

CORN GRAIN HYBRID TESTS IN TENNESSEE 2017



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Corn Grain Hybrid Tests in Tennessee

2017

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Experimental Procedures:

AgResearch and Education Center Tests: All corn hybrid trials were conducted in each of the physiographic regions of the state. Tests were conducted at the Highland Rim (Springfield), East TN (Knoxville), Milan (Milan) and West TN (Jackson) AgResearch 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 REC** 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. Plant populations of 36,000 plants per acre for irrigated plots and 34,000 plants per acre for non-irrigated plots were the goal at all locations. 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 approximately 230 lbs N/a. A portion of the nitrogen was applied prior to planting (e.g. 80 lbs/a) and the remainder was applied as a side-dress (e.g. 150 lbs/a). The plot size was two, 30-ft. rows. 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 26 counties in Tennessee, and three counties in Western Kentucky. The number of counties depended on the test. The County Standard Tests were divided into **early-, medium-, and full-season glyphosate resistant and Bt stacked trait tests** (same DAP criteria as listed above; some entries were stacked with Bt resistance genes). 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 REC locations were planted between mid-April and the beginning of May. Statewide corn planting remained on par with the 5 year average, with 89% of corn in Tennessee planted by mid-May. Adequate rainfall throughout the season facilitated earlier than average emergence and anticipation for good yields. Heavy rain and wind did cause some lodging at both the Milan location in June and at AgriCenter International in August. By mid-August, 86% of the crop rated good to excellent. Corn harvest remained on par with the five year average, with 74% of grain corn statewide harvested by the beginning of October. According to the Tennessee Agricultural Statistics Service, producers planted 760,000 acres this year, a decrease of 110,000 acres from 2016. Acreage harvested for grain in Tennessee is projected to be 705,000 acres, down 55,000 acres from last season. Corn grain production in Tennessee for 2017 is projected to be 119.85 million bushels, averaging 170 bu/a. Compared to 2016, this is a decrease in production of 5.48 million bushels but an increase in yield of 19 bu/a.

Interpretation of Data:

The tables on the following pages have been prepared with the entries listed in order of yield performance, the highest-yielding entry being listed first. Mean separation was performed using the **LSD (Least Significant Difference) test**. The mean trait value of any two entries being compared must differ by at least the LSD amount shown to be considered different at the 5% level of probability of significance. For example, given that the LSD for a test is 1.3 tons/a and the mean yield of Hybrid A was 9.3 tons/a and the mean yield of Hybrid B was 8.2 tons/a, then the two hybrids are not statistically different in yield because the difference of 1.1 tons/a is less than the minimum of 1.3 tons/a required for them to be significant. Similarly, if the average yield of Hybrid C was 10.6 tons/a then it is significantly higher yielding than both Hybrid B ($10.6 - 8.2 = 2.4$ tons/a > LSD of 1.3) and Hybrid A ($10.6 - 9.3 = 1.3$ tons/a = LSD of 1.3). Tests with an LSD value of N.S. indicate there were no significant differences in entry performance within that test.

To simplify interpretation, **Mean Separation Letters** have been listed next to each entry for the test of average yield across all locations. Hybrids that have any letter in common are not significantly different in yield at the 5% level of probability based on the LSD test. Hybrids with performance not significantly different from the top performing hybrid will have an “A” included in the list of mean separation letters next to that entry.

The **coefficient of variation (C.V.)** values are also shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is calculated as the ratio of the square root of error variance to the mean yield. 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. Eighty-six corn hybrids were evaluated in the 2017 **Research and Education Center (REC)** tests in Tennessee. There were 31 hybrids in the early- (Tables 3-8), 34 in the medium- (Tables 11-16), and 21 hybrids in the full-season (Tables 19-22) tests. The 86 hybrids represent 16 different brands (Table 26). The **County Standard (CS)** tests consisted of a early-season glyphosate resistant and Bt stacked trait test (17 hybrids at 17 locations, Table 9), a medium-season glyphosate resistant and Bt stacked trait test (18 hybrids at 24 locations, Table 17), and a full-season glyphosate resistant and Bt stacked trait test (11 hybrids at 16 locations, Table 23) for a total of 46 hybrids. In addition to 26 Tennessee counties, the County Standard tests involved Calloway, Carlisle, and Fulton counties in Western Kentucky. Common to both the REC and CS tests were 13 early-season, 13 medium-season, and 9 full-season hybrids (Tables 10, 18, 24). Similar to the REC tests, in the CS tests all hybrids were placed in the maturity test for which they fit regardless of other traits associated with each entry.

Eighty-two of the hybrids evaluated were transgenic, while four hybrids were conventional. Eighty hybrids contained genetic modification for insect tolerance (denoted by 3000GT, AM, CB, VIP, PC, SSX, VIP3110, VT2Pro, VT3Pro, YGCB, and HX1). Please see table 27 for full trait names and information on each of these traits. Eighty-two hybrids contained genetic modification for herbicide tolerance, with all 82 containing tolerance to glyphosate (denoted by RR, RR2, GT) and 27 of these containing a stack of glyphosate and glufosinate tolerance (denoted by LL).

Lodging. Heavy rain and wind caused greater than usual lodging damage at the Milan locations in June and at the AgriCenter International location in August. Lodging damage appeared to be associated with specific varieties, therefore, these locations were not excluded from the average yield across locations. End of season lodging scores are reported for each of these locations separately.

Irrigated vs. Non-irrigated Yields. Duplicate tests were conducted at the Milan and Highland Rim Research and Education Centers with and without irrigation. Due to adequate moisture throughout the growing season, average yield of non-irrigated tests tended to exceed those of irrigated tests. At Milan, non-irrigated tests exceed irrigated test yields by 17 bu/a for early-season hybrids (Table 4), 29 bu/a for medium-season hybrids (Table 12), and 15 bu/a for full-season hybrids (Table 20). Similar results were observed at Highland Rim, where non-irrigated tests exceeded irrigated test yields by 10 bu/a for early-season hybrids (Table 4) and 4 bu/a for medium-season hybrids (Table 12). The one exception included the full-season hybrid test at Highland Rim, where the irrigated test exhibited a 22 bu/a advantage compared with the non-irrigated test (Table 20).

Table 1. Location information from Research and Education Centers where corn hybrid tests were conducted in Tennessee in 2017.

Early Season Corn Hybrids					
Research and Education Center	Location	Irrigation	Planting Date	Harvest Date	Plant Population
Agricenter International	Memphis	Irrigated	April 26, 2017	September 25, 2017	26,885
East Tennessee	Knoxville	Irrigated	May 3, 2017	September 21, 2017	32,803
Highland Rim (irrigated)	Springfield	Irrigated	May 2, 2017	September 25, 2017	30,789
Highland Rim (non-irrigated)	Springfield	Non-Irrigated	May 2, 2017	September 25, 2017	33,749
Milan (irrigated)	Milan	Irrigated	May 2, 2017	September 18, 2017	30,228
Milan (non-irrigated)	Milan	Non-Irrigated	April 17, 2017	September 11, 2017	33,499
West Tennessee	Jackson	Irrigated	April 15, 2017	September 4, 2017	35,885

Medium Season Corn Hybrids					
Research and Education Center	Location	Irrigation	Planting Date	Harvest Date	Plant Population
Agricenter International	Memphis	Irrigated	April 26, 2017	September 25, 2017	26,734
East Tennessee	Knoxville	Irrigated	May 3, 2017	September 22, 2017	32,619
Highland Rim (irrigated)	Springfield	Irrigated	May 2, 2017	September 25, 2017	32,499
Highland Rim (non-irrigated)	Springfield	Non-Irrigated	May 2, 2017	September 25, 2017	33,874
Milan (irrigated)	Milan	Irrigated	May 2, 2017	September 20, 2017	29,347
Milan (non-irrigated)	Milan	Non-Irrigated	April 18, 2017	September 11, 2017	33,364
West Tennessee	Jackson	Irrigated	April 15, 2017	September 5, 2017	36,097

Full Season Corn Hybrids					
Research and Education Center	Location	Irrigation	Planting Date	Harvest Date	Plant Population
East Tennessee	Knoxville	Irrigated	May 3, 2017	September 22, 2017	31,202
Highland Rim (irrigated)	Springfield	Irrigated	May 2, 2017	September 26, 2017	31,419
Highland Rim (non-irrigated)	Springfield	Non-Irrigated	May 2, 2017	September 26, 2017	32,511
Milan (irrigated)	Milan	Irrigated	May 2, 2017	September 20, 2017	30,962
Milan (non-irrigated)	Milan	Non-Irrigated	April 18, 2017	September 11, 2017	33,107
West Tennessee	Jackson	Irrigated	April 15, 2017	September 6, 2017	37,793

Table 2. Location information from county locations where corn hybrid county standard tests were conducted in Tennessee in 2017.

Early Corn Hybrid Test (RR & Stacked)

County	Cooperator	Agent	Planting Date
Calloway, KY	Mitch Jackson	Tim Lax	May 17, 2017
Carlisle, KY	Brad Reddick	Bob Middleton	May 11, 2017
Chester	Van Nes Farms	Steve Rickman	April 14, 2017
Coffee	Jared Hale	Steve Harris	May 20, 2017
Crockett	Steve and Drew Bailey	Richard Buntin	April 10, 2017
Dyer	Jason Reed	Tim Campbell	May 9, 2017
Fulton, KY	Johnson Linder	Ben Rudy	May 10, 2017
Gibson	Denton Parkins	Philip Shelby	April 13, 2017
Giles	Pat Sulcer	Kevin Rose	April 19, 2017
Henderson	Billy Hatchett	Ron Blair	April 20, 2017
Henry	Tosh Farms	Ranson Goodman	May 9, 2017
	Brannon Farms		April 13, 2017
Hickman	Claude Callicott	Troy Dugger	May 9, 2017
Lake	Lindamood Planting Co.	Greg Allen	April 20, 2017
Loudon	David Richesin	John Goddard	May 4, 2017
Madison	Brian Taylor	Jake Mallard	April 18, 2017
Obion	Bill Thompson	Tim Smith	May 9, 2017
Tipton	Sneed Farms	Becky Muller	April 19, 2017
Weakley	David Oliver	Jeff Lannom	April 10, 2017

Medium Season Corn Hybrid Test (RR & Stacked)

County	Cooperator	Agent	Planting Date
Ballard	Tracy Sullivan	Bob Middleton	May 16, 2017
Blount	Pate Acres	John Wilson	May 20, 2017
Calloway, KY	Mitch Jackson	Tim Lax	May 17, 2017
Cannon	Jonny Powell	Bruce Steelman	May 17, 2017
Chester	Van Nes Farms	Steve Rickman	April 14, 2017
Coffee	Jared Hale	Steve Harris	May 20, 2017
Crockett	Young Farmers & Ranchers	Richard Buntin	April 17, 2017
Dyer	Jason Reed	Tim Campbell	May 9, 2017
Fayette	Mark McNabb	Jeff Via	April 10, 2017
Fulton, KY	Johnson Linder	Ben Rudy	May 10, 2017
Gibson	Denton Parkins	Philip Shelby	April 13, 2017
Giles	Mike Mayfield	Kevin Rose	May 10, 2017
Haywood	Bradley Booth	Lindsay Griffin	April 7, 2017
Henderson	Billy Hatchett	Ron Blair	April 20, 2017
Henry	Tosh Farms	Ranson Goodman	May 9, 2017
	Brannon Farms		April 13, 2017
Lake	Lindamood Planting Co.	Greg Allen	April 20, 2017
Loudon	David Richesin	John Goddard	May 4, 2017
Madison	Matt Griggs	Jake Mallard	April 17, 2017
Meigs	Swanks Farm	David Bilderback	May 17, 2017
Obion	Seth Taylor	Tim Smith	May 16, 2017
Perry	Craig & Tim Byrd	Amanda Mathenia	May 11, 2017
Tipton	Sneed Farms	Becky Muller	April 19, 2017
Trousdale	Terry Martin	Jason Evitts	May 3, 2017
Warren	MT. View Farms	Heath Nokes	May 10, 2017
Weakley	David Oliver	Jeff Lannom	April 10, 2017

Table 2 (cont.)**Full Season Corn Hybrid Test (RR & Stacked)**

County	Cooperator	Agent	Planting Date
Calloway, KY	Mitch Jackson	Tim Lax	May 17, 2017
Cannon	Jonny Powell	Bruce Steelman	May 17, 2017
Chester	Van Nes Farms	Steve Rickman	April 14, 2017
Coffee	Jason Franklin	Steve Harris	May 20, 2017
Dyer	Mike Underwood	Tim Campbell	April 11, 2017
Fayette	Mark McNabb	Jeff Via	April 10, 2017
Gibson	Denton Parkins	Philip Shelby	April 13, 2017
Giles	J. Tucker	Kevin Rose	May 16, 2017
Haywood	John King	Lindsay Griffin	April 13, 2017
Henderson	Billy Hatchett	Ron Blair	April 20, 2017
Henry	Tosh Farms	Ranson Goodman	May 9, 2017
Lake	Lindamood Planting Co.	Greg Allen	April 20, 2017
Madison	Brian Taylor	Jake Mallard	April 18, 2017
Monroe	Larry Lay	Jonathan Rhea	April 11, 2017
Montgomery	Terry Adams Billy McCraw	Rusty Evans	May 16, 2017 May 17, 2017
Tipton	Sneed Farms	Becky Muller	April 19, 2017

Table 3. Across locations mean yields and agronomic characteristics of 31 early-season (<114 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/ac)				Test Moisture (%)	Plant Weight (lbs/bu)	Ear Height (in.)	Height (in.)	Protein¶ (%)	Oil (%)	Starch¶ (%)	Lodging¶ (Milan Irr.) (%)	Lodging¶ (Milan Non-Irr.) (%)	Lodging¶ (Memphis) (%)
			Avg.	Yield Std (bu/ac)	Err.	Moisture (%)										
A	AgriGold A6544V72RIB**	RR.VT2P	209	20	19.6	55.8	108	41	7.9	4.4	74.0	2	2	3	2	8
AB	Beck's Hybrids 6368V2P	RR.VT2P	202	20	19.1	55.4	107	40	8.5	4.6	73.5	0	1	1	1	2
ABC	Dyna-Gro CX17212	RR.VT2P	198	20	19.0	56.7	108	40	8.8	4.7	73.2	0	2	2	0	45
ABC	Terral REV 23BHR55	RR2,LL,YGCB,HX1	197	20	19.7	56.0	112	38	8.0	4.3	74.2	2	2	2	0	0
ABCD	Warren Seed DS 9513 SSX	RR,LL,PC,SSX	196	20	21.7	55.6	106	39	9.3	5.0	72.2	1	1	1	1	2
ABCD	Dekalb DKC60-88 VT2PRB	RR.VT2P	195	20	18.1	56.7	102	39	8.4	4.7	73.7	11	8	8	2	2
ABCD	Warren Seed DS 9412 SSX	RR,LL,SSX	195	20	19.6	55.4	104	39	9.1	4.7	72.9	0	6	6	0	0
BCDE	LG Seeds LG5616-3300GT	RR,LL,3000GT	191	20	19.5	57.0	109	41	8.2	4.4	74.3	1	2	2	0	0
BCDE	NK Seeds N66V-3220-EZ1	GTL,LL,CB,VIP	190	20	19.0	55.8	115	43	8.9	4.7	73.4	3	3	3	3	33
BCDE	Armor 1227P	RR.VT2P	190	20	18.9	57.3	108	38	8.8	4.9	72.7	2	3	3	3	3
BCDE	AgriGold A643-87/GT3	RR.3000GT	190	20	19.8	56.7	112	43	8.3	4.7	73.3	0	2	2	2	33
BCDE	Warren Seed DS 9610	RR.3000GT	189	20	18.9	56.2	105	41	8.8	4.9	73.2	1	0	0	0	33
BCDE	Beck's Hybrids 6365AM	RR,LL,AM	188	20	19.7	57.4	109	40	8.4	4.6	73.2	2	4	4	0	0
BCDE	AgriGold A642-59GSTX	RR,SSX	188	20	19.0	55.4	104	38	8.9	4.9	73.0	2	3	3	7	7
BCDE	Dekalb DKC62-52 STX RIB	RR,LL,SSX	188	20	18.7	57.9	104	43	9.1	5.0	72.5	0	1	1	1	13
BCDE	Cavendale Farms 793 VIP 3110	RR,LL,VIP3110	188	20	19.9	58.8	116	41	7.8	4.2	74.8	2	3	3	27	27
BCDE	Augusta 5062	GTL,LL,VIP3110	187	20	19.3	59.3	117	40	8.6	4.2	74.5	3	1	1	1	17
CDEF	Dekalb DKC62-20 VT2PRB	RR.VT2P	185	20	18.3	57.1	109	42	9.0	4.6	73.2	2	4	4	7	7
CDEF	Croplan 6640	RR.VT3P	185	20	19.4	57.7	102	38	8.8	4.5	73.9	0	2	2	2	20
CDEF	LG Seeds LG5580VT2Pro	RR.VT2P	185	20	18.3	56.4	108	40	8.8	4.8	72.9	0	1	1	1	33
CDEF	LG Seeds LG5555VT2RIB	RR.VT2P	183	20	18.7	56.5	109	39	8.4	4.8	73.4	2	2	2	2	27
DEFG	Wyllfels W7696RIB	RR.VT2P	181	20	19.9	55.4	108	40	8.4	4.4	73.9	2	0	0	5	5
DEFG	Pfister 71C1PCR	RR,LL,PC	181	20	21.7	56.1	106	41	9.1	4.9	72.7	0	5	5	23	23
DEFG	AgriGold A6499STXRIB	RR,SSX	181	20	20.1	56.8	99	37	8.7	4.8	73.4	0	1	1	3	3
EFG	Armor 1340	RR.VT2P	177	20	19.0	57.1	104	41	8.8	5.1	72.4	4	10	10	50	50
EFG	Croplan 5290DG	RR.VT2P	177	20	19.7	56.3	105	41	9.2	5.0	72.3	3	8	8	50	50
EFG	Pfister 70A1SSR	RR,LL,SSX	176	20	18.3	55.6	102	39	7.7	4.8	72.9	0	1	1	18	18
FGH	Pfister 72G6SSR	RR,LL,SSX	172	20	20.3	53.8	103	42	8.7	5.0	72.8	4	8	8	13	13
GH	Progeny PGY7111VT2P	RR.VT2P	171	20	18.1	55.9	107	41	8.1	4.8	73.5	2	5	5	7	7
H	Progeny PGY6110VT2P	RR.VT2P	159	20	18.6	55.5	105	37	8.9	4.7	72.9	0	1	1	10	10
H	AgriGold A640-77VT2PRO	RR.VT2P	158	20	18.7	58.2	98	34	8.7	4.9	72.9	1	1	1	37	37
Average		186	20	19.3	56.5	107	40	9	5	73	2	3	3	17	-	-
L.S.D._{.05}		15	1.3	2.2	4	0.5	0.3	0.8	1	1	1	1	1	1	1	1
n		7	7	2	3	3	3	1	1	1	1	1	1	1	1	1

† Hybrids that have any MS letter in common are not significantly different at the 5% level of probability.

* Hybrids marked with an asterisk were in the top performing "A" group for two (**) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis.

¶ Three tests sustained higher than usual lodging due to storms. These included Milan irr. and non-irr. in June and Memphis in August. Lodging is reported separately for these locations. Lodging values do not typically follow a normal distribution, therefore statistical tests to compute LSD were not performed.

Table 4. Across and by location mean yields of 31 early-season (<114 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

MS†	Avg.	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std Err. (bu/acre)	Knoxville Irr. (bu/acre)	Springfield Non-Irr. (bu/acre)	Milan Irr. (bu/acre)	Milan Non-Irr. (bu/acre)	Jackson Irr. (bu/acre)	Memphis Irr. (bu/acre)
A	AgriGold A6544VT2RIB**	RR,VT2P	209	20	240	148	143	250	268	214	202
AB	Beck's Hybrids 6368V2P	RR,VT2P	202	20	245	126	139	244	262	223	170
ABC	Dyna-Gro CX17212	RR,VT2P	198	20	254	143	144	215	266	216	144
ABC	Terral REV 23BHR55	RR2,LL,YGCB,HX1	197	20	223	119	138	239	263	218	185
ABCD	Warren Seed DS 9513 SSX	RR,LL,PC,SSX	196	20	248	126	136	231	236	225	178
ABCD	Dekalb DKC60-88 VT2PRIB	RR,VT2P	195	20	243	136	125	236	239	227	164
ABCD	Warren Seed DS 9412 SSX	RR,LL,SSX	195	20	222	123	145	217	259	229	168
BCDE	LG Seeds LG5616-3000GT	RR,LL,3000GT	191	20	243	143	132	197	233	219	169
BCDE	NK Seeds N66V-3220-EZ1	GT,LL,CB,VIP	190	20	233	120	140	243	250	219	126
BCDE	Armor 1227P	RR,VT2P	190	20	236	132	136	224	260	210	133
BCDE	AgriGold A643-87GT3	RR,3000GT	190	20	239	133	128	207	236	220	165
BCDE	Warren Seed DS 9610	RR,3000GT	189	20	246	118	134	227	248	217	130
BCDE	Beck's Hybrids 6365AM	RR,LL,AM	188	20	219	111	128	216	252	212	175
BCDE	AgriGold A642-59STX	RR,SSX	188	20	232	126	135	240	234	176	170
BCDE	Dekalb DKC62-52 STX RIB	RR,LL,SSX	188	20	241	140	118	234	245	206	138
BCDE	Caverndale Farms 793 VIP 3110	RR,LL,VIP3110	188	20	216	129	146	233	238	204	140
BCDE	Augusta 5062	GT,LL,VIP3110	187	20	219	121	132	238	254	196	144
CDEF	Dekalb DKC62-20 VT2PRIB	RR,VT2P	185	20	227	121	127	248	242	199	128
CDEF	Croplan 6640	RR,VT3P	185	20	224	127	134	217	234	221	145
CDEF	LG Seeds LG5590VT2Pro	RR,VT2P	185	20	227	108	135	225	227	206	161
CDEF	LG Seeds LG5555VT2RIB	RR,VT2P	183	20	234	110	129	213	255	196	139
DEFG	Wytffels W7696RIB	RR,VT2P	181	20	208	105	135	241	228	193	159
DEFG	Pfister 71C1PCR	RR,LL,PC	181	20	234	121	135	208	235	212	124
DEFG	AgriGold A6499STXRIB	RR,SSX	181	20	212	87	122	223	240	208	181
EFG	Armor 1340	RR,VT2P	177	20	216	142	128	225	205	190	135
EFG	Croplan 5290DG	RR,VT2P	177	20	228	118	146	227	241	203	82
EFG	Pfister 70A1SSR	RR,LL,SSX	176	20	235	122	122	209	240	156	145
F GH	Pfister 72G6SSR	RR,LL,SSX	172	20	223	115	126	197	240	190	120
G H	Progeny PGY711VT2P	RR,VT2P	171	20	218	118	109	223	208	220	94
H	Progeny PGY6110VT2P	RR,VT2P	159	20	199	103	110	177	205	177	140
H	AgriGold A640-77VT2PRO	RR,VT2P	158	20	214	70	92	217	221	178	119
Average			186	20	229	121	131	224	241	206	148
L.S.D._{.05}			15		N.S.	26	26	28	23	N.S.	21
n			7		1	1	1	1	1	1	1
C.V. (%)			9.6		7.7	12.5	11.7	7.1	5.9	14.1	8.5

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

* Hybrids marked with an asterisk were in the top performing "A" group for two ("*) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 5. Two year across locations mean yields and agronomic characteristics of 14 early-season (<114 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std Err.	Test Yield (lbs/bu)	Plant Height (in.)	Ear Height (in.)	Protein (%)	Oil (%)	Starch (%)
A	AgriGold A6544VT2RIB	RR,VT2P	216	18	19.2	55.2	111	45	8.6	4.2
A	NK Seeds N66V-3220-EZ1	GT,LL,CB,VIP	210	18	18.6	54.3	116	46	9.4	4.2
A	Croplan 5290DG	RR,VT2P	205	18	19.4	56.2	107	45	9.5	4.6
A	Warren Seed DS 9513 SSX	RR,LL,PC, SSX	202	18	21.8	54.6	107	43	9.5	4.6
A	Terral REV 23BHR55	RR2,LL,YGCB,HX1	200	18	19.2	54.5	113	43	8.5	4.1
A	Croplan 6640	RR,VT3P	200	18	18.9	58.4	102	41	9.2	4.5
A	Augusta 5062	GT,LL,VIP3110	197	18	19.3	58.8	114	43	9.2	4.0
A	Warren Seed DS 9610	RR,3000GT	196	18	18.5	56.9	105	44	9.6	4.6
A	Cavendale Farms 793 VIP 3110	RR,LL,VIP3110	196	18	19.7	57.6	113	43	8.8	4.0
A	Wyffels W7696RIB	RR,VT2P	195	18	19.3	54.7	111	44	9.1	4.2
A	Warren Seed DS 9412 SSX	RR,LL,SSX	193	18	19.3	51.2	107	43	9.5	4.5
A	Beck's Hybrids 6365AM	RR,LL,AM	192	18	19.3	56.1	113	44	8.7	4.2
A	AgriGold A6499STXRIB	RR,SSX	190	18	19.7	55.9	100	41	9.0	4.8
A	Progeny PGY6110VT2P	RR,VT2P	180	18	18.4	56.0	105	41	9.2	4.3
Average			198	18	19	56	109	43	9	4
L.S.D._{.05}			N.S.	1.0	N.S.	6	3	N.S.	0.4	1.0
n			8	8	2	6	6	2	2	2

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis

Table 6. Two year across and by location mean yields of 14 early-season (<114 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std (bu/acre)	Knoxville Irr. (bu/acre)	Springfield Irr. (bu/acre)	Springfield Non-Irr. (bu/acre)	Milan Irr. (bu/acre)
A	AgriGold A6544VT2RIB	RR,VT2P	216	18	213	199	194	253
A	NK Seeds N66V-3220-EZ1	GT,LL,CB,VIP	210	18	208	181	183	257
A	Croplan 5290DG	RR,VT2P	205	18	207	175	190	248
A	Warren Seed DS 9513 SSX	RR,LL,PC,SSX	202	18	212	180	175	237
A	Terral REV 23BHR55	RR2,LL,YGCB,HX1	200	18	193	167	176	254
A	Croplan 6640	RR,VT3P	200	18	203	175	174	234
A	Augusta 5062	GT,LL,VIP3110	197	18	198	167	172	247
A	Warren Seed DS 9610	RR,3000GT	196	18	212	164	168	234
A	Caverdale Farms 793 VIP 3110	RR,LL,VIP3110	196	18	195	169	166	245
A	Wyffels W7696RIB	RR,VT2P	195	18	193	159	177	251
A	Warren Seed DS 9412 SSX	RR,LL,SSX	193	18	192	162	174	230
A	Beck's Hybrids 6365AM	RR,LL,AM	192	18	190	157	177	236
A	AgriGold A64999STXRIB	RR,SSX	190	18	196	150	168	234
A	Progeny PGY6110VT2P	RR,VT2P	180	18	190	164	151	211
Average			198	18	200	169	175	241
L.S.D.^{.05}			N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
n			8	2	2	2	2	2
C.V. (%)			9	8.8	9.9	7.9	5.8	

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

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 7. Three year across locations mean yields and agronomic characteristics of six early-season (<114 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2015-2017 (n=12).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield (bu/acre)	Moisture (%)	Weight (lbs/bu)	Plant Height (in.)	Ear Height (in.)	Protein¶ (%)	Oil (%)	Starch (%)
			Yield Std Err.	Test							
A	Terral REV 23BHR55	RR2,LL,YGCB,HX1	210	15	18.7	55.9	111	44	8.6	4.1	73.8
A	Beck's Hybrids 6365AM	RR,LL,AM	209	15	19.0	56.4	111	45	8.8	4.3	73.4
A	Croplan 6640	RR,VT3P	208	15	18.6	58.8	99	42	9.3	4.6	73.2
A	Warren Seed DS 9412 SSX	RR,LL,SSX	201	16	18.8	51.7	104	44	9.5	4.5	72.9
A	Warren Seed DS 9610	RR,3000GT	199	15	17.8	57.5	103	44	9.5	4.7	73.0
A	AgriGold A64999STXRIB	RR,SSX	197	15	19.1	57.0	97	41	9.0	4.9	73.0
Average		204	15	18.7	56.2	104	43	9.1	4.5	73.2	
L.S.D. .05		N.S.	0.7	3	5	3	0.3	0.3	0.6	3	
n		12	12	3	9	9	3	3	3	3	

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

¶ Protein, Oil, and Starch on a dry weight basis

Table 8. Three year across and by location mean yields of six early-season (<114 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2015-2017 (n=12).

MS†	Avg.	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std. (bu/acre)	Knoxville Irr. (bu/acre)	Springfield Irr. (bu/acre)	Springfield Non-Irr. (bu/acre)	Milan Irr. (bu/acre)
A	Terral REV 23BHR55	RR2,LL,YGCB,HX1	210	15	206	183	186	186	252
A	Beck's Hybrids 6365AM	RR,LL,AM	209	15	211	191	183	183	243
A	Croplan 6640	RR,VT3P	208	15	220	187	183	183	229
A	Warren Seed DS 9412 SSX	RR,LL,SSX	201	16	208	176	181	181	229
A	Warren Seed DS 9610	RR,3000GT	199	15	219	175	171	171	228
A	AgriGold A64999STXRIB	RR,SSX	197	15	216	155	179	179	234
Average		204	15	213	178	181	181	181	236
L.S.D. .05		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
n		12	3	3	3	3	3	3	3
C.V. (%)		8	7.5	12.9	6.2	4.5	4.5	4.5	4.5

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

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 9. Yields of 17 early-season (<114 DAP) Roundup / stacked corn hybrids in 17 County Standard Tests in Tennessee and Kentucky during 2017.[‡]

MS† Avg. Yield	Hybrid*	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Test Weight (lbs/bu)	Call. Carl. Ches. Croc. Dyer Fult. Gib. Hend. Hen. [¶] Hick. Lake Loud. Madi. Ohio. Weak.	
A	AgriGold 6544	215	15.6	58.4	207 220 231 160 146 184 219 194 188 269 252 173 227 197 278 249	
AB	** Beck's 6365	213	15.5	58.4	201 203 238 184 166 206 212 164 175 284 248 251 195 216 188 257 234	
ABC	** Croplan 6640	212	15.0	59.6	216 203 229 179 150 198 213 195 183 254 247 227 205 220 213 243 227	
ABCD	* Croplan 5290	211	15.1	60.7	206 190 235 144 159 195 207 214 163 261 233 196 205 233 233 265 214	
ABCDE	Armor 1340	208	15.5	60.0	185 209 194 174 150 201 206 208 205 250 235 231 220 190 245 200	
ABCDE	*** AgriGold 6499	208	15.9	59.7	205 189 215 196 147 195 214 190 194 243 253 227 204 179 222 246 210	
ABCDEF	* Warren Seed DS 9412	207	15.4	57.2	201 199 205 187 168 189 204 180 199 248 246 232 212 208 191 233 217	
BCDEF	Warren Seed DS 9513	205	16.4	56.9	204 217 222 182 143 191 205 215 166 248 231 224 205 181 218 234 195	
BCDEF	Dekalb 62-20	204	14.8	59.2	183 228 218 151 159 194 197 196 187 251 224 226 213 158 218 256 213	
CDEF	Terral REV 23BHR55	204	15.8	58.5	175 187 211 187 141 186 202 190 184 256 235 239 192 186 222 241 233	
DEFG	Dyna-Gro 52Vc91	203	15.0	60.3	193 171 192 196 128 198 199 194 195 237 250 219 210 205 196 239 220	
DEFGH	Progeny 7111	202	14.9	57.4	187 216 221 161 150 185 204 191 171 232 235 218 204 211 178 239 230	
EFGH	Beck's 6225	199	16.0	60.2	204 189 224 132 137 175 209 191 201 244 232 233 190 184 194 235 209	
FGH	Warren Seed DS 9610	199	15.0	58.4	190 183 230 172 118 168 213 181 176 245 232 211 203 213 186 246 209	
GHI	LG Seeds 5555	193	15.1	57.0	173 203 213 129 134 189 177 184 173 240 213 205 205 216 199 248 188	
HJ	NK 66V-3120	193	15.2	57.9	182 193 235 142 130 164 190 163 162 236 227 216 195 195 196 231 225	
I	Armor 0909	186	14.7	57.6	178 184 181 155 127 172 176 158 194 232 194 221 193 183 206 206 204	
Average		204	15	59	194 199 217 166 144 188 203 189 183 249 237 228 201 201 203 244 216	

‡ Data Provided by Ryan Blair, Ext. Area Specialist, Grain and Cotton Variety Testing, and Extension agents in counties shown above.

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

* Hybrids marked with an asterisk were in the top performing "A" group for two (*) or three (**) consecutive years within the previous three year evaluation period.

§ All yields are adjusted to 15.5% moisture.

County Locations include: Calloway (KY), Carlisle (KY), Chester, Crockett, Dyer, Fulton (KY), Gibson, Giles, Henderson, Henry (2 loc), Hickman, Lake, Loudon, Madison, Obion, and Weakley

Table 10. Overall average yields, moistures, and test weights of 13 early-season corn hybrids evaluated in both the County Standard Tests and Research and Education Center Tests in Tennessee during 2017.

Hybrid	Trait Package [†]	Avg. of CST and REC Tests				CST Tests				REC Tests			
		Avg. Yield [‡] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)
AgriGold A6544VT2RIB	RR, VT2P	212	18	57	215	15.6	58.4	209	19.6	209	19.6	55.8	
Warren Seed DS 9412 SSX	RR, LL, SSX	201	18	56	207	15.4	57.2	195	19.6	195	19.6	55.4	
Beck's Hybrids 6365AM	RR, LL, AM	201	18	58	213	15.5	58.4	188	19.7	188	19.7	57.4	
Terra! REV 23BHR55	RR2, LL, YGCB, HX1	200	18	57	204	15.8	58.5	197	19.7	197	19.7	56.0	
Warren Seed DS 9513 SSX	RR, LL, PC	200	19	56	205	16.4	56.9	196	21.7	196	21.7	55.6	
Croplan 6640	RR, VT3P	198	17	59	212	15.0	59.6	185	19.4	185	19.4	57.7	
Dekalb DKC62-20 VT2PRIB	RR, VT2P	195	17	58	204	14.8	59.2	185	18.3	185	18.3	57.1	
AgriGold A64999STXRIB	RR, SSX	194	18	58	208	15.9	59.7	181	20.1	181	20.1	56.8	
Croplan 5290DG	RR, VT2P	194	17	59	211	15.1	60.7	177	19.7	177	19.7	56.3	
Warren Seed DS 9610	RR, 3000GT	194	17	57	199	15.0	58.4	189	18.9	189	18.9	56.2	
Armor 1340	RR, VT2P	193	17	59	208	15.5	60.0	177	19.0	177	19.0	57.1	
LG Seeds LG5555VT2RIB	RR, VT2P	188	17	57	193	15.1	57.0	183	18.7	183	18.7	56.5	
Progeny PGY7111VT2P	RR, VT2P	186	17	57	202	14.9	57.4	171	18.1	171	18.1	55.9	
Average		197	17	58	206	15	59	187	19	187	19	56	

[†] For a full description of abbreviated biotech traits, see table 26.

[‡] All yields are adjusted to 15.5% moisture.

Table 11. Across locations mean yields and agronomic characteristics of 34 medium-season (114-116 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

M\$† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/ac)	Avg. Yield Std (%)	Moisture (%)	Test Weight (lbs/bu)	Plant Height (in.)	Ear Height (in.)	Protein (%)	Oil (%)	Starch (%)	Lodging¶ (Milan Irr.) (%)	Lodging¶ (Milan Non-Irr.) (%)	Lodging¶ (Memphis) (%)
A	LG Seeds LG5643VT2RIB**	RR,VT2P	218	20	19.4	56.4	106	39	7.7	4.5	74.0	1	2	0
AB	Dekalb DKC64-35 VT2P	RR,VT2P	210	20	19.8	58.4	104	40	8.2	4.6	73.9	0	1	0
ABC	AgriGold A6559VT3RIB	RR,VT3P	208	20	20.6	58.1	103	36	8.2	4.7	73.4	0	0	0
ABC	Dekalb DKC65-95 VT2P	RR,VT2P	207	20	20.3	57.1	102	38	8.5	4.9	73.5	2	0	0
ABCD	AgriGold A6572VT2RIB	RR,VT2P	205	20	19.6	57.4	107	41	9.1	4.6	73.6	3	2	0
BCDE	LG Seeds LG5650VT2RIB	RR,VT2P	203	20	19.4	57.2	105	41	9.1	4.7	73.5	2	2	7
BCDE	Wyllies W8918RIB	RR,LL,SSX	201	20	20.3	56.6	110	45	8.8	4.9	72.7	0	1	0
BCDE	Progeny PGY414VT2P	RR,VT2P	200	20	18.3	58.0	107	39	8.0	4.3	74.1	1	1	0
BCDE	Wyllies W8646	RR,VT2P	197	20	20.6	58.1	104	43	8.0	4.5	74.0	1	1	7
BCDE	Pfister 74A2RR	RR,LL	196	20	21.8	55.4	109	41	8.1	4.6	73.6	0	2	3
BCDE	Progeny PGY6116VT3P	RR,VT2P	196	20	21.0	57.7	102	37	8.5	4.9	73.1	1	3	25
BCDE	Augusta 1166	RR,VT2P	195	20	19.6	57.3	105	40	8.0	4.6	73.7	0	2	47
CDEF	Augusta 1165	RR,VT2P	193	20	20.5	57.7	105	38	8.3	4.6	73.1	0	1	17
CDEF	Armor AXT7116	RR,VT2P	193	20	20.9	57.2	104	42	8.4	4.9	73.1	0	1	0
DEFG	LG Seeds LG5700VT2RIB	RR,VT2P	192	20	19.2	56.6	105	41	8.2	4.7	73.2	0	0	60
DEFG	LG Seeds LG5663VT2PRIB	RR,VT2P	191	20	20.7	57.6	101	39	8.5	4.6	73.2	1	2	0
DEFG	NK Seeds 1405-3220EZ1	GT,LL,CB,VIP	191	20	20.2	56.6	112	42	8.0	4.7	73.4	3	3	0
DEFG	Armor 1447P	RR,VT2P	191	20	19.9	57.8	99	36	7.6	4.5	74.2	0	0	10
DEFG	NK Seeds N76A-3110	GT,LL,CB,VIP	190	20	20.5	56.5	112	38	9.1	4.3	73.2	2	2	35
DEFG	Wyllies W8288RIB	RR,LL,SSX	190	20	20.0	57.3	101	37	8.8	4.7	72.9	1	1	17
DEFG	Warren Seed DS 6414	RR	190	20	21.5	56.9	110	43	8.4	4.7	73.1	3	4	17
EFGH	Dyna-Gro D55VC45	RR,VT2P	189	20	20.2	60.0	103	36	8.9	4.8	73.1	1	1	10
EFGH	Croplan 5678	RR,VT2P	189	20	20.5	58.6	102	37	7.9	4.6	74.0	3	2	2
EFGH	Beck's Hybrids 65889V2P	RR,VT2P	189	20	20.3	59.1	106	42	8.2	4.5	73.8	0	1	17
EFGH	Progeny PGYEXP1715SS	RR,LL,SSX	189	20	21.3	58.1	105	42	8.9	4.5	73.9	0	1	17
EFGH	TerraL REV 25BHR26	RR2,LL,YGCB,HX1	189	20	19.7	57.9	114	42	8.1	4.3	74.4	1	1	20
EFGH	Augusta 5065	GT,LL,VIP3110	188	20	21.0	57.1	117	39	8.6	4.6	73.8	2	1	30
EFGH	Warren Seed DS 9314 SSX	RR,LL,SSX	188	20	21.1	56.4	97	39	8.7	4.6	73.7	0	2	3
Fghi	AgriGold A645-10VT2RIB	RR,VT2P	186	20	20.3	57.5	103	41	8.6	4.1	74.3	1	4	0
GhiJ	Armor 1667S	RR,SSX	183	20	20.5	59.1	106	43	8.8	4.6	73.6	1	0	3
Hijk	Progeny PGY5115VT2P	RR,VT2P	181	20	19.1	54.0	105	37	8.0	4.4	74.1	2	1	27
Ijk	Progeny PGY7215VT2P	RR,VT2P	180	20	20.7	58.0	105	42	8.4	4.4	73.7	2	3	0
Jk	Warren Seed DS 9913 SSX	RR,LL,SSX	176	20	20.3	57.8	99	38	8.4	4.8	73.2	1	1	0
K	Augusta 6664	RR,VT2P	174	20	19.3	57.7	104	34	8.1	4.5	73.7	0	1	3
Average			193	20	20.2	57.4	105	40	8	5	74	1	1	11
L.S.D._{.05}			15.2	1.1	N.S.	5	4	0.8	0.4	N.S.	-	-	-	1
n			7	7	2	3	3	1	1	1	1	1	1	1

† Hybrids that have any MS letter in common are not significantly different at the 5% level of probability.

* Hybrids marked with an asterisk were in the top performing "A" group for two (**) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis
¶ Three tests sustained higher than usual lodging due to storms. These included Milan irr. and non-irrigated in June and Memphis in August. Lodging is reported separately for these locations. Lodging values do not typically follow a normal distribution, therefore statistical tests to compute LSD were not performed.

Table 12. Across and by location mean yields of 34 medium-season (114-116 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

MS†	Avg.	Avg.	Avg.	Knoxville	Springfield	Milan	Milan	Jackson	Memphis
	Yield	Trait Package‡	Yield Std Err.	Irr. (bu/acre)	Non-Irr. (bu/acre)	Irr. (bu/acre)	Non-Irr. (bu/acre)	Irr. (bu/acre)	Irr. (bu/acre)
A	LG Seeds LG5643VT2RIB**	RR,VT2P	218	20	241	139	133	263	284
AB	Dekalb DKC64-35 VT2P	RR,VT2P	210	20	249	136	136	252	275
ABC	AgriGold A6659VT3RIB	RR,VT3P	208	20	247	150	136	236	269
ABC	Dekalb DKC65-95 VT2P	RR,VT2P	207	20	245	149	138	232	262
ABCD	AgriGold A6572VT2RIB**	RR,VT2P	205	20	254	134	144	221	252
BCDE	LG Seeds LG5650VT2RIB	RR,VT2P	203	20	248	136	150	218	258
BCDE	Wyllfels W8918RIB	RR,LL,SSX	201	20	228	123	142	221	244
BCDE	Progeny PGY4114VT2P	RR,VT2P	200	20	228	133	138	233	258
BCDE	Wyllfels W8646	RR,VT2P	197	20	214	137	157	217	265
BCDE	Pfister 74A2RR	RR,LL	196	20	228	142	128	226	249
BCDE	Progeny PGY6116VT3P	RR,VT2P	196	20	239	148	128	227	254
BCDE	Augusta 1166	RR,VT2P	195	20	216	128	128	232	257
CDEF	Augusta 1165	RR,VT2P	193	20	207	145	140	225	253
CDEF	Armor AXT7116	RR,VT2P	193	20	216	139	143	210	251
DEFG	LG Seeds LG5700VT2RIB	RR,VT2P	192	20	222	129	130	228	262
DEFG	LG Seeds LG5663VT2PRIB	RR,VT2P	191	20	220	122	124	218	259
DEFG	NK Seeds 1405-3220EZ1	GT,LL,CB,VIP	191	20	223	135	126	239	233
DEFG	Armor 1447P	RR,VT2P	191	20	231	125	140	236	255
DEFG	NK Seeds N76A-3110	GT,LL,CB,VIP	190	20	222	128	137	228	250
DEFG	Wyllfels W82668RIB	RR,LL,SSX	190	20	227	127	131	225	235
DEFG	Warren Seed DS 6414	RR	190	20	212	139	139	203	244
EFGH	Dyna-Gro D55VVC45	RR,VT2P	189	20	237	135	127	218	261
EFGH	Croplan 5678	RR,VT2P	189	20	220	114	121	226	269
EFGH	Beck's Hybrids 6589V2P	RR,VT2P	189	20	224	134	139	196	252
EFGH	Progeny PGYEXP1715SS	RR,LL,SSX	189	20	234	133	142	182	262
EFGH	Terral REv 25BHR26	RR2,LL,YGCB,HX1	189	20	219	131	133	229	207
EFGH	Augusta 5065	GT,LL,VIP3110	188	20	248	123	116	235	218
EFGH	Warren Seed DS 9314 SSX	RR,LL,SSX	188	20	221	141	131	198	225
FGBI	AgriGold A645-10VT2RIB	RR,VT2P	186	20	214	140	128	203	228
GHIJ	Armor 1667S	RR,SSX	183	20	227	130	140	207	248
HJK	Progeny PGY5115VT2P	RR,VT2P	181	20	229	78	144	213	244
IJK	Progeny PGY7215VT2P	RR,VT2P	180	20	205	139	123	202	234
JK	Warren Seed DS 9913 SSX	RR,LL,SSX	176	20	206	100	133	208	236
K	Augusta 6664	RR,VT2P	174	20	226	66	96	213	246
Average		193	20	227	130	134	221	250	231
L.S.D._{.05}		15	7	27.3	33.8	20.9	26	19.7	N.S.
n		15	7	1	1	1	9	1	1
C.V. (%)		8.2	7.3	15	7	4.7	8.9	8.5	

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

* Hybrids marked with an asterisk were in the top performing "A" group for two (**) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 13. Two year across locations mean yields and agronomic characteristics of 15 medium-season (114-116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std Err.	Test Weight (lbs/bu)	Plant Height (in.)	Ear Height (in.)	Protein (%)	Oil (%)	Starch (%)
A	LG Seeds LG5643VT2RIB	RR,VT2P	216	15	18.7	57.6	110	44	8.5	4.1
AB	AgriGold A6572VT2RIB	RR,VT2P	213	15	19.0	59.1	109	46	9.8	4.5
ABC	AgriGold A6659VT3RIB	RR,VT3P	209	15	20.5	58.8	105	40	8.9	4.4
ABC	LG Seeds LG5650VT2RIB	RR,VT2P	208	15	18.8	59.1	108	47	9.7	4.5
BCD	Progeny PGY6116VT3P	RR,VT2P	204	15	21.0	58.1	105	41	9.0	4.5
BCD	LG Seeds LG5663VT2PRIB	RR,VT2P	204	15	20.1	58.2	106	46	9.0	4.3
BCDE	NK Seeds N76A-3110	GT,LL,CB,VIP	203	15	19.9	54.5	115	43	9.8	4.0
BCDE	Wyffels W8268RIB	RR,LL,SSX	202	15	19.6	57.3	105	43	9.4	4.3
BCDE	Terra REV 25BHR26	RR2,LL,YGCB,HX1	202	15	19.3	58.5	114	46	8.7	4.0
CDE	Progeny PGY4114VT2P	RR,VT2P	201	15	18.1	58.5	110	43	8.8	4.1
CDEF	Wyffels W8918RIB	RR,LL,SSX	200	15	19.8	57.7	112	49	9.7	4.6
DEFG	Progeny PGY5115VT2P	RR,VT2P	194	15	18.9	57.4	106	41	8.8	4.2
EFG	Beck's Hybrids 6589V2P	RR,VT2P	192	15	19.9	59.3	107	45	9.0	4.3
FG	Warren Seed DS 9314 SSX	RR,LL,SSX	190	15	20.2	56.1	98	43	9.7	4.3
G	Warren Seed DS 9913 SSX	RR,LL,SSX	186	15	19.7	58.1	102	42	9.3	4.4
Average			202	15	20	58	107	44	9	4
L.S.D. .05			11	1	1.3	2	4	4	0.5	0
n			8	8	2	2	6	6	2	2

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis

† For a full description of abbreviations, see table 26.

Table 14. Two year across and by location mean yields of 15 medium-season (114-116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS†	Avg.	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield§ (bu/acre)	Knoxville Irr. (bu/acre)	Springfield Irr. (bu/acre)	Springfield Non-Irr. (bu/acre)	Milan Irr. (bu/acre)
A	LG Seeds LG5643VT2RIB	RR,VT2P	216	15	211	189	193	193	260
AB	AgriGold A6572VT2RIB	RR,VT2P	213	15	222	179	189	189	240
ABC	AgriGold A6659VT3RIB	RR,VT3P	209	15	205	188	187	187	240
ABC	LG Seeds LG5650VT2RIB	RR,VT2P	208	15	213	186	186	186	234
BCD	Progeny PGY6116VT3P	RR,VT2P	204	15	205	187	170	170	244
BCD	LG Seeds LG5663VT2PRIB	RR,VT2P	204	15	209	174	185	185	234
BCDE	NK Seeds N76A-3110	GT,LL,CB,VIP	203	15	196	172	186	186	241
BCDE	Wyffels W8268RIB	RR,LL,SSX	202	15	196	165	176	176	248
BCDE	TerraL REV 25BHR26	RR2,LL,YGCB,HX1	202	15	195	162	187	187	242
CDE	Progeny PGY4114VT2P	RR,VT2P	201	15	197	169	177	177	240
CDEF	Wyffels W8918RIB	RR,LL,SSX	200	15	200	165	181	181	237
DEFG	Progeny PGY5115VT2P	RR,VT2P	194	15	195	145	186	186	232
EFG	Beck's Hybrids 6589V2P	RR,VT2P	192	15	188	178	178	178	218
FG	Warren Seed DS 9314 SSX	RR,LL,SSX	190	15	187	165	162	162	222
G	Warren Seed DS 9913 SSX	RR,LL,SSX	186	15	179	145	172	172	230
Average			202	15	200	171	181	181	237
L.S.D. .05			11	22	26	N.S.	N.S.	N.S.	
n			8	2	2	2	2	2	
C.V. (%)			8	6.9	10.3	8.3	8.3	7.4	

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

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 15. Three year across locations mean yields and agronomic characteristics of eight medium-season (114-116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2015-2017 (n=12).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std (bu/acre) Err.	Test	Plant	Ear	Oil¶ (%)	Starch (%)
			(bu/acre)	(%)	(lbs/bu)	Height (in.)	Height (in.)		
A	AgriGold A6659VT3RIB	RR,VT3P	218	13	19.8	58.3	103	41	8.9
AB	Warren Seed DS 9412 SSX	RR,LL,SSX	213	14	19.3	56.3	105	47	8.8
AB	LG Seeds LG5663VT2PRIB	RR,VT2P	210	13	19.6	58.2	104	46	9.2
AB	Progeny PGY4114VT2P	RR,VT2P	209	13	17.9	58.3	108	43	8.8
AB	NK Seeds N76A-3110	GT,LL,CB,VIP	208	13	19.5	55.1	112	43	9.7
AB	Terra! REV 25BHR26	RR2,LL,YGCB,HX1	208	13	18.9	58.0	110	46	8.7
BC	Progeny PGY5115VT2P	RR,VT2P	203	13	18.4	57.5	104	42	9.0
C	Warren Seed DS 9314 SSX	RR,LL,SSX	197	13	19.4	55.9	96	43	9.5
Average			208	13	19.1	57.2	105	44	8.9
L.S.D._{.05}			12	N.S.	2	4	N.S.	0.6	0.3
n			12	3	9	9	3	3	3

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis

Table 16. Three year across and by location mean yields of eight medium-season (114-116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2015-2017 (n=12).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/acre)	Avg. Yield Std (bu/acre)	Knoxville Irr. (bu/acre)	Springfield Irr. (bu/acre)	Springfield Non-Irr. (bu/acre)	Milan Irr. (bu/acre)
A	AgriGold A6659VT3RIB	RR, VT3P	218	13	223	209	180	249
AB	Warren Seed DS 9412 SSX	RR, LL, SSX	213	14	220	203	189	238
AB	LG Seeds LG5663VT2PRIB	RR, VT2P	210	13	224	195	178	234
AB	Progeny PGY4114VT2P	RR, VT2P	209	13	218	188	171	246
AB	NK Seeds N76A-3110	GT, LL, CB, VIP	208	13	211	193	183	240
AB	Terrai REV 25BHR26	RR2, LL, YGCB, HX1	208	13	216	188	175	244
BC	Progeny PGY5115VT2P	RR, VT2P	203	13	220	173	181	230
C	Warren Seed DS 9314 SSX	RR, LL, SSX	197	13	208	185	163	221
Average		208	13	218	192	178	238	
L.S.D. _{.05}		12	N.S.	20	N.S.	N.S.		
n		12	3	3	3	3		
C.V. (%)		8	8.4	7.9	8.5	6.7		

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

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 17. Yields of 18 medium-season (114-116 DAP) Roundup / stacked corn hybrids in 24 County Standard Tests in Tennessee and Kentucky during 2017.^a

MS† Avg. Yield	Hybrid*	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Test Weight (lbs/bu)	Ball.	Call.	Cann.	Ches.	Croc.	Dyer	Fay.	Fult.	Giles.	Haw.	Hend.	HenrT	HenrB	Lake	Loud.	Mad.	Meigs.	Obion.	Perr.	Tipt.	Trou.	Warri.	Weak.		
A	DeKalb 64-35	220	15.4	60.7	132	202	245	235	197	139	207	188	214	265	271	253	250	241	207	212	236	216	233	236	213	235			
AB	LG Seeds 5643	218	15.5	58.7	141	208	231	251	219	139	214	192	226	246	288	233	266	252	189	194	233	205	239	205	190	220	236		
BC	Dyna-Gro 56/C46	212	16.2	60.1	140	211	215	231	186	133	188	200	209	214	278	238	266	230	189	224	223	196	223	209	232	218	203	225	
BC	Beck's 6589	212	15.4	60.7	147	211	228	233	196	144	183	216	218	216	289	213	246	242	193	176	205	213	235	223	194	213	216	230	
BCD	Croplan 5678	211	15.6	60.7	137	208	221	195	199	102	205	194	200	230	277	245	262	235	203	227	220	212	238	206	192	217	199	244	
CD	AgriGold 6572	210	15.2	61.3	149	209	213	225	196	140	201	200	213	248	269	223	263	205	207	178	215	205	230	223	187	199	218	219	
CD	AgriGold 6659	209	15.7	60.1	128	199	216	235	210	114	190	195	197	220	275	168	260	260	202	224	218	235	207	182	229	222	242		
CD	LG Seeds 5663	208	15.7	60.4	149	219	232	229	191	132	182	187	203	215	273	199	254	234	178	212	239	210	231	200	167	220	207	240	
CDE	Croplan 5570	208	15.7	58.6	156	215	208	224	197	149	191	205	193	208	261	197	265	247	193	172	228	211	228	200	188	217	216	221	
CDE	TerraL REV25BHR26	207	15.7	60.8	122	199	233	238	207	137	184	194	182	212	261	205	281	222	164	213	215	211	228	220	191	212	205	231	
CDEF	Progeny 6116	205	16.1	58.5	128	198	201	185	191	183	199	188	206	217	275	207	244	233	186	212	204	187	226	204	192	219	196	226	
DEF	Beck's 6674	204	15.6	60.9	157	203	224	215	197	105	176	194	191	212	259	235	258	224	195	205	223	200	213	184	201	223	197	214	
EFG	Warren Seed DS 64-14	201	16.4	58.2	111	199	189	228	196	134	200	181	211	209	250	213	249	215	209	174	226	228	177	228	195	192	211	200	226
FG	TerraL REV24BHR93	198	15.6	59.6	125	190	200	221	192	110	196	195	190	214	268	193	261	223	192	175	199	194	219	186	187	199	188	228	
G	Warren Seed DS 9913	196	15.4	58.5	130	197	183	200	199	125	177	192	201	204	246	218	232	224	182	199	202	183	205	206	209	193	197	201	
GH	Warren Seed DS 9914	195	15.9	58.6	139	187	194	202	191	105	199	185	197	213	239	210	237	206	188	217	199	187	226	184	178	204	192	199	
HI	Armor 1500	189	15.5	60.5	142	198	201	173	172	120	169	197	193	206	241	169	223	216	148	172	213	201	203	187	164	216	196	210	
I	NK 1405-3220	187	15.4	57.9	126	186	168	212	191	107	182	178	178	182	236	196	229	215	196	159	205	171	210	179	208	198	190	196	
Average		205	16	60	137	202	211	218	196	129	191	193	201	218	264	212	253	229	190	197	217	198	225	203	214	203	224		

^a Data Provided by Ryan Blair, Ext. Area Specialist Grain and Cotton Variety Testing, and Extension agents in counties shown above.^b Hybrids that have any MS letter in common are not significantly different in yield at the 5% level of probability.^c Hybrids marked with an asterisk were in the top performing 'A' group for two ('') or three ('') consecutive years within the previous three year evaluation period.^d All yields are adjusted to 15.5% moisture.

County Locations include: Ballard (KY), Calloway (KY), Gibson, Fayette, Crockett, Dyer, Fayette, Fullton (KY), Cannon, Chester, Croplan, Henry (2 loc.), Lake Loudon, Madison, Meigs, Obion, Perry, Tipton, Truscott, Warren, and Weakley

Table 18. Overall average yields, moistures, and test weights of 13 medium-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2017.

Hybrid	Trait Package [†]	Avg. of CST and REC Tests				CST Tests				REC Tests				
		Avg. Yield [‡] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Test (bu/acre)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Test (bu/acre)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)
LG Seeds LG5643VT2RIB	RR, VT2P	218	17	58	218	15.5	58.7	218	19.4	19.4	56.4			
Dekalb DKC64-35 VT2P	RR, VT2P	215	18	60	220	15.4	60.7	210	19.8	210	58.4			
AgriGold A6659VT3RIB	RR, VT3P	209	18	59	209	15.7	60.1	208	20.6	208	58.1			
AgriGold A6572VT2RIB	RR, VT2P	207	17	59	210	15.2	61.3	205	19.6	205	57.4			
Beck's Hybrids 6589V2P	RR, VT2P	200	18	60	212	15.4	60.7	189	20.3	189	59.1			
Progeny PGY6116VT3P	RR, VT2P	200	19	58	205	16.1	58.5	196	21.0	196	57.7			
Croplan 5678	RR, VT2P	200	18	60	211	15.6	60.7	189	20.5	189	58.6			
LG Seeds LG5663VT2PR1B	RR, VT2P	200	18	59	208	15.7	60.4	191	20.7	191	57.6			
Terral REV 25BHR26	RR2, LL, YGCB, HX1	198	18	59	207	15.7	60.8	189	19.7	189	57.9			
Warren Seed DS 6414	RR	195	19	58	201	16.4	58.2	190	21.5	190	56.9			
Warren Seed DS 9314 SSX	RR, LL, SSX	192	18	57	195	15.9	58.6	188	21.1	188	56.4			
NK Seeds 1405-3220EZ1	GT, LL, CB, VIP	189	18	57	187	15.4	57.9	191	20.2	191	56.6			
Warren Seed DS 9913 SSX	RR, LL, SSX	186	18	58	196	15.4	58.5	176	20.3	176	57.8			
Average		201	18.0	58.6	206	15.6	59.6	195	20.4	195	57.6			

[†] For a full description of abbreviated biotech traits, see table 26.

[‡] All yields are adjusted to 15.5% moisture.

Table 19. Across locations mean yields and agronomic characteristics of 21 full-season (> 116 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

MS† Avg. Yield	Hybrid	Trait Package‡	Avg. Yield§ (bu/ac)	Avg. Yield Std Err. (bu/ac)	Test Weight (lbs/bu)	Moisture (%)	Lodging (%)	Plant Height (in.)	Ear Height (in.)	Protein¶ (%)	Oil (%)	Starch (%)	Lodging¶ (Milan Irr.) (%)	Lodging¶ (Milan Non-Irr.) (%)
A	Dekalb DKC67-44 VT2P**	RR,VT2P	216	21	20.9	58.6	1	110	41	8.9	5.0	72.7	3	1
AB	Dyna-Gro D58VC37	RR,VT2P	212	21	22.0	59.0	2	104	38	8.4	5.1	73.1	10	1
AB	Dekalb DKC70-27 VT2P	RR,VT2P	212	21	23.2	57.9	1	110	41	9.0	4.8	72.9	3	1
AB	Dekalb DKC68-26 VT2P	RR,VT2P	211	21	21.4	58.7	0	107	37	7.8	4.6	74.0	2	0
AB	Armor 1717	RR,VT2P	209	21	22.5	58.4	1	106	38	8.8	5.2	72.8	1	2
ABC	AgriGold A6711VT2PRO**	RR,VT2P	205	21	21.2	58.5	1	110	40	8.5	5.1	73.2	4	0
ABC	AgriGold A647-90VT2PRO	RR,VT2P	205	21	22.2	58.1	0	108	42	8.7	4.6	73.7	0	1
ABC	Dyna-Gro D58VC65**	RR,VT2P	202	21	20.6	58.0	1	105	38	7.8	4.4	74.4	1	3
ABC	Dekalb DKC67-14 VT2P	RR,VT2P	198	21	20.9	59.1	4	109	39	8.1	4.7	73.5	5	11
ABC	Beck's Hybrids 6774V2P	RR,VT2P	196	21	22.0	58.4	1	109	40	8.4	4.6	73.9	3	2
ABC	Dekalb DKC67-72 VT2P	RR,VT2P	196	21	21.8	56.4	1	108	39	8.6	5.0	72.7	1	1
ABCD	TerraL REV 28BHR18	RR2,LL,YGCB,HX1	194	21	22.2	58.5	0	113	44	8.1	4.6	74.1	1	1
ABCD	Beck's Hybrids 6886VR	RR,LL,VIP3110	193	21	23.7	57.8	2	119	45	9.2	4.6	73.5	2	2
ABCD	Cavendale Farms CF 888 3000GT	RR,LL,3000GT	193	21	23.8	57.2	3	114	37	9.1	4.8	73.3	8	2
ABCD	NK Seeds N83D-3111	GT,LL,CB,VIP	193	21	23.2	58.5	1	115	43	8.7	4.5	73.9	3	4
BCDE	Augusta 7768	GT,LL,VIP3110	189	21	25.9	57.0	9	114	42	9.0	4.8	72.6	31	3
CDEF	Progeny PGY6119VT2P	RR,VT2P	183	21	22.8	57.7	2	103	38	8.9	4.9	73.2	3	3
DEF	TN 1702W		171	21	24.4	58.4	4	110	47	8.5	5.1	72.9	12	3
EFG	TN 1703Y		169	21	25.1	58.3	8	114	45	9.3	5.5	71.7	19	14
FG	TN 1701W		162	21	25.2	58.3	18	127	54	9.0	5.2	72.8	33	23
G	TN 1704Y		147	21	24.4	57.7	30	115	48	9.1	4.9	72.7	63	47
Average			193	21	22.8	58.1	4	111	42	9	5	73	10	6
L.S.D.¶			24.1	6	1.7	N.S.	11	7	5	0.6	0.3	0.9	-	-
n			6	6	2	4	3	3	1	1	1	1	1	1

† Hybrids that have any MS letter in common are not significantly different at the 5% level of probability.

* Hybrids marked with an asterisk were in the top performing "A" group for two (**) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

¶ Milan irr. and non-irr. tests sustained higher than usual lodging due to storms in June. Lodging is reported separately for these locations. Lodging values do not typically follow a normal distribution, therefore statistical tests to compute LSD were not performed.

Table 20. Across and by location mean yields of 21 full-season (> 116 DAP) corn hybrids evaluated in seven REC tests in Tennessee during 2017.

MST†	Avg.	Avg.	Avg.	Knoxville	Springfield	Milan	Milan	Jackson
Avg.	Yield	Hybrid	Trait Package‡	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.
				(bu/acre)	(bu/acre)	(bu/acre)	(bu/acre)	(bu/acre)
A	Dekalb DKC67-44 VT2P**	RR,VT2P	216	21	256	172	139	236
AB	Dyna-Gro D58VC37	RR,VT2P	212	21	241	172	116	269
AB	Dekalb DKC70-27 VT2P	RR,VT2P	212	21	255	149	119	264
AB	Dekalb DKC68-26 VT2P	RR,VT2P	211	21	224	148	130	242
AB	Armor 1717	RR,VT2P	209	21	237	147	131	256
ABC	AgriGold A6711VT2PRO**	RR,VT2P	205	21	244	133	136	242
ABC	AgriGold A647-90VT2PRO	RR,VT2P	205	21	226	161	120	248
ABC	Dyna-Gro D58VC65**	RR,VT2P	202	21	218	148	124	227
ABC	Dekalb DKC67-14 VT2P	RR,VT2P	198	21	237	141	134	235
ABC	Beck's Hybrids 6774V2P	RR,VT2P	196	21	236	130	125	233
ABC	Dekalb DKC67-72 VT2P	RR,VT2P	196	21	227	158	132	233
ABCD	Terral REV 28BHR18	RR2,LL,YGCB,HX1	194	21	209	137	107	242
ABCD	Beck's Hybrids 6886VR	RR,LL,VIP3110	193	21	231	154	115	243
ABCD	Cavendale Farms CF 888 3000GT	RR,LL,3000GT	193	21	205	138	124	243
ABCD	NK Seeds N83D-3111	GT,LL,CB,VIP	193	21	227	138	108	247
BCDE	Augusta 7768	GT,LL,VIP3110	189	21	224	129	129	250
CDEF	Progeny PGY6119VT2P	RR,VT2P	183	21	212	145	126	253
DEF	TN 1702W		171	21	199	118	105	257
EFG	TN 1703Y		169	21	187	128	113	261
FG	TN 1701W		162	21	181	128	120	265
G	TN 1704Y		147	21	171	148	107	269
Average		193	21	221	144	122	215	230
L.S.D._{.05}		24	24	30	N.S.	37	23	N.S.
n		6	1	1	1	1	1	1
C.V. (%)		9.6	6.5	12.5	13.7	10.1	5.8	10.9

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

* Hybrids marked with an asterisk were in the top performing "A" group for two (**) or three (***) consecutive years within the previous three year evaluation period.

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 21. Two year across locations mean yields and agronomic characteristics of eight full-season (> 116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg.			Test			Ear			Oil			Starch (%)		
			Avg. Yield (bu/acre)	Yield [§] (bu/acre)	Yield Std Err.	Avg. Moisture (%)	Weight (lbs/bu)	Plant Height (in.)	Ear Height (in.)	Protein (%)	Oil (%)	Starch (%)	Oil (%)	Starch (%)	Oil (%)	Starch (%)	
A	Dekalb DKC67-44 VT2P	RR,VT2P	220	14	20.1	59.3	111	46	9.2	4.8	72.9						
A	AgriGold A67111VT2PRO	RR,VT2P	208	14	20.3	59.7	110	43	9.0	4.8	73.3						
A	Dyna-Gro D58VG65	RR,VT2P	208	14	19.8	59.6	104	41	8.6	4.5	73.8						
A	Dekalb DKC68-26 VT2P	RR,VT2P	207	14	20.4	59.2	109	41	8.6	4.6	73.4						
A	Dekalb DKC67-14 VT2P	RR,VT2P	203	14	20.5	59.2	110	43	8.5	4.6	73.4						
A	Dekalb DKC67-72 VT2P	RR,VT2P	201	14	20.7	57.8	106	42	9.1	4.7	72.9						
A	NK Seeds N83D-3111	GT,LL,CB,VIP	196	14	22.7	58.5	117	46	9.2	4.4	73.6						
A	Augusta 7768	GT,LL,VIP3110	195	14	25.1	56.3	115	45	9.5	4.6	72.8						
Average		205	14	21	59	110	43	9	5	73							
L.S.D.^{.05}			N.S.	1.4	N.S.	5	3	0.5	N.S.	N.S.							
n			8	8	2	6	6	2	2	2							

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

|| Protein, Oil, and Starch on a dry weight basis

Table 22. Two year across and by location mean yields of eight full-season (> 116 DAP) corn hybrids evaluated in four REC tests in Tennessee during 2016-2017 (n=8).

MS† Avg. Yield	Hybrid	Trait Package‡	Avg.			Knoxville			Springfield			Milan		
			Yield § (bu/acre)	Yield Err. (bu/acre)	Yield Std (bu/acre)	Irr.	Irr.	Non-Irr.	(bu/acre)	Irr.	Non-Irr.	(bu/acre)	Irr.	Non-Irr.
A	Dekalb DKC67-44 VT2P	RR,VT2P	220	14	234	203	188	188	248	248	248	248	248	248
A	AgriGold A67111VT2PRO	RR,VT2P	208	14	221	180	174	174	248	248	248	248	248	248
A	Dyna-Gro D58VG65	RR,VT2P	208	14	213	192	168	168	241	241	241	241	241	241
A	Dekalb DKC68-26 VT2P	RR,VT2P	207	14	205	183	168	168	248	248	248	248	248	248
A	Dekalb DKC67-14 VT2P	RR,VT2P	203	14	212	186	167	167	242	242	242	242	242	242
A	Dekalb DKC67-72 VT2P	RR,VT2P	201	14	217	183	172	172	224	224	224	224	224	224
A	NK Seeds N83D-3111	GT,LL,CB,VIP	196	14	214	175	156	156	241	241	241	241	241	241
A	Augusta 7768	GT,LL,VIP3110	195	14	202	167	179	179	208	208	208	208	208	208
Average		205	14	215	184	172	238							
L.S.D..05		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.							
n		8	2	2	2	2	2							
C.V. (%)		9	4.3	10.7	8.8	8.8	7.2							

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

‡ For a full description of abbreviated biotech traits, see table 26.

§ All yields are adjusted to 15.5% moisture.

Table 23. Yields of 11 full-season (>116 DAP) Roundup / stacked corn hybrids in 16 County Standard Tests in Tennessee and Kentucky during 2017.[‡]

MS† Avg. Yield	Hybrid*	Avg. Yield§ (bu/acre)	Avg. Moisture (%)	Avg. Test Weight (lbs/bu)	Cann.	Call.	Ches.	Coff.	Dyer	Faye.	Gibs.	Gile.	Hayw.	Hend.	Henr.	Mad.	Monr.	Mont.1	Mont.2	Tipt.
A	*Dekalb 67-44	232	16.2	59.7	227	214	233	205	255	208	247	285	280	228	247	229	156	230	230	204
AB	*Dekalb 70-27	225	17.3	59.6	233	205	232	210	244	188	231	268	271	221	252	220	162	221	238	190
BC	Dyna-Gro 58VC37	222	15.9	59.7	198	209	241	186	249	169	218	272	275	227	233	221	172	212	241	196
BCD	Terral REV 28BHR18	222	16.6	59.8	214	216	256	194	217	183	209	272	264	214	257	207	172	174	257	212
BCD	AgriGold 6711	221	16.1	59.5	204	206	245	179	221	165	226	287	265	218	261	229	143	206	241	208
BCD	Dekalb 68-26	220	16.7	59.2	229	202	221	193	218	213	201	269	264	202	252	205	158	224	245	195
CDE	Dyna-Gro 57VP51	216	15.8	59.3	208	208	226	192	219	187	229	269	244	217	233	200	156	213	257	177
DE	Cropian 8621	213	15.9	56.9	225	183	236	191	219	179	221	251	262	216	247	205	142	208	222	183
E	Armor 1717	211	16.6	58.9	203	197	225	185	218	184	208	275	255	204	233	205	137	192	228	203
E	NK N83D-3111	210	17.6	58.1	214	182	221	193	207	200	196	250	243	184	236	214	165	229	244	172
E	Dekalb 67-72	210	16.7	58.3	207	213	226	185	217	166	204	258	255	216	248	215	136	211	198	185
Average		218	17	59	215	203	233	192	226	186	217	269	262	213	245	214	154	211	236	193

‡ Data Provided by Ryan Blair, Ext. Area Specialist, Grain and Cotton Variety Testing, and Extension agents in counties shown above.

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

* Hybrids marked with an asterisk were in the top performing "A" group for two (*) or three (***) consecutive years within the previous three year evaluation period.

§ All yields are adjusted to 15.5% moisture.

County Locations include: Cannon, Calloway (KY), Chester, Coffee, Dyer, Fayette, Gibson, Giles, Haywood, Henderson, Henry, Madison, Monroe, Montgomery (2 loc), Tipton.

Table 24. Overall average yields, moistures, and test weights of 9 full-season corn hybrids evaluated in County Standard Tests and Research and Education Center Tests in Tennessee during 2017.

Hybrid	Trait Package [†]	Avg. of CST and REC Tests				CST Tests				REC Tests			
		Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Yield [§] (bu/acre)	Avg. Moisture (%)	Avg. Weight (lbs/bu)	Avg. Yield [§] (bu/acre)
Dekalb DKC67-44 VT2P	RR,VT2P	224	19	59	232	16.2	59.7	216	20.9	212	23.2	58.6	58.6
Dekalb DKC70-27 VT2P	RR,VT2P	219	20	59	225	17.3	59.6	212	23.2	212	23.2	57.9	57.9
Dyna-Gro D58VC37	RR,VT2P	217	19	59	222	15.9	59.7	212	22.0	212	22.0	59.0	59.0
Dekalb DKC68-26 VT2P	RR,VT2P	215	19	59	220	16.7	59.2	211	21.4	211	21.4	58.7	58.7
AgriGold A6711VT2PRO	RR,VT2P	213	19	59	221	16.1	59.5	205	21.2	205	21.2	58.5	58.5
Armor 1717	RR,VT2P	210	20	59	211	16.6	58.9	209	22.5	209	22.5	58.4	58.4
Terral REV 28BHR18	RR2,LL,YGCB,HX1	208	19	59	222	16.6	59.8	194	22.2	194	22.2	58.5	58.5
Dekalb DKC67-72 VT2P	RR,VT2P	203	19	57	210	16.7	58.3	196	21.8	196	21.8	56.4	56.4
NK Seeds N83D-3111	GT,LL,CB,VIP	202	20	58	210	17.6	58.1	193	23.2	193	23.2	58.5	58.5
Average		212	19	59	219	17	59	205	22	58	22	58	58

[†] For a full description of abbreviated biotech traits, see table 26.

[§] All yields are adjusted to 15.5% moisture.

Table 25. Characteristics, as described by the seed company, of corn hybrids evaluated in yield tests in Tennessee during 2017.

Hybrid	Grain Color	Maturity	Herbicide Tolerance [§]	Insect Tolerance [§]	Refuge	Released or Experimental	Seed Treatment
AgriGold A640-77VT2PRO	Y	110	RR	VT2P	N	R	Poncho 500 + Votivo
AgriGold A642-59STX	Y	112	RR	SSX	N	R	Poncho 500 + Votivo
AgriGold A643-87GT3	Y	113	RR	3000GT	N	R	Poncho 500 + Votivo
AgriGold A645-10VT2RIB	Y	115	RR	VT2P	Y	R	Poncho 500 + Votivo
AgriGold A647-90VT2PRO	Y	117	RR	VT2P	N	R	Poncho 500 + Votivo
AgriGold A6499STXRIB	Y	112	RR	SSX	Y	R	Poncho 500 + Votivo
AgriGold A6544VT2RIB	Y	113	RR	VT2P	Y	R	Poncho 500 + Votivo
AgriGold A6572VT2RIB	Y	114	RR	VT2P	Y	R	Poncho 500 + Votivo
AgriGold A6659VT3RIB	Y	116	RR	VT3P	N	R	Poncho 500 + Votivo
AgriGold A6711VT2PRO	Y	118	RR	VT2P	N	R	Poncho 500 + Votivo
Armor 1340	Y	113	RR	VT2P	N	R	A500/Votivo
Armor 1717	Y	117	RR	VT2P	N	R	A500/Votivo
Armor 1227P	Y	112	RR	VT2P	N	R	A500/Votivo
Armor 1447P	Y	114	RR	VT2P	N	R	A500/Votivo
Armor 1667S	Y	115	RR	SSX	N	R	A500/Votivo
Armor AX77116	Y	116	RR	VT2P	N	R	A500/Votivo
Augusta 1165	Y	115	RR	VT2P	Y	R	Cruiser Maxx 250
Augusta 1166	Y	116	RR	VT2P	N	R	Cruiser Maxx 250
Augusta 5062	Y	112	GT,LL	VIP3110	N	R	Cruiser Maxx 250
Augusta 5065	Y	115	GT,LL	VIP3110	N	E	Cruiser Maxx 250
Augusta 6664	Y	114	RR	VT2P	N	R	Cruiser Maxx 250
Augusta 7768	Y	118	GT,LL	VIP3110	N	R	Cruiser Maxx 250
Beck's Hybrids 6365AM	Y	113	RR,LL	AM	Y	R	Escalate
Beck's Hybrids 6589V2P	Y	115	RR	VT2P	Y	R	Escalate
Beck's Hybrids 6368V2P	Y	113	RR	VT2P	Y	R	Escalate
Beck's Hybrids 6774V2P	Y	117	RR	VT2P	Y	R	Escalate
Beck's Hybrids 6886VR	Y	118	RR,LL	VIP3110	N	R	Escalate
Cavendale Farms 793 VIP 3110	Y	109	RR,LL	VIP3110	N	R	Cruiser 250 + Vibrance
Cavendale Farms CF 888 3000GT	Y	117	RR,LL	3000GT	N	R	Cruiser 250 + Vibrance
Croplan 5678	Y	116	RR	VT2P	Y	R	Acceleron
Croplan 6640	Y	113	RR	VT3P	Y	R	Acceleron
Croplan 5290DG	Y	112	RR	VT2P	Y	R	Acceleron
Dekalb DKC60-88 VT2PRIB	Y	110	RR	VT2P	Y	R	Acceleron A500P/N EDC
Dekalb DKC62-20 VT2PRIB	Y	112	RR	VT2P	Y	R	Acceleron A500P/N EDC
Dekalb DKC62-52 STX RIB	Y	112	RR,LL	SSX	Y	R	Acceleron A500P/N EDC
Dekalb DKC64-35 VT2P	Y	114	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC65-95 VT2P	Y	115	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC67-14 VT2P	Y	117	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC67-44 VT2P	Y	117	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC67-72 VT2P	Y	117	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC68-26 VT2P	Y	118	RR	VT2P	N	R	Acceleron A500P/N EDC
Dekalb DKC70-27 VT2P	Y	120	RR	VT2P	N	R	Acceleron A500P/N EDC
Dyna-Gro CX17212	Y	112	RR	VT2P	N	R	Poncho 500, Acceleron

Table 25 (cont.)

Hybrid	Grain Color	Maturity	Herbicide Tolerance [§]	Insect Tolerance [§]	Released or Experimental		Seed Treatment
					Refuge	Experimental	
Dyna-Gro D55VC45	Y	115	RR	VT2P	N	R	Poncho 500, Acceleron
Dyna-Gro D58VC37	Y	118	RR	VT2P	N	R	Poncho 500, Acceleron
Dyna-Gro D58VC65	Y	118	RR	VT2P	N	R	Poncho 500, Acceleron
LG Seeds LG5555VT2RIB	Y	110	RR	VT2P	Y	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5590VT2Pro	Y	111	RR	VT2P	N	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5616-3000GT	Y	112	RR,LL	3000GT	N	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5643VT2RIB	Y	114	RR	VT2P	Y	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5650VT2RIB	Y	114	RR	VT2P	Y	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5663VT2PRIB	Y	115	RR	VT2P	Y	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
LG Seeds LG5700VT2RIB	Y	116	RR	VT2P	Y	R	clothianidin, Bacillus firmus, metalaxylyl, ipconazole, trifloxystrobin
NK Seeds 1405-3220EZ1	Y	114	GT,LL	CB,VIP	Y	R	Avicta Complete, Vibrance
NK Seeds N66V-3220-EZ1	Y	110	GT,LL	CB,VIP	Y	R	Avicta Complete, Vibrance
NK Seeds N76A-3110	Y	114	GT,LL	CB,VIP	N	R	Avicta Complete, Vibrance
NK Seeds N83D-3111	Y	118	GT,LL	CB,VIP	N	R	Apron, Fludioxonil, Maxim, Dynasty, Vibrance, Cruiser, Avicta
Pfister 70A1SSR	Y	110	RR,LL	SSX	Y	R	Cruiser Corn
Pfister 71C1PCR	Y	111	RR,LL	PC	Y	R	Cruiser Corn
Pfister 72G6SSR	Y	112	RR,LL	SSX	Y	R	Cruiser Corn
Pfister 74A2RR	Y	114	RR,LL	SSX	Y	R	Cruiser Corn
Progeny PGY4114VT2P	Y	114	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY5115VT2P	Y	115	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY6110VT2P	Y	110	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY6116VT3P	Y	116	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY6119VT2P	Y	119	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY7111VT2P	Y	111	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGY7215VT2P	Y	115	RR	VT2P	N	R	Poncho 500 + Votivo
Progeny PGYEXP1715SS	Y	115	RR,LL	SSX	N	R	Poncho 500 + Votivo
Terral REV 23BHR55	Y	113	RR2,LL	YGCB,HX1	N	R	Maxim-Quattro + Poncho1250 + Votivo
Terral REV 25BHR26	Y	115	RR2,LL	YGCB,HX1	N	R	Maxim-Quattro + Poncho1250 + Votivo
Terral REV 28BHR18	Y	118	RR2,LL	YGCB,HX1	N	R	MaximQuattro + Poncho1250 + Votivo
TN 1701W	W	Full			E		CruiserMaxx
TN 1702W	W	Full			E		CruiserMaxx
TN 1703Y	Y	Full			E		CruiserMaxx
TN 1704Y	Y	Full			E		CruiserMaxx
Warren Seed DS 6414	Y	115	RR	PC	N	R	MaximQuattro + Poncho1250 + Votivo
Warren Seed DS 7513	Y	113	RR,LL		N	R	Cruiser Maxx 250

Table 25 (cont.)

Hybrid	Grain Color	Maturity	Herbicide Tolerance[§]	Insect Tolerance[§]	Refuge	Released or Experimental	Seed Treatment
Warren Seed DS 9314 SSX	Y	114	RR,LL	SSX	N	R	Cruiser Maxx 250
Warren Seed DS 9412 SSX	Y	112	RR,LL	SSX	N	R	Cruiser Maxx 250
Warren Seed DS 9610	Y	110	RR	3000GT	N	R	Cruiser Maxx 250
Warren Seed DS 9913 SSX	Y	114	RR,LL	SSX	N	R	Cruiser Maxx 250
Wyffels W7696RIB	Y	113	RR	VT2P	Y	R	Poncho 500, Votivo
Wyffels W8268RIB	Y	116	RR,LL	SSX	Y	R	Poncho 500, Votivo
Wyffels W8646	Y	116	RR	VT2P	N	R	P500, Votivo
Wyffels W8918RIB	Y	116	RR,LL	SSX	Y	R	Poncho 500, Votivo

§ For a full description of abbreviated biotech traits, see table 26.

Table 26. Contact information for corn hybrid seed companies evaluated in yield tests in Tennessee during 2017.

Company	Contact	Phone	Email	Web site
Agrigold Hybrids	Justin Warren	618-943-5776	justin.warren@agrígold.com	www.agrigold.com
Armor Seed	Lane Dill	901-233-0274	lanedill@armorseed.com	www.armorseed.com
Augusta Seed Corporation	Matt Rawley	540-255-5902	matt.rawley@augustaseed.com	www.augustaseed.com/
Beck's Superior Hybrids (Beck's & XL Brand)	Susan Powell Regional Product Specialist	270-604-2017	susan.camp@beckshybrids.com	www.beckshybrids.com
Caverndale Farms	AgCentral Farmers Cooperative Johnson City Chemical			www.caverndalefarms.com
Croplan Genetics (Winfield)	Caleb Robertson	731-614-5243	c robertson@landolakes.com	www.croplangenetics.com
Monsanto (Dekalb)	Larry Ganann	901-326-7140	larry.w.ganann@monsanto.com	www.dekalb.com
Dyna-Gro Seed	Jonathan Fant	731-819-6713	jonathan.fant@cpsagu.com	www.dynagroseed.com
LG Seeds	Security Seed and Chemical	931-485-7333		www.lgseeds.com/
NK Brand (Syngenta)	Chuck Leonard	270-519-9600	chuck.leonard@syngenta.com	www.nk-us.com
Pfister Seeds, LLC	Nicky Dunbar	270-625-3996	nounbar@pfisterseeds.com	http://www.pfisterseeds.com/
Progeny Ag Products	Hillary Spain Bret Mize	870-208-6032 570-208-4423	hillary@progenyag.com bret@progenyag.com	www.progenyag.com/
	Adam Shannon	256-777-1557	adam@progenyag.com	
Terral Seed Inc (Rev Brand)	Ricky Davis	901-355-2463	rdavis@terralseed.com	www.terralseed.com
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu	
Warren Seed	Lanny Warren	731-234-2921	lanny.warren@charter.net	www.dainylandseed.com
Wyffels Hybrids	Greg Triplett	270-775-5078	gtriplett@wyffels.com	www.wyffels.com

Table 27. Abbreviations used to identify biotech traits of corn grain hybrids evaluated in Tennessee during 2017.

Abbreviation	Name	Characteristic
3000GT	Syngenta Agrisure® 3000GT	Protection from Corn Borer, Western, Northern and Mexican Corn Rootworm. Glufosinate tolerance and Glyphosate tolerance. Event: SYTGA21+Bt11+MIR604. Contains: Cry1Ab, Modified Cry3A.
AM	AcreMax	Protection from Black Cutworm, Eastern Corn Borer, Fall Armyworm, Sugarcane Borer, Southern Corn Borer, Western Bean Cutworm, Corn Earworm. Glufosinate tolerance and Glyphosate tolerance. Contains: Cry1F, Cry1Ab.
CB/LL	Agrisure CB/LL	Protection from Corn Borer. Event: Bt11. Contains: Cry1Ab, PAT.
DG	Genuity DroughtGard™	Event: MON 87460
GT	Syngenta Agrisure® GT	Glyphosate tolerance. Event: SYTGA21
HX1	DowAgrosciences Pioneer Hi-Bred Herculex® I	Protection from Western Bean Cutworm, Corn Borer, Black Cutworm and Fall Armyworm resistance. Glufosinate herbicide tolerance. Event: TC1507. Contains: Cry1F.
LL	Bayer CropScience LibertyLink®	Glufosinate tolerance. Event: T25
PC	PowerCore	Protection from Corn Earworm, Black Cutworm, European Corn Borer, Southwestern Corn Borer, Fall Armyworm. Event: MON89034 x TC1507 x NK603. Contains: cry1Fa2, cp4epsps (aroA:CP4), pat, cry2Ab2, cry1A.105.
RA	Dow AgroSciences Refuge Advanced®	
RR2	Monsanto Roundup Ready® Corn 2	Glyphosate tolerance. Event: NK603
RW	Agrisure RW	Protection from Corn Rootworm. Event MIR604. Contains: mCry3A.
SSX	Monsanto Genuity™ SmartStax™ DowAgrosciences SmartStax™	Protection from Western, Northern, and Mexican Corn Rootworms, European and Southwestern Corn Borers, Sugarcane Borer, Southern Cornstalk Borer, Western Bean and Black Cutworms, Corn Earworm, Fall Armyworm. Glufosinate tolerance and Glyphosate tolerance. Event: Mon88017+Mon89034+TC1507+DAS59122-7. Contains: Cry1A.105, Cry2Ab2, Cry1F, Cry3Bb1, Cry34/35Ab1.
VIP3110	Agrisure Viptera™ 3110	Protection from European and Southwestern Corn Borers, Southern Cornstalk Borer, Fall and Beet Armyworm, Black and Western Bean Cutworm, Sugarcane Borer, Common Stalk borer and Dingy Cutworm. Glyphosate tolerance. Event: MIR162+Bt11+GA21. Contains: Vip3A, Cry1Ab.
VIP3111	Agrisure Viptera™ 3111A	Protection from European and Southwestern Corn Borers, Corn earworm, Southern cornstalk borer, Fall and Beet armyworm, Black and Western Bean Cutworm, Sugarcane borer, Western, Northern and Mexican corn rootworm, Common stalk borer and Dingy cutworm. Glyphosate tolerance. Contains Agrisure Artesian technology with multiple genes for season long drought protection. Event: MIR162+Bt11+GA21+MIR604. Contains: Vip3A, Cry1Ab.
VT2P	Monsanto Genuity™ VT Double PRO™	Protection from European and Southwestern Corn Borers, Sugarcane Borer, Southern Cornstalk Borer, Corn Earworm, and Fall Armyworm Glyphosate tolerance. Event: Mon89034+NK603. Contains: Cry1A.105, Cry2Ab2.

Table 27 (cont.)

Abbreviation	Name	Characteristic
VT3P	Monsanto Genuity™ VT Triple PRO™	Protection from European and Southwestern Corn Borers, Sugarcane Borer, Southern Cornstalk Borer, Corn Earworm, Fall Armyworm, Western Corn Rootworm, Northern Corn Rootworm, and Mexican Corn Rootworm. Glyphosate tolerance. Event: Mon88017+Mon89034. Contains: Cry1A.105, Cry2Ab2, Cry3Bb1.
YGCB	Monsanto YieldGard® Corn Borer	Protection from European and Southwestern Corn Borers, Sugarcane Borer and Southern Cornstalk Borer. Event: Mon810. Contains: Cry1Ab.



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