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

2020 Orchardgrass Report

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Introduction

Orchardgrass *(Dactylus glomerata)* is a high-quality, productive, cool-season grass that is well-adapted to Kentucky conditions. This grass is used for pasture, hay, green chop, and silage, but it requires better management than tall fescue for greater yields, higher quality, and longer stand life. It produces an open, bunch-type sod, making it compatible with alfalfa or red clover as a pasture and hay crop or as habitat for wildlife.

This report provides current yield data on orchardgrass varieties included in yield trials in Kentucky as well as guidelines for selecting orchardgrass varieties. Consult the UK Forage Extension website at www.forages.ca.uky.edu to access all forage variety testing reports from Kentucky and surrounding states and a large number of other forage publications.

Important Selection Considerations

Maturity. Orchardgrass varieties will range in maturity from early to late, based on the date of heading. In this report, early-maturing varieties will in general have higher first-cutting yields than later-maturing varieties because they are more mature at the date of first cutting. Orchardgrass typically matures earlier in the spring than red clover or alfalfa. Later-maturing varieties are preferred for use with red clover or alfalfa because they are at a more optimal stage of maturity when the legume is ready for cutting. A recent publication provides a good overview of orchardgrass maturity over time and over years (See Table 1).

Local adaptation and seasonal yield. Choose a variety adapted to Kentucky, as indicated by good performance across years and 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.

Seed quality. Buy premium-quality seed high in germination and purity and free from weed seed. Buy certified seed or proprietary seed of an improved variety. An improved variety is one that has performed well in independent trials. Other information on the label will include the test date (which must be within the past nine months), the level of germination, and the percentage of other crop and weed seed. Order seed well in advance of planting time to assure it will be available when needed.

Table 1. Regional orchardgrass maturity comparison (2011-2014).

	Maturity Rating[1]				
Variety	KY	PA	UT	VA	WI
BAR DGL 1GRL	3.3	3.0	3.3	3.6	2.3
Barlegro	1.0	1.5	1.7	1.0	2.2
Benchmark Plus	3.1	2.7	2.7	3.2	2.4
Crown Royale	2.9	2.6	3.1	1.5	2.2
Dascada	1.6	2.3	2.3	1.1	2.6
Excellate SA	1.7	2.1	1.8	1.1	2.0
Harvestar	2.1	2.1	2.2	1.2	2.1
Pennlate	3.0	2.6	2.6	1.2	2.2
Persist	3.3	2.9	3.2	2.2	2.7
Potomac	2.4	3.2	2.7	1.2	2.6
Prairie	3.0	2.6	3.1	1.7	2.6
Profit	2.9	2.5	3.0	1.3	2.3
Quickdraw	3.1	3.1	2.7	2.6	2.4
LSD[2]	0.4	0.4	0.5	0.9	0.3

[1] Rating of 1 to 4: 1 = very late; 4 = very early.
[2] Varieties significantly differ based on LSD.
For complete article: *Hay and Forage Grower*, March 2018.

Description of the Tests

Data from four studies are reported. Orchardgrass varieties were sown at Lexington (2017, 2018, and 2019) and Quicksand (2018). The soils at Lexington (Maury) and Quicksand (Nolin) are well-drained silt loams and are well-suited to orchardgrass production. Seedings were made at the rate of 20 pounds per acre into a prepared seedbed with a disk drill.

Table 2. Temperature and rainfall at Lexington, Kentucky, in 2018, 2019, and 2020.

	2018				2019				2020[2]			
	Temp		Rainfall		Temp		Rainfall		Temp		Rainfall	
	°F	DEP[1]	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	31	0	2.01	-0.85	33	+2	4.11	+1.25	40	+9	3.72	+0.86
FEB	45	+10	9.77	+6.56	42	+7	7.64	+4.43	38	+3	5.14	+1.93
MAR	42	-2.	5.16	+0.76	43	-1	3.49	-0.91	51	+7	3.79	-0.61
APR	50	-5	5.52	+1.64	54	+4	4.76	+0.88	52	-3	4.92	+1.04
MAY	73	+9	8.39	+3.92	69	+5	4.49	+0.02	62	-2	5.69	+1.22
JUN	76	+4	6.42	+2.76	73	+1	6.13	+2.47	72	0	2.56	-1.10
JUL	77	+1	6.15	+1.15	79	+3	3.30	-1.70	79	+3	3.23	-1.77
AUG	77	+2	6.45	+2.52	77	+2	2.42	-1.51	75	0	3.41	-0.52
SEP	74	+6	12.88	+9.68	77	+9	0.18	-3.02	68	0	4.43	-+0.83
OCT	59	+2	6.54	+3.97	61	+4	7.55	+5.58	57	0	4.98	+2.41
NOV	42	-3	5.64	+2.25	41	-4	5.39	+2.00				
DEC	40	+4	7.35	+3.37	43	+7	5.74	+1.76				
Total			82.28	+37.73			55.20	+10.65			41.47	+4.29

[1] DEP is departure from the long-term average.
[2] 2020 data is for ten months through October.

Table 3. Temperature and rainfall at Quicksand, Kentucky, in 2019 and 2020.

	2019				2020[2]			
	Temp		Rainfall		Temp		Rainfall	
	°F	DEP[1]	IN	DEP	°F	DEP	IN	DEP
JAN	37	+6	4.93	+1.64	42	+11	3.32	+0.03
FEB	45	+12	8.15	+4.55	41	+8	7.11	+3.51
MAR	44	+3	2.15	-2.19	52	+11	7.96	+3.62
APR	58	+5	2.55	-1.55	53	0	4.93	+0.83
MAY	68	+6	3.91	-0.57	62	0	5.75	+1.27
JUN	72	+2	8.35	+4.53	71	+1	4.54	+0.72
JUL	77	+3	6.32	+1.07	78	+4	4.26	-0.99
AUG	75	+2	1.57	-2.44	75	+2	6.56	+2.55
SEP	74	+8	0.04	-3.48	69	+3	4.40	+0.88
OCT	60	+6	6.80	+3.89	59	+5	3.55	+0.64
NOV	42	0	5.48	+1.60				
DEC	43	+10	6.15	+2.01				
Total			56.40	+9.06			52.38	+13.06

[1] DEP is departure from the long-term average.
[2] 2020 data is for the ten months through October.

Table 4. 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.

Plots were 5 feet by 20 feet in a randomized complete block design with four replications with a harvest plot area of 5 feet by 15 feet. Nitrogen was top-dressed at 60 pounds per acre of actual nitrogen in March, after the first cutting, and again in late summer, for a total of 180 pounds per acre per season. The tests were harvested using a sickle-type forage plot harvester to simulate a spring cut hay/summer grazing/fall stockpile management system. Fresh weight samples were taken at each harvest to calculate percent dry matter production. Management practices for establishment, fertility (P, K, and lime based on regular soil tests), weed control, and harvest timing were in accordance with University of Kentucky recommendations.

Results and Discussion

Weather data for Lexington and Quicksand are presented in Tables 2 and 3.

Ratings for maturity (see Table 4 for maturity scale), stand persistence, and dry matter yields (tons per acre) are reported in Tables 5 through 8. Yields are given by cutting date for 2020 and as total annual production. Stated yields are adjusted for percent weeds; therefore, tonnage given is for crop only. Varieties are listed by descending total yield. Experimental varieties, listed separately at the bottom of the tables, are not available commercially.

Statistical analyses were performed on all data (including experimentals) to determine if the apparent differences are truly due to varietal differences or just to chance. In the tables, the varieties not significantly different from the top variety in the total yield column are marked with one asterisk (*). To determine if two varieties are truly different, compare the difference between them to the least significant difference (LSD) at the bottom of the column. If the difference is equal to or greater than the LSD, the varieties are truly different when grown under the conditions at the given locations. The coefficient of variation (CV), which is a measure of the variability of the data, is included for each column of means. Low variability is desirable, and increased variability within a study results in higher CVs and larger LSDs.

Table 9 shows information about proprietors/distributors for all varieties included in the tests discussed in this report. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Experimental varieties are not available for farm use; commercial varieties can be purchased from dealerships. It is best to choose a variety that has performed well over several years and locations. It is important to consider the distribution of yield across the growing season when evaluating productivity of orchardgrass varieties (Tables 5 through 8).

Table 10 is a summary of yield data from 2003 to 2020 of commercial varieties that have been entered in the Kentucky trials. The data is listed as a percentage of the mean of the commercial varieties entered in each specific trial. In other words, the mean value for each trial is set at 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 Table 10, but these comparisons can 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 more information can be found in the yearly reports. See the footnote in Table 10 to determine the yearly report that should be referenced.

Summary

Selecting a good orchardgrass 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 orchardgrass 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)
- Renovating Hay and Pasture Fields (AGR-26)
- Orchardgrass (AGR-58)
- Establishing Forage Crops (AGR-64)
- Forage Identification and Use Guide (AGR-175)
- Rotational Grazing (ID-143)
- Rating Scale for Brown Stripe of Orchardgrass (PPFS-AG-F-07)

About the Authors

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Table 5. Dry matter yields, seedling vigor, maturity, and stand persistence of orchardgrass varieties sown September 8, 2017, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]			Percent Stand						Yield (tons/acre)							
		2018	2019	2020	2017	2018		2019		2020	2018	2019	2020					3-year
	Oct 12, 2017	May 8	May 13	May 11	Oct 12	Mar 13	Oct 19	Mar 22	Oct 21	Mar 17	Oct 27	Total	Total	May 12	Jun 15	Aug 19	Oct 22	Total	Total
Commercial Varieties-Available for Farm Use																			
SS0708OGDT	3.0	50.5	58.0	51.5	99	99	100	99	96	95	92	3.94	1.86	1.12	0.57	0.90	0.43	3.01	8.81*
Persist	2.9	48.8	58.0	52.5	100	99	100	99	97	97	94	4.14	1.84	1.08	0.55	0.68	0.50	2.81	8.79*
Rushmore II	3.9	46.3	57.0	52.5	100	100	100	100	97	96	94	4.25	1.73	1.04	0.63	0.68	0.44	2.79	8.78*
Prairie	3.3	49.8	57.5	51.5	100	100	100	100	96	97	97	4.14	1.97	1.10	0.44	0.56	0.55	2.65	8.76*
Potomac	3.1	50.3	58.0	51.3	100	100	100	100	97	98	95	3.55	1.93	1.08	0.64	0.54	0.49	2.75	8.23*
Treposno	5.0	45.0	56.0	34.3	100	100	100	99	92	91	76	3.70	1.76	0.61	0.63	0.72	0.40	2.37	7.83*
Aldebaran	2.9	45.0	53.0	35.3	100	100	100	98	89	88	71	4.14	1.57	0.73	0.45	0.50	0.42	2.10	7.81*
Lyra	2.9	45.0	52.8	34.3	100	95	100	94	89	77	66	3.11	1.32	0.46	0.35	0.46	0.41	1.68	6.11
Berta	2.6	45.0	52.0	34.3	100	98	100	94	89	70	58	3.48	1.41	0.18	0.40	0.35	0.21	1.14	6.03
Experimental Varieties																			
SOG-1614	3.1	46.3	51.5	33.0	100	97	100	98	92	92	77	3.81	1.71	0.85	0.46	0.64	0.48	2.43	7.95*
Mena	3.3	47.2	55.4	43.3	100	99	100	98	93	90	82	3.83	1.71	0.82	0.51	0.60	0.43	2.37	7.91
CV,%	16.7	4.5	4.8	17.8	1	2	0	3	7	9	16	19.07	25.27	28.85	31.72	31.28	25.96	20.80	15.65
LSD,0.05	0.8	3.1	3.9	11.4	1	3	0	4	10	12	20	1.08	0.63	0.35	0.24	0.27	0.16	0.72	1.80

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 4 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 orchardgrass varieties sown September 4, 2018, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]		Percent Stand					Yield (tons/acre)						
		2019	2020	2018	2019		2020		2019	2020					2-year
	Sep 28, 2018	May 13	May 11	Sep 28	Mar 22	Oct 18	Mar 17	Oct 27	Total	May 12	Jun 15	Aug 19	Oct 22	Total	Total
Commercial Varieties-Available for Farm Use															
Albert	5.0	55.5	51.5	100	100	99	99	99	2.79	1.46	0.59	0.72	0.53	3.31	6.09*
SS0708OGDT	5.0	58.0	55.5	100	100	100	100	100	2.55	1.40	0.56	0.59	0.58	3.13	5.68*
Prairie	4.8	56.5	55.5	100	100	100	100	100	2.52	1.48	0.48	0.57	0.57	3.10	5.62*
Potomac	4.8	57.0	52.5	100	100	100	100	100	2.52	1.27	0.51	0.65	0.54	2.96	5.48*
Persist	3.6	58.0	56.0	100	100	100	100	100	2.33	1.31	0.56	0.74	0.42	3.04	5.37*
Barlegro	3.5	52.5	52.5	100	100	94	94	92	2.23	1.21	0.57	0.74	0.49	3.01	5.24
Intensiv	3.8	46.8	53.0	100	100	96	95	94	2.20	1.24	0.56	0.59	0.61	3.01	5.20
Tucker	4.9	53.3	53.5	100	100	99	98	98	2.05	1.34	0.46	0.65	0.48	2.93	4.98
Swante	3.1	52.3	52.0	100	98	89	87	87	2.02	0.98	0.45	0.60	0.54	2.57	4.59
Experimental Varieties															
OG88	5.0	54.0	52.5	100	100	99	98	99	2.76	1.37	0.53	0.70	0.51	3.12	5.88*
RADLCF54	4.4	46.3	50.3	100	100	98	97	97	2.41	1.17	0.63	0.62	0.60	3.02	5.43*
DGLF48	3.9	56.0	53.5	100	100	100	100	100	2.26	1.44	0.48	0.67	0.35	2.94	5.21
18-DgLF93	3.6	54.5	53.0	100	100	93	90	91	1.99	1.21	0.55	0.70	0.51	2.98	4.97
18-DgLF92	3.6	50.8	51.8	100	100	94	89	88	2.01	1.19	0.47	0.55	0.43	2.64	4.65
Mean	4.2	53.7	53.1	100	100	97	96	96	2.33	1.29	0.53	0.65	0.51	2.98	5.31
CV,%	7.4	6.1	4.1	0	1	3	4	4	12.13	20.57	23.76	20.74	34.62	12.93	10.47
LSD,0.05	0.4	4.6	3.1	0	1	4	5	5	0.40	0.38	0.18	0.19	0.25	0.55	0.80

[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 4 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 orchardgrass varieties sown August 30, 2019, at Lexington, Kentucky.

Variety	Seedling Vigor[1]	Maturity[2]	Percent Stand			Yield (tons/acre)				
		2020	2019	2020		2020				
	Oct 23, 2019	May 7	Oct 23	Mar 17	Oct 27	May 7	Jun 23	Aug 19	Oct 23	Total
Commercial Varieties-Available for Farm Use										
Blizzard	4.8	49.8	100	100	100	1.37	0.80	0.83	0.81	3.81*
Quick Draw	4.4	53.5	100	100	100	1.52	0.61	0.74	0.88	3.74*
Echelon	3.3	40.5	100	97	97	0.98	0.78	1.01	0.82	3.59*
SS0708OGDT	4.8	53.0	100	100	100	1.29	0.72	0.69	0.76	3.46*
Persist	3.5	52.0	100	99	100	0.93	0.77	0.92	0.84	3.45*
Albert	4.0	46.3	100	100	100	1.05	0.72	1.02	0.65	3.45*
Prairie	3.6	53.0	100	100	100	1.12	0.67	0.90	0.66	3.36*
Tekapo	3.9	47.8	100	100	100	1.05	0.75	0.72	0.76	3.28*
Prodigy	4.5	53.0	100	99	99	1.10	0.68	0.75	0.74	3.27*
Profit	4.3	42.0	100	100	100	0.92	0.63	0.83	0.66	3.04
BARDGLHLR	2.6	39.0	100	98	99	0.91	0.54	0.61	0.76	2.82
Experimental Varieties										
SEOGP2	3.6	49.5	100	100	100	1.29	0.70	1.06	0.87	3.92*
O2019	3.4	46.0	100	99	100	1.10	0.77	0.64	0.76	3.28*
Mean	3.9	48.1	100	99	99	1.13	0.70	0.82	0.77	3.42
CV,%	15.2	7.1	0	2	1	24.37	28.61	24.84	27.05	17.20
LSD,0.05	0.8	4.9	0	2	2	0.39	0.29	0.29	0.30	0.84

[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 4 for complete scale.
*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 8. Dry matter yields, seedling vigor, and stand persistence of orchadgrass varieties sown September 7, 2018, at Quicksand, Kentucky.

Variety	Seedling Vigor[1] Oct 5, 2018	Percent Stand					Yield (tons/acre)				
		2018	2019		2020		2019	2020			2-year Total
		Oct 5	Mar 15	Oct 22	Mar 26	Nov 9	Total	May 7	Jul 2	Total	
Commercial Varieties-Available for Farm Use											
Persist	4.0	100	100	100	100	95	3.50	2.33	1.18	3.51	7.01*
Prairie	5.0	100	100	97	96	74	3.16	1.74	1.07	2.81	5.97*
Tucker	5.0	100	100	99	100	71	2.90	1.65	1.02	2.67	5.57
SS0708OGDT	5.0	100	100	100	100	85	2.97	1.67	0.92	2.59	5.56
Barlegro	4.1	100	100	92	92	75	2.56	1.36	1.32	2.69	5.25
Intensiv	4.5	100	100	93	93	60	2.72	1.27	1.21	2.49	5.20
Swante	2.8	96	95	71	68	24	2.22	1.30	0.88	2.18	4.39
Experimental Varieties											
OG88	4.8	100	100	100	100	91	2.83	1.78	1.16	2.94	5.78
DGLF48	3.5	99	98	97	97	74	2.70	1.69	1.17	2.86	5.56
18-DgLF92	3.4	99	99	93	93	53	2.92	1.30	1.16	2.46	5.38
18-DgLF93	2.3	67	85	84	88	69	2.50	1.21	1.23	2.44	4.94
RADLCF54	4.4	100	100	95	94	80	2.45	1.22	1.20	2.42	4.87
Mean	4.1	97	98	93	93	71	2.79	1.54	1.13	2.67	5.46
CV,%	11.7	7	5	10	11	27	17.47	18.22	22.33	16.47	14.96
LSD,0.05	0.7	10	8	14	15	27	0.70	0.40	0.36	0.63	1.17

[1] Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.
*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

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

Variety	Proprietor/KY Distibutor
Commercial Varieties-Available for Farm Use	
Albert	Oregro Seeds
Aldebaran	DLF Pickseed
BARDGLHLR	Barenbrug USA
Barlegro	Barenbrug USA
Berta	Mountain View Seeds
Blizzard	Allied Seed, LLC
Echelon	DLF Pickseed
Intensiv	Barenbrug USA
Lyra	Hood River Seed
Persist	Smith Seed Services
Potomac	Public
Prairie	Turner Seed Company
Prodigy	Caudill Seed
Profit	Ampac Seed
Quick Draw	Grassland Oregon
Rushmore II	Mountain View Seeds
SS-0708OGDT	Southern States
Swante	Smith Seed Services
Treposno	Hood River Seed
Tucker	Oregro Seeds
Experimental Varieties[1]	
DGLF48	Barenbrug USA
O2019	Ampac Seed
OG88	DLF Pickseed
RADLCF54	Radix Research
SEOGP2	Smith Seed Services
SOG-1614	Smith Seed Services
18-DgLF92	Barenbrug USA
18-DgLF93	Barenbrug USA

[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 orchardgrass yield trials 2003-2020 (yield shown as a percentage of the mean of the commercial varieties in the trial).

		Lexington											Princeton						Quicksand						
		2006[1,2]	2007	2009	2011	2012	2013	2014	2015	2016	2017	2019	2004	2006	2008	2010	2012	2015	2003	2005	2010	2013	2016	2018	Mean[3]
Variety	Proprietor	4-yr[4]	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	3-yr	4-yr	3-yr	3-yr	3-yr	2-yr	(#trials)
Albert	Oregro Seeds									99		114											98		104(3)
Aldebaran	DLF Pickseed										99														–
Alpine II	Mountain View Seeds									106															–
Ambassador	DLF Pickseed												95												–
Ambrosia	American Grass Seed Prod.													90											–
Barlegro	Barenbrug USA											98												94	96(2)
Benchmark Plus	Southern States	100	108	105	106	97	109	104						107	104	102	107		107	102	94	102			104(15)
Berta	Mountain View Seeds										76														–
Bounty	Allied Seed	101																		98					100(2)
Century	Seed Research of Oregon	98																		104					101(2)
Checkmate	Seed Research of Oregon		102			117											106								108(3)
Christoss	Proseeds Marketing		92																						–
Command	Seed Research of Oregon												87												–
Crown	Donley Seed			97											105										101(2)
Crown Royale Plus	Donley Seed																		97						–
Devour	Mountain View Seeds									98															–
Echelon	DLF Pickseed									99													113		106(2)
Elise	Rose-AgriSeed					86									98		98								94(3)
Endurance	DLF Pickseed									102				104									82		96(3)
Extend	Allied Seed				107								100			105					108				105(4)
Hallmark	James VanLeeuwen												98						96						97(2)
Harvestar	Columbia Seeds	91	97				94							106						100		102			100(6)
Haymaster	Southern States	94			102															97					98(3)
Haymate	Southern States																		103						–
Icon	Seed Research of Oregon	105																		98					102(2)
Inavale	DLF Pickseed								99	94								97					106		99(4)
Intensiv	Barenbrug USA											97												93	95(2)
Lazuly	Proseeds Marketing														97										–
LG-31	DLF Pickseed												92												–
Lyra	Hood River Seed								90		77							97							89(3)
Megabite	Turf-Seed														106										–
Olathe	DLF Pickseed								111	104								112					89		104(4)
Paiute	DLF Pickseed		108																						–
Persist	Smith Seed	105	106	107	112	106	100	103	111	98	111	100	101			105	102	101	108	101	102	103	107	126	105(21)
Potomac	Public			103	96	97	103	116	100	94	104	102			108	101	98	102			94	111	99		102(16)
Prairie	Turner Seed	107	101	109	106	113	123	108	103	111	111	105		100	104	99	104	96	105	107	120	102	105	107	107(22)
Prodigy	Caudill Seed			101		99	97			97					103		101					95			99(7)

continued

Table 10. continued.

Variety	Proprietor	Lexington											Princeton						Quicksand						Mean[3] (#trials)
		2006[1,2]	2007	2009	2011	2012	2013	2014	2015	2016	2017	2019	2004	2006	2008	2010	2012	2015	2003	2005	2010	2013	2016	2018	
		4-yr[4]	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	3-yr	4-yr	3-yr	3-yr	3-yr	2-yr	
Profit	Ampac Seed		107	96	98	103	96	97	89						103	102	102	96			115	96			100(13)
RAD-LCF 25	Radix Research															99					102				101(2)
Rushmore II	Mountain View seeds									98	111												102		103(3)
Shawnee	Rose-AgriSeed														86										–
Shiloh II	Proseeds Marketing												117												–
SS0708OGDT	Southern States							91	105	101	111	106						100					99	100	102(8)
Swante	Smith Seed											86												79	83(2)
Tekena II	Smith Seed	102											109						106	104					105(4)
Tekapo	Ampac Seed	91	81	82	78	82	76	80						98	86	92	82		105	91	81	89			86(15)
Treposno	Hood River Seed								92		99							99							97(3)
Tucker	Oregro Seeds				96							93		96	102	96					85			100	95(7)
Udder	Improved Forages	107																	106	99					104(3)
Vailliant	Proseeds Marketing		96																						–

[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 Orchardgrass Report" archived in the UK Forage website (www.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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