

# 2013 Timothy and Kentucky Bluegrass Report

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## 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 10-plus years. The UK Forage Extension Web site, at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage), 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 publica-

Table 1. Temperature and rainfall at Lexington, Kentucky, in 2011, 2012, and 2013<sup>2</sup>.

	2011				2012				2013 <sup>2</sup>			
	Temp		Rainfall		Temp		Rainfall		Temp		Rainfall	
	°F	DEP <sup>1</sup>	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	29	-2	2.10	-0.76	38	+7	4.80	+1.94	38	+7	4.50	+1.64
FEB	39	+4	6.34	+3.13	40	+5	5.39	+2.18	36	+1	1.78	-1.43
MAR	47	+3	4.76	+0.36	56	+12	5.64	+1.24	39	-5	5.47	+1.07
APR	58	+3	12.36	+8.48	56	+1	3.26	-0.62	55	0	4.46	+0.58
MAY	64	0	6.72	+2.25	69	+5	4.02	-0.45	65	+1	5.23	+0.76
JUN	74	+2	2.61	-1.05	73	+1	2.42	-1.24	72	0	7.32	+3.66
JUL	80	+4	6.29	1.29	81	+5	2.50	-2.50	72	-4	9.33	+4.33
AUG	75	0	2.89	-1.04	75	0	1.68	-2.25	72	-3	3.68	-0.25
SEP	66	-2	5.52	+2.32	67	-1	6.40	+3.20	67	-1	2.21	-0.99
OCT	55	-2	4.10	+1.53	55	-2	2.00	-0.57	55	-2	8.10	+5.53
NOV	50	+5	9.53	+6.14	43	-2	1.81	-0.65				
DEC	41	+5	5.58	+1.60	42	+6	9.57	+4.94				
Total			68.80	+24.25			49.49	+4.94			52.08	+14.90

<sup>1</sup> DEP is departure from the long-term average.

<sup>2</sup> 2013 data is for the ten months through October.

tion. 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 were sown at Lexington in 2011 and 2012, and Kentucky bluegrass varieties were sown at Lexington in 2010, 2011 and 2012 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. Seedlings 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. 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, 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 2013 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 that 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 (1996-2013) and timothy (2000-2013) 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 better 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 very stable performance; others may have performed very 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.

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

Code	Description	Remarks
<b>Leaf development</b>		
11	First leaf unfolded	Applicable to regrowth of established (plants) and to primary growth of seedlings.
12	2 leaves unfolded	Further subdivision by means of leaf development index (see text).
13	3 leaves unfolded	
•	•••••	
19	9 or more leaves unfolded	
<b>Sheath elongation</b>		
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	
<b>Tillering (alternative to sheath elongation)</b>		
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	
<b>Stem elongation</b>		
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	
<b>Booting</b>		
45	Boot swollen	
<b>Inflorescence emergence</b>		
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	
<b>Anthesis</b>		
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.
<b>Seed ripening</b>		
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, maturity and stand persistence of Kentucky bluegrass varieties sown September 6, 2010, at Lexington, Kentucky.**

Variety	Maturity <sup>1</sup>		Percent Stand						Yield (tons/acre)						3-year Total	
	2012	2013	2011		2012		2013		2011	2012	2013					
	Apr 25	May 9	Jul 12	Oct 18	Mar 21	Oct 23	Mar 22	Oct 21	Total	Total	May 9	Jun 28	Aug 2	Oct 21		Total
<b>Commercial Varieties—Available for Farm Use</b>																
Ginger	62.0	60.0	98	87	86	100	100	95	1.42	1.49	2.21	0.77	0.47	0.38	3.84	6.79*
Kenblue	64.0	59.5	97	98	100	100	100	100	1.58	1.14	1.57	0.62	0.46	0.46	3.11	5.84
Barderby	59.5	57.5	95	90	93	98	99	99	1.32	0.91	1.58	0.79	0.54	0.40	3.31	5.53
<b>Experimental Varieties</b>																
B-9.0967	54.5	53.5	98	96	96	100	100	100	1.24	1.10	0.80	0.67	0.45	0.41	2.33	4.66
RAD-KCC4L	57.0	56.0	85	65	68	98	98	98	0.81	0.71	1.23	0.56	0.43	0.29	2.51	4.03
Mean	59.4	57.3	94.0	87	89	99	99	98	1.26	1.07	1.48	0.68	0.47	0.39	3.02	5.29
CV,%	1.5	1.9	9.0	22	18	3	2	5	17.05	15.41	12.46	21.90	18.89	28.85	10.49	8.13
LSD,0.05	1.3	1.7	14.0	30	25	4	3	7	0.35	0.25	0.28	0.23	0.14	0.17	0.49	0.69

<sup>1</sup> 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.

## 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.

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 Web site, [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage).

- 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)

## Authors

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**Table 4. Dry matter yields, seedling vigor, maturity and stand persistence of Kentucky bluegrass varieties sown September 14, 2011, at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 11, 2011	Maturity <sup>2</sup>		Percent Stand					Yield (tons/acre)						2-year Total	
		2012	2013	2011		2012		2013		2012	2013					
		Apr 25	May 9	Oct 11	Mar 21	Oct 23	Mar 22	Oct 21	Total	May 9	Jun 28	Aug 2	Oct 21	Total		
<b>Commercial Varieties—Available for Farm Use</b>																
Ginger	4.3	61.3	58.5	100	100	100	100	98	0.88	2.18	0.87	0.49	0.37	3.91	5.06*	
Barderby	5.0	58.5	56.5	100	100	100	100	100	1.03	1.46	0.79	0.44	0.46	3.16	4.18*	
Kenblue	3.3	62.0	58.0	100	100	100	100	100	0.85	1.56	0.85	0.48	0.35	3.23	4.08	
<b>Experimental Varieties</b>																
RAD-1450	3.8	29.0	50.3	100	100	100	100	100	0.81	0.57	0.98	0.51	0.51	2.57	3.38	
RAD-KCC4L	4.8	58.5	57.0	100	100	100	100	100	0.33	1.22	0.73	0.45	0.36	2.76	3.09	
Mean	4.2	53.5	56.4	100	100	100	100	100	0.77	1.40	0.84	0.47	0.41	3.13	3.90	
CV,%	12.3	1.2	4.9	0	0	0	0	1	17.96	23.35	17.04	15.09	26.26	15.16	14.63	
LSD,0.05	0.8	1.0	4.4	0	0	0	0	2	0.22	0.50	0.22	0.11	0.17	0.73	0.92	

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

<sup>2</sup> 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 5. Dry matter yields, seedling vigor, maturity and stand persistence of Kentucky bluegrass varieties sown September 7, 2012, at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 16, 2012	Maturity <sup>2</sup>		Percent Stand				Yield (tons/acre)				
		2013		2012	2013		2013					
		May 21	Oct 16	Mar 20	Oct 22	May 21	Jun 28	Aug 2	Oct 24	Total		
<b>Commercial Varieties—Available for Farm Use</b>												
Kenblue	2.9	62.0	98	100	100	1.05	0.88	0.74	0.60	3.27*		
Ginger	3.5	62.0	98	98	98	0.91	0.87	1.02	0.31	3.11*		
Bardberby	3.6	61.5	100	100	100	0.96	0.58	0.87	0.41	2.82		
Park	5.0	60.5	78	100	100	0.89	0.65	0.67	0.35	2.56		
BigBlue	3.0	59.5	100	100	100	0.26	0.62	0.84	0.59	2.31		
<b>Experimental Varieties</b>												
RAD-2018	1.3	60.5	97	97	99	1.02	0.82	0.76	0.40	3.00*		
RAD-1448	3.4	54.5	100	100	100	0.64	0.93	0.85	0.55	2.98*		
RAD-1458	3.5	45.0	100	100	100	0.71	1.00	0.73	0.53	2.97*		
RAD-1445	2.6	47.8	97	98	99	0.56	0.69	0.61	0.35	2.21		
Mean	3.2	57.0	96	99	99	0.78	0.78	0.79	0.45	2.80		
CV,%	26.0	3.8	16	2	2	16.08	16.60	13.31	19.95	8.08		
LSD,0.05	1.2	3.2	22	3	3	0.18	0.19	0.15	0.13	0.33		

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

<sup>2</sup> 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 6. Dry matter yields, seedling vigor, maturity and stand persistence of timothy varieties sown September 14, 2011, at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 11, 2011	Maturity <sup>2</sup>		Percent Stand					Yield (tons/acre)					2-year Total
		2013		2011	2012		2013		2012	2013				
		May 4	May 24	Oct 11	Mar 21	Oct 23	Mar 22	Oct 22	Total	May 24	Jul 12	Oct 21	Total	
<b>Commercial Varieties—Available for Farm Use</b>														
Clair	2.0	53.5	56.0	100	100	100	100	100	2.85	3.73	0.85	1.52	6.11	8.96*
Derby	4.8	54.0	57.5	100	100	100	100	100	3.18	3.65	0.71	1.31	5.67	8.85*
Climax	4.8	50.3	57.5	100	100	100	100	100	2.52	3.61	0.70	1.42	5.74	8.26*
Talon	4.8	47.3	56.0	100	100	100	100	100	2.82	3.42	0.71	1.21	5.35	8.17*
Treasure	4.8	50.5	53.3	100	100	100	100	100	2.92	3.31	0.68	1.15	5.14	8.06*
Express	4.5	42.0	56.5	100	100	100	100	100	2.21	3.52	0.61	1.21	5.35	7.56
Barfleo	4.8	43.5	50.0	100	100	100	100	100	2.30	3.11	0.52	1.26	4.89	7.19
Barpenta	4.3	39.0	45.0	100	100	100	98	98	2.13	2.62	0.33	1.16	4.11	6.23
Mean	4.3	47.5	54.0	100	100	100	100	100	2.62	3.37	0.64	1.28	5.29	7.91
CV,%	13.3	5.3	3.5	0	0	1	1	1	9.41	7.95	18.63	17.59	8.23	7.92
LSD,0.05	0.8	3.7	4.4	0	0	1	2	2	0.36	0.39	0.18	0.33	0.68	0.92

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

<sup>2</sup> 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, maturity and stand persistence of timothy varieties sown September 7, 2012, at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 16, 2012	Maturity <sup>2</sup>		Percent Stand		Yield (tons/acre)			
		2013	2012	2013		2013			Total
		May 20	Oct 16	Mar 20	Oct 22	May 20	Jul 12	Oct 24	
<b>Commercial Varieties—Available for Farm Use</b>									
Treasure	4.8	56.0	100	100	100	3.34	0.99	1.03	5.37*
Talon	4.3	56.5	100	99	100	3.13	0.88	1.08	5.09*
Derby	3.8	57.5	95	95	95	3.06	0.94	1.03	5.04*
Barfleo	4.1	43.0	99	99	100	2.72	0.93	1.10	4.75*
Climax	3.8	56.5	96	96	95	2.78	0.94	0.86	4.59*
Clair	1.8	56.5	77	81	89	2.45	0.91	0.87	4.23
Comtral	4.3	37.0	97	97	98	2.26	0.78	0.96	4.00
Barpenta	3.6	39.0	98	98	98	2.06	0.66	0.93	3.66
<b>Experimental Varieties</b>									
TM 0802	3.4	53.5	94	94	96	2.99	0.94	0.97	4.90*
TM 0801	2.9	57.5	88	93	93	3.04	0.81	0.91	4.76*
TM 0804	3.8	51.8	96	97	98	2.86	0.78	0.96	4.61*
Mean	3.7	51.3	94	95	96	2.79	0.87	0.97	4.63
CV,%	21.2	4.6	10	9	5	9.58	31.43	33.96	16.04
LSD,0.05	1.1	3.4	13	12	7	0.39	0.40	0.48	1.07

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

<sup>2</sup> 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 at Lexington, Kentucky.**

Variety	Proprietor/KY Distributor	2010 <sup>1</sup>			2011		2012
		11 <sup>2</sup>	12	13	12	13	13
<b>Commercial Varieties—Available for Farm Use</b>							
Barderby	Barenbrug USA	*	x <sup>3</sup>	x	*	x	x
BigBlue	Pure Seed						x
Ginger	ProSeeds Marketing	*	*	*	*	*	*
Kenblue	Public	*	x	x	*	*	*
Park	Public						x
<b>Experimental Varieties</b>							
B-9.0967	Blue Moon Farms	*	x	x			
RAD-1445	Radix Research						x
RAD-1448	Radix Research						*
RAD-1450	Radix Research				*	x	
RAD-1458	Radix Research						*
RAD-2018	Radix Research						*
RAD-KCC4L	Radix Research	x	x	x	x	x	

<sup>1</sup> Establishment year

<sup>2</sup> Harvest year

<sup>3</sup> 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 at Lexington, Kentucky.**

Variety	Proprietor/KY Distributor	2011 <sup>1</sup>		2012
		12 <sup>2</sup>	13	13
<b>Commercial Varieties—Available for Farm Use</b>				
Barfleo	Barenbrug USA	x <sup>3</sup>	x	*
Barpenta	Barenbrug USA	x	x	x
Clair	Ky Agric. Exp. Station	*	*	x
Climax	Canada Agr. Res. Station	x	*	*
Comtral	Caudill Seed			x
Derby	FFR Cooperative	*	*	*
Express	Seed Research of Oregon	x	x	
Talon	Seed Research of Oregon	*	x	*
Treasure	Seed Research of Oregon	*	x	*
<b>Experimental Varieties</b>				
TM 0801	FFR Cooperative			*
TM 0802	FFR Cooperative			*
TM 0804	FFR Cooperative			*

<sup>1</sup> Establishment year

<sup>2</sup> Harvest year

<sup>3</sup> 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 1996-2013 (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor/KY Distributor	Lexington										
		96 <sup>1,2</sup> 3yr <sup>4</sup>	03 2yr	04 3yr	06 4yr	07 3yr	08 3yr	09 3yr	10 3yr	11 2yr	Mean <sup>3</sup> (#trials)	
Adam 1	Radix Research			98								-
Barderby	Barenbrug USA					94			101	91	94	95(4)
BigBlue	Rose-AgriSeed								82			-
Common	Public				71	66	68					68(3)
Ginger	ProSeeds Marketing		89			118	119	114	118	112	114	112(7)
Kenblue	Public	90		102	133					96	92	103(5)
Lato	Turf Seed Inc.	110				122						116(2)
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				-
Slezanka	DLF International Seeds		111									-

<sup>1</sup> Year trial was established

<sup>2</sup> 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 2004 was harvested three years, so the final report would be "2007 Timothy and Kentucky Bluegrass Report" archived in the KY Forage Web site at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage). The 96 and 03 Lexington results are in the appropriate Tall Fescue Reports.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 11. Summary of Kentucky Timothy Yield Trials 2000-2013 (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor/KY Distributor	Lexington										Quicksand		Princeton		Mean <sup>3</sup> (#trials)
		00 <sup>1,2</sup> 2yr <sup>4</sup>	01 3yr	02 4yr	06 3yr	07 3yr	08 3yr	09 3yr	11 2yr	99 2yr	01 2yr	00 3yr	04 2yr			
Alma	Newfield Seeds Co/Caudill Seed Co.													81		-
Auroro	General Feed and Grain	100									98					99(2)
Barfleo	Barenbrug USA								95	91						93(2)
Barpenta	Barenbrug USA					74				79						77(2)
Clair	Ky Agric. Exp. Station		109	115	107	95	108	104	113		108			122		109(9)
Classic	Cebeco International Seeds	100		88							87					92(3)
Climax	Canada Agr. Res. Station				79	102	105	98	104							98(5)
Colt	FFR Cooperative	105		101	90									112		101(5)
Common	Public		96													-
Derby	FFR Cooperative				112	111			106	112					124	113(5)
Dolina	DLF-Trifolium	100		91												96(2)
Express	Seed Research of Oregon			97		91			97	96						95(4)
Hokuei	Snow Brand Seed	103														-
Hokusei	Snow Brand Seed	97									99					98(2)
Joliette	Newfield Seeds Co/Caudill Seed Co.						87	89							90	89(3)
Jonaton	Newfield Seeds Co/Caudill Seed Co.														84	-
Outlaw	Grassland West Company												107			-
Richmond	Pickseed Canada Inc.	100									103					102(2)
Summit	Allied Seed, L.L.C.			114												-
Talon	Seed Research of Oregon				110	112			108	103						108(4)
Treasure	Seed Research of Oregon				103	115			103	102						106(4)
Tundra	DLF-Trifolium	95														-
Tuukka	Ampac Seed Company		95	90								92	93			93(4)

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 2000 was harvested two years, so the final report would be "2002 Timothy Report" archived in the KY Forage Web site at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage).

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data.



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