

Corn and Small Grains Silage Tests in Tennessee 2011

Fred L. Allen

Coordinator
Agronomic Crop
Variety Testing
and Demonstrations

Richard Johnson

Research Associate
Agronomic Crop Variety
Testing and Demonstrations

Virginia Sykes

Graduate Research
Assistant



Agronomic Crop Variety Testing and Demonstrations
Department of Plant Sciences
Institute of Agriculture
University of Tennessee, Knoxville

Telephone: 865-974-8821
Fax: 865-974-1947
Email: allenf@utk.edu

Variety test results are posted on UT's website at:
<http://varietytrials.tennessee.edu> and www.utcrops.com

Acknowledgments

This research was funded by the Tennessee Agricultural Experiment Station and UT Extension with partial funding from participating companies.

We gratefully acknowledge the assistance of the following individuals in conducting these experiments:

Department of Plant Sciences

Dr. Dennis West, Professor and Grains Breeder

Mr. David Kincer, Research Associate

Research and Education Centers:

East Tennessee, Knoxville

Dr. Robert Simpson, Superintendent

Mr. Bobby McKee, Sr. Farm Crew Leader

Mr. Lee Ellis, Research Assistant

Plateau, Crossville

Mr. Walt Hitch, Superintendent

Mr. Greg Blaylock, Light Farm Equipment Operator

Mr. Sam Simmons, Light Farm Equipment Operator

Highland Rim, Springfield

Dr. Barry Sims, Superintendent

Mr. Brad S. Fisher, Research Associate

Middle Tennessee, Spring Hill

Dr. Kevin Thompson, Superintendent

Mr. Roy Thompson, Research Associate

County Standard Corn Silage Tests

County

Blount

Washington

Producer

Mac Pate

David Saylor

Agent

John Wilson

John Hamrick

Table of Contents

Experimental Procedures _____	3
Interpretation of Data _____	4
Research and Education Center Information _____	4
2011 Corn Hybrid Silage Yield _____	5
2011 Corn Hybrid Silage Agronomic Data _____	6
2011 Corn Hybrid Silage Quality Data _____	7
2 Year Corn Hybrid Silage Data _____	9
3 Year Corn Hybrid Silage Data _____	11
County Standard Tests _____	13
2011 Wheat Silage Yield & Agronomic Data _____	15
2011 Wheat Silage Quality Data _____	18
2 Year Wheat Silage Data _____	20
2011 Oat Silage Yield & Agronomic Data _____	23
2011 Oat Silage Quality Data _____	24
2 Year Oat Silage Data _____	25
Corn Hybrid Characteristics _____	26
Seed Company Contact Information _____	27

CORN SILAGE YIELD TESTS

2011

Experimental Procedures

Research and Education Center Tests: Twenty-two corn hybrids were evaluated for silage yield and quality in 2011. The tests were conducted at the East Tennessee (Knoxville), Plateau (Crossville), Highland Rim (Springfield), and Middle Tennessee (Spring Hill), Research 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 was recorded on each sample for determination of moisture at harvest. The samples were then ground and analyzed for nutrient content. Silage quality analyses were provided by Cumberland Valley Analytical Services, Inc., Hagerstown, MD. Milk per ton and milk per acre calculations were performed using the University of Wisconsin Milk2006 program.

County Standard Tests: The County Standard Corn Silage Tests were conducted in Blount and Washington counties in Tennessee. Each hybrid was evaluated in a large strip-plot at each location, thus **each county test was considered as one replication of the test** in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Growing Season: The 2011 growing season was characterized by a wet spring resulting in some flooded fields followed by hotter and dryer than normal conditions. Hot dry conditions in July and August advanced harvest slightly ahead of the normal pace.

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 ($10.6 - 8.2 = 2.4 \text{ tons/a} > \text{LSD of } 1.3$) and Hybrid A ($10.6 - 9.3 = 1.3 \text{ tons/a} = \text{LSD of } 1.3$).

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 Research and Education Centers where the corn silage variety tests were conducted in 2011.

Research and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
East Tennessee	Knoxville	4/19/11	8/16/11	28,624	Sequatchie Silt Loam
Plateau	Crossville	5/11/11	8/24/11	30,492	Lilly Silt Loam
Middle Tennessee	Spring Hill	5/2/11	8/5/11	24,684	Maury Silt Loam
Highland Rim	Springfield	4/19/11	8/16/11	27,588	Stasser Silt Loam

Table 2. Mean yields † of 22 corn hybrids evaluated for silage at four locations in Tennessee during 2011.

Dry Weight 65% Moisture									
Brand	Hybrid \$	Dry Weight		65% Moisture		Dry Weight			
		Avg. Yield ± Std Err.	(n=4)	Avg. Yield ± Std Err.	(n=4)	Knoxville	Crossville	Spring Hill	Springfield
-----tons/a-----									
Mycogen	TMF2H918 (RR/LL/HX)	8.1 ± 0.4		23.2 ± 1.2		10.7	6.3	4.8	10.7
Augusta	A5462GT3000A (RR/LL/CB/RW)	8.0 ± 0.4		22.9 ± 1.2		8.7	8.4	5.9	9.2
Augusta	A5461GTCBLLA	8.0 ± 0.5		22.9 ± 1.3		10.6	6.8	5.6	9.1
Mycogen	TMF2L872 (RR/LL/HX1)	8.0 ± 0.5		22.9 ± 1.3		10.1	7.0	4.9	10.0
Augusta	A5464GTCBLL	7.9 ± 0.5		22.6 ± 1.3		10.1	7.1	5.0	9.5
Augusta	A5560VT3	7.8 ± 0.5		22.4 ± 1.4		9.2	6.6	6.4	9.2
DeKalb	DKC67-21 GENVT3P	7.8 ± 0.5		22.2 ± 1.3		9.3	8.1	3.9	9.8
Augusta	A7664VT3	7.8 ± 0.5		22.2 ± 1.3		10.4	7.1	5.2	8.4
Wyffels	W8681 (VT3Pro)	7.7 ± 0.4		22.0 ± 1.2		8.9	7.2	4.9	9.7
Wyffels	W8437 (VT3Pro)	7.6 ± 0.5		21.8 ± 1.4		8.4	6.1	5.7	10.3
Croplan	8756VT3	7.6 ± 0.5		21.6 ± 1.4		10.7	6.0	4.8	8.7
Croplan	8505VT3P	7.5 ± 0.4		21.4 ± 1.2		10.6	5.4	5.8	8.2
Croplan	8221VT3	7.5 ± 0.4		21.3 ± 1.2		10.8	5.6	5.6	7.8
Croplan	9009 RH	7.4 ± 0.4		21.1 ± 1.2		11.5	5.1	4.8	8.2
Croplan	7131VT3	7.4 ± 0.4		21.0 ± 1.2		8.3	6.2	5.4	9.6
Augusta	A6867CBLL	7.3 ± 0.4		20.8 ± 1.2		8.9	6.0	5.2	9.0
Augusta	A6867GTCBLLA	7.2 ± 0.5		20.7 ± 1.3		8.4	6.3	5.1	9.1
Augusta	A5337EVT3	7.1 ± 0.4		20.4 ± 1.2		9.7	5.9	5.4	7.6
Augusta	A6166GT3000A (RR/LL/CB/RW)	7.0 ± 0.4		20.1 ± 1.2		11.0	4.2	5.1	7.8
Masters Choice	MCT-6583 (RR/LL/CB/RW)	6.7 ± 0.4		19.0 ± 1.2		9.6	5.8	4.5	6.7
Croplan	6286 SS (RR2/LL/CB/RW)	6.4 ± 0.5		18.2 ± 1.3		8.5	4.9	4.6	7.4
Masters Choice	MC-590	6.3 ± 0.5		18.0 ± 1.3		7.7	6.6	3.9	7.0
Avg. (tons/a)		7.5		21.3		9.6	6.2	5.1	8.8
L.S.D. _{.05} (tons/a)		1.2		3.4		1.7	3.3	1.2	2.9
C.V. (%)		19.3		19.3		10.2	30.8	13.5	20.1

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

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

LL = contains a gene for tolerance to glufosinate

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

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

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

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

CL = contains a gene for tolerance to Imidazolinone class herbicides

Table 3. Mean yields † and agronomic characteristics of 22 corn hybrids evaluated for silage at four locations in Tennessee during 2011.

Brand	Hybrid §	Dry Weight		65% Moisture		Moisture at harvest (n=4)	Lodging (n=4)	Plant Height (n=4)	Ear Height (n=3)
		Avg. Yield ± Std Err. (n=4)	Avg. Yield ± Std Err. (n=4)	Avg. Yield ± Std Err. (n=4)	Avg. Yield ± Std Err. (n=4)				
		tons/a	tons/a	tons/a	tons/a	%	%	inches	inches
Mycogen	TMF2H918 (RR/LL/HX)	8.1 ± 0.4	23.2 ± 1.2	58.3	0	108	40		
Augusta	A5462GT3000A (RR/LL/CB/RW)	8.0 ± 0.4	22.9 ± 1.2	56.6	0	108	37		
Augusta	A5461GTCBLLA	8.0 ± 0.5	22.9 ± 1.3	53.9	0	104	40		
Mycogen	TMF2L872 (RR/LL/HX1)	8.0 ± 0.5	22.9 ± 1.3	55.7	0	104	38		
Augusta	A5464GTCBLL	7.9 ± 0.5	22.6 ± 1.3	54.1	0	101	37		
Augusta	A5560VT3	7.8 ± 0.5	22.4 ± 1.4	53.6	0	102	33		
DeKalb	DKC67-21 GENVT3P	7.8 ± 0.5	22.2 ± 1.3	54.8	0	100	36		
Augusta	A7664VT3	7.8 ± 0.5	22.2 ± 1.3	56.0	0	102	31		
Wyffels	W8681 (VT3Pro)	7.7 ± 0.4	22.0 ± 1.2	55.8	0	97	33		
Wyffels	W8437 (VT3Pro)	7.6 ± 0.5	21.8 ± 1.4	54.4	0	94	30		
Croplan	8756VT3	7.6 ± 0.5	21.6 ± 1.4	57.8	0	108	38		
Croplan	8505VT3P	7.5 ± 0.4	21.4 ± 1.2	56.9	0	108	41		
Croplan	8221VT3	7.5 ± 0.4	21.3 ± 1.2	55.3	0	110	44		
Croplan	9009 RH	7.4 ± 0.4	21.1 ± 1.2	56.3	0	111	42		
Croplan	7131VT3	7.4 ± 0.4	21.0 ± 1.2	55.2	0	98	30		
Augusta	A6867CBLL	7.3 ± 0.4	20.8 ± 1.2	54.8	0	109	38		
Augusta	A6867GTCBLLA	7.2 ± 0.5	20.7 ± 1.3	55.8	0	106	38		
Augusta	A5337EVT3	7.1 ± 0.4	20.4 ± 1.2	56.2	0	108	35		
Augusta	A6166GT3000A (RR/LL/CB/RW)	7.0 ± 0.4	20.1 ± 1.2	56.9	0	106	41		
Masters Choice	MCT-6583 (RR/LL/CB/RW)	6.7 ± 0.4	19.0 ± 1.2	58.2	0	106	37		
Croplan	6286 SS (RR2/LL/CB/RW)	6.4 ± 0.5	18.2 ± 1.3	56.1	0	102	33		
Masters Choice	MC-590	6.3 ± 0.5	18.0 ± 1.3	57.5	0	101	33		
Average		7.5	21.3	55.9	0	104	37		

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

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

LL = contains a gene for tolerance to glufosinate

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

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

YGRW, RW = contains a gene for rootworm resistance

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

CL = contains a gene for tolerance to Imidazolinone class herbicides

Table 4. Mean yields † and feed quality characteristics of 22 corn hybrids evaluated for silage at four locations in Tennessee during 2011.

Brand	Hybrid \$	Dry Weight		Crude Protein	NDF 30h		ADF	TDN	NEL	Milk/acre‡	
		Avg. Yield ± Std Err. (n=4)	Moisture at Harvest (n=4)	(n=4)	NDF (n=4)	IV Digest (n=4)	(n=4)	(n=4)	(n=4)	lbs/ton	lbs/acre
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	Mcal/lb		
Mycogen	TMF2H918 (RR/LL/HX)	8.1 ± 0.4	58.3	7.6	42.7	54.2	32.1	25.9	72.4	3036	24589
Augusta	A5462GT3000A (RR/LL/CB/RW)	8.0 ± 0.4	56.6	7.4	41.6	56.2	35.4	24.5	72.7	2951	23697
Augusta	A5461GTCBLLA	8.0 ± 0.5	53.9	7.3	40.0	57.8	37.3	23.5	73.6	2957	23743
Mycogen	TMF2L872 (RR/LL/HX1)	8.0 ± 0.5	55.7	7.5	42.8	57.5	33.1	25.5	72.5	2975	23798
Augusta	A5464GTCBLL	7.9 ± 0.5	54.1	7.6	39.3	55.9	37.3	23.3	73.7	2933	23232
Augusta	A5560VT3	7.8 ± 0.5	53.6	7.6	41.6	57.7	35.4	24.6	72.8	2939	23011
DeKalb	DKC67-21 GENVT3P	7.8 ± 0.5	54.8	7.6	40.4	57.8	35.5	24.0	73.2	2980	23124
Augusta	A7664VT3	7.8 ± 0.5	56.0	7.8	42.1	56.1	33.4	24.9	72.6	2960	22973
Wyffels	W8681 (VT3Pro)	7.7 ± 0.4	55.8	7.8	40.4	57.7	35.8	24.0	73.3	2988	22980
Wyffels	W8437 (VT3Pro)	7.6 ± 0.5	54.4	7.8	36.9	58.4	39.8	21.6	74.9	3047	23252
Croplan	8756VT3	7.6 ± 0.5	57.8	7.4	44.6	57.2	30.9	26.4	71.6	3014	22813
Croplan	8505VT3P	7.5 ± 0.4	56.9	7.5	41.4	55.5	34.1	24.4	73.3	3014	22608
Croplan	8221VT3	7.5 ± 0.4	55.3	7.6	41.7	54.5	35.5	24.9	72.6	2855	21271
Croplan	9009 RH	7.4 ± 0.4	56.3	7.6	44.4	55.7	31.3	26.8	71.7	2936	21729
Croplan	7131VT3	7.4 ± 0.4	55.2	7.9	39.2	57.2	36.8	22.9	73.9	2992	21990
Augusta	A6867CBLL	7.3 ± 0.4	54.8	8.0	38.8	58.5	38.0	22.6	73.7	2980	21696
Augusta	A6867GTCBLLA	7.2 ± 0.5	55.8	7.9	41.7	57.6	34.1	24.6	72.6	2965	21436
Augusta	A5337EVT3	7.1 ± 0.4	56.2	7.6	41.2	56.1	35.3	24.4	72.8	2943	20984
Augusta	A6166GT3000A (RR/LL/CB/RW)	7.0 ± 0.4	56.9	7.6	40.5	58.0	35.6	23.6	73.3	3051	21477
Masters Choice	MCT-6583 (RR/LL/CB/RW)	6.7 ± 0.4	58.2	7.4	42.3	55.4	33.1	25.4	72.2	3026	20125
Croplan	6286 SS (RR2/LL/CB/RW)	6.4 ± 0.5	56.1	7.9	39.3	56.0	37.2	22.8	73.9	2998	19095
Masters Choice	MC-590	6.3 ± 0.5	57.5	7.5	40.8	57.4	35.0	24.4	73.1	3071	19317

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

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

YGRW, RW = contains a gene for rootworm resistance

VT3, TS = contains a gene for rootworm resistance

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

RR, RR2 = contains a gene for tolerance to glyphosate

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

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

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 5. Mean yields † and feed quality characteristics of 22 corn hybrids evaluated for silage at four locations in Tennessee during 2011, sorted by brand.

Dry Weight																						
Brand	Hybrid \$	Avg. Yield ± Std Err. (n=4)	Moisture		Crude		NDF		IV Digest		Starch		ADF		TDN		NEL		Milk/ton [†]		Milk/acre [†]	
			at Harvest (n=4)	% (n=4)	Protein (n=4)	% dm (n=4)	NDF (n=4)	% of NDF (n=4)	% dm (n=4)	% dm (n=4)	% dm (n=4)	% dm (n=4)	% dm (n=4)	% dm (n=4)	% dm (n=4)	Mcal/lb (n=4)	lbs/ton (n=4)	lbs/ton (n=4)	lbs/acre (n=4)			
Augusta	A5461GTCBLLA	8.0 ± 0.5	53.9	7.3	40.0	57.8	37.3	23.5	73.6	0.77	2957	23743										
Augusta	A5462GT3000A (RR/LL/CB/RW)	8.0 ± 0.4	56.6	7.4	41.6	56.2	35.4	24.5	72.7	0.76	2951	23697										
Augusta	A5464GTCBLL	7.9 ± 0.5	54.1	7.6	39.3	55.9	37.3	23.3	73.7	0.77	2933	23232										
Augusta	A5560VT3	7.8 ± 0.5	53.6	7.6	41.6	57.7	35.4	24.6	72.8	0.76	2939	23011										
Augusta	A7664VT3	7.8 ± 0.5	56.0	7.8	42.1	56.1	33.4	24.9	72.6	0.76	2960	22973										
Augusta	A6867CBLL	7.3 ± 0.4	54.8	8.0	38.8	58.5	38.0	22.6	73.7	0.77	2980	21696										
Augusta	A6867GTCBLLA	7.2 ± 0.5	55.8	7.9	41.7	57.6	34.1	24.6	72.6	0.76	2965	21436										
Augusta	A5337EVT3	7.1 ± 0.4	56.2	7.6	41.2	56.1	35.3	24.4	72.8	0.76	2943	20984										
Augusta	A6166GT3000A (RR/LL/CB/RW)	7.0 ± 0.4	56.9	7.6	40.5	58.0	35.6	23.6	73.3	0.77	3051	21477										
Croplan	8756VT3	7.6 ± 0.5	57.8	7.4	44.6	57.2	30.9	26.4	71.6	0.75	3014	22813										
Croplan	8505VT3P	7.5 ± 0.4	56.9	7.5	41.4	55.5	34.1	24.4	73.3	0.77	3014	22608										
Croplan	8221VT3	7.5 ± 0.4	55.3	7.6	41.7	54.5	35.5	24.9	72.6	0.76	2855	21271										
Croplan	9009 RH	7.4 ± 0.4	56.3	7.6	44.4	55.7	31.3	26.8	71.7	0.75	2936	21729										
Croplan	7131VT3	7.4 ± 0.4	55.2	7.9	39.2	57.2	36.8	22.9	73.9	0.78	2992	21990										
Croplan	6286 SS (RR2/LL/CB/RW)	6.4 ± 0.5	56.1	7.9	39.3	56.0	37.2	22.8	73.9	0.77	2998	19095										
DeKalb	DKC67-21 GENVT3P	7.8 ± 0.5	54.8	7.6	40.4	57.8	35.5	24.0	73.2	0.77	2980	23124										
Masters Choice	MCT-6583 (RR/LL/CB/RW)	6.7 ± 0.4	58.2	7.4	42.3	55.4	33.1	25.4	72.2	0.75	3026	20125										
Masters Choice	MC-590	6.3 ± 0.5	57.5	7.5	40.8	57.4	35.0	24.4	73.1	0.77	3071	19317										
Mycogen	TMF2H918 (RR/LL/HX)	8.1 ± 0.4	58.3	7.6	42.7	54.2	32.1	25.9	72.4	0.76	3036	24589										
Mycogen	TMF2L872 (RR/LL/HX1)	8.0 ± 0.5	55.7	7.5	42.8	57.5	33.1	25.5	72.5	0.76	2975	23798										
Wyffels	W8681 (VT3Pro)	7.7 ± 0.4	55.8	7.8	40.4	57.7	35.8	24.0	73.3	0.77	2988	22980										
Wyffels	W8437 (VT3Pro)	7.6 ± 0.5	54.4	7.8	36.9	58.4	39.8	21.6	74.9	0.79	3047	23252										

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

§ 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 = contains a gene for rootworm resistance

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

RR, RR2 = contains a gene for tolerance to glyphosate

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 6. Mean yields † of 10 corn hybrids evaluated for silage in four environments for two years (2010-2011) in Tennessee.

Brand	Hybrid \$	Dry Weight		65% Moisture		Dry Weight		65% Moisture		Dry Weight		65% Moisture	
		Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)
		-----tons/a-----											
Mycogen	TMF2H918 (RR/LL/HX)	7.8 ± 0.3		22.1 ± 0.8		11.2		5.7		5.3		8.8	
Croplan	8505VT3P	7.7 ± 0.3		21.9 ± 0.8		10.8		5.7		6.0		8.2	
Augusta	A5461GTCBLLA	7.6 ± 0.3		21.8 ± 0.9		10.9		5.8		6.1		7.7	
Croplan	9009 RH	7.5 ± 0.3		21.5 ± 0.8		11.8		5.5		5.1		7.7	
Augusta	A5462GT3000A (RR/LL/CB/RW)	7.5 ± 0.3		21.4 ± 0.8		9.5		6.8		5.8		7.8	
Augusta	A5337EVT3	7.4 ± 0.3		21.1 ± 0.8		10.8		5.4		5.5		7.8	
Croplan	8756VT3	7.3 ± 0.3		21.0 ± 0.9		10.7		5.3		5.3		8.1	
Wyffels	W8681 (VT3Pro)	7.3 ± 0.3		20.9 ± 0.8		9.8		6.3		5.2		8.1	
Augusta	A6867CBLL	7.3 ± 0.3		20.8 ± 0.8		10.0		5.9		5.3		7.9	
Croplan	8221VT3	7.2 ± 0.3		20.7 ± 0.8		11.2		5.3		5.5		7.1	
Avg. (tons/a)		7.5		21.3		10.7		5.8		5.5		7.9	
L.S.D._{.05} (tons/a)		1.0		2.8		1.5		2.4		1.2		2.8	
C.V. (%)		18.1		18.1		9.4		26.9		14.7		22.4	

Table 7. Mean yields † and agronomic characteristics of 10 corn hybrids evaluated for silage in four environments for two years (2010-2011) in Tennessee.

Brand	Hybrid \$	Dry Weight		65% Moisture		Moisture		Lodging		Plant		Ear	
		Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	Avg. Yield ± Std Err.	(n=8)	at harvest	(n=8)	Height	(n=6)
		-----tons/a-----											
Mycogen	TMF2H918 (RR/LL/HX)	7.8 ± 0.3		22.1 ± 0.8		55.9		0		109		45	
Croplan	8505VT3P	7.7 ± 0.3		21.9 ± 0.8		55.9		0		107		43	
Augusta	A5461GTCBLLA	7.6 ± 0.3		21.8 ± 0.9		53.1		0		108		42	
Croplan	9009 RH	7.5 ± 0.3		21.5 ± 0.8		55.2		0		110		46	
Augusta	A5462GT3000A (RR/LL/CB/RW)	7.5 ± 0.3		21.4 ± 0.8		54.5		0		111		42	
Augusta	A5337EVT3	7.4 ± 0.3		21.1 ± 0.8		55.5		0		107		39	
Croplan	8756VT3	7.3 ± 0.3		21.0 ± 0.9		56.0		0		105		42	
Wyffels	W8681 (VT3Pro)	7.3 ± 0.3		20.9 ± 0.8		54.6		0		100		37	
Augusta	A6867CBLL	7.3 ± 0.3		20.8 ± 0.8		53.2		0		107		41	
Croplan	8221VT3	7.2 ± 0.3		20.7 ± 0.8		53.9		0		107		47	

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

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

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

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

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

LL = contains a gene for tolerance to glufosinate

YGRW, RW = contains a gene for rootworm resistance

CL = contains a gene for tolerance to Imidazolinone class herbicides

Table 8. Mean yields † and feed quality characteristics of 10 corn hybrids evaluated for silage at four locations for 2 years (2010-2011) in Tennessee.

Brand	Hybrid §	Dry Weight		Moisture at Harvest (n=8)	Crude Protein (n=8)	NDF		NDF 30h IV Digest (n=8)	Starch (n=8)	ADF (n=8)	TDN (n=8)	NEL (n=8)	Milk/ton [‡]		Milk/acre [‡] (n=8)
		Avg. Yield ± Std Err. (n=8)	Yield tons/a			NDF (n=8)	% dm						lbs/ton	lbs/acre	
Mycogen	TMF2H918 (RR/LL/HX)	7.8 ± 0.3	55.9	7.7	45.8	57.2	28.7	27.7	71.0	0.74	2983	23136			
Croplan	8505VT3P	7.7 ± 0.3	55.9	7.5	44.5	52.6	31.3	26.9	71.3	0.74	2819	21628			
Augusta	A5461GTCBLLA	7.6 ± 0.3	53.1	7.4	42.2	56.6	34.0	25.3	72.3	0.75	2900	22176			
Croplan	9009 RH	7.5 ± 0.3	55.2	7.4	46.4	53.6	28.7	28.3	70.4	0.73	2812	21141			
Augusta	A5462GT3000A (RR/LL/CB/RW)	7.5 ± 0.3	54.5	7.6	42.1	56.0	33.7	25.0	72.2	0.75	2926	21884			
Augusta	A5337EVT3	7.4 ± 0.3	55.5	7.7	41.9	55.7	33.1	25.2	72.2	0.75	2929	21580			
Croplan	8756VT3	7.3 ± 0.3	56.0	7.5	47.3	57.7	27.8	28.0	70.3	0.73	2930	21543			
Wyffels	W8681 (VT3Pro)	7.3 ± 0.3	54.6	8.1	42.6	57.0	33.0	25.4	72.1	0.75	2929	21476			
Augusta	A6867CBLL	7.3 ± 0.3	53.2	7.9	40.9	57.3	34.9	24.3	72.6	0.76	2932	21363			
Croplan	8221VT3	7.2 ± 0.3	53.9	7.6	43.6	54.1	32.4	26.4	71.3	0.74	2806	20337			

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis
Bt, YG, YGCB, CB, HX = contains a *Bacillus thuringiensis* gene for insect resistance

YGRW, RW = contains a gene for rootworm resistance

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

RR, RR2 = contains a gene for tolerance to glyphosate

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

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

Table 9. Mean yields † of five corn hybrids evaluated for silage in four environments for three years (2009-2011) in Tennessee.

		Dry Weight		65% Moisture		----- Dry Weight -----			
		Avg. Yield ± Std Err.	(n=12)	Avg. Yield ± Std Err.	(n=12)	Knoxville	Crossville	Spring Hill	Springfield
Brand	Hybrid \$	-----tons/a-----							
Mycogen	TMF2H918 (RR/LL/HX)	8.3 ± 0.2		23.6 ± 0.6		11.4	6.3	6.6	8.8
Croplan	9009 RH	8.2 ± 0.2		23.3 ± 0.6		12.1	6.4	6.6	7.6
Croplan	8756VT3	8.0 ± 0.2		22.9 ± 0.6		11.5	5.7	6.6	8.2
Wyffels	W8681 (VT3Pro)	7.9 ± 0.2		22.7 ± 0.6		10.4	6.4	6.4	8.6
Croplan	8221VT3	7.8 ± 0.2		22.4 ± 0.6		11.0	6.2	6.3	7.8
Avg. (tons/a)		8.0		23.0		11.3	6.2	6.5	8.2
L.S.D. _{.05} (tons/a)		0.9		2.5		1.5	2.0	1.2	2.3
C.V. (%)		14.7		14.7		9.3	21.2	11.4	18.1

Table 10. Mean yields † and agronomic characteristics of five corn hybrids evaluated for silage in four environments for three years (2009-2011) in Tennessee.

Brand	Hybrid \$	Dry Weight		65% Moisture		Moisture at harvest (n=12)	Lodging (n=11)	Plant Height (n=12)	Ear Height (n=9)
		Avg. Yield ± Std Err.	(n=12)	Avg. Yield ± Std Err.	(n=12)				
-----tons/a-----									
Mycogen	TMF2H918 (RR/LL/HX)	8.3 ± 0.2		23.6 ± 0.6		58.4	0	111	48
Croplan	9009 RH	8.2 ± 0.2		23.3 ± 0.6		58.1	0	112	49
Croplan	8756VT3	8.0 ± 0.2		22.9 ± 0.6		57.2	0	106	45
Wyyfels	W8681 (VT3Pro)	7.9 ± 0.2		22.7 ± 0.6		56.8	0	101	40
Croplan	8221VT3	7.8 ± 0.2		22.4 ± 0.6		56.1	0	107	49

Codes:

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

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

YGRW, RW = contains a gene for rootworm resistance

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

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

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

Table 11. Mean yields † and feed quality characteristics of five corn hybrids evaluated for silage at four locations for three years (2009-2011) in Tennessee.

Brand	Hybrid §	Dry Weight		Moisture at Harvest (n=12)	Crude Protein (n=12)	NDF		Starch (n=12)	ADF (n=12)	TDN (n=12)	NEL (n=12)	Milk/ton* (n=12)	Milk/acre* (n=12)
		Avg. Yield ± Std Err. (n=12)	tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
Mycogen	TMF2H918 (RR/LL/HX)	8.3 ± 0.2		58.4	7.7	46.2	56.1	27.2	28.4	71.1	0.74	3003	25469
Croplan	9009 RH	8.2 ± 0.2		58.1	7.6	47.2	52.9	26.9	29.1	70.4	0.73	2889	23975
Croplan	8756VT3	8.0 ± 0.2		57.2	7.5	46.5	57.6	28.5	27.7	70.9	0.74	2987	24234
WYffels	W8681 (VT3Pro)	7.9 ± 0.2		56.8	8.3	42.1	57.7	32.4	25.1	72.6	0.76	3048	24612
Croplan	8221VT3	7.8 ± 0.2		56.1	7.6	43.0	54.3	32.1	26.2	71.9	0.75	2902	23317

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

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

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

YGRW, RW = contains a gene for rootworm resistance

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

RR, RR2 = contains a gene for tolerance to glyphosate

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

COUNTY STANDARD TESTS

Table 12. Mean yields † of 20 corn hybrids evaluated for silage in two County Standard Tests in Tennessee during 2011.

Brand	Hybrid \$	Dry Weight		65% Moisture		----- Dry Weight -----		Moisture at harvest (n=2)	Lodging (n=1)	Plant Height (n=1)	Ear Height (n=1)
		Avg. Yield ± Std Err. (n=2)	Avg. Yield ± Std Err. (n=2)	tons/a (n=2)	tons/a (n=2)	Blount (n=1)	Washington (n=1)				
Augusta	A7664VT3	6.7 ± 0.4	19.1 ± 1.2	6.4	7.0	50.5	0	80	36		
DeKalb	DKC67-21 GENVT3P	6.4 ± 0.4	18.4 ± 1.2	6.2	6.7	52.3	0	92	47		
Croplan	7131VT3	6.3 ± 0.4	18.1 ± 1.2	4.9	7.7	59.3	0	76	36		
Augusta	A5462GT3000A (RR/LL/CB/RW)	6.3 ± 0.4	17.9 ± 1.2	5.4	7.1	56.5	0	84	45		
Croplan	8756VT3	6.1 ± 0.4	17.6 ± 1.2	4.9	7.4	63.1	0	88	46		
Wyffels	W8681 (VT3Pro)	6.0 ± 0.4	17.3 ± 1.2	5.6	6.5	56.5	0	78	38		
Croplan	8505VT3P	6.0 ± 0.4	17.0 ± 1.2	5.6	6.3	57.3	0	88	48		
Croplan	6286 SS (RR2/LL/CB/RW)	6.0 ± 0.4	17.0 ± 1.2	4.5	7.4	60.0	0	84	45		
Masters Choice	MCT-6583 (RR/LL/CB/RW)	5.9 ± 0.4	16.9 ± 1.2	5.1	6.7	59.1	0	90	48		
Augusta	A5461GTCBLLA	5.9 ± 0.4	16.8 ± 1.2	4.8	7.0	58.1	0	96	46		
Mycogen	TMF2L872 (RR/LL/HX1)	5.9 ± 0.4	16.8 ± 1.2	4.5	7.3	65.1	0	96	48		
Augusta	A6867GTCBLLA	5.9 ± 0.4	16.8 ± 1.2	4.5	7.2	57.1	0	90	42		
Augusta	A5560VT3	5.9 ± 0.4	16.8 ± 1.2	5.2	6.5	55.5	0	82	39		
Mycogen	TMF2H918 (RR/LL/HX)	5.9 ± 0.4	16.7 ± 1.2	4.2	7.5	67.0	0	94	46		
Augusta	A6166GT3000A (RR/LL/CB/RW)	5.8 ± 0.4	16.7 ± 1.2	4.8	6.9	57.9	0	84	41		
Augusta	A5337EVT3	5.8 ± 0.4	16.6 ± 1.2	5.4	6.2	61.8	2	87	40		
Croplan	9009 RH	5.4 ± 0.4	15.5 ± 1.2	4.3	6.6	65.1	0	90	50		
Wyffels	W8437 (VT3Pro)	5.4 ± 0.4	15.3 ± 1.2	4.7	6.0	55.5	0	73	38		
Croplan	8221VT3	4.9 ± 0.4	14.0 ± 1.2	3.6	6.2	68.3	0	90	50		
Augusta	A5464GTCBLL	4.8 ± 0.4	13.8 ± 1.2	3.8	5.9	61.3	0	84	42		
Avg. (tons/a)		5.9	16.8	4.9	6.8	59.4	0	86	44		
L.S.D._{.05} (tons/a)		1.3	3.7								
C.V. (%)		10.5	10.5								

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

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

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

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

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

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

Blount County Mac Pate Dairy Farm

Planted: 4-25-11

Harvested: 8-1-11

Population: 27,000

30 inch row spacing

Washington County: Savland farm (David Saylor)

Planted: 6-3-11

Harvested: 9-1-11

Population: 28,000

30 inch row spacing

Table 13. Mean yields † and feed quality characteristics of 20 corn hybrids evaluated for silage in two County Standard Tests in Tennessee during 2011.

Dry Weight																
Brand	Hybrid \$	Avg. Yield ± Std Err. (n=2)	Moisture		Crude		NDF 30h		ADF (n=2)	TDN (n=2)	NEL (n=2)	Milk/ton [†] (n=2)	Milk/acre [‡] (n=2)			
			at Harvest (n=2)	%	Protein (n=2)	% dm	IV Digest (n=2)	% of NDF						Starch (n=2)	% dm	
Augusta	A7664VT3	6.7 ± 0.4	50.5		9.8	44.7	64.5	26.5	26.0	71.4	0.74	2928	19556			
DeKalb	DKC67-21 GENVT3P	6.4 ± 0.4	52.3		9.0	52.6	61.2	17.9	31.4	67.3	0.70	2683	17251			
Croplan	7131VT3	6.3 ± 0.4	59.3		9.3	42.9	61.7	29.4	25.0	72.1	0.75	3057	19383			
Augusta	A5462GT3000A (RR/LLCB	6.3 ± 0.4	56.5		8.3	43.4	62.4	30.2	25.3	72.2	0.75	2927	18355			
Croplan	8756VT3	6.1 ± 0.4	63.1		8.8	48.9	62.7	20.9	28.4	69.9	0.73	2957	18186			
Wyffels	W8681 (VT3Pro)	6.0 ± 0.4	56.5		9.5	48.2	60.8	22.8	28.8	69.3	0.72	2797	16921			
Croplan	8505VT3P	6.0 ± 0.4	57.3		8.8	44.2	59.0	28.3	26.3	71.2	0.74	2858	17061			
Croplan	6286 SS (RR2/LL/CB/RW)	6.0 ± 0.4	60.0		8.3	43.7	58.1	30.7	25.3	72.2	0.75	3003	17896			
Masters Choice	MCT-6583 (RR/LL/CB/RW	5.9 ± 0.4	59.1		8.6	44.0	60.8	29.7	25.6	71.7	0.75	2985	17612			
Augusta	A5461GTCBLLA	5.9 ± 0.4	58.1		8.6	45.5	58.5	27.3	27.5	70.2	0.73	2820	16638			
Mycogen	TMF2L872 (RR/LL/HX1)	5.9 ± 0.4	65.1		8.4	47.4	58.7	20.9	28.7	70.0	0.73	2821	16641			
Augusta	A6867GTCBLLA	5.9 ± 0.4	57.1		9.8	43.5	60.6	28.6	25.7	71.2	0.74	2881	16967			
Augusta	A5560VT3	5.9 ± 0.4	55.5		8.8	45.7	57.7	27.2	27.1	70.7	0.74	2758	16191			
Mycogen	TMF2H918 (RR/LL/HX)	5.9 ± 0.4	67.0		9.3	49.1	59.2	21.7	29.5	69.2	0.72	3113	18210			
Augusta	A6166GT3000A (RR/LL/Cf	5.8 ± 0.4	57.9		8.5	46.1	62.3	27.0	26.8	70.9	0.74	2933	17129			
Augusta	A5337EVT3	5.8 ± 0.4	61.8		8.7	43.7	59.1	27.6	26.4	71.1	0.74	3078	17885			
Croplan	9009 RH	5.4 ± 0.4	65.1		9.4	46.3	62.0	24.0	27.7	70.4	0.73	3180	17202			
Wyffels	W8437 (VT3Pro)	5.4 ± 0.4	55.5		9.0	46.7	58.9	25.0	28.0	69.8	0.73	2740	14656			
Croplan	8221VT3	4.9 ± 0.4	68.3		9.3	45.7	57.6	23.1	27.9	70.0	0.73	3045	14889			
Augusta	A5464GTCBLL	4.8 ± 0.4	61.3		9.5	44.1	61.6	29.3	25.7	71.5	0.75	3081	14912			

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

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

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

YGRW, RW = contains a gene for rootworm resistance

VT3, TS = contains genes for corn borer, rootworm, and glyphosate resistance

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

RR, RR2 = contains a gene for tolerance to glyphosate

LL = contains a gene for tolerance to glufosinate

CL = contains a gene for tolerance to Imidazolinone class herbicides

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Small Grains Silage Test

Seventy-one wheat varieties and 23 fall seeded oat varieties were evaluated for silage yield and quality at the Middle Tennessee REC (Spring Hill, TN). Varieties were seeded at 26 seed per square foot. Plots were planted on 10/19/10 with a drill and consisted of 7 rows on 7 inch spacings, 30 ft in length. Each entry was replicated three times. The plots were harvested on 4/25/11 by a commercial silage harvester. Yields presented were adjusted to both dry weight and 65% moisture. A sub-sample from each plot of approximately 3 lbs was taken for analysis. Fresh weight and dried weight was recorded on each sample for determination of moisture at harvest. The samples were then ground and analyzed for nutrient content. Silage quality analyses were provided by Cumberland Valley Analytical Services, Inc., Hagerstown, MD. Milk per ton and milk per acre calculations were performed using the University of Wisconsin Milk2006 program.

Table 14. Mean yields and agronomic characteristics of 71 soft red winter wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center during 2011.

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Emergence	Lodging	Height
		Avg. Yield ± Std Err. (n=1)	Avg. Yield ± Std Err. (n=1)				
		tons/a	tons/a	%	%	(score)	inches
Dyna-Gro	9922	4.8 ± 0.3	13.8 ± 0.9	69.3	100	1.0	33
Pioneer	XW09H	4.5 ± 0.3	12.7 ± 0.9	68.9	100	1.0	31
USG	3251	4.4 ± 0.3	12.7 ± 0.9	71.0	97	1.0	33
Armor	ARX 0186	4.4 ± 0.3	12.5 ± 0.9	69.4	92	1.0	33
Warren Seed	McKenna 200	4.3 ± 0.3	12.3 ± 0.9	69.0	98	1.0	32
Pioneer	26R15	4.3 ± 0.3	12.3 ± 0.9	69.0	100	1.0	33
Syngenta	SY 9978	4.3 ± 0.3	12.2 ± 0.9	69.6	97	1.0	35
Terral	LA821	4.3 ± 0.3	12.2 ± 0.9	69.7	98	1.0	37
MO	Truman	4.2 ± 0.3	12.1 ± 0.9	73.2	88	1.0	31
Progeny	PGX10-7	4.2 ± 0.3	12.1 ± 0.9	70.2	98	1.0	33
Progeny	PGX10-5	4.2 ± 0.3	12.0 ± 0.9	68.8	100	1.0	33
Terral	TV8861	4.2 ± 0.3	11.9 ± 0.9	69.7	98	1.0	30
USG	3438	4.2 ± 0.3	11.9 ± 0.9	69.9	93	1.0	33
Progeny	125	4.2 ± 0.3	11.9 ± 0.9	69.1	98	1.0	34
Terral	TVX8535	4.1 ± 0.3	11.7 ± 0.9	72.0	95	1.0	33
USG	3209	4.1 ± 0.3	11.6 ± 0.9	70.6	97	1.0	32
TN Exp.	TN 902	4.1 ± 0.3	11.6 ± 0.9	68.8	100	1.0	36
Pioneer	26R22	4.0 ± 0.3	11.5 ± 0.9	71.5	100	1.0	32
Pioneer	26R20	4.0 ± 0.3	11.5 ± 0.9	71.6	98	1.0	32
Terral	TV8589	4.0 ± 0.3	11.4 ± 0.9	70.9	98	1.0	34
Delta Grow	8300	4.0 ± 0.3	11.3 ± 0.9	69.1	97	1.0	36
Armor	Ricochet	4.0 ± 0.3	11.3 ± 0.9	72.2	100	1.0	32
Croplan Genetics	8302	4.0 ± 0.3	11.3 ± 0.9	71.1	97	1.0	34
USG	3770	3.9 ± 0.3	11.2 ± 0.9	69.3	98	1.0	31
Armor	ARX 0179	3.9 ± 0.3	11.2 ± 0.9	69.9	97	1.0	35
MO	Milton	3.9 ± 0.3	11.2 ± 0.9	72.0	88	1.0	34
Terral	TVX8525	3.9 ± 0.3	11.1 ± 0.9	70.8	97	1.0	33
Delta Grow	7900	3.9 ± 0.3	11.0 ± 0.9	69.5	100	1.0	35
OH	Malabar	3.9 ± 0.3	11.0 ± 0.9	73.2	100	1.0	30
Cache River Valley Seed	Dixie McAlister	3.8 ± 0.3	11.0 ± 0.9	68.6	97	1.0	33
USG	3120	3.8 ± 0.3	10.9 ± 0.9	69.9	97	1.0	35
USG	3555	3.8 ± 0.3	10.8 ± 0.9	71.0	100	1.0	32
VA Exp.	VA05W-251	3.8 ± 0.3	10.7 ± 0.9	70.4	97	1.0	33
Progeny	166	3.8 ± 0.3	10.7 ± 0.9	69.4	100	1.0	34
Delta Grow	7500	3.8 ± 0.3	10.7 ± 0.9	69.8	97	1.0	34
Progeny	PGX10-2	3.7 ± 0.3	10.6 ± 0.9	71.1	98	1.0	33
TN Exp.	TN 1002	3.7 ± 0.3	10.6 ± 0.9	70.3	97	1.0	37
Warren Seed	McKay 100	3.7 ± 0.3	10.6 ± 0.9	72.4	100	1.0	35
Armor	Renegade	3.7 ± 0.3	10.6 ± 0.9	71.8	95	1.0	32
NC Exp.	Yadkin	3.7 ± 0.3	10.5 ± 0.9	69.2	93	1.0	32
Croplan Genetics	8614	3.7 ± 0.3	10.5 ± 0.9	69.0	97	1.0	36
Terral	TVX8626	3.7 ± 0.3	10.4 ± 0.9	71.9	100	1.0	32
USG	3201	3.7 ± 0.3	10.4 ± 0.9	70.9	97	1.0	31
Dyna-Gro	9171	3.6 ± 0.3	10.4 ± 0.9	69.1	92	1.0	32
USG	3295	3.6 ± 0.3	10.4 ± 0.9	68.1	98	1.0	31
Progeny	185	3.6 ± 0.3	10.3 ± 0.9	71.2	100	1.0	33
Terral	TV8558	3.6 ± 0.3	10.2 ± 0.9	70.8	93	1.0	33
Syngenta	Oakes	3.6 ± 0.3	10.2 ± 0.9	70.9	100	1.0	31
Syngenta	W1104	3.6 ± 0.3	10.2 ± 0.9	70.3	92	1.0	30
Delta Grow	5000	3.6 ± 0.3	10.1 ± 0.9	71.1	98	1.0	35
VA Exp.	VA05W-139	3.6 ± 0.3	10.1 ± 0.9	70.9	92	1.0	31

(continued)

Table 14. Mean yields and agronomic characteristics of 71 soft red winter wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center during 2011.

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Emergence	Lodging	Height
		Avg. Yield ± Std Err. (n=1)	Avg. Yield ± Std Err. (n=1)				
		tons/a	tons/a	%	%	(score)	inches
TN Exp.	TN 1103	3.5 ± 0.3	10.1 ± 0.9	70.6	100	1.0	33
USG	3409	3.5 ± 0.3	10.0 ± 0.9	70.1	98	1.0	34
Cache River Valley Seed	Dixie Kelsey	3.5 ± 0.3	10.0 ± 0.9	69.8	98	1.0	32
Dyna-Gro	9012	3.5 ± 0.3	10.0 ± 0.9	71.5	97	1.0	31
MO	Bess	3.4 ± 0.3	9.8 ± 0.9	70.8	98	1.0	32
VA	Jamestown	3.4 ± 0.3	9.8 ± 0.9	71.2	100	1.0	35
Cache River Valley Seed	Dixie 454	3.4 ± 0.3	9.7 ± 0.9	70.4	97	1.0	31
Syngenta	Branson	3.4 ± 0.3	9.7 ± 0.9	69.2	95	1.0	33
Pioneer	25R32	3.4 ± 0.3	9.6 ± 0.9	70.5	97	1.0	30
VA	Merl	3.3 ± 0.3	9.4 ± 0.9	72.3	100	1.0	34
TN Exp.	TN 1101	3.3 ± 0.3	9.3 ± 0.9	71.3	98	1.0	37
USG	3350	3.2 ± 0.4	9.3 ± 1.1	71.4	95	1.0	34
Terral	TVX8848	3.2 ± 0.3	9.3 ± 0.9	71.9	68	1.0	32
Dyna-Gro	Shirley	3.2 ± 0.3	9.2 ± 0.9	71.1	97	1.0	31
Progeny	117	3.2 ± 0.3	9.2 ± 0.9	75.5	100	1.0	36
Croplan Genetics	8925	3.2 ± 0.3	9.1 ± 0.9	71.3	97	1.0	34
TN Exp.	TN 1102	3.2 ± 0.3	9.0 ± 0.9	73.4	100	1.0	35
USG	3345	3.1 ± 0.3	8.9 ± 0.9	70.6	92	1.0	33
Terral	TVX8460	3.1 ± 0.3	8.8 ± 0.9	73.9	72	1.0	30
Dyna-Gro	9053	2.6 ± 0.3	7.5 ± 0.9	76.2	98	1.0	32
Average (bu/a)		3.8	10.7	70.7	96	1.0	33
L.S.D._{.05} (bu/a)		0.8	2.3				
C.V. (%)		13.2	13.2				

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 15. Mean yields † and feed quality characteristics of 71 wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center during 2011.

Brand	Variety	Dry Weight		Moisture		Crude		NDF		NDF 30h		ADF		TDN		NEL		Milk/ton [‡]		Milk/acre [‡]	
		Avg. Yield ± Std Err. (n=1)	tons/a	at Harvest (n=1)	%	Protein (n=1)	% dm	(n=1)	% dm	IV Digest (n=1)	% of NDF	(n=1)	% dm	(n=1)	% dm	(n=1)	Mcals/lb	(n=1)	lbs/ton	(n=1)	lbs/acre
Dyna-Gro	9922	4.8 ± 0.3		69.3		9.1		62.2		60.1		3.1		39.6		59.6		0.61		2439	11732
Pioneer	XW09H	4.5 ± 0.3		68.9		8.8		62.2		56.8		2.9		39.7		59.5		0.61		2255	10035
USG	3251	4.4 ± 0.3		71.0		9.3		65.7		60.4		1.5		41.5		58.3		0.60		2509	11115
Armor	ARX 0186	4.4 ± 0.3		69.4		9.3		58.3		58.8		3.6		36.8		61.7		0.64		2270	9896
Warren Seed	McKenna 200	4.3 ± 0.3		69.0		9.2		65.5		56.9		1.1		42.4		56.0		0.57		2281	9831
Pioneer	26R15	4.3 ± 0.3		69.0		8.8		61.3		58.2		3.1		39.1		59.6		0.61		2304	9886
Syngenta	SY 9978	4.3 ± 0.3		69.6		7.7		62.9		56.9		2.1		40.9		57.6		0.59		2118	9064
Terral	LA821	4.3 ± 0.3		69.7		8.2		66.2		56.2		1.7		42.3		57.3		0.59		2260	9629
MO	Truman	4.2 ± 0.3		73.2		11.9		63.9		62.8		2.9		39.4		60.6		0.62		2697	11437
Progeny	PGX10-7	4.2 ± 0.3		70.2		9.9		68.7		55.4		2.4		44.2		56.5		0.58		2276	9606
Progeny	PGX10-5	4.2 ± 0.3		68.8		8.7		61.9		56.4		2.3		39.8		58.1		0.60		2181	9180
Terral	TV8861	4.2 ± 0.3		69.7		8.2		60.9		60.6		2.3		38.6		60.0		0.62		2228	9311
USG	3438	4.2 ± 0.3		69.9		7.8		59.0		59.0		3.1		37.6		59.9		0.61		2105	8799
Progeny	125	4.2 ± 0.3		69.1																	
Terral	TVX8535	4.1 ± 0.3		72.0		9.3		68.8		53.1		2.3		44.6		55.1		0.56		2124	8664
USG	3209	4.1 ± 0.3		70.6		8.7		67.4		56.2		1.5		43.2		56.6		0.58		2351	9567
TN Exp.	TN 902	4.1 ± 0.3		68.8		9.2		59.6		59.5		2.6		38.0		59.5		0.61		2259	9150
Pioneer	26R22	4.0 ± 0.3		71.5		9.2		61.4		62.6		2.5		39.2		61.0		0.63		2441	9836
Pioneer	26R20	4.0 ± 0.3		71.6		8.2		61.8		61.3		2.8		39.5		59.1		0.61		2364	9481
Terral	TV8589	4.0 ± 0.3		70.9		7.9		61.7		58.0		2.1		39.5		58.5		0.60		2151	8602
Delta Grow	8300	4.0 ± 0.3		69.1		7.8		62.9		58.0		3.5		39.7		59.0		0.61		2310	9169
Armor	Ricochet	4.0 ± 0.3		72.2		8.7		71.2		48.5		3.9		46.6		53.6		0.54		1831	7252
Croplan Genetics	8302	4.0 ± 0.3		71.1		8.3		61.1		58.3		3.1		38.8		59.5		0.61		2239	8844
USG	3770	3.9 ± 0.3		69.3		7.9		61.5		55.4		2.8		39.2		58.7		0.60		2059	8093
Armor	ARX 0179	3.9 ± 0.3		69.9		8.8		71.5		49.2		3.8		46.6		54.5		0.55		1937	7574
MO	Milton	3.9 ± 0.3		72.0		7.9		66.8		55.7		2.7		43.0		57.5		0.59		2353	9175
Terral	TVX8525	3.9 ± 0.3		70.8		8.8		59.2		62.4		2.5		37.2		60.8		0.62		2272	8794
Delta Grow	7900	3.9 ± 0.3		69.5		8.9		71.8		48.1		3.9		47.0		53.7		0.54		1839	7099
OH	Malabar	3.9 ± 0.3		73.2		10.2		61.1		66.4		2.1		37.5		61.2		0.63		2621	10117
Cache River Valley Seed	Dixie McAlister	3.8 ± 0.3		68.6		8.6		64.7		58.5		2.9		41.1		58.4		0.60		2446	9391
USG	3120	3.8 ± 0.3		69.9		9.8		59.8		60.7		1.8		38.1		59.1		0.61		2280	8731
USG	3555	3.8 ± 0.3		71.0		8.1		65.6		61.8		2.3		40.6		59.2		0.61		2479	9370
VA Exp.	VA05W-251	3.8 ± 0.3		70.4		8.7		66.8		57.3		1.9		43.0		56.4		0.58		2380	8950
Progeny	166	3.8 ± 0.3		69.4		8.4		69.0		56.1		1.7		44.6		55.8		0.57		2288	8579
Delta Grow	7500	3.8 ± 0.3		69.8		8.8		57.5		59.4		3.3		36.3		61.5		0.63		2160	8098
Progeny	PGX10-2	3.7 ± 0.3		71.1		9.1		64.8		59.6		1.8		42.0		57.7		0.59		2431	9042

Table 15. (continued)

Brand	Variety	Dry Weight		Moisture at Harvest	Crude Protein	NDF 30h		ADF	TDN	NEL	Milk/ton [‡] (n=1)	Milk/acre [‡] (n=1)
		Avg. Yield ± Std Err. (n=1)	tons/a	% (n=1)	% dm (n=1)	NDF (n=1)	% of NDF (n=1)	% dm (n=1)	% dm (n=1)	Mcals/lb (n=1)	lbs/ton (n=1)	lbs/acre (n=1)
TN Exp.	TN 1002	3.7 ± 0.3		70.3	8.3	65.2	58.6	2.2	41.6	57.5	2355	8760
Warren Seed	McKay 100	3.7 ± 0.3		72.4	8.6	64.5	56.7	1.7	41.6	56.8	2240	8311
Armor	Renegade	3.7 ± 0.3		71.8	8.4	60.8	55.6	3.4	39.2	59.7	2196	8124
NC Exp.	Yadkin	3.7 ± 0.3		69.2	7.8	63.1	57.7	2.8	40.6	58.8	2237	8212
Croplan Genetics	8614	3.7 ± 0.3		69.0	8.5	62.2	59.3	3.2	39.3	60.1	2332	8536
Terral	TVX8626	3.7 ± 0.3		71.9	9.1	64.2	60.0	2.1	40.4	59.0	2424	8849
USG	3201	3.7 ± 0.3		70.9	9.3	64.3	60.8	2.1	40.5	58.1	2440	8907
Dyna-Gro	9171	3.6 ± 0.3		69.1	9.2	67.1	54.7	3.3	42.2	57.2	2303	8383
USG	3295	3.6 ± 0.3		68.1	8.7	62.9	59.7	1.4	39.9	58.6	2255	8207
Progeny	185	3.6 ± 0.3		71.2	10.1	65.1	60.2	1.5	41.7	58.1	2530	9084
Terral	TV8558	3.6 ± 0.3		70.8	9.3	68.6	53.1	2.8	43.8	55.5	2179	7778
Syngenta	Oakes	3.6 ± 0.3		70.9	10.0	63.9	59.0	1.3	40.6	58.2	2437	8677
Syngenta	W1104	3.6 ± 0.3		70.3	8.6	74.1	51.7	1.4	47.9	52.9	1944	6922
Delta Grow	5000	3.6 ± 0.3		71.1	9.3	71.8	49.6	5.0	44.6	55.0	1997	7091
VA Exp.	VA05W-139	3.6 ± 0.3		70.9	8.7	63.6	60.8	2.2	40.0	59.6	2398	8513
TN Exp.	TN 1103	3.5 ± 0.3		70.6	9.5	61.9	57.4	2.1	39.6	57.9	2250	7943
USG	3409	3.5 ± 0.3		70.1	8.9	62.1	54.7	2.2	39.3	58.7	2132	7485
Cache River Valley Seed	Dixie Kelsey	3.5 ± 0.3		69.8	8.9	62.7	59.9	3.0	39.4	59.8	2388	8383
Dyna-Gro	9012	3.5 ± 0.3		71.5	8.8	59.6	60.2	3.7	37.7	60.8	2292	7998
MO	Bess	3.4 ± 0.3		70.8	9.4	63.0	59.1	3.4	40.0	59.4	2514	8649
VA	Jamestown	3.4 ± 0.3		71.2	9.4	62.4	56.9	2.5	39.5	58.9	2283	7832
Cache River Valley Seed	Dixie 454	3.4 ± 0.3		70.4	8.3	57.9	59.5	4.1	36.7	61.2	2198	7495
Syngenta	Branson	3.4 ± 0.3		69.2	8.7	61.3	58.1	1.5	39.6	57.7	2131	7224
Pioneer	25R32	3.4 ± 0.3		70.5	9.0	69.0	58.9	2.5	43.8	57.0	2409	8069
VA	Merl	3.3 ± 0.3		72.3	8.5	70.3	49.8	2.7	45.3	54.6	2024	6678
TN Exp.	TN 1101	3.3 ± 0.3		71.3	9.1	71.4	54.6	1.4	46.2	52.8	2019	6582
USG	3350	3.2 ± 0.4		71.4	8.7	67.6	56.5	1.9	43.2	56.6	2381	7714
Terral	TVX8848	3.2 ± 0.3		71.9	8.4	63.3	59.6	1.9	40.2	58.6	2304	7465
Dyna-Gro	Shirley	3.2 ± 0.3		71.1	8.3	63.4	57.1	3.3	40.6	58.5	2316	7457
Progeny	117	3.2 ± 0.3		75.5	7.9	63.6	57.7	1.8	41.2	56.9	2186	7019
Croplan Genetics	8925	3.2 ± 0.3		71.3	8.9	62.6	61.6	3.2	39.2	61.0	2478	7905
TN Exp.	TN 1102	3.2 ± 0.3		73.4	9.4	66.9	58.7	1.8	42.5	56.7	2409	7588
USG	3345	3.1 ± 0.3		70.6	8.9	65.6	56.9	2.1	41.6	57.7	2323	7248
Terral	TVX8460	3.1 ± 0.3		73.9	9.3	59.1	63.4	2.6	37.2	60.8	2402	7421
Dyna-Gro	9053	2.6 ± 0.3		76.2	9.0	66.1	53.7	3.4	42.6	57.0	2254	5884

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

‡ based on University of Wisconsin Milk2006 software program.

NEL = Net Energy for Lactation

TDN = Total Digestible Nutrients

Table 16. Mean yields and agronomic characteristics of 44 soft red winter wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2010-2011).

Brand	Variety	Dry Weight	65% Moisture	Moisture at harvest	Emergence	Lodging	Height
		Avg. Yield ± Std Err. (n=2)	Avg. Yield ± Std Err. (n=2)				
		tons/a	tons/a	%	%	(score)	inches
USG	3251	4.0 ± 0.2	11.4 ± 0.6	65.3	97	1.0	32
Croplan Genetics	8302	3.9 ± 0.2	11.3 ± 0.6	63.0	97	1.0	33
Syngenta	SY 9978	3.9 ± 0.2	11.1 ± 0.6	65.5	97	1.0	36
TN Exp.	TN 902	3.8 ± 0.2	10.9 ± 0.6	63.2	100	1.0	34
Dyna-Gro	9922	3.8 ± 0.2	10.8 ± 0.6	63.1	100	1.0	32
Pioneer	26R22	3.8 ± 0.2	10.8 ± 0.6	64.4	100	1.0	32
Terral	LA821	3.7 ± 0.2	10.7 ± 0.6	62.3	98	1.0	35
Armor	Ricochet	3.7 ± 0.2	10.6 ± 0.6	64.1	100	1.0	30
Progeny	125	3.7 ± 0.2	10.6 ± 0.6	61.6	98	1.0	31
Pioneer	26R15	3.7 ± 0.2	10.6 ± 0.6	65.6	100	1.0	32
USG	3209	3.7 ± 0.2	10.4 ± 0.6	64.1	97	1.0	30
USG	3438	3.6 ± 0.2	10.4 ± 0.6	65.2	93	1.0	30
USG	3770	3.6 ± 0.2	10.3 ± 0.6	62.9	98	1.0	31
Delta Grow	8300	3.6 ± 0.2	10.1 ± 0.6	63.4	97	1.0	33
Syngenta	W1104	3.5 ± 0.2	10.1 ± 0.6	65.2	92	1.0	31
MO	Truman	3.5 ± 0.2	10.1 ± 0.6	67.3	88	1.0	32
Terral	TV8589	3.5 ± 0.2	10.0 ± 0.6	64.5	98	1.0	33
Warren Seed	McKay 100	3.5 ± 0.2	10.0 ± 0.6	63.2	100	1.0	34
USG	3201	3.5 ± 0.2	9.9 ± 0.6	63.5	97	1.0	30
Pioneer	26R20	3.5 ± 0.2	9.9 ± 0.6	68.3	98	1.0	32
MO	Milton	3.4 ± 0.2	9.8 ± 0.6	64.9	88	1.0	32
Progeny	166	3.4 ± 0.2	9.8 ± 0.6	63.9	100	1.0	34
Dyna-Gro	9012	3.4 ± 0.2	9.7 ± 0.6	65.6	97	1.0	30
Terral	TV8558	3.4 ± 0.2	9.7 ± 0.6	62.3	93	1.0	32
USG	3120	3.4 ± 0.2	9.6 ± 0.6	63.8	97	1.0	34
OH	Malabar	3.3 ± 0.2	9.6 ± 0.6	68.4	100	1.0	31
USG	3350	3.3 ± 0.2	9.5 ± 0.6	64.8	95	1.0	34
USG	3555	3.3 ± 0.2	9.5 ± 0.6	65.9	100	1.0	28
MO	Bess	3.3 ± 0.2	9.4 ± 0.6	63.6	98	1.0	32
Armor	Renegade	3.3 ± 0.2	9.4 ± 0.6	64.5	95	1.0	32
Terral	TV8861	3.3 ± 0.2	9.4 ± 0.6	64.4	98	1.0	30
USG	3409	3.2 ± 0.2	9.3 ± 0.6	63.5	98	1.0	32
Delta Grow	5000	3.2 ± 0.2	9.2 ± 0.6	63.8	98	1.0	32
Progeny	185	3.2 ± 0.2	9.1 ± 0.6	64.6	100	1.0	31
Syngenta	Oakes	3.2 ± 0.2	9.1 ± 0.6	65.5	100	1.0	31
Progeny	117	3.1 ± 0.2	9.0 ± 0.6	67.1	100	1.0	34
VA	Merl	3.1 ± 0.2	8.9 ± 0.6	64.9	100	1.0	31
Cache River Valley Seed	Dixie 454	3.1 ± 0.2	8.9 ± 0.6	66.0	97	1.0	31
Croplan Genetics	8925	3.1 ± 0.2	8.9 ± 0.6	63.7	97	1.0	33
Dyna-Gro	Shirley	3.1 ± 0.2	8.8 ± 0.6	65.4	97	1.0	28
NC Exp.	Yadkin	3.1 ± 0.2	8.8 ± 0.6	64.2	93	1.0	30
VA	Jamestown	3.1 ± 0.2	8.7 ± 0.6	64.4	100	1.0	31
Pioneer	25R32	3.0 ± 0.2	8.5 ± 0.6	66.0	97	1.0	31
Syngenta	Branson	2.9 ± 0.2	8.4 ± 0.6	65.2	95	1.0	31
Average (bu/a)		3.4	9.8	64.6	97	1.0	32
L.S.D._{.05} (bu/a)		0.6	1.8				
C.V. (%)		12.9	12.9				

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 17. Mean yields † and feed quality characteristics of 44 wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2010-2011).

Brand	Variety	Dry Weight				NDF 30h				NEL	Milk/ton [†]	Milk/acre [†]
		Avg. Yield ± Std Err. (n=2)	Moisture at Harvest (n=2)	Crude Protein (n=2)	NDF (n=2)	IV Digest (n=2)	Starch (n=2)	ADF (n=2)	TDN (n=2)			
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	% dm	Mcals/lb	lbs/ton	lbs/acre
USG	3251	4.0 ± 0.2	65.3	8.8	59.5	56.9	5.5	37.3	57.4	0.56	2323	9392
Croplan Genetics	8302	3.9 ± 0.2	63.0	8.4	58.6	56.0	4.6	36.9	57.2	0.56	2120	8353
Syngenta	SY 9978	3.9 ± 0.2	65.5	8.7	59.6	54.5	5.0	38.4	57.8	0.57	2196	8467
TN Exp.	TN 902	3.8 ± 0.2	63.2	8.0	57.7	57.5	4.9	36.4	57.6	0.56	2146	8225
Dyna-Gro	9922	3.8 ± 0.2	63.1	8.7	57.2	56.4	7.3	36.3	58.2	0.57	2298	8778
Pioneer	26R22	3.8 ± 0.2	64.4	9.4	58.9	58.7	5.5	37.5	60.0	0.59	2374	8955
Terral	LA821	3.7 ± 0.2	62.3	7.5	62.5	53.5	4.4	39.5	55.3	0.54	2088	7888
Armor	Ricochet	3.7 ± 0.2	64.1	9.1	62.9	51.7	5.6	40.3	55.1	0.53	1971	7319
Progeny	125	3.7 ± 0.2	61.6	9.0	56.6	52.2	7.2	35.3	55.6	0.52	2079	6818
Pioneer	26R15	3.7 ± 0.2	65.6	9.3	59.7	55.5	5.8	37.8	59.5	0.59	2344	8613
USG	3209	3.7 ± 0.2	64.1	8.3	60.2	57.0	4.9	38.0	57.0	0.55	2245	8217
USG	3438	3.6 ± 0.2	65.2	8.8	56.3	57.2	6.3	35.4	59.8	0.59	2230	7990
USG	3770	3.6 ± 0.2	62.9	8.2	58.3	55.4	5.8	36.8	58.4	0.57	2146	7675
Delta Grow	8300	3.6 ± 0.2	63.4	8.3	58.3	56.4	6.8	36.7	58.8	0.58	2292	8146
Syngenta	W1104	3.5 ± 0.2	65.2	9.4	65.5	53.1	3.8	41.9	55.8	0.55	2115	7437
MO	Truman	3.5 ± 0.2	67.3	11.0	61.3	59.5	3.3	38.0	59.4	0.58	2463	8840
Terral	TV8589	3.5 ± 0.2	64.5	8.1	59.9	54.6	5.0	37.7	57.4	0.57	2150	7557
Warren Seed	McKay 100	3.5 ± 0.2	63.2	8.6	60.3	56.2	4.9	38.2	57.3	0.56	2222	7759
USG	3201	3.5 ± 0.2	63.5	8.4	58.7	58.5	4.8	36.8	56.3	0.54	2187	7634
Pioneer	26R20	3.5 ± 0.2	68.3	8.8	59.6	60.1	5.3	37.4	60.7	0.60	2440	8412
MO	Milton	3.4 ± 0.2	64.9	8.3	61.0	56.1	4.6	38.6	57.1	0.56	2227	7676
Progeny	166	3.4 ± 0.2	63.9	8.8	62.4	55.4	5.2	39.7	57.2	0.56	2287	7832
Dyna-Gro	9012	3.4 ± 0.2	65.6	8.7	57.0	58.1	5.9	35.9	59.2	0.58	2237	7611
Terral	TV8558	3.4 ± 0.2	62.3	8.1	63.6	52.4	5.0	40.3	54.7	0.54	2067	7036
USG	3120	3.4 ± 0.2	63.8	8.6	57.2	58.0	5.2	36.1	57.8	0.57	2186	7432
OH	Malabar	3.3 ± 0.2	68.4	10.4	61.3	62.0	2.8	38.2	61.2	0.60	2531	8489
USG	3350	3.3 ± 0.2	64.8	8.3	62.1	55.6	4.6	39.3	56.6	0.55	2252	7529
USG	3555	3.3 ± 0.2	65.9	8.2	59.5	59.0	4.7	37.1	57.9	0.56	2284	7672
MO	Bess	3.3 ± 0.2	63.6	9.1	59.3	57.2	4.9	37.3	58.0	0.57	2309	7586
Armor	Renegade	3.3 ± 0.2	64.5	9.0	58.7	54.2	6.3	37.5	59.1	0.58	2251	7326
Terral	TV8861	3.3 ± 0.2	64.4	8.3	58.1	58.0	4.6	36.5	58.3	0.57	2169	7124
USG	3409	3.2 ± 0.2	63.5	8.7	58.8	53.8	5.8	36.8	57.9	0.57	2163	6967
Delta Grow	5000	3.2 ± 0.2	63.8	9.0	62.4	50.8	7.7	38.8	55.7	0.55	2067	6664
Progeny	185	3.2 ± 0.2	64.6	9.3	61.8	55.7	4.1	39.5	56.8	0.56	2309	7497
Syngenta	Oakes	3.2 ± 0.2	65.5	9.9	59.8	55.6	4.3	37.8	57.6	0.57	2312	7421
Progeny	117	3.1 ± 0.2	67.1	8.5	59.6	56.4	4.8	38.2	57.4	0.56	2200	6907

(continued)

Table 17. Mean yields † and feed quality characteristics of 44 wheat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2010-2011).

		Dry Weight									
		Avg. Yield	Moisture	Crude	NDF 30h		ADF	TDN	NEL	Milk/ton [‡]	Milk/acre [‡]
Brand	Variety	± Std Err. (n=2)	at Harvest (n=2)	Protein (n=2)	NDF (n=2)	IV Digest (n=2)	Starch (n=2)	(n=2)	(n=2)	(n=2)	(n=2)
		tons/a	%	% dm	% dm	% of NDF	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
VA	Merl	3.1 ± 0.2	64.9	8.3	62.6	52.3	5.4	39.5	0.54	2075	6486
Cache River Valley Seed	Dixie 454	3.1 ± 0.2	66.0	9.7	56.0	56.9	6.1	35.2	0.59	2269	7046
Croplan Genetics	8925	3.1 ± 0.2	63.7	8.1	59.1	56.7	6.1	37.1	0.57	2248	7029
Dyna-Gro	Shirley	3.1 ± 0.2	65.4	8.6	58.2	57.3	4.5	36.9	0.55	2178	6747
NC Exp.	Yadkin	3.1 ± 0.2	64.2	8.7	59.6	55.1	4.8	38.3	0.56	2184	6779
VA	Jamestown	3.1 ± 0.2	64.4	9.1	57.5	54.8	7.5	35.9	0.58	2279	6976
Pioneer	25R32	3.0 ± 0.2	66.0	9.8	63.0	57.1	4.6	39.7	0.57	2376	7082
Syngenta	Branson	2.9 ± 0.2	65.2	10.0	57.3	55.6	5.4	36.4	0.58	2260	6575

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

‡ based on University of Wisconsin Milk2006 software program.

TDN = Total Digestible Nutrients NEL = Net Energy for Lactation

NDF = Neutral Detergent Fiber ADF = Acid Detergent Fiber

Table 18. Mean yields and agronomic characteristics of 23 fall seeded oat lines evaluated for silage at the Middle Tennessee Research and Education Center during 2011.

Dry Weight 65% Moisture										
Brand	Variety	Avg. Yield ± Std Err. (n=1)	Avg. Yield ± Std Err. (n=1)	Moisture at harvest (n=1)	Emergence (n=1)	Winter Survival (n=1)	Lodging (n=1)	Height (n=1)		
		tons/a	tons/a	%	%	%	(score)	inches		
TX	TAMO 406	4.6 ± 0.2	13.2 ± 0.6	71.3	93.3	100	1.0	36		
TX	TX02D079	4.4 ± 0.2	12.5 ± 0.6	73.4	100.0	100	1.0	35		
LA	LA03063SBSBSB-S4	4.4 ± 0.2	12.4 ± 0.6	70.3	96.7	100	1.0	38		
LA	LA06041SBS-42	4.3 ± 0.2	12.2 ± 0.6	76.4	98.3	100	1.0	38		
TX	TX05CS556	4.0 ± 0.2	11.3 ± 0.6	75.5	100.0	100	1.0	36		
LA	LA06059SBS-66	3.9 ± 0.2	11.3 ± 0.6	74.1	96.7	100	1.0	40		
NC	NC07-3966	3.9 ± 0.2	11.2 ± 0.6	74.5	96.7	100	1.0	34		
LA	Horizon 270	3.9 ± 0.2	11.0 ± 0.6	75.0	98.3	100	1.0	35		
LA	LA05006GSBS-65-S1	3.8 ± 0.2	10.9 ± 0.6	77.4	98.3	100	1.0	38		
TX	TX09CS1112	3.8 ± 0.2	10.9 ± 0.6	73.3	98.3	100	1.0	32		
FL	Horizon 201	3.8 ± 0.2	10.8 ± 0.6	75.2	93.3	100	1.0	40		
NC	NC07-3834	3.7 ± 0.2	10.7 ± 0.6	77.2	96.7	100	1.0	35		
NC	NC07-3801	3.7 ± 0.2	10.5 ± 0.6	77.2	96.7	100	1.0	37		
FL	LA02012-S-B-139-S2-B-S1	3.6 ± 0.2	10.3 ± 0.6	76.0	96.7	100	1.0	39		
TX	TX07CS3697	3.6 ± 0.2	10.3 ± 0.6	74.9	100.0	100	1.0	38		
FL	FL99913-J1-S1	3.5 ± 0.2	10.1 ± 0.6	76.5	100.0	100	1.0	33		
NC	Rodgers	3.4 ± 0.2	9.8 ± 0.6	75.3	86.7	100	1.0	39		
TX	TX09CS1025	3.4 ± 0.2	9.8 ± 0.6	75.9	86.7	100	1.0	35		
FL	FL04178-FLID-B-S-2	3.4 ± 0.2	9.8 ± 0.6	76.2	98.3	100	1.0	39		
TX	TX07CS2783	3.4 ± 0.2	9.7 ± 0.6	76.7	98.3	100	1.0	38		
LA	FL0522-FLID-B-S-B-S-92-S1	3.4 ± 0.2	9.6 ± 0.6	77.0	96.7	100	1.0	36		
TX	TX09CS1066	3.3 ± 0.2	9.4 ± 0.6	75.3	85.0	100	1.0	34		
FL	FL02011-I-J2	2.4 ± 0.2	6.9 ± 0.6	74.8	96.7	62	1.0	35		
Average (bu/a)		3.7	10.6	75.2	96.0	98	1.0	37		
L.S.D. _{.05} (bu/a)		0.6	1.6							
C.V. (%)		9.2	9.2							

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 19. Mean yields † and feed quality characteristics of 23 oat varieties evaluated for silage at the Middle Tennessee Research and Education Center during 2011.

Brand	Variety	Dry Weight		Moisture at Harvest (n=1)	Crude Protein (n=1)	NDF (n=1)	NDF 30h		Starch (n=1)	ADF (n=1)	TDN (n=1)	NEL (n=1)	Milk/ton [‡] (n=1)	Milk/acre [‡] (n=1)
		Avg. Yield ± Std Err. (n=1)	tons/a	%	% dm	% dm	IV Digest (n=1)	% of NDF	% dm	% dm	% dm	Mcal/lb	lbs/ton	lbs/acre
TX	TAMO 406	4.6 ± 0.2		71.3	8.3	70.1		58.8	2.2	44.6	56.8	0.58	2190	10075
TX	TX02D079	4.4 ± 0.2		73.4	10.2	65.2		62.0	0.9	41.4	58.2	0.60	2353	10329
LA	LA03063SBSB-S4	4.4 ± 0.2		70.3	10.9	63.3		62.5	1.6	40.4	59.6	0.61	2462	10712
LA	LA06041SBS-42	4.3 ± 0.2		76.4	10.4	68.1		57.6	0.9	44.1	55.5	0.57	2047	8740
TX	TX05CS556	4.0 ± 0.2		75.5	8.4	70.0		51.1	1.9	45.6	56.5	0.58	1979	7856
LA	LA06059SBS-66	3.9 ± 0.2		74.1	8.2	70.5		60.7	1.2	44.7	57.3	0.59	2308	9092
NC	NC07-3966	3.9 ± 0.2		74.5	8.9	64.2		58.7	1.8	39.9	60.0	0.62	2237	8745
LA	Horizon 270	3.9 ± 0.2		75.0	9.1	65.7		58.7	2.0	41.9	57.7	0.59	2286	8823
LA	LA05006GSBS-65-S1	3.8 ± 0.2		77.4	9.8	62.5		61.3	1.5	39.3	60.0	0.62	2293	8759
TX	TX09CS1112	3.8 ± 0.2		73.3	9.5	65.6		61.7	1.6	41.9	58.8	0.60	2411	9186
FL	Horizon 201	3.8 ± 0.2		75.2	7.9	63.9		60.7	2.0	40.9	59.0	0.61	2183	8274
NC	NC07-3834	3.7 ± 0.2		77.2	9.0	66.9		59.6	1.2	42.6	57.7	0.59	2271	8471
NC	NC07-3801	3.7 ± 0.2		77.2	9.5	64.4		63.8	1.7	40.2	59.4	0.61	2457	9065
FL	LA02012-S-B-139-S2-B-S1	3.6 ± 0.2		76.0	9.2	60.6		66.3	1.4	38.6	60.8	0.63	2311	8344
TX	TX07CS3697	3.6 ± 0.2		74.9	10.1	69.4		55.0	1.9	44.7	55.7	0.57	2043	7375
FL	FL99913-J1-S1	3.5 ± 0.2		76.5	10.3	63.5		61.2	1.9	40.1	60.2	0.62	2422	8525
NC	Rodgers	3.4 ± 0.2		75.3	7.9	66.4		64.8	2.3	41.9	59.5	0.61	2475	8463
TX	TX09CS1025	3.4 ± 0.2		75.9	10.3	66.2		59.2	1.8	41.5	57.5	0.59	2252	7701
FL	FL04178-FLID-B-S-2	3.4 ± 0.2		76.2	8.0	66.6		56.8	1.4	43.2	57.3	0.59	2150	7330
TX	TX07CS2783	3.4 ± 0.2		76.7	10.6	61.7		61.7	2.6	38.6	60.3	0.62	2432	8294
LA	FL0522-FLID-B-S-B-S-92-S1	3.4 ± 0.2		77.0	10.1	67.6		57.4	1.0	43.4	56.9	0.58	2155	7219
TX	TX09CS1066	3.3 ± 0.2		75.3	9.7	65.3		58.2	2.4	41.3	58.5	0.60	2329	7662
FL	FL02011-I-J2	2.4 ± 0.2		74.8	8.6	61.1		56.2	1.9	39.6	58.6	0.60	1957	4697

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

NDF = Neutral Detergent Fiber

ADF = Acid Detergent Fiber

TDN = Total Digestible Nutrients

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 20. Mean yields and agronomic characteristics of eight fall seeded oat lines evaluated for silage at the Middle Tennessee Research and Education Center for two years (2010-2011).

Brand Variety	Dry Weight 65% Moisture				Height (n=2) inches
	Avg. Yield ± Std Err. (n=2)	tons/a	Avg. Yield ± Std Err. (n=2)	Moisture at harvest (n=2) %	
TX TAMO 406	3.5 ± 0.1	9.9 ± 0.3	67.8	1.0	31
LA LA03063SBSBSB-S4	3.1 ± 0.1	9.0 ± 0.3	67.0	1.0	32
FL Horizon 201	3.0 ± 0.1	8.6 ± 0.3	69.8	1.0	34
TX TX05CS556	3.0 ± 0.1	8.5 ± 0.3	71.2	1.0	31
TX TX07CS3697	2.9 ± 0.1	8.3 ± 0.3	70.3	1.0	33
LA Horizon 270	2.7 ± 0.1	7.8 ± 0.3	70.5	1.0	30
TX TX07CS2783	2.7 ± 0.1	7.8 ± 0.3	71.3	1.0	33
NC Rodgers	2.7 ± 0.1	7.7 ± 0.3	71.0	1.0	33
Average (bu/a)	3.0	8.4	69.9	1	32
L.S.D._{.05} (bu/a)	0.4	1.1			
C.V. (%)	8.9	8.9			

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 21. Mean yields † and feed quality characteristics of eight oat varieties evaluated for silage at the Middle Tennessee Research and Education Center for two years (2010-2011).

Brand Variety	Dry Weight				NDF 30h IV Digest (n=2) % of NDF	NDF (n=2) % dm	Crude Protein (n=2) % dm	Starch (n=2) % dm	ADF (n=2) % dm	TDN (n=2) % dm	NEL (n=2) Mcals/lb	Milk/ton [‡] (n=2) lbs/ton	Milk/acre [‡] (n=2) lbs/acre
	Avg. Yield ± Std Err. (n=2)	tons/a	Moisture at Harvest (n=2) %	Moisture Crude Protein (n=2) % dm									
TX TAMO 406	3.5 ± 0.1	67.8	8.8	65.4	56.0	65.4	8.8	5.0	41.7	58.2	0.58	2331	7928
LA LA03063SBSBSB-S4	3.1 ± 0.1	67.0	10.0	60.4	58.9	60.4	10.0	4.6	38.5	59.3	0.59	2416	7630
FL Horizon 201	3.0 ± 0.1	69.8	7.9	61.0	56.9	61.0	7.9	5.7	38.7	59.1	0.59	2302	6812
TX TX05CS556	3.0 ± 0.1	71.2	8.8	66.1	52.5	66.1	8.8	3.1	42.9	56.7	0.56	2108	6188
TX TX07CS3697	2.9 ± 0.1	70.3	9.4	65.1	53.2	65.1	9.4	4.3	41.8	56.5	0.57	2177	6230
LA Horizon 270	2.7 ± 0.1	70.5	9.8	63.1	55.7	63.1	9.8	4.3	40.1	58.7	0.59	2381	6467
TX TX07CS2783	2.7 ± 0.1	71.3	10.2	60.8	57.5	60.8	10.2	4.9	38.3	60.0	0.60	2448	6648
NC Rodgers	2.7 ± 0.1	71.0	8.7	63.6	57.6	63.6	8.7	4.6	40.6	58.3	0.59	2390	6502

† yields reported are dry weight basis unless otherwise indicated, feed analysis reported on an "dry weight" basis

NDF = Neutral Detergent Fiber

TDN = Total Digestible Nutrients

ADF = Acid Detergent Fiber

NEL = Net Energy for Lactation

‡ based on University of Wisconsin Milk2006 software program.

Table 22. Characteristics, as described by the seed company, of corn silage hybrids evaluated in yield tests in Tennessee during 2011.†

Brand	Hybrid \$	Grain		Herbicide		Released or	
		Color	Maturity	Tolerance	BT Gene	Experimental	Seed Treatment
Augusta	A5337EVT3	Y	111	RR	CB/RW	R	Poncho 250
Augusta	A5461GTCBLLA	Y	111	GT/LL	CB	R	Avicta 500
Augusta	A5462GT3000A (RR/LL/CB/RW)	Y	112	GT/LL	CB/RW	R	Avicta 500
Augusta	A5560VT3	Y	110	RR	CB/RW	R	Poncho 250
Augusta	A5464GTCBLL	Y	114	RR/LL	CB	R	Cruiser 250
Augusta	A6166GT3000A (RR/LL/CB/RW)	Y	116	RR/LL	CB/RW	R	Avicta 500
Augusta	A6867CBLL	Y	117	LL	CB	R	Cruiser 250
Augusta	A6867GTCBLLA	Y	117	RR/LL	Bt	R	Avicta 500
Augusta	A7664VT3	Y	114	RR	CB/RW	R	Poncho 250
Croplan	6286 SS (RR2/LL/CB/RW)	Y	113	RR2/LL	GCB,HXT,RW,	R	Cruiser 250
Croplan	7131VT3	Y	114	RR	CB/RW	R	Cruiser 250
Croplan	8221VT3	Y	118	RR	YGCB/RW	R	Cruiser 250
Croplan	8505VT3P	Y	117	RR	YG,CB,C,RW	R	Cruiser 250
Croplan	8756VT3	Y	118	RR	YGCB/RW	R	Cruiser 250
Croplan	9009 RH	Y	124	RR/LL	YGCB/RW	R	Cruiser 250
DeKalb	DKC67-21 GENVT3P	Y	117	RR	YG,CB,C,RW	R	Poncho 500, Votivo
Masters Choice	MC-590	Y	116	---	---	R	Poncho 250
Masters Choice	MCT-6583 (RR/LL/CB/RW)	Y	115	RR/LL	CB/RW	R	Poncho 250
Mycogen	TMF2H918 (RR/LL/HX)	Y	123	RR/LL	HX1	R	Cruiser 250
Mycogen	TMF2L872 (RR/LL/HX1)	Y	118	RR/LL	HX1	R	Cruiser 250
Wyffels	W8437 (VT3Pro)	Y	115	RR	YG,CB,C,RW	R	Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250
Wyffels	W8681 (VT3Pro)	Y	115	RR2	YG,CB,C,RW	R	Metalaxyl,ipconazole,trifloxystrobin,clothianidin 250

Codes:

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

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

CL = contains a gene for tolerance to Imidazolinone class herbicides

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

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

LL = contains a gene for tolerance to glufosinate

W = white grain

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

Table 23. Contact information for corn hybrid seed companies evaluated in yield tests in Tennessee during 2011.†

Company	Contact	Phone	Email	Web site	Address
Augusta Seed Corporation	Dennis Rawley Matt Rawley	540-886-6055 540-255-5902	augustaseed@aol.com		473 Tisdale Farm Ln, Stuanton, VA 24401
Croplan Genetics	Jesse Witt Keith Saum Jim Payne Ashley Plymale Matt Sowder Darrin Holder	256-221-5932 731-610-7006 901-652-0903 270-719-1570 901-355-7367 270-207-0190	jbwitt@landolakes.com kdsaum@landolakes.com jpayne@ourcoop.com	www.croplangenetics.com	Consolidated Ag Products (Agrilience) and Tennessee Farmers Co-op Locations
Monsanto (Dekalb)		800-335-2676	www.monsanto.com www.dekalb.com		800 N. Lindberg Blvd, St. Louis, MO 63167
Masters Choice	Ryan Carter	618-697-8898	ryan@seedcorn.com	www.seedcorn.com	3010 St. Rt. 146 E. Anna, IL 62906
Mycogen Seed	Joe Emanuele	724-261-9115	jemanuele@dow.com	www.dowagro.com/mycogen	3563 Hilty Road, Export, PA 15632
Wyffels Hybrids Inc.	Dave Strawn	309-944-8334	dstrawn@wyffels.com	www.wyffels.com	13344 US Hwy 6, Geneseo, IL 61254

Table 24. Contact information for small grains seed companies evaluated in yield tests in Tennessee during 2010-11.

Company	Contact	Phone	Email	Web site	Address
Armor, Delta King (Cullum Seeds)	Lane Dill	901-233-0274	lanedill@jwrayseeds.com	www.cullumseeds.com	P.O. Box 178, Fisher, AR 72429
Dixie (Cache River Valley Seed)	Jason McGarrh	870-275-2779	jasonm@crvseed.com	www.crvseed.com	P.O. Box 10, Cash, AR 72421
Croplan Genetics	Jesse Witt Keith Saum Ashley Plymale	256-221-5932 731-610-7006 270-719-1570	JBWitt@landolakes.com kdsaum@landolakes.com	www.croplangenetics.com	Consolidated Ag Products (Agrilience) and Tennessee Farmers Co-op Locations
	Jim Payne Matt Sowder	901-652-0903 901-355-7267	ipayne@ourcoop.com	www.ourcoop.com	
Delta Grow Seed	Lee Hughes	800-530-7933	leehughes19@hotmail.com	www.deltagrow.com	P O Box 219, England, AR 72046
Dyna-Gro (Crop Production Services)	Todd Theobald	731-885-1212 765-623-1382	todd.theobald@cpsagu.com	www.dynagroseed.com	710 South First Street, Union City, TN 38621
University of Missouri	Mary Ann Quade Anne McKendry	573-884-7333 573-882-7707	quadem@missouri.edu mckendrya@missouri.edu		University of MO Foundation Seed 3600 New Haven Rd Columbia, MO 65201
North Carolina State University	Paul Murphy	919-513-0000	paul_murphy@ncsu.edu		NC State University 840 Method Rd., Unit 3 Raleigh, NC 27695-7629
Ohio Seed Improvement Association	John Armstrong	614-889-1136	armstrong@ohseed.org		6150 Avery Road, Box 477 Dublin, OH 43017-0477
Pioneer Hi-Bred Int.	Michael Hughes	800-331-2475	michael.hughes@pioneer.com	www.pioneer.com	700 Boulevard South, Suite 302, Huntsville, AL 35802
Progeny	Corey Dildine	870-208-6032	corey@progenyag.com	www.progenyag.com	1529 Hwy 193, Wynne, AR 72396
Syngenta	June Hancock	870-483-7691	june.hancock@syngenta.com	www.agriprowheat.com	778 CR 680, Bay, AR 72411
Terral Seed Inc	Larry Mullen	318-231-8811	lmullen@terralseed.com	www.terralseed.com	P O Box 826, Lake Providence, LA 71254
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu		3421 Joe Johnson Dr, Knoxville, TN 37996-4561

(continued)

Table 24. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2010-11.

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	huff1@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 Tech	David Whitt	804-746-4884	dwhitt@vt.edu	www.virginiacrop.org	Virginia Crop Improvement Assoc. 9142 Atlee Station Rd Mechanicsville, VA 23116
Warren Seed	Lanny Warren	731-234-2921	lanny.warren@charter.net		208 South Thompson St., Union City, TN 38261
USDA (Oats)	Myron Fountain	919-513-7739	Myron.Fountain@are.usda.gov		USDA-ARS Plant Science Research Unit 1416 Gardner Hall, Dept Plant Pathology North Carolina State University, Campus Box 7616 Raleigh, NC 27695-7616

Variety test results are posted on UT's website at:
<http://varietytrials.tennessee.edu> and www.utcrops.com

SP618 200 1/12 12-0090 R12-5210-024-004-12

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.
UT Extension provides equal opportunities in programs and employment.