ROUNDUP READY COTTON VARIETY YIELDS AND CROP VALUE

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SUMMARY:

In an evaluation of twenty-one Roundup Ready cotton varieties planted April 4, 2005 on 30 inch rows, yields ranged from 781 - 1118 pounds/acre with an value before production costs (less picking, moduling and ginning) ranging from $268 - 421 per acre.

OBJECTIVES:

To determine the yield potential and value of Roundup Ready cotton varieties offered by area seed companies. This demonstration will assist the producers by evaluating all major hybrids, comparing them locally and then with coastal counties actively participating in the standardized demonstration.

MATERIALS and METHODS:

Twenty-one Roundup Ready cotton varieties were planted April 4, 2005 with FiberMax 800B2R chosen to be planted within the demonstration for field accuracy testing. The 21 varieties were replicated twice in this demonstration. Insecticide at planting included 1.5 oz/ac of Mustang Max. Herbicide included 1 qt/ac Caporal, 1 qt/ac of Grounded and 17 oz/ac of Dual Magnum. Two applications of 1 qt/ac Roundup Original Max was applied post emergence. Also applied was 1 qt/ac Roundup with hooded sprayers.

Fertilizer applied in the fall of 2004 was 23-50-15 plus 85-0-0 side-dressed during the growing season. Hybrids were planted at the rate of 52,000 plants/ac on a 30" row spacing with 8 rows per hybrid and 16 rows for the check variety. The previous crop planted was corn. Harvest was accomplished on August 25, 2005 with an 8 row cotton stripper harvesting about 1/4 acre per variety.

RESULTS and DISCUSSIONS:

About 14 inches of rain fell from January - August, 2005 but the mid to later part of the growing season was dry limiting yields. The yields replicated twice were averaged together and adjusted for field uniformity with accuracy testing. The check variety planted five times throughout the two replications was mistakenly labeled FM832B2R and was not

corrected until after the data was calculated and it was found to actually be FM800B2R, thus there are two FM800B2R's listed in the data and the second highest placing FM800B2R is an average of the check. They are the two highest yielding varieties within the demonstration and also the two with the highest net return. See Table 2. Lint valued from 46.10 - 51.70 cents per pound. Only two varieties had a mic below 5.1 and they were valued at 51.70 cents per pound.

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Table 1. Lint yields and performance factors for 21 Roundup Ready cotton varieties, Texas Cooperative Extension, Howard Book/Stephen Moreno Farm, Victoria County, Texas, 2005.

Variety	Turn-Out (%)	Yield [1] (lbs/A)	Length	Strength (g/tex)	Mic	UR %	Elong	Net Loan cents/lb
FM800B2R	42.1	1064.5	1.10	30.6	5.4	82.7	3.8	49.90
PSC480WR	41.6	1019.5	1.04	29.1	5.2	83.1	5.2	47.20
FM 800B2R	41.7	1118.2	1.12	30.5	5.3	83.1	3.9	50.45
DPL445BG/RR	43.5	997.5	1.06	29.9	5.1	82.3	5.3	48.90
STV4575BR (Cruiser)	43.3	959.9	1.02	28.1	5.5	81.8	5.5	46.10
STV5599BR	42.9	944.2	1.05	28.3	5.3	81.9	3.3	47.80
PSC310RR	43.1	936.5	1.01	28.3	5.2	80.9	4.5	46.10
DPL 543BG/RR	41.9	936.1	1.03	28.2	5.2	81.3	2.9	46.95
PSC470WR	42.2	935.1	1.03	29.8	5.2	83.6	5.6	47.55
DPL455BG/RR	43.6	923.0	1.06	29.2	4.7	81.8	3.4	51.70
DPL444BG/RR	42.8	919.9	1.05	27.4	4.6	82.1	3.8	51.70
STV 5242BR	41.5	919.3	1.03	26.7	5.2	82.2	3.9	46.95
DPL488BG/RR	42.6	883.8	1.09	29.4	5.1	81.6	3.7	50.05
PSC410RR	40.9	871.1	1.02	29.7	5.2	82.4	4.6	47.20
FM960B2R	41.1	865.2	1.05	27.9	5.7	81.2	2.5	47.80
DPL555BG/RR	43.2	856.3	1.02	26.6	5.2	79.4	3.0	46.55
FM989BR	40.5	849.6	1.03	29.0	5.2	80.7	3.8	46.95
FM960RR	42.2	840.3	1.05	30.0	5.2	81.6	2.9	48.90
FM800RR	41.2	824.4	1.06	31.2	5.4	83.0	3.7	48.50
FM991B2R	39.9	823.8	1.06	28.8	5.3	81.0	3.1	47.80
FM989BR (Gaucho)	42.2	781.2	1.02	28.3	5.1	80.9	3.0	46.95
Average	42.1	917.6	1.05	28.9	5.2	81.9	3.8	48.19

[1] Plots were stripper-harvested taking 8 rows from 575 to 585 in length (.267" acre). Lint yields are adjusted using accuracy testing to compensate for field variation.

Table 2. Lint yields and cotton value for 21 Roundup Ready cotton varieties, Texas Cooperative Extension, Howard Book/Stephen Moreno Farm, Victoria County, Texas, 2005.

Variety	*Lint Yield Lbs/Acre*	*Turnout %*	*Estimated Seed Yield Lbs/Acre*	*Lint Value $/Acre*	*Seed Value $/Acre*	*Gross Return $/Acre*	*Picking & Moduling Cost $/Acre*	*Ginning Cost $/Acre*	*Net Return $/Acre*
FM800B2R	1064.5	42.1	1703	531	77	608	95	117	396
PSC480WR	1019.5	41.6	1631	481	73	554	92	112	350
FM 800B2R	1118.2	41.7	1789	564	81	645	101	123	421
DPL445BG/RR	997.5	43.5	1596	488	72	560	86	110	364
STV4575BR (Cruiser)	959.9	43.3	1536	443	69	512	83	106	323
STV5599BR	944.2	42.9	1511	451	68	519	83	104	332
PSC310RR	936.5	43.1	1498	432	67	499	81	103	315
DPL 543BG/RR	936.1	41.9	1498	439	67	506	84	103	319
PSC470WR	935.1	42.2	1496	445	67	512	83	103	326
DPL455BG/RR	923.0	43.6	1477	477	66	543	79	102	362
DPL444BG/RR	919.9	42.8	1472	476	66	542	81	101	360
STV 5242BR	919.3	41.5	1471	432	66	498	83	101	314
DPL488BG/RR	883.8	42.6	1414	442	64	506	78	97	331
PSC410RR	871.1	40.9	1394	411	63	474	80	96	298
FM960B2R	865.2	41.1	1384	414	62	476	79	95	302
DPL555BG/RR	856.3	43.2	1370	399	62	461	74	94	293
FM989BR	849.6	40.5	1359	399	61	460	79	93	288
FM960RR	840.3	42.2	1344	411	60	471	75	92	304
FM800RR	824.4	41.2	1319	400	59	459	75	91	293
FM991B2R	823.8	39.9	1318	394	59	453	77	91	285
FM989BR (Gaucho)	781.2	42.2	1250	367	56	423	69	86	268

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