

# 2007 Long-Term Summary of Kentucky Forage Variety Trials

S.R. Smith, G.L. Olson and G. D. Lacefield

## Introduction

Forage crops occupy approximately 7 million acres in Kentucky. Forages provide a majority of the nutrition for beef, dairy, horse, goat, sheep, and wildlife in the state. In addition, forage crops play an environmentally friendly role in soil conservation, water quality, and air quality. There are over 60 forage species adapted to the climate and soil conditions of Kentucky. Only 10 to 12 of these species occupy the majority of the acreage, but within these species is a tremendous variation in varieties.

This publication was developed to provide a user-friendly guide to choosing the best variety for producers based on a summary of forage yield and grazing tolerance trials conducted in Kentucky over the last 10 to 12 years. Detailed variety reports and forage management publications are available at the University of Kentucky forage Web site at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage).

## Species in This Report

Red clover (*Trifolium pratense* L.) is a high-quality, short-lived, perennial legume that is used in mixed or pure stands, for pasture, hay, silage, green chop, soil improvement, and wildlife habitat. This species is adapted to a wide range of climatic and soil conditions and, therefore, is versatile as a forage crop. Stands of improved varieties are generally productive for two to three years, with the highest yields occurring in the year following establishment. Red clover is used primarily as a renovation legume for grass pastures. It is a dominant forage legume in Kentucky because it is relatively easy to establish and has high forage quality and high yield.

White clover (*Trifolium repens* L.) is a low-growing, perennial pasture legume with white flowers. It differs from red clover in that the stems (stolons) grow along the surface of the soil and can form adventitious roots that may lead to the development of new plants. White clover is classified into ladino, Dutch, and intermediate types. The intermediate types combine the higher yield of ladino with the grazing tolerance of the Dutch types.

Alfalfa (*Medicago sativa*) has historically been the highest yielding, highest quality forage legume grown in Kentucky. It forms the basis of Kentucky's cash hay enterprise and is an important component in dairy, horse, beef, and sheep diets. Choosing a good alfalfa variety is a key step in establishing a stand of alfalfa. The choice of variety can impact yield, stand persistence, and insect and disease resistance.

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 higher yields, quality, and long 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.

Tall fescue (*Festuca arundinacea*) is a productive, well-adapted, persistent, soil-conserving, cool-season grass that is grown on approximately 5.5 million acres in Kentucky. This grass, used for both hay and pasture, is the forage base for most of Kentucky's livestock enterprises, particularly beef cattle. The predominant variety, KY31, was developed in Kentucky for long-term persistence but contains a fungal endophyte that produces alkaloids detrimental to livestock production and reproductive health. Endophyte-free tall fescue varieties produce no detrimental alkaloids, but UK research shows that they are less persistent than KY31. New novel endophyte tall fescue varieties contain safe endophytes, which enhance stand persistence but cause no detrimental animal symptoms.

Annual ryegrass (*Lolium multiflorum*) and perennial ryegrass (*Lolium perenne*) are high-quality, productive, cool-season grasses used in Kentucky. Both have exceptionally high seedling vigor and are highly palatable to livestock. Annual ryegrasses are increasing in use across Kentucky as more winter-hardy varieties are released and promoted. Annual ryegrass is productive for four to six months and is used primarily for late fall and early-to-late spring pasture. Perennial ryegrass can be used as a short-lived hay or pasture plant and has growth characteristics similar to tall fescue. It is less persistent than other cool-season grass species.

Timothy (*Phleum pratense*) is the fourth most widely sown cool-season perennial grass used in Kentucky for forage after tall fescue, orchardgrass, and Kentucky bluegrass. Timothy is primarily harvested as hay, particularly for horses. In Kentucky, timothy behaves like a short-lived perennial, with stands lasting two to four years.

Kentucky bluegrass (*Poa pratensis*) is a high-quality, highly palatable, long-lived pasture plant with limited use for hay. It tolerates close frequent grazing better than most grasses. It has low yields and low summer production and becomes dormant and brown during hot, dry summers. Kentucky bluegrass is best suited for pastures where a dense sod is more important than high-forage production (e.g., horse pastures).

## Important Selection Considerations

**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. Also, look for varieties that are productive in the desired season of use. For management recommendations, check with your county Extension agent or see the forage Web site at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage). The following comprehensive bulletins may be especially useful:

- *Grain and Forage Crop Guide for Kentucky* (AGR-18)
- *Establishing Forage Crops* (AGR-64)
- *Rotational Grazing* (ID-143)

**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), 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

**Yield trials.** Plots were seeded at the recommended seeding rate per acre and were planted into a prepared seedbed with a disk drill. Plots were 5 by 15 feet in a randomized complete block design, with four replications. Grass plots were fertilized with 60 pounds of actual N per acre 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, weed control, and harvest timing were in accordance with University of Kentucky recommendations.

**Grazing trials.** Plots were 5 by 15 feet in a randomized complete block design, with each variety replicated six times. Plots were seeded at the recommended seeding rate per acre and were planted into a prepared seedbed using a disk drill. Grazing was continuous from April to October.

Plots were grazed down to below 4 inches quickly and were maintained at 2 to 4 inches (sometimes less) for the remainder of the grazing season. Supplemental hay was fed during periods of slowest growth. Visual ratings of percent stand were made in the fall several weeks after the cattle were removed to check stand survival after the grazing season and in the spring prior to grazing to check on winter survival and spring growth. Because trials were seeded in rows, persistence ratings were based on density within a row and not total ground cover. Grass plots were fertilized with 60 pounds of actual N per acre in the spring and 30 to 40 pounds of actual N in early November after cattle or horses were removed from the pasture. Other fertilizers (lime, P, and K) were applied as needed according to the University of Kentucky soil test recommendations.

## Results and Discussion

These tables summarize long-term yield and stand persistence data of commercial varieties that have been entered in the University of 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. For the grazing trials, varieties with percentages over 100 persisted better than average, and varieties with percentages less than 100 persisted less than average. Also in the grazing trials the alfalfa varieties were compared to Alfagraze and the fescue varieties were compared to KY31+ instead of the mean of all the commercial varieties. Direct, statistical comparisons of varieties cannot be made using the summary tables, 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. To determine which yearly report to refer to, see footnote in each table.

## Summary

Selecting a good forage variety is an important first step in establishing a productive stand of forage. 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. For more detailed information on yield and grazing tolerance within species, go to individual 2007 reports on the forage Web site. See below for specific reports. The forage Web site also contains reports from 2002 through 2006.

Yield and Grazing Tolerance Reports ([www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm](http://www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm))

PR-556 *2007 Alfalfa Report*

PR-562 *2007 Red and White Clover Report*

PR-558 *2007 Tall Fescue Report*

PR-557 *2007 Orchardgrass Report*

PR-561 *2007 Timothy and Kentucky Bluegrass Report*

PR-563 *2007 Annual and Perennial Ryegrass Report*

PR-559 *2007 Alfalfa Grazing Tolerance Report*

PR-560 *2007 Red and White Clover Grazing Tolerance Report*

PR-564 *2007 Cool-Season Grass Grazing Tolerance Report*

PR-565 *2007 Cool-Season Grass Horse Grazing Report*

## Authors

- S.R. Smith, Extension Associate Professor, Forages, Department of Plant and Soil Sciences
- G.L. Olson, Research Specialist, Forages, Department of Plant and Soil Sciences
- G.D. Lacefield, Extension Professor, Forages, Department of Plant and Soil Sciences

**Table 1. Summary of 1998-2007 Kentucky White Clover Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Type	Proprietor	Lexington			Princeton		Quicksand		Eden Shale		Mean <sup>3</sup> (#trials)
			2002 <sup>1,2</sup>	2003	2004	2003	2005	1998	2003	2003		
			3yr <sup>4</sup>	3yr	3-yr	3yr	3-yr	3yr	2yr	2yr		
Advantage	Ladino	Allied Seed		125						106	116(2)	
Alice	Intermediate	Barenbrug					86				-	
Avoca	Dutch	DLF International Seeds					82				-	
Barblanca	Intermediate	Barenbrug		92							-	
CA ladino	Ladino	Public	100		124	103		100	98		105(5)	
Colt	Intermediate	Seed Research of OR		90			114				102(2)	
Common	Dutch	Public	100				78				89(2)	
Crescendo	Ladino	Cal/West	105				109				107(2)	
Excel	Ladino	Allied Seed			100						-	
Durana	Dutch	Pennington		94		87	83		101	95	92(5)	
Ivory	Intermediate	Cebeco	96								-	
Jumbo	Ladino	Ampac Seed	93								-	
Kopu II	Intermediate	Ampac Seed	97								-	
Patriot	Intermediate	Pennington		103		104	100		98	99	101(5)	
Pinnacle	Ladino	Allied Seed					111				-	
Regal	Ladino	Public	99	96	92	107	100	100	104		100(7)	
Seminole	Ladino	Saddle Butte Ag. Inc			108						-	
Super Haifa	Intermediate	Allied Seed			77						-	
Tillman II	Ladino	Caudill Seed	103								-	
Will	Ladino	Allied Seed	107				136				122(2)	

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 2002 was harvested 3 years, so the final report would be "2004 Red and White Clover Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 2. Summary of 1998-2007 Kentucky Red Clover Yield Trials (yield shown as a percentage of the mean of the named commercial varieties in the trial).**

Variety	Proprietor	Lexington						Princeton				Quicksand				Eden Shale		Mean <sup>3</sup> (#trials)			
		00 <sup>1,2</sup>	00	01	02	03	04	99	00	03	05	98	01	03	05	00	03				
		3yr <sup>4</sup>	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2-yr	3yr	2yr	2yr	3-yr	3yr	2yr				
AA117ER	ABI Alfalfa										87						92			90(2)	
Acclaim	Allied Seed				92															-	
Arlington	WI Agr. Exp.Sta.				72															-	
Belle	Agribiotech	88			82			93												88(3)	
Cherokee	FL Agr. Exp. Sta.	78			65															72(2)	
Cinnamon	FFR/Sou.St.	111			108			115							100					109(4)	
Cinnamon Plus	FFR/Sou.St.					97						112					103			104(3)	
Dominion	Seed Research of OR											95					93			94(2)	
Duration	Cisco Co.			86	100										106					97(3)	
Emarwan	Turf-Seed						91								101					96(2)	
Freedom!	Barenbrug	108	105	127	123	96	118	103	105	110	136	109	111	103	119	102	102			111(16)	
Freedom!MR	Barenbrug				118	115	102				106	101					94	111		118	108(8)
FSG 9601	Allied Seed						89													-	
Greenstar	Genesis Turf														100					-	
Impact	Specialty Seeds	106	97							98										100(3)	
Kenland(cert.)	KY Ag.Exp Sta.	110	111	127	139	118	117	117	104	102	92	112	111	88	105	104	98			110(16)	
Kenland(uncert)	Public											78	83							81(2)	
Kenstar	KY Ag.Exp Sta.		105							104					107					105(3)	
Kenton	KY Ag.Exp Sta.	100	93	119	109	90	95	104	98	95	105		93	99	106	102	98			107(15)	
Kenway	KY Ag.Exp Sta.	106	104	111	134		97	103	100		94		100		103	102				105(11)	
Mammoth	Public							61												-	
Plus	Allied Seed	113			113			110									97			108(4)	
Prima	Public	92			74															83(2)	
Red Gold Plus	Turner Seed		97	97			95		95					98			98			97(6)	
RedlanGraze	ABI Alfalfa	95						101												98(2)	
RedlanGraze II	Americas Alfalfa			91	104									93						96(3)	
Redland Max	ABI Alfalfa						95													-	
Redstart	Syngenta	102			78															90(2)	
Robust	Scott Seed	92																		-	
Rojo Diablo	Great Plains			99										101						100(2)	
Royal Red	FFR/Sou.St.	108	92		91			79								96				93(5)	
Scarlet	Dairyland	95																		-	
Sienna	Great Plains			91										106						99(2)	
Solid	Production Service	97	102		98	84		112	98	87	86	94			76	105	84			94(12)	
Starfire	Ampac Seed	97	93		99				98							95				96(5)	
Triple Trust 350	ABI Alfalfa										92				92					92(2)	
Vesna	DLF-Jenks			53										96						75(2)	

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 2000 was harvested 3 years, so the final report would be "2002 Red and White Clover Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 3. Summary of 1995-2007 Kentucky Alfalfa Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the test).**

Variety	Proprietor	Variety Characteristics <sup>1</sup>						Lexington						Princeton			Bowling Green <sup>2</sup>			Eden Shale		Mean <sup>6</sup> (# trials)																
		Disease Resistance <sup>3</sup>						95 <sup>4,5</sup>	97	97	99	00	02	04	97	99	01	96	98	03	98		03															
		FD	Bw	Fw	An	PRR	APH	6yr <sup>7</sup>	5yr	6yr	4yr	5yr	5yr	4yr	5yr	4yr	4yr	7yr	7yr	3yr	5yr		4yr															
Abilene +Z	America's Alf.	5	HR	HR	HR	HR	R																											102(2)				
ABT 205	W-L Research	2	HR	HR	HR	HR	R																											99(2)				
ABT 350	W-L Research	3	HR	HR	HR	HR	HR																											101(3)				
ABT 400SCL	W-L Research	4	HR	HR	HR	HR	HR																											102(2)				
ABT 405	W-L Research	4	HR	HR	HR	HR	R																											103(4)				
AC Longview	Newfield Seeds		HR																																-			
Affinity+Z	ABI Alfalfa	4	HR	HR	HR	HR	R																												101(3)			
Alfagraze	America's Alf.	2	MR	R	MR	R	-																												98(2)			
AmeriGraze 401+Z	America's Alf.	4	HR	HR	HR	HR	R																												101(5)			
AmeriStand 403T	America's Alf.	3	HR	HR	HR	HR	HR																												-			
Ameriguard 302+Z	America's Alf.	3	HR	HR	HR	HR	HR																												-			
Apollo	America's Alf.	4	R	R	R	R	-																												95(3)			
Arc(certified)	Public	4	LR	MR	HR	-	-																												94(14)			
Baralfa 54	Barenbrug	-	R	HR	HR	HR	HR																												98(2)			
Buffalo	Public	-	-	-	-	-	-																												90(4)			
Choice	FFR/Sou. St.	4	HR	R	R	HR	R																												104(6)			
Cimarron3i	Great Plains	4	HR	HR	HR	HR	HR																												98(3)			
Cimarron SR	Great Plains	4	HR	HR	HR	HR	MR																												102(2)			
Cimarron VR	Great Plains	5	HR	HR	R	R	MR																												-			
Demand	ABI Alfalfa	3	HR	HR	HR	HR	R																												-			
Depend+EV	ABI Alfalfa	-	-	-	-	-	-																													-		
DK 127	Monsanto	3	HR	HR	HR	HR	-																													107(2)		
DK 133	Monsanto	4	HR	HR	HR	HR	R																													105(2)		
DK 131HQ	Monsanto	3	HR	HR	HR	HR	R																													-		
DK 140	Monsanto	4	HR	HR	HR	HR	H																													101(6)		
DK 141	Monsanto	4	HR	HR	HR	HR	H																													100(3)		
Dominator	America's Alf.	4	HR	HR	HR	HR	HR																													-		
Emperor	ABI Alfalfa	4	HR	HR	HR	HR	HR																													98(2)		
Evermore	FFR/Sou. St.	5	HR	HR	HR	HR	HR																													104(2)		
Excalibur II	Allied Seeds	4	HR	HR	HR	HR	R																													-		
Expedition	Syngenta	5	HR	HR	R	RR	R																													-		
Feast	Garst Seeds	3	HR	HR	HR	HR	R																													101(2)		
Feast +EV	Garst Seeds	3	HR	HR	HR	R	HR																													101(3)		
FK 421	Donely Seed	4	HR	H	H	H	H																													-		
Fortress	Syngenta	3	R	R	R	HR	-																														98(5)	
FSG 406	Allied Seeds	4	HR	HR	HR	HR	HR																														-	
FSG 408DP	Allied Seeds	4	HR	HR	HR	HR	R																														-	
FSG 505	Allied Seeds	5	HR	HR	HR	HR	R																														107(2)	
Gem	FFR/Sou. St.	4	HR	HR	HR	HR	S																													101(4)		
Geneva	Syngenta	4	HR	HR	HR	HR	HR																														103(6)	
Genoa	Syngenta	4	HR	HR	HR	RR	HR																														-	
GH 744	Golden Harvest	4	HR	HR	HR	HR	MR																														-	
Goldplus	PGI Alfalfa	4	HR	HR	HR	HR	R																														-	
Grazeking	FFR/Sou. St.	5	MR	HR	HR	R	S																														101(2)	
Haygrazer	Great Plains	4	HR	HR	R	R	MR																														101(2)	
HybridForce 400	Dairyland	4	HR	HR	R	HR	MR																														-	
Imperial	America's Alf.	3	HR	HR	HR	HR	R																															-
Innovator+Z	America's Alf.	3	HR	HR	HR	HR	R																															-
Legacy	Green Seed	4	R	R	R	R	R																														92(2)	
LH4	Pioneer	3	HR	HR	HR	R	R																														-	
Magnum V	Dairyland	4	HR	HR	R	HR	HR																														-	
Magnum V-wet	Dairyland	3	HR	HR	R	HR	MR																														-	
Mountaineer 2.0	Croplan Gen.	5	Hr	HR	HR	RR	HR																														-	
Multiqueen	Cal/West	4	HR	HR	HR	HR	R																														-	
Pasture Plus	MBS	3	HR	HR	R	HR	MR																														-	
Pegasus	FFR/Sou. St.	4	HR	HR	HR	HR	R																														-	
ProGro	MBS	4	HR	HR	R	HR	MR																															-
Regal	Great Plains	5	HR	HR	R	HR	MR																														99(2)	
Reward	PGI Alfalfa	4	HR	HR	R	HR	MR																														-	
Reward II	PGI Alfalfa	4	HR	HR	R	HR	R																														99(3)	
Rushmore	Syngenta	4	HR	HR	HR	HR	HR																														101(4)	
Saranac AR(certified)	Public	4	MR	R	HR	LR	-																														95(14)	
Spredor 3	Syngenta	1	HR	HR	R	MR	S																														98(2)	

**Table 3. Summary of 1995-2007 Kentucky Alfalfa Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the test).**

Variety	Proprietor	Variety Characteristics <sup>1</sup>						Lexington						Princeton			Bowling Green <sup>2</sup>			Eden Shale		Mean <sup>6</sup> (# trials)	
		Disease Resistance <sup>3</sup>						95 <sup>4,5</sup>	97	97	99	00	02	04	97	99	01	96	98	03	98		03
		FD	Bw	Fw	An	PRR	APH	6yr <sup>7</sup>	5yr	6yr	4yr	5yr	5yr	4yr	5yr	4yr	4yr	7yr	7yr	3yr	5yr		4yr
Stampedede	Allied Seeds	3	HR	R	R	HR	R		95											106			101(2)
Stellar	W-L Research	4	HR	HR	HR	HR	LR												94				-
Summer Gold	Beck's Hybrids	4	HR	HR	HR	HR	HR						108										-
Supercuts	ABI Alfalfa	4	HR	HR	HR	HR	S	104											103				104(2)
TMF Generation	Mycogen Seeds	4	HR	HR	HR	HR	R												103				-
TMF 4355LH	Mycogen Seeds	3	HR	R	HR	HR	R			100													-
TMF 4464	Mycogen Seeds	4	HR	HR	HR	HR	R									98							-
Triple Crown	FFR/Sou. St.	4	HR	HR	HR	HR	HR					102					100						101(2)
ValuePlus 1	Forage Genetics	4	HR	HR	HR	HR	R					106											-
Vernal	Public	2	R	MR	-	-	-						93						91		96		93(3)
Wintergreen	ABI Alfalfa	3	HR	HR	HR	HR	R			104					103						101		103(3)
WL 252HQ	W-L Research	2	HR	HR	HR	HR	LR											104					-
WL 319HQ	W-L Research	3	HR	HR	HR	HR	HR						108										-
WL 323	W-L Research	4	HR	HR	HR	HR	R	103															-
WL 324	W-L Research	3	HR	HR	HR	HR	HR													106			-
WL 325HQ	W-L Research	3	HR	HR	HR	HR	R			103						101			99				101(3)
WL 326GZ	W-L Research	4	HR	HR	HR	HR	HR		99						97				98		99		98(4)
WL 327	W-L Research	4	HR	HR	HR	HR	HR						105			100							103(2)
WL 332SR	W-L Research	4	HR	HR	HR	HR	HR								93								-
WL 338SR	W-L Research	4	HR	HR	HR	HR	HR						101										-
WL 342	W-L Research	4	HR	HR	HR	HR	HR										102						-
WL 357HQ	W-L Research	5	HR	HR	HR	HR	HR							122						101	106		110(2)
329	Cal/West	3	HR	HR	HR	HR	R	94															-
4m76	FFR/Sou. St.	4.7	HR	HR	HR	R	HR	R					116										-
5-star	Croplan Gen.	5	R	HR	R	R	R													97	99		98(2)
5246	Pioneer	2	R	R	HR	HR	R									98							-
5312	Public	3	HR	HR	HR	HR	HR					103											-
53H81	Pioneer	3	HR	HR	HR	R	HR					102											-
53Q60	Pioneer	3	HR	R	HR	HR	R									100							-
5454	Pioneer	4	R	HR	HR	HR	LR	96															-
54H69	Pioneer	4	HR	HR	HR	HR	R				99												-
54V46	Pioneer	4	R	HR	HR	HR	R															99	-
54V54	Pioneer	4	HR	HR	HR	HR	HR					98	94			104	105						100(4)
54V56	Pioneer																			98			-
630	Garst Seeds	3	HR	HR	MR	R	-	88															-
631	Garst Seeds	4	HR	R	HR	R	HR				107					106				106			106(3)
640OHT	Garst Seeds	4	HR	HR	HR	HR	HR								109						96		103(2)
6420	Garst Seeds	4	HR	R	HR	R	HR						106										-
645	Garst Seeds	4	HR	R	HR	HR	MR													103			-
6530	Garst Seeds	5	HR	HR	HR	HR	HR														92		-

<sup>1</sup> Variety characteristics: FD=fall dormancy, Bw=bacterial wilt, Fw=fusarium wilt, An=anthracnose, PRR=phytophthora root rot, APH-aphanomyces root rot. Information provided by seed companies.  
<sup>2</sup> The Bowling Green test is on soil infested with phytophthora and aphanomyces root rots.  
<sup>3</sup> Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance.  
<sup>4</sup> Year trial was established  
<sup>5</sup> 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 test. For example, the Lexington trial planted in 1995 was harvested for 6 years, so the final yield report would be "2000 Alfalfa Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>.  
<sup>6</sup> Mean only presented when respective variety was included in two or more trials.  
<sup>7</sup> Number of years of data

**Table 4. Summary of 1999-2007 Kentucky Tall Fescue Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington				Princeton				Quicksand				Mean <sup>3</sup> (#trials)
		1999 <sup>1,2</sup>	2001	2003	2005	1998	2000	2002	2004	1999	2001	2003	2005	
		2-yr <sup>4</sup>	3-yr	2-yr	2-yr	2-yr	2-yr	3-yr	3-yr	2-yr	2-yr	2-yr	2-yr	
Atlas	Proseeds	107								89				99(2)
Bariane	Barenbrug			87	112								97	99(3)
Barolex	Barenbrug				90									
BAR 9 TMPO	Barenbrug	96								97				97(2)
Bronson	Ampac Seed				90								102	96(2)
Bull	Improved Forages			98	98		102	103				97		100(5)
Carmine	DLF International		99								97			98(2)
DLF-B	DLF International	96												-
Enhance	Allied Seed								111					-
Festival	Pickseed West		107						106		107			107(3)
Fuego	Advanta Seeds	99												-
Hoedown	DLF International		104								106			105(2)
Jesup EF	Pennington Seed					106								-
Jesup MaxQ	Pennington Seed				101			98				100	103	101(3)
Johnstone	Proseeds	95	108							95				99(3)
KENHY	KY Agric Exp Sta.								92					-
Kokanee	Ampac Seed		89				86							88(2)
KY31+	KY Agric Exp Sta.	102	118	113	108	122	108	104	77	107	124	98	107	107(12)
Maximize	Turf-Seed	96	95							105	93			97(4)
Resolute	Ampac Seed		90								65			78(2)
Seine	Advanta Seeds	99							100					99(2)
Select	FFR/Sou. St.	106	106	94	105	105	105	95	109	107	112	102	90	103(12)
Stockman	Seed Research of OR			109					104			105		106(3)
TF33	Barenbrug					70								-
Tuscany	Forage Genetics		112											-
Vulcan	International Seeds					97								-
<b>Summary of Kentucky Festulolium Yield Trials</b>														
Duo	Ampac Seed	104			88									96(2)
Felina	DLF International		101											-
Hykor	DLF International			98								98		98(2)
Spring Green	Turf-Seed		88		109						97			98(3)
Vorage	Improved Forages						99							-

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 Tall Fescue Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 5. Summary of 1999-2007 Kentucky Orchardgrass Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington				Princeton				Quicksand				Mean <sup>3</sup> (#trials)
		1999 <sup>1,2</sup>	2001	2003	2006	1998	2000	2002	2004	1999	2001	2003	2005	
		2-yr <sup>4</sup>	2-yr	3-yr	2-yr	2-yr	2-yr	3-yr	3-yr	2-yr	2-yr	3-yr	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(5)
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)

<sup>1</sup> Year trial was established.

<sup>2</sup> 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](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data.



**Table 6. Summary of 1999-2007 Kentucky Timothy Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial.**

Variety	Proprietor/KY Distributor	Lexington			Quicksand		Princeton		Mean <sup>3</sup> (#trials)
		00 <sup>1,2</sup>	01	02	99	01	00	04	
		2yr <sup>4</sup>	3yr	4yr	2yr	2yr	3yr	2yr	
<b>Commercial Varieties-Available for Farm Use</b>									
Alma	Newfield Seeds Co/Caudill Seed Co.							81	-
Auroro	General Feed and Grain	100			98				99(2)
Clair	Ky Agric. Exp. Station		109	115		108		122	114(4)
Classic	Cebeco International Seeds	100		88	87				92(3)
Colt	FFR Cooperative	105		101	112			99	104(4)
Common	Public		96						-
Derby	FFR Cooperative							124	-
Dolina	DLF-Trifolium	100		91					96(2)
Express	Seed Research of Oregon			97					-
Hokuei	Snow Brand Seed	103							-
Hokusei	Snow Brand Seed	97			99				98(2)
Joliet	Newfield Seeds Co/Caudill Seed Co.							90	-
Jonaton	Newfield Seeds Co/Caudill Seed Co.							84	-
Outlaw	Grassland West Company						107		-
Richmond	Pickseed Canada Inc.	100			103				102(2)
Summit	Allied Seed, L.L.C.			114					-
Tundra	DLF-Trifolium	95							-
Tuukka	Ampac Seed Company		95	90		92	93		93(4)

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 2000 was harvested 2 years, so the final report would be "2002 Timothy Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data.

**Table 7. Summary of 1996-2007 Kentucky Bluegrass Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial.**

Variety	Proprietor/KY Distributor	Lexington			Princeton	Mean <sup>3</sup> (#trials)
		96 <sup>1,2</sup>	03	04	02	
		3yr <sup>4</sup>	2yr	3yr	3yr	
Adam 1	Radix Research			97		-
Barderby	Barenbrug				114	-
Ginger	ProSeeds Marketing		89			-
Kenblue	Public	90		103		97(2)
Lato	Turf Seed Inc.	110				-
Slezanka	DLF International Seeds		111			-

<sup>1</sup> Year trial was established

<sup>2</sup> 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 2004 was harvested 2 years, so the final report would be "2006 Timothy and Kentucky Bluegrass Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>. The 96 and 03 Lexington and 02 Princeton results are in the appropriate Tall Fescue Reports.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials

<sup>4</sup> Number of years of data

**Table 8. Summary of 1999-2007 Kentucky Annual Ryegrass Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington <sup>1</sup>					Princeton			Bowling Green		Mean <sup>4,5</sup> (#trials)
		1999 <sup>2,3</sup>	2001	2003	2004	2005	2000	2002	2004	2000	2003	
All trials are 1 year yields												
Andy	DLF International	112	105				99					105(3)
Angus I	DLF International								80			–
Aurelia	Forage Genetics		120						130			125(2)
Avance	DLF International	113					109					111(2)
Barextra	Barenbrug							117				–
Big Daddy	FFR/Sou. St.	87	86				90	85		104		90(5)
Common	Public						85	85		95	87	88(4)
Domino	DLF International							121				–
Fantastic	Ampac Seed	83					90			97		90(3)
Feast	Ampac Seed		90									–
Feast II	Ampac Seed		98					123				111(2)
Graze-N-Gro	Seed Research of OR			105						94	107	102(3)
Gulf	Public		72				81	77	57	86		75(5)
Hercules	Barenbrug	114					110					112(2)
Jackson	The Wax Co.				80	100		87			96	91(4)
Jeanne	DLF International		124									–
Jumbo	Barenbrug			103							104	104(2)
King	Lewis Seed		92									–
Marshall	The Wax Co.	87		92	120	100	102	97		114	106	102(8)
Monarque	Seed Research of OR								117			–
Passerel Plus	Pennington Seed							100				–
Rio		88					100	97		102		97(4)
Spark	DLF International	87								83		85(2)
Tam 90								85				–
Tetrelite II	DLF International								122			–
Winter Star	Ampac Seed		87					96				92(2)
Zorro	DLF International	120	127				135	130		118		126(5)

<sup>1</sup> Due to severe winterkill, the results of the 2006 planting are not shown. See table 2 in PR-563-2007 Annual and Perennial Ryegrass Report for yield and stand data.

<sup>2</sup> Year trial was established.

<sup>3</sup> 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 1 year, so the final report would be “2000 Annual and Perennial Ryegrass Report” archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>4</sup> Mean only presented when respective variety was included in two or more trials.

<sup>5</sup> In annual ryegrass, low yielding varieties usually result from winterkill.

**Table 9. Summary of 1999-2007 Kentucky Perennial Ryegrass Yield Trials (yield shown as a percentage of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington					Princeton		Bowling Green		Mean <sup>3,4</sup> (#trials)
		1999 <sup>1,2</sup>	2001	2003	2004	2005	2000	2002	2000	2003	
		2yr <sup>5</sup>	2yr	2yr	3yr	2-yr	2yr	3yr	2yr	2yr	
Aires	Ampac Seed		95					93			94(2)
Amazon	AgriBioTech	108			99			107			104(3)
Anaconda	Caudill Seed	113					95		103		104(3)
Aubisque	Seed Research of OR			144						99	122(2)
Bandit	Grassland West						106		114		110(2)
Bastion C-2	Seed Research of OR				91						-
Bestfor	Improved Forages						113	107	120		113(3)
Bestfor Plus	Improved Forages			116	108	133				136	123(4)
BG-34	Barenbrug					78					-
Bison	International Seeds									140	-
Boxer	AgriBioTech	121					106				114(2)
Calibra	DLF International							112			-
CAS MP64	Cascade International		97								-
Citadel	Ag Canada	101					94	113	103		103(4)
Derby	Public								74		-
Granddaddy	Smith seed		118					111			115(2)
Lasso	DLF International		98								-
Linn	Public	87	98	98	102		87	88	77		91(7)
Manhattan								85			-
Mara	Barenbrug								85		-
Matrix	Cropmark seeds			77						64	-
Maverick Gold	Ampac Seed		97					71			84(2)
Polly II	FFR/Sou. St.	104					110		125		113(3)
Polly Plus	Allied Seed			64						60	62(2)
Quartermaster	Radix Research					119					-
Quartet	Ampac Seed		97			64		113			91(3)
RAD-CPS212	Radix Research					135					-
Sampson	International Seeds	87									-
Sierra	Lewis Seed Co.					82					-
Tonga	Kings AgriSeeds					89					-
Yatsyn	Barenbrug	80					89				85(2)

<sup>1</sup> Year trial was established.

<sup>2</sup> 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 Annual and Perennial Ryegrass Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> In perennial ryegrass, low yielding varieties usually result from winterkill or summer mortality.

<sup>5</sup> Number of years of data

**Table 10. Summary of 2002-2007 Kentucky White Clover Grazing Tolerance Trials (stand persistence shown as a percent of the mean of the commercial varieties in the test).**

Variety	Type	Proprietor	Lexington				Mean <sup>4</sup> (#trials)
			2002 <sup>1,2</sup>	2004	2006 <sup>3</sup>	2006	
			2yr <sup>5</sup>	3yr	2yr	1yr	
Alice	Intermediate	Barenbrug USA		81	98		90(2)
Barblanca	Intermediate	Barenbrug USA		111	91	94	99(3)
Colt	Intermediate	Seed Research of OR		84	134	100	106(3)
Crescendo	Ladino	Cal/West	84			106	95(2)
Durana	Dutch	Pennington		90	105	102	99(3)
Insight	Ladino	Allied Seed				102	
Ivory	Intermediate	Cebeco	132	129			131(2)
Kopu II	Intermediate	Ampac Seed			77	97	87(2)
Patriot	Intermediate	Pennington		129	137	103	123(3)
Regal	Ladino	Public	92		57	95	81(3)
RegalGraze	Ladino	Cal/West			84	103	94(2)
Resolute	Intermediate	FFR/Southern States			101	102	102(2)
Seminole	Ladino	Saddle Butte Ag. Inc.		75		94	85(2)
Tillman II	Ladino	Caudill Seed	92				-
Will	Ladino	Allied Seed			117	103	110(2)

<sup>1</sup> Year trial was established.

<sup>2</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific test. For example, the trial planted in 2002 was grazed for 2 years so the final persistence report would be "2004 Red and White Clover Grazing Tolerance Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>.

<sup>3</sup> This trial was replanted in the spring of 2006 due to poor establishment in the fall of 2005

<sup>4</sup> Mean only presented when respective variety was included in two or more trials.

<sup>5</sup> Number of years of data.

**Table 11. Summary of 1994-2007 Kentucky Alfalfa Grazing Tolerance Trials (stand persistence shown as a percent of the grazing tolerant Alfagraze).**

Variety	Proprietor	Variety Characteristics <sup>1</sup>						Lexington									
		FD	Disease Resistance <sup>2</sup>					1994 <sup>3,4</sup>	1996	1997	1998	2000	2000	2001	2004	2005	Mean <sup>5</sup>
			Bw	Fw	An	PRR	APH	3yr <sup>6</sup>	3yr	4yr	3yr	2yr	3yr	3yr	3yr	2yr	(#trials)
ABT 205	W-L Research	2	HR	HR	HR	HR	R	94		84							89(2)
ABT 350	W-L Research	3	HR	HR	HR	HR	HR					46					-
ABT 405	W-L Research	4	HR	HR	HR	HR	R	71	129	69		46	100				83(5)
Alfagraze	Americas Alfalfa	2	MR	R	MR	R	-	100	100	100	100	100	100	100	100	100	100(9)
Amerigraze 401+Z	Americas Alfalfa	4	HR	HR	HR	HR	R		120	53	56	26	85	125			78(6)
Ameristand 403T	Americas Alfalfa	4	HR	HR	HR	HR	HR									125	-
Ameristand 407TQ	Americas Alfalfa															131	-
Apollo	Americas Alfalfa	4	R	R	R	R	-	48	75	33	47	17	31	25		47	40(8)
Arc (certified)	Public	4	LR	MR	HR	-	-		38								-
Baralfa 54	Barenbrug USA	-	R	HR	HR	HR	HR				78						-
Cut-n-Graze	Americas Alfalfa	3	HR	HR	HR	HR	R	68									-
FK 421	Donley Seed Co.	4	HR	H	H	H	H							100			-
Feast	Garst Seeds	3	HR	HR	HR	HR	R		146			87	92				108(3)
Fortress	Syngenta	3	R	R	R	HR	R	40	71								56(2)
Gold Plus	PGI Alfalfa	4	HR	HR	HR	HR	R				81						-
Grazeking	FFR/Southern States	5	MR	HR	HR	R	S		91	41				50			61(3)
Haygrazer	Great Plains Research	4	HR	HR	R	R	MR		75	39			38				51(3)
Integrity	PGI Alfalfa	4	HR	HR	HR	HR	HR									120	-
Legacy	Green Seed	4	R	R	R	R	R	32									-
Magnagraze	Dairyland Seed Co.	3	HR	HR	R	HR	-	56									-
Pasture Plus	MBS	3	HR	HR	R	HR	MR	60									-
Pioneer 98	Pioneer	3	HR	R	HR	R	-				56						-
ProGro	MBS Inc.	4	HR	HR	R	HR	MR				81						-
Quantum	ABI Alfalfa	2	HR	HR	HR	HR	R	71									-
Rushmore	Syngenta	4	HR	HR	HR	HR	HR	32									-
Saranac AR (cert.)	Public	4	MR	R	HR	LR	-		77					100			89(2)
Spredor 3	Syngenta	1	HR	HR	R	MR	S	71	123		75					102	93(4)
Stampede	Allied Seed	3	HR	R	R	HR	R		73								-
Triple Trust 450	ABI/America's Alfalfa	5	HR	HR	HR	HR	HR									108	-
Wintergreen	ABI Alfalfa	3	HR	HR	HR	HR	R	95		57	72						75(3)
WL 326GZ	W-L Research	4	HR	HR	HR	HR	HR		118		88						103(2)
115 Brand	Monsanto	3	HR	HR	R	HR	R					56	85				71(2)
5373	Pioneer	4	HR	HR	HRT	MR	LR	21									-
5432	Pioneer	4	HR	HR	-	MR	-								56		-

<sup>1</sup> Variety characteristics: FD=fall dormancy, Bw=bacterial wilt, Fw=fusarium wilt, An=anthracnose, PRR=phytophthora root rot, APH-aphanomyces root rot. Information provided by seed companies.

<sup>2</sup> Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance.

<sup>3</sup> Year trial was established

<sup>4</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific test. For example, the Lexington trial planted in 1996 was grazed for 3 years so final persistence report would be "1999 Alfalfa Grazing Tolerance Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>5</sup> Mean only presented when respective variety was included in two or more trials.

<sup>6</sup> Number of years of data

**Table 12. Summary of 1996-2007 Kentucky Tall Fescue Grazing Tolerance Trials (stand persistence shown as a percent of the stand rating of KY 31+).**

Variety	Proprietor	Lexington									Princeton		Mean <sup>3</sup> (#trials)
		1996 <sup>1,2</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2002		
		3yr <sup>4</sup>	4yr	3yr	4yr	4yr	4yr	4yr	4yr	3-yr	4yr		
Bariane	Barenbrug USA								89			-	
Barcel	Barenbrug USA	92										-	
BAR9TMPO	Barenbrug USA				75							-	
Bronson	Ampac Seed			39								-	
Cattle Club	Green Seed		37	98	70	93	91					78(2)	
Carmine	DLF International						90					-	
Dovey	Barenbrug USA	92										-	
Festival	Pickseed West						100	101			89	97(3)	
Festorina	Advanta Seeds	98	86		57							80(3)	
Fuego	Advanta Seeds			27								-	
Hoedown	DLF International					88						-	
Jesup EF	Pennington Seed		63	91					99			84(3)	
Jesup MaxQ	Pennington Seed			44	79				103	97	105	86(5)	
Johnstone	Proseeds		65	107			92					88(3)	
KY31+	KY Agri. Exp Sta.	100	100	100	100	100	100	100	100	100	100	100(10)	
KY31-	KY Agri. Exp Sta.	94	90	102	84		98	103	98	101	105	97(9)	
Kenhy	Public			116								-	
Kokanee	Ampac Seed					43						-	
Martin II	International Seeds		59									-	
Maximize	Turf Seed						99					-	
Orygun								99				-	
Resolute	Ampac Seed						23					-	
Select	FFR/Sou. St.			109	69	107	101	100	100		98	98(7)	
Southern Cross			25									-	
Stargrazer	FFR/Sou. St.	90			52	86	89					79(4)	
Stockman	Seed Res. of OR									92		-	
TF33	Barenbrug USA			34								-	
Vulcan	International Seeds			109								-	

<sup>1</sup> Year trial was established.

<sup>2</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1997 was grazed 4 years so the final report would be "2001 Cool-Season Grass Grazing Tolerance Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 13. Summary of 1996-2007 Kentucky Orchardgrass Grazing Tolerance Trials (stand persistence shown as a percent of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington								Princeton	Mean <sup>3</sup> (#trials)
		1996 <sup>1,2</sup>	1997	1998	1999	2000	2001	2002	2003	2002	
		3yr <sup>4</sup>	4yr	3yr	4yr	4yr	4yr	4yr	4yr	4yr	
Abertop	Pennington Seed							38			-
Albert	Univ. of Wisconsin						115				-
Amba	DLF International						71				-
Ambrosia	Pennington Seed		90								-
Athos	DLF International						93				-
Benchmark	FFR/Sou. States	100	105	115	94	118	123	114		133	113(8)
Benchmark Plus	FFR/Sou. States							120		133	127(2)
Boone	Public			131		102					117(2)
Cheyenne	Western Prod. Inc.			94							-
Crown	Donley Seed		86	96							91(2)
Crown Royale	Donley Seed						100				-
Crown Royale Plus	Donley Seed							124		83	104(2)
Hallmark	James VanLeeuwen	107		104	103		115		113	83	104(6)
Haymate	FFR/Sou. States	93	71	102	96	53	115	100	118	83	92(9)
Intensiv	Barenbrug USA								51		-
Mammoth	DLF International						115				-
Megabite	Turf Seed						77				-
Niva	DLF International							76		83	80(2)
Pizza	Advanta Seeds			63							-
Potomac	Public	98						116		117	110(3)
Prairie	Turner Seed					127	121			83	110(3)
Profile	Scott Seed	98						116			107(2)
Progress	Scott Seed	111									-
Tekapo	Ampac Seed	93	166	92	104		55	74	118	100	100(8)
Takena	Smith Seed		81				99				90(2)
WP300	Western Prod. Inc.			94							-

<sup>1</sup> Year trial was established.

<sup>2</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1997 was grazed 4 years so the final report would be "2001 Cool-Season Grass Grazing Tolerance Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data

**Table 14. Summary of 2000-2007 Kentucky Perennial Ryegrass Grazing Tolerance Trials (stand persistence shown as a percent of the mean of the commercial varieties in the trial).**

Variety	Proprietor	Lexington			Mean <sup>3</sup> (#trials)
		2000 <sup>1,2</sup>	2001	2003	
		4yr <sup>4</sup>	3yr	4yr	
AGRLP103	AgResearch USA	133		86	110(2)
Aries	Ampac Seed		139		-
Citadel	Donley Seed	112			-
Granddaddy	Smith Seed Services		121		-
Lasso	DLF-Jenks		130		-
Linn	Public	117	129	63	103(3)
Maverick	Ampac Seed		36		-
Polly II	FFR/Southern States	37	68		53(2)
Quartet	Ampac Seed		77		-
Remington	Barenbrug USA			151	-

<sup>1</sup> Year trial was established.

<sup>2</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2000 was grazed 4 years so the final report would be "2004 Cool-Season Grass Grazing Tolerance Report" archived in the KY Forage website at <[www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage)>.

<sup>3</sup> Mean only presented when respective variety was included in two or more trials.

<sup>4</sup> Number of years of data





Mention or display of a trademark, proprietary product, or firm in text or figures does not constitute an endorsement and does not imply approval to the exclusion of other suitable products or firms.