

EVALUATION OF ROUNDUP READY CORN HYBRID YIELDS AND CROP VALUE

Clay Ohrt, Cooperators, (2009)

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SUMMARY:

Ten Roundup Ready[®] corn hybrids planted in a replicated trial on March 19, 2009 yielded from 37 – 47.6 bushels per acre. At the 2009 average corn harvest market price of \$3.45/bushel, the corn hybrids ranged in value from \$127.57 – 164.31 per acre. Selecting from the top hybrid is always important and although there was a 10.7 bu/ac difference in yield resulting in a \$36.74 per acre difference there was no statistical difference between the hybrids within this trial. All hybrids performed equally well under the severe drought stress.

OBJECTIVES:

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

MATERIALS and METHODS:

Ten Roundup Ready corn hybrids were planted on March 19, 2009 and replicated 4 times within the plot. Fertilizer included 350 lbs/ac of 22-6-2 was applied in late January 2009. No herbicide or insecticide was applied to this plot.

The seeding rate was set at 21,600 seeds per acre planted 2½” deep on 38 inch rows. Harvested was on July 22, 2009 with a commercial combine. Yields were adjusted to 15 percent moisture.

RESULTS and DISCUSSIONS:

The crop grew well but with minimal moisture as the spring season progressed. As summer commenced, field moisture was nearly nil with this crop and all area crops matured early due to lack of soil moisture. Plant height was reduced and yields at harvest were low due to the drought and varied from 37 – 47.6 bushels/acre. See Table 1 for yield results and notes on harvest.

ACKNOWLEDGMENTS:

Appreciation is expressed to contributing seed companies and to Clay Ohrt, cooperater, Stephen Biles who helped coordinate planting of this plot, and Dr. Dan Fromme who statistically analyzed the data.

DISCLAIMER CLAUSE:

Trade names of commercial products used in this report are included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.

Table 1. Evaluation of ten Roundup Ready corn hybrids. Clay Ohrt, Cooperator, Victoria County, TX 2009.

Seed Company	Hybrid	Value-Added Trait	Moisture (%) ^{1/}	Bu. Wt. (lbs.) ^{1/}	Bu./Acre ^{1/2/}	Crop Value \$/A ^{3/}
CropLan	7505VT3	VT3	10.33 bc	53.5 a	47.6 a	\$164.31 a
Golden Acres	27Z07	VT3	9.33 c	51.0 d	43.7 a	150.68 a
Northrup King	N77P-3000GT	GT/CB/LL/RW	10.18 bc	53.3 ab	41.9 a	144.56 a
Dyna-Gro	58V24	VT3	10.20 bc	51.3 cd	41.9 a	144.39 a
Integra	INT9673	VT3	9.68 c	52.3 bc	39.9 a	137.74 a
DeKalb	DKC67-87	RR2/YGCB	11.03 ab	53.0 ab	39.7 a	136.88 a
Belle	1545	VT3	9.75 c	51.5 cd	39.3 a	135.59 a
Triumph	1802	VT3	11.58 a	52.8 ab	38.6 a	133.17 a
B-H Genetics	8895VT3	VT3	9.95 bc	51.0 d	37.9 a	130.76 a
Terral	TV25TR59	VT3	11.65 a	53.0 ab	37.0 a	127.57 a
Mean		---	10.37	52.3	40.8	\$140.56
<i>P>F</i>		---	<i>0.0010</i>	<i>0.0001</i>	<i>0.2891</i>	<i>0.2897</i>
<i>LSD (P=0.05)</i>		---	<i>1.081</i>	<i>1.08</i>	<i>NS</i>	<i>NS</i>
<i>Standard Deviation</i>		---	<i>0.745</i>	<i>0.74</i>	<i>5.55</i>	<i>19.1721</i>
<i>CV%</i>		---	<i>7.19</i>	<i>1.42</i>	<i>13.63</i>	<i>13.64</i>

^{1/} Means in a column followed by the same letter are not significantly different by ANOVA.

^{2/} Adjusted to 15% moisture.

^{3/} Crop value based on \$3.45/bushel crop average during harvest season.