

# 2009 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 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 current maturity and yield data on timothy varieties included in yield trials in Kentucky as well as guidelines for selecting timothy varieties. Tables 10 and 11 show summaries of all timothy and Kentucky bluegrass varieties tested in Kentucky for the last ten years. The UK Forage Extension website at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage) contains electronic versions of all forage variety testing reports from Kentucky and surrounding states and from 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 and others like it.

## Description of the Test

Data from six studies are reported. Timothy varieties were sown at Lexington in 2006, 2007 and 2008, and Kentucky bluegrass varieties were sown at Lexington in 2006, 2007 and 2008 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 6 lb/A for timothy and 15 lb/A for Kentucky bluegrass into a prepared seedbed with a disk drill. Plots were 5 by 20 feet in a randomized complete block design with four replications with a harvested plot area of 5 by 15 feet. Nitrogen was applied at 60 lb/A of actual N 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 and dry matter yields are reported in Tables 2 through 7. Yields are given by harvest date 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 currently 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 that the variety was in the test but yielded significantly less than the top-yielding variety. A single asterisk (\*) means that 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 (1996-2009) and timothy (2000-2009) 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 which yearly report to refer to.

## 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 or can be found at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage).

- AGR-1—Lime and Fertilizer Recommendations
- AGR-18—Grain and Forage Crop Guide for Kentucky
- AGR-64—Establishing Forage Crops
- AGR-84—Timothy
- AGR-134—Kentucky Bluegrass as a Forage Crop
- ID-147—Establishing and Managing Horse Pastures

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**Table 1. Temperature and rainfall at Lexington, Kentucky in 2006, 2007, 2008 and 2009.**

	2006				2007				2008				2009 <sup>2</sup>			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP <sup>1</sup>	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	42	+11	4.77	+1.91	37	+6	2.93	+0.07	32	+2	3.91	+1.05	29	-2	4.32	+1.46
FEB	36	+1	2.13	-1.08	27	-8	1.83	-1.38	36	+1	6.11	+2.90	38	+3	2.53	-0.68
MAR	44	0	3.05	-1.35	52	+8	1.97	-2.43	44	+1	6.51	+1.91	48	+4	2.39	-2.01
APR	59	+4	3.52	-0.36	53	-2	3.87	-0.01	55	0	5.89	+2.01	56	+1	4.79	+0.91
MAY	62	-2	2.99	-1.48	68	+4	1.45	-3.02	62	-2	4.33	+0.14	65	+1	6.04	+1.57
JUN	70	-2	1.82	-1.84	74	+2	1.77	-1.89	74	+2	3.59	-0.07	74	+2	5.19	+1.53
JUL	76	0	5.13	+0.13	74	-2	6.90	+1.90	76	0	3.41	-1.59	72	-4	7.57	+2.57
AUG	76	+1	3.23	-0.70	80	+5	2.56	-1.37	75	0	2.18	-1.75	73	-2	4.53	+0.60
SEP	64	-4	9.27	+6.07	72	+4	1.15	-2.05	72	+4	1.42	-1.78	69	+1	5.90	+2.70
OCT	54	-3	4.88	+2.31	63	+6	5.28	+2.71	57	0	1.53	-1.04	53	-4	5.77	+3.20
NOV	47	+2	1.78	-1.61	46	+1	2.86	-0.53	43	-2	2.53	-0.86				
DEC	42	+6	2.45	-1.53	40	+4	5.29	+1.31	35	-1	6.03	+2.05				
Total			45.02	+0.47			37.86	-6.69			47.24	+2.69			49.03	+11.85

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

<sup>2</sup> 2009 data are for ten months through October.

**Table 2. Dry matter yields, seedling vigor, maturity and stand persistence of Kentucky bluegrass varieties sown September 6, 2006 at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup>		Maturity <sup>2</sup>				Percent Stand				Yield (tons/acre)						3-year Total				
	Oct 25, 2006		2007		2008		2009		2007		2008		2009		2009						
	May 15	May 6	May 15	May 6	Oct 25	Oct 21	Apr 3	Apr 7	Oct 30	Total	Total	Total	May 13	Jun 24	Aug 7	Oct 19		Total			
<b>Commercial Varieties—Available for Farm Use</b>																					
Kenblue	4.0	60.0	57.5	60.0	100	100	100	100	100	100	100	100	100	100	100	1.67	0.42	0.40	0.58	3.08	6.78*
Ginger	3.3	52.3	59.5	60.0	100	100	98	98	99	99	98	99	99	97	90	1.57	0.36	0.39	0.38	2.69	6.22*
RAD-339	3.5	60.0	54.5	60.0	99	99	99	99	99	99	99	99	99	97	96	1.08	0.32	0.26	0.53	2.53	5.20
RAD-5	1.0	60.0	55.5	60.0	94	97	95	99	98	98	99	98	91	96	96	1.38	0.36	0.37	0.60	2.56	5.00
RAD-643	2.5	45.0	57.5	60.0	98	98	98	98	98	94	98	94	84	84	84	1.53	0.24	0.28	0.40	1.92	4.91
RAD-762	2.5	52.3	52.5	60.0	100	100	98	97	97	75	99	94	94	95	95	1.22	0.32	0.36	0.57	2.50	4.85
RAD-731zx	1.8	52.3	55.0	59.5	97	95	95	80	90	90	86	86	89	89	89	1.12	0.37	0.30	0.42	2.16	4.41
Common	3.0	29.0	51.5	60.0	98	97	97	91	96	91	88	88	89	89	89	0.70	0.32	0.28	0.56	2.11	3.59
<b>Experimental Varieties</b>																					
B-50815	4.0	60.0	53.0	60.0	100	100	100	100	100	100	100	100	100	100	100	1.72	0.34	0.34	0.58	2.94	6.30*
HTBF-1000	3.8	60.0	50.0	59.0	100	100	98	98	100	100	99	99	99	76	76	1.54	0.81	0.33	0.78	2.25	4.93
HTBF-2000	3.5	60.0	50.5	59.0	99	98	100	100	100	100	99	99	99	99	99	1.27	0.83	0.29	0.76	2.23	4.72
B-50336	3.3	52.3	54.0	60.0	100	100	98	97	98	97	98	93	71	71	71	0.81	1.10	0.25	0.49	2.17	4.32
H01-847	4.5	52.8	54.5	59.5	100	100	100	85	90	85	91	91	93	93	93	0.88	0.92	0.23	0.66	2.04	4.00
Mean	3.1	53.5	54.3	59.8	98.8	97.7	97.7	93.8	96.7	93.8	93.8	90.6	90.6	90.6	90.6	1.23	1.19	0.32	0.56	2.40	5.02
CV%	24.2	20.6	3.3	1.0	2.0	2.7	3.6	16.6	6.6	7.3	19.4	18.47	34.03	25.10	23.85	20.38	23.44	18.28	14.91	18.28	14.91
LSD/0.05	1.1	15.8	2.6	0.8	2.9	3.8	5.1	22.3	9.1	9.9	25.2	0.33	0.68	0.43	0.11	0.09	0.19	0.63	1.07	0.63	1.07

<sup>1</sup> Vigor score based on 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.

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

**Table 3. Dry matter yields, seedling vigor, maturity and stand persistence of Kentucky bluegrass varieties sown September 6, 2007 at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Nov 5, 2007	Maturity <sup>2</sup>		Percent stand					Yield (tons/acre)					2-year Total	
		2008	2009	2007	2008		2009		2008	2009					
		May 6	Apr 27	Nov 5	Mar 26	Oct 21	Apr 6	Oct 30	Total	May 5	Jun 15	Aug 7	Oct 19		Total
<b>Commercial Varieties—Available for Farm Use</b>															
Lato	3.8	51.5	51.5	98	98	99	100	100	1.30	1.64	0.76	0.77	0.58	3.76	5.06*
Ginger	1.8	57.0	58.0	97	97	99	100	96	0.93	1.62	1.04	0.84	0.24	3.74	4.67*
Barderby	5.0	57.0	56.0	100	100	100	100	96	0.88	1.31	0.72	0.71	0.29	3.03	3.91
Common	2.5	29.0	31.0	98	100	100	99	100	0.19	0.65	0.96	0.33	0.34	2.28	2.47
Mean	3.3	48.6	49.1	98.1	98.6	99.4	99.8	98.0	0.82	1.30	0.87	0.66	0.36	3.20	4.03
CV,%	26.1	2.8	1.0	1.8	1.8	0.8	0.6	1.6	8.83	26.66	10.12	21.84	22.07	14.62	12.44
LSD,0.05	1.4	2.1	0.8	2.9	2.8	1.3	0.9	2.4	0.12	0.56	0.14	0.23	0.13	0.75	0.80

<sup>1</sup> Vigor score based on 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.

\* 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 11, 2008 at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 21, 2008	Maturity <sup>2</sup>	Percent Stand				Yield (tons/acre)				
		2009	2008	2009		2009					
		Apr 27	Oct 21	Apr 10	Oct 30	May 5	Jun 24	Aug 12	Oct 20	Total	
<b>Commercial Varieties—Available for Farm Use</b>											
RAD-1039	3.3	31.0	80	76	93	0.38	0.53	0.28	0.31	1.50*	
Ginger	2.3	31.0	59	71	85	0.23	0.42	0.24	0.22	1.11	
Common	3.0	29.5	75	93	99	0.17	0.39	0.11	0.27	0.94	
<b>Experimental Varieties</b>											
RAD-C101110	5.0	58.0	96	98	100	0.37	0.59	0.29	0.31	1.56*	
Mean	3.4	37.4	77.5	84.6	94.1	0.29	0.48	0.23	0.28	1.28	
CV,%	20.4	1.3	12.3	11.1	5.8	37.43	20.31	29.28	28.52	15.98	
LSD,0.05	1.1	0.8	15.2	15.1	8.7	0.17	0.16	0.11	0.13	0.23	

<sup>1</sup> Vigor score based on 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.

\* 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 8, 2006 at Lexington, Kentucky.																														
Variety	Seedling Vigor <sup>1</sup>	Maturity <sup>2</sup>										Percent Stand					Yield (tons/acre)													
		2007		2008		2009		2007		2008		2009		2007		2008		2009		2007		2008		2009						
		Oct 25, 2006	May 10	May 13	May 20	May 20	Oct 25	Mar 26	Nov 30	Apr 3	Oct 21	Apr 2	Oct 30	Total	May 20	Aug 12	Oct 19	Total	May 20	Aug 12	Oct 19	Total	May 20	Aug 12	Oct 19	Total				
<b>Commercial Varieties—Available for Farm Use</b>																														
Derby	3.8	50.0	46.3	53.5	100	100	88	84	73	61	41	41	1.98	1.10	0.22	0.12	0.15	1.59	1.10	0.22	0.12	0.15	1.59	1.10	0.22	0.12	0.15	1.59	6.33*	
Talon	4.5	46.0	46.3	53.0	99	100	80	84	76	66	51	51	2.17	0.96	0.14	0.14	0.14	1.38	0.96	0.14	0.14	0.14	1.38	0.96	0.14	0.14	0.14	1.38	6.24*	
Clair	3.5	46.0	48.8	52.3	100	100	83	83	83	68	58	58	2.09	1.04	0.20	0.10	0.15	1.49	1.04	0.20	0.10	0.15	1.49	1.04	0.20	0.10	0.15	1.49	6.08*	
Treasure	4.0	48.8	47.5	49.0	100	100	72	71	70	63	51	51	2.87	1.72	0.83	0.17	0.13	2.23	1.72	0.83	0.17	0.13	2.23	1.72	0.83	0.17	0.13	2.23	5.81*	
Colt	3.8	34.0	45.0	48.0	100	100	80	75	71	65	50	50	1.63	0.90	0.12	0.14	0.11	1.28	0.90	0.12	0.14	0.11	1.28	0.90	0.12	0.14	0.11	1.28	5.07	
Climax	2.8	43.3	48.8	54.5	100	100	85	70	68	50	29	29	2.04	1.37	0.78	0.13	0.07	1.06	1.37	0.78	0.13	0.07	1.06	1.37	0.78	0.13	0.07	1.06	4.46	
<b>Experimental Varieties</b>																														
PF7PPT-1	3.5	37.3	45.0	47.8	100	100	74	73	69	56	40	40	1.48	0.83	0.13	0.08	0.10	1.14	0.83	0.13	0.08	0.10	1.14	0.83	0.13	0.08	0.10	1.14	4.93	
RAD-EMR74	1.8	37.8	45.0	50.8	98	99	72	59	50	38	23	23	1.81	1.05	0.64	0.17	0.09	0.98	1.05	0.64	0.17	0.09	0.98	1.05	0.64	0.17	0.09	0.98	3.84	
Mean	3.4	42.9	46.6	51.1	99.3	99.8	79.1	74.7	69.8	58.3	42.8	42.8	1.69	0.89	0.16	0.11	0.11	1.27	0.89	0.16	0.11	0.11	1.27	0.89	0.16	0.11	0.11	1.27	5.34	
CV%	24.1	11.8	4.0	7.0	1.5	1.0	13.0	19.6	19.0	23.4	34.6	34.6	16.73	27.40	48.76	43.54	45.94	25.59	16.73	27.40	48.76	43.54	45.94	25.59	16.73	27.40	48.76	43.54	12.04	
LSD,0.05	1.2	7.4	2.7	5.2	2.2	1.4	16.6	21.5	19.5	20.0	21.8	21.8	0.41	0.36	0.11	0.07	0.08	0.48	0.41	0.36	0.11	0.07	0.08	0.48	0.41	0.36	0.11	0.07	0.08	0.95

<sup>1</sup> Vigor score based on 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.  
\* 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 and tall oatgrass (TOG) varieties sown September 6, 2007 at Lexington, Kentucky.																													
Variety	Seedling Vigor <sup>1</sup>	Maturity <sup>2</sup>										Percent Stand					Yield (tons/acre)												
		2008		2009		2007		2008		2009		2008		2009		2007		2008		2009		2007		2008		2009			
		Oct 25, 2007	May 22	May 21	Oct 25	Mar 26	Oct 21	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30	Apr 7	Oct 30
<b>Commercial Varieties—Available for Farm Use</b>																													
Talon	3.0	54.5	53.5	88	88	68	91	95	96	96	2.79	3.11	0.98	1.38	0.59	0.606	8.85*												
Treasure	3.3	54.0	53.0	95	95	96	93	98	94	2.95	3.38	0.93	0.93	0.55	5.79	8.74*													
Derby	2.3	56.0	54.5	92	92	94	95	96	95	3.04	3.05	1.02	0.90	0.59	5.57	8.61*													
Climax	2.3	57.0	55.0	90	93	93	93	96	96	2.67	2.94	0.90	0.85	0.57	5.25	7.92*													
Express	3.3	46.3	53.0	97	98	98	92	96	95	2.67	2.79	0.58	0.86	0.42	4.66	7.33													
Clair	1.0	56.5	56.0	50	55	71	92	92	91	2.09	2.30	1.07	0.89	0.69	4.95	7.03													
Barpenta	3.0	42.0	45.0	90	93	83	86	86	93	2.12	2.56	0.32	0.80	0.40	4.08	6.21													
<b>Experimental Varieties</b>																													
TM9701	2.8	56.0	55.0	91	93	93	90	96	94	2.72	2.95	0.89	1.24	0.54	5.62	8.34*													
KYPP9301	2.8	57.0	57.0	93	95	95	93	98	98	2.78	2.73	1.20	0.83	0.65	5.41	8.18*													
TOG564692 (TOG)	3.0	59.5	56.5	74	71	73	84	84	63	2.91	1.94	1.26	0.82	0.51	4.53	7.44													
RAD-EMR74	1.3	47.5	46.8	69	61	43	58	58	49	1.52	1.98	0.34	0.67	0.18	3.18	4.69													
Mean	2.5	53.3	53.2	84.3	83.5	83.1	90.4	87.5	87.5	2.57	2.70	0.86	0.92	0.52	5.01	7.58													
CV%	38.6	4.5	3.4	10.3	19.0	18.1	9.9	12.8	12.8	8.47	18.00	23.70	35.92	23.56	13.17	9.36													
LSD,0.05	1.4	3.4	2.6	12.6	22.9	15.7	12.9	16.1	16.1	0.31	0.70	0.30	0.48	0.18	0.95	1.02													

<sup>1</sup> Vigor score based on 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.  
\* 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 11, 2008 at Lexington, Kentucky.**

Variety	Seedling Vigor <sup>1</sup> Oct 21, 2008	Maturity <sup>2</sup>	Percent Stand			Yield (tons/acre)				
		2009	2008	2009		2009				
		May 21	Oct 21	Apr 10	Oct 30	May 21	Jun 29	Aug 12	Oct 20	Total
<b>Commercial Varieties—Available for Farm Use</b>										
Clair	1.8	56.5	91	97	99	2.59	0.60	0.69	1.04	4.93*
Climax	4.3	56.0	98	100	100	2.67	0.52	0.71	0.93	4.83*
Joliette	4.0	48.5	98	100	100	2.24	0.27	0.59	0.83	3.93
<b>Experimental Varieties</b>										
KYEarly	5.0	57.5	100	100	99	2.41	0.73	0.73	1.10	4.97*
APH1001	3.8	46.8	99	100	100	2.01	0.26	0.63	0.91	3.81
Mean	3.8	53.1	97.1	99.4	99.5	2.38	0.48	0.67	0.96	4.49
CV,%	14.8	4.2	2.2	0.7	0.9	18.73	19.73	16.24	11.48	11.78
LSD,0.05	0.9	3.4	3.4	1.1	1.3	0.69	0.15	0.17	0.17	0.82

<sup>1</sup> Vigor score based on 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.

\* 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.**

Variety	Proprietor/KY Distributor	2006 <sup>1</sup>			2007		2008
		07 <sup>2</sup>	08	09	08	09	09
<b>Commercial Varieties—Available for Farm Use</b>							
Barderby	Barenbrug				x <sup>3</sup>	*	
Common	Public	x	x	x	x	x	x
Ginger	ProSeeds Marketing	*	*	*	x	*	x
Kenblue	Public	*	*	*			
Lato	Allied Seed				*	*	
RAD-1039	Radix Research						*
RAD-339	Radix Research	x	*	*			
RAD-5	Radix Research	x	x	*			
RAD-643	Radix Research	*	*	x			
RAD-731zx	Radix Research	x	x	x			
RAD-762	Radix Research	x	x	*			
<b>Experimental Varieties</b>							
B-50336	Blue Moon Farms	x	x	x			
B-50815	Blue Moon Farms	*	*	*			
H01-847	ProSeeds Marketing	x	x	x			
HTBF-1000	FFR	*	x	x			
HTBF-2000	FFR	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.

<b>Table 9. Performance of timothy varieties at Lexington.</b>							
<b>Variety</b>	<b>Proprietor/KY Distributor</b>	<b>2006<sup>1</sup></b>			<b>2007</b>		<b>2008</b>
		<b>07<sup>2</sup></b>	<b>08</b>	<b>09</b>	<b>08</b>	<b>09</b>	<b>09</b>
<b>Commercial Varieties— Available for Farm Use</b>							
Barpenta	Barenbrug				x <sup>3</sup>	x	
Clair	Ky Agric. Exp. Station	*	*	*	x	x	*
Climax	Canada Agr. Res. Station	x	x	x	x	*	*
Colt	FFR Cooperative	x	x	*			
Derby	FFR Cooperative	*	*	*	*	*	
Express	Seed Research of Oregon				x	x	
Joliette	Caudill Seed						x
Talon	Seed Research of Oregon	*	*	*	*	*	
Treasure	Seed Research of Oregon	*	x	*	*	*	
<b>Experimental Varieties</b>							
APH1001	ProSeeds Marketing						x
KY Early	Ky Agric. Exp. Station						*
KYPP9301	Ky Agric. Exp. Station				*	*	
PF7PPT-1	ProSeeds Marketing	x	x	*			
RAD-EMR74	Radix Research	x	x	x	x	x	
TM9701	Allied Seed				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 10. Summary of Kentucky Bluegrass Yield Trials 1996-2009 (yield shown as a percentage of the mean of the commercial varieties in the trial).**

<b>Variety</b>	<b>Proprietor/KY Distributor</b>	<b>Lexington</b>					<b>Princeton</b>	<b>Mean<sup>3</sup> (#trials)</b>
		<b>96<sup>1,2</sup> 3yr<sup>4</sup></b>	<b>03 2yr</b>	<b>04 3yr</b>	<b>06 3-yr</b>	<b>07 2yr</b>	<b>02 3yr</b>	
Adam 1	Radix Research			98				-
Barderby	Barenbrug					97	114	106(2)
Common	Public				70	61		66(2)
Ginger	ProSeeds Marketing		89		121	116		108(3)
Kenblue	Public	90		102	132			110(3)
Lato	Turf Seed Inc.	110				126		118(2)
RAD-339	Radix Research				102			-
RAD-5	Radix Research				98			-
RAD-643	Radix Research				96			-
RAD-731zx	Radix Research				86			-
RAD-762	Radix Research				95			-
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 2 years, so the final report would be "2006 Timothy and Kentucky Bluegrass Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>. The 96 and 03 Lexington and 02 Princeton 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 2000-2009 (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 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)
Barpenta	Barenbrug					82					-
Clair	Ky Agric. Exp. Station		109	115	107	93		108		122	109(6)
Classic	Cebeco International Seeds	100		88			87				92(3)
Climax	Canada Agr. Res. Station				79	105					92(2)
Colt	FFR Cooperative	105		101	90		112			99	101(5)
Common	Public		96								-
Derby	FFR Cooperative				112	114				124	117(3)
Dolina	DLF-Trifolium	100		91							96(2)
Express	Seed Research of Oregon			97		97					97(2)
Hokuei	Snow Brand Seed	103									-
Hokusei	Snow Brand Seed	97					99				98(2)
Joliet	Newfield Seeds Co/Caudill Seed Co.									90	-
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	117					114(2)
Treasure	Seed Research of Oregon				103	116					110(2)
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 2 years, so the final report would be "2002 Timothy Report" archived in the KY Forage website 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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