



2018 Timothy and Kentucky Bluegrass Report

G.L. Olson, S.R. Smith, T.D. Phillips, C.D. Teutsch, and J.C. Henning, Plant and Soil Sciences

Introduction

Timothy (*Phleum pratense*) is the fourth most widely sown cool-season perennial grass used in Kentucky for forage—after tall fescue, orchardgrass, and Kentucky bluegrass. It is a late-maturing bunchgrass that is primarily harvested as hay, particularly for horses. It also can be used for grazing or wildlife habitat.

Management is similar to that for other cool-season grasses. Harvesting at the mid- to late boot stage is needed to assure good yields and high forage quality. The quality of timothy declines more rapidly after heading than other cool-season grasses. In Kentucky, timothy behaves like a short-lived perennial, with stands usually lasting two to three years.

Kentucky bluegrass (*Poa pratensis*) is a high-quality, highly palatable, long-lived pasture plant with limited use for hay. It tolerates close, frequent grazing better than most grasses. It has low yields and low summer production and becomes dormant and brown during hot, dry summers. Kentucky bluegrass is slow to establish.

This report provides maturity and yield data on timothy and Kentucky bluegrass varieties included in yield trials in Kentucky. Tables 10 and 11 show summaries of all timothy and Kentucky bluegrass varieties tested in Kentucky for the last 15 years. The UK Forage Extension website, at forages.ca.uky.edu, contains forage variety testing reports from Kentucky and surrounding states and a large number of other forage publications.

Considerations in Selection

Local adaptation and seasonal yield. Choose a variety that is adapted to Kentucky, as indicated by good performance across locations in replicated yield trials, such as those presented in this publication. Also, look for varieties that are productive in the desired season of use, whether for hay or grazing. Later-maturing varieties are desirable when timothy is grown in pure stands for hay; early maturing varieties provide a better fit when timothy is grown in mixtures with legumes.

Seed quality. Buy premium-quality seed that is high in germination and purity and free from weed seed. Buy certified seed or proprietary varieties of seed of an improved variety. An improved variety is one that has performed well in independent trials such as those reported in this publication.

Description of the Test

Data from five studies are reported. Timothy varieties and Kentucky bluegrass varieties were sown at Lexington in 2015,

Table 1. Temperature and rainfall at Lexington, Kentucky in 2016, 2017, and 2018.

	2016				2017				2018 ²			
	Temp		Rainfall		Temp		Rainfall		Temp		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	32	+1	0.80	-2.06	40	+9	6.81	+3.95	31	0	2.01	-0.85
FEB	38	+3	6.09	+2.88	47	+12	4.46	+1.25	45	+10	9.77	+6.56
MAR	52	+8	4.07	-0.33	48	+4	3.34	-1.06	42	-2	5.16	+0.76
APR	57	+2	3.97	+0.09	62	+7	4.17	+0.29	50	-5	5.52	+1.64
MAY	64	0	9.17	+4.70	66	+2	7.74	+3.27	73	+9	8.39	+3.92
JUN	76	+4	5.09	+1.43	73	+1	7.68	+4.02	76	+4	6.42	+2.76
JUL	79	+3	7.43	+2.43	76	0	4.49	-0.51	77	+1	6.15	+1.15
AUG	79	+4	4.37	+0.44	74	-1	6.66	+2.73	77	+2	6.45	+2.52
SEP	74	+6	2.18	-1.02	69	+1	4.72	+1.52	74	+6	12.88	+9.68
OCT	64	+7	0.37	-2.20	60	+3	6.06	+3.49	59	+2	6.54	+3.97
NOV	51	+6	1.94	-1.45	47	+2	3.09	-0.30				
DEC	37	+1	9.4	+5.42	35	-1	2.66	-1.32				
Total			54.88	+10.33			61.88	+17.33			69.29	+32.11

¹ DEP is departure from the long-term average.

² 2018 data is for ten months through October.

2016, and 2017 as part of the University of Kentucky Forage Variety Testing Program. The soil at Lexington (Maury) is a well-drained silt loam and is well-suited for timothy and bluegrass production. Seedings were made at the rate of 8 pounds per acre for timothy and 15 pounds per acre for Kentucky bluegrass into a prepared seedbed with a disk drill. Plots were 5 feet by 20 feet in a randomized complete block design with four replications with a harvested plot area of 5 feet by 15 feet. Nitrogen was applied at 60 pounds per acre of actual nitrogen in March, May, and August for a total of 180 pounds/acre/year. The test was harvested using a sickle-type forage plot harvester leaving a 3-inch stubble to simulate a hay management system. The first cutting was harvested when spring growth of most varieties had reached the mid- to late-boot stage. Subsequent harvests were taken when forage growth was adequate for harvest. Fresh weight samples were taken at each harvest to calculate dry-matter production. Establishment, fertility (P, K, and lime based on regular soil tests), weed control, and harvest were managed according to University of Kentucky Cooperative Extension Service recommendations.

Results and Discussion

Weather data for Lexington are presented in Table 1.

Maturity ratings (see Table 2 for maturity scale) and dry matter yields are reported in tables 3 through 7. Yields are given by harvest date for 2018 and as total annual production. Stated yields are adjusted for percent weeds; therefore, value listed is for crop only. Varieties are listed by descending total production. Experimental varieties, listed separately at the bottom of the tables, are not available commercially.

Statistical analyses were performed on all data to determine if the apparent differences are truly due to varietal differences.

Varieties not significantly different from the top variety in the column are marked with one asterisk (*). To determine if two varieties are significantly different, compare the difference between them to the Least Significant Difference (LSD) at the bottom of that column. If the difference is equal to or greater than the LSD, the varieties are significantly different when grown under those conditions. The Coefficient of Variation (CV) is a measure of the variability of the data and is included for each column of means. Low variability is desirable, and increased variability within a study results in higher CVs and larger LSDs.

Tables 8 and 9 summarize information about distributors and yield performance for Kentucky bluegrass and timothy varieties included in tests in this report. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Remember that experimental varieties are not available for farm use. In tables 8 and 9, an open block indicates the variety was not in that particular test (labeled at the top of the column); an “x” in the block means the variety was in the test but yielded significantly less than the top-yielding variety. A single asterisk (*) means the variety was not significantly different from the highest-yielding variety, based on the 0.05 LSD. It is best to choose a variety that has performed well over several years and locations.

Tables 10 and 11 are summaries of yield data of commercial varieties for Kentucky bluegrass (1996-2018) and timothy (2000-2018) that have been entered in the Kentucky trials. The data are listed as a percentage of the mean of the commercial varieties entered in each specific trial. In other words, the mean for each trial is 100 percent—varieties with percentages over 100 yielded higher than average and varieties with percentages less than 100 yielded lower than average. Direct, statistical comparisons of varieties cannot be made using the summary tables 10 and 11, but these comparisons do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have stable performance; others may have performed well in wet years or on particular soil types. These details may influence variety choice, and the information can be found in the yearly reports. See footnotes in tables 10 and 11 to determine to which yearly report to refer.

Summary

Selecting a good timothy or Kentucky bluegrass variety is an important first step in establishing a productive stand of grass. Proper management, beginning with seedbed preparation and continuing throughout the life of the stand, is necessary for even the highest yielding variety to produce to its genetic potential.

Table 2. Descriptive scheme for the stages of development in perennial forage grasses.

Code	Description	Remarks
Leaf development		
11	First leaf unfolded	Applicable to regrowth of established (plants) and to primary growth of seedlings. Further subdivision by means of leaf development index (see text).
12	2 leaves unfolded	
13	3 leaves unfolded	
•	•••••	
19	9 or more leaves unfolded	
Sheath elongation		
20	No elongated sheath	Denotes first phase of new spring growth after overwintering. This character is used instead of tillering which is difficult to record in established stands.
21	1 elongated sheath	
22	2 elongated sheaths	
23	3 elongated sheaths	
•	•••••	
29	9 or more elongated sheaths	
Tillering (alternative to sheath elongation)		
21	Main shoot only	Applicable to primary growth of seedlings or to single tiller transplants.
22	Main shoot and 1 tiller	
23	Main shoot and 2 tillers	
24	Main shoot and 3 tillers	
•	•••••	
29	Main shoot and 9 or more tillers	
Stem elongation		
31	First node palpable	More precisely an accumulation of nodes. Fertile and sterile tillers distinguishable.
32	Second node palpable	
33	Third node palpable	
34	Fourth node palpable	
35	Fifth node palpable	
37	Flag leaf just visible	
39	Flag leaf ligule/collar just visible	
Booting		
45	Boot swollen	
Inflorescence emergence		
50	Upper 1 to 2 cm of inflorescence visible	
52	¼ of inflorescence emerged	
54	½ of inflorescence emerged	
56	¾ of inflorescence emerged	
58	Base of inflorescence just visible	
Anthesis		
60	Preanthesis	Inflorescence-bearing internode is visible. No anthers are visible.
62	Beginning of anthesis	First anthers appear.
64	Maximum anthesis	Maximum pollen shedding.
66	End of anthesis	No more pollen shedding.
Seed ripening		
75	Endosperm milky	Inflorescence green.
85	Endosperm soft doughy	No seeds loosening when inflorescence is hit on palm.
87	Endosperm hard doughy	Inflorescence losing chlorophyll; a few seeds loosening when inflorescence hit on palm.
91	Endosperm hard	Inflorescence-bearing internode losing chlorophyll; seeds loosening in quantity when inflorescence hit on palm.
93	Endosperm hard and dry	Final stage of seed development; most seeds shed.

Smith, J. Allan, and Virgil W. Hayes. 1981. p. 416-418. 14th International Grasslands Conference Proc. 1981. June 14-24, 1981, Lexington, Kentucky.

Table 3. Dry matter yields, seedling vigor, maturity, and stand persistence of Kentucky bluegrass varieties sown September 7, 2016, at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Oct 5, 2016	Maturity ²		Percent Stand					Yield (tons/acre)					2-year Total
		2017	2018	2016	2017		2018		2017	2018				
		Apr 20	May 8	Nov 29	Mar 14	Oct 31	Mar 15	Oct 19	Total	May 8	Aug 9	Oct 22	Total	
Commercial Varieties-Available for Farm Use														
Park	5.0	53.5	55.5	100	99	100	100	100	2.20	0.79	1.26	0.98	3.03	5.24*
Barderby	4.0	56.5	58.0	100	100	100	100	100	1.82	0.62	1.07	0.73	2.42	4.24
Ginger	3.0	58.0	62.0	100	100	100	100	100	1.61	0.86	1.10	0.55	2.51	4.12
Tirem	1.0	46.3	55.5	95	95	99	100	100	1.49	0.30	1.04	0.58	1.92	3.41
Mean	3.3	53.6	57.8	99	99	100	100	100	1.78	0.64	1.12	0.74	2.47	4.25
CV,%	29.9	3.4	1.7	3	2	1	1	1	23.43	35.67	22.54	32.24	10.26	12.48
LSD,0.05	1.6	2.9	1.6	4	3	1	1	1	0.67	0.37	0.40	0.37	0.41	0.85

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 4. Dry matter yields, seedling vigor, maturity, and stand persistence of Kentucky bluegrass varieties sown September 8, 2017, at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Oct 12, 2017	Maturity ²		Percent Stand			Yield (tons/acre)				
		2018		2017	2018		2018				
		May 8	Jun 15	Oct 12	Mar 14	Oct 19	May 8	Jun 15	Aug 9	Oct 24	Total
Commercial Varieties-Available for Farm Use											
Barderby	4.8	56.5	29.0	99	98	100	0.48	0.85	0.80	0.45	2.57*
Ginger	4.3	58.0	29.0	99	99	85	0.61	0.96	0.53	0.15	2.26*
Balin	4.5	56.0	60.0	98	98	93	0.60	0.77	0.38	0.22	1.97*
Park	5.0	55.5	29.0	100	100	99	0.45	0.79	0.33	0.16	1.72
Tirem ³	-	29.0	60.0	-	70	98	0.25	0.49	0.46	0.24	1.45
Experimental Varieties											
RAD-2018	3.0	43.5	29.0	70	74	98	0.65	0.68	0.47	0.43	2.23*
Mean	4.4	50.2	38.4	96	91	95	0.52	0.77	0.50	0.28	2.06
CV,%	14	13.0	0.0	5	9	11	45.32	27.16	40.79	57.02	22.93
LSD,0.05	1.1	10.3	0.0	8	13	16	0.37	0.32	0.32	0.25	0.71

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.

³ Extremely slow germination presented no stand assessment by Oct 12.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 5. Dry matter yields, seedling vigor, maturity, and stand persistence of timothy varieties sown September 4, 2015, at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Oct 15, 2015	Maturity ²			Percent Stand						Yield (tons/acre)						3-year Total	
		2016	2017	2018	2015	2016		2017		2018		2016	2017	2018				
		May 11	May 15	May 17	Oct 15	Mar 18	Oct 17	Mar 24	Oct 31	Mar 19	Oct 24	Total	Total	May 17	Aug 3	Oct 17		Total
Commercial Varieties-Available for Farm Use																		
Derby	5.0	55.0	56.0	58.0	100	100	95	95	95	95	95	4.52	4.38	2.22	0.73	0.45	3.40	12.30*
Clair	1.5	54.5	57.5	58.0	69	77	91	96	96	96	95	3.67	3.55	2.03	0.93	0.49	3.45	10.67*
Climax	4.6	49.3	54.0	52.5	100	100	92	92	89	90	90	3.10	3.08	1.53	0.68	0.60	2.81	8.99
Barfleo	3.8	48.5	52.0	51.3	99	99	91	91	92	92	90	2.93	2.73	1.24	0.67	0.40	2.31	7.96
Experimental Varieties																		
TM0801	4.6	56.5	58.0	58.0	97	99	96	96	96	96	94	4.35	3.63	2.26	0.67	0.49	3.42	11.41*
KYPP0901	4.4	47.5	51.5	51.3	95	98	91	92	86	84	84	2.69	2.02	1.31	0.41	0.39	2.11	6.82
Mean	4.0	51.9	54.8	54.8	93	95	93	94	92	92	91	3.54	3.23	1.77	0.68	0.47	2.92	9.69
CV,%	11.1	5.2	3.8	5.2	12	11	5	4	6	7	7	15.23	29.16	24.04	53.22	35.30	29.22	21.24
LSD,0.05	0.7	4.1	3.2	4.3	17	15	8	6	8	9	9	0.81	1.42	0.64	0.55	0.25	1.28	3.10

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

The following is a list of University of Kentucky Cooperative Extension publications related to timothy and Kentucky bluegrass management. They are available from your county Extension office and are listed in the “Publications” section of the UK Forage website, forages.ca.uky.edu.

- Lime and Fertilizer Recommendations (AGR-1)
- Grain and Forage Crop Guide for Kentucky (AGR-18)
- Establishing Forage Crops (AGR-64)
- Timothy (AGR-84)
- Kentucky Bluegrass as a Forage Crop (AGR-134)
- Forage Identification and Use Guide (AGR-175)
- Establishing Horse Pastures (ID-147)

About the Authors

G.L. Olson is a research specialist, S.R. Smith and J.C. Henning are Extension professors and forage specialists, C.D. Teutsch is an Extension associate professor and forage specialist, and T.D. Phillips is an associate professor in tall fescue and grass breeding.

Table 6. Dry matter yields, seedling vigor, maturity, and stand persistence of timothy varieties sown September 7, 2016, at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Oct 5, 2016	Maturity ²		Percent Stand					Yield (tons/acre)					2-year Total
		2017	2018	2017		2018			2017	2018				
		May 15	May 17	Nov 29	Mar 14	Oct 31	Mar 15	Oct 19	Total	May 17	Aug 14	Oct 22	Total	
Commercial Varieties-Available for Farm Use														
Zenyatta	3.3	57.5	56.5	87	84	90	93	91	5.61	2.72	0.67	0.33	3.72	9.34*
Derby	4.3	57.5	57.0	99	97	97	97	91	5.45	2.58	0.69	0.32	3.58	9.04*
Barfleo	2.8	46.3	41.8	97	93	94	96	91	5.09	2.12	0.46	0.36	2.94	8.03*
Climax	5.0	56.0	55.0	100	98	98	98	91	5.05	2.34	0.36	0.28	2.97	8.02*
Clair	3.0	45.0	40.5	99	94	94	96	88	4.42	1.82	0.41	0.39	2.62	7.04
Anjo	2.0	45.0	40.5	87	79	86	89	86	3.88	1.74	0.38	0.35	2.46	6.35
Experimental Varieties														
TM0704DT	4.8	52.5	52.3	100	99	93	99	96	5.78	2.35	0.62	0.34	3.31	9.09*
KYPP0901	3.8	51.0	46.3	97	96	97	98	97	5.23	2.13	0.53	0.31	2.98	8.21*
Mean	3.7	51.3	48.7	96	92	94	96	91	5.07	2.22	0.51	0.33	3.07	8.14
CV,%	22.6	2.2	6.9	7	8	5	3	11	12.68	17.73	37.65	36.77	15.08	11.16
LSD,0.05	1.3	1.7	4.9	10	11	7	4	15	0.94	0.58	0.28	0.18	0.68	1.33

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 7. Dry matter yields, seedling vigor, plant height, maturity, and stand persistence of timothy varieties sown September 8, 2017, at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Oct 12, 2017	Plant Height (in) May 9	Maturity ²	Percent Stand				Yield (tons/acre)					
			2018	2017			2018		2018				
			May 9	Oct 12	Mar 14	Oct 19	May 9	Jun 19	Aug 15	Oct 24	Total		
Commercial Varieties-Available for Farm Use													
KYEarly	2.8	26.5	46.3	93	95	100	2.03	0.59	0.75	0.40	3.78*		
Barpenta	4.0	13.5	33.8	100	100	100	1.48	1.46	0.33	0.34	3.61*		
Barfleo	4.8	18.0	40.5	100	100	100	1.98	0.78	0.56	0.28	3.60*		
Dawn	5.0	24.5	45.0	100	100	100	1.91	0.63	0.57	0.43	3.53*		
Clair	4.5	14.5	33.8	100	100	100	1.30	1.47	0.39	0.37	3.52*		
Climax	4.8	16.5	40.3	100	100	100	1.61	1.08	0.32	0.34	3.34*		
Experimental Varieties													
TM9902	4.9	22.5	43.5	100	99	100	2.10	0.76	0.74	0.36	3.97*		
NCNelson	4.8	20.5	45.0	100	100	100	2.06	0.62	0.59	0.41	3.69*		
Mean	4.4	19.6	41.0	99.0	99.0	100	1.81	0.92	0.53	0.37	3.63		
CV,%	10.0	7.1	8.0	1.0	1.0	0	17.74	24.08	41.13	35.59	13.33		
LSD,0.05	0.6	2.0	4.8	2.0	2.0	0	0.47	0.33	0.32	0.19	0.71		

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 8. Performance of Kentucky bluegrass varieties across years at Lexington.

Variety	Proprietor/KY Distributor	2016 ¹		2017
		17 ²	18	18
Commercial Varieties-Available for Farm Use				
Balin	Pure Seed			*
Barderby	Barenbrug USA	*	x ³	*
Ginger	ProSeeds Marketing	*	x	*
Park (certified)	Public	*	*	x
Tirem	DLF Pickseed	x	x	x
Experimental Varieties				
RAD-2018	Radix Research			*

¹ Establishment year.

² Harvest year.

³ "x" in the block indicates the variety was in the test but yielded significantly less than the top yielding variety in the test. Open boxes indicate the variety was not in the test.

*Not significantly different from the highest yielding variety in the test.

Table 9. Performance of timothy varieties across years at Lexington.

Variety	Proprietor/KY Distributor	2015 ¹			2016		2017
		16 ²	17	18	17	18	18
Commercial Varieties-Available for Farm Use							
Anjo	Hood River Seed				x	x	
Barfleo	Barenbrug USA	x ³	x	*	*	x	*
Barpenta	Barenbrug USA						*
Clair	Ky Agric. Exp. Station	x	*	*	x	x	*
Climax	Canada Agr. Res. Station	x	*	*	*	x	*
Dawn	Hood River Seed						*
Derby	Southern States	*	*	*	*	*	
KYEarly	Smith Seed Services						*
Zenyatta	DLF Pickseed				*	*	
Experimental Varieties							
KYPP0901	Ky Agric. Exp. Station	x	x	x	*	x	
NCNelson	Green Consulting Services						*
TM0704DT	DLF Pickseed				*	*	
TM 0801	Allied Seed	*	*	*			
TM9902	Mountain View Seeds						*

¹ Establishment year.

² Harvest year.

³ "x" in the block indicates the variety was in the test but yielded significantly less than the top yielding variety in the test. Open boxes indicate the variety was not in the test.

*Not significantly different from the highest yielding variety in the test.

Table 10. Summary of Kentucky Bluegrass Yield Trials at Lexington 2004-2018 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	04 ^{1,2}	06	07	08	09	10	11	12	13	14	16	Mean ³ (#trials)
		3yr ⁴	4yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	
Adam 1	Radix Research	98											-
Barderby	Barenbrug USA			94		101	91	98	87	103	101	100	97(8)
Big Blue	Rose-AgriSeed					82			95				89(2)
Common	Public		71	66	68								68(3)
Ginger	ProSeeds Marketing		118	119	114	118	112	107	110	107	95	97	108(10)
Kenblue	Public	102	133				96	95	118	95	100		106(7)
Lato	Turf Seed Inc.			122									-
Park (certified)	Public								90	95	104	127	104(4)
RAD-5	Radix Research		103										-
RAD-339	Radix Research		101										-
RAD-643	Radix Research		94										-
RAD-731zx	Radix Research		87										-
RAD-762	Radix Research		94										-
RAD-1039	Radix Research				118								-
Tirem	DLF Pickseed											80	-

¹ Year trial was established.

² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2012 was harvested three years, so the final report would be "2015 Timothy and Kentucky Bluegrass Report" archived in the KY Forage website at <forages.ca.uky.edu>.

³ Mean only presented when respective variety was included in two or more trials.

⁴ Number of years of data.

Table 11. Summary of Kentucky Timothy Yield Trials 2000-2018 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington														Quicksand		Princeton		Mean ³ (#trials)
		00 ^{1,2} 2yr ⁴	01 3yr	02 4yr	06 3yr	07 3yr	08 3yr	09 3yr	11 3yr	12 3yr	13 3yr	14 3yr	15 3yr	16 2yr	99 2yr	01 2yr	00 3yr	04 2yr		
Alma	Newfield Seeds Co/Caudill Seed Co.																	81	-	
Anjo	Hood River Seed														80				-	
Auroro	General Feed and Grain	100														98			99(2)	
Barfleo	Barenbrug USA							95	91	101			108	80	101				96(6)	
Barpenta	Barenbrug USA					74			82	82									79(3)	
Clair	Ky Agric. Exp. Station		104	113	107	95	107	104	112	99	97	111	107	88		106		122	105(14)	
Classic	Cebeco International Seeds	100		86											86				91(3)	
Climax	Canada Agr. Res. Station				79	102	104	98	102	100	82	96	90	101					95(10)	
Colt	FS Growmark	105		100	90											112		99	101(5)	
Common	Public		95																-	
Comtral	Caudill Seed									92	92								92(2)	
Derby	Southern States				112	111		106	112	108	112	119	123	113			124		114(10)	
Dolina	DLF Pickseed	99		90															95(2)	
Express	Seed Research of Oregon			95		91		97	95										95(4)	
Hokuei	Snow Brand Seed	103																	-	
Hokusei	Snow Brand Seed	96													99				98(2)	
Joliette	Newfield Seeds Co/Caudill Seed Co.						86	89									90		88(3)	
Jonaton	Newfield Seeds Co/Caudill Seed Co.																84		-	
KY Early	Smith Seed/Central Farm Supply	102	103	115			102					119			104	103			107(7)	
Outlaw	Grassland West Company																107		-	
Richmond	Pickseed Canada Inc.	100													103				102(2)	
Summergraze	Brett Young										96								-	
Summit	Allied Seed, L.L.C.			112															-	
Talon	Seed Research of Oregon				110	112		108	106	109									109(5)	
Tenho	Barenbrug USA											84							-	
Treasure	Seed Research of Oregon				103	115		103	101	108									106(5)	
Tundra	DLF Pickseed	95																	-	
Tuukka	Ampac Seed Company		94	88												91	93		92(4)	
Varis	Mountain View Seeds												83						-	
Zenyatta	DLF Pickseed										103			117					110(2)	

¹ Year trial was established.

² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2012 was harvested 3 years, so the final report would be "2015 Timothy and Kentucky Bluegrass Report" archived in the KY Forage website at <forages.ca.uky.edu>.

³ Mean only presented when respective variety was included in two or more trials.

⁴ Number of years of data.



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