

# PhytoGen and WideStrike Update

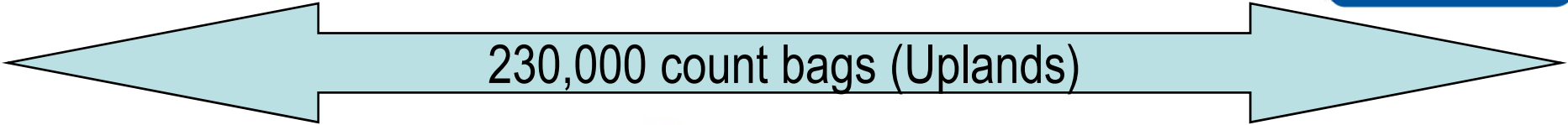
**Reed Parker**  
Cotton Development Specialist  
South Delta

**The right choice in the field and at the gin.**





# Eastern Offering



Conventional

Roundup Ready®

WideStrike™

WideStrike  
Roundup Ready

Roundup  
Ready® Flex

WideStrike™  
Roundup  
Ready® Flex



# Relative Maturities



Early			Late		
PHY 375 WRF	PHY 485 WRF	PHY 440 W			
PHY 370 WR					
PHY 315 RF	PHY 425 RF				
DP 444 BR	DP 445 BR	ST 4554 B2RF	FM 960 BR	ST 5599 BR	DP 555 BR

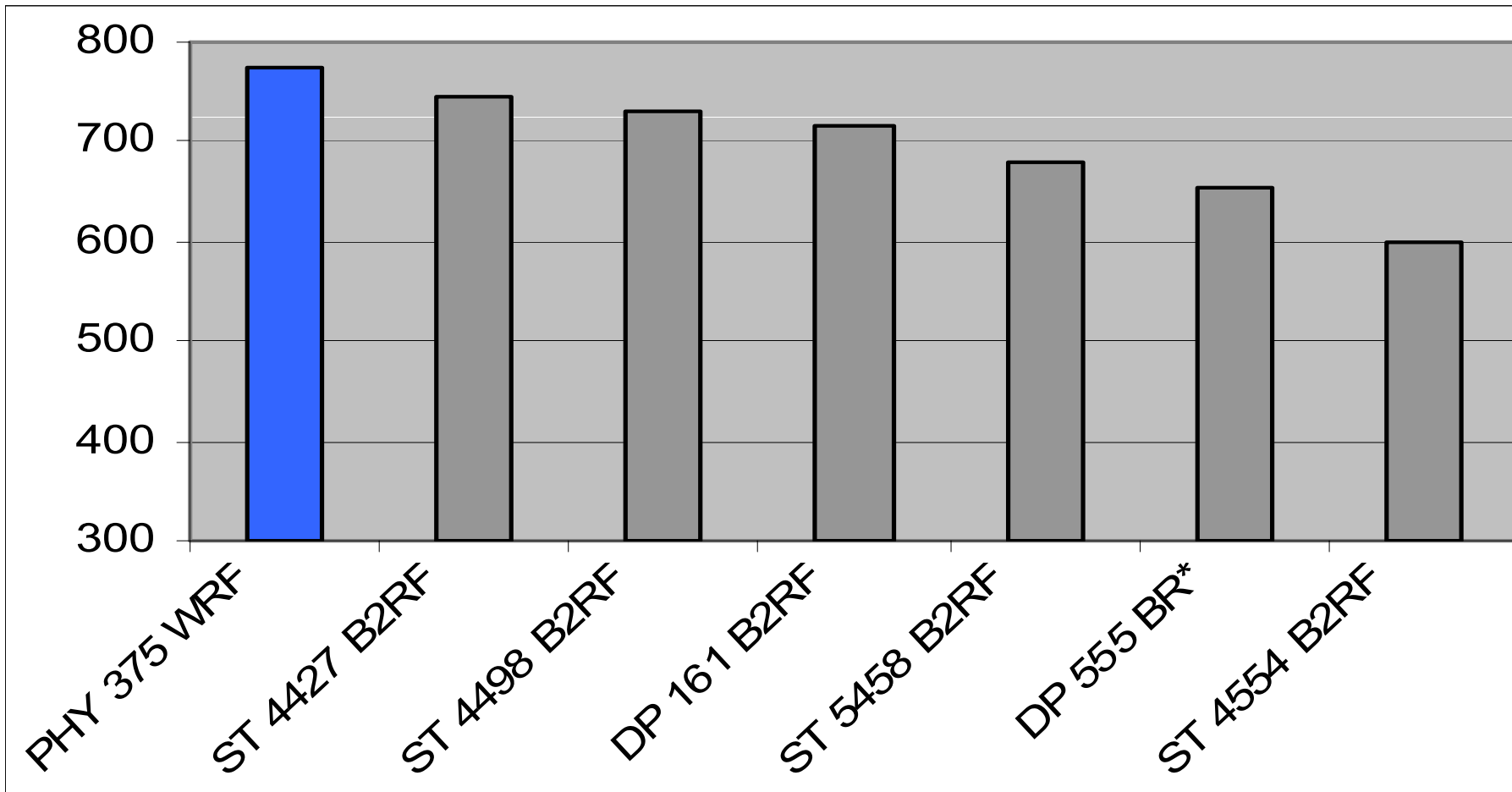
**These maturity estimates are based on available data and observations and are provided only to help gauge relative maturities.**

**Maturities can vary from year to year and field to field based on environmental conditions, soil types, management styles, etc.**

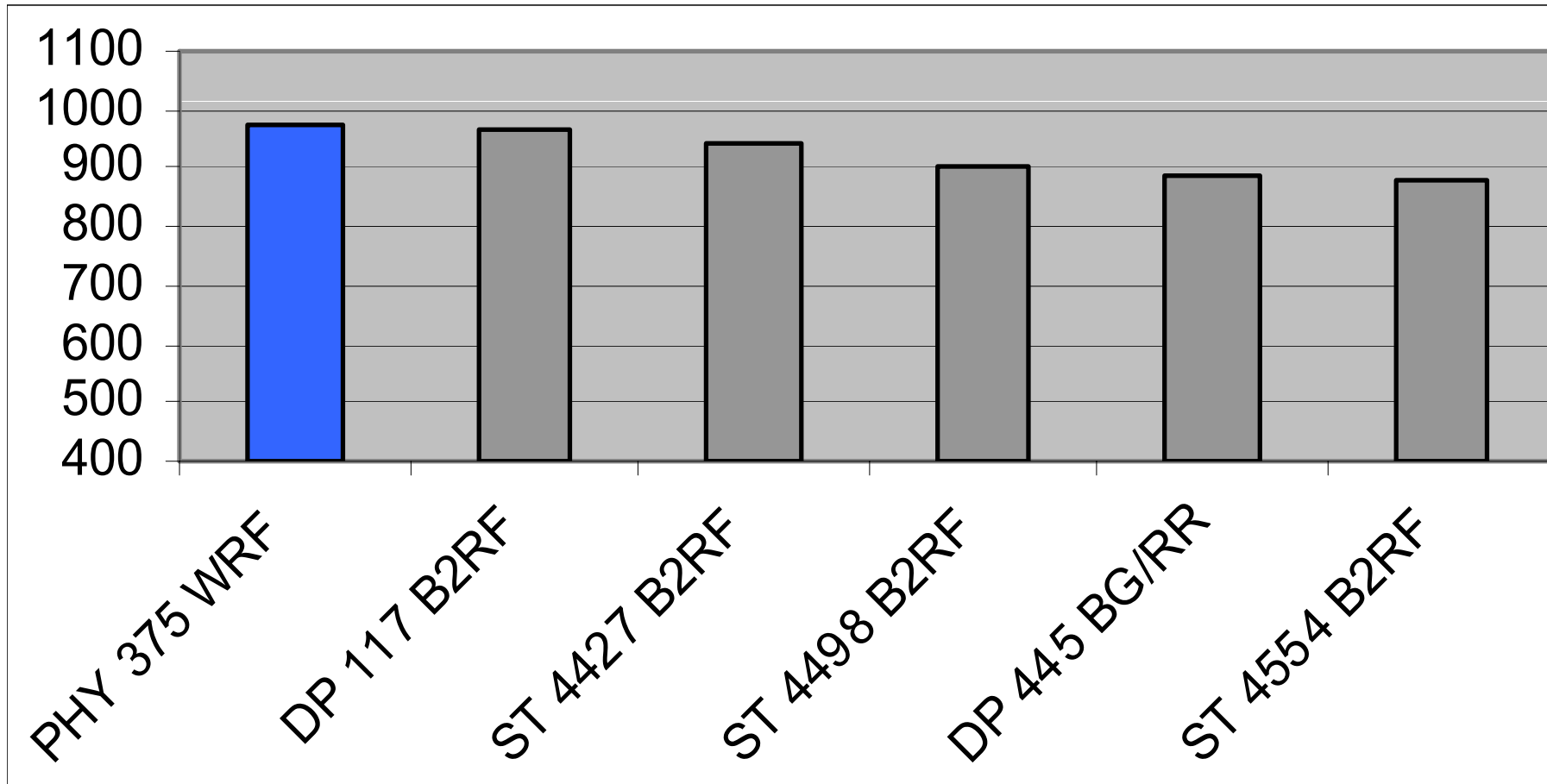
# Upland Early Maturity

- PHY 375 WRF positioning
  - Top yielding flex variety in Midsouth and Southeast
  - Excellent Quality
  - Consistency
  - Vigor/germination
  - Choice

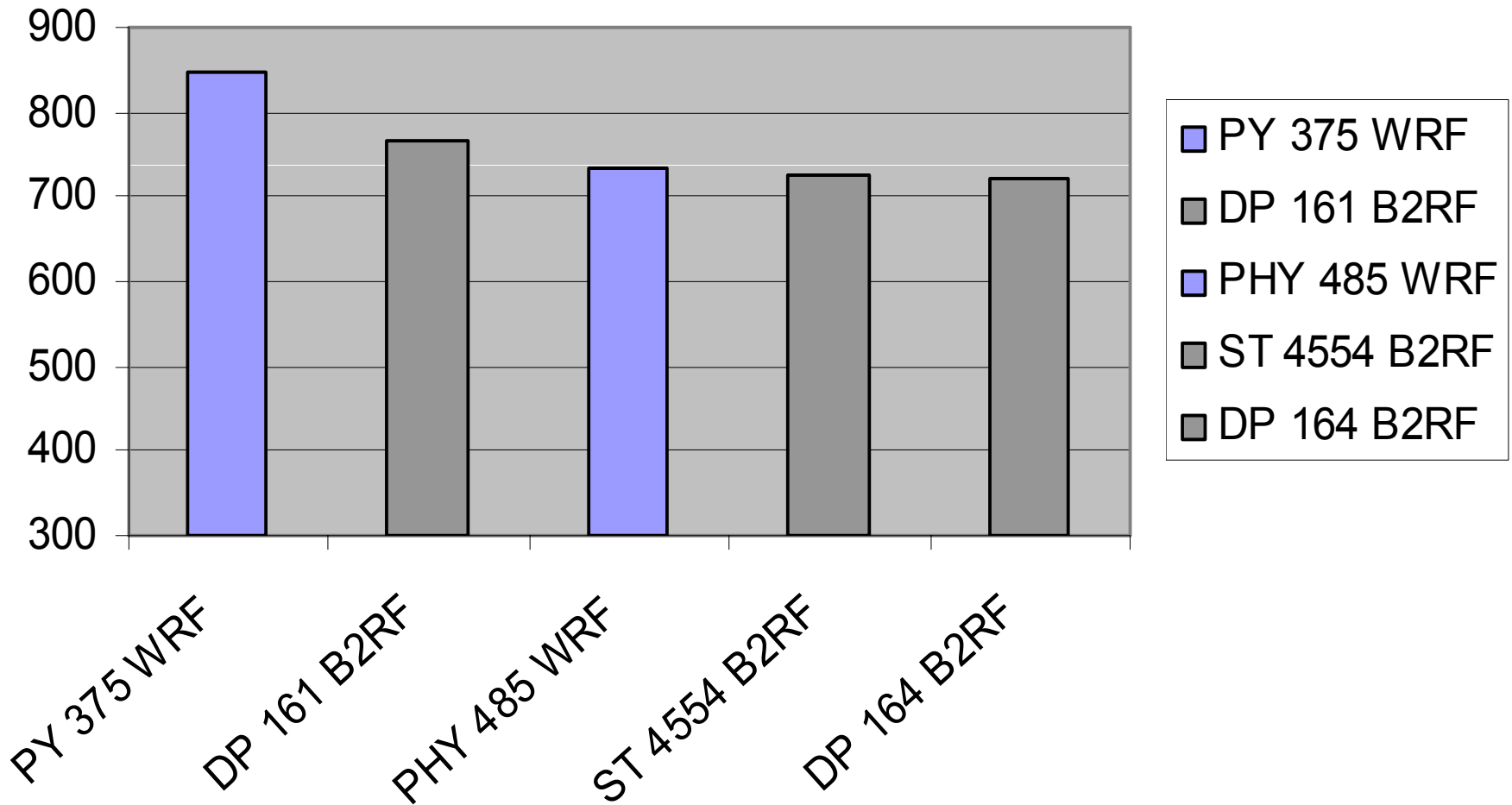
# Performance of 7 early maturing cotton varieties on Moreland clay loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2008.



# Performance of 6 early maturing cotton varieties on Commerce silt loam at the LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.



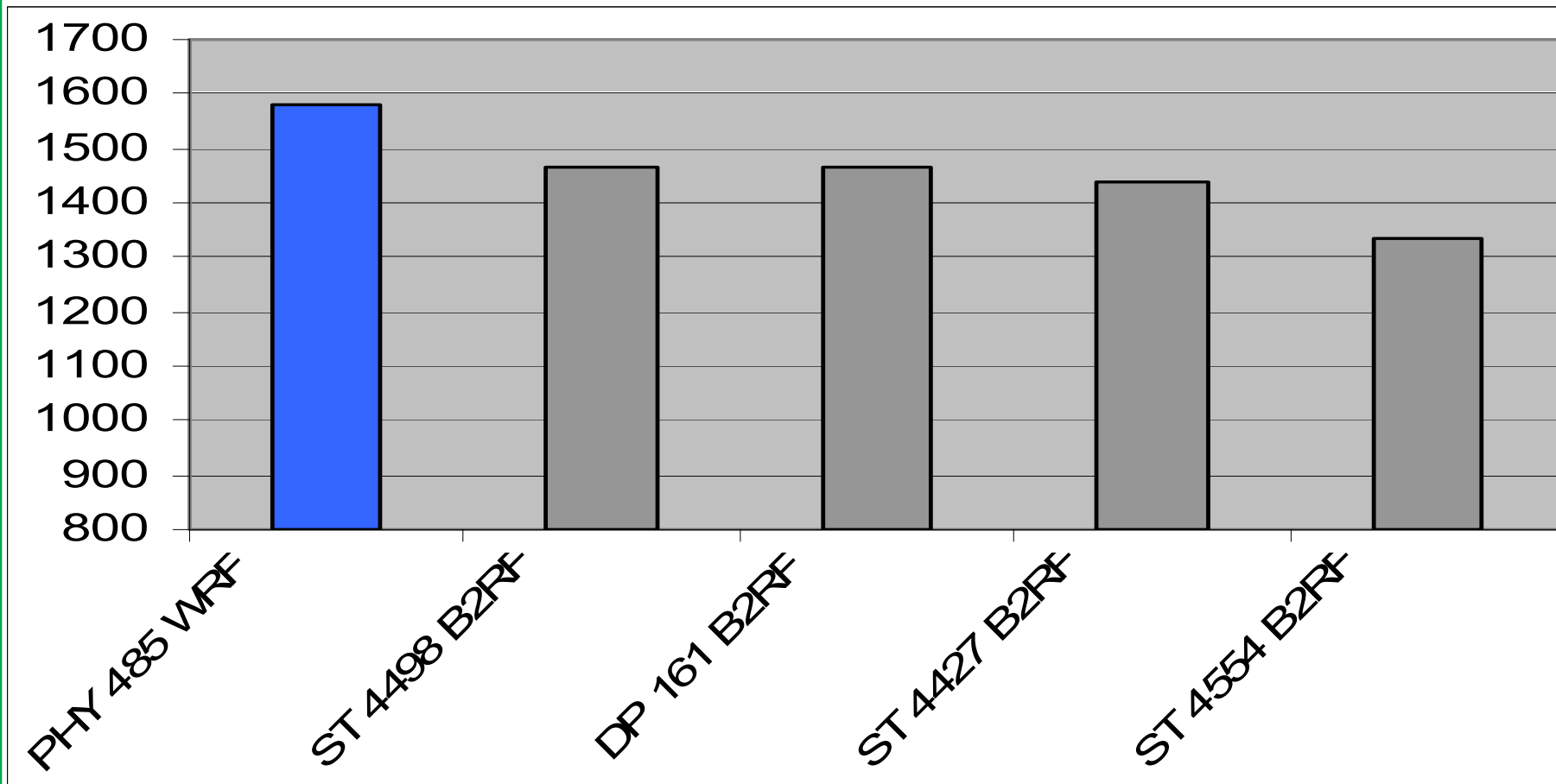
# 2008 Innovation Plot with Tru Goldman - Waterproof, LA



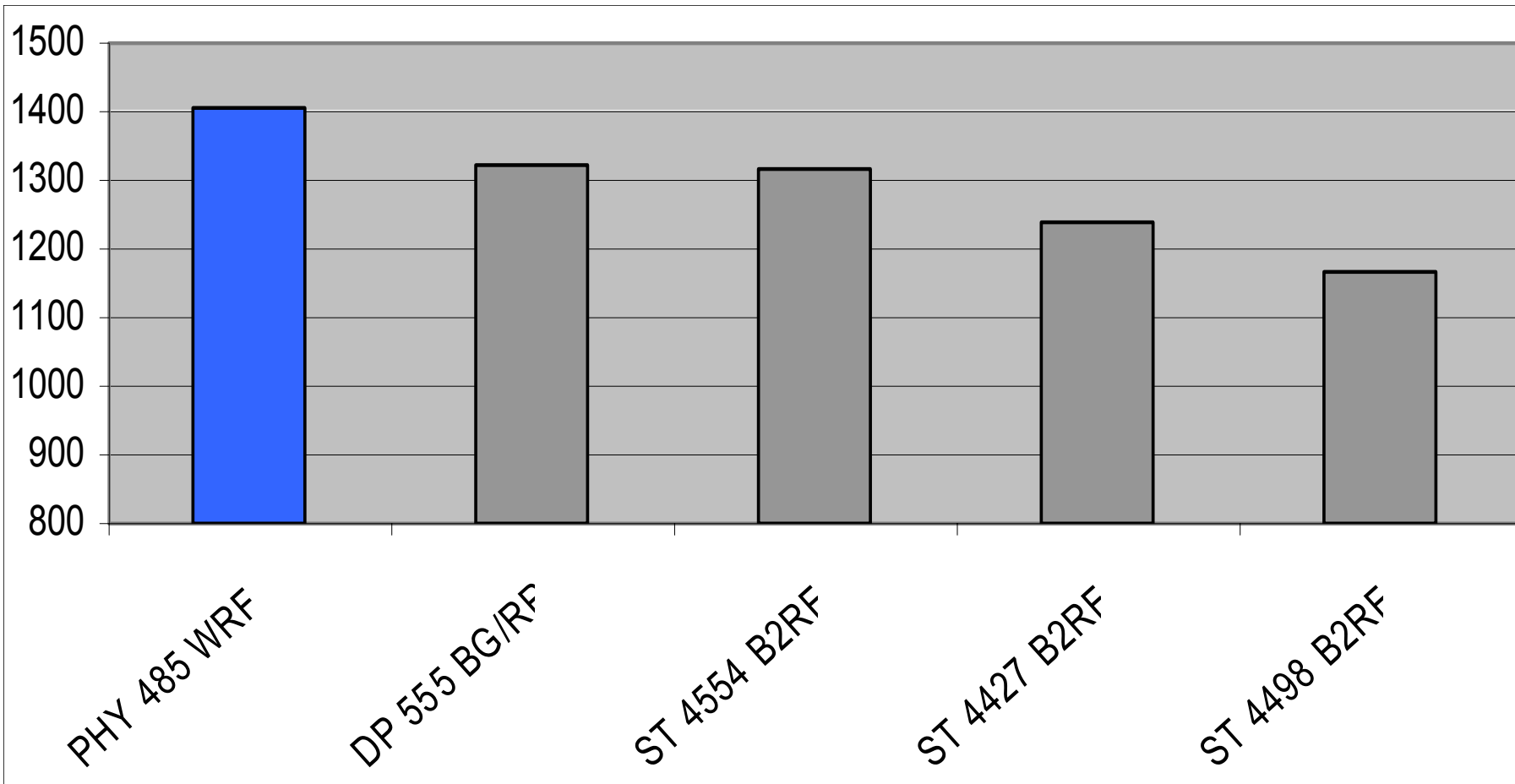
# Upland Early-Mid Maturity

- PHY 485 WRF positioning
  - Top yielding flex variety in Lower MidSouth and Southeast
  - Excellent Seedling Vigor
  - Excellent Fiber Characteristics
  - Stability
  - Choice

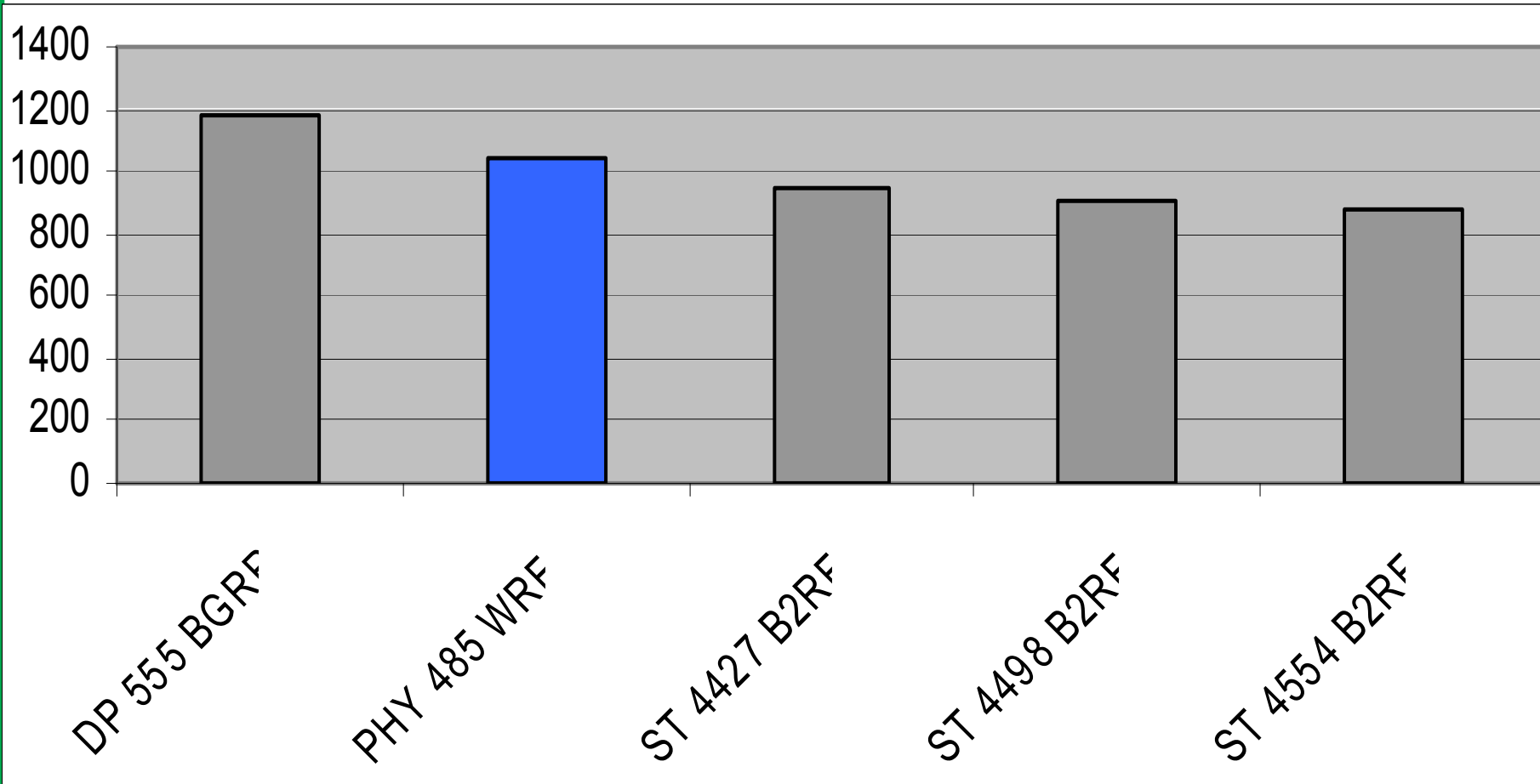
# Performance of 5 early maturing cotton varieties on Norwood silt loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2008.



# Performance of 5 early maturing cotton varieties on Sharkey clay at LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.



# Performance of 5 early maturing cotton varieties on Commerce silt loam at the LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.



# What is WideStrike?

	Cry1Ac	Cry1F
Bollgard <sup>®</sup> II	Cry1Ac	Cry2Ab
Bollgard <sup>®</sup>	Cry1Ac	

## DHT1 Introgression and Variety Development In Cotton

PHY470WR



Year	Introgression Stage	Comment	
2008	BC2F1	Continue introgression	
2009	BC3F1	Continue introgression	
2010	BC3F2	Identify homozygotes	
2011	BC3F3	Lines test	
2012	3A	Make Breeder Seed	
2013	3B/ 4	Make commercial seed/ fast track introduction if deregulation complete	
Products:	Germplasm	Target Geography	Traits
	300:DHT1	Early maturity/ Midsouth - Southeast	DHT1
	3003:DHT1	Early maturity/ Midsouth - Southeast	DHT1
	440W:DHT1	Early-Mid maturity/ Midsouth - Southeast	W:DHT1
	375WRF:DHT1	Early maturity/ Midsouth - Southeast	WRF:DHT1
	485WRF:DHT1	Early-Mid maturity/ Midsouth - Southeast	WRF:DHT1
	5065WRF:DHT1	Mid-Full maturity/ deep south/ Southeast	WRF:DHT1
	5068WRF:DHT1	Full maturity/ deep south/ Southeast	WRF:DHT1

↖  
**DHT1**

We will be prepared to introduce WideStrike/ RF/ DHT1/ Glufosinate across the Mid-South, Deep South, Southeast and Coastal Bend in 2013



# PowerFlex<sup>TM</sup>

**Herbicide**

<sup>TM</sup>Trademark of Dow AgroSciences LLC



## What is PowerFlex™?

- New grass and broadleaf herbicide for winter wheat
- Active ingredient: pyroxsulam
  - global field development since 1999
  - US field studies began in 2006
- Formulation: Dry granule (7.5% WG)
- Includes safener - “cloquintocet-mexyl”
- Use Rate: 3.5 oz / A
- Mode of action: ALS
- Spectrum: grass and broadleaf

## Packaging (Planned)

- Case contains:
  - 4 x 8.75 # jugs and a measuring device
  - At 3.5 oz / A - one case will treat 160 acres (40 acres per jug)



# PowerFlex – Grass weeds

Common name	Scientific Name	Fall Application	Spring Application
<b>Grass</b>			
blackgrass	<i>Alopecurus myosuroides</i>	C	C
brome, downy	<i>Bromus tectorum</i>	C	S
brome, Japanese	<i>Bromus japonicus</i>	C	C
brome, ripgut	<i>Bromus rigidum</i>	C	C
canarygrass, hood	<i>Phalaris paradoxa</i>	C	C
canarygrass, littleseed	<i>Phalaris minor</i>	C	C
cheat	<i>Bromus secalinus</i>	C	C
foxtail barley	<i>Hordeum jubatum</i>	S	S
foxtail, green	<i>Setaria viridis</i>		S
foxtail, yellow	<i>Pennisetum glaucum</i>		S
hairy chess	<i>Bromus commutatus</i>	C	C
quackgrass	<i>Elytrigia repens</i>	S	S
rescuegrass	<i>Bromus catharticus</i>	C	S
ryegrass, Italian	<i>Lolium multiflorum</i>	C	C
wild oat	<i>Avena fatua</i>	C	C
windgrass	<i>Apera spica-venti</i>	C	C

# PowerFlex – Broadleaf weeds

Common name	Scientific Name	Fall Application	Spring Application
<b>Broadleaf</b>			
buckwheat, wild	<i>Polygonum convolvulus</i>		S
bushy wallflower <sup>1</sup>	<i>Erysimum repandum</i>	C	C
canola, volunteer (wild turnip) <sup>2</sup>	<i>Brassica rapa</i>	C	C
chickweed, common	<i>Stellaria media</i>	C	C
chickweed, mouseear	<i>Cerastium vulgatum</i>	C	C
Carolina geranium	<i>Geranium carolinianum</i>	C	C
catchweed bedstraw (cleavers)	<i>Galium aparine</i>	S	C
coast fiddleneck	<i>Amsinckia intermedia</i>	C	C
Corn gromwell	<i>Lithospermum arvense</i>	C	C
<b>flixweed<sup>2</sup></b>	<i>Descurainia sophia</i>	C	C
hairy vetch	<i>Vicia villosa</i>	C	C
hempsnettles, common	<i>Galeopsis tetrahit</i>		C
<b>henbit<sup>2</sup></b>	<i>Lamium amplexicaule</i>	C	S
lambsquarters, common	<i>Chenopodium album</i>		C <sup>3</sup>
mustard, black	<i>Brassica nigra</i>	C	C
<b>mustard, blue<sup>2</sup></b>	<i>Chorispora tenella</i>	C	C
mustard, tumble <sup>1</sup>	<i>Sisymbrium altissimum</i>	C	C
<b>mustard, wild<sup>2</sup></b>	<i>Sinapis arvensis</i>	C	C
mustard, wormseed <sup>1</sup>	<i>Erysimum cheiranthoides</i>	C	C
pennycress, field <sup>2</sup>	<i>Thlaspi arvense</i>	C	C
<b>pinnate tansymustard<sup>1</sup></b>	<i>Descurainia pinnata</i>	C	C
pigweed, redroot	<i>Amaranthus retroflexus</i>		C
shepherdspurse <sup>1</sup>	<i>Capsella bursa-pastoris</i>	C	C
smallseed falseflax <sup>1</sup>	<i>Camelina microcarpa</i>	C	C
smartweed, annual	<i>Polygonum sp.</i>		C
thistle, Russian	<i>Salsola iberica</i>		C <sup>3</sup>
Virginia pepperweed	<i>Lepidium virginicum</i>	C	C

## PowerFlex™ in Winter Wheat - Summary

- **Fall or spring applications**
  - “The Power to be flexible”
- **Activity on key species**
  - **Grasses**
    - Downy brome (BROTE)
    - Cheat (BROSE)
    - Japanese brome (BROJA)
    - Italian ryegrass (LOLMU)
    - Wild oat (AVEFA)
  - **Broadleaves**
    - Flixweed (DESSO)
    - Tansy mustard (DESPI)
    - Blue mustard (COBTE)
    - Henbit (LAMAM)
- **Broad spectrum activity**
  - Control of major grass weeds
  - Limited need for broadleaf weed mixing partner
- **Superior rotation flexibility**
  - ≤ 9 months on all rotation crops
- **Easy to use formulation**
- **Anticipated US launch in fall of 2008 – hard red winter wheat only**

## PowerFlex Winter Wheat Herbicide

- Suggested Grower Price is \$13.50/acre or \$61.71/lb
- Published program is 12.5%
- Current plant back to soybeans is 5 months
  - We are working to get this down to 3 months
  - We will be confirming the research results we saw in 2008 in 2009.
  - Fully expect by late summer of 2009 we will have a 3 month plant back to soybeans and more than likely cotton.