

Corn Silage Tests in Tennessee

2014

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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 Silage Tests

County

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CORN SILAGE YIELD TESTS

2014

Experimental Procedures

AgResearch and Education Center Tests: Ten corn hybrids were evaluated for silage yield and quality in 2014. The tests were conducted at the East Tennessee (Knoxville), Highland Rim (Springfield), and Middle Tennessee (Spring Hill), AgResearch and Education Centers (REC). The plots at all locations consisted of two rows, planted 30 inches apart, 30 feet in length and were replicated three times. Yields presented were adjusted to both dry weight and 65% moisture. The plant populations as well as the planting and harvesting dates are given in Table 1. Plots were harvested by commercial silage harvesters. A sub-sample from each plot of approximately 3 lbs was taken for analysis. Fresh weight and dried weight were recorded on each sample for determination of moisture at harvest. The samples were then ground and analyzed for nutritional content. Silage quality analyses were provided by Cumberland Valley Analytical Services, Inc., Hagerstown, MD. Predictions for milk production per ton and milk production per acre were calculated using the University of Wisconsin Milk2006 program.

County Standard Tests: The County Standard Corn Silage Test was conducted in Washington county in Tennessee with the same 10 hybrids included in the REC tests. Each hybrid was evaluated in a large strip-plot. Plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Growing Season: The 2014 growing season was characterized by a wet spring which delayed planting. By mid-May, drier weather allowed for a rapid return to planting schedules and 87% of corn had been planted, an 11% increase over the five-year average. Persistent rains early in the season resulted in early tasseling in corn. Seventy-seven percent of the crop rated good to excellent in late August when the majority of corn silage was harvested.

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. 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 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).

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.

Table 1. Location information from AgResearch and Education Centers where corn and wheat silage variety tests were conducted in 2014.

AgResearch and Education Center	Crop	Location	Planting Date	Harvest Date	Plant Population	Soil Type
East Tennessee	corn	Knoxville	04/17/14	08/29/14	26,867	Sequatchie Silt Loam
Middle Tennessee	corn	Spring Hill	05/06/14	08/25/14	27,152	Maury Silt Loam
Highland Rim	corn	Springfield	04/24/14	08/19/14	28,185	Dickson Silt Loam
Middle Tennessee	wheat	Spring Hill	11/20/13	05/21/14	27,152	Maury Silt Loam

Table 2. Mean yields † of 10 corn hybrids evaluated for silage at three locations in Tennessee during 2014.

Brand	Hybrid §	Dry Weight	65% Moisture	----- Dry Weight Yield -----		
		Avg. Yield ± Std Err. (n=3)	Avg. Yield ± Std Err. (n=3)	Knoxville	Spring Hill	Springfield
-----tons/a-----						
Mycogen	TMF2L825 (RR/LL/HX1)	9.0 ± 0.3	25.8 ± 0.9	10.3	8.4	8.5
Augusta	8868 (RR)	8.6 ± 0.3	24.6 ± 0.9	10.3	8.2	7.3
Mycogen	TMF2H747 (RR/LL/SSX)	8.5 ± 0.3	24.2 ± 0.9	9.2	10.4	5.9
Mycogen	TMF2H919 (RR/LL/SSX)	8.1 ± 0.3	23.1 ± 0.9	9.0	9.2	6.1
Croplan	7927VT3P	8.1 ± 0.3	23.1 ± 0.9	9.6	8.3	6.3
Croplan	8750RH (RR/LL/YGCB)	7.9 ± 0.3	22.5 ± 0.9	7.9	8.6	7.1
Croplan	8621VT3P	7.8 ± 0.3	22.3 ± 0.9	9.0	8.4	6.1
Mycogen	TMF2R737 (RR/LL/SSX)	7.4 ± 0.3	21.1 ± 0.9	8.7	8.7	4.8
Augusta	6866 (GT/LL/CB/RW)	7.3 ± 0.3	21.0 ± 0.9	8.1	7.9	5.9
Mycogen	F2F817 (RR/LL/SSX)	6.8 ± 0.3	19.5 ± 0.9	7.3	7.8	5.5
Avg. (tons/a)		7.9	22.7	8.9	8.6	6.3
L.S.D._{.05} (tons/a)		0.9	2.6	1.4	1.6	2.0
C.V. (%)		12.3	12.3	9.1	11.0	18.1

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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

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

LL = contains a gene for tolerance to glufosinate

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

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

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

SSX, SmartStax = contains genes for European corn borer, Soutwestern corn borer, Northern corn rootworm, Western corn rootworm, fall armyworm,

Western bean cutworm, black cutworm, glyphosate, and glufosinate resistance

Table 3. Mean yields † and agronomic characteristics of 10 corn hybrids evaluated for silage at three locations in Tennessee during 2014.

Brand	Hybrid §	Dry Weight	65% Moisture	Moisture at harvest (n=3)	Lodging (n=2)	Plant Height (n=3)	Ear Height (n=3)
		Avg. Yield ± Std Err. (n=3)	Avg. Yield ± Std Err. (n=3)				
		tons/a	tons/a	%	%	inches	inches
Mycogen	TMF2L825 (RR/LL/HX1)	9.0 ± 0.3	25.8 ± 0.9	59	0	115	44
Augusta	8868 (RR)	8.6 ± 0.3	24.6 ± 0.9	55	0	110	44
Mycogen	TMF2H747 (RR/LL/SSX)	8.5 ± 0.3	24.2 ± 0.9	54	2	111	46
Mycogen	TMF2H919 (RR/LL/SSX)	8.1 ± 0.3	23.1 ± 0.9	60	1	115	48
Croplan	7927VT3P	8.1 ± 0.3	23.1 ± 0.9	55	0	116	42
Croplan	8750RH (RR/LL/YGCB)	7.9 ± 0.3	22.5 ± 0.9	58	0	116	44
Croplan	8621VT3P	7.8 ± 0.3	22.3 ± 0.9	56	0	110	43
Mycogen	TMF2R737 (RR/LL/SSX)	7.4 ± 0.3	21.1 ± 0.9	56	0	112	40
Augusta	6866 (GT/LL/CB/RW)	7.3 ± 0.3	21.0 ± 0.9	55	0	115	41
Mycogen	F2F817 (RR/LL/SSX)	6.8 ± 0.3	19.5 ± 0.9	61	5	113	47
Average		7.9	22.7	56.9	1	113	44

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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LL = contains a gene for tolerance to glufosinate

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Western bean cutworm, black cutworm, glyphosate, and glufosinate resistance

Table 4. Mean yields † and feed quality characteristics of 10 corn hybrids evaluated for silage at three locations in Tennessee during 2014.

Brand	Hybrid §	Dry Weight		Crude Protein	NDF	30h IV		ADF	TDN	NEL	Milk/ton‡	Milk/acre‡
		Avg. Yield ± Std Err. (n=3)	Moisture at Harvest (n=3)			NDFD	Starch					
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcals/lb	lbs/ton	lbs/acre
Mycogen	TMF2L825 (RR/LL/HX1)	9.0 ± 0.3	59	6.3	53.0	25.8	26.1	32.1	67.3	0.70	2148	19468
Augusta	8868 (RR)	8.6 ± 0.3	55	6.2	43.7	22.9	34.9	25.8	71.7	0.75	2331	20079
Mycogen	TMF2H747 (RR/LL/SSX)	8.5 ± 0.3	54	6.7	45.0	23.2	34.1	26.7	71.3	0.74	2251	18603
Mycogen	TMF2H919 (RR/LL/SSX)	8.1 ± 0.3	60	6.5	50.6	24.4	27.4	30.7	68.3	0.71	2256	18269
Croplan	7927VT3P	8.1 ± 0.3	55	6.5	44.4	23.4	34.3	25.8	71.8	0.75	2337	18949
Croplan	8750RH (RR/LL/YGCB)	7.9 ± 0.3	58	7.1	46.7	25.5	32.0	27.0	70.9	0.74	2375	18672
Croplan	8621VT3P	7.8 ± 0.3	56	6.9	46.8	22.9	31.6	27.5	70.3	0.73	2271	17669
Mycogen	TMF2R737 (RR/LL/SSX)	7.4 ± 0.3	56	6.7	46.8	24.5	31.5	28.1	70.0	0.73	2319	17180
Augusta	6866 (GT/LL/CB/RW)	7.3 ± 0.3	55	6.7	47.1	25.4	31.3	27.7	70.0	0.73	2278	16750
Mycogen	F2F817 (RR/LL/SSX)	6.8 ± 0.3	61	7.3	48.8	29.8	26.1	28.5	69.8	0.72	2471	16782

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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

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

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

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‡ based on University of Wisconsin Milk2006 software program.

NDF = Neutral Detergent Fiber

30h IV NDFD = Neutral Detergent Fiber Digestibility

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

Table 5. Mean yields † and feed quality characteristics of 10 corn hybrids evaluated for silage at three locations in Tennessee during 2014, sorted by brand.

Brand	Hybrid §	Dry Weight		Crude Protein	NDF	30h IV			TDN	NEL	Milk/ton [‡]	Milk/acre [‡]
		Avg. Yield ± Std Err. (n=3)	Moisture at Harvest (n=3)			NDFD	Starch	ADF				
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
Augusta	8868 (RR)	8.6 ± 0.3	55.0	6.2	43.7	22.9	34.9	25.8	71.7	0.75	2331	20079
Augusta	6866 (GT/LL/CB/RW)	7.3 ± 0.3	55.3	6.7	47.1	25.4	31.3	27.7	70.0	0.73	2278	16750
Croplan	7927VT3P	8.1 ± 0.3	55.1	6.5	44.4	23.4	34.3	25.8	71.8	0.75	2337	18949
Croplan	8750RH (RR/LL/YGCB)	7.9 ± 0.3	58.3	7.1	46.7	25.5	32.0	27.0	70.9	0.74	2375	18672
Croplan	8621VT3P	7.8 ± 0.3	55.6	6.9	46.8	22.9	31.6	27.5	70.3	0.73	2271	17669
Mycogen	TMF2L825 (RR/LL/HX1)	9.0 ± 0.3	58.8	6.3	53.0	25.8	26.1	32.1	67.3	0.70	2148	19468
Mycogen	TMF2H747 (RR/LL/SSX)	8.5 ± 0.3	53.9	6.7	45.0	23.2	34.1	26.7	71.3	0.74	2251	18603
Mycogen	TMF2H919 (RR/LL/SSX)	8.1 ± 0.3	60.1	6.5	50.6	24.4	27.4	30.7	68.3	0.71	2256	18269
Mycogen	TMF2R737 (RR/LL/SSX)	7.4 ± 0.3	56.3	6.7	46.8	24.5	31.5	28.1	70.0	0.73	2319	17180
Mycogen	F2F817 (RR/LL/SSX)	6.8 ± 0.3	61.0	7.3	48.8	29.8	26.1	28.5	69.8	0.72	2471	16782

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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

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‡ based on University of Wisconsin Milk2006 software program.

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30h IV NDFD = Neutral Detergent Fiber Digestibility

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

COUNTY STANDARD TESTS

Table 6. Mean yields † of 10 corn hybrids evaluated for silage in one County Standard Test in Tennessee during 2014.

Brand	Hybrid §	Dry Weight	65% Moisture	Moisture
		Yield (n=1)	Yield (n=1)	at harvest (n=1)
		-----tons/a-----		
		%		
Croplan	7927VT3P	8.2	23.5	66.2
Mycogen	TMF2H919 (RR/LL/SSX)	9.6	27.5	62.3
Mycogen	TMF2H747 (RR/LL/SSX)	8.5	24.3	65.2
Mycogen	F2F817 (RR/LL/SSX)	7.9	22.5	66.9
Augusta	6866 (GT/LL/CB/RW)	8.6	24.5	62.9
Mycogen	TMF2R737 (RR/LL/SSX)	9.0	25.8	61.7
Mycogen	TMF2L825 (RR/LL/HX1)	13.5	38.6	62.0
Croplan	8750RH (RR/LL/YGCB)	14.6	41.6	63.9
Augusta	8868 (RR)	16.0	45.9	59.7
Croplan	8621VT3P	13.2	37.7	64.2
Avg. (tons/a)		10.9	31.2	63.5

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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Western corn rootworm, fall armyworm, Western bean cutworm, black cutworm, glyphosate, and glufosinate resistance

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

Washington County: Savland Dairy Farm (David Saylor)

Planted: 5-27-14

Harvested: 9-1-14

Population: 28,600

30 inch row spacing

Table 7. Mean yields † and feed quality characteristics of 10 corn hybrids evaluated for silage in one County Standard Tests in Tennessee during 2014.

Brand	Hybrid §	Dry Weight	Moisture	Crude	30h IV			ADF	TDN	NEL	Milk/ton [‡]	Milk/acre [‡]
		Avg. Yield (n=1)	at Harvest (n=1)	Protein (n=1)	NDF (n=1)	NDFD (n=1)	Starch (n=1)					
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
Croplan	7927VT3P	8.2	23.5	8.6	38.6	23.6	33.4	23.2	73.3	0.76	2888	23760
Mycogen	TMF2H919 (RR/LL/SSX)	9.6	27.5	8.4	43.5	26.9	27.4	26.3	70.5	0.73	2503	24096
Mycogen	TMF2H747 (RR/LL/SSX)	8.5	24.3	8.4	40.8	26.3	30.5	24.8	71.8	0.75	2731	23227
Mycogen	F2F817 (RR/LL/SSX)	7.9	22.5	8.7	44.8	30.2	23.8	26.5	70.1	0.73	2571	20288
Augusta	6866 (GT/LL/CB/RW)	8.6	24.5	9.0	41.1	26.3	28.2	24.7	71.3	0.74	2540	21749
Mycogen	TMF2R737 (RR/LL/SSX)	9.0	25.8	8.3	40.6	24.6	30.5	24.4	71.5	0.74	2548	23023
Mycogen	TMF2L825 (RR/LL/HX1)	13.5	38.6	9.2	39.3	26.2	30.3	22.6	73.0	0.76	2576	34770
Croplan	8750RH (RR/LL/YGCB)	14.6	41.6	8.9	38.6	24.3	30.1	22.8	73.2	0.76	2590	37727
Augusta	8868 (RR)	16.0	45.9	8.2	36.8	22.7	35.9	21.8	74.5	0.78	2617	41993
Croplan	8621VT3P	13.2	37.7	9.1	41.5	27.1	26.5	24.5	71.4	0.74	2529	33358

† all silage yields are adjusted to dry weight basis unless otherwise indicated.

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NDF = Neutral Detergent Fiber

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ADF = Acid Detergent Fiber

TDN = Total Digestable Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 8. Mean yield† and agronomic characteristics of 90 soft red winter wheat varieties evaluated for silage at the Middle Tennessee AgResearch and Education Center during 2014.

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Height
		Avg. Yield ± Std Err. (n=1)	Avg. Yield ± Std Err. (n=1)		
		tons/a	tons/a	%	inches
Cache River Valley Seed	Dixie Xtreme	3.6 ± 0.3	10.3 ± 0.8	58.6	31
Croplan by Winfield	EXP 13-15	3.5 ± 0.3	10.1 ± 0.7	56.7	32
Progeny	357	3.5 ± 0.3	10.0 ± 0.7	58.2	31
Beck's Hybrids	129	3.5 ± 0.3	10.0 ± 0.7	59.2	31
Warren Seed	McKay 110	3.4 ± 0.3	9.8 ± 0.7	60.0	31
Cache River Valley Seed	DXEX 13-3	3.4 ± 0.3	9.7 ± 0.8	57.4	29
USG	3993	3.4 ± 0.3	9.6 ± 0.8	58.3	31
Armor	Octane	3.4 ± 0.3	9.6 ± 0.7	60.8	31
Cache River Valley Seed	Dixie McAlister	3.3 ± 0.3	9.5 ± 0.8	58.6	31
Pioneer	26R41	3.3 ± 0.3	9.4 ± 0.7	60.2	29
Dyna-Gro	9223	3.3 ± 0.3	9.4 ± 0.7	60.9	31
Dyna-Gro	WX13631	3.3 ± 0.3	9.4 ± 0.8	56.9	31
USG	3013	3.3 ± 0.3	9.4 ± 0.7	59.1	31
Croplan by Winfield	EXP 13-34	3.3 ± 0.3	9.3 ± 0.8	59.2	28
USG	3201	3.3 ± 0.3	9.3 ± 0.8	59.6	32
Tennessee Farmers Co-Op	FFR 2366	3.3 ± 0.3	9.3 ± 0.7	60.1	30
Steyer	Hunker	3.2 ± 0.3	9.3 ± 0.7	60.9	30
USG	3251	3.2 ± 0.3	9.2 ± 0.7	59.4	30
Progeny	PGX 13-1	3.2 ± 0.3	9.2 ± 0.7	59.5	30
Syngenta	SY 9978	3.2 ± 0.3	9.2 ± 0.7	60.3	29
Beck's Hybrids	113	3.2 ± 0.3	9.1 ± 0.8	58.4	30
USG	3404	3.1 ± 0.3	9.0 ± 0.7	57.4	28
Dyna-Gro	Yorktown	3.1 ± 0.3	8.9 ± 0.7	60.4	30
Armor	ARX1329	3.1 ± 0.3	8.8 ± 0.7	58.0	29
TN Exp.	TN 1202	3.1 ± 0.3	8.8 ± 0.8	60.5	31
Warren Seed	McKenna 315	3.1 ± 0.3	8.8 ± 0.7	57.2	31
Dyna-Gro	9012	3.1 ± 0.3	8.8 ± 0.7	54.7	32
Croplan by Winfield	9203	3.1 ± 0.3	8.7 ± 0.8	60.1	32
USG	3833	3.0 ± 0.3	8.7 ± 0.7	57.3	30
Progeny	185	3.0 ± 0.3	8.7 ± 0.7	58.3	31
Pioneer	26R53	3.0 ± 0.3	8.6 ± 0.7	56.5	33
Tennessee Farmers Co-Op	FFR 2239	3.0 ± 0.3	8.6 ± 0.8	58.8	31
Dyna-Gro	9373	3.0 ± 0.3	8.6 ± 0.7	60.9	31
VA Exp.	VA10W-119	3.0 ± 0.3	8.5 ± 0.7	55.6	29
TN Exp.	TN 1303	3.0 ± 0.3	8.5 ± 0.7	54.5	29
GA Exp.	GA-041293-11E54	3.0 ± 0.3	8.4 ± 0.7	58.4	31
MO	Milton	3.0 ± 0.3	8.4 ± 0.8	58.2	31
Delta Grow	7200	3.0 ± 0.3	8.4 ± 0.8	59.3	29
TN Exp.	TN 1401	3.0 ± 0.3	8.4 ± 0.8	59.9	30
Delta Grow	9700	2.9 ± 0.3	8.4 ± 0.7	61.0	29
Progeny	117	2.9 ± 0.3	8.4 ± 0.8	57.9	31
Pioneer	26R10	2.9 ± 0.3	8.4 ± 0.7	60.4	30
Armor	Vandal	2.9 ± 0.3	8.3 ± 0.8	60.4	32
Kentucky Small Grain Growers Assoc.	Pembroke 2008	2.9 ± 0.3	8.3 ± 0.7	56.5	30
USG	3120	2.9 ± 0.3	8.3 ± 0.8	60.7	29
MO	Truman	2.9 ± 0.3	8.2 ± 0.7	58.9	31
Armor	Havoc	2.9 ± 0.3	8.2 ± 0.7	59.6	30
USG	3024	2.9 ± 0.3	8.2 ± 0.8	56.8	33
Terral	TV8535	2.9 ± 0.3	8.2 ± 0.7	59.9	32
GA Exp.	GA-04434-11E44	2.9 ± 0.3	8.1 ± 0.7	59.0	29
Cache River Valley Seed	DXEX 14-1	2.8 ± 0.3	8.1 ± 0.7	60.3	31

Table 8. (continued)

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Height
		Avg. Yield ± Std Err. (n=1)	Avg. Yield ± Std Err. (n=1)		
		tons/a	tons/a	%	inches
Delta Grow	7500	2.8 ± 0.3	8.1 ± 0.7	58.5	32
Armor	ARX1325	2.8 ± 0.3	8.1 ± 0.7	59.9	31
Croplan by Winfield	9101	2.8 ± 0.3	8.0 ± 0.8	59.0	31
GA Exp.	GA-041293-11LE37	2.8 ± 0.3	8.0 ± 0.7	60.6	31
VA EXP.	VA08MAS-369	2.8 ± 0.3	8.0 ± 0.7	57.9	31
Armor	ARX1313	2.8 ± 0.3	8.0 ± 0.7	60.5	30
Beck's Hybrids	125	2.8 ± 0.3	8.0 ± 0.8	58.5	31
Pioneer	25R32	2.8 ± 0.3	7.9 ± 0.7	57.5	30
Kentucky Small Grain Growers Assoc.	KY03C-1237-32	2.8 ± 0.3	7.9 ± 0.7	59.2	29
Beck's Hybrids	120	2.8 ± 0.3	7.9 ± 0.7	58.9	31
Armor	Rampage	2.8 ± 0.3	7.9 ± 0.7	59.2	28
Steyer	Kidwell	2.8 ± 0.3	7.9 ± 0.7	58.9	31
MO	Bess	2.8 ± 0.3	7.9 ± 0.8	58.3	30
Terral	TV8525	2.8 ± 0.3	7.9 ± 0.7	60.2	31
USG	3438	2.8 ± 0.3	7.9 ± 0.7	58.1	31
Dyna-Gro	WX13622	2.7 ± 0.3	7.8 ± 0.7	58.5	30
TN Exp.	TN 1402	2.7 ± 0.3	7.7 ± 0.7	56.6	30
Terral	TV8848	2.7 ± 0.3	7.7 ± 0.8	59.8	31
Progeny	870	2.7 ± 0.3	7.7 ± 0.8	57.9	31
AgriPro/Coker (Syngenta)	SY Harrison	2.7 ± 0.3	7.7 ± 0.7	59.1	31
Armor	ARX1327	2.7 ± 0.3	7.6 ± 0.7	58.0	30
TN Exp.	TN 1102	2.7 ± 0.3	7.6 ± 0.7	57.1	31
Tennessee Farmers Co-Op	FFR 2407	2.7 ± 0.3	7.6 ± 0.7	60.2	29
Limagrain Cereal Seeds	L-448	2.7 ± 0.3	7.6 ± 0.7	58.2	31
Warren Seed	McKenna 325	2.7 ± 0.3	7.6 ± 0.8	57.7	28
Pioneer	25R78	2.6 ± 0.3	7.5 ± 0.7	57.5	31
Pioneer	26R20	2.6 ± 0.3	7.5 ± 0.7	59.9	31
VA EXP.	VA10W-21	2.6 ± 0.3	7.5 ± 0.7	59.5	30
GA Exp.	GA-041052-11E51	2.6 ± 0.3	7.4 ± 0.8	59.0	32
Progeny	PGX 13-2	2.6 ± 0.3	7.4 ± 0.8	60.2	32
Dyna-Gro	9171	2.6 ± 0.3	7.4 ± 0.8	58.7	32
Kentucky Small Grain Growers Assoc.	KY03C-1002-02	2.6 ± 0.3	7.4 ± 0.7	58.3	33
VA	Jamestown	2.5 ± 0.3	7.2 ± 0.7	57.1	30
Steyer	Dowell	2.5 ± 0.3	7.1 ± 0.7	60.2	32
TN Exp.	TN 1201	2.5 ± 0.3	7.0 ± 0.8	59.2	31
Armor	ARX1332	2.4 ± 0.3	7.0 ± 0.8	59.3	32
Terral	TV8861	2.4 ± 0.3	6.9 ± 0.8	58.9	33
Limagrain Cereal Seeds	L-343	2.4 ± 0.3	6.7 ± 0.8	60.2	31
Pioneer	25R40	2.3 ± 0.3	6.5 ± 0.7	60.5	29
	Average (bu/a)	2.9	8.3	58.9	30.6
	L.S.D._{.05} (bu/a)	0.7	1.9		
	C.V. (%)	14.3	14.3		

† yields reported are dry weight based, feed analysis reported on an "dry weight" basis

Table 9. Mean yields † and feed quality characteristics of 90 soft red winter wheat varieties evaluated for silage at the Middle Tennessee AgResearch and Education Center during 2014.

Brand	Variety	Dry Weight		Crude Protein (n=1)	NDF (n=1)	30h IV			NEL (n=1)	Milk/ton [†] (n=1)	Milk/acre [†] (n=1)	
		Avg. Yield ± Std Err. (n=1)	Moisture at Harvest (n=1)			NDFD (n=1)	Starch (n=1)	ADF (n=1)				TDN (n=1)
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcals/lb	lbs/ton	lbs/acre
Cache River Valley Seed	Dixie Xtreme	3.6 ± 0.3	58.6	7.3	56.9	32.4	4.3	36.4	59.3	0.61	1001	3319
Croplan by Winfield	EXP 13-15	3.5 ± 0.3	56.7	9.3	64.6	28.4	5.3	41.8	55.0	0.56	1366	4806
Progeny	357	3.5 ± 0.3	58.2	8.1	56.1	30.6	5.2	35.2	59.8	0.61	1079	4359
Beck's Hybrids	129	3.5 ± 0.3	59.2	7.1	56.8	30.7	5.6	36.2	59.6	0.61	1094	2920
Warren Seed	McKay 110	3.4 ± 0.3	60.0	7.3	56.4	31.9	4.7	35.5	60.0	0.61	1004	3330
Cache River Valley Seed	DXEX 13-3	3.4 ± 0.3	57.4	7.1	55.9	30.4	5.0	35.2	59.7	0.61	921	3581
USG	3993	3.4 ± 0.3	58.3	8.3	69.0	29.6	5.2	45.3	53.1	0.54	1176	3327
Armor	Octane	3.4 ± 0.3	60.8	7.7	61.2	35.7	2.9	39.3	56.5	0.58	1207	3936
Cache River Valley Seed	Dixie McAlister	3.3 ± 0.3	58.6	-	-	-	-	-	-	-	-	-
Pioneer	26R41	3.3 ± 0.3	60.2	6.9	56.3	31.5	4.6	35.4	59.3	0.61	972	3758
Dyna-Gro	9223	3.3 ± 0.3	60.9	7.0	61.3	32.8	3.1	39.6	57.2	0.58	1099	2800
Dyna-Gro	WX13631	3.3 ± 0.3	56.9	7.5	58.0	32.1	5.4	36.6	59.0	0.60	1120	3520
USG	3013	3.3 ± 0.3	59.1	8.4	69.4	33.8	4.1	44.8	54.2	0.55	1371	4517
Croplan by Winfield	EXP 13-34	3.3 ± 0.3	59.2	7.5	55.2	31.6	4.5	35.1	59.6	0.61	986	3284
USG	3201	3.3 ± 0.3	59.6	6.4	55.7	29.1	6.7	35.2	59.3	0.61	927	2892
Tennessee Farmers Co-Op	FFR 2366	3.3 ± 0.3	60.1	6.0	53.5	28.2	3.8	35.4	57.8	0.59	629	2015
Steyer	Hunker	3.2 ± 0.3	60.9	-	-	-	-	-	-	-	-	-
USG	3251	3.2 ± 0.3	59.4	6.9	59.0	31.0	4.8	37.0	59.1	0.60	1033	3895
Progeny	PGX 13-1	3.2 ± 0.3	59.5	7.4	56.6	31.3	4.6	36.2	58.9	0.60	1009	3860
Syngenta	SY 9978	3.2 ± 0.3	60.3	6.7	57.5	30.9	4.5	36.8	58.9	0.60	965	3786
Beck's Hybrids	113	3.2 ± 0.3	58.4	8.9	63.3	31.2	7.7	40.1	56.8	0.58	1480	4370
USG	3404	3.1 ± 0.3	57.4	7.6	55.5	28.9	7.3	34.8	60.3	0.62	1086	3019
Dyna-Gro	Yorktown	3.1 ± 0.3	60.4	9.0	70.7	35.0	3.0	45.4	54.2	0.55	1360	3463
Armor	ARX1329	3.1 ± 0.3	58.0	9.0	58.8	33.5	5.7	36.2	59.0	0.60	1332	4161
TN Exp.	TN 1202	3.1 ± 0.3	60.5	8.5	58.5	34.1	4.4	36.4	60.0	0.62	1266	4162
Warren Seed	McKenna 315	3.1 ± 0.3	57.2	7.3	55.0	29.6	5.3	34.6	59.8	0.61	949	2931
Dyna-Gro	9012	3.1 ± 0.3	54.7	9.6	68.7	31.6	5.1	45.4	53.2	0.54	1204	3187
Croplan by Winfield	9203	3.1 ± 0.3	60.1	7.7	54.0	31.0	4.0	34.1	60.1	0.62	896	2481
USG	3833	3.0 ± 0.3	57.3	8.0	58.0	32.6	4.0	36.8	58.9	0.60	1108	3470
Progeny	185	3.0 ± 0.3	58.3	9.5	67.8	32.0	5.6	43.9	55.1	0.56	1333	4231
Pioneer	26R53	3.0 ± 0.3	56.5	8.6	53.8	31.3	6.1	33.8	61.2	0.63	1076	3801
Tennessee Farmers Co-Op	FFR 2239	3.0 ± 0.3	58.8	9.9	66.4	31.5	3.9	42.8	55.1	0.56	1383	4828
Dyna-Gro	9373	3.0 ± 0.3	60.9	8.5	61.3	32.0	4.0	39.3	57.2	0.58	1244	3916
VA Exp.	VA10W-119	3.0 ± 0.3	55.6	9.6	63.8	29.4	9.5	40.6	56.5	0.58	1321	5052
TN Exp.	TN 1303	3.0 ± 0.3	54.5	7.0	58.9	31.1	5.5	36.8	58.9	0.60	1051	3366
GA Exp.	GA-041293-11E54	3.0 ± 0.3	58.4	7.5	53.2	29.4	7.4	33.2	60.9	0.62	1029	2986
MO	Milton	3.0 ± 0.3	58.2	7.2	54.5	30.8	5.3	34.7	60.1	0.62	898	2571
Delta Grow	7200	3.0 ± 0.3	59.3	9.4	59.1	34.2	4.0	36.8	59.5	0.61	1342	3406
TN Exp.	TN 1401	3.0 ± 0.3	59.9	7.3	58.4	31.1	7.8	36.5	59.8	0.61	1268	3982
Delta Grow	9700	2.9 ± 0.3	61.0	8.3	57.4	33.1	5.0	36.0	60.2	0.62	1217	3538
Progeny	117	2.9 ± 0.3	57.9	7.9	56.2	30.3	6.2	35.7	59.5	0.61	1056	4314

Table 9. (continued)

Brand	Variety	Dry Weight		Crude Protein	NDF	30h IV			NEL	Milk/ton [‡]	Milk/acre [‡]	
		Avg. Yield ± Std Err. (n=1)	Moisture at Harvest (n=1)			NDFD (n=1)	Starch (n=1)	ADF (n=1)				TDN (n=1)
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
Pioneer	26R10	2.9 ± 0.3	60.4	7.8	55.8	30.3	4.8	35.1	59.8	0.61	986	3312
Armor	Vandal	2.9 ± 0.3	60.4	8.5	55.5	29.2	4.3	35.3	58.7	0.60	959	2295
Kentucky Small Grain Growers Assoc.	Pembroke 2008	2.9 ± 0.3	56.5	7.5	58.2	32.2	4.5	37.2	58.3	0.60	1075	2775
USG	3120	2.9 ± 0.3	60.7	7.1	56.9	28.4	10.8	35.7	59.6	0.61	1363	4950
MO	Truman	2.9 ± 0.3	58.9	7.3	58.6	31.8	4.5	37.5	57.8	0.59	1084	3481
Armor	Havoc	2.9 ± 0.3	59.6	8.1	55.5	32.4	4.8	34.6	60.7	0.62	1074	3406
USG	3024	2.9 ± 0.3	56.8	10.0	58.7	31.3	7.1	36.8	59.4	0.61	1494	4154
Terral	TV8535	2.9 ± 0.3	59.9	7.8	54.0	27.6	5.1	35.3	57.9	0.59	926	2818
GA Exp.	GA-04434-11E44	2.9 ± 0.3	59.0	8.8	55.3	31.3	4.4	33.5	61.5	0.63	1156	2714
Cache River Valley Seed	DXEX 14-1	2.8 ± 0.3	60.3	7.4	57.2	33.1	3.2	36.5	59.2	0.61	1009	2483
Delta Grow	7500	2.8 ± 0.3	58.5	8.1	55.4	30.6	4.0	35.1	59.6	0.61	966	2940
Armor	ARX1325	2.8 ± 0.3	59.9	8.1	54.6	30.0	6.2	34.3	60.1	0.62	1052	2719
Croplan by Winfield	9101	2.8 ± 0.3	59.0	8.4	66.2	35.0	4.9	42.0	56.1	0.57	1544	4647
GA Exp.	GA-041293-11LE37	2.8 ± 0.3	60.6	7.4	53.5	29.7	8.6	33.4	61.5	0.63	1150	3462
VA EXP.	VA08MAS-369	2.8 ± 0.3	57.9	9.0	65.1	32.9	5.4	41.4	56.4	0.57	1485	4247
Armor	ARX1313	2.8 ± 0.3	60.5	8.8	56.3	32.4	4.8	35.2	59.7	0.61	1168	3387
Beck's Hybrids	125	2.8 ± 0.3	58.5	6.5	59.9	34.4	4.1	37.6	58.4	0.60	1082	2630
Pioneer	25R32	2.8 ± 0.3	57.5	-	-	-	-	-	-	-	-	-
Kentucky Small Grain Growers Assoc.	KY03C-1237-32	2.8 ± 0.3	59.2	9.9	66.2	27.0	7.6	43.5	54.5	0.55	1243	3653
Beck's Hybrids	120	2.8 ± 0.3	58.9	7.7	51.8	27.3	9.4	32.3	61.5	0.63	1163	3077
Armor	Rampage	2.8 ± 0.3	59.2	9.5	63.2	34.8	3.3	39.8	57.3	0.58	1436	3813
Steyer	Kidwell	2.8 ± 0.3	58.9	8.6	53.5	29.7	5.4	33.6	60.6	0.62	990	3567
MO	Bess	2.8 ± 0.3	58.3	8.0	56.1	30.6	5.1	35.3	59.9	0.61	1009	2866
Terral	TV8525	2.8 ± 0.3	60.2	8.9	55.7	31.2	6.6	34.6	60.2	0.62	1237	4648
USG	3438	2.8 ± 0.3	58.1	6.4	55.6	28.1	8.3	34.7	59.5	0.61	1038	2988
Dyna-Gro	WX13622	2.7 ± 0.3	58.5	8.5	54.1	30.0	6.9	33.6	61.2	0.63	1121	2817
TN Exp.	TN 1402	2.7 ± 0.3	56.6	8.5	59.2	31.0	6.5	37.1	58.7	0.60	1252	3102
Terral	TV8848	2.7 ± 0.3	59.8	8.6	55.1	30.5	6.2	34.6	60.4	0.62	1133	3013
Progeny	870	2.7 ± 0.3	57.9	6.6	53.0	27.9	6.6	33.9	60.1	0.62	869	3246
AgriPro/Coker (Syngenta)	SY Harrison	2.7 ± 0.3	59.1	8.2	54.3	29.6	6.0	34.1	60.3	0.62	1003	3160
Armor	ARX1327	2.7 ± 0.3	58.0	8.6	55.6	28.4	7.0	34.9	59.4	0.61	1126	2590
TN Exp.	TN 1102	2.7 ± 0.3	57.1	8.8	57.6	32.9	6.9	35.5	60.8	0.62	1356	3941
Tennessee Farmers Co-Op	FFR 2407	2.7 ± 0.3	60.2	8.6	56.9	32.9	4.9	35.4	60.0	0.62	1201	3057
Limagrain Cereal Seeds	L-448	2.7 ± 0.3	58.2	7.7	58.3	31.9	4.2	37.3	58.9	0.60	1085	2510
Warren Seed	McKenna 325	2.7 ± 0.3	57.7	7.4	54.3	29.7	6.7	33.7	60.2	0.62	966	2227
Pioneer	25R78	2.6 ± 0.3	57.5	8.6	55.0	29.4	6.8	35.1	59.5	0.61	1117	3511
Pioneer	26R20	2.6 ± 0.3	59.9	8.5	61.3	33.8	3.8	38.7	58.4	0.60	1276	4697
VA EXP.	VA10W-21	2.6 ± 0.3	59.5	7.8	57.5	30.2	4.4	36.6	58.8	0.60	1047	2319
GA Exp.	GA-041052-11E51	2.6 ± 0.3	59.0	7.9	55.3	29.4	5.5	34.8	59.4	0.61	996	2445
Progeny	PGX 13-2	2.6 ± 0.3	60.2	7.0	55.5	29.0	7.4	34.9	59.9	0.61	1058	3396
Dyna-Gro	9171	2.6 ± 0.3	58.7	7.2	58.0	29.9	4.5	37.1	57.9	0.59	953	2944
Kentucky Small Grain Growers Assoc.	KY03C-1002-02	2.6 ± 0.3	58.3	9.6	64.7	29.7	8.2	41.7	54.9	0.56	1226	3619

Table 9. (continued)

Brand	Variety	Dry Weight	Moisture at Harvest (n=1)	Crude Protein (n=1)	NDF (n=1)	30h IV		ADF (n=1)	TDN (n=1)	NEL (n=1)	Milk/ton [‡] (n=1)	Milk/acre [‡] (n=1)
		Avg. Yield ± Std Err. (n=1)				NDFD (n=1)	Starch (n=1)					
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
VA	Jamestown	2.5 ± 0.3	57.1	7.5	59.1	29.6	6.6	37.7	57.9	0.59	1122	2870
Steyer	Dowell	2.5 ± 0.3	60.2	6.8	59.2	31.0	5.2	37.6	58.2	0.59	1045	2787
TN Exp.	TN 1201	2.5 ± 0.3	59.2	8.0	56.9	33.3	6.0	34.9	60.9	0.62	1221	3426
Armor	ARX1332	2.4 ± 0.3	59.3	7.7	52.8	29.6	5.7	33.1	60.3	0.62	913	2327
Terral	TV8861	2.4 ± 0.3	58.9	7.4	56.9	30.9	5.2	35.9	59.6	0.61	1021	2603
Limagrain Cereal Seeds	L-343	2.4 ± 0.3	60.2	7.4	51.6	29.2	6.7	32.6	61.6	0.63	943	2437
Pioneer	25R40	2.3 ± 0.3	60.5	8.0	53.1	30.6	4.3	33.2	61.4	0.63	926	1796

† yields reported are dry weight based, feed analysis reported on a "dry weight" basis

NDF = Neutral Detergent Fiber

30h IV NDFD = Neutral Detergent Fiber Digestibility

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 10. Mean yields and agronomic characteristics of 34 soft red winter wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2012 & 2014).

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Height
		Avg. Yield ± Std Err. (n=2)	Avg. Yield ± Std Err. (n=2)		
		tons/a	tons/a	%	inches
Pioneer	26R41	2.8 ± 0.2	8.1 ± 0.4	54.4	29
Progeny	357	2.7 ± 0.2	7.8 ± 0.4	58.5	30
Dyna-Gro	9223	2.7 ± 0.2	7.6 ± 0.4	59.9	32
Pioneer	26R10	2.7 ± 0.2	7.6 ± 0.4	54.4	31
Pioneer	26R53	2.6 ± 0.2	7.5 ± 0.4	54.2	30
USG	3120	2.6 ± 0.2	7.4 ± 0.4	54.2	31
MO	Milton	2.6 ± 0.2	7.4 ± 0.4	57.0	31
Cache River Valley Seed	Dixie McAlister	2.6 ± 0.2	7.4 ± 0.4	55.1	30
Warren Seed	McKay 110	2.6 ± 0.2	7.3 ± 0.4	59.3	31
TN Exp.	TN 1202	2.6 ± 0.2	7.3 ± 0.4	58.4	30
USG	3251	2.5 ± 0.2	7.2 ± 0.4	60.2	31
Armor	Havoc	2.5 ± 0.2	7.0 ± 0.4	56.5	30
Dyna-Gro	Yorktown	2.4 ± 0.2	7.0 ± 0.4	60.0	30
Dyna-Gro	9012	2.4 ± 0.2	7.0 ± 0.4	55.4	32
Terral	TV8535	2.4 ± 0.2	6.9 ± 0.4	57.7	30
USG	3201	2.4 ± 0.2	6.9 ± 0.4	59.6	31
Progeny	185	2.4 ± 0.2	6.9 ± 0.4	56.4	31
Terral	TV8848	2.4 ± 0.2	6.7 ± 0.4	59.2	31
Pioneer	26R20	2.4 ± 0.2	6.7 ± 0.4	58.0	31
MO	Bess	2.4 ± 0.2	6.7 ± 0.4	57.9	31
Progeny	117	2.3 ± 0.2	6.7 ± 0.4	55.2	32
Progeny	870	2.3 ± 0.2	6.6 ± 0.4	55.8	30
TN Exp.	TN 1102	2.3 ± 0.2	6.5 ± 0.4	55.3	32
Armor	Rampage	2.3 ± 0.2	6.4 ± 0.4	57.6	29
Delta Grow	7500	2.2 ± 0.2	6.4 ± 0.4	56.7	31
Pioneer	25R32	2.2 ± 0.2	6.4 ± 0.4	57.6	31
AgriPro/Coker (Syngenta)	SY Harrison	2.2 ± 0.2	6.3 ± 0.4	57.0	30
Dyna-Gro	9171	2.2 ± 0.2	6.3 ± 0.4	56.9	31
MO	Truman	2.2 ± 0.2	6.2 ± 0.4	57.9	28
Terral	TV8525	2.1 ± 0.2	6.0 ± 0.4	59.0	30
USG	3438	2.1 ± 0.2	6.0 ± 0.4	56.1	30
TN Exp.	TN 1201	2.1 ± 0.2	5.9 ± 0.4	58.3	31
VA	Jamestown	2.1 ± 0.2	5.9 ± 0.4	53.8	29
Terral	TV8861	2.1 ± 0.2	5.9 ± 0.4	60.0	31
	Average (bu/a)	2.4	6.8	57.2	31
	L.S.D._{.05} (bu/a)	0.5	1.4		
	C.V. (%)	13.7	13.7		

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°;

5 = 95+% of plants leaning at an angle ≥ 45°.

Table 11. Mean yields † and feed quality characteristics of 34 wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2012 & 2014).

Brand	Variety	Dry Weight										
		Avg. Yield ± Std Err. (n=2) tons/a	Moisture at Harvest (n=2) %	Crude Protein (n=2) % dm	NDF (n=2) % dm	30h IV NDFD (n=2) % of NDF	Starch (n=2) % dm	ADF (n=2) % dm	TDN (n=2) % dm	NEL (n=2) Mcal/lb	Milk/ton‡ (n=2) lbs/ton	Milk/acre‡ (n=2) lbs/acre
Pioneer	26R41	2.8 ± 0.2	54.4	8.5	55.1	47.2	4.4	34.4	62.3	0.64	1573	4383
Progeny	357	2.7 ± 0.2	58.5	9.2	55.7	42.3	5.1	35.1	61.4	0.63	1565	4105
Dyna-Gro	9223	2.7 ± 0.2	59.9	8.9	59.9	47.4	3.3	37.9	60.6	0.62	1778	3591
Pioneer	26R10	2.7 ± 0.2	54.4	7.8	55.8	30.3	4.8	35.1	59.8	0.61	986	3312
Pioneer	26R53	2.6 ± 0.2	54.2	9.4	55.8	45.4	4.4	35.2	61.6	0.64	1626	4185
USG	3120	2.6 ± 0.2	54.2	10.7	54.2	46.0	6.9	32.8	62.9	0.65	1902	5516
MO	Milton	2.6 ± 0.2	57.0	8.6	54.8	47.7	4.4	34.3	62.6	0.65	1568	3614
Cache River Valley Seed	Dixie McAlister	2.6 ± 0.2	55.1	9.9	59.8	59.3	4.4	37.0	63.1	0.65	2345	4294
Warren Seed	McKay 110	2.6 ± 0.2	59.3	9.3	58.1	47.5	4.2	36.3	61.8	0.64	1801	3796
TN Exp.	TN 1202	2.6 ± 0.2	58.4	9.3	58.6	45.9	4.2	36.8	61.0	0.63	1755	4300
USG	3251	2.5 ± 0.2	60.2	9.0	59.1	45.8	3.8	37.0	61.0	0.63	1734	4207
Armor	Havoc	2.5 ± 0.2	56.5	8.9	55.3	43.6	6.2	35.0	61.7	0.64	1585	3778
Dyna-Gro	Yorktown	2.4 ± 0.2	60.0	10.2	63.4	47.1	2.9	40.2	58.8	0.60	1813	3980
Dyna-Gro	9012	2.4 ± 0.2	55.4	10.4	62.1	48.4	4.3	39.7	59.0	0.61	1786	3241
Terral	TV8535	2.4 ± 0.2	57.7	8.6	55.9	45.4	4.4	35.5	60.8	0.63	1604	3816
USG	3201	2.4 ± 0.2	59.6	8.6	56.2	43.1	5.3	35.3	61.2	0.63	1565	3218
Progeny	185	2.4 ± 0.2	56.4	10.7	60.3	48.5	4.6	38.1	60.8	0.63	1832	4022
Terral	TV8848	2.4 ± 0.2	59.2	9.8	54.9	47.1	5.0	34.0	62.9	0.65	1746	4202
Pioneer	26R20	2.4 ± 0.2	58.0	9.4	59.8	48.5	3.5	37.3	61.3	0.63	1837	4879
MO	Bess	2.4 ± 0.2	57.9	9.3	54.8	46.9	4.4	34.1	62.5	0.64	1606	3205
Progeny	117	2.3 ± 0.2	55.2	9.0	56.7	44.4	5.5	35.7	61.3	0.63	1650	4229
Progeny	870	2.3 ± 0.2	55.8	9.0	55.5	42.4	4.8	35.3	61.1	0.63	1552	3616
TN Exp.	TN 1102	2.3 ± 0.2	55.3	9.9	55.4	48.6	5.3	33.9	63.5	0.66	1811	4369
Armor	Rampage	2.3 ± 0.2	57.6	10.8	62.7	44.3	4.2	39.7	59.3	0.61	1951	3890
Delta Grow	7500	2.2 ± 0.2	56.7	9.0	54.7	47.5	4.4	34.1	62.5	0.65	1590	2945
Pioneer	25R32	2.2 ± 0.2	57.6	9.5	56.9	58.1	1.8	35.6	61.4	0.63	2014	2960
AgriPro/Coker (Syngenta)	SY Harrison	2.2 ± 0.2	57.0	9.1	54.8	45.6	4.8	34.0	62.5	0.65	1579	3322
Dyna-Gro	9171	2.2 ± 0.2	56.9	9.5	58.1	44.5	4.3	36.6	61.0	0.63	1707	3725
MO	Truman	2.2 ± 0.2	57.9	8.8	57.8	46.2	4.2	35.8	60.7	0.63	1703	3049
Terral	TV8525	2.1 ± 0.2	59.0	8.9	54.5	47.3	4.9	34.0	62.3	0.64	1605	3796
USG	3438	2.1 ± 0.2	56.1	8.0	55.0	46.1	5.9	34.1	62.2	0.64	1594	3130
TN Exp.	TN 1201	2.1 ± 0.2	58.3	9.4	55.8	47.7	4.6	34.1	63.0	0.65	1746	3696
VA	Jamestown	2.1 ± 0.2	53.8	8.8	55.4	48.1	5.4	34.4	62.5	0.65	1653	3461
Terral	TV8861	2.1 ± 0.2	60.0	9.0	56.8	46.0	4.5	35.3	61.7	0.64	1663	3276

NDF = Neutral Detergent Fiber

30h IV NDFD = Neutral Detergent Fiber NEL = Net Energy for Lactation

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 12. Characteristics, as described by the seed company, of corn silage hybrids evaluated in yield tests in Tennessee during 2014.†

Brand	Hybrid §	Grain Color	Maturity	Herbicide Tolerance	BT Gene	Released or Experimental	Seed Treatment
Augusta	8868 (RR)	Y	118	RR	CB, RW	R	Poncho 500
Augusta	6866 (GT/LL/CB/RW)	Y	116	GT/LL	CB	R	Cruiser 250
Croplan	7927VT3P	Y	116	RR	VT3Pro	R	Acceleron 250
Croplan	8621VT3P	Y	118	RR	VT3Pro	R	Acceleron 250
Croplan	8750RH (RR/LL/YGCB)	Y	118	RR/LL	YGCB	R	Acceleron 250
Mycogen	F2F817 (RR/LL/SSX)	Y	116	RR/LL	SSX	R	Cruiser 1250
Mycogen	TMF2H747 (RR/LL/SSX)	Y	113	RR/LL	SSX	R	Cruiser 1250
Mycogen	TMF2H919 (RR/LL/SSX)	Y	123	RR/LL	SSX	R	Cruiser 1250
Mycogen	TMF2L825 (RR/LL/HX1)	Y	117	RR/LL	HX1	R	Cruiser 1250
Mycogen	TMF2R737 (RR/LL/SSX)	Y	112	RR/LL	SSX	R	Cruiser 1250

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

§ 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

VIP or Viptera = contains genes for corn earworm, black cutworm, dingy cutworm, and stalk borer resistance

SSX, SS, SmartStax = contains genes for European corn borer, Southwestern corn borer, Northern corn rootworm, Western corn rootworm, fall armyworm, Western bean cutworm, black cutworm, glyphosate, and glufosinate resistance

Table 13. Contact information for corn hybrid seed companies evaluated in yield tests in Tennessee during 2014.

Company	Contact	Phone	Email	Web site	Address
Augusta Seed Corporation	Matt Rawley	540-255-5902 540-886-6055	matt.rawley@augustaseed.com	www.augustaseed.com	P.O. Box 899, Verona, VA 24482
Croplan Genetics (Winfield)	Andy Shrum Caleb Robertson(E. TN) Jack Christian (E. & Mid. TN) Keith Saum (W. TN) Eric Kennedy (W. TN and KY)	615-388-2800 731-614-5234 615-653-8832 731-610-7006 812-350-9025	jashrum@landolakes.com clobertson@landolakes.com rjchristian@landolakes.com kdsaum@landolakes.com eskennedy@landolakes.com	www.croplangenetics.com	Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op
Mycogen	Suzie McMullen	704-438-5286	smcmullen@dow.com	www.mycogen.com	

Table 14. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2013-14.

Company	Contact	Phone	Email	Web site	Address
Armor Seed	Lane Dill	901-233-0274	lanedill@armorseed.com	www.armorseed.com	P.O. Box 9, Waldenburg, AR 72475
Beck's Hybrids	Doug Closer	800-937-2325	dougc@beckshybrids.com	www.beckshybrids.com	6767 E. 276th St., Atlana, IN 46031
Cache River Valley Seed	Ted Holt	870-477-5427	tedh@crvseed.com	www.crvseed.com	P.O. Box 10, Cash, AR 72421
Croplan Genetics (Winfield)	Andy Shrum Caleb Robertson (E. TN) Jack Christian (E. & Mid TN) Keith Saum (W. TN) Eric Kennedy (W. TN and KY)	615-388-2800 731-614-5234 615-653-8832 731-610-7006 812-350-9025	jashrum@landolakes.com clrobertson@landolakes.com richristian@landolakes.com kdsaum@landolakes.com eskennedy@landolakes.com	www.croplangenetics.com	Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op Tennessee Farmers Co-op
Delta Grow Seed	Lee Hughes	501-842-2572	leehughes19@hotmail.com	www.deltagrow.com	P O Box 219, England, AR 72046
Dyna-Gro	Dewain Riley Todd Theobald	731-223-9876 765-623-1382	dewain.riley@cpsagu.com todd.theobald@cpsagu.com	www.dynagroseed.com	6221 Riverside Dr., Suite 1N, Dublin OH 43017
University of Georgia	Jerry Johnson	770-228-7345	jjohnson@griffin.uga.edu		UGA, Griffin Campus 1109 Experiment St. Griffin, GA 30223
Kentucky Small Grain Growers Assn.	Adam Andrews	502-974-1121	adam@kycorn.org		PO Box 90, Eastwood, KY 40018
Limagrain Cereal Seeds	Ken McClintock	309-569-0008	ken.mcclintock@limagrain.com	www.limagrain.com	257 E. Hail, Bushnell, IL 61422
University of Missouri	Mary Ann Quade	573-884-7333	quadem@missouri.edu		Missouri Crop Improvement 3211 Lemone Columbia, MO 65201
Pioneer Hi-Bred Int.	George Stabler	803-308-1003	george.stabler@pioneer.com	www.pioneer.com	59 Greif Parkway, Suite 200, Delaware, OH 43015
Progeny	Hillary Spain	870-208-6032		www.progenyag.com	1529 Hwy 193, Wynne, AR 72396
Steyer Seeds	Joe Steyer	800-231-4274	joesteyer@yahoo.com	www.steerseeds.com	PO Box 209, Old Fort, OH 44861
Syngenta	Gary Moore	901-262-4958	gary.m.moore@syngenta.com	www.syngenta.com	7099 Parkbrook Ln., Cordova, TN 38018
Tennessee Farmers Co-Op	Bryan Johnson	615-793-8506	bjohnson@ourcoop.com		180 Old Nashville Hwy, LaVergne, TN 37086
Terral Seed Inc	Phil Michener	800-551-4852 662-822-8242	pmichener@terralseed.com	www.terralseed.com	111 Ellington Dr., Rayville, LA 71269
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu		3421 Joe Johnson Dr, Knoxville, TN 37996-4561

(continued)

Table 14. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2011-12.

Company	Contact	Phone	Email	Web site	Address
Unisouth Genetics (USG)	Stacy Burwick	800-505-3133	sburwick@bellsouth.net	www.usgseed.com	2640-C Nolensville Rd., Nashville, TN 37211
	David Fandrich	931-967-3377	fandrichsupply@aol.com		Fandrich Supply Co, Belvidere, TN
	Mark Huffstetler	731-235-2167	huffy1@crunet.com		Huffstetler & Sons Seed Inc, Greenfield, TN
	Trey Hurt	731-836-7574	hurtco@bellsouth.net		Hurt Seed Co. Inc, Halls, TN
	Wes Miller	731-536-6251	wes@obiongrain.com		Obion Grain Co. Inc, Obion, TN
	Billy Sellers	731-538-2990			Sellers Seed, Obion, TN
Virginia Crop Improvement	Bruce Beahm	804-746-4884	bbeahm@rivnet.net	www.virginiacrop.org	Virginia Crop Improvement Assoc. 9225 Atlee Branch Lane Mechanicsville, VA 23116
Warren Seed	Lanny Warren	731-234-2921	lanny.warren@charter.net		P.O. Box 10, Woodland Mills, TN 38721