

2007 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 9 shows a summary of all orchardgrass varieties tested in Kentucky for the last nine 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 four studies are reported. Orchardgrass varieties were sown at Lexington (2006), Quicksand (2005), and Princeton (2004 and 2006). The soils at Lexington (Maury), Quicksand (Nolin), and Princeton (Crider) are well-drained silt loams and

are well suited to orchardgrass production. Seedings were made at the rate of 20 lb/A into a prepared seedbed with a disk drill. Plots were 5 by 15 ft in a randomized complete block design, with four replications. 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 Quicksand, Lexington, and Princeton are presented in Tables 1 through 3.

Ratings for maturity and stand and dry matter yields (tons/acre) are reported in Tables 4 through 7. Yields are given by cutting date 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 8 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 8, 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. It is best to choose a variety that has performed well over several years and locations. Remember to consider the distribution of yield across the growing season when evaluating productivity of orchardgrass varieties (Tables 4 through 7).

Table 9 is a summary of yield data from 1998-2007 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 9, 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 9 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 on the web at 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*

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Table 1. Temperature and rainfall at Lexington, Kentucky in 2005, 2006 and 2007.

	2005				2006				2007 ²			
	Temp.		Rainfall		Temp.		Rainfall		Temp.		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	37	+6	4.35	+1.49	42	+11	4.77	+1.91	37	+6	2.93	+0.07
FEB	39	+4	1.68	-1.53	36	+1	2.13	-1.08	27	-8	1.83	-1.38
MAR	41	-3	2.79	-1.61	44	0	3.05	-1.35	52	+8	1.97	-2.43
APR	56	+1	3.30	-0.58	59	+4	3.52	-0.36	53	-2	3.87	-0.01
MAY	61	-3	1.78	-2.69	62	-2	2.99	-1.48	68	+4	1.45	-3.02
JUN	75	+3	1.33	-2.33	70	-2	1.82	-1.84	74	+2	1.77	-1.89
JUL	77	+1	3.30	-1.70	76	0	5.13	+0.13	74	-2	6.90	+1.90
AUG	78	+3	3.34	-0.59	76	+1	3.23	-0.70	80	+5	2.56	-1.37
SEP	72	+4	0.59	-2.21	64	-4	9.27	+6.07	72	+4	1.15	-2.05
OCT	58	+1	0.92	-1.65	54	-3	4.88	+2.31	63	+6	5.28	+2.71
NOV	47	+2	1.54	-1.85	47	+2	1.78	-1.61	46	+1	2.86	-0.53
DEC	32	-4	2.19	-1.79	42	+6	2.45	-1.53				
Total			27.51	-17.04			45.02	+0.47			32.57	-8.00

¹ DEP is departure from the long-term average.

² 2007 data is for 11 months through November.

Table 2. Temperature and rainfall at Princeton, Kentucky in 2004, 2005, 2006 and 2007.

	2004				2005				2006				2007 ²			
	Temp.		Rainfall		Temp.		Rainfall		Temp.		Rainfall		Temp.		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	36	+2	4.12	+0.32	41	+7	5.30	+1.50	46	+12	5.38	+1.58	40	+6	4.89	+1.09
FEB	39	+1	2.44	-1.99	43	+5	2.30	-2.13	38	0	2.66	-1.77	34	-4	2.99	-1.44
MAR	53	+6	4.28	-0.66	47	0	4.11	-0.83	51	+4	4.22	-0.72	58	+11	1.85	-3.09
APR	59	0	5.32	+0.52	60	+1	4.61	-0.19	63	+4	4.02	-0.78	58	-1	3.95	-0.85
MAY	72	+5	7.34	+2.38	65	-2	1.54	-3.42	66	-1	5.42	+0.46	71	+4	2.29	-2.67
JUN	74	-1	3.40	-0.45	76	+1	3.09	-0.76	75	0	3.39	-0.46	76	+1	4.32	+0.47
JUL	75	-3	4.87	+0.58	79	+1	2.39	-1.90	79	+1	3.79	-0.50	77	-1	1.77	-2.52
AUG	73	-4	3.02	-0.99	80	+3	11.54	+7.53	80	+3	2.58	-1.43	85	+8	0.87	-3.14
SEP	71	0	0.20	-3.13	74	+2	2.17	-1.16	67	-4	9.80	+6.47	75	+4	3.52	+0.19
OCT	64	+5	4.03	+0.98	60	+1	0.19	-2.86	57	-2	4.5	+1.45	65	+6	8.33	+5.28
NOV	53	+6	6.94	+2.31	50	+3	2.48	-2.15	49	+2	4.31	-0.32	49	+2	2.31	-2.32
DEC	37	-1	4.29	-0.75	35	-4	1.92	-3.12	44	+5	4.76	-0.28				
Total			50.25	-0.88			42.55	-8.58			54.82	+3.69			37.09	-9.00

¹ DEP is departure from the long-term average.

² 2007 data is for 11 months through November.

Table 3. Temperature and rainfall at Quicksand, Kentucky in 2005, 2006 and 2007.

	2005				2006				2007 ²			
	Temp.		Rainfall		Temp.		Rainfall		Temp.		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	40	+9	4.45	+1.16	44	+13	4.48	+1.19	38	+7	2.70	-0.59
FEB	42	+9	3.01	-0.59	37	+4	1.56	-2.04	31	-2	0.61	-2.99
MAR	44	+3	2.86	-1.48	47	+6	1.74	-2.60	54	+13	2.70	-1.64
APR	58	+5	6.63	+2.53	60	+7	2.95	-1.15	55	+2	1.71	-2.39
MAY	63	+1	2.05	-2.43	63	+1	3.45	-1.03	69	+7	1.82	-2.66
JUN	75	+5	2.39	-1.43	71	+1	3.00	-0.82	75	+5	1.95	-1.87
JUL	78	+4	2.58	-2.67	77	+3	3.85	-1.40	76	+2	4.00	-1.25
AUG	79	+6	3.51	-0.50	78	+5	3.55	-0.46	82	+9	2.41	-1.60
SEP	72	+6	0.27	-3.25	65	-1	5.56	+2.04	73	+7	2.49	-1.03
OCT	59	+5	0.68	-2.23	55	+1	6.00	+3.09	63	+9	3.80	+0.89
NOV	49	+7	1.30	-2.58	48	+6	2.32	-1.56	47	+5	1.80	-2.08
DEC	34	+1	2.39	-1.75	43	+10	1.55	-2.59				
Total			32.12	-15.22			40.07	-7.27			25.99	-17.21

¹ DEP is departure from the long-term average.

² 2007 data is for 11 months through November.

Table 4. Dry matter yields, seedling vigor, maturity and stand persistence of orchardgrass varieties sown September 1, 2004 at Princeton, Kentucky.

Variety	Seedling Vigor ¹ Dec 21, 2004	Maturity ²		Percent Stand						Yield (tons/acre)					3-yr Total	
		2005	2007	2005		2006		2007		2005	2006	2007				
		May 10	May 8	Apr 15	Nov 3	Apr 5	Oct 30	Apr 3	Oct 18	Total	Total	May 8	Jun 25	Aug 16		Total
Commercial Varieties-Available for Farm Use																
Shiloh II	3.5	47.8	53.5	96	98	99	84	88	58	4.84	3.99	0.66	0.42	0.43	1.51	10.34*
Takena II	4.0	46.5	48.0	96	98	98	85	84	33	4.37	4.04	0.51	0.41	0.32	1.25	9.65*
Persist	4.3	50.8	55.5	100	99	99	95	94	65	4.42	3.19	0.59	0.39	0.34	1.31	8.92
Extend	3.3	46.5	47.8	81	96	95	85	85	43	4.32	3.22	0.58	0.42	0.30	1.30	8.83
Hallmark	3.3	50.8	54.0	100	99	100	97	96	43	3.99	3.42	0.58	0.44	0.25	1.26	8.68
Ambassador	3.8	51.0	52.3	99	99	98	97	94	48	3.90	3.35	0.56	0.34	0.28	1.18	8.43
LG-31	3.3	36.5	48.0	80	96	95	84	71	7	3.21	3.95	0.44	0.31	0.23	0.98	8.13
Command	3.0	40.0	46.3	81	99	94	86	78	12	3.16	3.44	0.41	0.43	0.26	1.10	7.70
Experimental Varieties																
KYDG0101	3.5	45.0	51.5	91	99	96	96	91	45	4.58	3.80	0.52	0.37	0.26	1.15	9.52*
ECF27	3.8	52.5	55.5	98	100	100	93	89	45	4.65	3.50	0.58	0.40	0.30	1.28	9.43*
KYDG9801	4.5	53.0	51.3	100	100	100	98	97	55	4.64	3.56	0.60	0.37	0.23	1.20	9.40*
KYDG9303	5.0	47.5	51.3	100	100	100	95	93	53	3.94	2.97	0.55	0.33	0.34	1.22	8.13
94-100	4.0	42.5	50.5	91	99	98	95	90	48	3.81	3.03	0.53	0.36	0.29	1.18	8.02
Mean	3.8	46.9	51.2	93.4	98.5	97.7	91.3	88.3	42.4	4.14	3.50	0.55	0.38	0.29	1.22	8.86
CV,%	10.4	9.8	6.1	5.7	2.1	2.0	9.4	9.8	45.1	20.73	13.82	24.70	18.13	30.96	16.74	10.79
LSD,0.05	0.6	6.6	4.5	7.6	3.0	2.8	12.3	12.4	27.4	1.23	0.69	0.19	0.10	0.13	0.29	1.37

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

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

Table 5. Dry matter yields and stand persistence of orchardgrass varieties sown September 31, 2005 at Quicksand Kentucky.

Variety	Percent Stand				Yield (tons/acre)				2-yr Total
	2006		2007		2006	2007		Total	
	Apr 18	Nov 3	Apr 12	Oct 17	Total	May 22	Oct 15		
Commercial Varieties-Available for Farm Use									
Prairie	96	96	98	96	6.24	2.18	1.26	3.44	9.68*
Takena II	89	91	94	90	6.10	2.16	1.23	3.39	9.50*
Udder	89	91	92	89	5.71	2.26	1.45	3.70	9.42*
Century	94	94	94	93	5.60	2.20	1.42	3.62	9.21*
Icon	88	90	93	93	5.68	2.41	1.08	3.49	9.17*
Harvestar	81	90	93	90	5.98	1.77	1.29	3.05	9.03*
Benchmark Plus	94	92	93	91	6.02	1.94	1.02	2.96	8.978*
Bounty	96	94	95	93	5.79	2.05	1.04	3.10	8.89*
Haymaster	84	88	91	88	5.49	2.17	1.09	3.26	8.76*
Persist	88	93	91	93	5.74	1.84	0.96	2.80	8.54*
Tekapo	95	94	95	94	5.65	1.69	0.74	2.43	8.07*
Mean	90.2	91.9	93.5	91.7	5.82	2.06	1.14	3.20	9.02
CV,%	10.4	5.9	4.5	4.8	15.93	17.76	27.13	18.38	14.70
LSD,0.05	13.6	7.9	6.0	6.3	1.34	0.53	0.45	0.85	1.92

* 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 March 20, 2006 at Lexington, Kentucky.

Variety	Seedling Vigor ¹ May 12, 2006	Maturity ² May 10 2007	Percent stand				Yield (tons/acre)					2-yr Total	
			2006		2007		2006	2007					
			May 12	Oct17	Mar 26	Oct 11	Total	May 10	Jun 28	Aug 14	Nov 5		Total
Commercial Varieties-Available for Farm Use													
Udder	3.5	55.0	91	95	94	89	3.27	1.15	0.37	1.48	0.22	3.22	6.49*
Icon	3.5	55.5	94	96	95	93	3.11	1.13	0.39	1.25	0.19	2.95	6.07*
Persist	3.0	57.5	93	96	97	94	2.79	1.36	0.32	1.30	0.23	3.22	6.00*
Prairie	3.0	57.0	93	96	95	94	2.87	1.24	0.34	1.23	0.24	3.05	5.92*
Takena II	3.5	48.0	90	96	96	91	2.82	0.99	0.42	1.37	0.27	3.05	5.87*
Bounty	3.8	58.0	95	96	94	95	2.80	1.27	0.35	1.25	0.20	3.07	5.87*
Harvestar	3.3	34.8	95	95	95	86	3.00	0.96	0.32	1.20	0.23	2.71	5.71*
Century	3.5	57.0	95	95	95	94	2.65	1.13	0.32	1.23	0.24	2.92	5.57
Haymaster	2.8	53.5	88	93	90	89	2.70	0.93	0.38	1.19	0.20	2.70	5.40
Benchmark Plus	4.3	56.5	96	98	97	97	2.66	1.04	0.39	1.05	0.24	2.72	5.38
Tekapo	3.8	57.0	98	99	96	95	2.69	0.58	0.26	1.13	0.23	2.20	4.90
Experimental varieties													
RAD-ECF26	3.3	56.5	98	98	97	95	3.04	1.17	0.36	1.25	0.30	3.08	6.12*
RAD-LCF21	3.5	42.5	100	99	94	93	2.91	0.65	0.34	1.39	0.28	2.65	5.57
IS-OG39	3.8	55.0	96	98	95	95	2.89	0.94	0.30	1.21	0.22	2.67	5.56
AGR DG101	3.5		98	98	13	21	2.70	0.01	0.24	0.31	0.08	0.64	3.33
Mean	3.5	53.1	94.5	96.4	89.4	87.9	2.86	0.97	0.34	1.19	0.22	2.72	5.58
CV,%	26.0	11.3	4.8	2.7	3.1	5.4	12.81	15.85	18.23	18.27	35.79	11.12	9.93
LSD,0.05	1.3	8.6	6.5	3.7	3.9	6.8	0.52	0.22	0.09	0.31	0.43	0.43	0.79

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.

* 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 September 6, 2006 at Princeton, Kentucky.

Variety	Seedling Vigor ¹ Oct 30, 2006	Maturity ² May 8 2007	Percent Stand			Yield (tons/acre)				
			2006		2007	2007				
			Oct 30	Apr 3	Oct 18	May 8	Jun 25	Aug 16	Nov 2	Total
Commercial Varieties-Available for Farm Use										
Harvestar	4.5	31.5	98	100	98	1.02	0.73	0.53	0.29	2.57*
Benchmark Plus	4.8	49.3	100	100	98	0.97	0.64	0.46	0.27	2.35*
Endurance	4.5	31.5	99	100	98	0.84	0.66	0.42	0.30	2.22*
Prairie	5.0	44.5	100	100	98	0.86	0.63	0.42	0.28	2.19
Tucker	5.0	34.8	100	100	98	0.82	0.58	0.44	0.27	2.11
Ambrosia	4.5	34.5	100	100	98	0.81	0.58	0.40	0.21	2.00
Tekapo	3.3	36.5	100	100	100	0.75	0.56	0.43	0.27	2.00
Experimental Varieties										
IS-OG 39	4.8	40.5	97	99	98	0.84	0.71	0.54	0.35	2.44*
OG 0204G	4.5	33.3	99	100	99	0.88	0.77	0.52	0.27	2.44*
NFOG101	2.8	50.5	100	99	99	0.47	0.29	0.42	0.27	1.45
Mean	4.4	38.7	99.2	99.6	98.2	0.83	0.61	0.46	0.28	2.18
CV,%	11.6	15.6	1.5	1.1	1.5	16.08	17.07	20.68	23.38	10.27
LSD,0.05	0.7	8.8	2.1	1.5	2.1	0.19	0.11	0.14	0.09	0.32

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.

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

Table 8. Performance of orchardgrass varieties across years and locations.

Variety	Proprietor/KY distributor	Princeton			Lexington	Quicksand
		2004 ¹		2006	2006	2005
		05 ²	06	07	07	06
Commercial Varieties-Available for Farm Use						
Ambassador	DLF International Seeds	*	*	x ³		
Ambrosia	American Grass Seed Producers				x	
Benchmark Plus	FFR/Southern States				*	x
Bounty	Allied Seed				*	*
Century	Seed Research of Oregon				x	*
Command	Seed Research of Oregon	x	*	x		
Endurance	DLF International Seeds				*	
Extend	Allied Seed	*	x	*		
Hallmark	James VanLeeuwen	*	*	*		
Harvestar	Columbia Seeds				*	*
Haymaster	FFR/Southern States				x	x
Icon	Seed Research of Oregon				*	*
Intensiv	Barenbrug USA					
LG-31	DLF International Seeds	x	*	x		
Persist	Smith Seed Services	*	x	*	*	*
Prairie	Turner Seed Company				x	*
Shiloh II	Proseeds Marketing	*	*	*		
Takena II	Smith Seed Services	*	*	*	*	*
Tekapo	Ampac Seed Company				x	x
Tucker	Oregro Seeds, Inc.				x	x
Udder	Improved Forages, Inc				*	*
Experimental Varieties						
AGR DG101	AgResearch USA				x	x
ECF27	Radix Research, Inc	*	*	*		
IS-OG39	DLF International Seeds				*	*
KYDG0101	KY Agric. Exp. Station	*	*	x		
KYDG9303	KY Agric. Exp. Station	*	x	*		
KYDG9801	KY Agric. Exp. Station	*	*	x		
NFOG101	Nobl Foundation, Inc.				x	
OG 0204G	Seed Research of Oregon				*	
RAD-ECF26	Radix Research, Inc				*	*
RAD-LCF21	Lewis Seed Co.				*	x
94-100	Agri-Food of Canada	*	x	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 9. Summary of Kentucky Orchardgrass Yield Trials 1999-2007 (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 2-yr	1998 2-yr	2000 2-yr	2002 3-yr	2004 3-yr	1999 2-yr	2001 2-yr	2003 3-yr	2005 2-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					-
Athos	DLF International Seeds		98								105			102(2)
Benchmark	FFR/Sou. St.	103				101	97	113		106				104(5)
Benchmark Plus	FFR/Sou. St.				94			107				107	100	102(4)
Boone	Public					103	104							104(2)
Bronc	Grassland West						98							-
Bounty	Allied Seed				102								99	101(2)
Century	Seed Research of Oregon				97								102	100(2)
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)
Extend	Allied Seed								100					-
Hallmark	James VanLeeuwen		102	102				103	98		101	96		100(6)
Harvestar	Columbia seeds				99								100	100(2)
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				106								102	-
Intensiv	Barenbrug			102										-
LG-31	DLF International Seeds								92					-
Mammoth	DLF International Seeds		102								104			103(2)
Megabite	Turf-Seed	94	105							101				100(3)
Niva	DLF International Seeds							81						-
Persist	Smith Seed			123	104				101			108	95	106(5)
Potomac	Public	104						98		99				100(3)
Prairie	Turner Seed		101		103		95	104			102	105	107	102(6)
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	105	106(25)
Tekapo	Ampac Seed	88			85					94	92	105	89	92(6)
Udder	Improved Forages			100	113		102	102				106	104	104(5)
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 2 years, so the final report would be "2001 Orchardgrass Report" archived in the KY Forage website 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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