SOUTHERN PFR PRACTICAL FARM RESEARCH®

Fungicide Study on Corn – 2008

Planted:	April 30, 2008	**Previous Crop:**	Corn
Harvested:	October 4, 2008	**Tillage:**	Disc / Chisel / Field Cultivator
Rows:	Three 30" rows	**Herbicide:**	3 qts. Degree Xtra
Soil Type:	Ragsdale Silt Loam		1 qt. Atrazine / 24 oz. Durango
Population:	34,000 seeds/A.	**Insecticide:**	6 oz. Artic

RAINFALL	
April	4.64 in.
May	6.36 in.
June	3.12 in.
July	8.90 in.
August	0.80 in.
Total	23.82 in.

Purpose: With more continuous corn acres being planted across Beck's marketing area, there is a growing interest in controlling foliar diseases that can severely limit yield in this rotation. This study was established to evaluate a foliar fungicide on the majority of the genetic families that Beck's offers in the southern marketing area. Applications were made at both full tassel and brown silk with a Hagie high-clearance sprayer using 15 gallons of water per acre. A fungicide/insecticide combination was also sprayed as an additional entry for each timing. Diseases commonly seen at the Southern PFR location include Gray Leaf Spot and Southern Leaf Blight along with occasional occurrences of Northern Leaf Blight, Southern and Common Rust, Anthracnose, and Diplodia ear rot.

Application	Brand	Test* Weight	Percent Moisture	Bushels* Per Acre	Yield Advantage vs. Untreated	Return on Investment^
HEADLINE – FULL TASSEL						
	BECK 5444VT3	57.2	16.1	208.3	+11.6	$33.11
	BECK 5555VT3	58.3	17.9	217.6	+23.4	$93.61
	BECK 5684VT3	57.2	17.1	221.1	-11.8	-$82.39
	BECK 5616VT3	58.6	16.3	203.6	-19.0	-$118.39
	BECK 7916VT3	57.8	20.0	256.9	+6.8	$10.61
	BECK 6722VT3	57.8	19.5	261.3	+10.2	$27.61
	BECK 6733HXR™**	60.4	18.5	222.8	+2.9	-$8.89
	AVERAGE	58.2	17.9	227.4	+3.4	-$6.39
HEADLINE / MUSTANG MAX – FULL TASSEL						
	BECK 5444VT3	56.9	15.9	225.7	+28.7	$115.11
	BECK 5555VT3	57.1	17.5	208.9	+14.7	$45.11
	BECK 5684VT3	58.0	17.1	214.8	-18.1	-$118.89
	BECK 5616VT3	59.1	17.0	233.9	+11.3	$28.11
	BECK 7916VT3	57.9	19.9	266.0	+15.9	$51.11
	BECK 6722VT3	57.6	20.7	262.7	+11.6	$29.61
	BECK 6733HXR™**	60.9	18.5	224.9	+5.0	-$3.39
	AVERAGE	58.2	18.1	233.8	+9.9	+$20.97
UNTREATED						
	BECK 5444VT3	55.6	14.9	197.0		
	BECK 5555VT3	57.3	17.3	194.2		
	BECK 5684VT3	57.6	17.1	232.9		
	BECK 5616VT3	59.0	17.3	222.6		
	BECK 7916VT3	57.3	19.4	250.1		
	BECK 6722VT3	57.4	19.5	251.1		
	BECK 6733HXR™**	61.2	18.3	219.9		
	AVERAGE	57.9	17.7	224.0		

SOUTHERN PFR PRACTICAL FARM RESEARCH®

Fungicide Study on Corn – Continued

Application	Brand	Test* Weight	Percent Moisture	Bushels* Per Acre	Yield Advantage vs. Untreated	Return on Investment^
HEADLINE – BROWN SILK						
	BECK 5444VT3	57.3	15.9	189.7	-7.3	-$59.89
	BECK 5555VT3	58.1	18.4	208.0	+13.8	$45.61
	BECK 5684VT3	58.1	17.4	232.7	-0.2	-$24.39
	BECK 5616VT3	58.4	17.4	206.4	-16.2	-$104.39
	BECK 7916VT3	57.0	20.1	257.3	+7.2	$12.61
	BECK 6722VT3	57.4	20.8	279.3	+28.2	$117.61
	BECK 6733HXR™**	61.0	18.2	203.0	-16.9	-$107.89
	AVERAGE	58.2	18.3	225.2	+1.2	-$17.25
HEADLINE / MUSTANG MAX – BROWN SILK						
	BECK 5444VT3	57.6	16.5	216.8	+19.8	$70.61
	BECK 5555VT3	57.5	18.6	218.7	+24.5	$94.11
	BECK 5684VT3	57.2	17.8	236.4	+3.5	-$10.89
	BECK 5616VT3	59.4	17.7	221.1	-1.5	-$35.89
	BECK 7916VT3	56.5	21.2	262.2	+12.1	$32.11
	BECK 6722VT3	57.5	20.8	229.7	-21.4	-$135.39
	BECK 6733HXR™**	60.9	18.8	195.5	-24.4	-$150.39
	AVERAGE	58.1	18.8	225.8	+1.8	-$19.39

*Bushels per acre and test weight corrected to 15% moisture.
**XL Brand distributed by Beck's Superior Hybrids, Inc.
^ROI based on $15.39/A. for 6 oz. of Headline, $5.00 for 2.5 oz. Mustang Max, $2.00 for additives and $6.00 for application. Corn price based on $5.00/Bu.

Summary: Although it appeared that disease pressure was light this summer, heavy rains and cooler than normal temperatures in July created an excellent environment for late season Northern Leaf Blight and rust infestations. As in previous years' testing, results varied significantly by genetic family. This year BECK 5444VT3, BECK 5555VT3, and BECK 6722VT3 showed the most consistent returns regardless of timing or product applied. BECK 7916VT3 also showed positive return on investment although historical data would show that most years the yield gain was not enough to pay for the investment. BECK 5684VT3, BECK 5616VT3, and BECK 6733HXR™** showed little to no response to the use of fungicide. The addition of Mustang Max to Headline applied at full tassel showed a 6.5 Bu./A. yield advantage over fungicide alone. Both the response to fungicide and the fungicide/insecticide combination applications were higher at full tassel compared to applications made at brown silk. Higher commodity prices have increased return on investment this year, but note that historical data from the Southern PFR farm suggests that those hybrids which are showing minimal return on investment will not pay for the use of foliar fungicides if market prices were to fall.