## 2021 Orchardgrass Report

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

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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, bunchtype 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 (https://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. Latermaturing 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

**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.

#### **Description of the Tests**

Data from three studies are reported. Orchardgrass varieties were sown at Lexington (2018, 2019, and 2020). The soils at Lexington (Maury) is a well-drained silt loam and is well-suited to orchardgrass production. Seedings were made at the rate of 20 pounds per acre 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 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 sickletype 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.

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

		Mati	urity Ra	ting <sup>1</sup>	
Variety	KY	PA	ÚT	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 <sup>2</sup>	0.4	0.4	0.5	0.9	0.3

<sup>&</sup>lt;sup>1</sup> Rating of 1 to 4: 1 = very late; 4 = very early.

Table 2. Temperature and rainfall at Lexington, Kentucky in 2019, 2020, and 2021.

		20	19			20	20			20	21 <sup>2</sup>	
	Tei	mp	Raiı	nfall	Tei	mp	Raiı	nfall	Tei	mp	Raiı	nfall
	°F	DEP <sup>1</sup>	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

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

<sup>&</sup>lt;sup>2</sup> Varieties significantly differ based on LSD. For complete article: Hay and Forage Grower, March 2018.

<sup>&</sup>lt;sup>2</sup> 2021 data is for ten months through October.

Table 3. 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
13	3 leaves unfolded	leaf development index (see text).
•	••••	
19	9 or more leaves unfolded	
	Sheath elongation	
20	No elongated sheath	Denotes first phase of new spring
21	1 elongated sheath	growth after overwintering. This character is used instead of
22	2 elongated sheaths	tillering which is difficult to record
23	3 elongated sheaths	in established stands.
•	••••	
29	9 or more elongated sheaths	
	Tillering (alternative to sheath e	longation)
21	Main shoot only	Applicable to primary growth
22	Main shoot and 1 tiller	of seedlingsor to single tiller
23	Main shoot and 2 tillers	transplants.
24	Main shoot and 3 tillers	
•	• • • • •	
29	Main shoot and 9 or more tillers	
	Stem elongation	
31	First node palpable	More precisely an accumulation
32	Second node palpable	of nodes. Fertile and sterile tillers
33	Third node palpable	distinguishable.
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	1/4 of inflorescence emerged	
54	½ of inflorescence emerged	
56	<sup>3</sup> / <sub>4</sub> of inflorescence emerged	
58	Base of inflorescence just visible	
	Anthesis	I
60	Preanthesis	Inflorescence-bearing internode is visible. No anthers are visible.
62	Beginning of anthesis  Maximum anthesis	First anthers appear.
64	Triariti attenesis	Maximum pollen shedding.
66	End of anthesis	No more pollen shedding.
7.5	Seed ripening	10
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.

#### **Results and Discussion**

Weather data for Lexington is presented in Table 2.

Ratings for maturity (see Table 3 for maturity scale), stand persistence, and dry matter yields (tons per acre) are reported in tables 4 through 6. Yields are given by cutting date for 2021 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 7 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 4 through 6).

#### **How to Interpret the Summary Table**

Table 8 is a summary of yield data from 2005 to 2021 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 8, 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 8 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 (https://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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Variety	Coodling	2	Maturity <sup>2</sup>				Pe	Percent Stand	pu						Yield (tons/acre)	ns/acre)			
Variety	Seediing Vigor <sup>1</sup>	2019	2020	2021	2018	2019	19	20.	2020	2021	21	2019	2020			2021			3-vear
ion Window	118	May 13	May 11	May 11	Sep 28	Mar 22	Oct 18	Mar 17	Oct 27	Mar 24	Oct 22	Total	Total	May 11	Jun 16	Aug 26	Oct 18	Total	Total
Commercial varie	Commercial Varieties-Available for Farm Use	e for Farm	ı Use																
SS07080GDT	5.0	58.0	55.5	54.0	100	100	100	100	100	100	100	2.55	3.13	1.13	0.73	1.08	0.68	3.62	9.30*
Albert	5.0	55.5	51.5	48.5	100	100	66	66	66	66	66	2.79	3.31	96.0	0.83	0.63	0.56	2.97	*20.6
Prairie	4.8	56.5	55.5	53.5	100	100	100	100	100	100	66	2.52	3.10	1.07	0.63	1.04	0.63	3.37	*66.8
Persist	3.6	58.0	56.0	26.0	100	100	100	100	100	100	66	2.33	3.04	1.08	0.62	1.04	0.68	3.42	*62.8
Intensiv	3.8	46.8	53.0	53.0	100	100	96	95	94	94	83	2.20	3.01	1.02	0.79	98.0	0.58	3.25	8.45*
Potomac	4.8	57.0	52.5	55.0	100	100	100	100	100	66	100	2.52	2.96	1.08	0.46	0.83	0.55	2.92	8.40*
Tucker	4.9	53.3	53.5	55.0	100	100	66	86	86	86	6	2.05	2.93	1.01	0.76	0.84	0.54	3.16	8.14*
Barlegro	3.5	52.5	52.5	8.05	100	100	94	64	92	92	87	2.23	3.01	0.74	69.0	0.91	0.54	2.89	8.12*
Swante	3.1	52.3	52.0	55.0	100	86	89	87	87	87	58	2.02	2.57	1.02	0.65	0.83	0.44	2.94	7.53
<b>Experimental Varieties</b>	ieties																		
0688	5.0	54.0	52.5	53.0	100	100	66	86	66	66	86	2.76	3.12	0.91	0.67	1.02	0.83	3.43	9.31*
DGLF48	3.9	56.0	53.5	55.5	100	100	100	100	100	66	96	2.26	2.94	1.63	0.63	0.73	0.64	3.64	8.85*
RADLCF54	4.4	46.3	50.3	46.5	100	100	86	26	6	62	92	2.41	3.02	0.88	0.75	0.75	0.64	3.02	8.45*
18-DgLF92	3.6	50.8	51.8	54.5	100	100	94	68	88	88	83	2.01	2.64	1.34	0.72	0.81	09.0	3.48	8.13*
18-DgLF93	3.6	54.5	53.0	53.5	100	100	93	06	91	93	88	1.99	2.98	0.74	0.74	0.88	0.59	2.94	7.91
Mean	4.2	53.7	53.1	53.1	100	100	6	96	96	96	91	2.33	2.98	1.04	69.0	0.87	0.61	3.22	8.53
CV,%	7.4	6.1	4.1	9.9	0	0	3	4	4	4	11	12.13	12.93	27.30	21.89	30.85	20.59	16.27	10.09
LSD,0.05	0.4	4.6	3.1	5.0	0	0	4	5	5	9	14	0.40	0.55	0.41	0.22	0.39	0.18	0.75	1.23

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

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 3 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 orchardgrass varieties sown August 30, 2019, at Lexington, Kentucky.

	Seedling	Mati	ırity <sup>2</sup>		Pe	rcent Sta	nd				Yiel	d (tons/a	cre)		
	Vigor <sup>1</sup>	2020	2021	2019	20	20	20	21	2020			2021			2-year
Variety	Oct 23, 2019	May 7	May 11	Oct 23	Mar 17	Oct 27	Mar 24	Oct 22	Total	May 11	Jun 16	Aug 26	Oct 19	Total	Total
<b>Commercial Va</b>	arieties-Availal	ble for Fa	rm Use												
Quickdraw	4.4	53.5	57.5	100	100	100	100	100	3.74	2.26	1.02	0.97	0.96	5.21	8.95*
Blizzard	4.8	49.8	55.5	100	100	100	100	100	3.81	1.79	0.86	0.78	0.83	4.26	8.06*
Persist	3.5	52.0	57.0	100	99	100	100	100	3.45	2.06	0.81	0.93	0.80	4.61	8.06*
SS0708OGDT	4.8	53.0	56.0	100	100	100	100	100	3.46	1.76	1.00	0.92	0.71	4.40	7.86*
Echelon	3.3	40.5	46.8	100	97	97	98	98	3.59	1.58	0.97	0.82	0.84	4.20	7.79*
Albert	4.0	46.3	52.5	100	100	100	100	100	3.45	1.42	0.98	0.96	0.91	4.26	7.71*
Tekapo	3.9	47.8	55.5	100	100	100	100	100	3.28	1.89	0.74	0.89	0.82	4.35	7.63*
Prairie	3.6	53.0	56.0	100	100	100	100	100	3.36	1.78	0.80	0.84	0.83	4.24	7.59*
Profit	4.3	42.0	52.8	100	100	100	100	100	3.04	2.02	0.80	0.84	0.77	4.43	7.48*
Prodigy	4.5	53.0	55.5	100	99	99	100	99	3.27	1.72	0.65	0.83	0.76	3.95	7.21*
BARDGLHLR	2.6	39.0	32.0	100	98	99	99	98	2.82	1.39	0.76	0.67	0.67	3.48	6.30
<b>Experimental</b>	Varieties														
SEOGP2	3.6	49.5	57.0	100	100	100	100	100	3.92	2.10	0.74	0.88	1.01	4.73	8.65*
02019	3.4	46.0	52.8	100	99	100	100	100	3.28	1.94	0.97	0.85	0.90	4.66	7.94*
Mean	3.9	48.1	53.8	100	99	99	100	99	3.42	1.82	0.85	0.86	0.83	4.37	7.79
CV,%	15.2	7.1	4.9	0	2	1	1	1	17.20	18.19	32.02	20.39	19.30	17.57	16.07
LSD,0.05	0.8	1.9	3.7	0	2	2	2	2	0.84	0.48	0.39	0.33	0.23	1.10	1.79

Table 6. Dry matter yields, seedling vigor, maturity, and stand persistence of orchardgrass varieties sown August 28, 2020, at Lexington, Kentucky.

	Seedling	Maturity <sup>2</sup>	P	ercent Stan	d		Yie	eld (tons/ac	re)	
	Vigor <sup>1</sup>	2021	2020	20	21			2021		
Variety	Sep 24, 2020	May 7	Sep 24	Mar 24	Oct 22	May 7	Jun 16	Aug 26	Oct 20	Total
Commercial V	arieties-Availal	ole for Farm U	se							
Bighorn	4.0	46.3	100	100	100	2.56	1.67	1.34	1.01	6.59*
Harvestar	2.9	48.0	100	100	100	2.32	1.47	1.20	0.89	5.89*
Prairie	3.4	53.5	100	100	100	2.21	1.29	1.13	0.87	5.50*
Prodigy	3.8	53.0	100	100	100	2.08	1.47	0.95	0.88	5.38*
Tucker	3.5	51.0	100	100	100	2.03	1.35	1.02	0.79	5.19
Alpine II	3.1	45.0	100	100	100	1.90	1.42	1.08	0.75	5.16
Olathe	3.9	46.3	100	100	100	1.90	1.29	1.13	0.82	5.14
Profit	3.4	46.8	100	100	100	1.94	1.23	0.99	0.83	4.99
SS0708OGDT	3.4	52.0	100	100	100	2.07	1.24	0.84	0.81	4.97
Intensiv	3.1	45.0	100	100	100	1.88	1.37	0.85	0.72	4.83
Persist	3.3	53.5	100	100	100	1.90	1.22	0.82	0.79	4.73
Captur	3.1	45.0	100	100	100	1.75	1.30	0.96	0.70	4.70
HLR	3.0	45.0	100	100	100	1.71	1.31	0.84	0.73	4.59
Devour	3.4	45.0	100	100	100	1.71	1.11	0.78	0.71	4.31
Swante	2.9	46.3	100	100	100	1.53	1.09	0.85	0.57	4.03
Experimental	Varieties									
OG97	3.8	50.8	100	100	100	2.21	1.53	1.29	0.96	6.00*
SEOGP2	3.5	52.5	100	100	100	2.23	1.34	1.08	0.94	5.59*
BARDGLF95	2.4	45.0	100	100	100	1.82	1.35	0.86	0.84	4.86
OG96	3.3	46.3	98	100	100	1.92	1.38	0.83	0.71	4.83
BARDGLF94	3.5	48.0	100	100	100	1.97	1.22	0.96	0.48	4.63
Mean	3.3	48.2	100	100	100	1.98	1.33	0.99	0.79	5.10
CV,%	19.6	4.4	1	0	0	19.11	17.47	26.98	25.37	17.09
LSD,0.05	0.9	3.0	1	0	0	0.54	0.33	0.38	0.28	1.23

<sup>1</sup> 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 3 for complete scale.

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

 <sup>1</sup> 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 3 for complete scale.
 \*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 8. Summary of Kentucky orchardgrass yield trials 2005-2021 (yield shown as a percentage of the mean of the commercial varieties in the trial).

					•		l exington	oton							۵	Princeton				j	Onicksand			
		20061,2 2007	200	7 2009	9 2011	2012	-	2013 2014	2015	2016	2017	2018	2019	2006	2008	2008 2010 2012		2015 20	05 20	10 20	2005 2010 2013 2016	16 2018		Mean <sup>3</sup>
Variety	Proprietor	4-yr <sup>4</sup>	3-yr	r 3-yr	r 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 2	2-yr 4	4-yr 3	3-yr 3	3-yr 3-	3-yr 2-yr	_	(#trials)
Albert	Oregro Seeds		-			-				66		106	100								6	86	10.	101(4)
Aldebaran	DLF Pickseed										66												_	
Alpine II	Mountain View Seeds									106												-	_	
Ambrosia	American Grass Seed Prod.													06									_	1
BARDGLHLR	Barenbrug USA											;	82									-		1 3
Barlegro	Barenbrug USA	100	100	105	106	0.7	100	25				35		107	5	100	107	7	100	70	102	94	-	95(2)
Berta	Mountain View Seeds	001	001	+			601	2			92			2	5	701	2	-		+	70	+	5 .	£ .
Blizzard	Allied Seed										)		105										'	
Bounty	Allied Seed	101																0,	98				100	100(2)
Century	Seed Research of Oregon	86																-	104				10	101(2)
Checkmate	Seed Research of Oregon		102			117											106						108	108(3)
Christoss	Proseeds Marketing		92																					
Crown	Donley Seed			6											105						_		10.	101(2)
Devour	Mountain View Seeds									86														
Echelon	DLF Pickseed									66			101								1	113	107	104(3)
Elise	Rose-AgriSeed					98									86		86						94	94(3)
Endurance	DLF Pickseed									102				104							82	2	96	96(3)
Extend	Allied Seed				107											105			_	108			10]	107(3)
Harvestar	Columbia Seeds	91	97				94							106					100	_	102		86	(9)86
Haymaster	Southern States	94			102													01	97				86	98(3)
Icon	Seed Research of Oregon	105																0,	86				102	102(2)
Inavale	DLF Pickseed								66	94								97			1	106	66	99(4)
Intensiv	Barenbrug USA											66										93	_	96(2)
Lazuly	Proseeds Marketing														97								_	
Lyra	Hood River Seed								8		77							97					88	88(3)
Megabite	Turf-Seed				_										106								4	
Olathe	DLF Pickseed			_					111	104								112			∞	68	100	104(4)
Paiute	DLF Pickseed		108	+	$\dashv$												-	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\dashv$	
Persist	Smith Seed	105	106	$\dashv$	+	106	9	103	111	86	13	103	105			105		+	101		-	126	$\dashv$	(20)
Potomac	Public			+	+	97	103	116	9	94	104	88			108	+	+	_		-	+	+	_	102(16)
Prairie	Turner Seed	107	101	+	901	113	123	108	103	111	111	105	66	9	104	66		96	107	120 1	+	105 107	_	(22)
Prodigy	Caudill Seed			+	+	66	97			97			94		103	+	+	1		+	95		86	98(8)
Profit	Ampac Seed		107	96	88	103	96	97	88				97		103	102	102	96	-	115 9	96		100	100(14)
Quickdraw	Grassland Oregon			1									106										1	. 3
RAD-LCF 25	Radix Research															66		+	_	102	+		10	101(2)
Rushmore II	Mountain View seeds									86	11										102	20	100	104(3)
Shawnee	Rose-AgriSeed														98							$\dashv$		
SS07080GDT	Southern States							91	105	101	111	109	102				_	100			6	99 100	$\dashv$	102(9)
Swante	Smith Seed											88										79		84(2)
Tekena II	Smith Seed	102		$\dashv$	_													_	_				103	103(2)
Tekapo	Ampac Seed	91	8	82	78	82	26	80					66	86	98	92	82	01	91	81	89		86(	86(15)
Treposno	Hood River Seed								92		66							66					97(3)	(3)
Tucker	Oregro Seeds				96							95		96	102	96			~	85		100	(2)96 (2)	(7)
Udder	Improved Forages	107																0,	66				100	103(2)
Vailliant	Proseeds Marketing		96	4	_											-	4	-	-	-	-	-	4	
1 Year trial was established.	olished.					,							,											

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 this summary table as a guide in making variety decisions, but refer to specific trial. For example, the Lexington trial planted in 2012 was harvested three years, so the final report would be "2015 Orchardgrass Report" archived in the UK Forage website (https://forages.auky.adu).

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

Table 7. Proprietors of orchardgrass varieties in current trials in Kentucky.

Variety	Proprietor/KY Distibutor
Commercial Varieties	-Available for Farm Use
Albert	Oregro Seeds
Alpine II	Mountain View Seeds
BARDGLHLR	Barenbrug USA
Barlegro	Barenbrug USA
Bighorn	Mountain View Seeds
Blizzard	Allied Seed, LLC
Captur	DLF Pickseed
Devour	Mountain View Seeds
Echelon	DLF Pickseed
Harvestar	Columbia Seeds
HLR	Barenbrug USA
Intensiv	Barenbrug USA
Olaathe	DLF Pickseed
Persist	Smith Seed Services
Potomac	Public
Prairie	Turner Seed Company
Prodigy	Caudill Seed
Profit	Ampac Seed
Quick Draw	Grassland Oregon
SS-0708OGDT	Southern States
Swante	Smith Seed Services
Tekapo	Ampac Seed
Tucker	Oregro Seeds
<b>Experimental Varieti</b>	es <sup>1</sup>
BARDGLF94	Barenbrug USA
BARDGLF95	Barenbrug USA
DGLF48	Barenbrug USA
O2019	Ampac Seed
OG88	DLF Pickseed
OG96	DLF Pickseed
OG97	DLF Pickseed
RADLCF54	Radix Research
SEOGP2	Smith Seed Services
SOG-1614	Smith Seed Services
18-DgLF92	Barenbrug USA
18-DgLF93	Barenbrug USA

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

