

Corn Grain Hybrid Tests in Tennessee

2006

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Variety test results are posted on UT's website at:

**<http://varietytrials.tennessee.edu/>
and
www.utcrops.com**

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County Standard Corn Tests

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<u>County</u>	<u>Agent</u>	<u>Producer</u>
<u>Early Season Corn Hybrid Test</u>		
Ballard, KY	Bob Middleton	JAP Farms
Coffee	Dean Northcutt	L.A. Teal
Dyer	Tim Campbell	Carl & Marvin Schultz
Gibson	Philip Shelby	Denton Clay Parkins
Giles	Kevin Rose	Pat Sulcer
Henry	Ken Goddard	Tosh Farms
Lake	Greg Allen	Jeremy Hopper
Lauderdale	Jerry Parker	Mike Escue
Montgomery	Rusty Evans	James & Bob Menees
Obion	Tim Smith	Scott & David Wisener
UT Martin	Dr. Richard Joost	Charlie Rowlett & Reese Blair
Weakley	Jeff Lannom	David Oliver
<u>Medium Season Corn Hybrid Test</u>		
Coffee	Dean Northcutt	L.A. Teal
Dyer	Tim Campbell	Carl & Marvin Schultz
Fulton, KY	Ben Mullins & Cam Kenimer	Johnson Linder
Gibson	Philip Shelby	Denton Clay Parkins
Hardin	Marcus McLemore	Karl Forsbach
Henry	Ken Goddard	Tosh Farms
Lake	Greg Allen	Terry Petty
Lauderdale	Jerry Parker	Phillip Smith
Obion	Tim Smith	Elwin Tanner
Robertson	Paul Hart	Freddie Edwards
UT Martin	Dr. Richard Joost	Charlie Rowlett & Reese Blair
Weakley	Jeff Lannom	David Scarbrough
<u>Early & Medium Season Bt Corn Hybrid Test</u>		
Coffee	Dean Northcutt	L.A. Teal
Crockett	Richard Buntin	Steve Bailey
Dyer	Tim Campbell	Carl & Marvin Schultz
Gibson	Philip Shelby	Denton Clay Parkins
Hardin	Marcus McLemore	Karl Forsbach
Henry	Ken Goddard	Tosh Farms
Humphreys	Scott Reese	Steve May
Lake	Greg Allen	Jeremy Hopper
Lauderdale	Jerry Parker	Mike Escue
Obion	Tim Smith	Ty & John McConnell
Weakley	Jeff Lannom	Bob Grooms

Full Season & Full Season Bt Corn Hybrid Test

Ballard, KY	Bob Middleton	Larry & Tyler Powell
Cannon	Bruce Steelman	Jerry Powell
Coffee	Dean Northcutt	L.A. Teal
Dyer	Tim Campbell	Carl & Marvin Schultz
Fulton, KY	Ben Mullins & Cam Kenimer	Johnson Linder
Gibson	Philip Shelby	Denton Clay Parkins
Hardin	Marcus McLemore	Karl Forsbach
Henderson	Ron Blair	Billy Hatchett
Henry	Ken Goddard	Tosh Farms
Lake	Greg Allen	Jeremy Hopper
Res & Ed Center at Milan	Dr. Angela Thompson	Dr. Blake Brown
Weakley	Jeff Lannom	David Scarbrough

White Corn Hybrid Test

Carroll	Steve Burgess	Ricky & Robert Chandler
Coffee	Dean Northcutt	L. A. Teal
Gibson	Phillip Shelby	Andy & Charles King
Henry (Tosh Farm)	Ken Goddard	Jimmy Tosh
Henry (Wilson Farm)	Ken Goddard	David Wilson
Lake	Greg Allen	Jeremy Hopper
Lincoln	David Qualls	Danny & Danny Good, Jr.
Marion	John Wilson	Gilliam Farm
Weakley	Jeff Lannom	Scotty Ogg

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CORN GRAIN VARIETY TESTS IN TENNESSEE

EXPERIMENT STATION AND COUNTY STANDARD TESTS

2006

Experimental Procedures:

Research and Education Center Tests: All corn hybrid trials were conducted in each of the physiographic regions of the state. Tests were conducted at the Ames Plantation (Grand Junction) and at the Highland Rim (Springfield), East TN (Knoxville), Middle TN (Spring Hill), and Milan (Milan) Research and Education Centers. The early-season test was also conducted at the Plateau Research and Education Center in Crossville. Duplicate plantings of the early-, medium- and full-season tests were made at the Milan and Middle Tennessee Research and Education Centers for performance testing with and without irrigation.

The corn hybrids were placed in either the **early-, medium-, or full-season tests** based on the maturity as reported by the company providing the hybrid. The early season test contained hybrids that had maturity <114 days after planting (DAP); the medium season test contained hybrids with maturity of 114-116 DAP; and the full season test contained hybrids with maturities >116 DAP. All corn hybrid trials were over-planted and thinned to a uniform population per acre at each location (see Table 1). Population varied with location but attempts were made to make the population the same for all hybrids at a given location. Tests were conducted using 30 inch row spacing. The tests were fertilized with 150 pounds of nitrogen per acre. A portion of the nitrogen was applied prior to seeding and the remainder was applied as a side-dress. The plot size was two rows, 30 feet in length. Plots were replicated three times at each location. An incomplete block design was used at each location in order to reduce the within replication variation.

County Standard Tests: The County Standard Corn Tests were conducted in several counties (9 to 13) in Tennessee, and a few in West Kentucky. The number of counties depended on the test. The County Standard Tests were divided into **early-, early & medium Bt-, medium-, full season Bt & non Bt-** (same DAP criteria as listed above), and **white corn tests**. Each hybrid was evaluated in a large strip-plot at each location, thus **each county test was considered as one replication of the test** in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Growing Season: The 2006 season was characterized by hot, dry conditions throughout most of the growing season, particularly in middle and east TN. The northwest counties of the State experienced very timely amounts of rain throughout the growing season, thus corn yields were very good in that portion of the State. The NW counties produce a large portion of the State's corn crop. Cooler temperatures and timely, widespread rainfall occurred across the State in late August and early September. The State corn grain yield average is projected to be better than average at 125 bu/a. This figure is 5 bu/a below 2005 yields.

Interpretation of Data:

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first. **All yields presented have been adjusted to 15.5% moisture.** At the bottom of the tables, **LSD** values stand for **Least Significant Difference**. The mean yields of any two

varieties being compared must differ by at least the amount shown to be considered different in yielding ability at the 5% level of probability of significance. For example, given that the LSD for a test is 8.0 bu/a and the mean yield of Hybrid A was 110 bu/a and the mean yield of Hybrid B was 115 bu/a, then the two hybrids are not statistically different in yield because the difference of 5 bu/a is less than the minimum of 8 bu/a required for them to be significant. Similarly, if the average yield of Hybrid C was 123 bu/a then it is significantly higher yielding than both Hybrid B ($123 - 115 = 8$ bu/a = LSD of 8) and Hybrid A ($123 - 110 = 13$ bu/a > LSD of 8).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the square root of error mean square is of the overall test mean yield at that location. For example, a C.V. of 10% indicates that the size of the error variation is about 10% of the size of the test mean. Similarly, a C.V. of 30% indicates that the size of the error variation is nearly one-third as large as the test mean. A goal in conducting each yield test is to keep the C.V. as low as possible, preferably below 20 percent.

RESULTS

Yield and Agronomic Traits. One hundred corn hybrids were evaluated in the 2006 **Research and Education Center (REC)** tests in Tennessee. There were 38 hybrids in the early- (Tables 2-7), 39 in the medium- (Tables 8-13), and 23 hybrids in the full-season (Tables 14-19). The 100 hybrids represent 22 different brands (Table 28). Common to both the REC and the **County Standard (CS)** tests were 11 early-season, 15 medium-season, and five full-season hybrids. The CS tests consisted of an early-season test (16 hybrids at 12 locations, Table 20), a early to medium-season Bt test (24 hybrids at 11 locations, Table 21), a medium-season test (18 hybrids at 12 locations, Table 22), a full-season test containing Bt and non-Bt hybrids (14 hybrids at 13 locations, Table 23), and a test of white grain hybrids (10 hybrids at 9 locations, Table 24) for a total of 82 hybrids. In addition to Tennessee counties, the County Standard full-season test involved Ballard and Fulton counties in Western Kentucky. In the REC tests, the white grain, Bt, RR, CL and stacked-trait hybrids were not placed in separate tests, but were placed in the maturity test for which they fit. Fifty-six of the 100 hybrids in the 2006 REC tests have a Bt gene for European Corn Borer resistance (denoted by Bt, YG, CB, YGCB); 2 have a gene for Corn Root Worm resistance (denoted by YGRW, RW); 49 have a Roundup Ready gene for tolerance to glyphosate herbicide (denoted by R, RR); four have a gene for tolerance to Liberty (glufosinate) herbicide (denoted by LL); and 36 have “stacked” genes (primarily, RR and Bt).

Irrigated vs. Non-irrigated Yields. Duplicate tests were conducted at the Milan and Middle TN Research and Education Centers with and without irrigation. In a year of somewhat less than favorable moisture conditions during critical stages of the growing season, the average differences in yields across hybrids receiving irrigation versus non-irrigation at Milan in 2006 were: 48 bu/a for early-season hybrids (Table 2), 38 bu/a for medium-season hybrids (Table 8) and 45 bu/a for full-season hybrids (Table 14). The differences in yield between irrigated and non-irrigated plots at the Middle TN station (very hot, dry growing season) were 56, 91, and 56 bu/a for the early-, medium-, and full-season tests, respectively (Tables 2, 8, and 14).

Table 1. Location information from research and education centers where the corn hybrid tests were conducted in Tennessee in 2006.

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Early Season Corn Hybrids					
East Tennessee Plateau	Knoxville	April 17, 2006	September 18, 2006	28,459	Sequatchie Silt Loam
Highland Rim	Crossville	May 15, 2006	October 23, 2006	27,878	Hendon Silt Loam
Middle TN (irrigated)	Springfield	April 28, 2006	September 27, 2006	27,298	Sango Silt Loam
Middle TN (non-irrigated)	Spring Hill	April 25, 2006	September 19, 2006	27,878	Maury Silt Loam
Milan (irrigated)	" "	April 25, 2006	September 21, 2006	27,878	Maury Silt Loam
" (non-irrigated)	Milan	May 8, 2006	September 27, 2006	24,103	Loring, Memphis Silt Loam
Ames Plantation	"	May 9, 2006	September 28, 2006	24,394	Grenada, Routon Silt Loam
	Grand Junction	April 26, 2006	September 27, 2006	27,298	Lexington Silt Loam

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Medium Season Corn Hybrids					
East Tennessee	Knoxville	April 17, 2006	September 18, 2006	28,459	Sequatchie Silt Loam
Highland Rim	Springfield	April 28, 2006	September 29, 2006	27,298	Sango Silt Loam
Middle TN (irrigated)	Spring Hill	April 25, 2006	September 19, 2006	27,878	Maury Silt Loam
Middle TN (non-irrigated)	" "	April 25, 2006	September 21, 2006	27,878	Maury Silt Loam
Milan (irrigated)	Milan	May 9, 2006	September 27, 2006	24,103	Grenada, Loring, Memphis Silt
" (non-irrigated)	"	May 9, 2006	September 29, 2006	24,394	Grenada, Routon Silt Loam
Ames Plantation	Grand Junction	April 26, 2006	September 27, 2006	27,298	Lexington Silt Loam

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Full Season Corn Hybrids					
East Tennessee	Knoxville	April 17, 2006	September 27, 2006	28,459	Sequatchie Silt Loam
Highland Rim	Springfield	April 28, 2006	October 2, 2006	27,298	Sango Silt Loam
Middle TN (irrigated)	Spring Hill	April 25, 2006	September 19, 2006	27,878	Maury Silt Loam
Middle TN (non-irrigated)	" "	April 25, 2006	September 21, 2006	27,878	Maury Silt Loam
Milan (irrigated)	Milan	May 9, 2006	September 29, 2006	24,103	Grenada Silt Loam
" (non-irrigated)	"	May 9, 2006	September 29, 2006	24,394	Grenada, Routon Silt Loam
Ames Plantation	Grand Junction	April 26, 2006	September 27, 2006	27,298	Lexington Silt Loam

Table 2. Mean yields of 38 early-season (<114 DAP) corn hybrids evaluated in eight environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†]	Spring Hill				Milan		Ames	
		± Std Err (n=8)	Knoxville	Crossville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
		-----bu/a-----								
Asgrow	RX715 (RR2/YGCB)	159 ± 3	195	186	145	89	151	200	140	165
Trisler Seed Farms	T-5175 CB	158 ± 3	188	195	143	73	171	199	144	151
DeKalb	DKC61-45 (RR2/YGCB)	152 ± 3	198	172	117	60	148	210	143	169
NK Brand	N 70-T9 (LL/YG)	152 ± 3	186	196	125	69	174	195	150	119
Golden Harvest	Laser L-9H07 Bt/RR	151 ± 3	199	194	147	66	156	192	137	122
NK Brand	N68-B8 (LL/CB)	151 ± 3	197	188	126	68	154	187	143	148
AgVenture	7801 R2CB	151 ± 3	193	191	143	56	154	184	158	132
Trisler Seed Farms	T-5338 CB	151 ± 3	190	189	139	93	145	177	144	134
Pioneer	33N56	151 ± 3	201	174	157	86	164	179	109	137
Trisler Seed Farms	T-5337 CB	151 ± 3	180	201	134	80	146	177	165	126
Agrigold	A6455Bt	150 ± 3	195	190	136	59	146	194	141	142
Dyna-Gro	57G68 (RR/YGRW)	150 ± 3	199	184	131	95	170	181	130	113
FFR	736 Bt	150 ± 3	184	177	125	70	160	198	143	140
DeKalb	DKC63-46 (RR2/YGCB)	149 ± 3	190	179	136	86	146	191	152	110
Dyna-Gro	57B90 (RR/YGCB/YGRW)	148 ± 3	181	187	140	77	155	187	148	113
Dyna-Gro	57F67 (Bt)	148 ± 3	193	192	134	70	155	182	147	111
Dyna-Gro	57P69 (RR/Bt)	148 ± 3	200	199	125	63	166	189	136	106
Vigoro	V 52YR52 (RR2/YGCB)	147 ± 3	189	190	125	67	160	174	148	128
NK Brand	N 65-M7	147 ± 3	202	199	139	75	158	156	128	121
Vigoro	V 52Y61 (YGCB)	147 ± 3	161	177	126	74	154	179	151	153
Crow's	4981 R	147 ± 3	194	183	143	81	150	162	120	141
Trisler Seed Farms	T-5245 CB	145 ± 4 §	178	194	149	82	159	161	113	.
Golden Harvest	H-9107	145 ± 3	188	189	131	83	137	183	122	125
AgVenture	AV 8109 R2CB	144 ± 4 §	166	175	129	91	152	167	146	.
LG Seeds	LG 2615	144 ± 3	188	184	127	94	143	184	124	107
Trisler Seed Farms	T-5255 RRCB	144 ± 3	185	195	109	55	162	187	132	126
Dyna-Gro	57K14 (RR)	143 ± 3	186	189	126	79	157	173	107	128
Agrigold	A6474Bt	143 ± 4 §	190	176	127	96	124	182	119	.
NK Brand	N71-R7	142 ± 4 §	166	172	139	98	141	166	126	.
Agrigold	A6522	142 ± 3	188	179	139	94	145	172	115	102
Golden Harvest	H-9251 (LL/CB)	142 ± 3	189	208	112	58	141	188	115	124
Golden Harvest	H-8920	138 ± 4 §	174	182	140	100	122	158	107	.
FFR	690	137 ± 3	171	190	118	66	133	178	111	132
Fielder's Choice	7787 R	136 ± 3	169	189	146	48	141	165	108	122
Fielder's Choice	9612 B	135 ± 3	177	189	111	61	145	174	121	103

Table 2 (continued)

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=8)	Spring Hill				Milan		Ames	
			Knoxville	Crossville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
Dyna-Gro	56K70 (RR)	135 ± 3	170	176	123	81	148	152	113	119
Dyna-Gro	5545	134 ± 3	179	185	122	39	134	182	108	120
FFR	693 RR2	133 ± 4	178	163	115	63	137	167	107	134
	Avg. (bu/a)	147	186	187	131	75	150	180	132	133
	L.S.D._{.05} (bu/a)	9	20	19	18	16	29	18	27	50
	C.V. (%)	10.0	6.4	6.1	8.6	13.2	11.7	6.0	12.0	19.7

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

§ Average calculated using best linear unbiased estimates from Ames location.

Table 3. Overall mean yields and agronomic characteristics of 38 early-season corn hybrids evaluated in eight environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†]	Moisture	Test		Plant	Ear
		± Std Error (n=8)	at Harvest (n=8)	Weight (n=4)	Lodging (n=3)	Height [‡] (n=2)	Height [‡] (n=2)
		bu/a	%	lbs/bu	%	in.	in.
Asgrow	RX715 (RR2/YGCB)	159 ± 3	16.3	58.9	2	109	49
Trisler Seed Farms	T-5175 CB	158 ± 3	15.5	56.9	1	111	51
DeKalb	DKC61-45 (RR2/YGCB)	152 ± 3	15.6	59.5	0	107	46
NK Brand	N 70-T9 (LL/YG)	152 ± 3	16.7	57.8	0	109	50
Golden Harvest	Laser L-9H07 Bt/RR	151 ± 3	15.6	57.7	1	109	49
NK Brand	N68-B8 (LL/CB)	151 ± 3	15.4	57.2	1	102	45
AgVenture	7801 R2CB	151 ± 3	15.7	57.4	3	115	49
Trisler Seed Farms	T-5338 CB	151 ± 3	17.4	55.1	2	113	52
Pioneer	33N56	151 ± 3	16.4	59.5	11	112	52
Trisler Seed Farms	T-5337 CB	151 ± 3	18.2	56.7	1	112	50
Agrigold	A6455Bt	150 ± 3	16.0	57.0	0	112	50
Dyna-Gro	57G68 (RR/YGRW)	150 ± 3	15.3	57.3	9	109	46
FFR	736 Bt	150 ± 3	16.5	57.8	2	113	51
DeKalb	DKC63-46 (RR2/YGCB)	149 ± 3	15.9	58.0	2	107	48
Dyna-Gro	57B90 (RR/YGCB/YGRW)	148 ± 3	17.9	58.0	2	113	51
Dyna-Gro	57F67 (Bt)	148 ± 3	15.4	57.3	1	108	45
Dyna-Gro	57P69 (RR/Bt)	148 ± 3	16.1	57.5	4	111	47
Vigoro	V 52YR52 (RR2/YGCB)	147 ± 3	15.8	57.3	1	111	49
NK Brand	N 65-M7	147 ± 3	15.6	57.6	9	109	48
Vigoro	V 52Y61 (YGCB)	147 ± 3	16.0	57.0	1	109	52
Crow's	4981 R	147 ± 3	15.6	60.0	4	104	49
Trisler Seed Farms	T-5245 CB	145 ± 4 §	15.6	57.8	0	106	48
Golden Harvest	H-9107	145 ± 3	16.5	56.8	4	106	50
AgVenture	AV 8109 R2CB	144 ± 4 §	14.9	58.1	0	108	50
LG Seeds	LG 2615	144 ± 3	16.8	57.8	6	104	44
Trisler Seed Farms	T-5255 RRCB	144 ± 3	16.6	58.1	1	114	50
Dyna-Gro	57K14 (RR)	143 ± 3	15.5	57.4	9	109	48
Agrigold	A6474Bt	143 ± 4 §	15.6	58.4	0	105	48
NK Brand	N71-R7	142 ± 4 §	15.1	59.1	7	106	49
Agrigold	A6522	142 ± 3	16.6	58.1	7	106	48
Golden Harvest	H-9251 (LL/CB)	142 ± 3	16.6	58.0	0	108	51
Golden Harvest	H-8920	138 ± 4 §	15.8	58.9	8	104	50
FFR	690	137 ± 3	15.9	58.0	9	115	52
Fielder's Choice	7787 R	136 ± 3	17.0	56.7	7	108	49
Fielder's Choice	9612 B	135 ± 3	16.7	57.7	3	111	49
Dyna-Gro	56K70 (RR)	135 ± 3	14.4	59.4	6	111	50
Dyna-Gro	5545	134 ± 3	15.4	58.1	8	108	47
FFR	693 RR2	133 ± 4	15.6	58.3	9	116	52
Average		147	16.0	57.8	4	109	49

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

[‡]Average of Knoxville and Springfield.

§ Average calculated using best linear unbiased estimates from Ames location.

Table 4. Mean yields of 18 early-season (<114 DAP) corn hybrids evaluated in eight environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=16)	Spring Hill				Milan		Ames	
			Knoxville	Crossville	(Irr.)	(Non-Irr.)	(Irr.)	(Non-Irr.)		
----- bu/a -----										
Asgrow	RX715 (RR2/YGCB)	164 ± 3	204	187	147	116	135	198	166	157
Trisler Seed Farms	T-5338 CB	164 ± 3	204	217	147	100	131	199	172	141
AgVenture	7801 R2CB	162 ± 2	200	207	153	106	136	202	167	125
NK Brand	N 70-T9 (LL/YG)	162 ± 3	187	208	143	104	136	211	169	134
Pioneer	33N56	161 ± 3	217	195	159	111	126	191	150	136
Trisler Seed Farms	T-5337 CB	160 ± 3	197	211	144	107	118	189	180	130
DeKalb	DKC61-45 (RR2/YGCB)	159 ± 3	205	184	138	95	128	205	160	153
NK Brand	N 65-M7	157 ± 3	207	205	157	106	130	177	147	129
Dyna-Gro	57P69 (RR/Bt)	157 ± 3	203	204	144	99	140	195	152	115
FFR	736 Bt	156 ± 3	192	194	147	108	132	189	165	125
Trisler Seed Farms	T-5255 RRCB	156 ± 3	201	210	129	93	127	209	154	122
Dyna-Gro	57F67 (Bt)	155 ± 3	200	198	147	108	130	186	160	113
Dyna-Gro	57K14 (RR)	155 ± 3	200	203	144	102	132	194	133	128
Trisler Seed Farms	T-5245 CB	153 ± 3	189	200	155	108	131	165	144	131
Dyna-Gro	5545	152 ± 2	194	202	145	81	123	197	144	127
Golden Harvest	H-9107	151 ± 3	195	189	140	109	122	181	151	123
FFR	690	150 ± 3	182	196	133	100	128	195	143	126
FFR	693 RR2	143 ± 3	185	188	132	91	115	183	131	117
Avg. (bu/a)		156	198	200	145	102	129	193	155	130
L.S.D._{.05} (bu/a)		9	20	20	18	17	30	29	30	38
C.V. (%)		10.2	6.5	6.8	8.2	10.2	14.7	10.1	11.6	16.6

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 5. Mean yields and agronomic characteristics of 18 early-season corn hybrids evaluated in eight environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear
		± Std Err		Weight		Height	Height
		(n=16)	(n=16)	(n=9)	(n=7)	(n=4)	(n=4)
		bu/a	%	lbs/bu	%	in.	in.
Asgrow	RX715 (RR2/YGCB)	164 ± 3	15.9	58.6	3	109	46
Trisler Seed Farms	T-5338 CB	164 ± 3	17.1	55.6	2	108	48
AgVenture	7801 R2CB	162 ± 2	15.7	57.6	3	110	44
NK Brand	N 70-T9 (LL/YG)	162 ± 3	16.7	58.0	1	109	44
Pioneer	33N56	161 ± 3	16.1	59.7	6	111	49
Trisler Seed Farms	T-5337 CB	160 ± 3	17.4	56.7	3	110	45
DeKalb	DKC61-45 (RR2/YGCB)	159 ± 3	15.3	59.1	1	108	44
NK Brand	N 65-M7	157 ± 3	15.3	57.7	7	109	45
Dyna-Gro	57P69 (RR/Bt)	157 ± 3	15.8	57.7	4	112	45
FFR	736 Bt	156 ± 3	16.3	58.5	4	114	49
Trisler Seed Farms	T-5255 RRCB	156 ± 3	16.3	57.7	2	112	46
Dyna-Gro	57F67 (Bt)	155 ± 3	15.4	57.7	3	107	42
Dyna-Gro	57K14 (RR)	155 ± 3	15.6	57.7	6	109	43
Trisler Seed Farms	T-5245 CB	153 ± 3	15.4	58.2	3	103	43
Dyna-Gro	5545	152 ± 2	15.5	57.8	6	109	45
Golden Harvest	H-9107	151 ± 3	16.0	57.1	3	104	45
FFR	690	150 ± 3	15.7	58.3	8	116	49
FFR	693 RR2	143 ± 3	15.6	58.5	6	115	48
Average		156	16.0	57.9	4	110	46

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 6. Mean yields of 13 early-season (<114 DAP) corn hybrids evaluated in eight environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=24)	Spring Hill				Milan		Ames	
			Knoxville	Crossville	(Irr.)	(Non-Irr.)	(Irr.)	(Non-Irr.)		
			----- bu/a -----							
Trisler Seed Farms	T-5338 CB	173 ± 2	218	215	159	135	141	200	162	152
Trisler Seed Farms	T-5337 CB	171 ± 2	208	208	163	136	136	194	170	150
NK Brand	N 70-T9 (LL/YG)	170 ± 2	202	201	165	137	144	202	160	150
DeKalb	DKC61-45 (RR2/YGCB)	169 ± 2	219	182	161	133	141	203	159	158
Pioneer	33N56	167 ± 2	232	186	169	138	125	191	147	147
Trisler Seed Farms	T-5255 RRCB	167 ± 2	209	213	152	126	140	201	148	143
Dyna-Gro	57F67 (Bt)	166 ± 2	213	189	169	146	142	186	152	132
NK Brand	N 65-M7	164 ± 2	223	191	174	137	135	175	139	136
Dyna-Gro	57P69 (RR/Bt)	164 ± 2	215	197	161	133	138	192	148	125
FFR	736 Bt	164 ± 2	197	190	169	134	141	187	156	136
Dyna-Gro	5545	163 ± 2	205	213	157	118	131	193	144	144
Dyna-Gro	57K14 (RR)	154 ± 2	204	185	149	125	137	180	129	128
FFR	693 RR2	154 ± 2	194	186	150	124	128	182	132	136
	Avg. (bu/a)	165	211	197	161	132	137	191	150	141
	L.S.D._{.05} (bu/a)	8	22	22	19	21	28	25	25	30
	C.V. (%)	9.4	6.8	7.5	7.9	9.7	13.0	8.9	10.8	12.8

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 7. Mean yields and agronomic characteristics of 13 early-season corn hybrids evaluated in eight environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†]	Moisture (n=24)	Test	Lodging (n=12)	Plant	Ear
		± Std Err (n=24)		Weight (n=13)		Height (n=5)	Height (n=5)
		bu/a	%	lbs/bu	%	in.	in.
Trisler Seed Farms	T-5338 CB	173 ± 2	17.3	55.9	2	111	48
Trisler Seed Farms	T-5337 CB	171 ± 2	17.9	57.1	3	113	46
NK Brand	N 70-T9 (LL/YG)	170 ± 2	17.0	58.4	2	111	44
DeKalb	DKC61-45 (RR2/YGCB)	169 ± 2	16.0	59.2	1	110	44
Pioneer	33N56	167 ± 2	16.8	59.9	5	114	49
Trisler Seed Farms	T-5255 RRCB	167 ± 2	16.7	58.1	2	116	48
Dyna-Gro	57F67 (Bt)	166 ± 2	15.8	57.9	4	110	43
NK Brand	N 65-M7	164 ± 2	15.7	57.8	7	111	44
Dyna-Gro	57P69 (RR/Bt)	164 ± 2	16.0	57.8	3	115	45
FFR	736 Bt	164 ± 2	16.8	58.9	3	117	49
Dyna-Gro	5545	163 ± 2	16.1	58.0	6	113	46
Dyna-Gro	57K14 (RR)	154 ± 2	16.0	57.8	6	113	44
FFR	693 RR2	154 ± 2	16.1	58.7	5	119	48
Average		165	16.5	58.1	4	113	46

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 8. Mean yields of 39 medium-season (114-116 DAP) corn hybrids evaluated in seven environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†]	Spring Hill			Milan		Ames	
		± Std Err (n=7)	Knoxville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
FFR	835 (Bt)	162 ± 3	182	184	87	201	197	174	112
Terral	TV 26BR61 (RR/YGCB)	162 ± 3	187	176	76	191	202	180	124
FFR	755 HX	160 ± 3	177	189	94	193	200	169	100
Pioneer	33R81 (YGCB/RR2)	160 ± 3	190	161	93	191	214	160	110
Agrigold	A6633Bt	159 ± 3	183	175	89	181	209	160	114
NK Brand	N 76-D3 (LL/Bt)	159 ± 3	195	165	89	178	200	167	120
Dyna-Gro	58P59 (RR/Bt)	158 ± 3	182	179	90	173	202	160	121
Belle	1533 Y	156 ± 3	177	175	81	185	202	170	103
Pioneer	33Y45	155 ± 3	178	164	99	166	202	144	133
Belle	1545 RY	153 ± 3	174	189	70	176	207	155	99
DeKalb	DKC66-23 (RR2/YGCB)	152 ± 3	177	152	78	186	202	153	117
Steyer	1153 YGCB	152 ± 3	158	170	100	181	191	149	114
Croplan Genetics	799 (RR2)	150 ± 3	173	181	56	193	187	131	132
Pioneer	33M53 (RR2)	150 ± 3	182	169	95	155	189	139	122
Terral	TV 25BR23 (RR/YGCB)	150 ± 3	181	162	68	174	194	153	117
Agrigold	A6585Bt	150 ± 3	174	153	67	166	196	160	131
Terral	TV 25R31 (RR)	149 ± 3	180	163	72	164	190	155	120
Golden Harvest	Laser L-9H63 Bt	148 ± 3	183	145	86	181	192	139	110
UniSouth Genetics	FB 905 RRCB	148 ± 3	181	184	66	161	187	152	105
FFR	756 (RR2/Bt)	148 ± 3	175	181	75	163	190	134	117
Steyer	1152 YGCB	147 ± 3	180	177	77	169	190	176	63
Dyna-Gro	57F87 (YG)	147 ± 3	176	170	76	169	199	148	91
Adrian Associates	AX 1143	145 ± 3	173	162	92	145	192	154	99
UniSouth Genetics	FB 814 CB	145 ± 3	176	174	75	146	182	164	96
Terral	TV 26BR41 (RR/YGCB)	143 ± 3	155	185	81	173	184	153	69
Dyna-Gro	57P46 (RR/Bt)	143 ± 3	170	162	44	176	190	153	104
Vigoro	V 5570	142 ± 3	166	168	98	159	169	135	96
Dyna-Gro	57P12 (RR/Bt)	142 ± 3	171	156	69	147	200	148	99
Dyna-Gro	57N96	141 ± 3	173	177	78	162	161	139	99
Pioneer	33V15	141 ± 3	166	169	92	156	184	116	105
Terral	TVX 25BR601 (RR/YGCB)	141 ± 3	168	162	79	142	185	143	108
Terral	TVX 25BR602 (RR/YGCB)	141 ± 3	167	167	79	143	182	137	110
Dyna-Gro	57K33 (RR)	138 ± 3	168	183	79	169	160	110	98
Agrigold	A6622	137 ± 3	166	155	68	159	173	159	77
FFR	746 RR2/Bt	136 ± 3	164	160	48	169	174	142	96

Table 8 (continued)

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=7)	Spring Hill			Milan		Ames	
			Knoxville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
LG Seeds	LG 2640	135 ± 3	169	152	59	153	169	139	104
FFR	749 RR2	135 ± 3	160	168	69	159	158	132	99
Terral	TVX 25R501 (RR)	131 ± 3	143	176	73	141	157	121	103
Agrigold	A6647RR	129 ± 3	156	152	75	137	166	120	94
	Avg. (bu/a)	147	173	169	78	167	188	150	106
	L.S.D._{.05} (bu/a)	8	16	25	15	25	17	24	32
	C.V. (%)	9.4	5.6	9.1	12.0	9.2	5.5	9.5	18.3

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 9. Overall mean yields and agronomic characteristics of 39 medium-season corn hybrids evaluated in seven environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†]	Moisture	Test		Plant	Ear
		± Std Error (n=7)	at Harvest (n=7)	Weight (n=4)	Lodging (n=3)	Height [‡] (n=2)	Height [‡] (n=2)
		bu/a	%	lbs/bu	%	in.	in.
FFR	835 (Bt)	162 ± 3	17.0	56.7	1	110	47
Terral	TV 26BR61 (RR/YGCB)	162 ± 3	18.6	59.2	0	110	56
FFR	755 HX	160 ± 3	15.8	56.6	3	121	59
Pioneer	33R81 (YGCB/RR2)	160 ± 3	17.2	56.1	1	114	51
Agrigold	A6633Bt	159 ± 3	16.3	55.7	2	107	44
NK Brand	N 76-D3 (LL/Bt)	159 ± 3	16.8	57.0	2	110	45
Dyna-Gro	58P59 (RR/Bt)	158 ± 3	16.4	55.6	4	111	49
Belle	1533 Y	156 ± 3	16.9	56.9	2	110	49
Pioneer	33Y45	155 ± 3	17.6	59.3	2	118	54
Belle	1545 RY	153 ± 3	17.1	57.0	0	112	48
DeKalb	DKC66-23 (RR2/YGCB)	152 ± 3	16.2	58.6	4	111	46
Steyer	1153 YGCB	152 ± 3	16.7	57.2	3	106	48
Croplan Genetics	799 (RR2)	150 ± 3	16.8	59.0	6	116	49
Pioneer	33M53 (RR2)	150 ± 3	17.2	60.8	4	112	49
Terral	TV 25BR23 (RR/YGCB)	150 ± 3	17.0	57.1	1	106	47
Agrigold	A6585Bt	150 ± 3	16.3	56.8	1	103	46
Terral	TV 25R31 (RR)	149 ± 3	19.3	57.5	5	108	53
Golden Harvest	Laser L-9H63 Bt	148 ± 3	17.2	55.1	5	109	49
UniSouth Genetics	FB 905 RRCB	148 ± 3	18.9	58.0	2	108	49
FFR	756 (RR2/Bt)	148 ± 3	17.1	58.3	0	111	48
Steyer	1152 YGCB	147 ± 3	17.1	56.9	2	109	46
Dyna-Gro	57F87 (YG)	147 ± 3	17.5	56.8	3	108	47
Adrian Associates	AX 1143	145 ± 3	15.8	56.1	3	106	50
UniSouth Genetics	FB 814 CB	145 ± 3	16.8	58.2	1	109	50
Terral	TV 26BR41 (RR/YGCB)	143 ± 3	17.2	56.9	1	113	48
Dyna-Gro	57P46 (RR/Bt)	143 ± 3	15.7	57.6	1	112	48
Vigoro	V 5570	142 ± 3	15.6	58.5	5	115	52
Dyna-Gro	57P12 (RR/Bt)	142 ± 3	18.1	56.7	0	112	47
Dyna-Gro	57N96	141 ± 3	17.2	56.9	9	110	47
Pioneer	33V15	141 ± 3	16.2	61.4	9	116	49
Terral	TVX 25BR601 (RR/YGCB)	141 ± 3	19.1	59.4	1	116	58
Terral	TVX 25BR602 (RR/YGCB)	141 ± 3	15.8	60.0	1	106	54
Dyna-Gro	57K33 (RR)	138 ± 3	17.0	57.6	10	109	47
Agrigold	A6622	137 ± 3	17.5	57.9	7	105	50
FFR	746 RR2/Bt	136 ± 3	16.0	58.0	5	115	57
LG Seeds	LG 2640	135 ± 3	16.2	56.6	7	107	47
FFR	749 RR2	135 ± 3	15.9	58.5	8	111	50
Terral	TVX 25R501 (RR)	131 ± 3	16.6	60.1	8	116	51
Agrigold	A6647RR	129 ± 3	16.8	59.3	5	112	51
	Average	147	16.9	57.7	3	111	50

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

[‡]Average of Knoxville and Springfield.

Table 10. Mean yields of 18 medium-season (114-116 DAP) corn hybrids evaluated in seven environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=14)	Spring Hill			Milan		Ames	
			Knoxville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
Pioneer	33R81 (YGCB/RR2)	170 ± 3	216	165	103	177	221	190	116
FFR	755 HX	167 ± 3	198	176	103	193	203	183	115
Belle	1545 RY	161 ± 3	190	174	97	171	197	175	124
Belle	1533 Y	161 ± 3	189	171	101	169	201	182	115
Dyna-Gro	58P59 (RR/Bt)	159 ± 3	191	159	100	166	202	169	128
Terral	TV 25BR23 (RR/YGCB)	159 ± 3	191	160	101	153	206	173	126
Terral	TV 25R31 (RR)	157 ± 3	190	159	91	153	209	174	122
Dyna-Gro	57P12 (RR/Bt)	154 ± 2	195	152	91	161	194	164	123
Steyer	1152 YGCB	154 ± 3	195	167	92	162	192	172	100
Dyna-Gro	57P46 (RR/Bt)	153 ± 3	185	161	84	168	196	164	115
UniSouth Genetics	FB 814 CB	153 ± 2	190	161	98	142	192	161	128
Pioneer	33V15	153 ± 2	188	161	105	148	196	157	117
Terral	TV 26BR41 (RR/YGCB)	152 ± 3	180	171	98	163	181	171	103
Dyna-Gro	57F87 (YG)	152 ± 3	185	156	96	167	192	158	107
FFR	746 RR2/Bt	150 ± 3	182	155	81	161	189	168	115
Dyna-Gro	57N96	150 ± 2	177	167	94	167	173	156	116
Agrigold	A6622	149 ± 3	190	155	91	155	178	162	111
FFR	749 RR2	146 ± 2	170	158	92	153	180	152	120
Avg. (bu/a)		156	189	163	96	163	195	168	117
L.S.D._{.05} (bu/a)		9	14	19	17	25	28	24	30
C.V. (%)		9.4	4.8	7.6	11.5	10.4	8.7	9.5	15.2

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 11. Mean yields and agronomic characteristics of 18 medium-season corn hybrids evaluated in seven environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear
		± Std Err (n=14)		Weight (n=9)		Height (n=4)	Height (n=4)
		bu/a	%	lbs/bu	%	in.	in.
Pioneer	33R81 (YGCB/RR2)	170 ± 3	17.1	56.3	1	116	51
FFR	755 HX	167 ± 3	16.1	57.1	2	124	58
Belle	1545 RY	161 ± 3	17.3	57.0	2	115	47
Belle	1533 Y	161 ± 3	17.2	56.9	3	107	46
Dyna-Gro	58P59 (RR/Bt)	159 ± 3	17.0	56.3	3	110	46
Terral	TV 25BR23 (RR/YGCB)	159 ± 3	16.9	57.6	2	109	46
Terral	TV 25R31 (RR)	157 ± 3	19.0	58.0	4	111	50
Dyna-Gro	57P12 (RR/Bt)	154 ± 2	18.0	56.8	4	114	44
Steyer	1152 YGCB	154 ± 3	17.4	56.9	3	113	44
Dyna-Gro	57P46 (RR/Bt)	153 ± 3	16.0	57.7	2	113	47
UniSouth Genetics	FB 814 CB	153 ± 2	17.6	58.1	2	111	49
Pioneer	33V15	153 ± 2	16.3	61.2	7	119	49
Terral	TV 26BR41 (RR/YGCB)	152 ± 3	17.6	57.0	3	116	46
Dyna-Gro	57F87 (YG)	152 ± 3	17.6	56.9	4	111	45
FFR	746 RR2/Bt	150 ± 3	16.3	58.4	4	119	57
Dyna-Gro	57N96	150 ± 2	17.4	57.1	7	112	45
Agrigold	A6622	149 ± 3	17.5	58.5	4	106	48
FFR	749 RR2	146 ± 2	16.2	58.6	6	112	49
Average		156	17.2	57.6	3	113	48

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 12. Mean yields of six medium-season (114-116 DAP) corn hybrids evaluated in seven environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†]		Spring Hill		Milan		Ames	
		± Std Err (n=18)	Knoxville	(Irr.) (Non-Irr.)	Springfield	(Irr.) (Non-Irr.)			
		----- bu/a -----							
Terral	TV 25BR23 (RR/YGCB)	167 ± 2	208	171	140	155	201	165	129
Terral	TV 26BR41 (RR/YGCB)	165 ± 2	203	178	137	165	190	160	122
Dyna-Gro	57P46 (RR/Bt)	163 ± 2	207	174	127	161	196	151	125
Dyna-Gro	57F87 (YG)	163 ± 2	202	167	134	167	196	151	124
Pioneer	33V15	162 ± 2	207	168	134	152	197	152	123
FFR	749 RR2	156 ± 2	191	173	127	154	171	151	124
	Avg. (bu/a)	163	203	172	133	159	192	155	124
	L.S.D._{.05} (bu/a)	8	15	19	20	24	25	22	27
	C.V. (%)	8.8	4.7	7.5	10.1	9.9	8.2	9.3	13.6

[†]All Yields are adjusted to 15.5% moisture.

Table 13. Mean yields and agronomic characteristics of six medium-season corn hybrids evaluated in seven environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†]		Test		Plant	Ear
		± Std Err (n=21)	Moisture (n=21)	Weight (n=15)	Lodging (n=10)	Height (n=5)	Height (n=5)
		bu/a	%	lbs/bu	%	in.	in.
Terral	TV 25BR23 (RR/YGCB)	167 ± 2	17.2	57.7	2	111	46
Terral	TV 26BR41 (RR/YGCB)	165 ± 2	18.0	57.2	3	119	47
Dyna-Gro	57P46 (RR/Bt)	163 ± 2	16.5	57.9	2	116	48
Dyna-Gro	57F87 (YG)	163 ± 2	18.0	57.1	4	116	46
Pioneer	33V15	162 ± 2	16.8	61.4	6	123	51
FFR	749 RR2	156 ± 2	16.9	58.6	5	115	50
	Average	163	17.2	58.3	4	117	48

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 14. Mean yields of 23 full-season (>116 DAP) corn hybrids evaluated in seven environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=7)	Spring Hill			Milan		Ames	
			Knoxville	(Irr.)	(Non-Irr.)	Springfield	(Irr.)		(Non-Irr.)
----- bu/a -----									
DeKalb	DKC67-23 (RR2/YGCB)	145 ± 3	186	123	84	143	206	159	113
Belle	1747 RY	144 ± 3	177	144	81	153	196	155	103
Dyna-Gro	58P45 (RR/YGCB)	142 ± 3	184	128	67	153	194	170	100
Pioneer	31P41	142 ± 3	183	121	73	142	209	142	126
Vigoro	V 58Y41 (Bt)	139 ± 3	173	144	78	138	198	151	93
Dyna-Gro	58P60 (RR/YGCB)	139 ± 4	176	130	60	156	204	149	98
Pioneer	31D58	138 ± 4	182	124	76	123	219	128	112
Agrigold	A6710BtRR	136 ± 4	179	139	56	136	191	144	105
Dyna-Gro	58K40 (RR)	134 ± 3	178	146	62	118	184	139	114
FFR	885	134 ± 4	171	121	79	142	183	139	101
UniSouth Genetics	FB 927 RRCB	131 ± 4	156	126	88	132	174	128	113
FFR	833 (RR2)	130 ± 3	158	123	83	133	174	128	112
TN Exp	TN 0604 (W)	130 ± 3	140	141	88	143	174	142	83
FFR	842 RR2	130 ± 3	157	116	84	124	197	151	82
Belle	1525 R	130 ± 3	157	131	75	133	174	138	101
Dyna-Gro	58K02 (RR)	129 ± 4	162	140	62	120	190	141	88
UniSouth Genetics	FB 909	128 ± 4	156	119	86	136	191	138	68
FFR	843 RR2/Bt	127 ± 4	155	135	68	109	186	148	87
Belle	1515 C	127 ± 3	154	131	75	126	173	130	97
TN Exp	TN 0601	121 ± 3	142	121	65	143	167	115	92
TN Exp	TN 0506 (W)	118 ± 3	133	125	74	120	163	113	101
TN Exp	TN 0602	110 ± 3	126	111	71	109	177	114	62
TN Exp	TN 0603	106 ± 4	138	132	70	89	118	125	69
Avg. (bu/a)		133	162	130	74	135	185	140	97
L.S.D._{.05} (bu/a)		9	18	32	22	28	20	22	28
C.V. (%)		10.8	6.8	13.5	16.8	11.9	6.6	9.2	17.6

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

[‡]Average of Knoxville and Springfield.

Table 15. Overall mean yields and agronomic characteristics of 23 full-season corn hybrids evaluated in seven environments in Tennessee during 2006.

Brand	Hybrid	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear
		± Std Error (n=7)	at Harvest (n=7)	Weight (n=4)	(n=3)	Height [‡] (n=2)	Height [‡] (n=2)
		bu/a	%	lbs/bu	%	in.	in.
DeKalb	DKC67-23 (RR2/YGCB)	145 ± 3	17.2	58.4	2	108	49
Belle	1747 RY	144 ± 3	18.1	59.8	2	113	56
Dyna-Gro	58P45 (RR/YGCB)	142 ± 3	17.8	59.3	6	110	56
Pioneer	31P41	142 ± 3	17.6	58.4	3	110	52
Vigoro	V 58Y41 (Bt)	139 ± 3	17.2	57.0	7	108	44
Dyna-Gro	58P60 (RR/YGCB)	139 ± 4	18.6	58.8	2	111	57
Pioneer	31D58	138 ± 4	17.8	59.8	2	108	49
Agrigold	A6710BtRR	136 ± 4	18.1	58.2	0	100	46
Dyna-Gro	58K40 (RR)	134 ± 3	18.0	60.0	3	110	54
FFR	885	134 ± 4	18.0	58.1	6	118	56
UniSouth Genetics	FB 927 RRCB	131 ± 4	16.8	59.2	2	109	54
FFR	833 (RR2)	130 ± 3	16.4	61.1	4	112	51
TN Exp	TN 0604 (W)	130 ± 3	17.5	57.8	7	107	52
FFR	842 RR2	130 ± 3	17.0	56.3	13	108	49
Belle	1525 R	130 ± 3	18.1	59.1	3	116	57
Dyna-Gro	58K02 (RR)	129 ± 4	18.8	56.5	5	106	49
UniSouth Genetics	FB 909	128 ± 4	17.4	59.3	22	114	58
FFR	843 RR2/Bt	127 ± 4	18.5	56.8	4	107	50
Belle	1515 C	127 ± 3	18.2	59.0	3	112	57
TN Exp	TN 0601	121 ± 3	20.1	58.4	18	112	55
TN Exp	TN 0506 (W)	118 ± 3	18.3	60.2	3	103	54
TN Exp	TN 0602	110 ± 3	18.9	58.8	18	115	54
TN Exp	TN 0603	106 ± 4	17.5	60.0	13	111	57
Average		133	17.9	58.7	6	110	53

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

[‡]Average of Knoxville and Springfield.

Table 16. Mean yields of seven full-season (>116 DAP) corn hybrids evaluated in six environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=12)		Spring Hill (Irr.) (Non-Irr.)		Milan (Irr.) (Non-Irr.)		
		bu/a						
Vigoro	V 58Y41 (Bt)	156 ± 3	179	159	101	136	203	158
FFR	842 RR2	152 ± 3	171	132	107	116	212	171
UniSouth Genetics	FB 909	149 ± 3	164	134	102	129	214	152
FFR	885	146 ± 3	172	130	99	129	195	151
Agrigold	A6710BtRR	144 ± 3	169	149	92	113	179	160
FFR	843 RR2/Bt	142 ± 3	168	138	94	101	193	156
TN Exp	TN 0506 (W)	139 ± 3	158	139	101	109	188	142
Avg. (bu/a)		147	169	140	100	119	198	156
L.S.D._{.05} (bu/a)		10	17	22	24	24	29	28
C.V. (%)		10.1	6.5	9.9	13.9	12.3	8.6	11.8

[†]All Yields are adjusted to 15.5% moisture.

Table 17. Mean yields and agronomic characteristics of seven full-season corn hybrids evaluated in six environments for two years (2005-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=12)		Test Weight (n=8)		Plant Height (n=4)	Ear Height (n=4)
		bu/a		lbs/bu			
		%		%		in.	
Vigoro	V 58Y41 (Bt)	156 ± 3	17.1	57.3	4	107	42
FFR	842 RR2	152 ± 3	17.2	56.7	5	109	47
UniSouth Genetics	FB 909	149 ± 3	17.5	59.4	7	115	54
FFR	885	146 ± 3	17.8	58.5	3	119	55
Agrigold	A6710BtRR	144 ± 3	18.0	58.3	0	98	44
FFR	843 RR2/Bt	142 ± 3	17.8	56.4	2	109	48
TN Exp	TN 0506 (W)	139 ± 3	18.3	60.0	2	103	52
Average		147	17.7	58.1	3	109	49

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

Table 18. Mean yields of one full-season (>116 DAP) corn hybrid evaluated in six environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=18)	Spring Hill			Milan		
			Knoxville	(Irr.) (Non-Irr.)	Springfield	(Irr.)	(Non-Irr.)	
Vigoro	V 58Y41 (Bt)	165 ± 2	190	169	133	143	202	152
	C.V. (%)	9.7	7.0	9.5	11.6	11.5	8.5	11.4

[†]All Yields are adjusted to 15.5% moisture.

Table 19. Mean yields and agronomic characteristics of one full-season corn hybrid evaluated in six environments for three years (2004-2006) in Tennessee.

Brand	Hybrid	Avg. Yield [†] ± Std Err (n=18)	Moisture (n=18)	Test		Plant Height (n=5)	Ear Height (n=5)
				Weight (n=12)	Lodging (n=11)		
Vigoro	V 58Y41 (Bt)	165 ± 2	17.2	57.4	4	112	46

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

[†]All Yields are adjusted to 15.5% moisture.

COUNTY STANDARD TESTS ‡

Table 20. Yields of 16 early-season (<114 DAP) corn hybrids in 12 County Standard Tests in Tennessee and Kentucky during 2006.†‡

MS	Brand/Hybrid	Avg.	Avg.	Test	KY										UT Martin	
		Yld	Moisture	Weight †	Ballard	Coffee	Dyer	Gibson	Giles	Henry	Lake	Lauderdale	Montgomery	Obion	Weakley	Weakley
		bu/a	%	lbs/bu	4/11 §	4/19	4/6	4/4	4/19	4/17	4/5	4/12	4/11	4/10	4/13	4/13
A	*Asgrow RX715RR2 [P]	174	16.6	57.8	225	75	219	182	76	246	203	168	197	198	101	193
AB	****NK Brand N65-M7 [C]	168	16.9	57.0	201	74	202	177	94	215	195	169	195	204	108	181
AB	Crow's 7R321 RR2 [C]	168	17.2	57.7	221	66	196	172	85	219	190	173	196	196	112	185
ABC	*Dekalb DKC61-72RR2 [P]	167	16.4	57.6	222	76	206	172	82	220	188	167	189	205	96	175
BC	Asgrow RX754RR2 [P]	165	17.0	58.4	213	77	218	171	92	219	184	152	185	178	108	182
BC	**Golden Harvest H-8906 [C]	164	16.8	57.9	207	75	203	174	87	224	200	166	180	185	93	178
BC	Garst 8451RR [C]	164	17.3	56.6	216	67	212	176	84	207	178	168	204	193	88	179
BCD	*Pioneer 33N56 [P]	164	17.3	59.6	208	68	195	171	91	214	189	167	189	179	110	188
BCDE	*Pioneer 33N56	163	17.3	58.7	201	73	206	165	89	212	166	157	186	192	116	188
BCDE	Agrigold 6445CL [P]	162	16.6	58.0	209	73	201	168	60	202	188	170	181	192	118	183
BCDE	AgVenture 8108RR [P]	161	16.7	58.3	203	80	193	169	80	221	184	134	188	185	104	189
CDEF	Golden Harvest H-9107 [C]	160	17.1	56.8	213	73	204	165	66	212	173	174	183	182	100	171
DEF	**Dekalb DKC61-42 [P]	157	16.7	57.4	205	72	201	164	58	208	159	153	193	188	91	187
EF	FFR 690 [P]	156	16.0	57.9	197	59	202	154	81	214	179	156	166	185	117	161
EF	Croplan CPL691RR [C]	156	17.9	57.2	197	71	199	171	66	199	153	154	182	184	100	194
F	Dyna-Gro 56K70 [P]	153	15.4	58.2	167	80	201	165	88	186	173	157	176	171	111	160
Average (bu/a)		163	16.8	57.8	207	73	204	170	80	214	181	161	187	189	105	181

MS = Hybrids that have any MS letter in common are not statistically different in yield at the 5% level of probability.

†Yields have been adjusted to 15.5% moisture. Each hybrid was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

§ Planting date.

† Test weight is averaged from 10 locations.

Brand/Hybrid names followed by a [C] or [P] were treated with a seed applied systemic insecticide, either Cruiser [C] or Poncho 250 [P]

Hybrids marked with an asterisk(*), (**), (***), (****), or (****) were in the top performing group in 2005, 2004, 2003, 2002 and/or 2001, respectively.

‡Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above.

Table 21. Yields of 24 early-medium season (108-116 DAP) Bt corn hybrids in 11 County Standard Tests in Tennessee during 2006.†‡

MS	Brand/Hybrid	Avg.	Avg.	Test												
		Yld bu/a	Moisture %	Weight ¶ lbs/bu	Coffee 4/19 §	Crockett 3/8	Dyer 4/7	Gibson 4/4	Hardin 4/18	Henry 4/17	Humphreys 4/18	Lake 4/6	Lauderdale 4/1	Obion 4/12	Weakley 4/12	
EARLY (= <114 DAP)																
AB	*Croplan CPL631 Bt [C]	178	16.7	56.2	91	175	222	181	132	231	215	205	183	165	159	
ABCD	*Trisler T-5338 CB [P]	177	18.0	55.7	77	155	207	194	125	228	232	208	212	168	144	
ABCDE	LG Seeds LG2600 Bt [P]	176	16.2	55.1	84	179	175	169	141	231	225	202	191	177	155	
ABCDE	*NK Brand N76-D3 YG [C]	175	18.3	56.0	79	150	197	179	135	240	228	204	199	171	147	
ABCDEFG	Merschman M-512C-1 YGCB [P]	173	17.0	56.4	86	168	206	165	130	225	228	208	172	170	145	
ABCDEFG	*Dyna-Gro 57F67 YG [P]	173	16.6	56.6	81	174	197	174	140	213	220	195	194	151	157	
BCDEFG	FFR 736 Bt [P]	170	17.3	57.3	77	167	199	181	120	206	203	210	187	169	148	
CDEFG	Vigoro V52Y61 YG [C]	170	16.6	56.7	83	162	179	158	126	246	220	190	188	170	143	
DEFG	Trisler T-5255 CB [P]	169	17.1	56.6	67	172	199	189	124	211	222	188	180	160	150	
DEFG	NK Brand N65-C5 YG [C]	169	16.5	57.1	80	175	187	166	132	208	226	196	196	143	149	
FG	Merschman M-313A-1 YGCB [P]	166	17.7	56.1	63	159	213	159	120	217	222	187	183	160	144	
G	Golden Harvest H-9251 CB [C]	165	17.1	56.9	68	167	196	162	119	212	214	187	193	167	133	
Average (bu/a)		172	17.1	56.4	78	167	198	173	129	222	221	199	190	164	148	
MEDIUM (114-116 DAP)																
A	Dekalb DKC64-81 (YGCB) [P]	180	17.3	58.6	94	172	201	186	129	230	236	198	197	169	164	
A	*Golden Harvest Laser L-9H63 Bt [C]	178	18.0	54.7	92	172	219	175	123	222	222	214	184	174	166	
ABC	*Dyna-Gro 57F87 YG [P]	178	18.2	55.4	95	177	209	157	123	239	225	209	200	173	149	
ABCDE	*Belle 1533Y [C]	176	18.7	56.1	90	150	203	183	125	245	216	201	191	173	162	
ABCDE	NK Brand N76-M5 YG [C]	176	17.7	55.8	97	152	217	172	134	240	220	187	181	176	156	
ABCDEF	Agrigold 6633Bt [P]	175	17.7	55.8	91	139	179	179	135	244	214	202	195	180	165	
ABCDEFG	Garst 8353CBLL [C]	173	18.2	56.0	86	176	174	163	127	213	230	199	199	171	168	
ABCDEFG	Agrigold 6585Bt [P]	173	17.5	55.3	76	143	220	177	127	207	233	207	199	164	152	
ABCDEFG	*Dekalb DKC66-21 (YGCB) [P]	172	18.0	57.3	75	150	204	179	115	232	225	201	199	172	140	
BCDEFG	USG/FB 814 CB	170	18.5	56.1	86	182	186	160	118	211	208	203	197	162	155	
EFG	Felder's Choice 7850B [P]	168	18.5	56.6	96	175	186	166	123	211	206	189	187	172	136	
G	Merschman M-613B-1 YGCB [P]	166	18.0	57.7	83	137	217	159	112	223	222	198	153	162	157	
Average (bu/a)		174	18.0	56.3	88	160	201	171	124	226	221	201	190	171	156	

MS = Hybrids that have any MS letter in common are not statistically different in yield at the 5% level of probability.

†Yields have been adjusted to 15.5% moisture. Each hybrid was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

§ Planting date.

¶ Test weight is averaged from 9 locations.

Brand/Hybrid names followed by a [C] or [P] were treated with a seed applied systemic insecticide, either Cruiser [C] or Poncho 250 [P]

Hybrids marked with an asterisk(*), (**), (***), (****), or (****) were in the top performing group in 2005, 2004, 2003, 2002 and/or 2001, respectively.

‡Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above.

Table 22. Yields of 18 medium-season (114-116 DAP) corn hybrids in 12 County Standard Tests in Tennessee and Kentucky during 2006.†:

MS	Brand/Hybrid	Avg.	Avg.	Test		KY								UT Martin		
		Yld bu/a	Moisture %	Weight ¶ lbs/bu	¶ Coffee 4/20 §	Dyer 4/6	Fulton 4/3	Gibson 4/4	Hardin 4/18	Henry 4/17	Lake 4/6	Lauderdale 4/4	Obion 4/11	Robertson 4/12	Weakley 4/13	Weakley 4/14
A	*NK Brand N76-H2 [C]	164	17.0	55.9	84	204	188	167	133	241	183	129	211	177	112	134
A	*Garst 8380IT [C]	164	16.7	56.3	92	219	177	170	135	215	189	128	227	162	103	146
AB	Crow's 5175RR [C]	162	16.1	57.6	83	219	176	150	100	242	190	138	210	175	107	152
ABC	*Golden Harvest H-9461 [C]	160	17.0	55.5	81	215	201	171	123	237	156	132	225	163	90	132
ABC	LG Seeds LG2640	160	16.5	55.3	73	202	188	168	119	228	192	141	214	166	105	120
ABC	AgVenture 8923 [P]	159	16.7	55.6	83	220	204	163	116	204	192	130	216	160	113	108
ABCD	*Pioneer 33V15 [P]	158	16.2	59.1	82	205	182	173	122	222	187	139	210	151	98	121
ABCD	Pioneer 33Y45 [P]	157	17.2	58.3	81	229	179	151	114	228	180	128	221	157	111	107
ABCD	*Pioneer 33R76RR [P]	157	17.0	56.3	68	226	211	161	117	213	196	118	207	155	99	106
ABCDE	***Pioneer 33M54 [P]	156	16.9	59.1	81	209	195	142	125	211	179	125	215	162	117	108
ABCDE	Merschman M-314A-2 [P]	155	17.2	56.0	88	179	184	164	118	239	182	132	192	172	100	114
ABCDE	Fielder's Choice 7830R [P]	155	16.3	58.5	76	203	196	160	110	221	159	139	208	154	96	141
ABCDE	Agrigold 6622 [P]	155	17.0	57.0	79	200	215	138	117	204	175	125	217	159	105	119
BCDEF	Croplan CPL799RR [C]	154	17.3	57.7	78	200	181	172	114	228	186	116	178	160	103	127
CDEF	Agrigold 6633 [P]	152	16.4	55.0	83	214	148	163	122	217	180	123	157	154	120	146
DEF	Dyna-Gro 57K33RR [P]	149	17.0	56.6	83	205	177	152	100	219	152	133	189	170	95	108
EF	Belle 1525R [C]	146	18.5	58.4	72	200	175	152	95	199	169	114	201	152	116	111
F	USG/FB 814RR	145	17.0	56.2	85	187	152	157	111	191	167	112	195	166	93	119
Average (bu/a)		156	16.9	56.9	81	208	185	160	116	220	179	128	205	162	105	123

MS = Hybrids that have any MS letter in common are not statistically different in yield at the 5% level of probability.

†Yields have been adjusted to 15.5% moisture. Each hybrid was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

§ Planting date.

¶ Test weight is averaged from 10 locations.

Brand/Hybrid names followed by a [C] or [P] were treated with a seed applied systemic insecticide, either Cruiser [C] or Poncho 250 [P]

Hybrids marked with an asterisk(*), (**), (***), (****), or (*****) were in the top performing group in 2005, 2004, 2003, 2002 and/or 2001, respectively.

‡Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above

Table 23. Yields of 14 full-season and full-season Bt (>116 DAP) corn hybrids in 13 County Standard Tests in Tennessee and Kentucky during 2006.†‡

MS	Brand/Hybrid	Avg.	Avg.	Test	KY								Milan Irr		Milan Non Irr	Weakley	
		Yld	Moisture	Weight ¶	Ballard	Cannon	Coffee	Dyer	Fulton	Gibson	Hardin	Henderson	Henry	Lake	R E C		R E C
		bu/a	%	lbs/bu	4/15 §	4/17	4/20	4/6	4/3	4/4	4/18	4/5	4/16	4/1	4/17	4/17	4/14
A	Pioneer 31P41 [P]	176	17.7	57.3	196	143	78	219	202	179	128	185	208	211	215	194	125
AB	*Pioneer 31G68 YGCB [P]	175	17.3	56.1	213	151	87	227	185	159	124	176	198	201	244	204	111
ABC	Golden Harvest H-9392 [C]	173	17.0	55.9	217	152	79	215	193	174	130	160	201	200	230	192	103
ABC	FFR 835 Bt [P]	172	17.2	54.8	228	148	84	231	200	173	124	129	199	210	199	189	123
ABC	Garst 8294 YGCB [C]	171	18.4	54.7	209	144	79	210	198	175	123	172	203	205	215	183	114
ABC	***Pioneer 31G66 [P]	170	17.2	56.4	200	148	81	214	202	154	146	167	192	195	209	195	105
ABCD	Pioneer 31D58 [P]	167	17.8	58.6	207	139	69	227	144	150	122	179	199	208	234	197	99
ABCDE	Croplan CPL818 Bt [C]	166	18.8	55.9	202	144	79	194	202	162	124	163	191	207	188	179	128
BCDE	Vigoro 58Y41 YG [C]	166	17.5	54.9	219	150	86	206	178	163	133	146	216	195	192	175	103
CDE	Pioneer 32D99 [P]	165	18.8	56.8	193	138	71	231	173	148	114	173	189	195	241	190	90
DEF	Crow's 6621RR [C]	160	17.1	56.6	195	142	79	186	182	166	130	152	207	193	172	165	114
DEF	FFR 842RR [P]	159	18.6	54.7	180	146	63	214	199	148	119	171	168	196	204	172	84
EF	Agrigold 6647RR [P]	158	16.9	57.2	174	140	71	185	208	148	112	160	195	194	201	175	91
F	Agrigold 6647RR	154	17.1	56.9	182	137	73	191	167	149	112	156	173	193	195	164	103
Average (bu/a)		167	17.7	56.2	201	144	77	211	188	161	124	163	196	200	210	184	107

MS = Hybrids that have any MS letter in common are not statistically different in yield at the 5% level of probability.

†Yields have been adjusted to 15.5% moisture. Each hybrid was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

§ Planting date.

¶ Test weight is averaged from 10 locations.

Brand/Hybrid names followed by a [C] or [P] were treated with a seed applied systemic insecticide, either Cruiser [C] or Poncho 250 [P]

Hybrids marked with an asterisk(*), (**), (***), (****), or (****) were in the top performing group in 2005, 2004, 2003, 2002 and/or 2001, respectively.

Milan R E C = Research and Education Center at Milan.

‡Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above.

Table 24. Yields of ten white corn hybrids in nine County Standard Tests in Tennessee during 2006.†‡

MS	Brand/Hybrid	Avg.	Avg.	Test	Tosh Farm			Wilson Farm					
		Yld	Moisture	Weight ¶	Carroll	Coffee	Gibson	Henry	Henry	Lake	Lincoln	Marion	Weakley
		bu/a	%	lbs/bu	4/11 §	4/20	4/17	4/17	5/3	4/1	4/1	4/2	4/10
A	**Pioneer 32B10 (W) [P]	159	19.0	56.6	131	99	176	210	179	200	133	122	182
AB	*Pioneer 33V62 (W) [P]	157	18.6	57.1	132	86	164	200	173	204	131	132	189
ABC	Pioneer 32R38 (W) [P]	152	18.4	56.0	132	90	163	207	191	190	120	92	188
ABC	Agrigold 6537W [P]	151	18.1	57.0	129	99	159	191	179	195	123	111	178
BCD	Agrigold 6587W [P]	148	19.2	57.6	130	88	168	186	165	184	121	117	174
CD	Zimmerman 1863W [C]	147	22.4	54.9	125	83	159	204	168	181	123	104	173
CD	Zimmerman 1714W [C]	146	20.2	56.9	124	89	155	188	147	192	113	127	174
D	*Zimmerman 1851W [C]	141	22.0	54.6	120	92	152	196	165	178	112	93	163
D	Zimmerman 1713W [C]	140	20.6	56.0	119	93	129	167	192	158	131	104	167
D	Asgrow RX818W [P]	140	20.3	56.5	124	89	162	182	127	190	112	102	169
Average (bu/a)		148	19.9	56.3	127	91	159	193	169	187	122	110	176

MS = Hybrids that have any MS letter in common are not statistically different in yield at the 5% level of probability.

†Yields have been adjusted to 15.5% moisture. Each hybrid was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

§ Planting date.

¶ Test weight is averaged from 8 locations.

Brand/Hybrid names followed by a [C] or [P] were treated with a seed applied systemic insecticide, either Cruiser [C] or Poncho 250 [P]

Hybrids marked with an asterisk(*), (**), (***), (****), or (****) were in the top performing group in 2005, 2004, 2003, 2002 and/or 2001, respectively.

‡Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above.

Table 25. Overall average yields and moistures of 11 early-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2006.†

Brand	Hybrid	County Standard Tests				Research and Education Center Tests		
		Avg. Yield	Avg. Moisture	Test Weight	Test / # Loc	Avg. Yield (n=8)	Moisture (n=8)	Test Weight (n=4)
		bu/a	%	lbs/bu		bu/a	%	lbs/bu
Asgrow	RX715 (RR2/YGCB)	174	16.6	57.8	Early / 12	159	16.3	58.9
NK Brand	N 65-M7	168	16.9	57.0	Early / 12	147	15.6	57.6
Pioneer	33N56	164	17.3	59.6	Early / 12	151	16.4	59.5
Golden Harvest	H-9107	160	17.1	56.8	Early / 12	145	16.5	56.8
Dyna-Gro	56K70 (RR)	153	15.4	58.2	Early / 12	135	14.4	59.4
Trisler Seed Farms	T-5338 CB	177	18.0	55.7	Early-Med Bt / 11	151	17.4	55.1
Dyna-Gro	57F67 (Bt)	173	16.6	56.6	Early-Med Bt / 11	148	15.4	57.3
FFR	736 Bt	170	17.3	57.3	Early-Med Bt / 11	150	16.5	57.8
Vigoro	V 52Y61 (YGCB)	170	16.6	56.7	Early-Med Bt / 11	147	16.0	57.0
Trisler Seed Farms	T-5255 RRCB	169	17.1	56.6	Early-Med Bt / 11	144	16.6	58.1
Golden Harvest	H-9251 (LL/CB)	165	17.1	56.9	Early-Med Bt / 11	142	16.6	58.0
Average (bu/a)		167	16.9	57.2		147	16.1	57.8

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

†All Yields are adjusted to 15.5% moisture.

Yield comparisons should only be made within the group of hybrids that were evaluated in the same County Standard Test in the same number of locations, e.g., Early / 12 or Early-Med BT / 11.

Table 26. Overall average yields and moistures of 15 medium-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2006.†

Brand	Hybrid	County Standard Tests				Research and Education Center Tests		
		Avg. Yield bu/a	Avg. Moisture %	Test Weight lbs/bu	Test / # Loc	Avg. Yield (n=7) bu/a	Moisture (n=7) %	Test Weight (n=4) lbs/bu
Golden Harvest	Laser L-9H63 Bt	178	18.0	54.7	Early-Med Bt / 11	148	17.2	55.1
Dyna-Gro	57F87 (YG)	178	18.2	55.4	Early-Med Bt / 11	147	17.5	56.8
Belle	1533 Y	176	18.7	56.1	Early-Med Bt / 11	156	16.9	56.9
NK Brand	N 76-D3 (LL/Bt)	175	18.3	56.0	Early-Med Bt / 11	159	16.8	57.0
Agrigold	A6633Bt	175	17.7	55.8	Early-Med Bt / 11	159	16.3	55.7
Agrigold	A6585Bt	173	17.5	55.3	Early-Med Bt / 11	150	16.3	56.8
UniSouth Genetics	FB 814 CB	170	18.5	56.1	Early-Med Bt / 11	145	16.8	58.2
FFR	835 (Bt)	172	17.2	54.8	Full & Bt / 13	162	17.0	56.7
Agrigold	A6647RR	154	17.1	56.9	Full & Bt / 13	129	16.8	59.3
LG Seeds	LG 2640	160	16.5	55.3	Medium / 12	135	16.2	56.6
Pioneer	33V15	158	16.2	59.1	Medium / 12	141	16.2	61.4
Pioneer	33Y45	157	17.2	58.3	Medium / 12	155	17.6	59.3
Agrigold	A6622	155	17.0	57.0	Medium / 12	137	17.5	57.9
Croplan Genetics	799 (RR2)	154	17.3	57.7	Medium / 12	150	16.8	59.0
Dyna-Gro	57K33 (RR)	149	17.0	56.6	Medium / 12	138	17.0	57.6
Average (bu/a)		165	17.5	56.3		147	16.9	57.6

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

†All Yields are adjusted to 15.5% moisture.

Yield comparisons should only be made within the group of hybrids that were evaluated in the same County Standard Test in the same number of locations, e.g.,

Early-Med BT / 11, Full & Bt / 13, or Medium / 12.

Table 27. Overall average yields and moistures of five full-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2006.†

Brand	Hybrid	County Standard Tests				Research and Education Center Tests		
		Avg. Yield bu/a	Avg. Moisture %	Test Weight lbs/bu	Test / # Loc	Avg. Yield (n=6) bu/a	Moisture (n=6) %	Test Weight (n=4) lbs/bu
Pioneer	31P41	176	17.7	57.3	Full & Bt / 13	142	17.6	58.4
Pioneer	31D58	167	17.8	58.6	Full & Bt / 13	138	17.8	59.8
Vigoro	V 58Y41 (Bt)	166	17.5	54.9	Full & Bt / 13	139	17.2	57.0
FFR	842 RR2	159	18.6	54.7	Full & Bt / 13	130	17.0	56.3
Belle	1525 R	146	18.5	58.4	Medium / 12	130	18.1	59.1
Average (bu/a)		163	18.0	56.8		136	17.5	58.1

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

R, RR, RR2, R2 = contains a gene for tolerance to glyphosate

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

†All Yields are adjusted to 15.5% moisture.

Yield comparisons should only be made within the group of hybrids that were evaluated in the same County Standard Test in the same number of locations, e.g.,

Full & Bt / 13 or Medium / 12.

Table 28. Characteristics of corn hybrids evaluated in yield tests in Tennessee during 2006.†

Early-Season Corn Hybrid Entries		Grain Color	Maturity	Herbicide		Released or Experimental	Comments from Companies
Brand	Hybrid			Tolerance	BT Gene		
Agrigold	A6474Bt	Y	111	---	YGCB	R	---
Agrigold	A6522	Y	113	---	---	E	---
Agrigold	A6455Bt	Y	110	---	YGCB	E	---
AgVenture	7801 R2CB	Y	110	RR	Bt	R	Suited to high yield environment, early harvest
AgVenture	AV 8109 R2CB	Y	110	RR	Bt	R	---
Asgrow	RX715 (RR2/YGCB)	Y	111	RR2	YGCB	R	---
Crow's	4981 R	Y	112	RR	---	R	High yield, for good soils
DeKalb	DKC61-45 (RR2/YGCB)	Y	111	RR2	YGCB	R	---
DeKalb	DKC63-46 (RR2/YGCB)	Y	113	RR2	YGCB	R	---
Dyna-Gro	5545	Y	113	---	---	R	Very consistent on dryland
Dyna-Gro	56K70 (RR)	Y	109	RR	---	R	Excellent test weight, drought tolerant
Dyna-Gro	57B90 (RR/YGCB/YGRW)	Y	113	RR	CB + RW	R	Rootworm protected, dryland
Dyna-Gro	57F67 (Bt)	Y	112	---	YG	R	Very good no-till, dryland
Dyna-Gro	57G68 (RR/YGRW)	Y	113	RR	YGRW	R	Rootworm protected, dryland
Dyna-Gro	57K14 (RR)	Y	111	RR	---	R	High yield, silage hybrid
Dyna-Gro	57P69 (RR/Bt)	Y	113	RR	YG	R	High yield, silage hybrid
FFR	690	Y	112	---	---	R	High yield, good silage
FFR	693 RR2	Y	112	RR2	---	R	Tall, early, good silage
FFR	736 Bt	Y	112	---	Bt	R	High yield, drought tolerant
Fielder's Choice	7787 R	Y	112	RR	---	R	Drought tolerant
Fielder's Choice	9612 B	Y	113	---	Bt	R	Yield, drought tolerant
Golden Harvest	H-8920	Y	111	---	---	R	---
Golden Harvest	H-9107	Y	112	---	---	R	---
Golden Harvest	H-9251 (LL/CB)	Y	113	LL	Bt	R	---
Golden Harvest	Laser L-9H07 Bt/RR	Y	110	RR	Bt	R	---
LG Seeds	LG 2615	Y	113	---	---	R	High yield, healthy, high test weight
NK Brand	N 65-M7	Y	111	---	---	R	Does well on most soil types
NK Brand	N 70-T9 (LL/YG)	Y	112	LL	CB	R	Dependable yields for wide range of environments
NK Brand	N68-B8 (LL/CB)	Y	112	LL	CB	R	Excellent standability & Yld, short statured hybrid
NK Brand	N71-R7	Y	112	---	---	R	Good yield and quality - conventional for Bt refuge
Pioneer	33N56	Y	112	---	---	R	---
Trisler Seed Farms	T-5175 CB	Y	109	---	CB	R	Excellent plant health
Trisler Seed Farms	T-5245 CB	Y	110	---	CB	R	Early vigor
Trisler Seed Farms	T-5255 RRCB	Y	112	RR	CB	R	Wide area of adaptability
Trisler Seed Farms	T-5337 CB	Y	113	---	CB	R	improved stress protection
Trisler Seed Farms	T-5338 CB	Y	113	---	CB	R	well suited to high yield environments
Vigoro	V 52Y61 (YGCB)	Y	112	---	YGCB	R	---
Vigoro	V 52YR52 (RR2/YGCB)	Y	111	RR2	YGCB	R	---

Table 28 (continued)

Medium-Season Corn Hybrid Entries				Herbicide		Released or	
Brand	Hybrid	Grain Color	Maturity	Tolerance	BT Gene	Experimental	Comments from Companies
Adrian Associates	AX 1143	Y	114	---	---	E	---
Agrigold	A6585Bt	Y	114	---	YGCB	R	---
Agrigold	A6622	Y	115	---	---	R	---
Agrigold	A6633Bt	Y	115	---	YGCB	R	---
Agrigold	A6647RR	Y	115	RR	---	R	---
Belle	1533 Y	Y	115	---	Bt	R	---
Belle	1545 RY	Y	115	RR	Bt	R	---
Croplan Genetics	799 (RR2)	Y	116	RR	---	R	High yield, fast dry down
DeKalb	DKC66-23 (RR2/YGCB)	Y	116	RR2	YGCB	R	---
Dyna-Gro	57F87 (YG)	Y	115	---	YG	R	Very drought tolerant
Dyna-Gro	57K33 (RR)	Y	114	RR	---	R	Very good drought tolerance, silage
Dyna-Gro	57N96	Y	114	---	---	R	Very good drought tolerance, silage
Dyna-Gro	57P12 (RR/Bt)	Y	115	RR	YG	R	High yield for all soils
Dyna-Gro	57P46 (RR/Bt)	Y	115	RR	YG	R	Very good early vigor
Dyna-Gro	58P59 (RR/Bt)	Y	116	RR	YG	R	High yield, silage hybrid
FFR	746 RR2/Bt	Y	114	RR2	Bt	R	Yield, stand, test weight
FFR	749 RR2	Y	115	RR2	---	R	Stress tolerant, Flex
FFR	755 HX	Y	115	---	HX	R	Grain or Silage, tall
FFR	756 (RR2/Bt)	Y	115	RR2	Bt	R	Good yield, stress tolerance, test wieght
FFR	835 (Bt)	Y	116	---	Bt	R	High Yield
Golden Harvest	Laser L-9H63 Bt	Y	115	---	Bt	R	---
LG Seeds	LG 2640	Y	114	---	---	R	High yield, healthy, widely adapted
NK Brand	N 76-D3 (LL/Bt)	Y	114	LL	Bt	R	Excellent yields across wide soil types
Pioneer	33M53 (RR2)	Y	115	RR2	---	R	---
Pioneer	33R81 (YGCB/RR2)	Y	114	RR	YGCB	R	---
Pioneer	33V15	Y	114	---	---	R	---
Pioneer	33Y45	Y	115	---	---	R	---
Steyer	1152 YGCB	Y	115	---	Bt	R	---
Steyer	1153 YGCB	Y	115	---	YGCB	R	---
Terral	TV 25BR23 (RR/YGCB)	Y	114	RR	YGCB	R	Very high yield, no marginal soils
Terral	TV 25R31 (RR)	Y	114	RR	---	R	Superior yield / good ear flex
Terral	TV 26BR61 (RR/YGCB)	Y	116	RR	YGCB	R	High yield environments
Terral	TV 26BR41 (RR/YGCB)	Y	115	RR	YGCB	E	High yield environments
Terral	TVX 25BR601 (RR/YGCB)	Y	115	RR	YGCB	E	High yield environments
Terral	TVX 25BR602 (RR/YGCB)	Y	115	RR	YGCB	E	High yield environments
Terral	TVX 25R501 (RR)	Y	114	RR	---	E	Excellent stress tolerance and stalks
UniSouth Genetics	FB 814 CB	Y	115	---	Bt	R	High fertility soils, heat & drought tolerant
UniSouth Genetics	FB 905 RRCB	Y	116	RR	Bt	R	Heat and drought tolerant
Vigoro	V 5570	Y	114	---	---	R	---

Table 28 (continued)

Full-Season Corn Hybrid Entries				Herbicide		Released or	
Brand	Hybrid	Grain Color	Maturity	Tolerance	BT Gene	Experimental	Comments from Companies
Agrigold	A6710BtRR	Y	117	RR	Bt	R	---
Belle	1515 C	Y	117	---	---	R	---
Belle	1525 R	Y	117	RR	---	R	---
Belle	1747 RY	Y	117	RR	Bt	R	---
DeKalb	DKC67-23 (RR2/YGCB)	Y	117	RR2	YGCB	R	---
Dyna-Gro	58K02 (RR)	Y	119	RR	---	R	Defensive, silage hybrid
Dyna-Gro	58K40 (RR)	Y	117	RR	---	R	Very good drought tolerance, silage
Dyna-Gro	58P45 (RR/YGCB)	Y	120	RR	YGCB	R	High yield, defensive
Dyna-Gro	58P60 (RR/YGCB)	Y	120	RR	YGCB	R	Very good test weight, stalks, drought tollerant
FFR	885	Y	118	---	---	R	Tall, good stadibility, silage
FFR	833 (RR2)	Y	117	RR2	---	R	Good Yield, Test Wiegth, stand
FFR	842 RR2	Y	117	RR2	---	R	Grain or Silage
FFR	843 RR2/Bt	Y	117	RR2	Bt	R	High yield, stacked traits
Pioneer	31D58	Y	119	---	---	R	---
Pioneer	31P41	Y	118	---	---	R	---
TN Exp	TN 0506 (W)	W	Full	---	---	E	---
TN Exp	TN 0601	Y	Full	---	---	E	---
TN Exp	TN 0602	Y	Full	---	---	E	---
TN Exp	TN 0603	Y	Full	---	---	E	---
TN Exp	TN 0604 (W)	W	Full	---	---	E	---
UniSouth Genetics	FB 909	Y	118	---	---	---	Very robust, healthy, good for silage
UniSouth Genetics	FB 927 RRCB	Y	117	RR	Bt	R	---
Vigoro	V 58Y41 (Bt)	Y	117	---	YGCB	R	High yield / high quality silage

Codes:

Bt, YG, YGCB, CB = contains a *Bacillus thuringiensis* gene for insect resistance

CBRW, RW = contains a gene for rootworm resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

† Information on this table provided by the respective seed companies.

LL = contains a gene for tolerance to glufosinate

W = white grain

RR, R, R2, RR2 = contains a gene for tolerance to glyphosate