Corn Silage Tests in Tennessee

2022

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This report is available as a pdf and in sortable, mobile friendly tables at:

search.utcrops.com/corn-silage

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CORN SILAGE YIELD TESTS

2022

Experimental Procedures

AgResearch and Education Center Tests: Six corn hybrids were evaluated for silage yield and quality in 2022. The tests were conducted at the Highland Rim (Springfield), Middle Tennessee (Spring Hill), Plateau (Crossville), East Tennessee (Knoxville), and Northeast Tennessee (Greeneville) AgResearch and Education Centers. The plots at all locations consisted of two rows, planted 30 inches apart, 30 feet in length. Entries were arranged in a randomized complete block design with three replications. Yields were adjusted to both dry weight and 65% moisture. Plots were planted at 36,000 seeds/ac with a population goal of 34,000 plants/ac. The resulting plant populations, as well as the planting and harvesting dates, are given in Table 1. Plots were harvested using commercial silage harvesters. A sub-sample of approximately 3 lbs was taken from each plot for analysis. Fresh weight and dried weight were recorded on each sample for determination of moisture at harvest. Dried samples were then ground and analyzed for nutritive content. Silage quality analyses were provided by the UT Beef and Forage Center using a Foss DS2500F (Foss North America, Eden Prairie, MN) instrument with the 2021 Unfermented Corn Silage calibration provided by the NIRS Forage and Feed Consortium (Berea, KY). Predictions for milk production per ton and milk production per acre were calculated using the University of Wisconsin Milk2006 program.

Growing Season: Corn silage official variety trials were planted between late-April and late-May at the University of Tennessee AgResearch and Education Center (REC) locations. Early season rains delayed corn planting throughout the state in April. The weather remained mixed throughout planting, allowing for a large amount of planting to take place in short bursts in mid-May. Statewide corn planting caught up to the five-year average by mid-May, with 84 percent of corn planted in Tennessee. Drought conditions prevailed across the

state from mid-June to mid-July, stressing young corn during critical growing periods. Rains in the end of July and early August came too late to aid in corn development. By late August, 29 percent of the crop was rated good to excellent. The Greeneville location averaged 36% moisture at harvest, which is well below the recommended moisture range for harvesting corn silage. Therefore, this location was dropped from the analysis. The Spring Hill location had very low yield and poor quality due to the unfavorable weather conditions this year. This location was kept in the analysis as it is representative of conditions observed across the state this year on non-irrigated acres.

Interpretation of Data:

The tables on the following pages have been prepared with the entries listed in order of yield performance, the highest-yielding entry being listed first. Mean separation was performed using the **Fisher's Protected LSD (Least Significant Difference) test**. The mean trait value of any two entries being compared must differ by at least the LSD amount shown to be considered different at the 5% level of probability of significance. To simplify interpretation, **Mean Separation Letters** have been listed next to each entry for traits analyzed across locations. Hybrids that have any letter in common are not significantly different in yield at the 5% level of probability based on the LSD test. Hybrids with performance not significantly different from the top performing hybrid will have an "A" included in the list of mean separation letters next to that entry.

Table 1. Location information from the University of Tennessee Institute of Agriculture (UTIA) AgResearch and Education Centers (REC) where corn silage variety tests were conducted in 2022.

AgResearch and Education Center	Location	Planting Date	Harvest Date	Plant Population	Soil Type
East Tennessee	Knoxville	28-Apr-2022	9-Aug-2022	32,702	Shady Loam
Plateau	Crossville	24-May-2022	31-Aug-2022	35,558	Lily Loam
Northeast Tennessee*	Greeneville	2-May-2022	29-Aug-2022	not eval.	Holston Loam
Middle Tennessee	Spring Hill	28-Apr-2022	25-Jul-2022	30,911	Maury Silty Clay Loam
Highland Rim	Springfield	27-Apr-2022	15-Aug-2022	35,058	Dickson Silt Loam

*This location was planted and harvested; however, due to low average moisture at harvest (36%) which was outside the range of normal silage harvest, this location was removed from further analysis.

Table 2-a. Across location mean yield and agronomic traits of corn hybrids evaluated for silage in small plot replicated trials at four REC locations in Tennessee during 2022. Analysis included hybrid performance over a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Avg. Yield 65% Moisture (*tons/acre*)			Milk/ton§ (*lbs/ton*)			Milk/acre§ (*lbs/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	6.4 A			18 A			3,138 A			20,842 A		
NK1748-3110	RR,LL	3110	5.8 A	6.8 A		17 A	19 A		3,337 A	3,261 A		20,287 A	22,425 A	
DKC 70-64 RIB	RR,LL	SSX	5.7 A			16 A			3,250 A			19,753 A		
DKC 67-66 RIB	RR,LL	SSX	5.7 A			16 A			3,160 A			18,710 A		
NK1701-3220-EZ1	RR,LL	3220	5.6 A	6.7 A	7.1	16 A	19 A	20	3,241 A	3,219 A	3,094	19,005 A	21,761 A	20,892
NK1838 3110	RR,LL	3110	5.4 A			15 A			3,297 A			18,282 A		
Average			**5.8**	**6.7**		**16**	**19**		**3,237**	**3,240**		**19,480**	**22,093**	
Standard Error			**1.4**	**1.5**		**4**	**4**		**239**	**126**		**5,149**	**4,945**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**15**	**13**		**15**	**13**		**7**	**4**		**16**	**12**	

Table 2-a, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Moisture at Harvest (*%*)			Plant Height (*inches*)			Ear Height (*inches*)			Lodging‖ (*%*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	66 A			98 A			40 A			0.2		
NK1748-3110	RR,LL	3110	68 A	69 A		95 A	102 A		36 A	39 A		0.1	0.0	
DKC 70-64 RIB	RR,LL	SSX	67 A			94 A			37 A			0.1		
DKC 67-66 RIB	RR,LL	SSX	67 A			95 A			35 A			0.2		
NK1701-3220-EZ1	RR,LL	3220	68 A	69 A	66	96 A	103 A	103	38 A	40 A	41	0.1	0.0	0.2
NK1838 3110	RR,LL	3110	68 A			98 A			37 A			0.1		
Average			**67**	**69**		**96**	**103**		**37**	**40**		**0.1**	**0.0**	
Standard Error			**2**	**2**		**11**	**11**		**4**	**5**		**0.4**	**0.19**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**.**	**.**	
C.V.			**6**	**4**		**7**	**6**		**10**	**11**		**.**	**.**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
§ Based on University of Wisconsin Milk2006 software program.
‖ ANOVA was not performed for lodging, mean values are given.

Table 2-b. Across location mean dry weight yield and feed quality characteristics of corn hybrids evaluated for silage in small plot replicated trials at four REC locations in Tennessee during 2022. Analysis included hybrid performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Crude Protein¶ (*% dm*)			Neutral Detergent Fiber¶ (*% dm*)			30 hr In Vitro Neutral Detergent Fiber Digestibility¶ (*% of NDF*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	6.4 A			8.4 A			44.4 A			52.8 A		
NK1748-3110	RR,LL	3110	5.8 A	6.8 A		8.2 A	7.8 A		42.9 A	44.3 A		55.5 A	55.1 A	
DKC 70-64 RIB	RR,LL	SSX	5.7 A			8.5 A			41.9 A			56.2 A		
DKC 67-66 RIB	RR,LL	SSX	5.7 A			8.2 A			42.9 A			56.1 A		
NK1701-3220-EZ1	RR,LL	3220	5.6 A	6.7 A	7.1	8.1 A	8.0 A	7.7	43.2 A	44.2 A	46.8	54.6 A	54.5 A	52.4
NK1838 3110	RR,LL	3110	5.4 A			8.5 A			42.7 A			54.9 A		
Average			**5.8**	**6.7**		**8.3**	**7.9**		**43.0**	**44.3**		**55.0**	**54.8**	
Standard Error			**1.4**	**1.5**		**0.7**	**0.5**		**6.4**	**3.7**		**2.4**	**1.6**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**15**	**13**		**5**	**6**		**9**	**6**		**7**	**5**	

Table 2-b, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Starch¶ (*% dm*)			Acid Detergent Fiber¶ (*% dm*)			Total Digestable Nutrients¶ (*% dm*)			Net Energy for Lactation¶ (*Mcals/lb*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	27.2 A			22.5 A			69.2 A			0.68 A		
NK1748-3110	RR,LL	3110	28.6 A	25.7 A		22.1 A	23.2 A		72.0 A	72.0 A		0.71 A	0.69 A	
DKC 70-64 RIB	RR,LL	SSX	28.1 A			21.4 A			71.1 A			0.69 A		
DKC 67-66 RIB	RR,LL	SSX	28.0 A			22.1 A			69.9 A			0.68 A		
NK1701-3220-EZ1	RR,LL	3220	27.6 A	24.6 A	23.2	21.9 A	22.6 A	24.4	70.7 A	71.4 A	69.4	0.69 A	0.68 A	0.67
NK1838 3110	RR,LL	3110	28.8 A			21.3 A			71.4 A			0.70 A		
Average			**28.0**	**25.2**		**21.9**	**22.9**		**70.7**	**71.7**		**0.69**	**0.69**	
Standard Error			**8.4**	**5.3**		**3.7**	**2.2**		**2.6**	**1.3**		**0.04**	**0.02**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**18**	**12**		**11**	**8**		**4**	**3**		**5**	**3**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
¶ Nutritive content values were calculated on a 100% dry matter (DM) basis.

Table 3. Location comparison of mean dry weight yields of corn hybrids evaluated for silage in replicated small plot trials at four REC locations in Tennessee during 2(performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Knoxville (*tons/acre*)			Crossville (*tons/acre*)			Spring Hill (*tons/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	6.4 A			7.3 A			8.9 A			2.3 A		
NK1748-3110	RR,LL	3110	5.8 A	6.8 A		7.4 A	9.1 A		7.0 A	8.1 A		1.9 AB	3.4 A	
DKC 70-64 RIB	RR,LL	SSX	5.7 A			7.6 A			7.2 A			1.3 C		
DKC 67-66 RIB	RR,LL	SSX	5.7 A			6.9 A			7.0 A			1.6 BC		
NK1701-3220-EZ1	RR,LL	3220	5.6 A	6.7 A	7.7	6.8 A	8.9 A	8.5	7.0 A	8.4 A	7.7	1.3 C	2.8 B	4.2
NK1838 3110	RR,LL	3110	5.4 A			7.1 A			5.7 A			1.9 AB		
Average			**5.8**	**6.7**		**7.2**	**9.0**		**7.1**	**8.2**		**1.7**	**3.1**	
Standard Error			**1.4**	**1.5**		**0.2**	**1.9**		**0.8**	**1.3**		**0.2**	**1.5**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**0.54**	**0.47**	
C.V.			**15**	**13**		**5**	**4**		**19**	**17**		**17**	**10**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.

Table 4-a. By location mean yield and agronomic traits of corn hybrids evaluated for silage in small plot replicated trials at the East Tennessee AgResearch and Education Center in Knoxville, Tennessee during 2022. Analysis included hybrid performance over a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Avg. Yield 65% Moisture (*tons/acre*)			Milk/ton§ (*lbs/ton*)			Milk/acre§ (*lbs/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	7.3 A			21 A			3,358 A			24,486 A		
NK1748-3110	RR,LL	3110	7.4 A	9.1 A		21 A	26 A		3,477 A	3,335 A		25,798 A	30,313 A	
DKC 70-64 RIB	RR,LL	SSX	7.6 A			22 A			3,628 A			27,664 A		
DKC 67-66 RIB	RR,LL	SSX	6.9 A			20 A			3,064 A			21,026 A		
NK1701-3220-EZ1	RR,LL	3220	6.8 A	8.9 A	8.5	19 A	25 A	24	3,637 A	3,426 A	3,343	24,803 A	29,922 A	28,340
NK1838 3110	RR,LL	3110	7.1 A			20 A			3,550 A			25,297 A		
Average			**7.2**	**9.0**		**21**	**26**		**3,452**	**3,380**		**24,846**	**30,118**	
Standard Error			**0.2**	**1.9**		**1**	**5**		**140**	**178**		**1,357**	**4,828**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**5**	**4**		**5**	**4**		**7**	**3**		**9**	**3**	

Table 4-a, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Moisture at Harvest (*%*)			Plant Height (*inches*)			Ear Height (*inches*)			Lodging‖ (*%*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	64 A			121 A			48 A			0.7		
NK1748-3110	RR,LL	3110	64 A	65 A		119 A	122 B		47 A	48 A		0.3	0.2	
DKC 70-64 RIB	RR,LL	SSX	62 A			122 A			50 A			0.3		
DKC 67-66 RIB	RR,LL	SSX	64 A			121 A			47 A			0.9		
NK1701-3220-EZ1	RR,LL	3220	65 A	64 A	63	121 A	124 A	120	48 A	49 A	46	0.3	0.2	0.1
NK1838 3110	RR,LL	3110	64 A			128 A			47 A			0.0		
Average			**64**	**64**		**122**	**123**		**48**	**48**		**0.4**	**0.2**	
Standard Error			**1**	**1**		**4**	**3**		**2**	**1**		**0.6**	**0.38**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**2**		**N.S.**	**N.S.**		**.**	**.**	
C.V.			**4**	**3**		**4**	**1**		**6**	**5**		**.**	**.**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
§ Based on University of Wisconsin Milk2006 software program.
‖ ANOVA was not performed for lodging, mean values are given.

Table 4-b. By location mean dry weight yield and feed quality characteristics of corn hybrids evaluated for silage in small plot replicated trials at the East Tennessee AgResearch and Education Center in Knoxville, Tennessee during 2022. Analysis included hybrid performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Crude Protein¶ (*% dm*)			Neutral Detergent Fiber¶ (*% dm*)			30 hr In Vitro Neutral Detergent Fiber Digestibility¶ (*% of NDF*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	7.3 A			6.1 A			36.8 A			49.7 A		
NK1748-3110	RR,LL	3110	7.4 A	9.1 A		6.4 A	6.6 A		37.7 A	39.8 A		50.1 A	50.7 A	
DKC 70-64 RIB	RR,LL	SSX	7.6 A			6.5 A			32.2 A			52.1 A		
DKC 67-66 RIB	RR,LL	SSX	6.9 A			5.9 A			41.0 A			47.5 A		
NK1701-3220-EZ1	RR,LL	3220	6.8 A	8.9 A	8.5	6.3 A	6.6 A	6.5	33.1 A	37.4 A	40.9	53.2 A	51.5 A	49.3
NK1838 3110	RR,LL	3110	7.1 A			6.4 A			33.8 A			50.9 A		
Average			**7.2**	**9.0**		**6.3**	**6.6**		**35.8**	**38.6**		**50.6**	**51.1**	
Standard Error			**0.2**	**1.9**		**0.3**	**0.2**		**2.6**	**3.2**		**3.0**	**1.5**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**5**	**4**		**7**	**7**		**13**	**6**		**10**	**6**	

Table 4-b, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Starch¶ (*% dm*)			Acid Detergent Fiber¶ (*% dm*)			Total Digestable Nutrients¶ (*% dm*)			Net Energy for Lactation¶ (*Mcals/lb*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	38.3 A			19.2 A			71.5 A			0.72 A		
NK1748-3110	RR,LL	3110	36.5 A	34.3 A		19.6 A	21.0 A		73.0 A	72.2 A		0.73 A	0.71 A	
DKC 70-64 RIB	RR,LL	SSX	42.7 A			16.1 A			75.1 A			0.76 A		
DKC 67-66 RIB	RR,LL	SSX	32.8 A			22.2 A			67.4 A			0.67 A		
NK1701-3220-EZ1	RR,LL	3220	41.0 A	36.1 A	33.7	16.8 A	18.8 A	20.9	75.3 A	73.2 A	71.8	0.76 A	0.72 A	0.71
NK1838 3110	RR,LL	3110	42.4 A			17.1 A			74.0 A			0.75 A		
Average			**39.0**	**35.2**		**18.5**	**19.9**		**72.7**	**72.7**		**0.73**	**0.71**	
Standard Error			**3.1**	**3.7**		**1.8**	**1.8**		**2.0**	**1.5**		**0.02**	**0.03**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**14**	**10**		**17**	**9**		**5**	**2**		**5**	**2**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
¶ Nutritive content values presented on a 100% dry matter (DM) basis.

Table 5-a. By location mean yield and agronomic traits of corn hybrids evaluated for silage in small plot replicated trials at the Plateau AgResearch and Education Center in Crossville, Tennessee during 2022. Analysis included hybrid performance over a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Avg. Yield 65% Moisture (*tons/acre*)			Milk/ton§ (*lbs/ton*)			Milk/acre§ (*lbs/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	8.9 A			25 A			3,309 A			29,399 A		
NK1748-3110	RR,LL	3110	7.0 A	8.1 A		20 A	23 A		3,702 A	3,463 A		25,688 A	27,621 A	
DKC 70-64 RIB	RR,LL	SSX	7.2 A			20 A			3,582 A			25,638 A		
DKC 67-66 RIB	RR,LL	SSX	7.0 A			20 A			3,493 A			24,329 A		
NK1701-3220-EZ1	RR,LL	3220	7.0 A	8.4 A	7.7	20 A	24 A	22	3,456 A	3,318 A	3,113	24,114 A	27,628 A	23,533
NK1838 3110	RR,LL	3110	5.7 A			16 A			3,642 A			20,557 A		
Average			**7.1**	**8.2**		**20**	**24**		**3,531**	**3,391**		**24,954**	**27,625**	
Standard Error			**0.8**	**1.3**		**2**	**4**		**133**	**194**		**2,451**	**2,996**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**19**	**17**		**19**	**17**		**7**	**5**		**17**	**16**	

Table 5-a, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Moisture at Harvest (*%*)			Plant Height (*inches*)			Ear Height (*inches*)			Lodging‖ (*%*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	63 C			103 A			41 A			0.0		
NK1748-3110	RR,LL	3110	68 A-C	70 A		105 A	113 A		34 A	43 A		0.0	0.0	
DKC 70-64 RIB	RR,LL	SSX	65 BC			101 A			38 A			0.0		
DKC 67-66 RIB	RR,LL	SSX	64 BC			102 A			37 A			0.0		
NK1701-3220-EZ1	RR,LL	3220	70 AB	70 A	70	105 A	112 A	109	41 A	44 A	43	0.0	0.0	0.0
NK1838 3110	RR,LL	3110	74 A			101 A			36 A			0.3		
Average			**67**	**70**		**103**	**113**		**38**	**43**		**0.0**	**0.0**	
Standard Error			**2**	**1**		**4**	**8**		**3**	**6**		**0.1**	**0.00**	
L.S.D.$_{.05}$			**6**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**.**	**.**	
C.V.			**5**	**3**		**6**	**4**		**13**	**14**		**.**	**.**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
§ Based on University of Wisconsin Milk2006 software program.
‖ ANOVA was not performed for lodging, mean values are given.

Table 5-b. By location mean dry weight yield and feed quality characteristics of corn hybrids evaluated for silage in small plot replicated trials at the Plateau AgResearch and Education Center in Crossville, Tennessee during 2022. Analysis included hybrid performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Crude Protein¶ (*% dm*)			Neutral Detergent Fiber¶ (*% dm*)			30 hr In Vitro Neutral Detergent Fiber Digestibility¶ (*% of NDF*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	8.9 A			8.8 A			37.0 A			49.9 A		
NK1748-3110	RR,LL	3110	7.0 A	8.1 A		8.4 A	8.1 A		35.9 A	40.2 A		55.4 A	55.9 A	
DKC 70-64 RIB	RR,LL	SSX	7.2 A			8.8 A			34.9 A			54.2 A		
DKC 67-66 RIB	RR,LL	SSX	7.0 A			8.1 A			33.7 A			55.4 A		
NK1701-3220-EZ1	RR,LL	3220	7.0 A	8.4 A	7.7	8.2 A	8.5 A	7.7	37.3 A	40.6 A	44.1	51.4 A	54.4 A	51.2
NK1838 3110	RR,LL	3110	5.7 A			8.8 A			34.1 A			53.9 A		
Average			**7.1**	**8.2**		**8.5**	**8.3**		**35.5**	**40.4**		**53.4**	**55.2**	
Standard Error			**0.8**	**1.3**		**0.3**	**0.2**		**2.1**	**3.8**		**2.1**	**1.9**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**19**	**17**		**6**	**6**		**10**	**5**		**7**	**5**	

Table 5-b, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Starch¶ (*% dm*)			Acid Detergent Fiber¶ (*% dm*)			Total Digestable Nutrients¶ (*% dm*)			Net Energy for Lactation¶ (*Mcals/lb*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	37.0 A			17.5 A			70.9 A			0.71 A		
NK1748-3110	RR,LL	3110	37.8 A	29.7 A		18.3 A	21.0 A		76.3 A	74.3 A		0.76 A	0.72 A	
DKC 70-64 RIB	RR,LL	SSX	38.4 A			16.9 A			74.7 A			0.75 A		
DKC 67-66 RIB	RR,LL	SSX	40.4 A			16.6 A			73.7 A			0.73 A		
NK1701-3220-EZ1	RR,LL	3220	34.9 A	27.8 A	25.6	18.1 A	20.1 A	22.1	72.9 A	72.4 A	69.3	0.73 A	0.70 A	0.67
NK1838 3110	RR,LL	3110	38.3 A			16.4 A			75.3 A			0.76 A		
Average			**37.8**	**28.8**		**17.3**	**20.5**		**74.0**	**73.4**		**0.74**	**0.71**	
Standard Error			**2.8**	**7.6**		**1.1**	**2.4**		**1.8**	**1.3**		**0.02**	**0.04**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**13**	**11**		**11**	**6**		**4**	**3**		**4**	**3**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
¶ Nutritive content values presented on a 100% dry matter (DM) basis.

Table 6-a. By location mean yield and agronomic traits of corn hybrids evaluated for silage in small plot replicated trials at the Middle Tennessee AgResearch and Education Center in Spring Hill, Tennessee during 2022. Analysis included hybrid performance over a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Avg. Yield 65% Moisture (*tons/acre*)			Milk/ton§ (*lbs/ton*)			Milk/acre§ (*lbs/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	2.3 A			6 A			2,616 A			5,881 A		
NK1748-3110	RR,LL	3110	1.9 AB	3.4 A		6 AB	10 A		2,512 A	2,851 A		4,394 A-C	9,908 A	
DKC 70-64 RIB	RR,LL	SSX	1.3 C			4 C			2,399 A			3,135 C		
DKC 67-66 RIB	RR,LL	SSX	1.6 BC			5 BC			2,598 A			4,177 BC		
NK1701-3220-EZ1	RR,LL	3220	1.3 C	2.8 B	4.2	4 C	8 B	12	2,543 A	2,878 A	2,916	3,368 BC	8,472 A	12,831
NK1838 3110	RR,LL	3110	1.9 AB			6 AB			2,550 A			4,957 AB		
Average			**1.7**	**3.1**		**5**	**9**		**2,536**	**2,865**		**4,319**	**9,190**	
Standard Error			**0.2**	**1.5**		**1**	**4**		**71**	**338**		**617**	**5,356**	
L.S.D.$_{.05}$			**0.54**	**0.5**		**1.6**	**1**		**N.S.**	**N.S.**		**1,567**	**N.S.**	
C.V.			**17**	**10**		**17**	**10**		**4**	**3**		**19**	**10**	

Table 6-a, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Moisture at Harvest (*%*)			Plant Height (*inches*)			Ear Height (*inches*)			Lodging‖ (*%*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	69 A			73 A			31 A			0.0		
NK1748-3110	RR,LL	3110	71 A	71 A		70 A	86 A		28 A	31 A		0.0	0.0	
DKC 70-64 RIB	RR,LL	SSX	73 A			70 A			27 A			0.0		
DKC 67-66 RIB	RR,LL	SSX	74 A			71 A			25 A			0.0		
NK1701-3220-EZ1	RR,LL	3220	73 A	74 A	70	69 A	83 A	92	27 A	31 A	35	0.0	0.0	0.0
NK1838 3110	RR,LL	3110	66 A			70 A			28 A			0.0		
Average			**71**	**72**		**71**	**84**		**28**	**31**		**0.0**	**0.0**	
Standard Error			**3**	**1**		**3**	**15**		**2**	**4**		**0.0**	**0.00**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**.**	**.**	
C.V.			**6**	**5**		**7**	**4**		**11**	**12**		**.**	**.**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
§ Based on University of Wisconsin Milk2006 software program.
‖ ANOVA was not performed for lodging, mean values are given.

Table 6-b. By location mean dry weight yield and feed quality characteristics of corn hybrids evaluated for silage in small plot replicated trials at the Middle Tennessee AgResearch and Education Center in Spring Hill, Tennessee during 2022. Analysis included hybrid performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Crude Protein¶ (*% dm*)			Neutral Detergent Fiber¶ (*% dm*)			30 hr In Vitro Neutral Detergent Fiber Digestibility¶ (*% of NDF*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	2.3 A			9.6 A			62.2 A			59.8 A		
NK1748-3110	RR,LL	3110	1.9 AB	3.4 A		8.4 A	8.3 A		61.5 A	55.0 A		60.1 A	58.2 A	
DKC 70-64 RIB	RR,LL	SSX	1.3 C			9.0 A			60.4 A			63.4 A		
DKC 67-66 RIB	RR,LL	SSX	1.6 BC			9.4 A			60.7 A			63.2 A		
NK1701-3220-EZ1	RR,LL	3220	1.3 C	2.8 B		9.1 A	8.7 A	8.5	62.1 A	54.9 A	53.7	60.6 A	58.8 A	55.5
NK1838 3110	RR,LL	3110	1.9 AB			9.7 A			63.4 A			58.9 A		
Average			**1.7**	**3.1**		**9.2**	**8.5**		**61.7**	**54.9**		**61.0**	**58.5**	
Standard Error			**0.2**	**1.5**		**0.2**	**0.3**		**1.7**	**6.9**		**1.1**	**2.0**	
L.S.D.$_{.05}$			**0.54**	**0.5**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**17**	**10**		**4**	**5**		**5**	**4**		**3**	**4**	

Table 6-b, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Starch¶ (*% dm*)			Acid Detergent Fiber¶ (*% dm*)			Total Digestable Nutrients¶ (*% dm*)			Net Energy for Lactation¶ (*Mcals/lb*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	4.6 A			33.0 A			64.0 A			0.59 A		
NK1748-3110	RR,LL	3110	4.2 A	10.7 A		32.5 A	29.5 A		62.9 A	67.8 A		0.57 A	0.62 A	
DKC 70-64 RIB	RR,LL	SSX	2.4 A			32.5 A			62.1 A			0.55 A		
DKC 67-66 RIB	RR,LL	SSX	4.1 A			32.1 A			64.5 A			0.59 A		
NK1701-3220-EZ1	RR,LL	3220	4.3 A	10.3 A		32.9 A	29.0 A		63.2 A	68.3 A	68.0	0.58 A	0.63 A	0.64
NK1838 3110	RR,LL	3110	2.9 A			33.1 A			63.1 A			0.58 A		
Average			**3.8**	**10.5**		**32.7**	**29.2**		**63.3**	**68.1**		**0.58**	**0.63**	
Standard Error			**1.3**	**6.3**		**1.2**	**3.6**		**1.0**	**5.0**		**0.01**	**0.05**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**60**	**18**		**6**	**6**		**3**	**2**		**3**	**2**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
¶ Nutritive content values presented on a 100% dry matter (DM) basis.

Table 7-a. By location mean yield and agronomic traits of corn hybrids evaluated for silage in small plot replicated trials at the Highland Rim AgResearch and Education Center in Springfield, Tennessee during 2022. Analysis included hybrid performance over a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2021-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Avg. Yield 65% Moisture (*tons/acre*)			Milk/ton§ (*lbs/ton*)			Milk/acre§ (*lbs/acre*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	7.2 A			20 A			3,268 A			23,600 A		
NK1748-3110	RR,LL	3110	7.0 A	6.4 A		20 A	18 A		3,609 A	3,382 A		24,953 A	21,844 A	
DKC 70-64 RIB	RR,LL	SSX	6.7 A			19 A			3,392 A			22,574 A		
DKC 67-66 RIB	RR,LL	SSX	7.2 A			21 A			3,483 A			25,307 A		
NK1701-3220-EZ1	RR,LL	3220	7.4 A	6.6 A	6.4	21 A	19 A	6	3,280 A	3,242 A	2,993	24,334 A	21,398 A	18,611
NK1838 3110	RR,LL	3110	6.7 A			19 A			3,422 A			23,003 A		
Average			**7.0**	**6.5**		**20**	**19**		**3,409**	**3,312**		**23,962**	**21,621**	
Standard Error			**0.7**	**0.7**		**2**	**2**		**154**	**157**		**2,769**	**3,229**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**9**	**9**		**9**	**9**		**7**	**4**		**11**	**10**	

Table 7-a, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Moisture at Harvest (*%*)			Plant Height (*inches*)			Ear Height (*inches*)			Lodging‖ (*%*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	68 A			95 A			38 A			0.0		
NK1748-3110	RR,LL	3110	67 A	69 A		85 A	88 A		34 A	35 A		0.0	0.0	
DKC 70-64 RIB	RR,LL	SSX	68 A			82 A			33 A			0.0		
DKC 67-66 RIB	RR,LL	SSX	65 A			85 A			33 A			0.0		
NK1701-3220-EZ1	RR,LL	3220	65 A	68 A	68	88 A	93 A	94	34 A	37 A	37	0.0	0.0	0.0
NK1838 3110	RR,LL	3110	68 A			92 A			35 A			0.0		
Average			**67**	**69**		**88**	**90**		**35**	**36**		**0.0**	**0.0**	
Standard Error			**2**	**3**		**6**	**5**		**3**	**2**		**0.0**	**0.00**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**.**	**.**	
C.V.			**4**	**3**		**11**	**13**		**14**	**13**		**.**	**.**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
§ Based on University of Wisconsin Milk2006 software program.
‖ ANOVA was not performed for lodging, mean values are given.

Table 7-b. By location mean dry weight yield and feed quality characteristics of corn hybrids evaluated for silage in small plot replicated trials at the Highland Rim AgResearch and Education Center in Springfield, Tennessee during 2022. Analysis included hybrid performance across a 1 yr (2022), 2 yr (2021-2022) and 3 yr (2020-2022) period.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Avg. Yield Dry Weight (*tons/acre*)			Crude Protein¶ (*% dm*)			Neutral Detergent Fiber¶ (*% dm*)			30 hr In Vitro Neutral Detergent Fiber Digestibility¶ (*% of NDF*)		
			1 yr‡	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	7.2 A			9.2 BC			41.7 A			51.6 A		
NK1748-3110	RR,LL	3110	7.0 A	6.4 A		9.3 B	8.2 A		36.5 A	42.3 A		56.1 A	55.6 A	
DKC 70-64 RIB	RR,LL	SSX	6.7 A			9.8 A			40.2 A			55.1 A		
DKC 67-66 RIB	RR,LL	SSX	7.2 A			9.2 B			36.2 A			58.1 A		
NK1701-3220-EZ1	RR,LL	3220	7.4 A	6.6 A	6.4	8.6 C	8.1 A	8.2	40.7 A	44.2 A	47.9	51.6 A	53.0 A	53.8
NK1838 3110	RR,LL	3110	6.7 A			9.4 AB			39.3 A			55.8 A		
Average			**7.0**	**6.5**		**9.3**	**8.2**		**39.1**	**43.2**		**54.7**	**54.3**	
Standard Error			**0.7**	**0.7**		**0.2**	**0.9**		**2.7**	**4.9**		**2.4**	**1.6**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**0.5**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**9**	**9**		**3**	**4**		**12**	**7**		**6**	**4**	

Table 7-b, cont.

Hybrid	Herb. Pkg.†	Insect Pkg.†	Starch¶ (*% dm*)			Acid Detergent Fiber¶ (*% dm*)			Total Digestable Nutrients¶ (*% dm*)			Net Energy for Lactation¶ (*Mcals/lb*)		
			1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr	1 yr	2 yr	3 yr
DKC 64-44 RIB	RR,LL	SSX	28.7 A			20.3 A			70.5 A			0.70 A		
NK1748-3110	RR,LL	3110	35.8 A	27.9 A		17.9 A	21.3 A		75.2 A	73.6 A		0.75 A	0.71 A	
DKC 70-64 RIB	RR,LL	SSX	29.0 A			19.9 A			72.4 A			0.72 A		
DKC 67-66 RIB	RR,LL	SSX	34.8 A			17.5 A			73.9 A			0.73 A		
NK1701-3220-EZ1	RR,LL	3220	29.7 A	24.1 A	18.8	20.0 A	22.5 A	25.3	70.8 A	71.5 A	68.6	0.70 A	0.69 A	0.65
NK1838 3110	RR,LL	3110	31.6 A			19.0 A			72.9 A			0.72 A		
Average			**31.6**	**26.0**		**19.1**	**21.9**		**72.6**	**72.5**		**0.72**	**0.70**	
Standard Error			**4.1**	**7.0**		**1.5**	**3.1**		**2.0**	**0.9**		**0.02**	**0.03**	
L.S.D.$_{.05}$			**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**		**N.S.**	**N.S.**	
C.V.			**20**	**14**		**13**	**9**		**5**	**3**		**5**	**3**	

* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.
† For a full description of abbreviated biotech traits, see table 10.
‡ Hybrids that have any letter in common, within a column, are not significantly different at the 5% level of probability using a least signficiant difference (L.S.D) mean separation test. The L.S.D value is given, when significant differences were observed, and is marked as N.S., when no significant differences were observed among hybrids.
¶ Nutritive content values presented on a 100% dry matter (DM) basis.

Table 8. Characteristics, as described by the seed company, of corn silage hybrids evaluated in yield tests in Tennessee during 2022†.

Hybrid	Grain Color	Maturity	Herb. Pkg.‡	Insect Pkg.‡	Refuge in a Bag	Released or Experimental	Seed Treatment
DKC 64-44 RIB	Y	114	RR,LL	SSX	Y	R	PV1250 + B360 + EDC
DKC 67-66 RIB	Y	117	RR,LL	SSX	Y	R	PV1250 + B360 + EDC
DKC 70-64 RIB	Y	120	RR,LL	SSX	Y	R	PV1250 + B360 + EDC
NK1701-3220-EZ1	Y	117	RR,LL	3220		R	Cruiser maxx
NK1748-3110	Y	117	RR,LL	3110		R	Cruiser maxx
NK1838 3110	Y	118	RR,LL	3110		R	Cruiser maxx

† Information on this table provided by the respective seed companies.
‡ For a full description of abbreviated biotech traits, see table 10.
* Hybrids marked with an asterisk were in the top performing "A" group for yield across locations within two (**) or three (***) consecutive years of the previous three year evaluation period.

Table 9. Contact information for corn hybrid seed companies evaluated in silage tests in Tennessee during 2022.

Company	Contact	Phone	Email	Website
Nk Seeds	Brad Mcalpin	870-227-0524	brad.mcalpin@syngenta.com	
Dekalb (Bayer Crop Science)	James Griffin	731-413-9825	james.griffin1@bayer.com	www.dekalbasgrowdeltapine.com/

Table 10. Abbreviations used to identify biotech seed traits contained in corn silage hybrids evaluated in Tennessee in 2022.

Abbreviation	Name	Characteristic
LL	Bayer CropScience LibertyLink®	Glufosinate herbicide tolerance.
RR	Monsanto Roundup Ready® Corn	Glyphosate herbicide tolerance.
SSX	Monsanto Genuity™ SmartStax™ DowAgrosciences SmartStax™	Cry1A.105, Cry2Ab2, Cry1F, Cry3Bb1, Cry34/35Ab1 Western, Northern, and Mexican Corn Rootworms, European and Southwestern Corn Borers, Sugarcane Borer, Southern Cornstalk Borer, Western Bean and Black Cutworms, Corn Earworm, Fall Armyworm protection. Glyphosate and glufosinate herbicide tolerance.
3110	Agrisure Viptera™ 3110	Vip3A, Cry1Ab, European and Southwestern Corn Borers, Southern Cornstalk Borer, Fall and Beet Armyworm, Black and Western Bean Cutworm, Sugarcane Borer, Common Stalk borer and Dingy Cutworm protection Glyphosate tolerance.
3220	Agrisure Viptera™ 3220	Vip3A, Cry1Ab, Cry1F. Protection from corn earworm, western bean cutworm, black cutworm, dingy cutworm, fall armyworm, true armyworm, beet armyworm, sugarcane borer, southwestern corn borer, southern cornstalk borer, lesser cornstalk borer, western corn rootworm, northern corn rootworm, Mexican corn rootworm, European corn borer and common stalk borer. Glyphosate and glufosinate tolerance.
RIB	Refuge in Bag	