University of Kentucky
College of Agriculture, Food and Environment
Agricultural Experiment Station

2021 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 15 years. The UK Forage Extension website (https://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.

Table 1. Temperature and rainfall at Lexington, Kentucky in 2019, 2020, and 2021.

	2019				2020				2021[2]			
	Temp		Rainfall		Temp		Rainfall		Temp		Rainfall	
	°F	DEP[1]	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	33	+2	4.11	+1.25	40	+9	3.72	+0.86	34	+3	4.51	+1.65
FEB	42	+7	7.64	+4.43	38	+3	5.14	+1.93	31	-4	4.60	+1.39
MAR	43	-1	3.49	-0.91	51	+7	3.79	-0.61	50	+6	5.12	+0.72
APR	54	+4	4.76	+0.88	52	-3	4.92	+1.04	54	-1	2.72	-1.16
MAY	69	+5	4.49	+0.02	62	-2	5.69	+1.22	62	-2	4.34	-0.13
JUN	73	+1	6.13	+2.47	72	0	2.56	-1.10	73	+1	6.26	+2.60
JUL	79	+3	3.30	-1.70	79	+3	3.23	-1.77	75	-1	5.90	+0.90
AUG	77	+2	2.42	-1.51	75	0	3.41	-0.52	76	+1	6.16	+2.23
SEP	77	+9	0.18	-3.02	68	0	4.43	+0.83	69	+1	3.03	-0.17
OCT	61	+4	7.55	+5.58	57	0	4.98	+2.41	62	+5	3.68	-1.11
NOV	41	-4	5.39	+2.00	49	+4	2.18	-1.21				
DEC	43	+7	5.74	+1.76	36	0	2.27	-1.71				
Total			55.20	+10.65			45.92	+1.37			46.32	+9.14

[1] DEP is departure from the long-term average.
[2] 2021 data is for ten months through October.

Description of the Test

Data from five studies are reported. Timothy varieties and Kentucky bluegrass varieties were sown at Lexington in 2018, 2019, and 2020 as part of the 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 2021 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.

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.
12	2 leaves unfolded	Further subdivision by means of leaf development index (see text).
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 seedlingsor 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 quantitywhen inflorescence hit on palm.
93	Endosperm hard and dry	Final stage of seed development; most seeds shed.

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

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 total yield 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 show information about proprietors/distributors 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.

How to Interpret the Summary Tables

Tables 10 and 11 are summaries of yield data of commercial varieties for Kentucky bluegrass (1996-2021) and timothy (2000-2021) 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 should be referenced.

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 website, www.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)

Table 3. Dry matter yields, seedling vigor, maturity, and stand persistence of timothy varieties sown August 30, 2019, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]			Percent Stand					Yield (tons/acre)					
		2020		2021	2019	2020		2021		2020	2021				2-year
	Oct 23, 2019	May 14	Jun 17	May 18	Oct 23	Mar 17	Oct 27	Mar 24	Oct 22	Total	May 18	Jul 6	Oct 19	Total	Total
Commercial Varieties-Available for Farm Use															
Derby	5.0	50.0	61.5	55.0	99	99	99	99	98	3.78	2.64	0.75	1.00	4.38	8.16*
Dawn	4.0	45.0	37.3	54.0	99	100	100	100	100	3.68	2.55	0.66	1.00	4.21	7.89*
Zenyatta	3.8	50.5	62.0	55.5	91	94	95	96	96	3.81	2.69	0.50	0.84	4.04	7.84*
Carson	3.8	47.5	53.8	50.3	98	99	99	99	99	3.67	2.52	0.64	0.92	4.08	7.75*
KYEarly	2.3	48.8	62.0	56.0	70	73	95	95	94	3.08	2.43	0.74	0.83	3.99	7.07
Climax	5.0	45.0	62.0	48.5	100	99	99	99	99	3.08	2.41	0.55	0.89	3.85	6.93
Barfleo	5.0	45.0	45.0	45.0	99	100	100	100	100	2.95	2.08	0.62	0.83	3.54	6.49
Barpenta	4.0	40.5	29.0	37.0	96	98	98	97	98	3.13	1.46	0.89	0.91	3.26	6.39
Clair	5.0	45.0	61.5	37.5	100	99	99	99	99	2.76	1.64	0.60	0.85	3.10	5.86
Experimental Varieties															
11PHL4808	4.5	45.0	34.3	41.0	99	100	99	99	99	3.31	2.20	0.41	0.83	3.44	6.75
Mean	4.2	46.2	50.8	49.0	95	96	98	98	98	3.33	2.26	0.64	0.89	3.79	7.11
CV,%	7.9	3.3	20.2	4.9	10	7	1	1	1	9.81	19.53	22.83	17.58	12.47	8.58
LSD,0.05	0.5	2.2	14.9	3.4	13	10	2	2	2	0.47	0.64	0.21	0.23	0.69	0.89

[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.

About the Authors

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Table 4. Dry matter yields, seedling vigor, maturity, and stand persistence of timothy varieties sown August 28, 2020, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]	Percent Stand			Yield (tons/acre)			
		2021	2020	2021		2021			
	Sep 24, 2020	May 18	Sep 24	Mar 24	Oct 22	May 18	Jul 6	Oct 20	Total
Commercial Varieties-Available for Farm Use									
Zenyatta	3.4	54.5	100	100	100	3.54	1.29	0.87	5.70*
KYEarly	4.5	56.0	100	100	100	3.39	1.39	0.79	5.56*
Carson	4.0	49.0	100	100	100	3.44	1.33	0.67	5.44*
Dawn	4.3	54.0	100	100	100	3.53	1.04	0.77	5.34*
Barfleo	4.3	44.8	100	100	100	3.42	1.12	0.66	5.20*
Derby	4.5	52.3	100	100	100	3.48	0.97	0.67	5.13*
Clair	4.0	53.0	100	100	100	2.75	1.20	0.70	4.65
Climax	4.1	40.5	100	100	100	2.94	0.92	0.68	4.54
Barpenta	3.4	39.0	100	100	100	2.61	1.03	0.72	4.35
Baronaise	4.6	40.0	100	100	100	2.82	0.62	0.70	4.14
Mean	4.1	48.3	100	100	100	3.19	1.09	0.72	5.10
CV,%	10.2	6.4	0	0	0	10.62	39.11	13.97	12.41
LSD,0.05	0.6	4.5	0	0	0	0.49	0.62	0.15	0.90

[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 5. Dry matter yields, seedling vigor, maturity, and stand persistence of Kentucky bluegrass varieties sown September 4, 2018, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]			Percent Stand							Yield (tons/acre)					
		2020	2021		2018	2019		2020		2021		2020	2021				2-year
	Sep 28, 2018	Apr 28	Apr 28	Jun 14	Sep 28	Mar 22	Oct 18	Mar 17	Oct 27	Mar 24	Oct 22	Total	Apr 27	Jun 14	Oct 18	Total	Total
Commercial Varieties-Available for Farm Use																	
Barderby	4.5	59.5	56.5	29.0	100	100	100	100	100	100	100	2.05	0.56	0.85	0.90	2.31	4.36*
Park	5.0	58.5	60.0	29.0	100	100	100	100	100	100	98	1.70	0.65	0.55	0.78	1.98	3.68
Ginger	3.9	60.0	57.5	29.0	100	100	100	100	98	98	84	1.73	0.68	0.65	0.46	1.80	3.53
Balin	5.0	56.0	54.5	29.0	100	100	100	100	96	96	93	1.40	0.30	0.50	0.71	1.51	2.91
Experimental Varieties																	
RAD1446	3.8	29.0	38.0	66.0	100	100	100	100	98	98	95	1.69	0.33	0.79	0.74	1.86	3.55
Mean	4.4	52.6	53.3	36.4	100	100	100	100	98	98	94	1.71	0.51	0.67	0.72	1.89	3.61
CV,%	16.1	1.3	7.4	0.0	0	0	0	0	2	2	8	13.30	43.89	38.15	21.34	15.90	8.50
LSD,0.05	1.1	1.1	6.1	0.0	0	0	0	0	4	4	12	0.35	0.34	0.39	0.24	0.46	0.47

[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 6. Dry matter yields, seedling vigor, maturity, and stand persistence of Kentucky bluegrass varieties sown August 30, 2019, at Lexington, Kentucky.

Variety	Seedling Vigor[1] Nov 6, 2019	Maturity[2] 2021 Apr 28	Maturity[2] 2021 Jun 14	Percent Stand 2019 Nov 6	Percent Stand 2020 Mar 17	Percent Stand 2020 Oct 27	Percent Stand 2021 Mar 24	Percent Stand 2021 Oct 22	Yield (tons/acre) 2020 Total	Yield (tons/acre) 2021 Apr 28	Yield (tons/acre) 2021 Jun 14	Yield (tons/acre) 2021 Oct 19	Yield (tons/acre) 2021 Total	Yield (tons/acre) 2-year Total
Commercial Varieties-Available for Farm Use														
Barderby	4.0	57.5	29.0	100	100	100	100	100	0.77	0.79	1.12	0.98	2.89	3.66*
Park	4.3	58.5	29.0	100	100	100	100	100	0.61	0.61	1.26	0.90	2.77	3.38*
Ginger	3.3	60.0	29.0	100	100	100	100	100	0.59	0.87	1.17	0.48	2.52	3.11*
Experimental Varieties														
B-18.2822	3.8	45.0	66.0	100	100	100	100	100	0.49	0.39	1.63	1.03	3.06	3.55*
Mean	3.8	55.3	38.3	100	100	100	100	100	0.61	0.67	1.29	0.85	2.81	3.42
CV,%	19.7	2.7	0.0	0	0	0	0	0	20.49	26.77	19.70	17.31	12.33	11.27
LSD,0.05	1.2	2.4	0.0	0	0	0	0	0	0.20	0.29	0.41	0.24	0.55	0.62

[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, maturity, and stand persistence of Kentucky bluegrass varieties sown August 28, 2020, at Lexington, Kentucky.

Variety	Seedling Vigor[1] Sep 24, 2020	Maturity[2] 2021 Apr 28	Percent Stand 2020 Sep 24	Percent Stand 2021 Mar 24	Percent Stand 2021 Oct 22	Yield (tons/acre) 2021 Apr 28	Yield (tons/acre) 2021 Jun 14	Yield (tons/acre) 2021 Oct 20	Yield (tons/acre) 2021 Total
Commercial Varieties-Available for Farm Use									
Barderby	4.5	57.0	100	100	100	0.74	1.30	0.46	2.50*
Park	5.0	52.3	100	100	100	0.56	1.56	0.32	2.43*
Ginger	4.1	56.0	100	100	100	0.41	1.15	0.22	1.79*
Experimental Varieties									
SEPP16-6	4.3	45.0	100	100	100	0.13	1.37	0.28	1.79*
Mean	4.5	52.6	100	100	100	0.46	1.35	0.32	2.13
CV,%	6.0	4.6	0	0	0	31.22	26.19	30.92	22.27
LSD,0.05	0.4	3.8	0	0	0	0.23	0.56	0.16	0.76

[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. Proprietors of timothy varieties in current trials.

Variety	Proprietor/KY Distributor
Commercial Varieties-Available for Farm Use	
Barfleo	Barenbrug USA
Baronaise	Barenbrug USA
Barpenta	Barenbrug USA
Carson	Mountain View Seeds
Clair	Ky Agric. Exp. Station
Climax	Canada Agr. Res. Station
Dawn	Hood River Seed
Derby	Southern States
KYEarly	Smith Seed Services
Zenyatta	DLF Pickseed
Experimental Varieties[1]	
11PHL4808	Barenbrug USA

[1] Experimental varieties are not available commercially, but provide an indication of the progress being made by forage breeding companies.

Table 9. Proprietors of Kentucky bluegrass varieties in current trials.

Variety	Proprietor/KY Distributor
Commercial Varieties-Available for Farm Use	
Balin	Pure Seed
Barderby	Barenbrug USA
Ginger	ProSeeds Marketing
Park (certified)	Public
Experimental Varieties[1]	
B-18.2822	Blue Moon Farms
RAD-1446	Radix Research
SEPP16-6	Smith Seed Services

[1] Experimental varieties are not available commercially, but provide an indication of the progress being made by forage breeding companies.

Table 10. Summary of Kentucky timothy yield trials 2000-2021 (yield shown as a percentage of the mean of the commercial varieties in the trial).

		Lexington															Quicksand		Princeton		Mean[3] (#trials)
		00[1,2]	01	02	06	07	08	09	11	12	13	14	15	16	17	19	99	01	00	04	
Variety	Proprietor/KY Distributor	2yr[4]	3yr	4yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	2yr	2yr	3yr	2yr	
Alma	Newfield Seeds Co/Caudill Seed Co.																			81	–
Anjo	Hood River Seed													81							–
Aurora	General Feed and Grain	100															98				99(2)
Barfleo	Barenbrug USA							95	91	101		108	80	97	94	91					96(8)
Barpenta	Barenbrug USA					74			82	82					94	89					84(5)
Carson	Mountain View Seeds														113	108					111(2)
Clair	Ky Agric. Exp. Station		104	113	107	95	107	104	112	99	97	111	107	88	88	82		106		122	103(16)
Classic	Cebeco International Seeds	100		86													86				91(3)
Climax	Canada Agr. Res. Station				79	102	104	98	102	100	82	96	90	102	92	97					95(12)
Colt	FS Growmark	105		100	90												112			99	101(5)
Common	Public		95																		–
Comtral	Caudill Seed									92	92										92(2)
Dawn	Hood River Seed														103	110					107(2)
Derby	Southern States				112	111		106	112	108	112	119	123	112		114				124	113(11)
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				115	99	104	103			107(9)
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			119		110					111(3)

[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 2017 was harvested three years, so the final report would be "2020 Timothy and Kentucky Bluegrass Report" archived in the UK Forage website (https://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 Bluegrass Yield Trials at Lexington 2004-2021 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	04[1,2] 3yr[4]	06 4yr	07 3yr	08 3yr	09 3yr	10 3yr	11 3yr	12 3yr	13 3yr	14 3yr	16 3yr	17 3yr	18 2yr	19 2yr	Mean[3] (#trials)
Adam 1	Radix Research	98														–
Balin	Pure Seed												91	80		86(2)
Barderby	Barenbrug USA			94		101	91	98	87	103	101	103	128	120	108	103(11)
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	101	119	98	92	108(13)
Kenblue	Public	102	133				96	95	118	95	100					106(7)
Lato	Turf Seed Inc.			122												–
Park (certified)	Public								90	95	104	117	88	102	100	99(5)
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											79	74			77(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 2017 was harvested three years, so the final report would be "2020 Timothy and Kentucky Bluegrass Report" archived in the UK Forage website (https://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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