

Corn Grain Hybrid Tests in Tennessee

2011

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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

Coordinator: **Robert C. Williams, Jr.**, Area Specialist, Grain Crops

<u>County</u>	<u>Producer</u>	<u>Agent</u>
<u>Early/Medium/Full Season Corn Hybrid Test (Conventional & Bt)</u>		
Coffee	L.A. Teal & Mike England	Steve Harris
Henry	Tosh Farms	Ranson Goodman
Lake	Hopper Farms	Greg Allen
REC at Milan	Dr. Blake Brown	Dr. Angela McClure
Obion	Bill Thompson	Tim Smith
Weakley 1 & 2	Billy Scarbrough	Jeff Lannom

Early Season Corn Hybrid Test (RR and Stacked)

<i>Ballard, KY</i>	J A P Farms	Bob Middleton
<i>Calloway, KY</i>	Murdock & Sons	Todd Powell/Tim Lax
Carroll	Steve Coleman	Steve Burgess
Coffee	L.A. Teal & Mike England	Steve Harris
Crockett	Steve & Drew Bailey	Richard Buntin
Fayette	Joseph McNabb	Jeff Via
Franklin/Grundy	George, Eddie & Eric Clay	Ed Burns/Creig Kimbro
<i>Fulton, KY</i>	Johnson Linder	Cam Kenimer/Ben Mullins
Gibson	Denton Clay Parkins	Philip Shelby
Giles	Pat Sulcer	Kevin Rose
Henderson	Billy Hatchet	Ron Blair
Henry	Brannon Farms	Ranson Goodman
Henry	Tosh Farms	Ranson Goodman
Lake	Terry Petty	Greg Allen
REC at Milan (fungicide)	Dr. Blake Brown	Dr. Angela McClure
REC at Milan (no fungicide)	Dr. Blake Brown	Dr. Angela McClure
Obion	David & Scott Wisener	Tim Smith
Rutherford	Brandon Whitt & John Batey	Mitchell Mote
Weakley	Bob Grooms	Jeff Lannom

County Standard Corn Tests

Coordinator: **Robert C. Williams, Jr.**, Area Specialist, Grain Crops

County

Producer

Agent

Medium Season Corn Hybrid Test (RR & Stacked)

Blount	Mac Pate	John Wilson
<i>Calloway, KY</i>	Murdock & Sons	Todd Powell/Tim Lax
Cannon	Johnny & Judy Powell	Bruce Steelman
<i>Carlisle, KY</i>	Curtsinger Farms	Bob Middleton
Coffee	L.A. Teal & Mike England	Steve Harris
Fayette	Lee Graves	Jeff Via
Franklin/Grundy	George, Eddie & Eric Clay	Ed Burns/Creig Kimbro
Gibson 1 & 2	Denton Clay Parkins	Philip Shelby
Henry	Brannon Farms	Ranson Goodman
Henry	Tosh Farms	Ranson Goodman
Hickman	Clint & Claude Callicott	Troy Dugger
Humphreys	Lee Uptain	Amanda Mathenia/Jerri Lynn Sims
Lake	Terry Petty	Greg Allen
Loudon	David Richesin	John Goddard
Madison	Matt Griggs	Billy Wyatt/Jake Mallard
REC at Milan (fungicide)	Dr. Blake Brown	Dr. Angela McClure
REC at Milan (no fungicide)	Dr. Blake Brown	Dr. Angela McClure
Obion	Elwin Tanner	Tim Smith
Robertson	Freddie Edwards	Paul Hart
Weakley	Luke Cochran	Jeff Lannom

Full Season Corn Hybrid Test (RR & Stacked)

<i>Calloway, KY</i>	Murdock & Sons	Todd Powell/Tim Lax
Cannon	Johnny & Judy Powell	Bruce Steelman
Coffee	L.A. Teal & Mike England	Steve Harris
Fayette	Lee Graves	Jeff Via
Franklin/Grundy	George, Eddie & Eric Clay	Ed Burns/Creig Kimbro
Gibson	Denton Clay Parkins	Philip Shelby
Henderson	Billy Hatchet	Ron Blair
Henry	Tosh Farms	Ranson Goodman
Humphreys	Lee Uptain	Amanda Mathenia/Jerri Lynn Sims
Lake	Terry Petty	Greg Allen
Loudon	David Richesin	John Goddard
Obion	Elwin Tanner	Tim Smith
Weakley	David Scarbrough	Jeff Lannom

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CORN GRAIN VARIETY TESTS IN TENNESSEE

RESEARCH AND EDUCATION CENTER TESTS

2011

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), Highland Rim (Springfield), East TN (Knoxville), and Milan (Milan) Research and Education Centers (**REC**). The Early and Medium-season tests were also planted at the Agricenter International Research Center (Memphis).

Duplicate plantings of the early-, medium- and full-season tests were made at the **Milan and Highland Rim 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 planted to uniform populations per acre at each location using a precision seeding planter. Populations varied with location but attempts were made to make the population the same for all hybrids at a given location (Table 1). 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, 28 to 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 19 counties in Tennessee, and two counties in Western Kentucky. The number of counties depended on the test. The County Standard Tests were divided into **early-, medium- and full-season conventional & Bt tests** (same DAP criteria as listed above), and **early-, medium-, and full-season glyphosate resistant stacked with Bt 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 2011 growing season was characterized by a wet spring resulting in some flooded fields and planting delays nearly a month behind normal progress. Field conditions were varied across the state following planting with some areas receiving adequate rainfall while other areas were hotter and dryer than normal through July. Hot, dry conditions persisted across the state, however two-thirds of the corn crop was rated as good to excellent at the end of August. Harvest proceeded at a good pace in the fall with some minor regional delays due to rainfall. According to the Tennessee Agricultural Statistics Service, producers planted 770,000 acres this year, an increase of 60,000 from 2010. Acreage harvested for grain is projected to be 730,000, up 90,000 acres from last season. Corn grain production for 2011 is projected to be 99.3 million bushels, an increase of 33 percent from the previous year and the highest production on record since 1917. The state corn grain yield average is projected to be 136 bu/a, 19 bushels above the 2010 yield.

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 ($123 - 115 = 8 \text{ bu/a} = \text{LSD of } 8$) and Hybrid A ($123 - 110 = 13 \text{ bu/a} > \text{LSD of } 8$).

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 variance 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 and eleven corn hybrids were evaluated in the 2011 **Research and Education Center (REC)** tests in Tennessee. There were 39 hybrids in the early- (Tables 2-7), 52 in the medium- (Tables 8-13), and 20 hybrids in the full-season (Tables 14-19). The 111 hybrids represent 17 different brands (Tables 27-28). The **County Standard (CS)** tests consisted of an early, medium, and full-season conventional & Bt test (13 hybrids at 7 locations, Table 20), a early-season glyphosate resistant Bt stacked trait test (22 hybrids at 17 locations, Table 21), a medium-season glyphosate resistant Bt stacked trait test (21 hybrids at 20 locations, Table 22), and a full-season glyphosate resistant Bt stacked trait test (6 hybrids at 13 locations, Table 23) for a total of 62 hybrids. In addition to 19 Tennessee counties, the County Standard tests involved Ballard and Calloway counties in Western Kentucky. Common to both the REC and CS tests were 15 early-season, 20 medium-season, and four full-season hybrids (Tables 24-26). In the REC tests, the white grain, Bt, RW, RR, LL and stacked-trait hybrids were not placed in separate tests, but were placed in the maturity test for which they fit. One hundred and two of the 111 hybrids in the 2011 REC tests have a Bt gene for Corn Borer resistance (denoted by Bt, YG, CB, YGCB, HX); 64 have a gene for Corn Root Worm resistance (denoted by RW); 98 have a Roundup Ready gene for tolerance to glyphosate herbicide (denoted by R, RR, RR2,GT); 48 have a gene for tolerance to Liberty (glufosinate) herbicide (denoted by LL); five hybrids are conventional and contain no transgenes; 6 hybrids contain a single transgene; seven are double stacked with combinations of RR, Bt, RW, LL; 43 hybrids are triple stacked with combinations of RR, LL, Bt, RW; 21 hybrids are quad stacked with combinations of RR, LL, Bt, RW; and 31 hybrids have the VT3P, VT3Pro or PRO designation which denotes resistance to glyphosate, corn borer, rootworm, earworm and armyworm (Table 27).

Irrigated vs. Non-irrigated Yields. Duplicate tests were conducted at the Milan and Highland Rim Research and Education Centers with and without irrigation. In a year of variable rainfall during critical stages of the growing season, the average differences in yields across hybrids receiving irrigation versus non-irrigation at Milan were significant: 67 bu/a for early-season hybrids (Table 2), 70 bu/a for medium-season hybrids (Table 8), and 43 bu/a for full-season hybrids (Table 14). In a stark contrast, the Highland Rim **non-irrigated** plot yields were higher than the irrigated plots this year by 36, 42, and 2 bu/a for the early-, medium-, and full-season tests, respectively (Tables 2, 8, and 14). The irrigated field at Springfield is

located on a more marginal upland soil type, while the non-irrigated field was located on a more productive bottomland soil. Differences in the soil productivity along with rainfall received at critical periods in the crop's development resulted in the non-irrigated tests out-performing the irrigated tests at the Springfield location this year. In the future, the non-irrigated test site at this location will be selected to more closely match the soil productivity and general site conditions of the irrigated field.

Table 1. Location information from research and education centers where the corn hybrid tests were conducted in Tennessee in 2011.

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Early Season Corn Hybrids					
East Tennessee	Knoxville	April 19, 2011	September 12, 2011	28,003	Sequatchie Silt Loam
Highland Rim (irrigated)	Springfield	April 18, 2011	August 30, 2011	24,684	Sango Silt Loam
" " (non-irrigated)	"	April 19, 2011	September 12, 2011	23,232	Staser Silt Loam
Milan (irrigated)	Milan	May 9, 2011	September 27, 2011	28,459	Loring, Memphis Silt Loam
" (non-irrigated)	"	May 9, 2011	September 13, 2011	28,459	Grenada Silt Loam
Ames Plantation	Grand Junction	May 6, 2011	September 28, 2011	27,926	Lexington Silt Loam
Agricenter International	Memphis	May 11, 2011	September 28, 2011	28,936	Falaya Silt Loam

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Medium Season Corn Hybrids					
East Tennessee	Knoxville	April 19, 2011	September 19, 2011	25,513	Sequatchie Silt Loam
Highland Rim (irrigated)	Springfield	April 18, 2011	September 9, 2011	24,394	Sango Silt Loam
" " (non-irrigated)	"	April 19, 2011	September 14, 2011	22,942	Staser Silt Loam
Milan (irrigated)	Milan	May 9, 2011	September 28, 2011	28,169	Loring, Memphis Silt Loam
" (non-irrigated)	"	May 9, 2011	September 14, 2011	28,169	Grenada Silt Loam
Ames Plantation	Grand Junction	May 6, 2011	September 28, 2011	27,528	Lexington Silt Loam
Agricenter International	Memphis	May 11, 2011	September 27, 2011	28,625	Falaya Silt Loam

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
Full Season Corn Hybrids					
East Tennessee	Knoxville	April 19, 2011	September 19, 2011	25,513	Sequatchie Silt Loam
Highland Rim (irrigated)	Springfield	April 18, 2011	September 16, 2011	24,974	Sango Silt Loam
" " (non-irrigated)	"	April 19, 2011	September 14, 2011	21,780	Staser Silt Loam
Milan (irrigated)	Milan	May 9, 2011	September 28, 2011	28,169	Grenada Silt Loam
" (non-irrigated)	"	May 9, 2011	September 14, 2011	28,459	Grenada Silt Loam
Ames Plantation	Grand Junction	May 6, 2011	September 29, 2011	28,140	Lexington Silt Loam

Table 2. Mean yields of 39 early-season (<114 DAP) corn hybrids evaluated in seven environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]	Springfield				Milan		AgCenter	
		± Std Err (n=7)	Knoxville	(Irr.)**	(Non-Irr.)	(Irr.)	(Non-Irr.)	Ames	Memphis	
----- bu/a -----										
Mycogen	2V738 (RR/LL/CB/RW)	191 ± 4	185	190	186	231	169	161	216	
AgVenture	RL8428HB (RR/LL/CB)	190 ± 4	207	163	178	249	188	150	194	
Mycogen	2V715 (RR/LL/CB/RW)	190 ± 4	187	154	192	233	181	157	223	
DeKalb	DKC61-88 GENVT3P	190 ± 4	189	161	200	248	187	161	181	
DeKalb	DKC62-09 GENVT3P	189 ± 4	177	178	189	248	175	162	196	
Wyffels	W7477 (VT3Pro)	189 ± 4	191	155	193	245	178	145	213	
Agrigold	A6489VT3	188 ± 4	196	158	208	249	172	137	196	
Steyer	11302 VT3Pro	188 ± 4	192	148	201	246	176	153	201	
Steyer	11204 VT3Pro	188 ± 4	210	130	185	248	181	161	201	
Dairyland	9111 (RR/LL/CB/RW)	187 ± 4	172	196	191	217	168	146	220	
DeKalb	DKC63-87 GENVT2P	185 ± 4	180	144	211	248	177	153	181	
Augusta	A0720CBLL	184 ± 4	174	144	189	250	174	149	211	
Croplan	6286SS	183 ± 4	172	162	211	221	151	150	211	
Agrigold	A6553VT3	182 ± 4	181	130	180	237	173	145	228	
Augusta	A5461GTCBLL	182 ± 4	188	139	190	243	163	144	205	
Augusta	A0606GTCBLL	181 ± 4	176	143	180	235	167	146	220	
Armor	1161PRO V (VT3)	181 ± 4	165	154	176	245	164	138	224	
Augusta	A5337EVT3	181 ± 4	184	143	187	246	175	141	189	
NK Brand	N72F-3000GT (RR/LL/CB/RW)	180 ± 4	183	152	187	238	173	154	174	
Agrigold	A6533VT3	179 ± 4	170	131	192	240	181	143	195	
Augusta	A5175CB	179 ± 4	176	150	181	239	158	139	207	
Dairyland	7115 (RR/CB)	178 ± 4	206	156	148	230	152	145	208	
NK Brand	N68A-3000GT (RR/LL/CB/RW)	177 ± 4	171	172	179	225	162	133	199	
Agrigold	A6476VT3Pro	176 ± 4	176	158	184	237	162	142	172	
Croplan	6125VT3	176 ± 4	167	146	182	238	179	141	178	
Dyna-Gro	D51VP40 (VT3P)	176 ± 4	169	129	169	244	173	152	196	
Armor	1262DPro (VT2)	175 ± 4	159	141	195	239	163	136	195	
Dyna-Gro	CX111113 (VT3P)	175 ± 4	174	156	169	222	177	150	175	
Dairyland	9910 (VT3)	174 ± 4	142	149	183	228	150	148	217	
Agrigold	A6458VT3	173 ± 4	167	132	198	246	171	132	167	
DeKalb	DKC62-63 GENVT3P	173 ± 4	159	131	171	254	182	143	171	
Augusta	A5558VT3P	172 ± 4	180	129	192	224	158	140	184	
Dairyland	7313 (VT3)	172 ± 4	163	182	186	228	156	135	153	
Augusta	A5560VT3	170 ± 4	143	140	166	244	171	108	216	
Augusta	A5462GT3000	169 ± 4	178	133	177	236	177	123	161	
Agrigold	A6452VT3	168 ± 4	173	148	203	237	159	122	133	
Augusta	A5658GTCBLL	167 ± 4	162	134	177	216	157	137	186	

Table 2 (continued)

Brand	Hybrid §	Avg. Yield [†]							
		± Std Err (n=7)	Knoxville	Springfield (Irr.)**	Springfield (Non-Irr.)	Milan (Irr.)	Milan (Non-Irr.)	Ames	AgCenter Memphis
Wyffels	W7997 (VT3Pro)	161 ± 4	159	125	168	212	165	146	152
Augusta	A2854CBLL	146 ± 4	163	127	154	191	143	119	127
	Avg. (bu/a)	179	176	149	185	236	169	144	190
	L.S.D._{.05} (bu/a)	9	24	37	28	16	20	22	21
	C.V. (%)	8.4	8.3	14.7	8.9	4.2	7.3	9.6	6.8

†All Yields are adjusted to 15.5% moisture.

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

LL = contains a gene for tolerance to glufosinate

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

** - Irrigated field at Springfield is located on a more marginal soil type, while the non-irrigated field was located on a more productive bottomland soil.

Differences in the soil type along with rainfall at critical periods in the crop's development resulted in the non-irrigated test out-performing the irrigated tests at the Springfield location.

Table 3. Overall mean yields and agronomic characteristics of 39 early-season corn hybrids evaluated in seven environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear	Protein	Oil	Starch
		± Std Error (n=7) bu/a	at Harvest (n=7) %	Weight (n=1) lbs/bu	(n=3) %	Height [‡] (n=3) in.	Height [‡] (n=3) in.	(n=1) %	(n=1) %	(n=1) %
Mycogen	2V738 (RR/LL/CB/RW)	191 ± 4	17.0	55.8	1	97	34	9.4	4.4	72.6
AgVenture	RL8428HB (RR/LL/CB)	190 ± 4	17.8	55.9	0	102	28	9.4	4.0	73.3
Mycogen	2V715 (RR/LL/CB/RW)	190 ± 4	15.6	52.8	1	97	34	9.0	4.1	73.3
DeKalb	DKC61-88 GENVT3P	190 ± 4	16.1	56.1	1	94	31	9.0	3.9	74.0
DeKalb	DKC62-09 GENVT3P	189 ± 4	16.0	56.1	1	94	33	8.6	4.1	73.6
Wyffels	W7477 (VT3Pro)	189 ± 4	16.3	54.7	0	97	29	8.6	3.7	74.2
Agrigold	A6489VT3	188 ± 4	17.0	56.1	3	89	32	9.8	4.1	73.0
Steyer	11302 VT3Pro	188 ± 4	15.8	56.1	0	99	29	8.5	3.8	73.7
Steyer	11204 VT3Pro	188 ± 4	17.5	56.1	0	95	31	8.9	4.2	73.7
Dairyland	9111 (RR/LL/CB/RW)	187 ± 4	16.4	54.4	1	94	31	8.4	4.2	73.3
DeKalb	DKC63-87 GENVT2P	185 ± 4	16.3	55.2	2	99	31	9.4	4.0	73.3
Augusta	A0720CBLL	184 ± 4	17.5	54.4	2	99	32	9.4	4.1	73.7
Croplan	6286SS	183 ± 4	17.8	55.7	0	98	34	8.6	4.3	73.2
Agrigold	A6553VT3	182 ± 4	19.3	53.5	1	93	28	9.1	4.1	73.2
Augusta	A5461GTCBLL	182 ± 4	16.1	53.4	1	107	35	8.4	3.8	74.6
Augusta	A0606GTCBLL	181 ± 4	16.7	53.8	1	106	35	8.5	3.9	74.4
Armor	1161PRO V (VT3)	181 ± 4	16.6	54.2	1	92	29	8.4	4.3	73.2
Augusta	A5337EVT3	181 ± 4	18.9	55.1	1	102	34	8.9	3.7	74.0
NK Brand	N72F-3000GT (RR/LL/CB/RW)	180 ± 4	17.0	54.8	2	107	34	8.6	3.9	73.8
Agrigold	A6533VT3	179 ± 4	18.0	55.6	1	92	29	8.9	4.2	73.0
Augusta	A5175CB	179 ± 4	16.8	54.1	0	100	31	8.6	4.2	73.7
Dairyland	7115 (RR/CB)	178 ± 4	19.2	53.6	2	102	36	9.1	4.5	73.2
NK Brand	N68A-3000GT (RR/LL/CB/RW)	177 ± 4	16.4	52.8	1	101	34	8.7	4.4	73.1
Agrigold	A6476VT3Pro	176 ± 4	16.0	55.7	1	90	31	8.9	4.2	73.8
Croplan	6125VT3	176 ± 4	15.8	55.3	1	96	31	9.2	3.9	73.6
Dyna-Gro	D51VP40 (VT3P)	176 ± 4	16.8	53.7	1	93	28	8.6	4.2	73.2
Armor	1262DPro (VT2)	175 ± 4	17.3	56.4	3	99	30	8.4	4.2	73.8
Dyna-Gro	CX111113 (VT3P)	175 ± 4	16.0	53.9	0	96	29	8.8	3.9	73.5
Dairyland	9910 (VT3)	174 ± 4	15.2	54.5	3	95	32	8.1	4.0	73.6
Agrigold	A6458VT3	173 ± 4	17.2	53.3	0	96	29	9.4	4.0	73.1
DeKalb	DKC62-63 GENVT3P	173 ± 4	16.4	55.2	4	94	29	9.0	4.3	73.3
Augusta	A5558VT3P	172 ± 4	15.9	55.9	1	100	30	10.2	4.4	72.6
Dairyland	7313 (VT3)	172 ± 4	16.9	56.6	1	99	31	9.0	4.4	73.0
Augusta	A5560VT3	170 ± 4	17.2	53.8	1	96	30	8.5	4.1	73.7
Augusta	A5462GT3000	169 ± 4	16.7	53.0	0	103	33	8.4	3.9	74.6
Agrigold	A6452VT3	168 ± 4	16.6	53.2	1	103	29	9.9	4.2	73.0
Augusta	A5658GTCBLL	167 ± 4	16.0	55.7	1	94	32	9.1	4.1	74.0

Table 3 (continued)

Brand	Hybrid §	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear	Protein	Oil	Starch
		± Std Error (n=7)	at Harvest (n=7)	Weight (n=1)	(n=3)	Height [‡] (n=3)	Height [‡] (n=3)	(n=1)	(n=1)	(n=1)
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Wyffels	W7997 (VT3Pro)	161 ± 4	17.0	56.1	1	89	27	8.3	4.4	73.6
Augusta	A2854CBLL	146 ± 4	15.3	54.1	0	92	30	8.7	4.2	73.8
Average		179	16.8	54.8	1	97	31	8.9	4.1	73.5

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Protein, Oil, and Starch on a dry weight basis

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

[‡]Average of Knoxville and Springfield.

Table 4. Mean yields of 16 early-season (<114 DAP) corn hybrids evaluated in six environments for two years (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†] ± Std Err (n=12)	Springfield		Milan		Ames	
			Knoxville	(Irr.)** (Non-Irr.)	(Irr.)	(Non-Irr.)		
			----- bu/a -----					
Agrigold	A6489VT3	171 ± 3	192	143	167	225	167	128
Agrigold	A6533VT3	169 ± 3	182	128	148	235	180	139
Augusta	A5461GTCBLL	168 ± 3	184	143	154	241	150	136
Armor	1161PRO V (VT3)	167 ± 3	182	148	140	241	178	116
DeKalb	DKC62-63 GENVT3P	167 ± 3	175	127	151	241	178	132
Dairyland	7313 (VT3)	165 ± 3	175	148	155	217	162	133
Agrigold	A6553VT3	164 ± 3	190	121	148	232	166	129
Agrigold	A6458VT3	163 ± 3	188	124	150	231	169	118
Agrigold	A6476VT3Pro	163 ± 3	177	144	151	216	154	133
Augusta	A5462GT3000	162 ± 3	176	131	144	228	171	125
Dyna-Gro	D51VP40 (VT3P)	162 ± 3	182	131	133	233	176	118
Croplan	6286SS	161 ± 3	182	132	156	215	155	128
Dairyland	9910 (VT3)	161 ± 3	163	138	144	224	165	130
Augusta	A5337EVT3	161 ± 3	183	135	148	234	165	98
Augusta	A5175CB	160 ± 3	178	138	150	220	163	111
Agrigold	A6452VT3	158 ± 3	182	124	150	223	154	115
	Avg. (bu/a)	164	181	135	149	229	166	124
	L.S.D._{.05} (bu/a)	9	21	31	23	17	22	24
	C.V. (%)	8.9	7.5	14.0	9.8	4.9	8.7	12.1

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

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

Table 5. Mean yields and agronomic characteristics of 16 early-season corn hybrids evaluated in six environments for two years (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]		Test		Plant	Ear	Protein	Oil	Starch
		± Std Err (n=12)	Moisture (n=12)	Weight (n=2)	Lodging (n=5)	Height [‡] (n=6)	Height [‡] (n=6)	(n=2)	(n=2)	(n=2)
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Agrigold	A6489VT3	171 ± 3	16.6	57.9	2	94	35	10.1	4.1	73.0
Agrigold	A6533VT3	169 ± 3	16.9	56.9	1	97	32	9.5	4.4	72.5
Augusta	A5461GTCBLL	168 ± 3	15.3	55.7	1	107	39	9.0	3.8	74.2
Armor	1161PRO V (VT3)	167 ± 3	16.1	56.6	1	97	34	8.9	4.3	73.3
DeKalb	DKC62-63 GENVT3P	167 ± 3	16.0	57.6	2	101	33	9.3	4.5	73.0
Dairyland	7313 (VT3)	165 ± 3	16.4	57.6	1	103	36	9.7	4.5	72.7
Agrigold	A6553VT3	164 ± 3	18.7	55.0	1	98	33	9.5	4.2	73.2
Agrigold	A6458VT3	163 ± 3	15.8	54.6	0	100	34	9.7	4.1	73.0
Agrigold	A6476VT3Pro	163 ± 3	15.3	57.2	1	97	35	9.9	4.4	72.9
Augusta	A5462GT3000	162 ± 3	16.3	56.3	1	106	39	9.1	4.0	74.2
Dyna-Gro	D51VP40 (VT3P)	162 ± 3	16.3	55.6	1	100	33	9.2	4.3	73.0
Croplan	6286SS	161 ± 3	17.2	57.5	0	99	37	8.9	4.6	73.0
Dairyland	9910 (VT3)	161 ± 3	14.6	56.5	2	103	36	8.9	4.1	73.3
Augusta	A5337EVT3	161 ± 3	18.2	55.6	1	105	38	9.5	3.8	73.7
Augusta	A5175CB	160 ± 3	16.0	55.9	0	102	35	9.0	4.4	73.1
Agrigold	A6452VT3	158 ± 3	16.3	56.1	1	103	35	10.2	4.4	72.7
Average		164	16.4	56.4	1	101	35	9.4	4.2	73.2

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Protein, Oil, and Starch on a dry weight basis

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

[‡]Average of Knoxville and Springfield.

Table 6. Mean yields of six early-season (<114 DAP) corn hybrids evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†] ± Std Err		Milan			Ames
		(n=15)	Knoxville	Springfield	(Irr.)	(Non-Irr.)	
		----- bu/a -----					
Agrigold	A6533VT3	181 ± 2	200	138	221	186	161
Agrigold	A6489VT3	180 ± 2	202	158	215	175	152
Augusta	A5337EVT3	178 ± 2	207	146	224	183	130
Dairyland	7313 (VT3)	175 ± 2	193	155	209	172	147
Dyna-Gro	D51VP40 (VT3P)	173 ± 2	200	127	212	180	144
Augusta	A5175CB	173 ± 2	200	146	209	176	134
Avg. (bu/a)		177	200	145	215	179	145
L.S.D._{.05} (bu/a)		10	19	26	18	20	27
C.V. (%)		8.3	6.4	12.0	5.5	7.5	11.6

Table 7. Mean yields and agronomic characteristics of six early-season corn hybrids evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†] ± Std Err		Test		Plant	Ear	Protein (n=3)	Oil (n=3)	Starch (n=3)
		(n=15)	Moisture (n=15)	Weight (n=3)	Lodging (n=7)	Height [‡] (n=6)	Height [‡] (n=6)			
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Agrigold	A6533VT3	181 ± 2	17.3	57.0	1	100	36	9.3	4.6	72.3
Agrigold	A6489VT3	180 ± 2	17.0	58.3	2	99	38	9.9	4.3	72.8
Augusta	A5337EVT3	178 ± 2	17.9	55.9	2	107	40	9.4	4.0	73.3
Dairyland	7313 (VT3)	175 ± 2	16.8	57.8	1	103	39	9.7	4.7	72.5
Dyna-Gro	D51VP40 (VT3P)	173 ± 2	16.7	56.5	1	105	35	9.1	4.4	72.9
Augusta	A5175CB	173 ± 2	16.4	56.7	0	105	39	9.1	4.5	73.0
Average		177	17.0	57.0	1	103	38	9.4	4.4	72.8

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

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

[‡]Average of Knoxville and Springfield.

Table 8. Mean yields of 52 medium-season (114-116 DAP) corn hybrids evaluated in seven environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]	Springfield		Milan		Ames	AgCenter Memphis	
		± Std Err (n=7)	Knoxville	(Irr.)**	(Non-Irr.)	(Irr.)			(Non-Irr.)
			-----bu/a-----						
Dyna-Gro	V5683VT3	191 ± 4	185	138	163	268	183	162	236
DeKalb	DKC66-96 GENVT3P	188 ± 4	173	141	190	244	189	151	224
Wyffels	W8681 (VT3)	186 ± 4	172	124	164	259	194	169	219
Mycogen	2T784 (RR/LL/CB/RW)	183 ± 4	176	142	184	244	181	153	200
Terral-REV Brand	26HR22 (RR/LL/Hx)	181 ± 4	181	132	177	248	168	122	239
Beck's XL Brand	6903HR	180 ± 4	208	133	170	251	175	142	182
Agrigold	A6679VT3Pro	179 ± 4	195	138	180	222	176	159	183
Beck's XL Brand	6733HXR (RR/LL/CB)	179 ± 4	169	130	154	259	190	135	214
Agrigold	A6573VT3	179 ± 4	153	145	206	257	179	141	170
NK Brand	N79Z-GT/CB/LL	179 ± 4	175	135	176	240	155	144	224
DeKalb	DKC64-69 GENVT3P	178 ± 4	177	136	176	224	194	119	218
Terral-REV Brand	26HR82 (RR/LL/Hx)	176 ± 4	189	121	194	256	172	114	188
Steyer	11406 VT3Pro	175 ± 4	165	122	179	258	168	154	181
Croplan	6926VT3P	174 ± 4	157	123	173	236	172	146	213
Delta Grow	2988 GTBt11	174 ± 4	185	124	146	240	171	139	213
NK Brand	N77P-3111 (RR/LL/CB/RW)	174 ± 4	155	129	167	232	173	137	224
Terral-REV Brand	26HR70 (RR/LL/HX)	174 ± 4	179	129	164	229	171	137	206
NK Brand	N78S-3111 (RR/LL/CB/RW)	173 ± 4	159	122	150	244	170	139	229
Armor	1655PRO V (VT3)	173 ± 4	188	120	180	246	172	147	158
Terral-REV Brand	25HR39 (RR/LL/HX)	173 ± 4	164	120	176	247	158	132	215
Terral-REV Brand	26HR50 (RR/LL/HX)	173 ± 4	193	135	149	263	174	121	174
Terral-REV Brand	25HR49 (RR/LL/HX)	173 ± 4	178	132	172	254	170	147	155
Dyna-Gro	D54VP81 (VT3P)	172 ± 4	164	125	171	253	185	119	188
Augusta	A5464GTCBLL	171 ± 4	181	120	174	232	174	144	170
Armor	1415Pro (VT3)	170 ± 4	163	120	178	247	178	129	172
Augusta	A0715HXT (LL)	169 ± 4	181	121	152	234	160	145	190
Croplan	6914AS3000GT	169 ± 4	165	117	157	238	192	138	174
Armor	1539Pro (VT3)	168 ± 4	166	148	166	232	160	160	145
Dairyland	9414Q (RR/LL/CB/RW)	168 ± 4	142	132	164	232	171	123	213
Agrigold	A6677	168 ± 4	172	124	154	251	161	133	177
Terral-REV Brand	26R60 (RR)	167 ± 4	168	137	146	250	159	133	178
Dairyland	9214Q (RR/LL/CB/RW)	167 ± 4	162	124	168	228	177	142	166
Wyffels	W8437 (VT3Pro)	166 ± 4	159	137	162	215	174	156	161
DeKalb	DKC65-19 GENVT3P	165 ± 4	165	99	175	232	168	124	192
Augusta	A7664VT3P	164 ± 4	164	110	164	240	182	140	148
Mycogen	2A787 (RR/LL/CB/RW)	164 ± 4	133	120	156	242	163	135	198
Delta Grow	2888 GTBt11	163 ± 4	189	130	154	234	151	145	134

Table 8 (continued)

Brand	Hybrid §	Avg. Yield [†]	Springfield		Milan		AgCenter		
		± Std Err (n=7)	Knoxville	(Irr.)**	(Non-Irr.)	(Irr.)	(Non-Irr.)	Ames	Memphis
			-----bu/a-----						
Beck's XL Brand	6626HXR (RR/LL/CB)	161 ± 4	195	113	142	231	171	124	153
Mycogen	2T832 (RR/LL/CB/RW)	161 ± 4	145	112	161	228	170	151	160
Agrigold	A6632VT3Pro	159 ± 4	132	125	169	236	155	146	152
Delta Grow	3788 GTBt11	159 ± 4	161	118	163	219	156	145	152
Augusta	A6166GT3000	159 ± 4	164	91	155	228	161	128	184
Augusta	A7664CB	159 ± 4	141	123	172	236	157	132	148
Augusta	A6164GT3000	158 ± 4	155	101	180	222	165	130	156
Dyna-Gro	D55VC21 (VT3)	158 ± 4	150	121	173	241	167	143	114
Dyna-Gro	D56VP24 (VT3P)	158 ± 4	157	124	167	223	179	142	115
Dairyland	7615 (RR2/YGCB)	156 ± 4	150	124	156	218	163	122	158
Augusta	A6166CBLL	156 ± 4	167	98	176	222	165	121	140
Steyer	11601 GT	155 ± 4	159	109	169	226	149	130	145
Terral-REV Brand	25R19 (RR)	155 ± 4	152	122	155	230	161	122	139
Augusta	A6266GT3000	147 ± 4	130	113	157	228	151	112	138
Caverndale Farms	CF 848 3000GT	144 ± 4	156	104	147	220	157	127	97
	Avg. (bu/a)	169	168	124	166	240	170	137	178
	L.S.D._{.05} (bu/a)	9	29	22	23	19	23	21	31
	C.V. (%)	8.8	9.9	11.0	8.5	4.9	8.4	9.4	10.7

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

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

** - Irrigated field at Springfield is located on a more marginal soil type, while the non-irrigated field was located on a more productive bottomland soil.

Differences in the soil type along with rainfall at critical periods in the crop's development resulted in the non-irrigated test out-performing the irrigated tests at the Springfield location.

Table 9. Overall mean yields and agronomic characteristics of 52 medium-season corn hybrids evaluated in seven environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear	Protein	Oil	Starch
		± Std Err (n=7) bu/a	at Harvest (n=7) %	Weight (n=1) lbs/bu	(n=3) %	Height [‡] (n=3) in.	Height [‡] (n=3) in.	(n=1) %	(n=1) %	(n=1) %
Dyna-Gro	V5683VT3	191 ± 4	16.5	55.9	1	112	33	9.5	3.9	74.0
DeKalb	DKC66-96 GENVT3P	188 ± 4	16.1	58.9	1	93	28	9.2	4.5	73.1
Wyffels	W8681 (VT3)	186 ± 4	17.8	55.3	0	94	28	9.5	4.6	72.3
Mycogen	2T784 (RR/LL/CB/RW)	183 ± 4	17.9	54.6	2	102	35	9.1	4.6	73.0
Terral-REV Brand	26HR22 (RR/LL/Hx)	181 ± 4	17.2	57.7	0	114	35	8.3	4.1	74.3
Beck's XL Brand	6903HR	180 ± 4	17.1	57.8	0	112	36	8.5	4.1	74.2
Agrigold	A6679VT3Pro	179 ± 4	17.5	58.2	0	92	32	9.2	4.4	73.5
Beck's XL Brand	6733HXR (RR/LL/CB)	179 ± 4	16.5	56.5	0	105	35	8.5	4.2	73.9
Agrigold	A6573VT3	179 ± 4	16.9	54.9	0	99	29	8.9	4.2	73.5
NK Brand	N79Z-GT/CB/LL	179 ± 4	16.9	54.8	4	105	34	9.1	3.8	74.4
DeKalb	DKC64-69 GENVT3P	178 ± 4	16.0	56.2	2	88	29	8.8	4.2	73.5
Terral-REV Brand	26HR82 (RR/LL/Hx)	176 ± 4	18.6	55.2	0	110	33	9.3	4.2	73.1
Steyer	11406 VT3Pro	175 ± 4	16.7	58.3	2	93	29	8.5	4.4	73.7
Croplan	6926VT3P	174 ± 4	15.8	57.3	1	86	28	9.0	4.7	73.0
Delta Grow	2988 GTBt11	174 ± 4	17.8	55.9	1	102	31	9.2	4.0	73.8
NK Brand	N77P-3111 (RR/LL/CB/RW)	174 ± 4	17.5	53.8	0	100	34	8.5	4.3	73.3
Terral-REV Brand	26HR70 (RR/LL/HX)	174 ± 4	17.5	56.4	0	113	35	8.6	4.0	74.1
NK Brand	N78S-3111 (RR/LL/CB/RW)	173 ± 4	18.7	54.3	0	100	30	8.1	4.0	74.5
Armor	1655PRO V (VT3)	173 ± 4	16.4	57.1	0	99	33	9.0	4.2	73.7
Terral-REV Brand	25HR39 (RR/LL/HX)	173 ± 4	16.6	58.1	0	108	36	8.5	3.9	74.5
Terral-REV Brand	26HR50 (RR/LL/HX)	173 ± 4	18.2	58.5	0	109	31	8.5	4.1	74.1
Terral-REV Brand	25HR49 (RR/LL/HX)	173 ± 4	17.5	57.2	1	108	34	8.9	4.2	73.8
Dyna-Gro	D54VP81 (VT3P)	172 ± 4	16.8	57.2	2	91	29	8.8	4.4	73.4
Augusta	A5464GTCBLL	171 ± 4	16.0	57.0	1	101	36	9.3	4.1	74.3
Armor	1415Pro (VT3)	170 ± 4	16.5	54.4	1	93	29	8.4	3.9	74.3
Augusta	A0715HXT (LL)	169 ± 4	16.2	54.8	0	96	33	9.5	4.2	73.7
Croplan	6914AS3000GT	169 ± 4	16.4	55.7	1	104	35	8.4	4.1	74.4
Armor	1539Pro (VT3)	168 ± 4	17.4	58.5	2	95	33	9.1	4.4	73.3
Dairyland	9414Q (RR/LL/CB/RW)	168 ± 4	17.7	57.2	0	86	29	8.7	4.2	73.8
Agrigold	A6677	168 ± 4	16.8	58.6	4	110	35	8.5	4.1	74.1
Terral-REV Brand	26R60 (RR)	167 ± 4	16.8	56.0	7	105	30	8.7	3.9	74.4
Dairyland	9214Q (RR/LL/CB/RW)	167 ± 4	17.6	55.3	0	99	33	8.8	4.4	73.9
Wyffels	W8437 (VT3Pro)	166 ± 4	16.2	59.2	1	91	27	8.5	4.1	74.0
DeKalb	DKC65-19 GENVT3P	165 ± 4	16.0	59.6	1	84	26	8.9	4.8	73.2
Augusta	A7664VT3P	164 ± 4	17.8	55.7	0	94	27	9.5	4.5	72.5
Mycogen	2A787 (RR/LL/CB/RW)	164 ± 4	17.5	57.4	0	89	28	8.9	4.2	73.6
Delta Grow	2888 GTBt11	163 ± 4	17.1	55.3	3	107	34	9.0	3.8	74.6

Table 9 (continued)

Brand	Hybrid §	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear	Protein	Oil	Starch
		± Std Err (n=7)	at Harvest (n=7)	Weight (n=1)	(n=3)	Height [‡] (n=3)	Height [‡] (n=3)	(n=1)	(n=1)	(n=1)
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Beck's XL Brand	6626HXR (RR/LL/CB)	161 ± 4	18.2	56.9	0	104	33	9.0	4.5	73.3
Mycogen	2T832 (RR/LL/CB/RW)	161 ± 4	18.2	55.0	2	99	30	8.4	4.1	74.0
Agrigold	A6632VT3Pro	159 ± 4	16.9	58.4	1	85	27	8.4	4.3	73.8
Delta Grow	3788 GTBt11	159 ± 4	17.6	56.7	1	98	35	9.1	4.1	74.2
Augusta	A6166GT3000	159 ± 4	18.5	56.9	0	101	36	9.0	4.2	73.9
Augusta	A7664CB	159 ± 4	17.9	55.1	1	92	28	9.2	4.3	73.2
Augusta	A6164GT3000	158 ± 4	17.1	57.2	1	98	37	9.3	4.0	74.3
Dyna-Gro	D55VC21 (VT3)	158 ± 4	16.7	56.6	1	90	28	8.6	4.2	73.9
Dyna-Gro	D56VP24 (VT3P)	158 ± 4	17.3	55.3	1	95	31	8.1	4.0	73.9
Dairyland	7615 (RR2/YGCB)	156 ± 4	18.4	54.6	1	95	29	8.2	4.1	74.1
Augusta	A6166CBLL	156 ± 4	17.2	57.3	1	100	35	8.7	4.1	74.6
Steyer	11601 GT	155 ± 4	17.5	55.2	2	97	34	8.6	3.9	74.6
Terral-REV Brand	25R19 (RR)	155 ± 4	16.5	57.5	5	110	33	8.7	4.2	74.1
Augusta	A6266GT3000	147 ± 4	17.2	53.5	1	99	30	8.1	4.2	74.2
Caverndale Farms	CF 848 3000GT	144 ± 4	18.8	57.1	0	99	35	8.9	4.3	74.0
Average		169	17.2	56.5	1	99	32	8.8	4.2	73.8

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Protein, Oil, and Starch on a dry weight basis

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

[‡]Average of Knoxville and Springfield.

Table 10. Mean yields of 26 medium-season (114-116 DAP) corn hybrids evaluated in six environments for two years (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]	Springfield		Milan		Ames	
		± Std Err (n=12)	Knoxville	(Irr.)** (Non-Irr.)	(Irr.)	(Non-Irr.)		
			----- bu/a -----					
Dyna-Gro	V5683VT3	171 ± 3	197	135	143	254	164	133
DeKalb	DKC64-69 GENVT3P	167 ± 3	185	141	158	223	169	125
DeKalb	DKC66-96 GENVT3P	166 ± 3	182	136	155	230	166	129
Croplan	6926VT3P	165 ± 3	173	149	153	228	157	132
Beck's XL Brand	6903HR	164 ± 3	196	136	141	242	146	122
Armor	1655PRO V (VT3)	162 ± 3	187	125	150	235	149	126
Wyffels	W8681 (VT3)	162 ± 3	174	127	142	220	173	136
Dyna-Gro	D55VC21 (VT3)	161 ± 3	163	133	146	228	159	134
Beck's XL Brand	6733HXR (RR/LL/CB)	160 ± 3	171	131	134	240	160	127
NK Brand	N78S-3111 (RR/LL/CB/RW)	160 ± 3	180	134	130	228	162	126
Dairyland	9214Q (RR/LL/CB/RW)	159 ± 3	175	132	148	215	160	123
NK Brand	N77P-3111 (RR/LL/CB/RW)	158 ± 3	181	123	146	224	156	122
Augusta	A7664CB	158 ± 3	162	136	147	225	155	124
Terral-REV Brand	25HR49 (RR/LL/HX)	157 ± 3	170	116	138	241	157	120
Terral-REV Brand	25HR39 (RR/LL/HX)	155 ± 3	162	124	144	243	151	108
Terral-REV Brand	26HR70 (RR/LL/HX)	155 ± 3	176	124	143	219	154	115
Dairyland	9414Q (RR/LL/CB/RW)	154 ± 3	164	132	138	216	162	114
Terral-REV Brand	26R60 (RR)	154 ± 3	177	129	127	230	152	111
Agrigold	A6677	154 ± 3	176	116	127	246	143	117
Terral-REV Brand	26HR50 (RR/LL/HX)	154 ± 3	195	120	118	246	145	97
Dairyland	7615 (RR2/YGCB)	153 ± 3	170	133	136	213	151	116
Agrigold	A6632VT3Pro	151 ± 3	144	122	140	223	150	127
Augusta	A6166CBLL	149 ± 3	175	105	146	209	145	114
Augusta	A6166GT3000	149 ± 3	169	108	133	214	142	128
Augusta	A6164GT3000	148 ± 3	166	105	144	209	150	114
Terral-REV Brand	25R19 (RR)	145 ± 3	150	116	123	234	146	103
	Avg. (bu/a)	157	174	127	140	228	155	121
	L.S.D._{.05} (bu/a)	9	28	21	19	18	20	21
	C.V. (%)	8.9	10.5	10.9	9.0	5.2	8.5	11.4

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Table 11. Mean yields and agronomic characteristics of 26 medium-season corn hybrids evaluated in six environments for two years (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]		Test		Plant	Ear	Protein	Oil	Starch
		± Std Err (n=12)	Moisture (n=12)	Weight (n=2)	Lodging (n=5)	Height [‡] (n=6)	Height [‡] (n=6)			
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Dyna-Gro	V5683VT3	171 ± 3	16.5	57.0	1	115	42	10.1	4.2	73.2
DeKalb	DKC64-69 GENVT3P	167 ± 3	15.8	57.4	1	96	34	9.2	4.5	73.1
DeKalb	DKC66-96 GENVT3P	166 ± 3	15.7	59.2	1	99	33	9.5	4.6	72.9
Croplan	6926VT3P	165 ± 3	15.5	59.2	1	92	32	9.7	4.8	72.7
Beck's XL Brand	6903HR	164 ± 3	16.7	59.2	0	112	42	9.0	4.1	74.1
Armor	1655PRO V (VT3)	162 ± 3	16.4	58.2	1	105	40	9.8	4.3	73.0
Wyffels	W8681 (VT3)	162 ± 3	17.5	55.9	0	100	34	10.4	4.4	72.3
Dyna-Gro	D55VC21 (VT3)	161 ± 3	16.9	56.5	1	101	35	9.6	4.4	73.1
Beck's XL Brand	6733HXR (RR/LL/CB)	160 ± 3	16.1	58.4	1	110	40	8.9	4.1	73.9
NK Brand	N78S-3111 (RR/LL/CB/I	160 ± 3	17.0	55.5	0	103	34	8.8	4.1	74.1
Dairyland	9214Q (RR/LL/CB/RW)	159 ± 3	17.4	55.7	0	106	38	9.4	4.4	73.5
NK Brand	N77P-3111 (RR/LL/CB/I	158 ± 3	16.6	55.2	0	105	38	8.7	4.3	73.5
Augusta	A7664CB	158 ± 3	17.3	56.1	1	99	34	9.8	4.4	72.8
Terral-REV Brand	25HR49 (RR/LL/HX)	157 ± 3	16.6	58.5	1	114	41	9.3	4.2	73.7
Terral-REV Brand	25HR39 (RR/LL/HX)	155 ± 3	16.0	59.1	0	113	40	9.0	4.0	74.1
Terral-REV Brand	26HR70 (RR/LL/HX)	155 ± 3	17.1	57.7	0	116	43	9.6	4.0	73.6
Dairyland	9414Q (RR/LL/CB/RW)	154 ± 3	16.9	57.9	0	95	34	9.1	4.1	73.7
Terral-REV Brand	26R60 (RR)	154 ± 3	16.3	57.7	5	110	36	9.1	3.9	74.3
Agrigold	A6677	154 ± 3	16.5	59.2	3	111	42	9.0	4.3	73.7
Terral-REV Brand	26HR50 (RR/LL/HX)	154 ± 3	17.5	59.9	0	112	37	8.9	4.2	73.8
Dairyland	7615 (RR2/YGCB)	153 ± 3	17.6	55.5	1	102	35	8.6	4.3	73.9
Agrigold	A6632VT3Pro	151 ± 3	16.5	57.8	1	92	32	9.2	4.4	73.3
Augusta	A6166CBLL	149 ± 3	16.9	58.7	2	103	39	9.2	4.1	74.3
Augusta	A6166GT3000	149 ± 3	18.2	58.0	0	103	40	9.6	4.2	73.7
Augusta	A6164GT3000	148 ± 3	16.4	58.3	1	101	39	9.7	4.1	73.9
Terral-REV Brand	25R19 (RR)	145 ± 3	16.2	58.7	3	112	39	9.3	4.2	73.7
Average		157	16.7	57.7	1	105	37	9.3	4.2	73.5

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Protein, Oil, and Starch on a dry weight basis

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

[‡]Average of Knoxville and Springfield.

Table 12. Mean yields of 13 medium-season (114-116 DAP) corn hybrids evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]	Milan				
		± Std Err (n=15)	Knoxville	Springfield	(Irr.)	(Non-Irr.)	Ames
		----- bu/a -----					
Wyffels	W8681 (VT3)	177 ± 2	192	138	217	181	160
Terral-REV Brand	25HR39 (RR/LL/HX)	177 ± 2	191	146	232	173	141
Dairyland	9214Q (RR/LL/CB/RW)	177 ± 2	198	143	214	176	153
NK Brand	N77P-3111 (RR/LL/CB/RW)	176 ± 2	201	137	220	171	151
Dyna-Gro	D55VC21 (VT3)	175 ± 2	188	138	221	171	156
Terral-REV Brand	25HR49 (RR/LL/HX)	174 ± 2	191	133	227	172	148
Terral-REV Brand	26HR50 (RR/LL/HX)	174 ± 2	215	118	237	166	136
Terral-REV Brand	26HR70 (RR/LL/HX)	172 ± 2	197	137	214	171	142
Augusta	A7664CB	172 ± 2	189	136	218	169	149
Augusta	A6166CBLL	171 ± 2	197	151	210	161	135
Dairyland	7615 (RR2/YGCB)	168 ± 2	192	123	213	169	141
Terral-REV Brand	26R60 (RR)	168 ± 2	200	117	216	166	138
Dairyland	9414Q (RR/LL/CB/RW)	166 ± 2	184	131	209	170	134
Avg. (bu/a)		173	195	135	219	170	145
L.S.D._{.05} (bu/a)		9	25	20	17	19	21
C.V. (%)		8.2	8.6	9.9	5.4	7.8	10.4

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

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

Table 13. Mean yields and agronomic characteristics of 13 medium-season corn hybrids evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]	Test			Plant	Ear	Protein	Oil	Starch
		± Std Err (n=15)	Moisture (n=15)	Weight (n=3)	Lodging (n=8)	Height [‡] (n=6)	Height [‡] (n=6)			
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Wyffels	W8681 (VT3)	177 ± 2	18.0	56.3	0	106	37	10.1	4.5	72.4
Terral-REV Brand	25HR39 (RR/LL/HX)	177 ± 2	16.6	59.7	0	114	42	9.0	4.1	73.7
Dairyland	9214Q (RR/LL/CB/RW)	177 ± 2	17.7	56.5	0	109	40	9.5	4.6	73.2
NK Brand	N77P-3111 (RR/LL/CB/RW)	176 ± 2	17.2	55.7	0	107	41	8.7	4.3	73.5
Dyna-Gro	D55VC21 (VT3)	175 ± 2	17.5	56.8	0	103	36	9.6	4.4	73.0
Terral-REV Brand	25HR49 (RR/LL/HX)	174 ± 2	17.1	58.7	0	115	42	9.2	4.3	73.5
Terral-REV Brand	26HR50 (RR/LL/HX)	174 ± 2	18.1	60.0	0	114	38	8.8	4.2	73.7
Terral-REV Brand	26HR70 (RR/LL/HX)	172 ± 2	17.4	58.2	0	117	43	9.5	4.1	73.5
Augusta	A7664CB	172 ± 2	17.7	56.7	1	102	36	9.6	4.5	72.6
Augusta	A6166CBLL	171 ± 2	17.8	58.7	1	106	41	9.2	4.3	74.0
Dairyland	7615 (RR2/YGCB)	168 ± 2	17.8	56.0	1	106	35	8.7	4.4	73.5
Terral-REV Brand	26R60 (RR)	168 ± 2	16.8	58.6	4	113	39	9.1	3.9	74.1
Dairyland	9414Q (RR/LL/CB/RW)	166 ± 2	17.2	57.9	0	98	35	8.9	4.3	73.5
Average		173	17.4	57.7	1	108	39	9.2	4.3	73.4

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

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

[‡]Average of Knoxville and Springfield.

Table 14. Mean yields of 20 full-season (>116 DAP) corn hybrids evaluated in six environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]		Springfield		Milan		Ames
		± Std Err (n=6)	Knoxville	(Irr.)**	(Non-Irr.)	(Irr.)	(Non-Irr.)	
		bu/a						
DeKalb	DKC67-88 GENVT3P	179 ± 4	204	140	151	242	188	152
Croplan	8410VT3P	178 ± 4	205	137	159	216	178	173
Terral-REV Brand	28HR20 (RR/LL/HX)	178 ± 4	199	118	163	240	215	131
Augusta	A6867CBLL	171 ± 4	188	127	142	215	195	157
Beck's XL Brand	8603HR (RR/LL/CB)	171 ± 4	213	136	126	215	185	148
Terral-REV Brand	27HR32 (RR/LL/Hx)	170 ± 4	201	136	161	203	169	149
Croplan	8505VT3P	166 ± 4	190	123	140	234	177	134
Augusta	A6867GTCBLL	160 ± 4	175	119	130	232	154	151
DeKalb	DKC67-57 GENVT3P	159 ± 4	173	124	125	215	168	150
Caverndale Farms	CF 907 GTCBLL	159 ± 4	169	128	135	228	154	139
Beck's	7988BTR (RR/LL/CB)	158 ± 4	173	133	113	228	153	146
Agrigold	A6839VT3Pro	153 ± 4	158	120	134	211	144	151
Terral-REV Brand	28R10 (RR)	152 ± 4	185	135	129	206	138	121
Terral-REV Brand	27HR52 (RR/LL/Hx)	149 ± 4	195	120	61	201	180	134
Augusta	A008VT3	148 ± 4	144	123	125	195	158	145
TN Exp	TN 0902	145 ± 4	165	136	125	158	155	131
Augusta	A7669GTCBLL	145 ± 4	144	119	113	200	150	142
TN Exp	TN 1101	145 ± 4	164	135	119	179	153	117
TN Exp	TN 1103W	138 ± 4	169	125	112	160	134	129
TN Exp	TN 1102	134 ± 4	147	121	127	167	136	108
Avg. (bu/a)		157	177	128	130	207	164	140
L.S.D._{.05} (bu/a)		11	38	23	29	27	29	20
C.V. (%)		10.6	12.1	10.9	13.7	7.7	10.6	8.5

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

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.

** - Irrigated field at Springfield is located on a more marginal soil type, while the non-irrigated field was located on a more productive bottomland soil.

Differences in the soil type along with rainfall at critical periods in the crop's development resulted in the non-irrigated test out-performing the irrigated tests at the Springfield location.

Table 15. Overall mean yields and agronomic characteristics of 20 full-season corn hybrids evaluated in six environments in Tennessee during 2011.

Brand	Hybrid §	Avg. Yield [†]	Moisture	Test	Lodging	Plant	Ear	Protein	Oil	Starch
		± Std Err (n=6)	at Harvest (n=6)	Weight (n=1)	(n=3)	Height [‡] (n=3)	Height [‡] (n=3)	(n=1)	(n=1)	(n=1)
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
DeKalb	DKC67-88 GENVT3P	179 ± 4	16.9	57.3	1	102	38	8.6	4.4	73.7
Croplan	8410VT3P	178 ± 4	15.9	56.7	1	88	28	8.8	4.5	73.3
Terral-REV Brand	28HR20 (RR/LL/HX)	178 ± 4	17.2	56.5	0	106	34	8.7	4.3	73.8
Augusta	A6867CBLL	171 ± 4	16.9	58.6	1	101	34	9.4	4.0	74.2
Beck's XL Brand	8603HR (RR/LL/CB)	171 ± 4	16.4	57.4	1	110	36	8.4	4.3	73.7
Terral-REV Brand	27HR32 (RR/LL/Hx)	170 ± 4	16.3	57.6	0	108	34	8.4	4.2	74.2
Croplan	8505VT3P	166 ± 4	16.2	54.4	0	100	35	8.9	4.3	73.7
Augusta	A6867GTCBLL	160 ± 4	16.4	57.3	4	99	35	9.0	3.9	74.7
DeKalb	DKC67-57 GENVT3P	159 ± 4	16.0	56.8	1	88	30	9.0	4.3	73.5
Caverndale Farms	CF 907 GTCBLL	159 ± 4	16.5	57.4	4	100	32	8.6	4.2	74.2
Beck's	7988BTR (RR/LL/CB)	158 ± 4	16.9	56.6	4	98	34	9.0	4.0	74.2
Agrigold	A6839VT3Pro	153 ± 4	16.2	58.5	0	91	31	9.0	4.5	73.4
Terral-REV Brand	28R10 (RR)	152 ± 4	17.1	58.0	7	104	31	8.7	4.2	74.0
Terral-REV Brand	27HR52 (RR/LL/Hx)	149 ± 4	17.8	54.0	0	103	30	8.6	4.2	73.8
Augusta	A008VT3	148 ± 4	16.7	53.5	2	95	31	8.4	4.1	73.8
TN Exp	TN 0902	145 ± 4	16.7	56.6	3	102	37	9.3	4.3	73.2
Augusta	A7669GTCBLL	145 ± 4	17.1	57.3	2	91	32	9.1	3.9	74.6
TN Exp	TN 1101	145 ± 4	17.2	54.5	2	100	34	8.9	4.5	73.5
TN Exp	TN 1103W	138 ± 4	17.6	57.6	7	108	45	8.7	4.8	73.0
TN Exp	TN 1102	134 ± 4	18.0	54.8	5	98	35	9.4	4.8	72.6
Average		157	16.8	56.6	2	100	34	8.8	4.3	73.8

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

W = white grain

Protein, Oil, and Starch on a dry weight basis

[†]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 (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]						
		± Std Err (n=12)	Knoxville	Springfield (Irr.)** (Non-Irr.)		Milan (Irr.) (Non-Irr.)		Ames
		bu/a						
Terral-REV Brand	28HR20 (RR/LL/HX)	162 ± 3	196	135	132	208	187	116
Augusta	A6867CBLL	162 ± 3	186	137	132	204	185	127
Croplan	8505VT3P	158 ± 3	182	142	125	214	162	126
Augusta	A008VT3	147 ± 3	166	135	117	189	148	127
Terral-REV Brand	28R10 (RR)	145 ± 3	186	136	113	194	144	95
Agrigold	A6839VT3Pro	144 ± 3	163	120	109	199	152	119
TN Exp	TN 0902	140 ± 3	165	135	110	163	154	117
Avg. (bu/a)		151	178	134	120	196	162	118
L.S.D._{.05} (bu/a)		10	31	20	24	22	23	22
C.V. (%)		10.1	10.8	9.7	13.5	7.3	9.3	11.4

Table 17. Mean yields and agronomic characteristics of seven full-season corn hybrids evaluated in six environments for two years (2010-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†]								
		± Std Err (n=12)	Moisture (n=12)	Test Weight (n=2)		Lodging (n=5)	Plant Height [‡] (n=6)	Ear Height [‡] (n=6)	Protein (n=2)	Oil (n=2)
		bu/a	%	lbs/bu	%	in.	in.	%	%	%
Terral-REV Brand	28HR20 (RR/LL/HX)	162 ± 3	17.3	58.4	0	112	39	9.0	4.3	73.6
Augusta	A6867CBLL	162 ± 3	16.8	59.6	1	107	39	9.7	4.1	73.8
Croplan	8505VT3P	158 ± 3	16.1	56.9	0	106	41	10.0	4.3	73.0
Augusta	A008VT3	147 ± 3	16.3	54.5	1	100	34	8.9	4.2	73.4
Terral-REV Brand	28R10 (RR)	145 ± 3	16.7	59.6	4	110	38	9.3	4.2	73.8
Agrigold	A6839VT3Pro	144 ± 3	16.1	59.7	1	97	35	9.4	4.6	73.1
TN Exp	TN 0902	140 ± 3	16.5	58.1	2	106	42	9.7	4.4	72.9
Average		151	16.6	58.1	1	105	38	9.4	4.3	73.4

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

W = white grain

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

LL = contains a gene for tolerance to glufosinate

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

Protein, Oil, and Starch on a dry weight basis

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

[‡]Average of Knoxville and Springfield.

Table 18. Mean yields of three full-season (>116 DAP) corn hybrid evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†] ± Std Err					
		(n=15)	Knoxville	Springfield	Milan (Irr.) (Non-Irr.)		Ames
		----- bu/a -----					
Terral-REV Brand	28HR20 (RR/LL/HX)	183 ± 3	221	135	214	195	152
Augusta	A008VT3	167 ± 3	196	114	198	166	159
TN Exp	TN 0902	151 ± 3	186	107	171	164	127
Avg. (bu/a)		167	201	119	194	175	146
L.S.D._{.05} (bu/a)		11	28	24	20	22	32
C.V. (%)		9.9	8.9	13.4	6.7	8.4	13.9

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

Table 19. Mean yields and agronomic characteristics of three full-season corn hybrid evaluated in five environments for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Avg. Yield [†] ± Std Err		Test		Plant		Ear		Protein (n=3)	Oil (n=3)	Starch (n=3)
		(n=15)	Moisture (n=15)	Weight (n=3)	Lodging (n=8)	Height [‡] (n=6)	Height [‡] (n=6)					
		bu/a	%	lbs/bu	%	in.	in.	%	%	%		
Terral-REV Brand	28HR20 (RR/LL/HX)	183 ± 3	17.5	58.9	0	114	41	9.0	4.3	73.6		
Augusta	A008VT3	167 ± 3	16.9	55.2	1	103	37	8.7	4.3	73.3		
TN Exp	TN 0902	151 ± 3	17.4	58.4	1	106	44	9.8	4.6	72.5		
Average		167	17.2	57.5	1	108	41	9.2	4.4	73.1		

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

Bt, YG, YGCB, CB, HX = contains a *Bacillus thuringiensis* gene for insect resistance LL = contains a gene for tolerance to glufosinate

YGRW, RW, CRW = contains a gene for rootworm resistance

W = white grain

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

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

[‡]Average of Knoxville and Springfield.

COUNTY STANDARD TESTS ‡

Table 20. Yields of seven early-season (<114 DAP), five medium-season (114-116 DAP), and one full-season (>116 DAP) conventional and Bt corn hybrids in seven County Standard Tests in Tennessee during 2011.†‡

MS	Brand/Hybrid	Avg. Yld bu/a	Avg. Moisture %	Test ¶ Weight lbs/bu	Coffee 4/15 §	Henry 6/3	Lake 4/14	REC at			
								Milan 5/9	Obion 5/9	Weakley 1 4/14	Weakley 2 6/3
Early Season											
A	Augusta A5175 CB	162.7	16.8	56.5	170	121	142	228	163	184	129
A	Augusta A0720 CBLL	162.3	17.7	56.0	178	97	131	233	160	190	147
A	**AgriGold A6533 CL	159.0	17.2	55.8	171	114	117	218	162	192	139
A	AgriGold A6478	159.0	16.8	57.5	183	118	112	203	169	193	135
A	**Augusta A0606 CBLL	158.6	16.9	56.8	159	121	141	225	169	186	109
B	Augusta A2854 CBLL	145.5	15.1	55.7	158	124	126	195	135	168	112
B	AgriGold A6458 CL	143.6	16.2	55.3	155	102	115	197	160	184	92
Average (bu/a)		155.8	16.7	56.2	168	114	126	214	160	185	123
Medium Season											
A	Augusta A7664 CB	166.6	19	56	168	154	128	234	158	182	141
AB	Steyer 114101	164.9	18	58	178	142	112	234	170	189	128
ABC	*AgriGold A6677	159.5	18	57	159	159	100	233	160	174	131
BC	Steyer 1156	152.3	18	58	144	134	104	229	157	155	143
C	AgriGold A6632 CL	150.6	18	56	166	112	85	209	165	190	127
Average (bu/a)		158.8	18.1	57.0	163	140	106	228	162	178	134
Full Season											
ABC	*Augusta A6867 CBLL	160.4	18.5	56.7	160	137	139	232	139	176	139

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 all 7 locations.

Hybrids marked with an asterisk (*) and/or (**) were in the top performing group in 2010 and/or 2009 respectively.

REC at Milan = 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 21. Yields of 22 early-season (<114 DAP) Roundup / stacked corn hybrids in 17 County Standard Tests in Tennessee and Kentucky during 2011.†‡

MS	Brand/Hybrid	Avg. Yld bu/a	Avg. Moist %	Test ¶ Weight lbs/bu	KY		Carroll	Coffee	Crockett	Fayette	Franklin	Gibson	Giles	Henderson	Henry		REC at				
					Ballard	Calloway									(Brannon)	(Tosh)	Lake	fung.	no fung.	Obion	Weakley
A	Dekalb DKC61-88 GENVT3P	173.4	15.8	56.7	257	188	177	175	144	142	209	119	179	174	176	143	157	189	187	174	157
AB	LG Seeds LG2555 VT3	171.4	16.9	55.2	247	193	178	164	147	120	208	126	195	173	192	145	120	194	192	194	126
AB	**Dekalb DKC63-84 VT3	171.2	15.9	56.3	252	198	194	177	131	132	202	119	160	169	193	166	139	183	180	176	140
AB	LG Seeds LG2620 VT3	170.4	17.2	56.2	249	194	188	164	156	140	215	114	180	175	193	133	149	192	182	141	130
ABC	Dekalb DKC63-14 VT3	169.3	16.1	57.7	235	202	194	186	160	140	199	122	185	172	169	152	116	176	175	176	121
ABCD	AgriGold A6458VT3	168.3	16.4	55.4	248	157	178	172	148	138	212	122	156	169	175	159	152	184	184	184	124
ABCDE	***AgriGold A6533VT3	167.2	17.5	55.2	230	202	192	194	146	124	199	117	186	145	183	164	123	184	180	141	132
ABCDEF	*AgriGold A6476VT3PRO	166.0	15.7	56.6	231	185	159	179	139	127	202	121	181	163	182	148	147	193	184	159	121
ABCDEFG	NK Brand N72Q 3111 RRLL	165.3	17.3	54.7	221	165	188	165	153	114	201	85	174	166	165	173	154	198	194	179	115
ABCDEFG	NK Brand N68B 3111 RRLL	165.3	17.0	54.4	221	180	172	167	153	112	197	82	169	170	198	182	148	177	170	178	135
BCDEFGH	Dyna-Gro 51VP40 (VT3P)	163.4	16.3	56.3	226	161	178	135	132	129	192	124	166	161	192	178	162	176	174	175	117
CDEFGH	Mycogen 2D744 SSX/LL/RR2	161.4	17.1	57.3	233	183	165	144	137	108	191	106	169	147	174	177	157	188	186	170	110
DEFGH	Armor 1262D PRO	160.5	16.9	57.9	214	187	178	134	161	124	196	118	135	165	189	132	126	186	184	170	130
EFGH	Armor 1161 PRO	159.3	16.4	55.8	230	169	170	122	135	133	169	108	177	163	179	178	144	186	177	158	109
EFGH	Augusta A5462 GT3000	159.1	16.8	56.0	212	173	175	165	119	108	185	123	180	166	173	133	139	181	170	184	120
EFGH	Dairyland 7313 YGCB/RR2	159.0	16.3	57.4	229	178	168	144	140	86	188	133	165	164	177	161	115	188	185	157	126
EFGH	Augusta A5461 GTCBLL	158.6	16.1	54.1	224	180	168	152	136	116	209	131	155	147	160	108	133	195	182	166	136
EFGH	Steyer 11201 VT3Pro	158.5	15.7	58.5	221	172	163	171	130	157	208	97	122	161	172	141	159	177	167	159	118
FGH	Steyer 10901 GENSS	158.1	16.6	56.5	236	156	167	139	129	104	199	94	168	151	190	168	145	186	180	157	118
FGH	Mycogen 2A695 HXT/LL/RR2	157.5	17.0	52.5	210	156	161	145	133	135	188	116	169	155	170	180	138	162	153	172	135
GH	Dairyland 9910 VT3	156.7	15.4	56.3	228	187	157	159	128	98	198	132	167	166	145	141	135	166	169	174	116
H	Mycogen 2V738 SSX/LL/RR2	155.1	16.4	56.5	210	170	164	140	131	110	184	106	158	152	163	172	128	182	173	168	125
Average (bu/a)		163.4	16.5	56.1	230	179	174	159	140	123	198	114	168	162	178	156	140	184	179	169	125

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 14 locations.

Hybrids marked with an asterisk (*), (**), and/or (***) were in the top performing group in 2010, 2009, and/or 2008, respectively.

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

Table 22. Yields of 21 medium-season (114-116 DAP) Roundup / stacked corn hybrids in 20 County Standard Tests in Tennessee and Kentucky during 2011.††

MS	Brand/Hybrid	Avg. Yld bu/a	Avg. Moist %	Test ¶ lbs/bu	KY																	REC at				
					Blount										Gibson		Henry		Milan							
					5/13 §	5/10	5/10	4/5	4/14	4/9	5/9	5/9	5/10	6/3	5/10	6/3	5/9	5/12	4/14	5/5	5/5	5/11	5/12	5/11		
A	*Dekalb DKC66-96 GENVT3P	168.7	16.8	58.3	153	181	213	176	179	194	123	136	177	171	174	146	126	91	142	208	202	233	190	160		
AB	*Dekalb DKC64-69 GENVT3P	166.9	15.9	57.7	183	192	207	211	171	188	119	141	179	194	169	150	107	93	165	173	177	201	176	140		
ABC	Dyna-Gro V5683VT3	165.4	17.7	56.7	168	171	192	170	167	182	122	131	174	192	160	161	155	81	147	193	200	200	198	145		
BCD	AgriGold A6553VT3	160.2	17.7	55.1	152	180	204	156	167	215	111	129	148	160	177	147	137	88	151	166	166	213	179	159		
BCDE	Dairyland 9214 Quad HXRWLLRR	159.6	17.5	57.1	144	180	210	159	165	194	119	132	171	166	162	179	125	73	137	175	173	183	185	161		
BCDE	LG Seeds LG2641 VT3	159.6	17.7	55.7	147	183	195	162	162	200	122	140	151	164	162	145	134	89	147	182	185	202	175	145		
CDEF	Dairyland 9414 Quad HXRWLLRR	157.9	17.7	57.6	141	181	204	147	154	186	118	130	168	168	160	152	128	69	138	185	180	217	186	147		
CDEFG	Terral 26HR70 RLLHx	157.5	17.7	57.9	158	183	204	127	162	194	132	131	178	110††	162	150	134	77	141	185	189	202	177	156		
CDEFG	AgriGold A6633VT3	157.1	17.1	55.9	158	177	201	173	161	209	116	128	177	139	154	148	128	89	144	160	160	202	152	167		
DEFG	Terral 25HR39 RLLHx	156.9	17.7	58.2	153	186	210	168	163	195	118	122	140	164	161	162	127	66	138	183	187	213	154	128		
DEFG	Dyna-Gro 55VC21 (VT2PRO)	156.6	17.7	57.2	149	179	212	145	175	204	115	123	140	162	170	158	121	71	149	171	178	197	179	134		
DEFG	AgriGold A6632VT3PRO	156.2	17.4	57.0	147	199	201	151	146	185	117	130	186	124	163	150	132	82	162	157	160	205	184	147		
DEFG	Mycogen 2A787 HXT/LL/RR2	156.2	17.7	57.4	153	189	185	143	140	179	127	136	132	184	166	150	124	77	152	182	181	205	185	132		
DEFG	NK Brand N77P 3111 RLL	155.6	17.6	55.9	161	189	192	157	150	187	129	127	128	171	165	166	111	74	147	180	178	202	177	121		
DEFG	Armor 1539 PRO	155.0	16.9	58.1	173	174	209	179	156	203	98	122	143	132	149	170	117	77	149	171	165	211	180	121		
DEFG	Armor 1415 PRO	153.4	16.7	56.6	154	184	208	169	160	190	94	116	145	154	165	126	127	76	122	165	168	204	177	164		
DEFG	Dairyland 7615 YGCB/RR2	152.3	17.9	56.7	153	185	207	154	165	195	109	140	157	82††	155	126	124	66	147	177	172	201	177	155		
EFG	Steyer 11402 VT3Pro	151.5	15.9	56.8	156	179	193	146	138	189	121	116	182	181	154	135	110	81	127	164	160	195	174	129		
FG	Augusta A6166 GT3000	150.7	18.6	57.4	133	162	201	200	165	185	105	128	160	70††	161	142	115	76	140	163	159	205	186	159		
GH	Steyer 11601 GT	149.4	18.5	56.4	152	173	195	162	160	178	114	121	162	75††	154	158	112	69	154	170	164	176	188	151		
H	Augusta A6266 GT3000	141.8	17.0	54.9	138	175	156	151	154	189	91	105	143	140	150	143	97	80	129	160	159	192	158	126		
Average (bu/a)		156.6	17.4	56.9	154	181	200	162	160	192	115	128	159	163	161	151	123	78	144	175	174	203	178	145		

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 18 locations.

Hybrids marked with an asterisk (*) were in the top performing group in 2010.

†† Denotes 4 hybrids in the Henry (Tosh) plot that sustained from 30 to 65% green snap prior to ear development. (None of the 4 hybrids were adjacent to each other).

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

Table 23. Yields of six full-season (>116 DAP) Roundup / stacked corn hybrids in 13 County Standard Tests in Tennessee and Kentucky during 2011.†‡

MS Brand/Hybrid	Avg.	Avg.	Test ¶	KY												
	Yld	Moist	Weight	Calloway	Cannon	Coffee	Fayette	Franklin	Gibson	Henderson	Henry	Humphreys	Lake	Loudon	Obion	Weakley
	bu/a	%	lbs/bu	5/10 §	5/10	4/15	4/14	4/9	5/9	5/9	6/3	6/3	5/9	5/12	5/11	6/3
A *Terral 28HR29 RRLHx	155.1	19.3	58.1	152	197	137	153	209	113	170	176	169	133	52	233	123
A ****Dekalb DKC67-21 VT3P	154.3	17.2	58.3	174	185	164	165	195	116	154	167	159	126	72	186	142
A *Augusta A6867 GTCBLL	153.6	17.9	58.7	164	187	162	159	196	129	148	169	170	124	65	202	122
A **Armor 1655 PRO	153.3	17.7	57.9	186	185	184	163	177	123	166	129	156	142	74	200	108
A *Terral 28HR20 RRLHx	152.9	18.4	58.5	173	190	169	167	194	124	167	112	152	157	55	227	100
A AgriGold A6839VT3PRO	147.4	17.7	58.6	168	183	142	152	200	127	149	143	142	129	65	195	121
Average (bu/a)	152.8	18.1	58.4	170	188	160	160	195	122	159	149	158	135	64	207	119

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 all 13 locations.

Hybrids marked with an asterisk (*), (**), (***), and/or (****) were in the top performing group in 2010, 2009, 2008 and/or 2007, respectively.

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

Table 24. Overall average yields, moistures, and test weights of 15 early-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2011.†

Brand	Hybrid §	Avg. of CST and REC Tests			CST Tests				REC Tests		
		Avg. Yield	Moisture	Test Weight	Avg. Yield	Moisture	Test Weight	Test / # Loc	Avg. Yield (n=7)	Moisture (n=7)	Test Weight (n=1)
		bu/a	%	lbs/bu	bu/a	%	lbs/bu		bu/a	%	lbs/bu
DeKalb	DKC61-88 GENVT3P	182	16.0	56.4	173	15.8	56.7	Early RR Stacked / 17	190	16.1	56.1
Augusta	A0720CBLL	173	17.6	55.2	162	17.7	56.0	Conv. & Bt / 7	184	17.5	54.4
Agrigold	A6533VT3	173	17.7	55.4	167	17.5	55.2	Early RR Stacked / 17	179	18.0	55.6
Mycogen	2V738 (RR/LL/CB/RW)	173	16.7	56.2	155	16.4	56.5	Early RR Stacked / 17	191	17.0	55.8
Agrigold	A6553VT3	171	18.5	54.3	160	17.7	55.1	Med RR Stacked / 20	182	19.3	53.5
Agrigold	A6476VT3Pro	171	15.8	56.1	166	15.7	56.6	Early RR Stacked / 17	176	16.0	55.7
Augusta	A5175CB	171	16.8	55.3	163	16.8	56.5	Conv. & Bt / 7	179	16.8	54.1
Agrigold	A6458VT3	171	16.8	54.4	168	16.4	55.4	Early RR Stacked / 17	173	17.2	53.3
Augusta	A5461GTCBLL	170	16.1	53.7	159	16.1	54.1	Early RR Stacked / 17	182	16.1	53.4
Armor	1161PRO V (VT3)	170	16.5	55.0	159	16.4	55.8	Early RR Stacked / 17	181	16.6	54.2
Dyna-Gro	D51VP40 (VT3P)	170	16.5	55.0	163	16.3	56.3	Early RR Stacked / 17	176	16.8	53.7
Armor	1262DPro (VT2)	168	17.1	57.1	160	16.9	57.9	Early RR Stacked / 17	175	17.3	56.4
Dairyland	9910 (VT3)	165	15.3	55.4	157	15.4	56.3	Early RR Stacked / 17	174	15.2	54.5
Augusta	A5462GT3000	164	16.8	54.5	159	16.8	56.0	Early RR Stacked / 17	169	16.7	53.0
Augusta	A2854CBLL	146	15.2	54.9	146	15.1	55.7	Conv. & Bt / 7	146	15.3	54.1
Average		169	16.6	55.3	161	16.5	56.0		177	16.8	54.5

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

†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., Conv. & BT / 7 or Early RR Stacked / 17.

Table 25. Overall average yields, moistures, and test weights of 20 medium-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2011.†

Brand	Hybrid §	Avg. of CST and REC Tests			CST Tests				REC Tests		
		Avg. Yield	Moisture	Test Weight	Avg. Yield	Moisture	Test Weight	Test / # Loc	Avg. Yield (n=7)	Moisture (n=7)	Test Weight (n=1)
		bu/a	%	lbs/bu	bu/a	%	lbs/bu		bu/a	%	lbs/bu
DeKalb	DKC66-96 GENVT3P	178	16.5	58.6	169	16.8	58.3	Med RR Stacked / 20	188	16.1	58.9
Dyna-Gro	V5683VT3	178	17.1	56.3	165	17.7	56.7	Med RR Stacked / 20	191	16.5	55.9
DeKalb	DKC64-69 GENVT3P	172	15.9	57.0	167	15.9	57.7	Med RR Stacked / 20	178	16.0	56.2
Terral-REV Brand	26HR70 (RR/LL/HX)	166	17.6	57.2	157	17.7	57.9	Med RR Stacked / 20	174	17.5	56.4
Terral-REV Brand	25HR39 (RR/LL/HX)	165	17.2	58.2	157	17.7	58.2	Med RR Stacked / 20	173	16.6	58.1
NK Brand	N77P-3111 (RR/LL/CB/RW)	165	17.5	54.9	156	17.6	55.9	Med RR Stacked / 20	174	17.5	53.8
Agrigold	A6677	164	17.5	58.0	160	18.2	57.3	Conv. & Bt / 7	168	16.8	58.6
Dairyland	9214Q (RR/LL/CB/RW)	163	17.6	56.2	160	17.5	57.1	Med RR Stacked / 20	167	17.6	55.3
Armor	1655PRO V (VT3)	163	17.1	57.5	153	17.7	57.9	Full RR Stacked / 13	173	16.4	57.1
Dairyland	9414Q (RR/LL/CB/RW)	163	17.7	57.4	158	17.7	57.6	Med RR Stacked / 20	168	17.7	57.2
Augusta	A7664CB	163	18.5	55.5	167	19.0	55.8	Conv. & Bt / 7	159	17.9	55.1
Armor	1415Pro (VT3)	162	16.6	55.5	153	16.7	56.6	Med RR Stacked / 20	170	16.5	54.4
Armor	1539Pro (VT3)	161	17.1	58.3	155	16.9	58.1	Med RR Stacked / 20	168	17.4	58.5
Mycogen	2A787 (RR/LL/CB/RW)	160	17.6	57.4	156	17.7	57.4	Med RR Stacked / 20	164	17.5	57.4
Agrigold	A6632VT3Pro	158	17.2	57.7	156	17.4	57.0	Med RR Stacked / 20	159	16.9	58.4
Dyna-Gro	D55VC21 (VT3)	157	17.2	56.9	157	17.7	57.2	Med RR Stacked / 20	158	16.7	56.6
Augusta	A6166GT3000	155	18.6	57.2	151	18.6	57.4	Med RR Stacked / 20	159	18.5	56.9
Dairyland	7615 (RR2/YGCB)	154	18.2	55.6	152	17.9	56.7	Med RR Stacked / 20	156	18.4	54.6
Steyer	11601 GT	152	18.0	55.8	149	18.5	56.4	Med RR Stacked / 20	155	17.5	55.2
Augusta	A6266GT3000	144	17.1	54.2	142	17.0	54.9	Med RR Stacked / 20	147	17.2	53.5
Average		162	17.4	56.8	157	17.6	57.1		167	17.2	56.4

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

†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.,

Conv. & BT / 7 or Med RR Stacked / 20.

YGRW, RW, CRW = contains a gene for rootworm resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

Table 26. Overall average yields, moistures, and test weights of four full-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2011.†

Brand	Hybrid §	Avg. of CST and REC Tests			CST Tests				REC Tests		
		Avg. Yield bu/a	Moisture %	Test Weight lbs/bu	Avg. Yield bu/a	Moisture %	Test Weight lbs/bu	Test / # Loc	Avg. Yield (n=6) bu/a	Moisture (n=6) %	Test Weight (n=1) lbs/bu
Augusta	A6867CBLL	166	17.7	57.6	160	18.5	56.7	Conv. & Bt / 7	171	16.9	58.6
Terral-REV Brand	28HR20 (RR/LL/HX)	165	17.8	57.5	153	18.4	58.5	Full RR Stacked / 13	178	17.2	56.5
Augusta	A6867GTCBLL	157	17.1	58.0	154	17.9	58.7	Full RR Stacked / 13	160	16.4	57.3
Agrigold	A6839VT3Pro	150	17.0	58.6	147	17.7	58.6	Full RR Stacked / 13	153	16.2	58.5
Average		160	17.4	57.9	154	18.1	58.1		166	16.7	57.7

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

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

YGRW, RW, CRW = contains a gene for rootworm resistance

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

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P, PRO = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

LL = contains a gene for tolerance to glufosinate

†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.,

Conv. & BT / 7 or Full RR Stacked / 13.

Table 27. Characteristics, as described by the seed company, of corn hybrids evaluated in yield tests in Tennessee during 2011.†

Early-Season Corn Hybrid Entries		Grain		Herbicide		Released or		Seed
Brand	Hybrid §	Color	Maturity	Tolerance	BT Gene	Experimental		Treatment
Agrigold	A6452VT3	Y	110	RR	YGCB/RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6458VT3	Y	110	RR	YGCB/RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6476VT3Pro	Y	111	RR	YG,CB,C,RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6489VT3	Y	112	RR2	YGCB/RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6533VT3	Y	113	RR2	YGCB/RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6553VT3	Y	113	RR	YGCB/RW	R		Vortex,Allegiance,Trilex,Poncho500,Votivo
AgVenture	RL8428HB (RR/LL/CB)	Y	113	RR/LL	CB	R		Poncho 1250, Votivo
Armor	1161PRO V (VT3)	Y	111	RR2	YG,CB,C,RW	R		Accelaron, Poncho, Votivo
Armor	1262DPro (VT2)	Y	112	RR2	YG,CB,C	R		Accelaron
Augusta	A0606GTCBLL	Y	111	GT/LL	CB	R		Avicta, Cruiser 500
Augusta	A0720CBLL	Y	111	LL	CB	R		Cruiser 250
Augusta	A2854CBLL	Y	104	LL	CB	R		Cruiser 250
Augusta	A5175CB	Y	107		CB	R		Poncho 250
Augusta	A5337EVT3	Y	111	RR	CB/RW	R		Poncho 250
Augusta	A5461GTCBLL	Y	111	GT/LL	CB	R		Avicta, Cruiser 500
Augusta	A5462GT3000	Y	112	GT/LL	CB/RW	R		Avicta, Cruiser 500
Augusta	A5558VT3P	Y	108	RR	YG,CB,C,RW	R		Poncho 250
Augusta	A5560VT3	Y	110	RR	CB/RW	R		Poncho 250
Augusta	A5658GTCBLL	Y	108	GT/LL	CB	R		Cruiser 250
Croplan	6125VT3	Y	109	RR	YG,CB,C,RW	R		Cruiser Extreme 250
Dairyland	9111 (RR/LL/CB/RW)	Y	112	RR/LL	CB/RW	E		CruiserMaxx
Dairyland	7115 (RR/CB)	Y	111	RR	HX1	E		CruiserMaxx
Dairyland	7313 (VT3)	Y	113	RR	YGCB/RW	R		CruiserMaxx
Dairyland	9910 (VT3)	Y	110	RR	YGCB/RW	R		Cruiser Extreme 250
DeKalb	DKC61-88 GENVT3P	Y	111	RR	YG,CB,C,RW	R		Poncho 500, Votivo
DeKalb	DKC62-09 GENVT3P	Y	113	RR	YG,CB,C,RW	R		Poncho 500, Votivo
DeKalb	DKC62-63 GENVT3P	Y	112	RR	YG,CB,C,RW	R		Poncho 500, Votivo
DeKalb	DKC63-87 GENVT2P	Y	113	RR	YG, CB, C	R		Poncho 500, Votivo
Dyna-Gro	CX11113 (VT3P)	Y	113	RR	YG,CB,C,RW	E		Accelaron
Dyna-Gro	D51VP40 (VT3P)	Y	111	RR	YG,CB,C,RW	R		Apron XL, Poncho 250
Croplan	6286SS	Y	113	RR/LL	YG,RW,C	R		Cruiser Extreme 250
Mycogen	2V715 (RR/LL/CB/RW)	Y	111	RR/LL	CB/RW	R		Cruiser, Maxim, Apron, Dynasty, Avicta
Mycogen	2V738 (RR/LL/CB/RW)	Y	113	RR/LL	YG,CB,C,RW	R		Cruiser, Maxim, Apron, Dynasty, Avicta
NK Brand	N68A-3000GT (RR/LL/CB/RW)	Y	111	RR/LL	CB/RW	R		Cruiser 500
NK Brand	N72F-3000GT (RR/LL/CB/RW)	Y	113	RR/LL	CB/RW	R		Cruiser 500
Steyer	11204 VT3Pro	Y	112	RR	YGCB, YGRW	E		Poncho, Trilex, Allegiance, Vortex
Steyer	11302 VT3Pro	Y	113	RR	YGCB, YGRW	E		Poncho, Trilex, Allegiance, Vortex
Wyffels	W7477 (VT3Pro)	Y	112	RR	YG,CB,C,RW	R		Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250
Wyffels	W7997 (VT3Pro)	Y	113	RR	YG,CB,C,RW	R		Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250

Table 27 (continued)

Medium-Season Corn Hybrid Entries		Grain		Herbicide		Released or	Seed
Brand	Hybrid \$	Color	Maturity	Tolerance	BT Gene	Experimental	Treatment
Agrigold	A6573VT3	Y	114	RR	YGCB/RW	R	Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6632VT3Pro	Y	115	RR	YG,CB,C,RW	R	Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6677	Y	116	---	---	R	Vortex,Allegiance,Trilex,Poncho500,Votivo
Agrigold	A6679VT3Pro	Y	116	RR	YG,CB,C,RW	R	Vortex,Allegiance,Trilex,Poncho500,Votivo
Armor	1415Pro (VT3)	Y	114	RR2	YG,CB,C,RW	R	Acceleron
Armor	1539Pro (VT3)	Y	115	RR2	YG,CB,C,RW	R	Acceleron
Armor	1655PRO V (VT3)	Y	116	RR2	YG,CB,C,RW	R	Acceleron, Poncho, Votivo
Augusta	A0715HXT (LL)	Y	116	LL	CB	R	Cruiser 250
Augusta	A5464GTCBLL	Y	114	GT/LL	CB	R	Cruiser 250
Augusta	A6164GT3000	Y	114	GT/LL	CB/RW	R	Cruiser 250
Augusta	A6166GT3000	Y	114	GT/LL	CB/RW	R	Avicta, Cruiser 500
Augusta	A6266GT3000	Y	116	GT/LL	CB/RW	R	Cruiser 250
Augusta	A6166CBLL	Y	114	LL	CB	R	Cruiser 250
Augusta	A7664VT3P	Y	114	RR	YG,CB,C,RW	R	Poncho 250
Augusta	A7664CB	Y	114	---	CB	R	Cruiser 250
Beck's XL Brand	6733HXR (RR/LL/CB)	Y	114	RR/LL	HX1	R	Escalate
Beck's XL Brand	6626HXR (RR/LL/CB)	Y	114	RR/LL	HX1	R	Escalate
Beck's XL Brand	6903HR	Y	115	RR/LL	HX1	E	Escalate
Caverndale Farms	CF 848 3000GT	Y	115	RR/LL	CB/RW	R	Poncho 250, Trilex, Maxim, Acetellic
Croplan	6926VT3P	Y	114	RR	YG,CB,C,RW	R	Cruiser Extreme 250
Croplan	6914AS3000GT	Y	114	RR	CB/RW	R	Cruiser Extreme 250
Dairyland	7615 (RR2/YGCB)	Y	115	RR	YGCB	R	Cruiser Extreme 250
Dairyland	9214Q (RR/LL/CB/RW)	Y	114	RR/LL	YGCB/RW	R	CruiserMaxx
Dairyland	9414Q (RR/LL/CB/RW)	Y	115	RR/LL	HXX	R	CruiserMaxx
DeKalb	DKC64-69 GENVT3P	Y	114	RR	YG,CB,C,RW	R	Poncho 500, Votivo
DeKalb	DKC65-19 GENVT3P	Y	115	RR	YG,CB,C,RW	R	Poncho 500, Votivo
DeKalb	DKC66-96 GENVT3P	Y	116	RR	YG,CB,C,RW	R	Poncho 500, Votivo
Delta Grow	2888 GTBt11	Y	116	RR/LL	Bt	R	Maxim, Acetellic
Delta Grow	2988 GTBt11	Y	116	RR/LL	Bt	R	Maxim, Acetellic
Delta Grow	3788 GTBt11	Y	115	RR/LL	Bt	R	Maxim, Acetellic
Dyna-Gro	D54VP81 (VT3P)	Y	114	RR	YG,CB,C,RW	E	Acceleron
Dyna-Gro	D55VC21 (VT3)	Y	115	RR	YG,CB,C,RW	R	Apron XL, Poncho 250
Dyna-Gro	D56VP24 (VT3P)	Y	116	RR	YG,CB,C,RW	R	Apron XL, Poncho 250
Dyna-Gro	V5683VT3	Y	116	RR	YGCB/RW	R	Apron XL, Poncho 250
Mycogen	2A787 (RR/LL/CB/RW)	Y	114	RR/LL	CB/RW	R	Cruiser, Maxim, Apron, Dynasty, Avicta
Mycogen	2T784 (RR/LL/CB/RW)	Y	114	RR/LL	YG,CB,C,RW	R	Cruiser, Maxim, Apron, Dynasty, Avicta
Mycogen	2T832 (RR/LL/CB/RW)	Y	115	RR/LL	CB/RW	R	Cruiser, Maxim, Apron, Dynasty, Avicta
NK Brand	N77P-3111 (RR/LL/CB/RW)	Y	114	RR	YG/CB/RW	R	Cruiser 500
NK Brand	N78S-3111 (RR/LL/CB/RW)	Y	116	RR/LL	YG/CB/RW	R	Cruiser 500
NK Brand	N79Z-GT/CB/LL	Y	115	RR/LL	CB	R	Cruiser 500
Steyer	11601 GT	Y	116	GT	---	R	Cruiser, Maxim, Apron, Dynasty
Steyer	11406 VT3Pro	Y	114	RR	YGCB, YGRW	E	Poncho, Trilex, Allegiance, Vortex
Terral-REV Brand	25HR39 (RR/LL/HX)	Y	115	RR2/LL	HX1	R	Cruiser 250, Dynasty, Apron, Maxim
Terral-REV Brand	25HR49 (RR/LL/HX)	Y	115	RR/LL	HX1	R	Cruiser 250, Dynasty, Apron, Maxim
Terral-REV Brand	25R19 (RR)	Y	115	RR2	---	R	Cruiser 250, Dynasty, Apron, Maxim

Table 27 (continued)

Terral-REV Brand	26HR22 (RR/LL/Hx)	Y	116	RR2/LL	HX1	R	Cruiser 250, Maxim, Apron, Dynasty
Terral-REV Brand	26HR50 (RR/LL/HX)	Y	116	RR2/LL	HX1	E	Cruiser 250, Dynasty, Apron, Maxim
Terral-REV Brand	26HR70 (RR/LL/HX)	Y	116	RR2/LL	HX1	R	Cruiser 250, Dynasty, Apron, Maxim
Terral-REV Brand	26HR82 (RR/LL/Hx)	Y	116	RR2/LL	HX1	R	Cruiser 250, Maxim, Apron, Dynasty
Terral-REV Brand	26R60 (RR)	Y	116	RR2	---	R	Cruiser 250, Dynasty, Apron, Maxim
Wyffels	W8437 (VT3Pro)	Y	115	RR	YG,CB,C,RW	R	Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250
Wyffels	W8681 (VT3)	Y	115	RR2	YGCB/RW	R	Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250

Full-Season Corn Hybrid Entries		Grain		Herbicide		Released or	Seed
Brand	Hybrid §	Color	Maturity	Tolerance	BT Gene	Experimental	Treatment
Agrigold	A6839VT3Pro	Y	119	RR	YG,CB,C,RW	R	Vortex,Allegiance,Trilex,Poncho500,Votivo
Augusta	A008VT3	Y	117	RR	CB/RW	R	Cruiser 250
Augusta	A6867GTCBLL	Y	117	GT/LL	CB	R	Avicta, Cruiser 500
Augusta	A7669GTCBLL	Y	119	GT/LL	CB	R	Cruiser 250
Beck's	7988BTR (RR/LL/CB)	Y	117	RR/LL	CB	R	Escalate
Beck's XL Brand	8603HR (RR/LL/CB)	Y	118	RR/LL	HX1	R	Escalate
Caverndale Farms	CF 907 GTCBLL	Y	118	GT/LL	CB	R	Poncho 250, Trilex, Maxim, Acetellic
Croplan	8410VT3P	Y	118	RR	YG,CB,C,RW	R	Cruiser Extreme 250
Croplan	8505VT3P	Y	118	RR	YG,CB,C,RW	R	Cruiser Extreme 250
DeKalb	DKC67-57 GENVT3P	Y	117	RR	YG,CB,C,RW	R	Poncho 500, Votivo
DeKalb	DKC67-88 GENVT3P	Y	117	RR	YG,CB,C,RW	R	Poncho 500, Votivo
Terral-REV Brand	27HR32 (RR/LL/Hx)	Y	117	RR2/LL	HX1	R	Cruiser 250, Maxim, Apron, Dynasty
Terral-REV Brand	27HR52 (RR/LL/Hx)	Y	117	RR2/LL	HX1	R	Cruiser 250, Maxim, Apron, Dynasty
Terral-REV Brand	28HR20 (RR/LL/HX)	Y	118	RR2/LL	HX1	R	Cruiser 250, Dynasty, Apron, Maxim
Augusta	A6867CBLL	Y	117	LL	CB	R	Avicta, Cruiser 500
Terral-REV Brand	28R10 (RR)	Y	118	RR2	---	R	Cruiser 250, Dynasty, Apron, Maxim
TN Exp	TN 0902	Y	120	---	---	E	Dividend XL, Cruiser 250
TN Exp	TN 1101	Y	Full	---	---	E	Dividend XL, Cruiser 250
TN Exp	TN 1102	Y	Full	---	---	E	Dividend XL, Cruiser 250
TN Exp	TN 1103W	W	Full	---	---	E	Dividend XL, Cruiser 250

§ If a trait appears inside parenthesis i.e. (RR/CB), then it is not part of the hybrid name.

VT3 = contains genes for European corn borer, corn root worm, and glyphosate resistance

VT3P = contains genes for corn borer, rootworm, earworm, armyworm and glyphosate resistance

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

CBRW, RW, CRW = contains a gene for rootworm resistance

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

W = white grain CL = contains a gene for tolerance to Imidazolinone class herbicides

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

Table 28. Contact information for corn hybrid seed companies evaluated in yield tests in Tennessee during 2011

Company	Contact	Phone	Email	Web site	Address
Agrigold Hybrids	Lee Herring	270-399-5558			
	Drew Snider	270-776-1486		www.agrigold.com	RR#1 Box 203, St. Francisville, IL 62460
AgVenture	Mike Davis	219-474-3339	mdavis@agventuredm.com	www.agventure.com	207 North Seventh Street, P.O. Box 29 Kentland, IN 47951
Armor Seed		877-336-2290		www.armorseed.com	2528 Alexander Drive, Jonesboro, AR 72401
	Lane Dill	901-233-0274	lanedill@armorseed.com		P.O. Box 178, Fisher, AR 72429
	Jimmy Wray	270-832-3843	jimmywray@armorseed.com		6497 Turner Landing Rd., LaCenter, KY 42056
Augusta Seed Corporation	Dennis Rawley	540-886-6055	augustaseed@aol.com		473 Tisdale Farm Ln, Stuarton, VA 24401
	Matt Rawley	540-255-5902			
Beck's Superior Hybrids (Beck's & XL Brand)	Doug Clouser	800-937-2325	dougc@beckshybrids.com	www.beckshybrids.com	6767 East 276th Street, Atlanta, IN 46031
Caverndale Farms	Barry Welty	859-236-2150	bwelty@kywimax.com	www.caverndalefarms.com	1921 Bluegrass Pike, Danville, KY 40422
Croplan Genetics	Jesse Witt	256-221-5932	JBWitt@landolakes.com	www.croplangenetics.com	Consolidated Ag Products (Agriliance) and Tennessee Farmers Co-op Locations
	Keith Saum	731-610-7006	kdsaum@landolakes.com		
	Darrin Holder	270-207-0190			
	Jim Payne	901-652-0903	jpayne@ourcoop.com	www.ourcoop.com	
	Ashley Plymale	270-719-1570			
	Matt Sowder	901-355-7267			
Dairyland Seed Co	Lanny Warren	731-234-2921	lanny.warren@charter.net	www.dairylandseed.com www.monsanto.com	208 South Thompson St., Union City, TN 38261
Monsanto (Dekalb)	Larry Ganann	901-326-7140	larry.w.ganann@monsanto.com	www.dekalb.com	800 N. Lindberg Blvd, St. Louis, MO 63167
Delta Grow Seed	Lee Hughes	800-530-7933	leehughes19@hotmail.com	www.deltagrow.com	P O Box 219, England, AR 72046
Crop Production Services (Dyna-Gro)	Todd Theobald	731-885-1212	todd.theobald@cpsagu.com	www.dynagroseed.com	710 South First Street, Union City, TN 38261
Mycogen Seed	Kelby McKinney	618-237-8227	kmckinney@dow.com	www.dowagro.com/mycogen	3563 Hilty Road, Export, PA 15632
NK Brand (Syngenta)	Mike Saxton	270-745-7333	mike.saxton@syngenta.com	www.nk-us.com	424 Jamie Way, Bowling Green, KY 42104
Steyer Seeds	Joe Steyer	800-231-4274	joesteyer@yahoo.com	www.steyerseeds.com	6154 N. Co. Rd. 33, Tiffin, OH 44883
	Tom Jones	270-213-0020	steyerseeds@steyerseeds.com		
	Phil Coffman	270-832-7362			
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu		3421 Joe Johnson Dr, Knoxville, TN 37996-4561
Terral Seed Inc (Rev Brand)	Larry Mullen	318-559-2840	lmullen@terralseed.com	www.terralseed.com	P O Box 826, Lake Providence, LA 71254
Wyffels Hybrids	David Strawn	309-944-8334	dstrawn@wyffels.com	www.wyffels.com	13344 US Hwy. 6, Geneseo, IL 61254