarps must
be in
good shape**



- Regularly inspect for holes
- Routinely replace
- Monitor temp first 5-7 days

Cotton Ginning



- ◆ The primary mission of the cotton gin is to produce marketable products from seed cotton.
- ◆ The gin adjusts moisture, cleans, removes seed, cleans fiber and packages the bale.



Cotton Ginning



- ◆ Gins can preserve fiber quality and enhance market value.
- ◆ Varieties are the single most important factor in determining fiber quality
- ◆ Field weathering degrades fiber by weakening and discoloring fiber.



Ginning Considerations

- ◆ 1. Color Grade
- ◆ 2. Foreign Matter
- ◆ 3. Staple Length
- ◆ 4. Turnout
- ◆ 5. Seed Size
- ◆ 6. Hairy Leaf
- ◆ 7. Neps
- ◆ 8. Short Fibers
- ◆ 9. Seedcoat Fragments
- ◆ 10. Prep



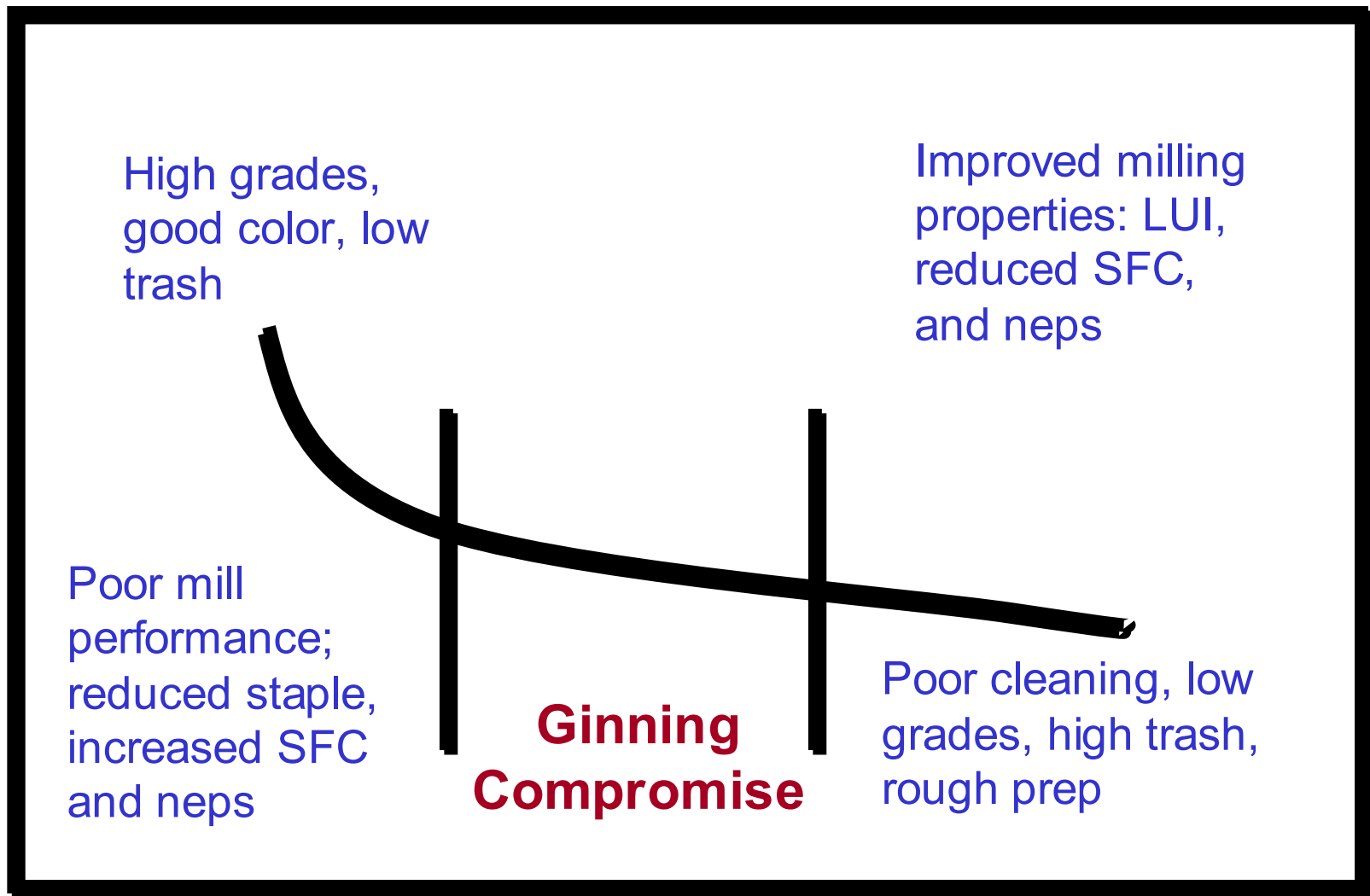
Moisture Content



Is the key to smooth ginning and quality preservation !



Fiber damage ↑



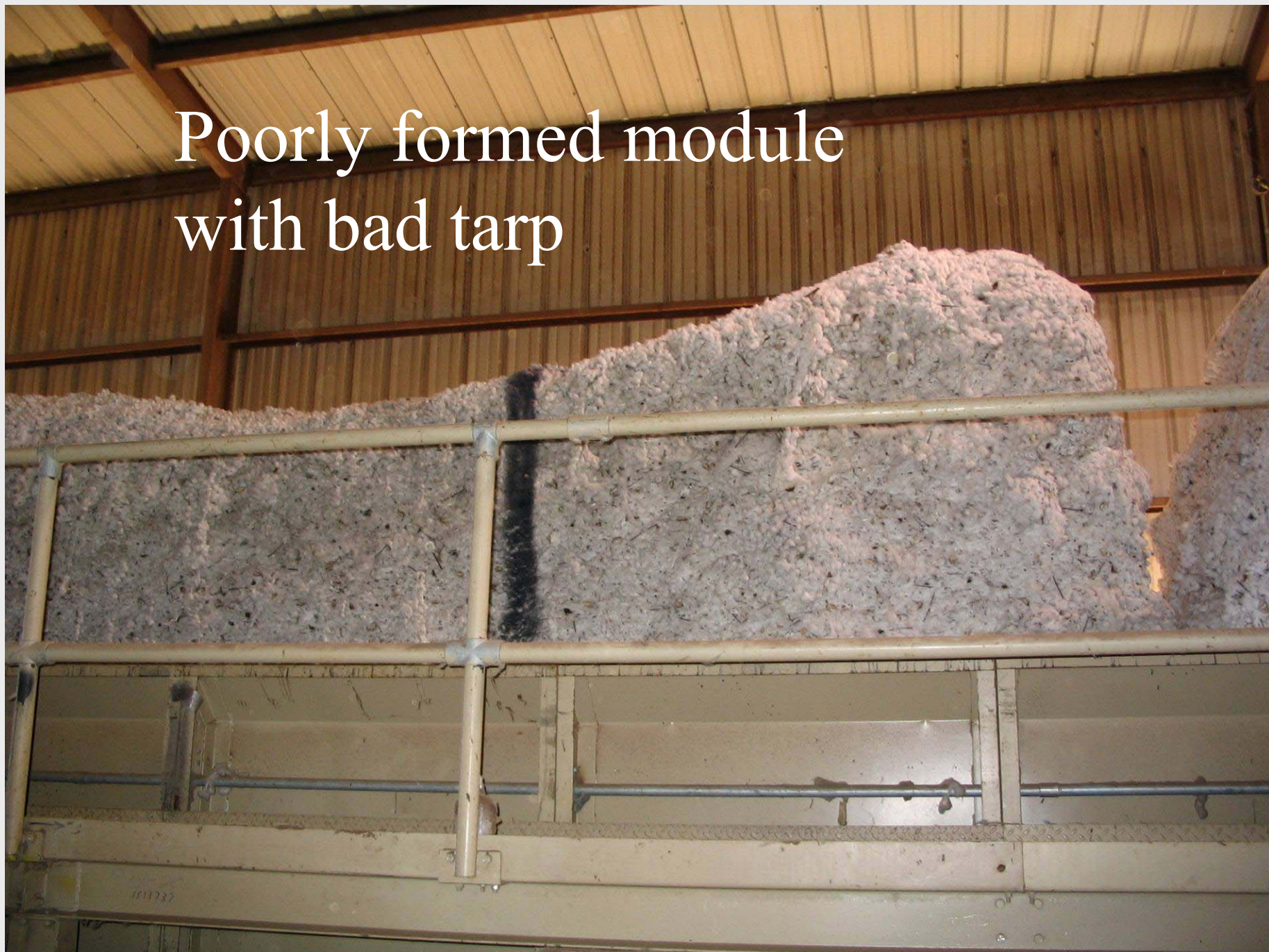
Increasing Fiber Moisture →







Poorly formed module
with bad tarp



Bale Value in Poorly Formed Module with Poor Tarp

Loss of \$246

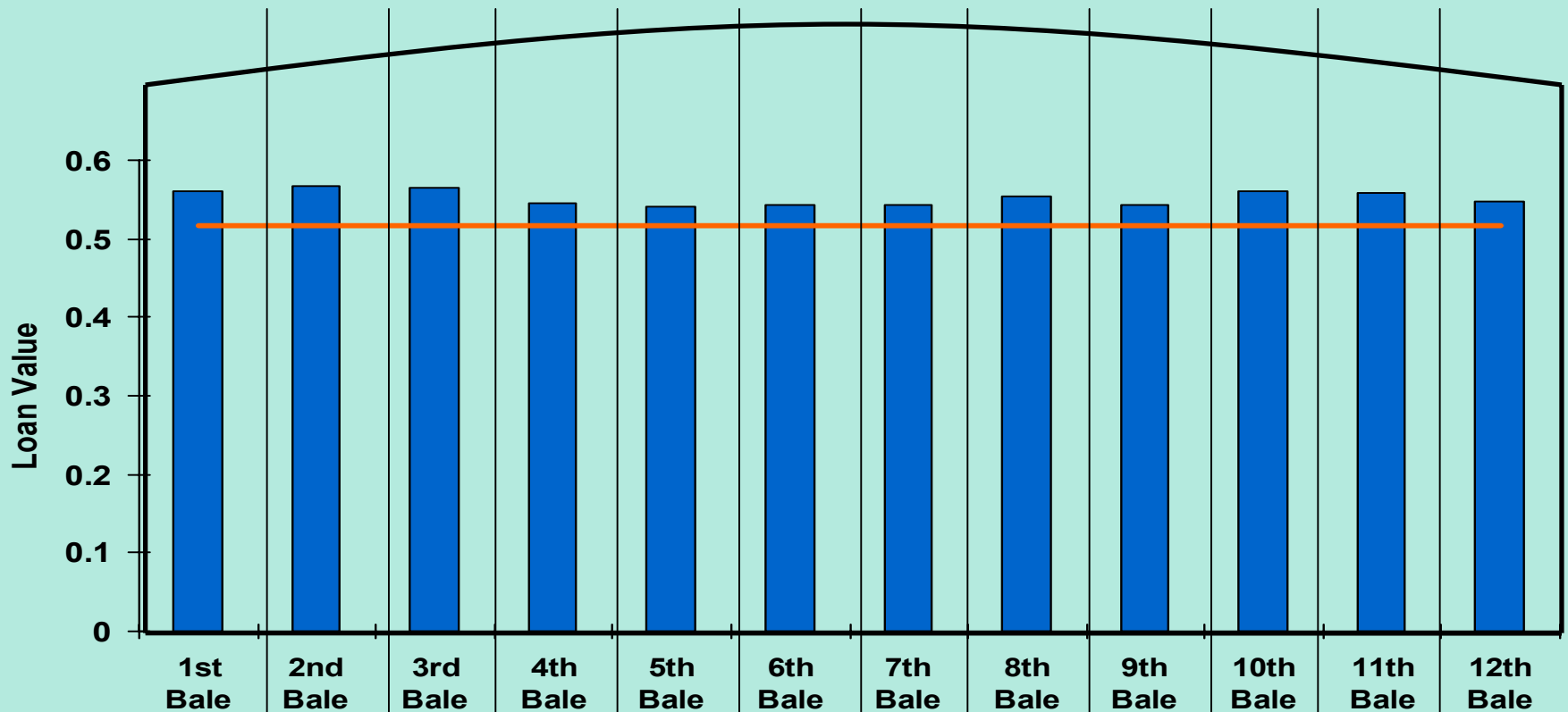
Local Base Loan Value (0.5160)



Bale Value of Well-Built Module with Good Tarp

Profit of \$201

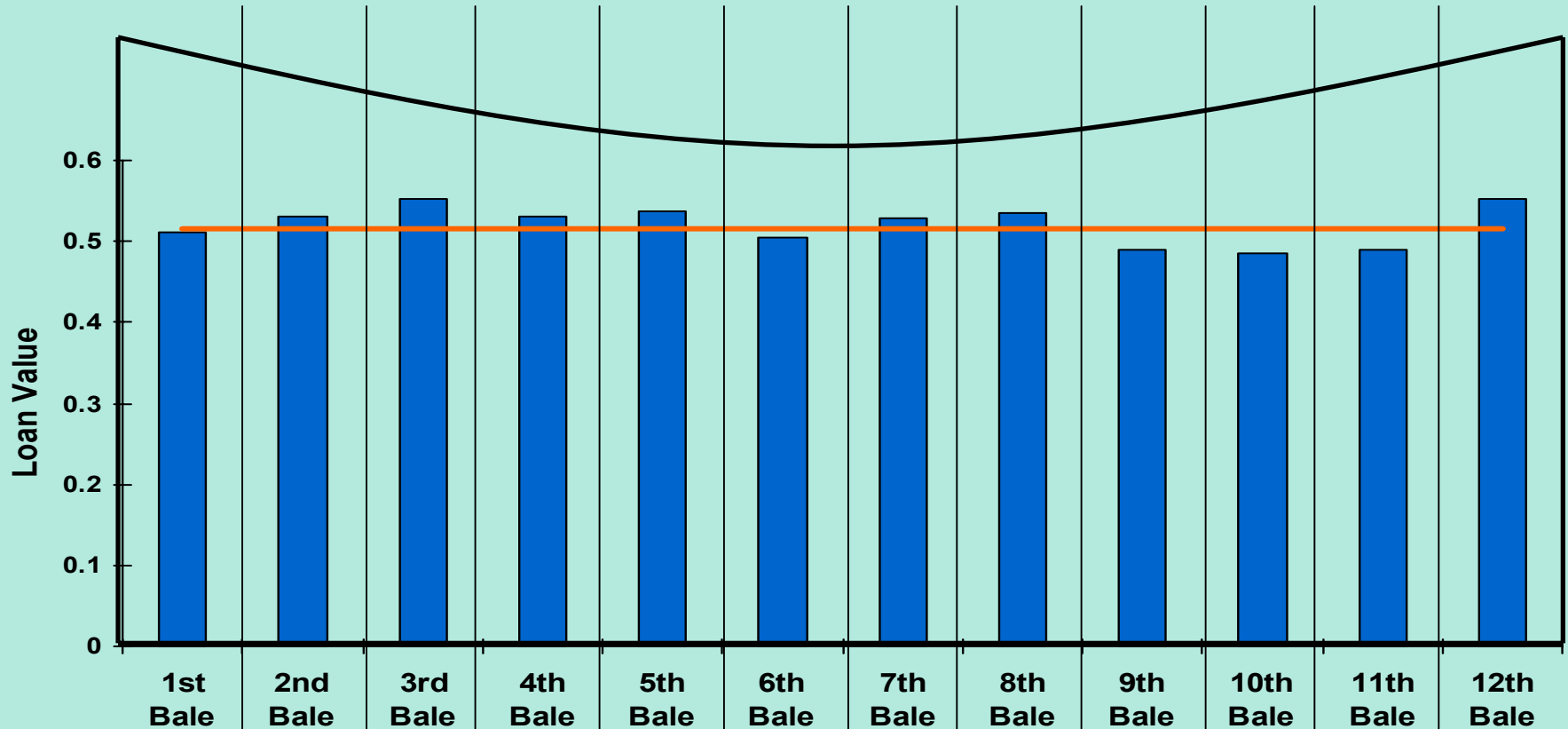
Local Base Loan Value (0.5160)



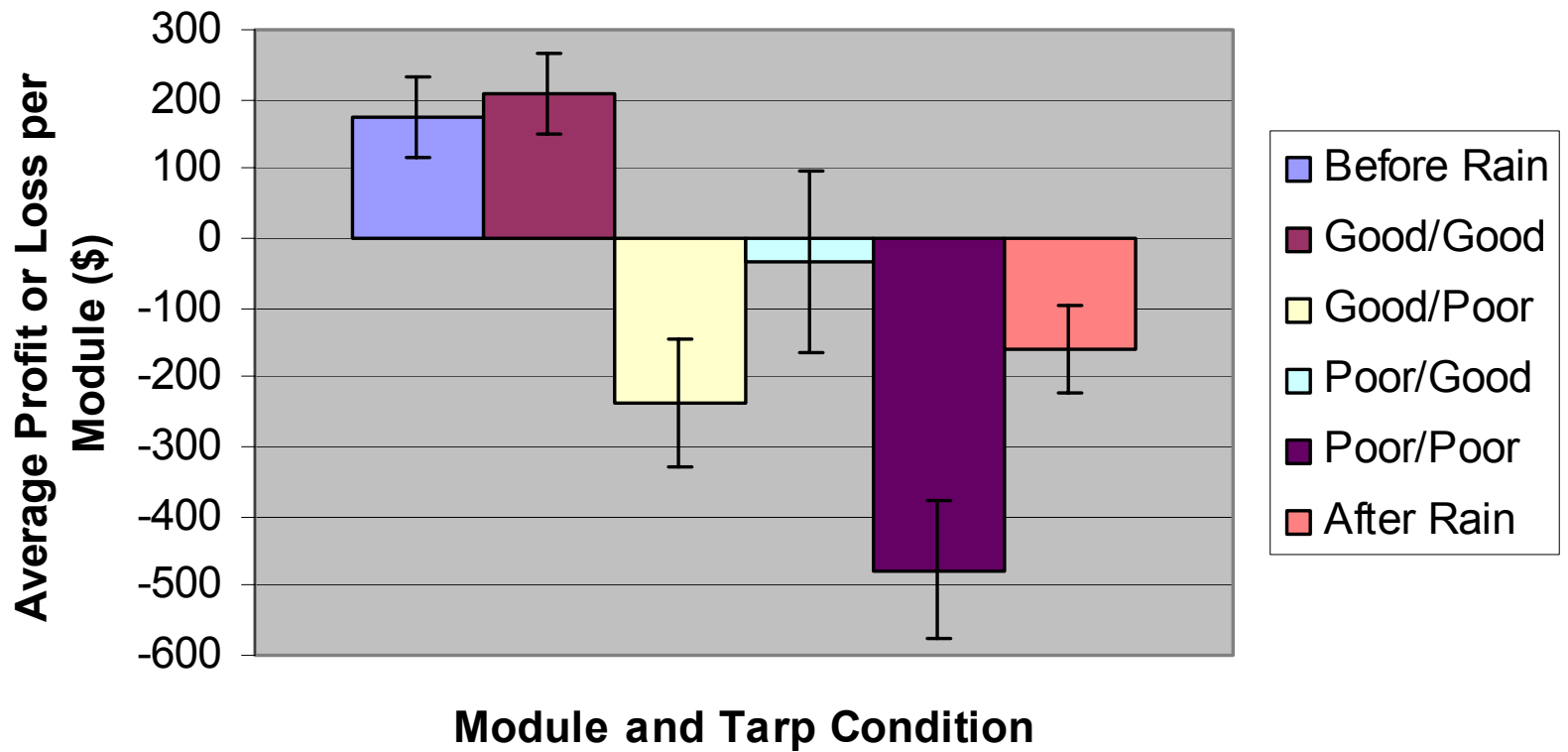
Bale Value of Poorly Formed Module with Good Tarp

Profit of \$27

Local Base Loan Value (0.5160)



Effect of Good vs. Poor Tarp





Effect of Module Shape and Tarp Condition on Turnout and Ginning Rate

	Turnout %	Ginning Rate (bph)
Good Module Good Tarp	34	42
Good Module Poor Tarp	27	29
Poor Module Good Tarp	31	34
Poor Module Poor Tarp	26	19



Watch for Contaminants in Seed Cotton



**THE NUMBER ONE CONTROLLABLE
QUALITY ISSUE IN COTTON IS
CONTAMINATION!**



(cm): 美標 10月份投入

TYPE	LOT	規格	進口檢量
SHV-AC	KTVA	76	4052/0000/2101
SHV-AC	KTVA	76	4052/0111/2101
SHV-AC	TK6021-2	76	4052/0127/2101
SHV-AC	ELA01-07	76	4052/0192/2101
SHV-AC	TK6021-3	76	4052/0127/2101
SHV-AC	JFA01-7006	76	
SHV-AC	ELA04-06	76	4052/0116/2101-1
SHV-AC	ELA07-07	76	4052/0116/2101-2
SHV-AC	TK6021/TK6021-2	76	4052/00184/7001
SHV-AC	JFA01-7005-42	76	4052/00285/1101
SHV-AC	JBU20	76	4052/00952/1101
EHOT	THAA	76	4052/00017/011
EHOT	ELA00-104	76	4052/00423/4101



Additional Information



Visit
Ginning Technology
Web Site

<http://msa.ars.usda.gov/gintech/>

