

2010 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 very 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. Table 8 shows a summary of all orchardgrass varieties tested in Kentucky for the last 10-plus years. The UK Forage Extension web site at <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.

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.

Local Adaptation and Seasonal Yield. Choose a variety that is 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 that is 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) and the level of germination and other crop and weed seed. Order seed well in advance of planting time to assure that it will be available when needed.

Description of the Tests

Data from three studies are reported. Orchardgrass varieties were sown at Lexington (2007 and 2009), and Princeton (2008). The soils at Lexington (Maury), and Princeton (Crider) are well-drained silt loams and are well suited to orchardgrass production. Seedlings were made at the rate of 20 lb/A 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 harvest plot area of 5 by 15 feet. Nitrogen was topdressed at 60 lb/A of actual N in March, after the first cutting, and again in late summer, for a total of 180 lb/A 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, weed control, and harvest timing were in accordance with University of Kentucky recommendations.

Results and Discussion

Weather data for Lexington and Princeton are presented in Tables 1 and 2.

Ratings for maturity (see Table 3 for maturity scale), stand persistence and dry matter yields (tons/A) are reported in Tables 4 through 6. Yields are given by cutting date for 2010 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 that 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 summarizes information about distributors and yield performance across locations for all varieties currently included in tests discussed in this publication. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Remember that experimental varieties are not available for farm use; commercial varieties can be purchased through distributors. In Table 7, 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 top-yielding variety in that study, based on the 0.05 LSD. It is best to choose a variety that has performed well over several years and locations.

Table 1. Temperature and rainfall at Lexington, Kentucky in 2007, 2008, 2009 and 2010.

	2007				2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	37	+6	2.93	+0.07	32	+2	3.91	+1.05	28	-3	2.45	-0.41	29	-2	2.40	-0.46
FEB	27	-8	1.83	-1.38	36	+1	6.11	+2.90	38	+3	2.86	-0.35	29	-6	1.38	-1.83
MAR	52	+8	1.97	-2.43	44	+1	6.51	+1.91	48	+4	2.19	-2.21	47	+3	1.05	-3.35
APR	53	-2	3.87	-0.01	55	0	5.89	+2.01	55	0	4.48	+0.60	59	+4	2.74	-1.14
MAY	68	+4	1.45	-3.02	62	-2	4.33	+0.14	64	0	5.05	+0.58	67	+3	7.84	+3.37
JUN	74	+2	1.77	-1.89	74	+2	3.59	-0.07	74	+2	5.41	-1.75	76	+4	4.61	+0.95
JUL	74	-2	6.90	+1.90	76	0	3.41	-1.59	71	-5	5.89	+0.89	78	+2	5.49	+0.49
AUG	80	+5	2.56	-1.37	75	0	2.18	-1.75	73	-2	5.38	+1.45	78	+3	1.54	-2.39
SEP	72	+4	1.15	-2.05	72	+4	1.42	-1.78	68	0	5.37	+2.17	71	+3	1.14	-2.06
OCT	63	+6	5.28	+2.71	57	0	1.53	-1.04	54	-3	4.83	+2.26	59	+2	1.22	-1.35
NOV	46	+1	2.86	-0.53	43	-2	2.53	-0.86	49	+4	0.94	-2.45				
DEC	40	+4	5.29	+1.31	35	-1	6.03	+2.05	36	0	3.86	-0.12				
Total			37.86	-6.69			47.24	+2.69			48.71	+4.16			29.41	-7.77

¹ DEP is departure from the long-term average.

² 2010 data is for 10 months through October.

Remember to consider the distribution of yield across the growing season when evaluating productivity of orchardgrass varieties (Tables 4 through 6).

Table 8 is a summary of yield data from 1998 to 2010 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 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 Table 8, 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 footnote in Table 8 to determine which yearly report to refer to.

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.uky.edu/Ag/Forage:

- AGR-1—*Lime and Fertilizer Recommendations*
- AGR-18—*Grain and Forage Crop Guide for Kentucky*
- AGR-26—*Renovating Hay and Pasture Fields*
- AGR-58—*Orchardgrass*
- AGR-64—*Establishing Forage Crops*
- AGR-175—*Forage Identification and Use Guide*

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Table 2. Temperature and rainfall at Princeton, Kentucky in 2008, 2009, and 2010.

	2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	37	+3	2.40	-1.40	33	-1	0.94	-2.86	31	-3	3.06	-0.74
FEB	39	+1	6.76	+2.33	42	+4	3.28	-1.15	33	-5	1.54	-2.89
MAR	48	+1	7.55	+2.61	53	+6	2.89	-2.05	48	+1	3.24	-1.7
APR	58	-1	6.56	+1.76	58	-1	5.35	+0.55	62	3	3.3	-1.54
MAY	65	-2	6.19	+1.23	67	0	6.14	+1.18	69	+2	10.41	+5.45
JUN	78	+3	1.24	-2.61	77	+2	7.97	+4.12	79	4	4.82	0.97
JUL	79	+1	5.12	+0.83	74	-4	7.45	+3.16	80	2	2.73	-1.56
AUG	77	0	0.69	-3.32	75	-2	2.44	-1.60	81	4	2.46	-1.55
SEP	74	+3	0.61	-2.72	71	0	4.61	+1.28	72	1	0.94	-2.39
OCT	60	+1	2.21	-0.84	55	-4	9.08	+6.03	60	+1	0.97	-2.08
NOV	46	-1	2.59	-2.04	52	+5	1.50	-3.13				
DEC	39	0	6.49	+1.95	36	-3	2.73	-2.31				
Total			48.95	-2.18			54.31	+3.22			33.47	-7.99

¹ DEP is departure from the long-term average.

² 2010 data is for 10 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 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 (<i>alternative to sheath elongation</i>)		
21	Main shoot only	Applicable to primary growth of seedlings or to single-tiller transplants.
22	Main shoot and 1 tiller	
23	Main shoot and 2 tillers	
24	Main shoot and 3 tillers	
•	• • • •	
29	Main shoot and 9 or more tillers	
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 quantity when inflorescence hit on palm.
93	Endosperm hard and dry	Final stage of seed development; most seeds shed.
Smith, J. Allan, and Virgil W. Hayes. 1981. pp. 416-418. 14th International Grasslands Conference Proc. 1981. June 14-24, 1981, Lexington, Kentucky.		

Variety		Maturity ²										Percent Stand										Yield (tons/acre)						3-year Total		
		Seedling Vigor ¹		2008		2009		2010		2007		2008		2009		2010		2008		2009		2010		2008		2009		2010		Total ³
		Oct 25, 2007		May 12	May 15	May 6	Oct 25	Mar 26	Oct 21	Apr 6	Oct 30	Apr 13	Oct 15	2010	2009	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
Commercial Varieties—Available for Farm Use		Paiute2	3.0	57.5	57.0	57.0	55.5	99	100	100	100	100	100	100	100	100	100	99	99	96	100	100	96	1.53	0.93	0.24	2.71	10.18*		
		Benchmark Plus	4.0	56.5	58.0	57.5	100	100	100	100	100	100	100	100	100	100	100	100	100	99	94	94	2.36	1.49	0.91	0.22	2.63	10.15*		
		Profit	3.5	51.8	55.5	53.5	100	100	100	100	100	100	100	100	100	100	100	100	100	99	94	94	2.20	1.58	0.95	0.23	2.76	10.07*		
		Persist	4.0	57.0	58.0	57.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	96	100	96	1.75	0.89	0.28	2.92	9.99*		
		Checkmate	3.3	53.0	54.5	52.0	99	100	100	100	100	100	100	100	100	100	100	100	100	99	95	95	2.08	1.29	0.98	0.25	2.52	9.59*		
		Prairie	4.0	57.0	57.0	55.5	98	100	100	100	100	100	100	100	100	100	100	100	100	98	93	93	2.14	1.45	0.96	0.25	2.67	9.48*		
		Harvestar	3.8	46.3	53.0	51.5	100	99	100	100	99	95	93	94	84	84	84	2.11	1.11	84	94	94	2.11	1.28	1.11	0.20	2.59	9.15*		
		Vaillant	2.8	34.8	43.8	46.0	100	100	100	100	100	88	90	88	78	88	78	2.15	1.31	78	88	88	2.15	1.31	1.09	0.23	2.62	9.02		
		Christoss	4.3	30.0	34.5	38.3	100	100	100	100	100	94	95	92	79	92	79	2.21	1.12	79	92	92	2.21	1.12	1.09	0.18	2.39	8.61		
		Tekapo	4.5	55.0	55.5	54.5	100	100	100	100	100	93	98	98	93	98	93	1.78	3.63	93	98	93	1.78	1.14	0.88	0.22	2.23	7.64		
Experimental Varieties		9007238	2.5	55.0	57.5	57.5	98	98	99	99	99	99	100	100	99	99	100	1.06	4.58	96	99	96	1.06	1.59	0.89	0.24	2.72	8.36		
		Mean	3.6	50.3	53.1	52.6	99.4	99.4	99.7	97.0	97.5	96.8	90.6	90.6	90.6	90.6	90.6	2.05	4.63	90.6	96.8	90.6	2.05	1.41	0.97	0.23	2.61	9.29		
		CV%	17.7	9.5	7.1	4.6	1.4	1.0	0.5	2.0	2.3	2.8	2.8	3.7	2.8	3.7	10.47	9.97	3.7	2.8	3.7	10.47	12.33	10.32	19.29	10.03	7.98			
		LSD, 0.05	0.9	6.9	5.5	3.5	2.0	1.4	0.8	2.8	3.3	3.9	4.8	4.8	4.8	4.8	0.31	0.67	4.8	3.9	4.8	0.31	0.25	0.14	0.06	0.38	1.07			

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

²Maturity 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.

³Due to very dry weather, there was not enough growth for a late summer or fall harvest.

* 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 September 29, 2008 at Princeton, Kentucky.

Variety	Seedling Vigor ¹ Oct 30, 2008	Maturity ²		Percent Stand					Yield (tons/acre)				2-year Total
		2009	2010	2008	2009		2010		2009	2010		Total ³	
		May 11	May 18	Oct 30	Apr 17	Nov 4	Mar 18	Nov 18	Total	May 18	Jun 16		
Commercial Varieties—Available for Farm Use													
Crown	3.3	55.5	63.3	95	99	98	95	80	4.41	1.66	0.44	2.10	6.51*
Lazuly	4.5	38.3	61.8	96	81	80	84	40	4.62	1.31	0.51	1.82	6.44*
Prodigy	2.8	57.5	62.5	95	93	94	93	63	4.25	1.78	0.41	2.19	6.44*
Potomac	3.8	57.0	63.0	97	100	99	96	87	4.16	1.69	0.43	2.12	6.28*
Tucker	3.8	50.3	62.3	97	98	97	93	78	4.21	1.66	0.40	2.06	6.27*
Benchmark Plus	3.8	56.5	63.3	96	99	98	95	88	4.01	1.71	0.41	2.12	6.13*
Profit	3.5	50.3	62.3	96	97	96	95	82	4.14	1.50	0.48	1.98	6.12*
Megabite	3.8	55.5	63.0	97	97	98	98	84	3.82	1.59	0.53	2.12	5.94*
Elsie	2.8	52.8	62.5	95	97	96	97	83	4.05	1.39	0.48	1.88	5.93*
Prairie	3.8	51.8	62.8	98	99	97	97	81	4.31	1.10	0.45	1.56	5.87*
Shawnee	2.0	34.8	52.0	93	84	89	88	57	3.71	1.38	0.57	1.95	5.66
Tekapo	2.8	48.3	63.8	95	68	83	86	72	3.34	1.48	0.41	1.89	5.23
Experimental Varieties													
ADG 1002	3.5	50.3	62.0	96	99	100	97	85	4.31	1.58	0.63	2.21	6.52*
B-80707	2.8	57.0	63.0	97	98	97	93	75	4.06	1.79	0.43	2.22	6.28*
ADG 1001	3.3	49.3	62.8	97	94	96	93	68	4.00	1.63	0.58	2.22	6.21*
8SS	3.0	55.5	63.3	95	95	93	93	76	4.18	1.61	0.42	2.03	6.20*
Mean	3.3	51.3	62.1	95.8	93.4	94.3	93.2	75.2	4.10	1.55	0.47	2.03	6.13
CV,%	19.1	11.5	1.2	2.1	9.8	6.4	4.9	15.1	9.06	19.67	13.17	15.58	7.46
LSD, 0.05	0.9	8.4	1.0	2.8	13.0	8.5	6.5	18.6	0.53	0.44	0.09	0.45	0.65

¹ Vigor score based on 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.

³ Due to very dry weather, there was not enough growth for a late summer or fall harvest.

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

Variety	Seedling Vigor ¹ Oct 13, 2009	Maturity ²	Percent Stand			Yield (tons/acre)			
		2010	2009	2010		2010			
		May 6	Oct 13	Apr 13	Oct 18	May 6	Jun 22	Aug 10	Total ³
Commercial Varieties—Available for Farm Use									
Prairie	4.0	56.0	100	100	98	1.43	1.29	0.47	3.19*
Potomac	3.9	57.5	99	100	77	1.49	1.16	0.47	3.12*
Benchmark Plus	3.8	57.0	100	100	98	1.39	1.17	0.48	3.04*
Persist	3.5	57.5	99	100	99	1.49	1.03	0.47	3.00*
Crown	2.6	56.0	98	99	97	1.30	1.12	0.36	2.78
Prodigy	1.6	57.0	88	95	95	1.07	1.25	0.43	2.75
Profit	3.0	53.0	95	98	97	1.13	1.04	0.44	2.61
Tekapo	2.1	51.0	89	90	97	0.71	1.04	0.34	2.09
Experimental Varieties									
IS-OG51	3.8	56.5	98	100	99	1.15	1.12	0.43	2.69
B-9-NIC4	2.8	57.0	95	98	96	1.09	1.11	0.36	2.57
Mean	3.1	55.9	96.1	97.8	95.4	1.23	1.13	0.43	2.78
CV,%	30.7	2.2	6.3	3.3	14.7	13.49	10.84	20.67	8.98
LSD, 0.05	1.4	1.8	8.7	4.6	20.4	0.24	0.18	0.13	0.36

¹ Vigor score based on 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.
³ Due to very dry weather, there was not enough growth for a late summer or fall harvest.
* Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Variety	Proprietor/KY Distributor	Princeton		Lexington		
		2008 ¹		2007		2009
		09 ²	10	08	09	10
Commercial Varieties—Available for Farm Use						
Benchmark Plus	FFR/Southern States	x ³	*	*	*	*
Checkmate	Seed Research of Oregon			*	*	x
Christoss	ProSeeds Marketing			*	x	x
Crown	Donley Seed	*	*			x
Elsie	Rose-AgriSeed	x	*			
Harvestar	Columbia Seeds			*	x	*
Lazuly	ProSeeds Marketing	*	*			
Megabite	Rose-AgriSeed	x	*			
Paiute 2	DLF International Seeds			*	*	*
Persist	Smith Seed Services			*	*	*
Potomac	Public					*
Prairie	Turner Seed Company	*	x	*	*	*
Profit	Ampac Seed Company	*	*	*	*	*
Shawnee	Rose-AgriSeed	x	*			
Prodigy	Caudill Seed	*	*			x
Tekapo	Ampac Seed Company	x	*	x	x	x
Tucker	Oregro Seeds, Inc.	*	*			
Vailliant	Proseeds Marketing			*	x	*
Experimental Varieties						
8SS	Rose-AgriSeed	*	*			
9007238	USDA/NRCS			x	*	*
ADG 1001	ProSeeds Marketing	x	*			
ADG 1002	ProSeeds Marketing	*	*			
B-8.0707	Blue Moon Farms	x	*			
B-9-NIC4	Blue Moon Farms					x
IS-OG51	DLF International Seeds					x

¹ Establishment year.
² Harvest year.
³ x in the box indicates the variety was in the test but yielded significantly less than the top ranked variety in the test. Open box indicates the variety was not in the test.
* Not significantly different from the highest yielding variety in the test.

Table 8. Summary of Kentucky Orchardgrass Yield Trials 1999-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor	Lexington					Princeton					Quicksand				Mean ³ (#trials)	
		1999 ^{1,2} 2-yr ⁴	2001 2-yr	2003 3-yr	2006 4-yr	2007 3-yr	1998 2-yr	2000 2-yr	2002 3-yr	2004 3-yr	2006 3-yr	1999 2-yr	2001 2-yr	2003 3-yr	2005 4-yr		
Abertop	Pennington							71							-		
Albert	Univ. of Wis.		103									106			105(2)		
Amba	DLF International Seeds		96									80			88(2)		
Ambassador	DLF International Seeds								95						-		
Ambrosia	American Grass Seed Prod.									90					-		
Athos	DLF International Seeds		98									105			102(2)		
Benchmark	FFR/Sou. St.	103					101	97	113			106			104(5)		
Benchmark Plus	FFR/Sou. St.				100	108			107		107			107	102	105(6)	
Boone	Public						103	104								104(2)	
Bronc	Grassland West							98								-	
Bounty	Allied Seed				101										98	100(2)	
Century	Seed Research of Oregon				98										104	101(2)	
Checkmate	Seed Research of Oregon					102										-	
Christoss	Proseeds Marketing					92										-	
Command	Seed Research of Oregon									87						-	
Crown	Donley Seed	101					105		101			97				101(4)	
Crown Royale	Donley Seed												110			-	
Crown Royale Plus	Donley Seed								108					97		103(2)	
Eastwood	Ampac Seed		86										86			86(2)	
Endurance	DLF International Seeds										104					-	
Extend	Allied Seed									100						-	
Hallmark	James VanLeeuwen		102	102					103	98			101	96		100(6)	
Harvestar	Columbia Seeds				91	97					106				100	99(4)	
Haymaster	FFR/Sou. St.				94										97	96(2)	
Haymate	FFR/Sou. St.	106					93	100	106			108	104	103		103(7)	
Icon	Seed Research of Oregon				105										98	102(2)	
Intensiv	Barenbrug			102												-	
LG-31	DLF International Seeds									92						-	
Mammoth	DLF International Seeds		102										104			103(2)	
Megabyte	Turf-Seed	94	105									101				100(3)	
Niva	DLF International Seeds								81							-	
Paiute	DLF International Seeds					108										-	
Persist	Smith Seed			123	105	106				101				108	101	107(6)	
Potomac	Public	104							98			99				100(3)	
Prairie	Turner Seed		101		107	101		95	104		100		102	105	107	102(9)	
Profit	Ampac Seed					107										-	
Renegade	Grassland West							95								-	
Shiloh	Proseeds Marketing						109									-	
Shiloh II	Proseeds Marketing									117						-	
Spanish Pink	DLF International Seeds						82									-	
Spanish Red	DLF International Seeds	101										94				98(2)	
Takena	Smith Seed		107						100				108			105(3)	
Tekena II	Smith Seed			110	102					109				106	104	106(5)	
Tekapo	Ampac Seed	88			91	81						98	94	92	105	91	93(8)
Tucker	Oregro Seeds											96				-	
Udder	Improved Forages			100	107			102	102					106	99	103(6)	
Vailliant	Proseeds Marketing					96										-	
Vision	Cropmark Seeds			63										67		65(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 1999 was harvested two years, so the final report would be "2001 Orchardgrass Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

⁴ Number of years of data.



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