2009 Long-Term Summary of Kentucky Forage Variety Trials

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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 past 10 to 12 years. Detailed variety reports and forage management publications are available from your local county agent or by visiting the University of Kentucky forage website at www.uky. edu/Ag/Forage and clicking on the Forage Variety Trial link.

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. There are both diploid (two sets of chromosomes) and tetraploid (four sets of chromosomes) varieties of perennial ryegrass. Tetraploids have larger tillers and seedheads and wider leaves. Tetraploid types tend to be taller and less dense than diploid types, even in early stages of regrowth. Diploid types produce more tillers, have better stand persistence and are more tolerant to heavy grazing.

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 shortlived 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).

Festuloliums are hybrids between various fescues and ryegrasses with higher quality than tall fescue and improved stand survival over perennial ryegrass. Their use in Kentucky is still limited because they do not survive as long as tall fescue.

Important Selection Considerations

Local Adaptation and Seasonal Yield. Choose a variety/species that is adapted to your region of 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 UK forage website at 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)
- Forage Identification and Use Guide (AGR-175)
- *Lime and Fertilizer Recommendations* (AGR-1)

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 the amount of 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 lb/A actual N in March, after the first cutting, and again in late summer, for a total of 180 lb/A per season. Other fertilizers (lime, P and K) were applied as needed according to the University of Kentucky soil test recommendations. 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. Management practices for establishment, fertility and weed control were in accordance with University of Kentucky recommendations.

Results and Discussion

These tables summarize long-term vield 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.

					Lexir	ngton			Prine	eton	Quicl	sand	Eden Shale	
			02 ^{1,2}	03	04	06	07	08	03	05	98	03	03	Mean ³
Variety	Type ⁴	Proprietor	3yr ⁵	3yr	3-yr	2-yr	2-yr	2yr	3yr	3-yr	3yr	2yr	2yr	(#trials)
Advantage	Ladino	Allied Seed, L.L.C.		125									106	116(2)
Alice	Intermediate	Barenbrug								86				-
Avoca	Dutch	DLF International Seeds				59				82				71(2)
Barblanca	Intermediate	Barenbrug		92										-
CA ladino	Ladino	Public	100		124				103		100	98		105(5)
Colt	Intermediate	Seed Research of OR		90		57				114				87(3)
Common	Dutch	Public	100				53			78				77(3)
Companion	Ladino	Oregro Seeds						74						
Crescendo	Ladino	Cal/West Seeds	105			140				109				118(3)
Excel	Ladino	Allied Seed, L.L.C.			100									-
Durana	Intermediate	Pennington		94		94	88	79	87	83		101	95	92(7)
Insight	Ladino	Allied Seed, L.L.C.				128								-
lvory	Intermediate	Cebeco	96											-
Ivory II	Intermediate	DLF International Seeds					86							-
Jumbo	Ladino	Ampac Seed	93											-
Kopu II	Intermediate	Ampac Seed	97			97	95	94						96(3)
Patriot	Intermediate	Pennington		103		87	104	117	104	100		98	99	99(7)
Pinnacle	Ladino	Allied Seed, L.L.C.				120				111				116(2)
Rampart	Ladino	Allied Seed, L.L.C.					80	84						-
Regal	Ladino	Public	99	96	92		125	100	107	100	100	104		103(8)
RegalGraze	Ladino	Cal/West Seeds				127	140	111						134(2)
Resolute	Intermediate	FFR/Southern States				63								-
Seminole	Ladino	Saddle Butte Ag. Inc			108	70	79							86(3)
Super Haifa	Intermediate	Allied Seed, L.L.C.			77									-
Tillman II	Ladino	Caudill Seed	103											-
Will	Ladino	Allied Seed, L.L.C.	107			162	150	141		136				139(4)

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 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>.

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

⁴ Ladino white clover shows higher yield than intermediate and dutch white clover but often shows lower long term survival (>3 years), especially under grazing or harsh environmental conditions. See Table 11 for survival under grazing.

⁵ Number of years of data

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 2009 reports on the forage Web site. See below for specific reports. The forage Web site contains all reports from 2001 through 2009.

Yield and Grazing Tolerance Reports

(www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm)

- 2009 Alfalfa Report (PR-589)
- 2009 Red and White Clover Report (PR-590)
- 2009 Tall Fescue and Brome Report (PR-592)
- 2009 Orchardgrass Report (PR-591)
- 2009 Timothy and Kentucky Bluegrass Report (PR-593)
- 2009 Annual and Perennial Ryegrass Report (PR-594)
- 2009 Alfalfa Grazing Tolerance Report (PR-595)
- 2009 Red and White Clover Grazing Tolerance Report (PR-596)
- 2009 Cool-Season Grass Grazing Tolerance Report (PR-597)
- 2009Cool-Season Grass Horse Grazing Report (PR-598)

Other Reports Not Included in this Summary Report

- 2009 Native Warm-Season Perennial Grass Report (PR-599)
- 2009 Summer Annual Grass Report (PR-601)

Authors

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ABT 350 W-L Research 3 HR				<u> </u>	<u> </u>			<u> </u>					99					104									102(2)
Alt 4 Add Alt 4 He He He He He								-			100						97										. ,
Alt Price Mathematical Mathematimatical Matrematical Mathematical Matrematical Mathematical Mat																									101		. ,
AL Longview Newfield Seeds I I I I				<u> </u>	<u> </u>												100	102				102					
Attingsze Attingsze <t< td=""><td></td><td></td><td>4</td><td></td><td>НК</td><td>нк</td><td>нк</td><td>K</td><td></td><td>101</td><td>101</td><td></td><td></td><td></td><td>0.2</td><td></td><td>108</td><td></td><td></td><td></td><td>101</td><td></td><td></td><td></td><td></td><td></td><td>. ,</td></t<>			4		НК	нк	нк	K		101	101				0.2		108				101						. ,
Alfegrade Amenetrals Alf 2 M R M R R M R R M R M R M R M R M M R M M R M M R M M M R M M R M M M M<			4								00				83			101			104						
America America America America America America B	,							-		00	99							101			104				07		
401-2 merica's AII 1 N													00				102	00									. ,
Amerigand 4037 American 4017 Americ		America's All.	4	пк						102			99				102	99							102		101(5)
Americal Americal M. 3 M. M. <		America's Alf	3	HR	HR	HR	HR	HR								98			97								98(2)
302-2 America's ALL R			_									103							57								-
Apollo America's Alf. 4 R R R - 80 108 7 7 7 90 75 90 75 90 75 90 75 90 75 90 75 75		/ uncrica 5 / unc										105															
Are (certified) Public 4 I.M. MR HR		America's Alf.	4	R	R	R	R	-	80	108											96						95(3)
Baralfa SHM Barenbrugg 5 H I I I I I I I I I I I I I I I								_			87	99	91	96	76		96	100	99	95		90	98		94		94(15)
Burfal Public - 1 1 1 1 1 1 0 1 1 0 0 0 0							HR	HR																			
Buffaio Public - 101 - 103 - 103 - 103 - 103 - 103 - 103 - 103 - 101 - 0 0 0 0			-		<u> </u>			<u> </u>														96			99		98(2)
Choice FFR/Sou St. 4 HR R R N				1	-									90	82	91				95	93	-		83		95	90(7)
Cimaron SR Great Plains 4 HR HR HR R <td></td> <td>FFR/Sou. St.</td> <td>4</td> <td>HR</td> <td>R</td> <td>R</td> <td>HR</td> <td>R</td> <td>110</td> <td></td> <td>104</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>106</td> <td></td> <td></td> <td></td> <td>103</td> <td>97</td> <td></td> <td></td> <td>103</td> <td></td> <td>104(6)</td>		FFR/Sou. St.	4	HR	R	R	HR	R	110		104						106				103	97			103		104(6)
Cimaron VR Graz Plains S HR HR HR R MR P P D <thd< th=""> D <thd< th=""> D<td>Cimarron3i</td><td>Great Plains</td><td>4</td><td>HR</td><td>HR</td><td>HR</td><td>HR</td><td>HR</td><td></td><td></td><td>100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>99</td><td></td><td></td><td>96</td><td></td><td>98(3)</td></thd<></thd<>	Cimarron3i	Great Plains	4	HR	HR	HR	HR	HR			100											99			96		98(3)
CM 19303 Alled Seeds S HR HR<	Cimarron SR	Great Plains	4	HR	HR	HR	HR	MR				103						101									102(2)
Demand ABI Alfafa 3 HR HR HR HR R	Cimarron VR	Great Plains	5	HR	HR	R	R	MR			99																-
Depender ABI AFIAFIA - -	CW 15030		-	HR	HR	HR		HR																104			
Dr. 1272 Monsanto 3 HR HR HR HR R R C C C C C D	Demand	ABI Alfalfa	3	HR	HR	HR	HR	R													99						-
DK1333 Monsanto 4 HR HR HR HR HR R No 105 No No </td <td>Depend+EV</td> <td>ABI Alfalfa</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>104</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>	Depend+EV	ABI Alfalfa	-	-	-	-	-	-													104						-
DK131HO Monsanto 4 HR		Monsanto		HR					111																		107(2)
DK140 Monsanto 4 HR HR HR HR H Int									106												104						105(2)
DK141 Monsanto 4 HR	-			<u> </u>				<u> </u>				105															-
DKA-41:188R Monsanto 4 HR HR HR								-						95					100						103		101(6)
Dominator America's Alf. 4 HR HR <td></td> <td>99</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>98</td> <td></td> <td></td> <td></td> <td>103</td> <td></td> <td></td> <td></td> <td></td> <td></td>											99							98				103					
Dynagro Everlast United Agr. Prod. 4 HR HR HR HR R N				<u> </u>	<u> </u>			<u> </u>								103											-
Emperor ABI Alfalfán 4 HR HR<									102																		-
Enforcer FFR/Sou.St. 4 HR HR<																				101		4.0.0		100			. ,
Everyone FR/Sou St. 5 HR HR HR HR HR R No								<u> </u>							-							102			93		. ,
Excalibur II Allied Seeds 4 HR HR HR HR HR R <th< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td>90</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>105</td><td></td><td></td><td>102</td><td></td></th<>					-			-							90								105			102	
Expedition Syngenta S HR HR R									107														105	104		103	
Peast Garst Seeds 3 HR HR HR HR R HR R IO1 IO IO1 IO IO1 IO IO IO1 IO IO IO IO1 IO IO IO1 IO IO IO1				1				<u> </u>	107						107	110				06							
Feast +EV Garst Seeds 3 HR HR HR HR HR H </td <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>101</td> <td></td> <td></td> <td></td> <td></td> <td>107</td> <td>110</td> <td>101</td> <td></td> <td></td> <td>96</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>. ,</td>				1						101					107	110	101			96							. ,
FK421 Donley Seed 4 HR H										101					106		101						101			06	
Fortress Syngenta 3 R <td></td> <td></td> <td>-</td> <td><u> </u></td> <td></td> <td>100</td> <td></td> <td></td> <td></td> <td>101</td> <td></td> <td></td> <td></td> <td>101</td> <td></td> <td></td> <td>90</td> <td>101(3)</td>			-	<u> </u>											100				101				101			90	101(3)
FSG 406 Allied Seeds 4 HR HR<										00	96						07		101		08				00		- 08(5)
FSG 408DP Allied Seeds 4 HR HR HR HR HR HR R			-							33	30						51				90		110		33		
FSG 505 Allied Seeds 5 HR HR<				<u> </u>	<u> </u>			<u> </u>							105								110				
Gem FFR/sou.St. 4 HR HR </td <td></td> <td>105</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>106</td> <td></td> <td></td> <td>108</td> <td>107(2)</td>															105								106			108	107(2)
Geneva Syngenta 4 HR											100						98				101		100		105	100	
Genoa Syngenta 4 HR													106	103				99	104			101					103(6)
GH744 Golden Harvest 4 HR HR<								-		İ	l	l			112					98							105(0)
Goldplus PGI Alfalfa 4 HR HR HR R <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>104</td><td>1</td><td></td><td></td><td> </td><td></td><td></td><td> </td><td></td><td></td><td></td><td> </td><td></td><td></td></th<>										1				104	1												
Grazeking FFR/Sou.St. 5 MR HR R R S 100 0 <td></td> <td> </td> <td> </td> <td> </td> <td></td> <td> </td> <td></td> <td></td> <td> </td> <td></td> <td></td> <td> </td> <td>90</td> <td></td> <td></td> <td> </td> <td></td> <td></td>																						90					
Haggrazer Great Plains 4 HR HR R R R MR 102 1<										100					1										102		101(2)
HybriForce 400Dairyland4HRHRHRHRMRMRMRMMM<	·										İ	İ	İ	İ				İ			İ						101(2)
Imperial America's Alf. 3 HR HR HR R </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>106</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																			106								
Innovator+Z America's Alf. 3 HR <								-													104						-
IntegrityPGI Alfalfa4HR																					101						-
L447HD Legacy Seeds 4 HR td></td> <td>PGI Alfalfa</td> <td></td> <td></td> <td></td> <td>HR</td> <td></td> <td>HR</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Ĺ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>102</td> <td></td> <td></td> <td>_</td>		PGI Alfalfa				HR		HR							Ĺ									102			_
Legacy Green Seed 4 R		Legacy Seeds						-								107											-
LH4 Pioneer 3 HR HR R R R 99 Image: Constraint of the state	Legacy	Green Seed	4	R	R	R	R	R	88												96						92(2)
LH4 Pioneer 3 HR HR R R R 99 Image: Constraint of the state		Croplan Genetics	3	HR	HR	HR	HR	HR								99				103				108			103(3)
Magnum VDairyland4HRHRRHRHRII			3		-			-				99															
Magnum V-wet Dairyland 3 HR HR R HR MR MR MR 105 Image: Constraint of the state of	Magnum V	Dairyland	4			R							104														-
Mountaineer 2.0 Croplan Gen. 5 Hr HR HR RR HR I <t< td=""><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>105</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td></t<>				1									105														-
Pasture Plus MBS 3 HR HR R MR A A A B A B			5					-							108												-
Pasture Plus MBS 3 HR R HR MR									103																		_
Pegasus FFR/Sou. St. 4 HR HR HR R I			3												Ĺ							108					
PerForm Dairyland 4 HR HR HR HR HR HR - 104 - 104						HR		R											95								-
		Dairyland	4			HR	HR									104											-

continued on page 6

																								Ed	len	
			Varie	y Cha	racte	ristics	5 ¹				Lexin	gton					Princ	eton		Bo	wling	Gre	en ²	Sh	ale	
			D	isease	e Resi	stanc	e ³	95 4,5		97	99	00	02	04	06	97	99	01	05	96	98	03	06	98	03	Mean ⁶
Variety	Proprietor	FD	Bw	Fw	An	PRR	APH	6yr ⁷	5yr	6yr	4yr	5yr	5yr	5yr	3yr	5yr	4yr	4yr	5yr	7yr	7yr	3yr	3yr	5yr	4yr	(# trials
Phirst	UniSouth	4	HR	HR	HR	HR	R												105				103			104(2)
	Genetics	<u> </u>																								
Phoenix	FFR/Sou. St.	5	HR	HR	HR	HR	R							113	100						0.5		97			103(3)
ProGro	PGI Alfalfa	4	HR	HR	R	HR	MR														95					-
Radiant-AM	Ampac Seed	4	HR	HR	HR	HR	HR								98								107			-
Rebound 5.0	Croplan Genetics	4	HR	HR	HR	HR	HR															100	107		0.4	-
Regal	Great Plains PGI Alfalfa	5	HR	HR	R	HR	MR										00					103			94	99(2)
Reward II		4	HR	HR	R	HR	MR										98	00	102			04			102	
Reward II	PGI Alfalfa	-	HR	HR	R	HR	R	100				05				102		99	103	00		94			103	100(4)
Rushmore	Syngenta Public	4	HR	HR	HR HR	HR LR	HR –	108 103	99	05	06	95 93	87	77	00	103		02	05	99 101	90		01	101	95	101(4)
Saranac AR (certified)	Public	4	MR	R	пк	LK	-	103	99	95	96	93	8/	77	90	93		92	95	101	90	99	91	101	95	94(17)
. ,	Cup gopto	1	HR	Цр	R	MR	S		95															101		98(2)
Spredor 3	Syngenta Allied Seeds	3	HR	HR R	R	HR	R		95 95															101		,
Stampede Stellar	W-L Research	4		н НR	к HR	HR	LR		22												94			100		101(2)
Stellar Summer Gold		4	HR	HR	HR		HR							107							94					-
	Beck's Hybrids ABI Alfalfa	4	HR	HR	HR	HR HR	HK S	104						107						102						-
Supercuts			HR					104												103						104(2)
TMF Generation TMF 4355LH	Mycogen Seeds	4	HR	HR	HR	HR	R				100									103						-
	Mycogen Seeds	3	HR	R	HR	HR	R				100						98									-
TMF 4464	Mycogen Seeds	4	HR	HR	HR	HR	R					102					98	100								-
Triple Crown	FFR/Sou. St.	4	HR	HR	HR	HR	HR					102						100	100				105			101(2)
TripleTrust 450	ABI Alfalfa	5	HR	HR	HR	Hr	HR					100							100				105			103(2)
ValuePlus 1	Forage Genetics	4	HR	HR	HR	HR	R					106							0.5					0.6		-
Vernal	Public	2	R	MR	-	-	-						93			100			95		91			96		94(4)
Wintergreen	ABI Alfalfa	3	HR	HR	HR	HR	R			104						103								101		103(3)
Withstand	FFR/Sou. St.	4	HR	HR	HR	HR	HR								99								114			107(2)
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 343HQ	W-L Research	4	HR	HR	HR	HR	HR								98											-
WL 348AP	W-L Research	4	HR	HR	HR	HR	HR																99			
WL 357HQ	W-L Research	5	HR	HR	HR	HR	HR							123					106			101			106	109(4)
329	Cal/West	3	HR	HR	HR	HR	R	94																		_
4m76	FFR/Sou. St.	5	HR	HR	R	HR	R				L	L	116	L	L	L	L						L	L		-
5-star	Croplan Gen.	5	R	HR	R	R	R				ļ	ļ		ļ	ļ	ļ	ļ					97	ļ	ļ	99	98(2)
5246	Pioneer	2	R	R	HR	HR	R				L	L		L	L	L	98						L	L		
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)
6400HT	Garst Seeds	4	HR	HR	HR	HR	HR				[[108	[[[96	[[103(2)
6415	Garst Seeds	4	HR	HR	HR	HR	HR												103				101			102(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	1	-		i –	i –		1	i –	i –	i –	-	1			92	i –	i –	1	_

provided by seed companies. The Bowling Green test is on soil infested with phytophthora and aphanomyces root rots.

³ Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance.

⁴ Year trial was established.

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⁴⁷ Year trial was established.
 ⁵ 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>.
 ⁶ Mean only presented when respective variety was included in two or more trials.
 ⁷ Number of years of data.

			Le	xingto	n			P	rinceto	n			Quic	csand		
		1999 ^{1,2}	2001	2003	2005	2007	1998	2000	2002	2004	2006	1999	2001	2003	2005	Mean ³
Variety	Proprietor	2-yr ⁴	3-yr	2-yr	3-yr	2-yr	2-yr	2-yr	3-yr	3-yr	3-yr	2-yr	2-yr	2-yr	4-yr	(#trials)
Atlas	Proseeds	107										89				98(2)
BarElite	Barenbrug					99										-
Bariane	Barenbrug			87	103										95	95(3)
Barolex	Barenbrug				94											-
BarOptima PLUS E34	Barenbrug					103										-
BAR 9 TMPO	Barenbrug	96							1			97			1	97(2)
Bronson	Ampac Seed				91	97									102	97(3)
Bull	Improved Forages			98	106			102	103					97		101(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				102	105			98					100	102	101(5)
Johnstone	Proseeds	95	108									95				99(3)
KENHY	KY Agric Exp Sta.									92						-
Kokanee	Ampac Seed	İ	89					86	İ						İ	88(2)
KY31+	KY Agric Exp Sta.	102	118	113	112	109	122	108	104	77	106	107	124	98	110	108(14)
Maximize	Turf-Seed	96	95						1			105	93		1	97(4)
Nanryo	Jap. Grassland ForageSeed/USDA- ARS, El Reno, OK					97										-
Noria	ProSeeds Marketing					102										-
Resolute	Ampac Seed	İ	90										65		İ	78(2)
Savory	DLF International	İ							1		93				1	_
Seine	Advanta Seeds	99							İ	100					İ	99(2)
Select	FFR/Sou. St.	106	106	94	103	102	105	105	95	109	103	107	112	102	91	103(14)
Stockman	Seed Research of OR			109						104	99		1	105		104(4)
TF0203G	Seed Research of OR					88										-
TF33	Barenbrug	l					70		1						1	-
Tuscany	Forage Genetics	İ	112						l						l	-
Tuscany II	Seed Research of OR	İ						l	İ		100		İ 👘	l	İ	_
Vulcan	International Seeds						97		İ	İ			İ			-

Year trial was established.
 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>.
 Mean only presented when respective variety was included in two or more trials.
 Number of years of data.

			Lexir	gton			P	rinceto	n			Quic	ksand		1
		1999 ^{1,2}	2001	2003	2006	1998	2000	2002	2004	2006	1999	2001	2003	2005	Mean ³
Variety	Proprietor	2-yr ⁴	2-yr	3-yr	4-yr	2-yr	2-yr	3-yr	3-yr	3-yr	2-yr	2-yr	3-yr	4-yr	(#trials
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			107		107			107	102	105(5)
Boone	Public					103	104								104(2)
Bronc	Grassland West			1		1	98			1		1			<u> </u>
Bounty	Allied Seed				101									98	100(2)
Century	Seed Research of Oregon				98									104	101(2)
Command	Seed Research of Oregon								87						-
Crown	Donley Seed	101				105		101			97				101(4)
Crown Royale	Donley Seed											110			-
Crown Royale Plus								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					106				100	99(3)
Haymaster	FFR/Sou. St.				94									97	96(2)
Haymate	FFR/Sou. St.	106				93	100	106			108	104	103		103(7)
lcon	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)
Megabite	Turf-Seed	94	105								101				100(3)
Niva	DLF International Seeds							81							-
Persist	Smith Seed			123	105				101				108	101	108(5)
Potomac	Public	104						98			99				100(3)
Prairie	Turner Seed		101		107		95	104		100		102	105	107	103(8)
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	107					100			94	100			98(2)
Takena	Smith Seed		107	110	102			100	100			108	100	104	105(3)
Tekena II	Smith Seed			110	102				109	00			106	104	106(5)
Tekapo	Ampac Seed	88			91					98	94	92	105	91	94(7)
Tucker	Oregro Seeds			100	107		102	102		96			100	00	-
Udder	Improved Forages			100	107		102	102					106	99	103(6)
Vision	Cropmark Seeds s established.			63	l								67		65(2)

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.

				Lexingtor	ı		Quick	csand	Princ	eton	
		00 ^{1,2}	01	02	06	07	99	01	00	04	Mean ³
Variety	Proprietor/KY Distributor	2yr ⁴	3yr	4yr	3yr	2yr	2yr	2yr	3yr	2yr	(#trials)
Alma	Newfield Seeds Co/Caudill Seed Co.									81	-
Auroro	General Feed and Grain	100					98				99(2)
Barpenta	Barenbrug					82					-
Clair	Ky Agric. Exp. Station		109	115	107	93		108		122	109(6)
Classic	Cebeco International Seeds	100		88			87				92(3)
Climax	Canada Agr. Res. Station				79	105					92(2)
Colt	FFR Cooperative	105		101	90		112			99	101(5)
Common	Public		96								-
Derby	FFR Cooperative				112	114				124	117(3)
Dolina	DLF-Trifolium	100		91							96(2)
Express	Seed Research of Oregon			97		97					97(2)
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							-
Talon	Seed Research of Oregon				110	117					114(2)
Treasure	Seed Research of Oregon				103	116					110(2)
Tundra	DLF-Trifolium	95									-
Tuukka	Ampac Seed Company		95	90				92	93		93(4)

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 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>. ³ Mean only presented when respective variety was included in two or more trials.
⁴ Number of years of data.

			L	.exingto	n		Princeton	
	Proprietor/KY	96 ^{1,2}	03	04	06	07	02	Mean ³
Variety	Distributor	3yr ⁴	2yr	3yr	3-yr	2yr	3yr	(#trials)
Adam 1	Radix Research			98				-
Barderby	Barenbrug					97	114	106(2)
Common	Public				70	61		66(2)
Ginger	ProSeeds Marketing		89		121	116		108(3)
Kenblue	Public	90		102	132			110(3)
Lato	Turf Seed Inc.	110				126		118(2)
RAD-339	Radix Research				102			-
RAD-5	Radix Research				98			-
RAD-643	Radix Research				96			-
RAD-731zx	Radix Research				86			-
RAD-762	Radix Research				95			-
Slezanka	DLF International Seeds		111					_

Year trial was established.
 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>. The 96 and 03 Lexington and 02 Princeton results are in the appropriate Tall Fescue Reports.
 Mean only presented when respective variety was included in two or more trials.

⁴ Number of years of data.

					Lexin	gton ¹				F	Princeto	n		rling een	
Variety	Proprietor	1999 ^{2,3}	2001	2003	2004		2006 Il trials i	2007 are 1 ve	2008 ar yield:	2000 s	2002	2004	2000	2003	Mean ⁴ (#trials)
Abundant							26			Ĩ	1				(<i>n</i> en en 5)
Acrobat	Proseeds Marketing								244						_
Andy	DLF International	112	105						2	99					105(3)
Angus I	DLF International											80			-
Aurelia	Forage Genetics		120									130			125(2)
Avance	DLF International	113		l l						109					111(2)
Barextra	Barenbrug										117				-
Big Daddy	FFR/Sou. St.	87	86							90	85		104		90(5)
Bruiser	Ampac Seed	-							111						-
Common	Public									85	85		95	87	88(4)
DH-3	Allied Seed							106	45						76(2)
Diamond T							18								-
Domino	DLF International										121				-
Fantastic	Ampac Seed	83					105	98		90			97		92(4)
Feast	Ampac Seed		90	1						ĺ	İ				-
Feast II	Ampac Seed		98						59		123				93(3)
Flying A	Oregro Seeds						85		100	1	1				-
Graze-N-Gro	Seed Research of OR			105				78		ĺ	İ	94		107	96(4)
Gulf	Public		72					78	44	81	77	57	86		71(7)
Hercules	Barenbrug	114								110					112(2)
Jackson	The Wax Co.				80	100	138	120	100		87			96	97(6)
Jeanne	DLF International		124								İ				-
Jumbo	Barenbrug			103										104	104(2)
King	Lewis Seed		92												-
Marshall	The Wax Co.	87		92	120	100	221	116	169	102	97		114	106	110(10)
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)
Stockaid							181								-
Striker	Seed Research of OR							104							-
ТАМТВО	Oregro Seeds								80						-
Tam 90									82		85				84(2)
TetraPro									67						-
Tetrelite II	DLF International											122			-
T-Rex							25								-
Winter Star	Ampac Seed		87								96				92(2)
Zorro	DLF International	120	127							135	130		118		126(5)

 ¹ In annual ryegrass, low yielding varieties usually result from winterkill. Note: Due to severe winterkill, yield results from the 2006 planting were not included in the overall mean. See "2009 Annual and Perennial Ryegrass and Festulolium Report" Table 2 for yield and stand data for the 2006 planting.
 ² Year trial was established.
 ³ 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>. ⁴ Mean only presented when respective variety was included in two or more trials.

				L	exingto	n			Prine	eton	Bowlin	g Green	
		1999 ^{1,2}	2001	2003	2004	2005	2006	2007	2000	2002	2000	2003	Mean ³
Variety	Proprietor	2yr ⁴	2yr	2yr	3yr	3yr	2yr	2yr	2yr	3yr	2yr	2yr	(#trials)
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			İ	İ		İ	İ	106		114	İ	110(2)
Bastion C-2	Seed Research of OR			İ	91		İ	İ	İ			İ	_
Bestfor	Improved Forages			İ	İ		İ	İ	113	107	120	İ	113(3)
Bestfor Plus	Improved Forages			116	108	118						136	120(4)
BG-34	Barenbrug			İ	İ	83	85	İ	İ			İ	84(2)
Bison	International Seeds			İ	İ		İ	İ	İ		1	140	_
Boost	Allied Seed							128					-
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		-
Eurostar	Seed Research of OR							116					-
Feeder	Seed Research of OR							77					-
Granddaddy	Smith Seed		118				101	108		111			110(4)
GreenGold	Grasslands Oregon						96						-
Lasso	DLF International		98										-
Linn	Public	87	98	98	102		98	83	87	88	77		91(9)
Manhatten										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)
Power	Ampac Seed							112					_
Quartermaster	Radix Research					122							-
Quartet	Ampac Seed		97			56		45		113			78(4)
RAD-CPS212	Radix Research					134					1		-
RAD-MI125	Mountain View Seeds						120				1		-
Sampson	International Seeds	87		1				1	1		1	1	-
Sierra	Lewis Seed Co.	<u>, , , , , , , , , , , , , , , , , , , </u>				89					1		_
Tonga	Ampac Seed					96					1		_
Yatsyn	Barenbrug	80							89		1		85(2)

Year trial was established.

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/ 2 Ag/Forage>.

³ Mean only presented when respective variety was included in two or more trials.
 ⁴ Number of years of data.

				Lexington			Princeton	Quick	ksand	
		1999 ^{2,3}	2001	2003	2005	2007	2000	2001	2003	Mean ⁴
Variety	Proprietor	2-yr ⁵	3-yr	2-yr	3-yr	2-yr	2-yr	2-yr	2-yr	(#trials)
Duo	Ampac Seed	104			84					94(2)
Felina	DLF International		101							-
Hykor	DLF International			98					98	98(2)
Spring Green	Turf-Seed		88		105	101		97		98(4)
Vorage	Improved Forages						99			_

Table 10. Summary of Kentucky Festulolium Yield Trials 1999-2009 (yield shown as a percentage of the mean of the commercial varieties in the

The festuloliums were in fescue trials from 1999-2005 and in the 2007 perennial ryegrass trial. Year trial was established.

² Teal trial was established.
 ³ 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>.
 ⁴ Mean only presented when respective variety was included in two or more trials.
 ⁵ Number of years of data.

			2002 ^{1,2}	2004	2006 ³	2006	2008 ⁴	Mean ⁵
Variety	Туре	Proprietor	2yr ⁶	4yr	2yr	2yr	2yr	(#trials)
Alice	Intermediate	Barenbrug USA		59	98			79(2)
Barblanca	Intermediate	Barenbrug USA		118	91	151		120(3)
Colt	Intermediate	Seed Research of OR		114	134	122		123(3)
Crescendo	Ladino	Cal/West	84			72		78(2)
Durana	Intermediate	Pennington		83	105	103	101	98(4)
Insight	Ladino	Allied Seed				77		-
lvory	Intermediate	Cebeco	132	142				137(2)
Kopu II	Intermediate	Ampac Seed			77	122		100(2)
Patriot	Intermediate	Pennington		110	137	122	101	118(4)
Rampart	-	Oregro Seeds					100	-
Regal	Ladino	Public	92		57	54	100	76(4)
RegalGraze	Ladino	Cal/West			84	87	99	90(3)
Resolute	Intermediate	FFR/Southern States			101	106		104(2)
Seminole	Ladino	Saddle Butte Ag. Inc.		75		97		86(2)
Tillman II	Ladino	Caudill Seed	92					-
Will	Ladino	Allied Seed			117	87	101	102(3)

¹ Year trial was established.

Year trial was established.
 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>.
 This trial was replanted in the spring of 2006 due to poor establishment in the fall of 2005.
 This trial was replanted in the spring of 2008 due to poor establishment in the fall of 2007.
 Mean only presented when respective variety was included in two or more trials.
 Number of years of data.

Martine Descentatione ³				Valie		variety characteristics	stics						Lexir	Lexington					
Watery Form For API Syst <th< th=""><th></th><th></th><th></th><th></th><th>Disea</th><th>se Resi</th><th>stance²</th><th></th><th>1994^{3,4}</th><th></th><th>1997</th><th>1998</th><th>2000</th><th>2000</th><th>-</th><th>2004</th><th>2005</th><th>2006</th><th>Mean⁵</th></th<>					Disea	se Resi	stance ²		1994 ^{3,4}		1997	1998	2000	2000	-	2004	2005	2006	Mean ⁵
Alf 705 WL Research 3 HR HR HR HR HR HR 10 100 100 100 100 100 100 100 100 100	Variety	Proprietor	FD	Bw	Fw	An	PRR	APH	3yr ⁶		4yr	3yr	2yr	3yr	-	4yr	4yr	3yr	(#trials)
Aff 750 WL Research 3 HR HR HR H F 1 129 66 100 <td>ABT 205</td> <td>W-L Research</td> <td>2</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>Я</td> <td>94</td> <td></td> <td>84</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>89(2)</td>	ABT 205	W-L Research	2	HR	HR	HR	HR	Я	94		84								89(2)
Mart 405 Mar	ABT 350	W-L Research	m	HR	HR	HR	HR	HR						46					I
Americandor Manificanze American Malfin 2 MM R N M R M M R M	ABT 405	W-L Research	4	HR	HR	H	HR	ж	11	129	69			46	100				83(5)
Americand 4071 American Alfalia 4 HR <	Alfagraze	Americas Alfalfa	7	MR	ж	MR	æ	ı	100	100	100	100	100	100	100	100	100	100	100(10)
Americand 4017 Americas Alfalia A Americas Alfalia Americas Americas America Amer	Amerigraze 401+Z	Americas Alfalfa	4	HR	HR	HR	HR	ж		120	53	56	26	85	125				78(6)
Americand 407(2) Americand 407(2)<	Ameristand 403T	Americas Alfalfa	4	НВ	HR	HR	HR	HR									141	144	143(2)
Application Americas Alfalita 4 IR R - - 48 75 33 47 17 31 23 36 27 Benlin 54 Barenbrug USA - R	Ameristand 407TQ	Americas Alfalfa															136		ı
And (certified) Public And (certified) Public And (certified) Public And (certified) Public And (certified) Public <td>Apollo</td> <td>Americas Alfalfa</td> <td>4</td> <td>R</td> <td>R</td> <td>R</td> <td>R</td> <td>Ι</td> <td>48</td> <td>75</td> <td>33</td> <td>47</td> <td>17</td> <td>31</td> <td>25</td> <td></td> <td>36</td> <td>27</td> <td>39(9)</td>	Apollo	Americas Alfalfa	4	R	R	R	R	Ι	48	75	33	47	17	31	25		36	27	39(9)
All of the constraint of the co	Arc (certified)	Public	4	LR	MR	HR	I	I		38									Ι
Cutro-Graze Americas Alfalia 3 HR R 20 21 20	Baralfa 54	Barenbrug USA	I	ж	HR	HR	HR	HR				78							I
FK 421 Donley-Seed Co. 4 HR H	Cut-n-Graze	Americas Alfalfa	3	HR	HR	HR	HR	R	68										Ι
Fleest Gatz Seels 3 HR HR HR R 40 71 87 92 N N Gold Piss Syngeria Syngeria 3 R HR <td< td=""><td>FK 421</td><td>Donley Seed Co.</td><td>4</td><td>HR</td><td>т</td><td>т</td><td>т</td><td>т</td><td></td><td></td><td></td><td></td><td></td><td></td><td>100</td><td></td><td></td><td></td><td>I</td></td<>	FK 421	Donley Seed Co.	4	HR	т	т	т	т							100				I
Electress Synthema 3 R R R A 10 71 81	Feast	Garst Seeds	ß	HR	HR	HR	HR	Я		146			87	92					108(3)
Gold Plus:PCI Alfafia	Fortress	Syngenta	с	Я	Я	Я	HR	Я	40	71									56(2)
Gazeking FH?Southen States 5 MR R <td>Gold Plus</td> <td>PGI Alfalfa</td> <td>4</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>R</td> <td></td> <td></td> <td></td> <td>81</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Ι</td>	Gold Plus	PGI Alfalfa	4	HR	HR	HR	HR	R				81							Ι
HaygrazerGreat Plains Research4HRHRRMR753938M17172LegaryGreat Plains Research4HHRHRHRHHR<	Grazeking	FFR/Southern States	5	MR	HR	HR	Я	S		91	41				50				61(3)
Integrity Picinali	Haygrazer	Great Plains Research	4	Щ	HR	ж	ж	MR		75	39			38					51(3)
Legacy Green Seed 4 R R 8 3.2 Image of the state of the st	Integrity	PGI Alfalfa	4	۴	H	Ħ	Ħ	Ħ									172		I
Magnagraze Dairyland Seed Co. 3 HR HR C 56 C C C C Parture Plus Magnagrad 3 HR HR R HR NR 60 NR 56 NR NR Profero MBS Inc. 4 HR	Legacy	Green Seed	4	٣	ж	٣	٣	щ	32										ı
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Pioneer 98 Pioneer 3 HR R - 56 6 6 7 ProGio MBS linc. 4 HR HR HR R 7 7 Quantum BBS linc. 4 HR HR HR R 7 7 Quantum BBS linc. 4 HR HR HR PR 7 100 14 Rebel Target Seed 3 HR HR HR HR 7 10 10 14 Rushmore Syngenta 1 HR HR HR HR HR 14 14 14 Rushmore Syngenta 1 HR HR HR HR 17 100 68 14 Stranpede Alled Seed 3 HR HR HR HR 11 13 75 100 68 14 Stranpede Alled Seed 3 HR HR	Pasture Plus	MBS	m	НR	HR	ж	HR	MR	60										I
ProGroMBS Inc.MBS Inc.4HRHRHRMRR718181179QuantumABI Affair2HRHRHRHRHRHRHRHR147QuantumBargedTarget Seed3HRHRHRHRHR147RushmoreSyngenta4HRHRHRHRHRHR146Stranac AR (cert.)Public3HRHRHRHRHR1145Stranac AR (cert.)Public4HRHRHRHR1237510068Stranac AR (cert.)Public5HRHRHRHRHR1145146Stranac AR (cert.)Public5HRHRHRHRHR123757510068Stranac AR (cert.)Public5HRHRHRHRHR115145Stranac AR (cert.)Public5HRHRHRHR123757568Stranac AR (cert.)Public3HRHRHRHRHR1145145WintergreenABI Affafa3HRHRHRHRHR1145WintergreenABI Affafa3HRHRHRHRHR115WintergreenABI Affafa3HRHRHRHRHR1145WintergreenABI Affafa	Pioneer 98	Pioneer	m	H	٣	НH	٣	I				56							I
QuantumABI Alfalfa2HR </td <td>ProGro</td> <td>MBS Inc.</td> <td>4</td> <td>HR</td> <td>HR</td> <td>ж</td> <td>HR</td> <td>MR</td> <td></td> <td></td> <td></td> <td>81</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>I</td>	ProGro	MBS Inc.	4	HR	HR	ж	HR	MR				81							I
Rebel Target Seed 4 HR <td>Quantum</td> <td>ABI Alfalfa</td> <td>7</td> <td>HR</td> <td>HR</td> <td>НВ</td> <td>HR</td> <td>ж</td> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>I</td>	Quantum	ABI Alfalfa	7	HR	HR	НВ	HR	ж	11										I
RuggedTarget Seed3HR <td>Rebel</td> <td>Target Seed</td> <td>4</td> <td>Ħ</td> <td>HR</td> <td>Ħ</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>79</td> <td>ı</td>	Rebel	Target Seed	4	Ħ	HR	Ħ	H	H										79	ı
RushmoreSyngenta4HRHRHRHR32AASaranac AR (cert.)Public4MRRHRLR-110068Saranac AR (cert.)Syngenta1HRHRLR-7706868Striple Trust 450ABI/America's Alfalfa5HRHRHRHRHRHRHR1123750068NintegreenABI Affafia3HRHRHRHRHRHR145145WintergreenABI Affafia3HRHRHRHRHR18720068145WintergreenABI Affafia3HRHRHRHRHR18720068757200145Wintergreen3HRHRHRHRR7372885685175725373Pioneer4HRHRRLR2188568501755373Pioneer4HRHRRLR21210687511455373Pioneer4HRHRRZ2121275 <td>Rugged</td> <td>Target Seed</td> <td>m</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>HR</td> <td>HR</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>146</td> <td>I</td>	Rugged	Target Seed	m	HR	HR	HR	HR	HR										146	I
Saranac AR (cert.)Public4MRRHRLR-7710010068Spredor 3Syngenta1HRHRRAR73750068StampedeAllied Seed3HRHRHRHRR73750068Triple Trust 450ABI/America's Alfalfa5HRHRHRHRHRHRHR113123720145WintergreenABI Alfalfa3HRHRHRHRR9557720145WL 326GZW-L Research4HRHRHRR1188856850145WL 326GZW-L Research3HRHRHRRR1188856850145WL 326GZW-L Research4HRHRRR2112056850WL 326GZWoerer4HRHRRR21885685051WL 326GZPioneer4HRHRRR212105685051WL 326GZPioneer4HRHRRRR212105685151515333Pioneer4HRHR-MR-05151515151	Rushmore	Syngenta	4	HR	HR	НR	HR	HR	32										I
Spredor 3Syngenta1HRHRRMRS711237568StampedeAllied Seed3HRHRHRHRHRHRHRHRHRTriple Trust 450ABI/America's Alfalfa5HRHRHRHRHRHRHRHRHRWintergreenABI Alfalfa3HRHRHRHRHRHRHRHRHRHRWL 326GZW-L Research4HRHRHRR955772PPWL 326GZW-L Research3HRHRHRRR955685P7WL 326GZW-L Research4HRHRHRRR955685P7WL 326GZW-L Research4HRHRHRRR772P77WL 326GZW-L Research4HRHRHRR21885685775373Pioneer4HRHRHRLR2172751775323Pioneer4HRHRLR212175685775323Pioneer4HRHR-MR-5151775323Pioneer4HRHR-MR-568551 <td< td=""><td>Saranac AR (cert.)</td><td>Public</td><td>4</td><td>MR</td><td>۳</td><td>НВ</td><td>LR</td><td>ı</td><td></td><td>77</td><td></td><td></td><td></td><td></td><td>100</td><td></td><td></td><td></td><td>89(2)</td></td<>	Saranac AR (cert.)	Public	4	MR	۳	НВ	LR	ı		77					100				89(2)
Stampede Allied Seed 3 HR L 21 23 26 85 56 85 51 </td <td>Spredor 3</td> <td>Syngenta</td> <td>-</td> <td>НR</td> <td>HR</td> <td>æ</td> <td>MR</td> <td>S</td> <td>71</td> <td>123</td> <td></td> <td>75</td> <td></td> <td></td> <td></td> <td></td> <td>68</td> <td></td> <td>96(4)</td>	Spredor 3	Syngenta	-	НR	HR	æ	MR	S	71	123		75					68		96(4)
Triple Trust 450 ABI/America's Alfalfa 5 HR L 21 21 25 25 21 21 21 21 21 21 21 21 21 21 21 </td <td>Stampede</td> <td>Allied Seed</td> <td>m</td> <td>Ψ</td> <td>۳</td> <td>ж</td> <td>Ħ</td> <td>۳</td> <td></td> <td>73</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ı</td>	Stampede	Allied Seed	m	Ψ	۳	ж	Ħ	۳		73									ı
Wintergreen ABI Atrialta 3 HR R 118 56 85 51 51 51 5373 Pioneer 4 HR HR HR R 21 88 56 85 51 5	Triple Trust 450	ABI/America's Alfalfa	2	HR	뚝	HR	HR	HR				1					145		1
WL JJ06JZ W-L Research 4 HK LK 21 56 85 51 5	Wintergreen	ABI Alfalfa	~ ·	Ĩ	Ξ	Ξ	Ξ	× !	£	,	رکر	22							/5/3/
Initial Stand Monsanto 3 Initial Inititer Initian <thinitial< th=""></thinitial<>	115 P	W-L Kesearch	4 (Ě		Ě	Ě	Ĕ		×		88	2	Ľ					103(2)
33/3 Prioreer 4 HR HR LK 21 22 22 22 22 22 23 23 23 24 21	CECT	Monsanto	n					<u>-</u>	5				n	8					/ 1/7)
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¹ Variety characteristics: FD=fall dormancy, Bw=bacterial wilt, Fw=fusarium wilt, An=anthracnose, PRR=phytophthera root rot, APH-aphanomyces root rot. Information pro seed companies. 2 Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=nsistance, HR=high resistance. 3 Year trial was established 4 Ose this summary ratio a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties of a stand persistence between varieties.	5432	Pioneer	4	Ξ.	Ξ,	'	MK	1								- C			'
 Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, RE=high resistance. Year trial was established Bus 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 and the statistical differences in stand persistence between varieties 	 Variety characteris veed companies 	tics: FD=fall dormancy, Bw	=bacter	ial wilt,	Fw=tu:	sarium	vilt, An	=anthra	cnose, F	'KK=phyt	ophthe	a root ru	ot, APH-	aphanor	nyces ro	ot rot. In	iformatic	n provid	ded by
³ Year trial was established ⁴ 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 ⁴ 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 ⁴ 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 ⁴ 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 ⁴ 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 ⁴ 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 ⁴ Use this statistical differences and the statistical differences in stand persistence between varieties ⁴ Use this statistical differences in the statistical differences in statistical differences in stand persistence between varieties ⁴ Use the statistical differences in	² Disease resistance	: S=susceptible, LR=low res	sistance,	MR=m	oderati	e resista	ince, R=	resistan	ice, HR≕	high resis	stance.								
⁴ Use this summary table as guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in stand persistence between varieties of the statistical differences in statistical	³ Year trial was estal	blished				,	9					-	;						
	⁴ Use this summary	table as a guide in making	variety	decisio	ns, but	refer to	specific	yearly	reports t	o detern	nine stat	istical di	itterence	es in star	d persis	tence be	etween v	arieties.	lo tind
actual persistence ramings, how in the yearty report to the initial year of each specific test. For example, the testingion that printed in 1990 was grazed for 3 years so final persistence	actual persistence	ratings, look in the yearly r	eport fo	or the fir	ופסע ופר	of and	finens c		meye vo	04+00		n tria	i potuci	1006 v	ACCID SCI	d for 3 v	t on one of	and cui	ictonco

Table 13. Summary	Table 13. Summary of 1996-2009 Kentucky Tall		cue Grazin	ig Tolerand	e Trials (st	and persis	stence sho	rescue Grazing Tolerance Trials (stand persistence shown as a percent of the stand rating of KY 31+).	cent of th	e stand ra	ting of KY	31+).		
							Lexington						Princeton	
		1996 ^{1,2}	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2002	Mean ³
Variety	Proprietor	3yr ⁴	4yr	3yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	3yr	4yr	(#trials)
Advance MaxQ	Pennington Seed											88		I
Bariane	Barenbrug USA								89		75	40		68(3)
Barcel	Barenbrug USA	92												I
Barolex	Barenbrug USA										78	69		74(2)
BarOptima PLUS E34	Barenbrug USA										100			I
BAR9TMPO	Barenbrug USA				75									1
Bronson	Ampac Seed			39										I
Cattle Club	Green Seed		37	98	70	93	91							78(2)
Carmine	DLF-Jenks						90							I
Cowgirl	Rose Agri-Seed									66				I
Dovey	Barenbrug USA	92												I
Festival	Pickseed West						100	101					89	97(3)
Festorina	Advanta Seeds	98	86		57									80(3)
Fuego	Advanta Seeds			27										I
Hoedown	DLF-Jenks					88								I
Jesup EF	Pennington Seed		63	91					99					84(3)
Jesup MaxQ	Pennington Seed			114	79			103	97		68	66	105	95(7)
Johnstone	Proseeds		65	107			92							88(3)
KY31+	KY Agri. Exp Sta.	100	100	100	100	100	100	100	100	100	100	100	100	100(12)
KY31-	KY Agri. Exp Sta.	94	90	102	84		98	103	98	100	82	66	105	96(11)
Kenhy	Public			116										I
Kokanee	Ampac Seed					43								I
Martin II	International Seeds		59											I
Maximize	Rose Agri-Seed						66							I
Orygun	1							66						I
Resolute	Ampac Seed						23							I
Select	FFR/Sou. St.			109	69	107	101	100	100		67	96	98	94(9)
Southern Cross	1		25											I
Stargrazer	FFR/Sou. St.	90			52	86	89							79(4)
Stockman	Seed Res. of OR									102				I
TF33	Barenbrug USA			34										I
Tuscany II	Seed Res. of OR											66		I
Verdant	Am.Grass Seed											90		Ι
Vulcan	International Seeds			109										I
¹ Year trial was established. ² Use this summary table as	¹ Year trial was established. ² Use this summary table as a guide in making vari	ing variety	decisions,	but refer to	specific ve	arly report	s to determ	ine statistic	cal differen	ices in stan	d persisten	ce betweer	' varieties.	o find
actual persistence	actual persistence ratings, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in in 1997 was grazed 4 years so the final report	rly report fo	or the final	year of eac	h specific ti	rial. For exa	mple, the l	exington t	rial planted	d in in 1997	was grazeo	d 4 years so	the final re	port
³ Mean only present	would be zout Coorseadon class chazing toterance neport actimed in the Nr rotage website at 3 Mean only presented when respective variety was included in two or more trials.	ig ioleranc rietv was in	e report a	יאס סר שסני	e trials.	ge websile	al <www.u< td=""><td>uky.edu/Ag</td><td>rorage>.</td><td></td><td></td><td></td><td></td><td></td></www.u<>	uky.edu/Ag	rorage>.					
⁴ Number of vears of data	if data.	in cran in cran												
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Natiety Mericy							Lexington	gton					Princeton	
			19961,2	1997	1998	1999	2000	2001	2002	2003	2004	2005	2002	Mean ^{3,5}
0 Pen Iark Pen Iark Pen Iark FFR Iark FFR Iark FFR Iark FFR Park Pren Iark FFR Park Pren Park Pren Park FFR Park Pren Park Pren Park Pren Park Pren Park Pren Park Park Park	Variety	Proprietor	3yr ⁴	4yr	3yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	(#trials)
Image Image ia Pen DLF DLF iark FFR iark FFR nd Der nd FFR nd Dor total Paula e FFR e FFR e FFR e FFR e FFR e Dar oth Dar fee Duf fee Duf fee Duf fial was established. Smid is summary table as stables adse: is summary table as stables adse: is summary table as stables find is summary table as stables find is summary table as stables find fish find was estables	Abertop	Pennington Seed							38					I
DLF iar DLF iark Plus FFR Pub nd See nd See nd See nd See nd Dor total Dor	Albert	Univ. of Wisconsin						115						I
ia Pen lark Plus PLF he ark Plus DLF he Pub nd See Net Plus Dor toyale Plus Dor toyale Plus Dor toyale Plus Dor See FFR but DLF c Pub c Pub s Sco s Sco s Sco s Sco s Sco s summary table as vas grazed 4 years s range presented whe er of years of data.	Amba	DLF-Jenks						71						Т
DLF lark Plus FFR Pub nd FFR nd See nd See nd Dor Rest Pub nd See nd Dor Rest Sco See Sco See Sco See Sco Rest See Rest See Rest See Rest See See Sco See Sco Rest See See See Rest <	Ambrosia	Pennington Seed		90										I
lark Plus FFR hark Plus FFR nd Pub nd See Net See Net See Net See Net See Net See Net See Net See See See See See See Net See	Athos	DLF-Jenks						93				60		77(2)
Jark Plus FFR nd Pub nd See nd See nd See loor Dor topsale Scoo sial was established. Nues vas grazed 4 years stables as top as strable as topsa	Benchmark	FFR/Sou. States	100	105	115	94	118	123	114				133	113(8)
Putble nd Putble nd See Noisyale Dor topyale Dor <	Benchmark Plus	FFR/Sou. States							120			152	133	135(3)
ne Wei nd See Dor Ioyale Plus Dor Ioyale Plus Dor k FFR e Barri Barri Barri C Plub C Plub Smi Smi Smi Smi Smi Smi Smi Smi	Boone	Public			131		102							117(2)
nd See Loyale Dor Loyale Dor Larr Jarr e FFR e Bar bit DLF c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Pub c Sco s Sco s Sco s Sco s Sco s Sco s Sco s Sco s Sco c Pub c Sco c Sco c Sco c Sco c Sco c Sco c Sco c Sco c Sco c Sco c Sco	Cheyenne	Western Prod. Inc.			94									ı
Dor toyale Dor toyale Dor toyale Dor te Dor te Tur te DLF Smil Smil c Pub c Pub c Pub c Pub s Smil s Sco	Command	Seed Research of OR									18			I
totyale Dor totyale Plus Dor k Jarr e Bar bith Dur e Bar bith Dur bith Dur bith Dur bith Dur bith Dur bith Dur c Pub c Pub c Smi s Smi ial was established. Westerde aver vas grazed 4 years si sapes orage>. orage	Crown	Donley Seed		86	96									91(2)
toyale Plus Dor k Jarr e FFR bth JLF bth DLF c Pub c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami c Sami <td>Crown Royale</td> <td>Donley Seed</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>I</td>	Crown Royale	Donley Seed						100						I
HallmarkJames VanLeeuwen107104103115113113133104(6)HaymateFFR/Sou. States937110296531151001188392(9)IntensivDLF-JenksDLF-Jenks102965311510011812MamoltDLF-JenksTurf Seed1102965311510011822MegabiteTurf SeedTurf Seed1177619117113(4)PersistSmith Seed986363104116119117113(4)PizaAdvanta Seeds9863104127121116117113(4)PizaPotomacPublic98104127121116117113(4)PizaBotomacPublic98104127121116117113(4)PizaPotomacScott Seed1111127121116117113(4)PizaBotomacScott Seed11111127121116117113(4)PizaScott Seed111111127121116117113(4)PizaScott Seed111111127121116117113(4)PizaScott Seed93166921045574118107	Crown Royale Plus	Donley Seed							124				83	104(2)
e FFR bth DLF lee DLF DLF DLF Smi Smi Smi Smi Smi Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Hallmark	James VanLeeuwen	107		104	103		115		113			83	104(6)
Bar bth Bar bth DLF te Turt bth DLF c DLF Smi Smi c Pub c Pub c Adv c <t< td=""><td>Haymate</td><td>FFR/Sou. States</td><td>93</td><td>71</td><td>102</td><td>96</td><td>53</td><td>115</td><td>100</td><td>118</td><td></td><td></td><td>83</td><td>92(9)</td></t<>	Haymate	FFR/Sou. States	93	71	102	96	53	115	100	118			83	92(9)
oth DLF te Turit te Turit c DLF Smi Adv c Pub c Pub Smi Sco Smi Sco Smi Sco Smin Sco State Sco State Sco State Sco State Sco State Sco State Sco State Sco State Sco State Sco	Intensiv	Barenbrug USA								51				I
te Turi DLF Smi C DLF Pub C Pub C Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Mammoth	DLF-Jenks						115						I
DLF Smi Smi Smi Smi Smi Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Megabite	Turf Seed						77						I
Smi C Pub C Tur Tur Tur Tur Sco Sco Sco	Niva	DLF-Jenks							76				83	80(2)
c Pub c Pub Turi Turi Turi Turi Turi Sco Sco Sc	Persist	Smith Seed										138		I
c Pub Turr Turr Turr Turr Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Pizza	Advanta Seeds			63									I
Tur Tur Sco Sco Sco Smi Am Smi Smi Nees I al was established. Wees I al was established. Wees Smi Smi Smi Nees Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Potomac	Public	98						116		119		117	113(4)
s Sco Sco Sco Sco Sco Sco Sco Sco Sco Sco	Prairie	Turner Seed					127	121					83	110(3)
s Sco Am Am Smi Smi Smi Smi Smi Nee Smi Smi Smi Smi Smi Smi Smi Smi Smi Smi	Profile	Scott Seed	98						116					107(2)
Am Smi Smi Smi Smi Nee: Smarstelies. To find en varieties. To find vas grazed 4 years si rage>. only presented whe er of years of data.	Progress	Scott Seed	111											I
Takena Smith Seed 81 99 99 90(2) WP300 Western Prod. Inc. 94 99 90 90(2) Vear trial was established. 1 - <t< td=""><td>Tekapo</td><td>Ampac Seed</td><td>93</td><td>166</td><td>92</td><td>104</td><td></td><td>55</td><td>74</td><td>118</td><td></td><td>50</td><td>100</td><td>94(9)</td></t<>	Tekapo	Ampac Seed	93	166	92	104		55	74	118		50	100	94(9)
WP300 Western Prod. Inc. 94 94 94 94 94 94 95 96 96 97 </td <td>Takena</td> <td>Smith Seed</td> <td></td> <td>81</td> <td></td> <td></td> <td></td> <td>99</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>90(2)</td>	Takena	Smith Seed		81				99						90(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 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 spazed 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 agrforages.<="" p=""> ³ Mean only presented when respective variety was included in two or more trials. ⁵ Stand thinning may have been greater for preferred varieties due to closer grazing. See individual trial tables in the "2009 Cool Season Grass Grazing. See individual trial tables in the "2009 Cool Season Grass Grazing. See individual trial tables in the "2009 Cool Season Grass Grazing Tolerance Report" actived in the "2000 Cool Season Grass Grazing. See individual trial tables in the "2009 Cool Season Grass Grazing Tolerance Report" active the "2009 Cool Season Grass Grazing Tolerance Report.</www.uky.edu>	WP300	Western Prod. Inc.			94									I
² 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 <br="">Ag/Forage>. ³ Mean only presented when respective variety was included in two or more trials. ⁵ Stand thinning may have been greater for preferred varieties due to closer grazing. See individual trial tables in the "2009 Cool Season Grass Grazing Tolerance.</www.uky.edu>	¹ Year trial was establ	ished.			·	9								
	 Use this summary t, between varieties. 1 	able as a guide in making o find actual persistence r	variety de atinas. loc	cisions, b ok in the	ut reter to vearlv rep	ort for th	yearly rel e final ve	ports to c ar of eacl	letermine Dispecific	e statistic trial. For	al differei example.	the Lexir	and persister noton trial pl	anted in
a) — ··	1997 was grazed 4	/ears so the final report wo	ould be "2	001 Cool	-Season G	irass Graz	zing Toler	ance Rep	ort" arch	ived in th	e KY Fora	ige websi	te at <www.< td=""><td>uky.edu/</td></www.<>	uky.edu/
		ed when respective variety	r was inclu	ided in tv	vo or mor	e trials.								
Stand thinning may have l	⁴ Number of years of	-	-	-	-		-	-	-	-	-	(-
			eterred var	leties du	e to close	r grazıng.	. See indi	vidual tri	al tables I	n the "20	09 2001 5	eason Gr	ass Grazing	olerance

	mary of 2000-2009 Kentu own as a percent of the n					als (stand
		20001,2	2001	2003	2005	Mean ³
Variety	Proprietor	4yr ⁴	3yr	4yr	3yr	(#trials)
AGRLP103	AgResearch USA	133		86		110(2)
Aries	Ampac Seed		139			-
BG 34	Barenbrug USA				1765	-
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		63	70(2)
Remington	Barenbrug USA			151 ⁵		-
Tonga	Ampac Seed				61	-
determine sta ratings, look i	established. nary table as a guide in ma atistical differences in stanc n the yearly report for the n 2000 was grazed 4 years	d persistence final year of e	between va ach specific	arieties. To fi trial. For ex	nd actúal p ample, the	érsistence 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
 ³ Mean only presented when respective variety was included in two or more trials.
 ⁴ Number of years of data.
 ⁵ Grazing tolerance values for these entries may have been elevated due to the low survival of the other commercial varieties in the trials for these years. See 2009 Cool-Season Grass Grazing Tolerance Report for more details.



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