PR-880

Agricultural Experiment Station

2025 Long-Term Summary of Kentucky Forage Variety Trials

G.L. Olson, S.R. Smith, and C.D. Teutsch, Plant and Soil Sciences

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 a positive environmental role in soil conservation, water quality, and air quality. There are more than 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 there 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 twenty years. Detailed variety reports and forage management publications are available from your county Extension agent or at the University of Kentucky forage website (https://forages.mgcafe.uky.edu) by clicking on the "Forage Variety Trial" link.

How to Interpret the Summary Tables

These tables summarize long-term yield and stand persistence data of commercial varieties that have been entered in the University of Kentucky trials. Except for the alfalfa and tall fescue grazing tolerance trials, the data are 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 alfalfa- and tall fescue-grazing tolerance trials using cattle, data are listed as a percentage of the grazing tolerant varieties Alfagraze and KY31, respectively. In the horse-grazing trials, the data for fescue varieties were expressed as a percentage of endophyte free KY31 instead of the mean of all the commercial varieties. Direct, statistical comparisons of varieties cannot be made using the summary tables, but these data do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have stable performance; others may have performed well in wet years or on particular soil types. These details may influence variety choice, and more information can be found in the yearly reports. See the footnote in each table to determine which yearly report should be referenced.

Species in this Report

Red clover (*Trifolium pratense*) 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*) 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)* is 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 and wildlife habitat. Choosing a good alfalfa variety is a key step in establishing a stand of alfalfa. The choice of variety can impact yield, stand persistence, insect and disease resistance, and grazing tolerance.

Orchardgrass (*Dactylis 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.

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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. Tall fescue is the forage base for most of Kentucky's livestock enterprises, particularly beef cattle, and is used for both hay and pasture. 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 (both Italian and Westerwolds types) are increasingly in use across Kentucky as more winter-hardy varieties are released and promoted. Annual ryegrass is productive for six to eight months when planted early fall (late August/September) and is used primarily for late fall and early to late spring pasture. Perennial ryegrass can be used as a short-lived (two to three years) 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 typically more tolerant to heavy grazing.

Timothy (*Phleum pratense*) is the fourth most widely sown cool-season perennial forage grass used in Kentucky 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 usually lasting two 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 limited because they do not survive as long as tall fescue. Newer varieties show promise where high quality and yield are more important than long-term persistence.

Meadow fescue (*Festuca pratensis*) is a semibunch type cool season European grass that has great winter hardiness. It will yield slightly less than tall fescue and orchardgrass, but has better digestability and palatability for grazing applications.

Bromegrasses have several advantages over tall fescue, including retaining quality as they mature and better growth during dry weather, but they are generally less well adapted in Kentucky. Smooth bromegrass (*Bromus inermis*) is a perennial pasture and hay grass native to Europe. It has creeping underground stems or rootstocks from which the leafy stems arise. Smooth bromegrass is palatable to all classes of livestock, from emergence to the heading stage. Meadow bromegrass (*Bromus biebersteinii*) is a native of southeastern Europe and the adjacent Near East. It resembles smooth bromegrass but has only short rhizomes or none at all. Meadow bromegrass is densely tufted and has a similar growth habit to tall fescue. Hybrid bromegrasses are a cross between smooth and meadow bromegrasses. Alaska bromegrass (*Bromus sitchensis*), also called Sitka bromegrass, is a long-lived perennial bunchgrass that will actively grow at moderate rates during the spring and summer season. It does not spread by rhizomes and is more suited to environments with harsh winters. Prairie bromegrass (*Bromus wildenowii*) is a tall, cool-season, leafy, short-lived, perennial, deep-rooted bunchgrass. It was introduced from South America. Seedheads are produced throughout the growing season. Prairie bromegrass can maintain productive stands for several years if at least one growth cycle each year is allowed to go to seed. Some prairie bromegrasses are susceptible to winterkill. Mountain bromegrass (*Bromus marginatus*) is native to North America from Alaska to northern Mexico, where it can be found in many types of habitat. It is a short-lived, perennial, cool-season, sod-forming grass.

Sudangrass *(Sorghum bicolor* ssp. *drummondii)* is a rapidly growing annual grass in the sorghum family. It is medium yielding and well suited for grazing or hay because of its smaller stem size compared to other sorghum species. Sudangrass regrows quickly after harvest and can be harvested several times during summer and early fall.

Sorghum-sudangrass hybrids are more vigorous and slightly higher yielding than sudangrass. A larger stem size makes these hybrids less useful for hay; therefore, they are commonly used for baleage and grazing.

Forage sorghum is used primarily as silage for livestock and is typically a one cut crop. It grows 6 to 12 feet tall and is typically harvested when the seed is in the milk to soft dough stage.

Pearl millet *(Pennisetum glaucum)* is the most widely grown type of millet. It is well adapted to production systems characterized by drought, low soil fertility, and high temperature. It is higher yielding than foxtail millet and regrows rapidly after harvest if an 8- to 10-inch stubble height is left. Dwarf varieties are available which are leafier and better suited for grazing.

The brown midrib or BMR trait is an outward expression of a naturally occurring genetic mutation in forage sorghum, sorghum-sudangrass, sudangrass, and pearl millet. In most cases, plants possessing the BMR trait contain less or altered lignin, making the plant more digestible and desirable for animal production. Therefore, it is advisable to seed summer annuals that have the BMR trait in addition to other desirable characteristics like high yield. With BMR varieties, the midrib of the leaf appears brown or tannish in color.

Teff, also referred to as summer love-grass (*Eragrostis tef*), is a warm-season annual grass native to Ethiopia and has been used as a grain crop for thousands of years. Recently, there has been considerable interest in teff as a forage crop. It is high quality, palatable, and fine stemmed and therefore makes excellent hay.

Crabgrass (*Digitaria sanguinalis*) is a warm season annual which propagates by seed. It is adapted to many soil types. Crabgrass can be utilized by either grazing or haying and is one of the highest quality warm season forages at a vegetative stage.

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 forage website (https://forages.ca.uky.edu).

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 feet by 15 feet in a randomized complete block design with four replications. Cool season perennial grass plots were typically fertilized with 60 pounds of actual N per acre in March, after the first cutting, and again in late summer for a total of up to 180 pounds per acre per season. Warm season grasses were fertilized with about 120 pounds of actual N per acre, depending on the species. No nitrogen was applied to the legume trials. 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 at timings appropriate for the specific crop. 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 feet 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 determine stand persistence 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.

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 2025 reports on the forage website (https://forages.ca.uky.edu). See below for specific reports. Reports from 2001 to 2025 can be found in the archive website (https://forages.ca.uky.edu/content/archived-research-reports).

Yield and Grazing Tolerance Reports

Individual forage species reports can be found at https://forages.ca.uky.edu/variety_trials.

- 2025 Alfalfa Report (PR-871)
- 2025 Red and White Clover Report (PR-870)
- 2025 Orchardgrass Report (PR-872)
- 2025 Tall Fescue, Bromegrass, and Meadow Fescue Report (PR-873)
- 2025 Timothy and Kentucky Bluegrass Report (PR-874)
- 2025 Annual and Perennial Ryegrass and Festulolium Report (PR-875)
- 2025 Alfalfa and Red and White Clover Grazing Tolerance Report (PR-876)
- 2025 Cool-Season Grass Grazing Tolerance Report (PR-877)
- 2025 Cool-Season Grass Horse Grazing Report (PR-878)
- 2025 Annual Grass Report: Warm Season and Cool Season (Cereals) (PR-879)
- 2025 Long-Term Summary of Kentucky Forage Variety Trials (PR-880)

For more information

The following comprehensive bulletins may be especially useful:

- Grain, Forage, and Cover Crop Guide for Kentucky (AGR-18)
- Establishing Forage Crops (AGR-64)
- Rotational Grazing (ID-143)
- Extending Grazing and Reducing Stored Feed Needs (AGR-199)
- Forage Identification and Use Guide (AGR-175)
- Lime and Fertilizer Recommendations (AGR-1)
- Warm Season Annual Grasses in Kentucky (AGR-229)
- Sudangrass and Sorghum-Sudangrass Hybrids (AGR-234)
- Pearl Millet (AGR-231)
- Forage Sorghum (AGR-230
- Crabgrass (AGR-232)
- Growing Wheat for forage (AGR-263)
- Frost Seeding Clover: A Recipe for Success (AGR-271)

About the Authors

G.L. Olson is a research specialist, S.R. Smith is an Extension professor and forage specialist, and C.D. Teutsch is an Extension associate professor and forage specialist.

Table 1. Summary of Kentucky white clover yield trials 2002-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Type	Proprietor	Lexington																				Princeton		Mean[3] (#trials)
			02[1,2]	03	04	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	23	24	03	05	
			3yr[4]	3yr	3-yr	2-yr	2-yr	3yr	2yr	3yr	3yr	2yr	3yr	3yr	2yr	3yr	3yr	2-yr	3-yr	3-yr	3yr	2yr	3yr	3-yr	
Advantage	Ladino	Allied Seed, L.L.C.		125																					–
Alice	Intermediate	Barenbrug USA												105	120	77	93	93	112	100	96	105		86	99(10)
Apis	–	Smith Seed Services																	96	99	98				98(3)
Avoca	Dutch	DLF Pickseed				59																		82	71(2)
Barblanca	Intermediate	Barenbrug USA		92																					–
Bombus	Ladino	Columbia Seed														110	113								112(2)
Brianna	Ladino	DLF Pickseed														102	99								101(2)
CA ladino	Ladino	Public	100		124																		103		109(3)
Colt	Intermediate	Seed Research of OR		90		57																		114	87(3)
Common	Dutch	Public	100				53			98														78	82(4)
Companion	Ladino	Oregro Seeds						87	94	92									90						89(4)
Crescendo	Ladino	Cal/West Seeds	105			140														100	113			109	113(5)
Crusader II	Intermediate	Allied Seed, L.L.C.								90	50	54	75												67(4)
Excel	Ladino	Allied Seed, L.L.C.			100																				–
Domino	Ladino	Grassland Oregon												87											–
Durana	Intermediate	Pennington		94		94	88	82	85	97	93	84	97	89	78	98	87	73	82	85	93	88	87	83	88(20)
Dusi	Ladino	Barenbrug USA																		106	112				109(2)
Edith	Dutch	Smith Seed Services																		68	65	67			67(3)
GWC-AS10	Ladino	Ampac Seed									102														–
Hebe	Dutch	Smith Seed Services																		70	70	72			71(2)
Heslop		DLF Pickseed										101				110	112				108	116			109(5)
Insight	Ladino	Allied Seed, L.L.C.				128																			–
Ivory	Intermediate	Cebeco	96																						–
Ivory II	Intermediate	DLF Pickseed					86			101	127														105(3)
Jumbo	Ladino	Ampac Seed	93																						–
Jumbo II	Ladino	Ampac Seed									121	101			99										107(3)
Kakariki	Ladino	Luisetti Seeds															106			108	99	120			108(4)
Kopu II	Intermediate	Ampac Seed	97			97	95	95	103	96	80	90													94(8)
KY Select	Intermediate	KY. Agric. Exp. Station									98	95													97(2)
Mara Polo	Intermediate	Smith Seed Services																		93	89	86			89(3)
Neches	Intermediate	Barenbrug USA													79				93	101					91(3)
Ocoee	Ladino	Allied Seed, L.L.C.								89	74														82(2)
Patriot	Intermediate	Pennington		103		87	104	113	95	117	117	99	82	78	88	99	92	92	88	99	111	90	104	100	98(20)
Pinnacle	Ladino	Allied Seed, L.L.C.				120																		111	116(2)
Rampart	Ladino	Allied Seed, L.L.C.					80	89	97	83									90	90					88(6)
Regal	Ladino	Public	99	96	92		125	100	116	118	129	146	123										107	100	113(12)
RegalGraze	Ladino	Barenbrug USA				127	140	102	103						111	118	110	120	120	108	124	134			118(12)
Renovation	Intermediate	Smith Seed Services												83	85	90			99						89(4)
Resolute	Intermediate	Southern States				63																			–
RIVENDEL	–	DLF Pickseed														59	87								73(2)
Seminole	Ladino	Saddle Butte Ag. Inc			108	70	79							114											93(4)
Stamina	Intermediate	Mountain View Seeds																				96			–
Super Haifa	Intermediate	Allied Seed, L.L.C.			77																				–
Tillman II	Ladino	Caudill Seed	103																						–
WBDX	Dutch	Saddle Butte Ag. Inc									72														–
Will	Ladino	Allied Seed, L.L.C.	107			162	150	132	107	119	137	130	123	143	140	139	101	122	122	111	115	127		136	122(19)

[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 the spring of 2010 was harvested 3 years, so the final report would be "2012 Red and White Clover Report" archived in the UK Forage website at <forages.ca.uky.edu>.

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

[4] Number of years of data

Table 2. Summary of Kentucky red clover yield trials 2006-2025 (yield shown as a percentage of the mean of the named commercial varieties in the trial).

Variety	Proprietor	Lexington																	Princton							Quicksand				EdenShale		Mean[3] (#trials)
		06[1,2]	08	09	10	11	12	13	14	15	16	17	18	19	20	22	23	24	08	09	11	13	15	19	23	05	08	10	19	08	10	
		2yr[4]	3yr	2yr	3yr	3yr	2yr	3yr	3yr	3yr	3yr	2-yr	3-yr	3-yr	3-yr	3yr	3yr	2yr	3yr	2yr	2yr	3yr	3yr	2-yr	2yr	3yr	3yr	3yr	2-yr	3yr	3yr	
AA117ER	ABI Alfalfa	110																								92						101(2)
Barduro	Barenbrug USA													86	81									73					83			81(4)
Bearcat	Brett Young Seeds										118																					–
Bigfoot	Preferred Alf. Genetics													97										107								101(2)
Blaze	Mountain View Seeds													107	108	87	116	118							102							106(6)
Bobcat	BrettYoung Seeds																120															–
Cinnamon Plus	Southern States	109	112	123	117	94	113	101	98										102	102	100	101				103	108	124		108	122	108(17)
Common O	Public				96	97	60	84	92	72	47	79	67	77	78	65	68	88				67	96	70				72	85		77	77(20)
CW9901	Barenbrug USA													103										115					109			109(3)
Dominion	Seed Research of OR	102																	102							93				109		102(4)
Dynamite	Grassland Oregon																88	74							90							84(3)
Emarwan	Turf-Seed			117																106								99				107(3)
Evolve	DLF Pickseed USA									101	93	101											96									98(4)
FF9615	LaCrosse Seed										107	103																				105(2)
Freedom!	Barenbrug USA	91	100	108	106	109	96	101	97	109	110	112	107	114	115	127	125	124	107	116	95	108	107	124	99	119	106	115	133	100	140	111(30)
Freedom!MR	Barenbrug USA	114	114		112								117	126						108				82		111		128	115		125	114(11)
FSG 402	Allied Seed							104														115										108(2)
Gallant	Turner Seed							101		114		104	101	97	110	114	100	116				108	100	121	99							106(11)
GA9908	Smith Seed											92		93	107	97	100							92	97				85			97(8)
Juliet	Caudill Seed			84															93	90										84	59	82(5)
Kenland (cert.)	KY Ag.Exp Sta.	117	99	111	99	116	111	109	103	107	115	107	107	107	108	112	110	120	113	106	106	116	99	113	104	105	104	123	110	110	138	110(30)
Kenland (uncert)	Public				82						40								74									67		66	92	70(6)
Kenton	KY Ag.Exp Sta.	112	121																112	94						106	98					107(6)
Kenway	KY Ag.Exp Sta.	119	118																106	103						103	94					107(6)
LS 9703	Lewis Seed						104															87										96(2)
Medalion	DLF Pickseed USA						98			85	101	104			109	91						94	103									98(8)
Morning Star	Cal/West Seeds																		90											90		90(2)
Plus II	Allied Seed		130																								97					114(2)
Q medium red	Grassland Oregon																71	72														72(2)
Quinequeli	Caudill Seed			92																80											57	76(3)
Rancher	VanDyke Seed																	81														–
Raptor	Columbia Seeds														99																	–
Red Gold	Proseeds Marketing	81																	89											102		91(3)
Red Gold Plus	Turner Seed																															–
Redkin	DLF Pickseed USA									112	123	106			94								97									106(5)
Renegade	DLF Pickseed USA														99																	–
Robust	Blu Moon Farms											77																				–
Robust II	Seed Research of OR																		110											108		109(2)
Rocket	Seed Research of OR																		106											108		107(2)
Rustler	Oregro Seeds		83		101	84									80												94	99			104	92(7)
Solid	Production Service	79																								76						78(2)
SS-0303RCG	Southern States						117		103	112	146	116	102	93	115	108	100	109				104	102	104	108				80			107(16)
Starfire II	Cal/West & Ampac		101		111				107										112								110	112		115	111	110(8)
Triple Trust 350	ABI Alfalfa	101																								92						97(2)
Wildcat	Brett Young Seeds			101																107								98				102(3)

[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 the spring of 2010 was harvested 3 years, so the final report would be "2012 Red and White Clover Report" archived in the UK Forage website (https://forages.ca.uky.edu).

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

[4] Number of years of data

Table 3. Summary of Kentucky alfalfa yield trials 2005-2025 (yield shown as a percentage of the mean of the commercial varieties in the test).

Variety	Proprietor	Variety Characteristics[1]							Lexington												Princeton						Mean[5] (# trials)
		FD	Disease Resistance[2]						08[3,4]	11	12	15	16	17	18	19	20	21	22	23	05	08	09	11	13	22	
			Bw	Fw	An	PRR	APH1	APH2	6yr[6]	6yr	6yr	5yr	6yr	6yr	5yr	6yr	6yr	5yr	3yr	3yr	5yr	5yr	6yr	4yr	3yr	4yr	
A-4440	Producers Choice	4	HR	HR	HR	HR	HR	HR	100												99						100(2)
A 5225	Producers Choice	5	HR	HR	HR	HR	R	R	104													107					106(2)
Adrenalin	Brett Young Seeds	4	HR	HR	HR	HR	HR	–															104				–
Alfabar	Barenbrug USA	3	HR	HR	HR	HR	HR/R	–									110			100							–
Alfagraze	America's Alfalfa	3	HR	HR	HR	HR	HR	–								73	89	93	100							99	91(5)
Ameristand 403T	America's Alfalfa	4	HR	HR	HR	HR	HR	R	91	102	94											100	101	107	99		99(7)
Ameristand 403T Plus	America's Alfalfa	4	HR	HR	HR	HR	HR	R				104	102	107	112	106	99	102	94				94			112	103(10)
Ameristand 407TQ	America's Alfalfa	4	HR	HR	HR	HR	HR	R															103	104			104(2)
Ameristand 427TQ	America's Alfalfa	4	HR	HR	HR	HR	HR	HR				109															–
Ameristand 428TQ	America's Alfalfa	4	HR	HR	HR	HR	HR	HR												106							–
Anchormate	ProSeed Marketing	–	–	–	–	–	–	–	100																		–
Arc (certified)	Public	4	LR	MR	HR	–	–	–		93	92										95	86			95		92(5)
Archer III	America's Alfalfa	5	HR	HR	HR	HR	HR	–															106				–
Baralfa 53HR	Barenbrug USA	5	HR	R	HR	HR	HR	–													104						–
Buffalo	Public	–	–	–	–	–	–	–	80	89		85									95	78	87		91		86(7)
Bulldog-505	Univ. of GA	5	–	HR	–	R	–	–			103		93	91									96		103		97(5)
Caliber	Beck's Hybrids	4	HR	HR	HR	HR	HR	–			99	105	99	105										99			101(5)
Charger	Beck's Hybrids	5	HR	HR	HR	HR	HR	–								104								106			105(2)
Contender	Beck's Hybrids	5	HR	HR	HR	HR	HR	–				101	103	101													101(3)
DKA 43-13	Monsanto	4	HR	HR	HR	HR	HR	–	102																		–
DKA 50-18	Monsanto	5	HR	HR	HR	HR	HR	–	110																		–
DG4210	Crop Production	4	HR	HR	HR	HR	HR	–																101	103		102(2)
Dynagro Everlast	United Agr. Prod.	4	HR	HR	HR	HR	R	–													101						–
Evermore	Southern States	5	HR	HR	HR	HR	HR	–			100		102	107													103(3)
Expedition	NEXGROW	5	HR	HR	R	RR	R	–													96						–
Fierce	Beck's Hybrids	4	HR	HR	HR	HR	HR	–				102		107													104(2)
FSG 403LR	Farm Sci. Genetics	4	HR	HR	HR	HR	HR	–																	102		–
FSG 408DP	Allied Seeds	4	HR	HR	HR	HR	R	–														110					–
FSG 415BR	Allied Seeds	4	HR	HR	HR	HR	HR	–					103			112	108										108(3)
FSG 424	Farm Sci. Genetics	4	HR	HR	HR	HR	HR	–																	109		–
FSG 426	Farm Sci. Genetics	4	HR	HR	HR	HR	HR	HR				103															–
FSG 450	Farm Sci. Genetics	4	HR	HR	HR	HR	HR	HR										103	99							93	98(3))
FSG 524	Farm Sci. Genetics	5	HR	HR	HR	HR	HR	–																	96		–
FSG 527	Farm Sci. Genetics	5	HR	HR	HR	HR	HR	–									100			96							–
FSG 528SF	Lewis Seed Co.	5	HR	R	HR	HR	R	–	107																		–
GA-409	Pref. Alf. Genetics	4	HR	HR	HR	HR	HR	–									103			100							–
GA-497HD	Pref. Alf. Genetics	5	HR	HR	HR	HR	HR	–					104			112	105	99	101	104						94	103(7)
GA-535	Pref. Alf. Genetics	5	HR	HR	HR	HR	HR	–								108	104			102							106(2)
Genoa	NEXGROW	4	HR	HR	HR	HR	HR	–	99												98	118					105(3)
Gunner	Croplan Genetics	5	HR	HR	HR	HR	HR	–																103			–
HighFive	Allied Seeds	5	HR	HR	HR	HR	HR	HR										117	101							106	108(3)
KingFisher 243	Cal/West	5	HR	HR	HR	HR	HR	–															98				–
Kingfisher 4020	Byron Seeds	4	HR	HR	HR	HR	HR	–		101																	–
L449Aph2	Legacy Seeds	4	HR	HR	HR	HR	HR	HR																97			–
L455HD	Legacy Seeds	4	HR	HR	HR	HR	HR	–																	102		–
Lancer	Allied Seeds	4	HR	HR	HR	HR	HR	–																101			–
LegenDairy 5.0	Croplan Genetics	3	HR	HR	HR	HR	HR	–													103						–
Mariner III	Allied Seeds	4	HR	HR	HR	HR	HR	R														99					–
Mariner V	Allied Seeds	4	HR	HR	HR	HR	HR	HR										97	103	97						101	100(4)

(Continued)

Table 3. Summary of Kentucky alfalfa yield trials 2005-2025 (*continued*).

Variety	Proprietor	Variety Characteristics[1]							Lexington												Princeton						Mean[5] (# trials)
		FD	Disease Resistance[2]						08[3,4]	11	12	15	16	17	18	19	20	21	22	23	05	08	09	11	13	22	
			Bw	Fw	An	PRR	APH1	APH2	6yr[6]	6yr	6yr	5yr	6yr	6yr	5yr	6yr	6yr	5yr	3yr	3yr	5yr	5yr	6yr	4yr	3yr	4yr	
MVS4220Q	Mountain View Seeds	4	HR	HR	HR	HR	HR	–									108			106							–
Optimus	Brett Young Seeds	–	HR	HR	HR	HR	HR	–																	98		–
Paola	Interlake Forage Seeds	5	HR	HR	HR	HR	HR	HR								96	93										96(2)
PGI 459	Producers Choice	4	HR	HR	HR	HR	R	R	102																		–
Phirst	UniSouth Genetics	4	HR	HR	HR	HR	R	–													105						–
Phoenix	Southern States	5	HR	HR	HR	HR	R	–	102		105											101		94			101(4)
Radiance HD	Ampac Seed/Cisco	4	HR	HR	HR	HR	HR	–			101												105	103			103(3)
Rebound 5.0	Croplan Genetics	4	HR	HR	HR	HR	HR	–	103														103				103(2)
Rebound 6.0	Croplan Genetics	4	HR	HR	HR	HR	HR	HR		104														101			103(2)
Rebound 6XT	Croplan Genetics	4	HR	HR	HR	HR	HR	HR					107			120											114(2)
Reward II	PGI Alfalfa	4	HR	HR	R	HR	R	–													103						–
Saranac AR (certified)	Public	4	MR	R	HR	LR	–	–	86	91	97	92	88	83	88	87	91	78	96	101	95	88	92	82	97	96	90(18)
Signature	Allied Seeds	4	HR	HR	HR	HR	HR	HR										101	96							89	95(3)
Triade	Interlake Forage Seeds	5	HR	HR	HR	HR	HR	HR								80	90										86(2)
TripleTrust 450	ABI Alfalfa	5	HR	HR	HR	HR	HR	–													100						–
TripleTrust 500	Central Farm Supply	5	HR	HR	HR	HR	HR	–		108																	–
USG 681HY	UniSouth Genetics	6	HR	HR	HR	HR	–	–														113					–
Vernal	Public	2	R	MR	–	–	–	–													95						–
Withstand	Southern States	4	HR	HR	HR	HR	HR	HR	90		96											100		87			93(4)
WL 343HQ	W-L Research	4	HR	HR	HR	HR	HR	–	110													100					105(2)
WL 349HQ	W-L Research	4	HR	HR	HR	HR	HR	HR								109											–
WL 354HQ	W-L Research	4	HR	HR	HR	HR	HR	HR																115			–
WL 357HQ	W-L Research	5	HR	HR	HR	HR	HR	–													106						–
WL 363HQ	W-L Research	5	HR	HR	HR	HR	HR	–	105	103													105				104(3)
WL 365HQ	W-L Research	5	HR	HR	HR	HR	HR	–					99														–
WL3521HQ	W-L Research	5	HR	HR	HR	HR	HR	HR												90							
4030	Brett Young Seeds	4	HR	HR	HR	HR	HR	R			104																–
53H92	Pioneer	3	HR	HR	HR	HR	HR	R		95																	–
54Q16	Pioneer	4	HR	HR	HR	HR	HR	HR										102	101							99	101(3)
54Q29	Pioneer	4	HR	HR	HR	HR	R	R										106	103							104	104(3)
54Q32	Pioneer	4	HR	HR	HR	HR	HR	–		99																	–
54VQ52	Pioneer	4	HR	R	HR	HR	HR	HR										108	107							109	108(3)
55H96	Pioneer	5	HR	HR	HR	HR	HR	HR										95	100							98	98(3)
55V48	Pioneer	5	HR	HR	HR	HR	HR	R		102																	–
55V50	Pioneer	5	HR	R	Hr	HR	HR	HR			110					93									105		104(3)
6415	NEXGROW	4	HR	HR	HR	HR	HR	–													103						–
6417	NEXGROW	4	HR	HR	HR	HR	HR	HR	105																		–
6422Q	NEXGROW	4	HR	HR	HR	HR	HR	–		112													102				107(2)
6552	NEXGROW	5	HR	HR	HR	HR	HR	–	105																		–

[1] 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.
[2] Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance. (more detailed disease and insect resistance ratings at www.alfalfa.org/pdf/2024_Alfalfa_Variety_Leaflet.pdf)
[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 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 the spring of 2008 was harvested for 6 years, so the final yield report would be "2013 Alfalfa Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[5] Mean only presented when respective variety was included in two or more trials.
[6] Number of years of data

Table 4 . Summary of Kentucky Roundup Ready alfalfa yield trials 2011-2025 (yield shown as a percentage of the mean of the commercial varieties in the test).

Variety	Proprietor	Variety Characteristics[1]							Lexington							Princeton			Quicksand	Mean[5] (# trials)
		FD	Disease Resistance[2]						12[3,4]	15	16	20	21	22	23	11	13	15	14	
			Bw	Fw	An	PRR	APH1	APH2	6yr[6]	6yr	5-yr	6-yr	5yr	4yr	3yr	5yr	4yr	2yr	2yr	
Alfagraze 300 RR	America's Alfalfa	3	HR	R	HR	HR	HR	–	95	96	100	99	90	97		93	99	93		96(9)
Alfagraze 600 RR	America's Alfalfa	6	–	R	HR	R	R	–		97								85	93	92(3)
Ameristand 405T RR	America's Alfalfa	4	HR	HR	HR	HR	HR	MR	100	100	89	102	100	96		97	100	98	93	98(10)
Ameristand 423TQ RR	America's Alfalfa	4	HR	HR	HR	HR	HR	HR							99					–
Ameristand 433T RR	America's Alfalfa	3	HR	R	R	HR	HR	–	92	98	100	94	102	99			95	96	107	98(9)
Ameristand 445TQ RR	America's Alfalfa	4	HR	HR	HR	HR	HR	–	105	104							100			103(3)
Ameristand 481HVX	America's Alfalfa	4	HR	HR	HR	HR	HR	HR							92					–
AphaTron RR	Croplan Genetics	4	HR	HR	HR	HR	HR	HR	99								98			99(2)
Consistency 4.10 RR	Croplan Genetics	4	HR	HR	HR	HR	HR	–	101							102				102(2)
DKA-41-18 RR	Monsanto	4	HR	HR	HR	HR	HR	–	100							101		100		100(3)
DKA 44-16 RR	Monsanto	4	HR	HR	HR	HR	HR	–	104								100			102(2)
Stratica RR	Croplan Genetics	4	HR	HR	HR	HR	HR	–	97		105						96			99(3)
Tonnica RR	Crop Genetics	5	HR	HR	HR	HR	HR	–	105								101			103(2)
WL 355 RR	W-L Research	4	HR	HR	HR	HR	HR	–	99							102		110		104(3)
WL 356HQ RR	W-L Research	5	HR	HR	HR	HR	HR	HR	100	99							96			98(3)
WL 372HQ RR	W-L Research	5	HR	HR	HR	HR	HR	–	102								106			104(2)
WL 375HVX RR	W-L Research	5	HR	HR	HR	HR	HR	HR							99					–
WL 3546HW RR	W-L Research	5	HR	HR	HR	HR	HR	HR							103					–
428 RR	Allied Seed	4	HR	HR	HR	HR	HR	–		100	100						104		111	104(4)
438 RR	Allied Seed	4	HR	HR	HR	HR	HR	–				110	96	101	104					103(3)
54R02 RR	Pioneer	4	HR	HR	HR	HR	HR	–	97	107	96					104		102	97	101(6)
54VR10 RR	Pioneer	4	HR	HR	R	HR	HR						112	107	103					109(2)
55VR06 RR	Pioneer	5	HR	R	HR	HR	HR	MR		95									99	97(2)
55VR08 RR	Pioneer	5	–	HR	HR	HR	HR	HR		103	111							110		108(3)
6516R RR	NEXGROW	5	HR	–	HR	HR	HR	–	106								109			108(2)

[1] 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.
[2] Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance. (more detailed disease and insect resistance ratings at www.alfalfa.org/pdf/2024_Alfalfa_Variety_Leaflet.pdf)
[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 forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific test. For example, the Princeton trial planted in the spring of 2011 was harvested for 5 years, so the final yield report would be "2015 Alfalfa Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[5] Mean only presented when respective variety was included in two or more trials.
[6] Number of years of data

Table 5. Summary of Kentucky orchardgrass yield trials 2007-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor	Lexington															Princeton						Quicksand				Mean[3] (#trials)
		07[1,2]	09	11	12	13	14	15	16	17	18	19	20	21	22	23	08	10	12	15	21	23	10	13	16	18	
		3-yr[4]	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3yr	2yr	3-yr	3-yr	3-yr	2-yr	3-yr	2yr	3-yr	3-yr	3-yr	2-yr	
Albert	Oregro Seeds								99		106	100													98		101(4)
Aldebaran	DLF Pickseed									99																	–
Alpine II	Mountain View Seeds								106				98	104	100	99					95						100(6)
Ammo	Barenbrug USA															96											
Baridana	Barenbrug USA															101											
Barlegro	Barenbrug USA										95			84							95					94	92(4)
Benchmark Plus	Southern States	108	105	106	97	109	104										104	102	107				94	102			103(11)
Berta	Mountain View Seeds									76																	–
Bighorn	Mountain View Seeds												124	95	106	107					112						109(5)
Blizzard	Allied Seed											104															–
Captur	DLF Pickseed												81	96	93						97						93(4)
Checkmate	Seed Research of Oregon	102			117														106								108(3)
Christoss	Proseeds Marketing	92																									–
Crown	Donley Seed		97														105										101(2)
Devour	Mountain View Seeds								98				88			96						103					96(4)
Echelon	DLF Pickseed								99			101													113		104(3)
Elise	Rose-AgriSeed				86												98		98								94(3)
Endurance	DLF Pickseed								102																82		96(3)
Everlast	Allied Seed													107							100						104(2)
Extend	Allied Seed			107														105					108				107(3)
Harvestar	Columbia Seeds	97				94							116											102			103(5)
Haymaster	Southern States			102																							–
HLR	Barenbrug USA											82	89														86(2)
Inavale	DLF Pickseed							99	94											97					106		99(4)
Intensiv	Barenbrug USA										99		91	95		88					93					93	93(6)
Lazuly	Proseeds Marketing																97										–
Lyra	Columbia Seeds							90		77										97							88(3)
Megabite	Turf-Seed																106										–
Olathe	DLF Pickseed							111	104				101							112					89		103(5)
Paiute	DLF Pickseed	108																									–
Persist	Smith Seed	106	107	112	106	100	103	111	98	111	103	105	98	103	107	113		105	102	101	102	101	102	103	107	126	106(24)
Persist II	Smith Seed											111	111	103	100	109					107	98					106(7)
Potomac	Public		103	96	97	103	116	100	94	104	98			100	97		108	101	98	102	94		94	111	99		101(19)
Prairie	Turner Seed	101	109	106	113	123	108	103	111	111	105	98	109	103	101		104	99	104	96	98		120	102	105	107	106(23)
Prodigy	Caudill Seed		101		99	97			97			93	111	104	97	91	103		101		106	96		95			99(14)
Profit	Ampac Seed	107	96	98	103	96	97	89				97	96	109	100	103	103	102	102	96	94		115	96			100(19)
Quickdraw	Grassland Oregon											113															–
RAD-LCF 25	Radix Research																	99					102				101(2)
Rushmore II	Mountain View seeds								98	111						90						100			102		100(5)
Shawnee	Rose-AgriSeed																86										–
SS0708OGDT	Southern States						91	105	101	111	109	100	103	96	100	107				100	106	102			99	100	102(15)
Swante	Smith Seed										88		82													79	83(3)
Tekapo	Ampac Seed	81	82	78	82	76	80					95					86	92	82				81	89			86(15)
Treposno	Columbia Seeds							92		99										99							97(3)
Tucker	Oregro Seeds			96							95		103				102	96					85			100	97(8)
Vailliant	Proseeds Marketing	96																									–

[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 the fall of 2022 was harvested 3 years, so the final report would be "2025 Orchardgrass Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data.

Table 6. Summary of Kentucky tall fescue yield trials 2009-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Endophyte Status[1]	Proprietor	Lexington														Princeton							Quicksand				Mean[4] (#trials)
			09[2,3]	11	12	13	14	15	16	17	18	19	20	21	22	23	10	12	15	17	19	21	23	13	16	18	21	
			3-yr[5]	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	3-yr	3-yr	2-yr	3-yr	3-yr	3-yr	2-yr	3-yr	3-yr	3-yr	3-yr	
Armory	free	Barenbrug USA										98	99								98	95						98(4)
Baguala	free	Allied Seed						92											96									94(2)
BarElite	free	Barenbrug USA		100													92											96(2)
BARFASTF-43	free	Barenbrug USA										99									85							92(2)
BarOptima PLUS E34	novel	Barenbrug USA		107	108	102	99	113	99	90	95	102	101	96	88	99	99	100	96	105	102	99	99	93	118	85	81	99(24)
Bronson	free	Ampac Seed	105	102	99	99			100			110					101	91	103									101(9)
Brutus	free	Saddle Butte Ag. Inc.					90																					–
Bull	free	Improved Forages			100						100							99						95				99(4)
Cajun II	free	Smith Seed Services		97		105	99	99	98	107	109	99	104	99	100	98	101		104	91	111		106	90	96	104	113	101(21)
Cowgirl	free	Rose-AgriSeeds			94										107		100	98										102(4)
DLFPS-FTF100 Protek	novel	DLF Pickseed										98									80							89(2)
Dominate	free	Allied Seed						90						101					99			106						99(4)
Drover	free	Barenbrug USA					105	120																				113(2)
DuraMax GOLD	novel	DLF Pickseed		102																								–
Enhance	free	Allied Seed		93																								–
Estancia ArkShield	novel	Mountain View Seeds			106				96		105	99	100	99	115	93		102			102	97	107		103		87	101(14)
Fawn	free	Smith Seed Services														103							95					99(2)
Fillmore(FTF70)	free	DLF Pickseed											103															–
Flourish	free	Allied Seed			92													101										97(2)
FSG 402TF	free	Farm Science Genetics						92											103									98(2)
Goliath	free	Ampac Seed	100			104											99											101(3)
Greendale	free	DLF Pickseed										105		98	104	102					113	103						104(6)
Greendale Protek	novel	DLF Pickseed										106	97								116							106(3)
HyMark	free	Fraser Seeds		91				104											103									99(3)
Iliade	free	Columbia Seeds														95							102					–
Jesup EF	free	Pennington Seed		98	105												103	100										102(4)
Jesup MaxQ	novel	Pennington Seed	110	103	100	93	106	102	111	104	101		111				100	98	98	103				100	116	105		104(17)
Jesup MaxQII	novel	Pennington Seed										103		93	96	98							97				105	99(6)
Kentucky 32	free	Oregro Seeds		93	94		101				83	101					94	101										95(7)
Kokanee	free	Smith Seed Services										81																–
Kora Protek	novel	DLF Pickseed							101																86			94(2)
KY31+	toxic	KY Agric Exp Sta.	102	93	95	103	100	99	103	101	107	71	93	102	96	97	112	101	92	105	105	99	99	110	110	107	118	101(25)
Lacefield MaxQ II	novel	Pennington Seed				97	104	93	92	94	106	112	100	100	104	96			105	100		97	99	113	102	95	106	101(19)
Martin2 Protek	novel	DLF Pickseed		104					96			105	97								99				106			101(6)
Palatine	free	Mountain View Seeds											101			90							92				89	93(4)
Payload	free	Brett Young							89																111			100(2)
Ranchero	free	Smith Seed Services								92		101	107	96	93	102				96	107		99				105	100(10)
Select	free	Southern States	98	90	100	97	103	97	102								99	100	99					99	86			98(12)
SS-0705TFSL	free	Southern States					99	99	106	111	94	110	103	106	103	103			103	101		99	103		101	104	99	103(16)
STF43	free	Barenbrug USA											91															–
Teton II	free	Mountain View Seeds		107	105		96		103									99							91			100(6)
Texoma MaxQ II	novel	Pennington Seed										111	107	107	83	102							103				96	101(7)
Tower	free	DLF Pickseed							101			105									96				91			98(4)
Tower Protek	novel	DLF Pickseed		98					104			102	90								92				81			95(6)
Triumphant	free	DLF Pickseed										95		103	111						95	106						103(5)
Triumphant Protek	novel	DLF Pickseed										96	96								97							96(3)
Tuscany II	free	Seed Research of OR			97													106										102(2)
Velvet	free	Oregro Seeds										91																–
5CAN	free	Brett Young	86																									–

[1] Free-varieties that do not contain an endophyte. Toxic-KY31+ contains a toxic endophyte. Novel-varieties that contain an endophyte that aids persistence but is not toxic to cattle or horses.
[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 the fall of 2016 was harvested 3 years, so the final report would be "2019 Tall Fescue Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[4] Mean only presented when respective variety was included in two or more trials.
[5] Number of years of data.

Table 7. Summary of Kentucky bromegrass yield trials at Lexington 2006-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial.)

Variety	Type	Proprietor/KY Distributor	2006[1,2]	2008	2010	2012	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Mean[3]
			4-yr[4]	3-yr	3-yr	3-yr	3-yr	3-yr	4-yr	3-yr	3-yr	3-yr	3-yr	3-yr	3-yr	2-yr	(#trials)
AAC Torque	hybrid	Brett Young Seeds													83	97	90(2)
AC Knowles	hybrid	Agriculture Canada	85		82	102	89										89(4)
Admiral	meadow	Cisco Seeds							107	106	100	100	102	102	100	107	103(8)
Arid	smooth	Mountain View Seeds							94	93					100	88	94(4)
Arsenal	meadow	Barenbrug USA									106	106	104	112	113	119	110(6)
Artillery	smooth	Barenbrug USA									100	99	89	92	99	103	97(6)
Bigfoot	hybrid	Grassland Oregon	108	116	105												110(3)
Canterbury	mountain	Barenbrug USA		79													–
Carlton	smooth	Pickseed USA				82	95				85						87(3)
CDC Torsion	meadow	Brett Young Seeds													110	114	112(2)
Champaign	meadow	Mountain View Seeds													98	94	96(2)
Doina	smooth	Barenbrug USA		114	108												111(2)
Fleet	meadow	Agriculture Canada	110			109											110(2)
Hakari	Alaska	Barenbrug USA		85	85												85(2)
MacBeth	meadow	Cisco Seeds		136	119	107	116	107	103	123	100	95	105	104	96	91	108(13)
Olga	smooth	Barenbrug USA		116	101												109(2()
Peak	smooth	Allied Seed		97		100		93	95	88	103		99	89	90	92	95(10)
Persister	prairie	DLF Pickseed		72													–
RAD-BI29	smooth	Columbia Seeds	96	86													91(2)
Stratus	meadow	Allied Seed												101	107	97	102(3)

[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 the fall of 2021 was harvested 3 years, so the final report would be "2024 Tall Fescue, Bromegrass, nd meadow Fescue Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data

Table 8. Summary of Kentucky Timothy Yield Trials 2000-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington																		Mean[3] (#trials)
		01[1,2]	02	06	07	08	09	11	12	13	14	15	16	17	19	20	21	22	23	
		3yr[4]	4yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	
Anjo	Columbia Seeds												81							–
Barfleo	Barenbrug USA						95	91	101		108	80	97	94	92	98		88	85	94(11)
Baronaise	Barenbrug USA															83				–
Barpenta	Barenbrug USA				74			82	82					94	92	90		83	79	85(8)
Carson	Mountain View Seeds													113	106	105	104	110	112	108(6)
Clair	Ky Agric. Exp. Station	104	113	107	95	107	104	112	99	97	111	107	88	88	85	96	110	100	109	109(18)
Classic	Cebeco International Seeds		86																	–
Climax	Canada Agr. Res. Station			79	102	104	98	102	100	82	96	90	102	92	98	94	81	75	80	92(16)
Colt	FS Growmark		100	90																95(2)
Common	Public	95																		–
Comtral	Caudill Seed								92	92										92(2)
Conquest	Allied Seed, L.L.C.																107		117	112(2)
Dawn	Columbia Seeds													103	107	110			102	106(4)
Derby	Southern States			112	111		106	112	108	112	119	123	112		112	104				112(11)
Dolina	DLF Pickseed		90																	–
Express	Seed Research of Oregon		95		91		97	95												95(4)
Express II	Allied Seed, L.L.C.																88	98	91	92(3)
Joliette	Newfield Seeds Co/Caudill Seed Co.					86	89													88(2)
KY Early	Smith Seed/Central Farm Supply	103	115			102				119				115	99	106	99	115	105	108(10)
Sahara DT	DLF Pickseed																	119	103	111(2)
Summergraze	Brett Young									96										–
Summit	Allied Seed, L.L.C.		112																	–
Talon	Seed Research of Oregon			110	112		108	106	109											109(5)
Tenho	Barenbrug USA										84									–
Treasure	Seed Research of Oregon			103	115		103	101	108											106(5)
Tuukka	Ampac Seed Company	94	88																	92(3)
Valor	DLF Pickseed																101	96	110	102(3)
Varis	Mountain View Seeds										83									–
Zenyatta	DLF Pickseed									103			119		109	114	110	116	109	111(7)

[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 the fall of 2017 was harvested 3 years, so the final report would be "2020 Timothy and Kentucky Bluegrass Report" archived in the UK Forage website (https://forages.ca.uky.edu).

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

[4] Number of years of data.

Table 9. Summary of Kentucky Bluegrass Yield Trials at Lexington 2004-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	04[1,2]	06	07	08	09	10	11	12	13	14	16	17	18	19	20	21	22	23	Mean[3] (#trials)
		3yr[4]	4yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	3yr	3yr	3yr	3yr	2yr	
Adam 1	Radix Research	98																		–
Balin	Pure Seed												91	80						86(2)
Barderby	Barenbrug USA			94		101	91	98	87	103	101	103	128	120	109	125				105(12)
Big Blue	Rose-AgriSeed					82			95											89(2)
Common	Public		71	66	68															68(3)
Fahrenheit 90	Mountain View Seeds																		96	–
Ginger	ProSeeds Marketing		118	119	114	118	112	107	110	107	95	101	119	98	95	108	129	119	136	111(17)
Isabel	Smith Seed Services															64	65			65(2)
Kenblue	Public	102	133				96	95	118	95	100									106(7)
Lato	Turf Seed Inc.			122																–
Park (certified)	Public								90	95	104	117	88	102	96	102	106	102	112	101(11)
RAD-5	Radix Research		103																	–
RAD-339	Radix Research		101																	–
RAD-643	Radix Research		94																	–
RAD-731zx	Radix Research		87																	–
RAD-762	Radix Research		94																	–
RAD-1039	Radix Research				118															–
Tirem	DLF Pickseed											79	74					79	77	77(4)
365ss	Mountain View Seeds																		78	–

[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 the fall of 2017 was harvested 3 years, so the final report would be "2020 Timothy and Kentucky Bluegrass Report" archived in the UK Forage website (https://forages.ca.uky.edu).

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

[4] Number of years of data

Table 10. Summary of Kentucky annual ryegrass yield trials at Lexington from 2006-2025 (yield shown as a percentage of the yield value of Marshall)[1].

Variety	Type	Proprietor	06[2,3]	07	08	09	10	10	11	12	12	13	14	15	16	17	18	19	21	22	23	24	Mean[4] (#trials)
AE110	Westerwold tetraploid	Pickseed USA, Inc.							89	100													95(2)
Alisca	Westerwold tetraploid	Allied Seed																			101		–
Amp	Westerwold tetraploid	Columbia Seeds										75							91				83(2)
Assist	Westerwold diploid	SaddleButte										88											–
Attain	Westerwold tetraploid	Smith Seed Services					111					52	69					92				95	92(4)
Baqeuano	Westerwold tetraploid	Smith Seed Services															77						–
Barmultra II	Italian tetraploid	Barenbrug USA					133				103	95		125	108							93	112(5)
Barneal	diploid	Barenbrug USA																				91	
Bendix	Westerwold tetraploid	Smith Seed Services																	91	90			91(2)
Big Bang	Westerwold tetraploid	Brett Young											67										–
Big Boss	Westerwold tetraploid	Smith Seed Services					98				86	38	73										86(3)
Big Daddy	Westerwold tetraploid	FFR/Sou. St.					86	98	82														89(3)
Bill	Westerwold diploid	Smith Seed Services											62										–
Bill Max	Westerwold tetraploid	Gentos SA																				80	–
Brangus	Italian tetraploid	KB SeedSolutions					94																–
Bruiser	Westerwold diploid	Ampac Seed			65	105	100		104	86		100	105	95	86	113		96	84	91			94(12)
Centurion	Westerwold diploid	Mountain View Seeds								97			132		100	117			96	94	98	100	104(8)
Claro	Westerwold tetraploid	Smith Seed Services																	86	103			95(2)
Dexter	Westerwold tetraploid	Smith Seed Services																	89		101		95(2)
DH-3	Italian tetraploid	Allied Seed		91	27				89														69(3)
Diplomat	Westerwold diploid	Allied Seed																			83		–
Dixie Gold	Westerwold tetraploid	Caudill Seed										19											–
DoubleDiamond	Westerwold tetraploid	Oregro Seeds															84						–
Dyna-Gain	Westerwold diploid	Columbia Seeds										71											–
DynaPlus	Westerwold diploid	Columbia Seeds																	84				–
Ed	Westerwold diploid	Smith Seed Services					96					101	100								89		95(3)
Feast II	Italian tetraploid	Ampac Seed			35	113	109		81	93	71	47	56	88	80	87	65	86	67	86	91	72	80(16)
Fox	Italian diploid	DLF Pickseed					109																–
Fria	Westerwold diploid	Allied Seed					95		87	89		104	81	85	98								89(6)
Frostproof	Westerwold diploid	Smith Seed Services													96			93	80	90	93	82	89(6)
GR-AS10	Italian	Ampac Seed					113																–
Green Farm	Westerwold diploid	Smith Seed Services											85										–
Green Farm 2	Westerwold diploid	Smith Seed Services																	86	94			90(2)
Gulf	Westerwold diploid	Public		67	26	87	78		76	72		27	69	60	87	87	56	80	66	79	84	76	72(16)
Halsey	Intermediate tetraploid	Smith Seed Services																			99		–
Hellen	Westerwold tetraploid	Smith Seed Services																95	83	93			90(3)
Hercules	Westerwold tetraploid	Barenbrug USA									91	68											80(2)
HS-1	Italian diploid	KB SeedSolutions					72																–
Jackson	Westerwold diploid	The Wax Co.	62	103	59	101	99	106	106	91	77	69	100	99	97	105	95	95	87	91	95	97	95(18)
Jumbo	Westerwold tetraploid	Barenbrug USA														88	83						86(2)
KB Royal	Italian diploid	KB SeedSolutions					83																–
Kodiak	Westerwold diploid	DLF Pickseed																			100		–
Koga	Westerwold tetraploid	Smith Seed Services														94	96	101	95		106		98(5)
Kospeed	Westerwold diploid	Smith Seed Services											80	92									86(2)
Kowinearly	Westerwold diploid	Smith Seed Services											95	96									96(2)
LHT-102	Intermediate	Ampac Seed								100													–
Mantis	Westerwold tetraploid	Smith Seed Services																	88	107			98(2)
Marshall	Westerwold diploid	The Wax Co.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100(18)
Master	Westerwold tetraploid	Smith Seed Services															82						–
Maximo	Intermediate tetraploid	Pickseed USA, Inc.							101														–

(Continued)

Table 10. Summary of Kentucky annual ryegrass yield trials at Lexington from 2006-2025 (*Continued*)[1].

Variety	Type	Proprietor	06[2,3]	07	08	09	10	10	11	12	12	13	14	15	16	17	18	19	21	22	23	24	Mean[4] (#trials)
Maximus	Westerwold tetraploid	Barenbrug USA														63	84						74(2)
McKinley	Westerwold diploid	DLF Pickseed																			101		–
Melquatro	Italian tetraploid	Columbia Seeds												135		72					92		100(3)
Meroa	Westerwold diploid	Smith Seed Services											93	102				108	96				100(4)
MX 108	Westerwold tetraploid	Pickseed USA, Inc.							95	114													105(2)
Nelson	Westerwold tetraploid	The Wax Co.						86			93	65	77	105	97	73	91	104	94	115	105	96	95(12)
Oryx	Italian diploid	Columbia Seeds												100							84		92(2)
Primecut	Westerwold brand	Oregro Seeds							94														–
Rampage	Westerwold diploid	Allied Seed																				55	–
Ranahan	Westerwold tetraploid	Mountain View Seeds																				101	–
Rapido	Westerwold diploid	Smith Seed Services																77					–
Ribeye	diploid	Barenbrug USA																				82	–
TAMTBO	Westerwold tetraploid	Tex. Ag Exp Sta.			47		101		108	95			79				91						87(6)
Tam 90	Italian diploid	Tex. Ag Exp Sta.			49								78										64(2)
TetraPrime	Italian tetraploid	Mountain View Seeds								101			96	104	91	99	90	86	80				93(8)
TetraPrime II	Italian tetraploid	Mountain View Seeds																		98		92	95(2)
TetraPro	Italian tetraploid	Tex. Ag Exp Sta.			40																		–
TillageRootMax	Westerwold diploid	Cover Crop Solutions							82	90													86(2)
Trinova	Westerwold tetraploid	Smith Seed Services															78						–
Ugne	Italian tetraploid	Columbia Seeds													102								–
Verdure	Westerwold tetraploid	Smith Seed Services					86					42	58										72(2)
Vibe	Italian diploid	Allied Seed																				61	–
Winterhawk	Westerwold diploid	Oregro Seeds					104		117	92			119			113	96	91	98	100	97	98	102(11)
Zoom	Westerwold tetraploid	Allied Seed																				70	–

[1] In annual ryegrass, low yielding varieties usually result from winterkill. Note: Due to severe winterkill, yield results from the 2006 and 2013 plantings were not included in the overall mean.
[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 the fall of 2015 was harvested 1 year, so the final report would be "2016 Annual and Perennial Ryegrass and Festulolium Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[4] Mean only presented when respective variety was included in two or more trials.

Table 11. Summary of Kentucky perennial ryegrass yield trials at Lexington from 2004-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Type	Proprietor	04[1,2]	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean[3,4] (#trials)
			3yr[5]	3yr	2yr	3yr	3yr	3yr	2yr	3yr	3yr	3yr	2yr	2yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	
Albion	tetraploid	Grasslands Oregon											105	103									104(2)
Amazon	tetraploid	AgriBioTech	99																				–
Barvitra	diploid	Barenbrug USA												104				109					107(2)
Bastion C-2	tetraploid	Seed Research of OR	91																				–
Best for Plus	hybrid tetraploid	Improved Forages	108	118																			113(2))
BG-34	diploid	Barenbrug USA		83	85				86		87	84	85	81		83							84(8)
Boost	tetraploid	Allied Seed				130	125	120	143	110	103	102						108	112		111		117(10)
Calibra	tetraploid	DLF Pickseed					96	109	81	99	103	96	87	100	98	98	89	95					96(12)
Crave	tetraploid	Ampac Seed									95												–
Delika	diploid	Columbia Seeds																				57	–
Dexter 1	tetraploid	DLF Pickseed																		97	94	108	100(3)
Elena DS	tetraploid	Allied Seed									110				110				110				110(3)
Eurostar	tetraploid	Seed Research of OR				112																	–
Everlast	diploid	Caudill Seed										104											–
Feeder	diploid	Seed Research of OR				76																	–
Grand Daddy	tetraploid	Smith Seed			101	109		76	92	84	86		107										94(7)
Green Gold	tetraploid	Grasslands Oregon			96																		–
Herbal	–[7]	ProSeeds Marketing					77																–
Impressario	tetraploid	DLF Pickseed						107			92												100(2)
Kentaur	tetraploid	DLF Pickseed								106		117											112(2)
Lactal	tetraploid	Brett Young						102															–
LHT-102	tetraploid	Ampac Seed									114												–
Linn (certified)	diploid	Public	102		98	85	84	101	92	93	80	95	83	89	83	74	98	105	102	93	91	101	92(19)
Melpetra	tetraploid	Columbia Seeds													83								–
Orantas	diploid	DLF Pickseed						82															–
Ortet	tetraploid	Oregro Seeds					114																–
PayDay	tetraploid	Mountain View Seeds									101	103	99		87	108	95	93	89	92	103	99	97(11)
Power	tetraploid	Ampac Seed				110	103	102	100	109	104	95	101	107				100	86	90	91	103	100(14)
Polim	tetraploid	DLF Pickseed							106														–
Quartermaster	tetraploid	Radix Research		122																			–
Quartet	tetraploid	Ampac Seed		56		46																	51(2)
RAD-CPS212	hybrid tetraploid	Radix Research		134																			–
RAD-MI125	hybrid tetraploid	Mountain View Seeds			120																		–
Remington	tetraploid	Barenbrug USA											95	117	109	108	105	85	102	117	86	87	101(10)
Remington PLUS NEA2[6]	tetraploid	Barenbrug USA											119	99			105	91	89	101		89	99(7)
Sierra	diploid	Lewis Seed Co.		89																			–
TetraGain SLT	tetraploid	Pure Seed									111									113	113	130	117(4)
TetraMag	tetraploid	Mountain View Seeds									110		136		127	124	121	116	130	99	113	133	121(10)
TetraSweet	tetraploid	Mountain View Seeds													104	105	87	97	80	98	97	92	95(8)
Tonga	tetraploid	Kings AgriSeeds		96				103															100(2)
Verseka	tetraploid	Allied Seed									75												–
Victorian	diploid	Caudill Seed										104	83										94(2)

[1] Year trial was established.
[2] Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in the fall of 2012 was harvested 3 years, so the final report would be "2015 Annual and Perennial Ryegrass and Festulolium Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] In perennial ryegrass, low yielding varieties usually result from winterkill or summer mortality.
[5] Number of years of data
[6] Remington PLUS NEA2 contains a non-toxic (novel) endophyte.
[7] Type was not provided by the company.

Table 12. Summary of Kentucky festulolium yield trials at Lexington from 2001-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).[1]

Variety	Type[2]	Proprietor	2001[3,4]	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2019	2020	2021	2022	2023	Mean[5] (#trials)
			2yr[6]	3yr	3yr	3yr	3yr	3yr	2yr	3yr	2yr	3yr	3yr	3yr	3yr	3yr	3yr	3yr	2yr	
Agula	MF x IR	Allied Seed					94													–
Barfest	MF x PR	Barenbrug USA					105	101	107	119	91	92	92							101(7)
Bonus	MF x IR	Allied Seed					93	46	32	34										51(4)
Duo	MF x PR	Ampac Seed		89	98	99	95	106	103	96	96	83	83	80	98	97	86	88	98	94(16)
Felina	(TF x IR) x TF	DLF Pickseed	104				132	118	134	114	96									116(6)
Fojtan	(TF x IR) x TF	DLF Pickseed					112	101	124	92	72	94	100	108	86					99(9)
Gain	MF x IR	Allied Seed					103	77	52	75										77(4)
Hostyn	MF xIR	DLF Pickseed							107	110	106		108							108(4)
Hykor	(TF x IR) x TF	DLF Pickseed					133	141	153	131	119	121	112		94	109				124(9)
InaMerlin	MF x IR	Columbia Seeds											88	77						83(2)
Kenfest	MFx AR	KY Agr. Exp Station												97						–
Lenor	IR x TF	Columbia Seeds															104	95		100(2)
Lofa	(TF x Int) x Int	DLF Pickseed					105	107	110	128	112	91	109	108	104	100	108	104		108(12)
Mahulena	(TF x IR) x TF	DLF Pickseed							131	109	107		111	114		106	105	110		112(8)
Meadow Green	MF x PR	Pure Seed Testing							37	34										36(2)
Perseus	MF x IR	DLF Pickseed					132	114	126	123	110	109	105	112	113	105	115	109	110	114(13)
Perun	MF x IR	DLF Pickseed					127	114	107	131	110	102	99	110	105	87				109(10)
Rebab	(TF x IR) xTF	DLF Pickseed								94	77									86(2)
Spring Green	MF x PR	Pure Seed Testing	96	111	114	101	113	112	114	110	103	107	92	94	101	96	92	97	96	103(17)
Sugarcrest	MFxPR	Mountain View Seeds															95	93	96	95(3)
Sweet Tart	MF x IR	ProSeeds Marketing			88		82	63	62											74(4)
Tatron	IR x TF	Columbia Seeds															95	105		100(2)

[1] The festuloliums were in fescue trials from 2001-2005 and in perennial ryegrass trials from 2008-2009.
[2] MF=meadow fescue, TF=tall fescue, IR=Italian ryegrass, PR=perennial ryegrass, Int=intermediate ryegrass.
[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 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 the fall of 2012 was harvested 3 years, so the final report would be "2015 Annual and Perennial Ryegrass and Festulolium Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[5] Mean only presented when respective variety was included in two or more trials.
[6] Number of years of data

Table 13. Summary of meadow fescue yield trials at Lexington 2019-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	2019[1,2]	2020	2021	2022	2023	Mean[3] (#trials)
		3-yr[4]	3-yr	3-yr	3-yr	2-yr	
HDR	Barenbrug USA	95	105	101		104	101(4)
Hyperbola	DLF Pickseed				92	92	92(2)
Pradel	Barenbrug USA	105	88	99	103	97	98(5)
Raskila	Columbia Seeds		103	100	105	107	104(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 the fall of 2021 was harvested 3 years, so the final report would be "2024 Tall Fescue, Bromegrass, and Meadow Fescue Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data

Table 14. Summary of Kentucky pearl millet yield trials 2013-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington													Princeton								Mean[3] (#trials)
		13[1,2]	14	15	16	17	18	19	20	21	22	23	24	25	17	18	19	20	21	22	23	24	
		All trials are 1 year yields																					
Epic BMR[4]	Coffey Seed							97	93	83	100	98	97	94			99	96	87	96	132	94	97(13)
Exceed BMR	Coffey Seed							89	103	81	97	100	105	89			102	90	107	97	73	86	94(13)
FSG 300 Hybrid	Farm Science Genetics			109	99	109									117								109(4)
FSG 315 BMR (Dwarf)	Farm Science Genetics			101	102	81									97								95(4)
Leafy22 Hybrid	Turner Seed				105	124	108	108	113	119	101	106	108	116	115	100	116	111	119	99	120	101	111(18)
Millex32	Sorghum Partners								110	131	102	105	107	106				111	93	99	94	119	107(11)
PearlMil	Dyna-Gro Seed							103	113	120	107	109	103	105			110	100	110	105	89	103	106(13)
Pennleaf Hybrid	Pennington Seed	93	91	94	96	87	98	100	95	100	96	97	91	104	84	93		90					94(16)
PP102M Hybrid	Cisco Seeds	93	93	90	79	90	91	97	92	103	92	101	92		77	104	95		81	104	80	95	92(19)
Prime360	Byron Seed							91	90	77	88	93	98	85			103	96	103	94	97	90	93(13)
SS1562M BMR	Southern States							103	94	72	98	87	84	98			95	95	90	93	125	102	95(13)
SS501	Southern States	90	99	96	86	94	94								89	96							93(8)
SS635	Southern States	108	112	101	116	94	110	108	105	100	103	99	97	95	107	115	105	110	98	99	93	96	103(21)
Sweet Summer	Cisco Seeds						86	95	97	97	95	89	96	96		85	104	91	99	93	118	104	96(15)
Tifleaf III Hybrid	Gayland Ward Seed	116	106	108	116	120	113	119	95	131	114	120	111	112	114	112	111	101	121	116	141	105	114(21)
Wonderleaf	Advanta Seed							98	100	86	105	97	109	101		100	107	109	92	105	69	105	99(14)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] BMR (Brown Mid-rib) means that a variety has been developed to produce lower amounts of lignin which usually translates into higher quality.

Table 15. Summary of Kentucky sudangrass yield trials 2010-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington																Princeton									Mean[3] (#trials)
		10[1,2]	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	17	18	19	20	21	22	23	24	25	
AS9301 BMR[4]	Advanta Seeds			118																							–
AS9302 BMR (Brachytic Dwarf)	Advanta Seeds								124	104	102	112	99	96	103	101		119	117	115	113	104	100	119	110		109(16)
Enorma BMR	Cal/West Seeds	99	94	92	91	83	91	98																			93(7)
FSG 1000 BMR	Farm Science Genetics						101	124	110																		112(3)
Hayking BMR	Central Farm Supply	91	97	97	96	92	94	90	80	109								99									95(10)
Monarch V	Public	102	97	93	98	110	99	82																			97(7)
Piper	Public	97	94	104	105	89	94	85	81	86	93	83	92	102	106	104	102	86	99	88	82	98	101	88	117	92	95(25)
ProMax BMR	Ampac Seed	110	115	96	103	100	111	111	106	102	101	106	107	108	106	104	114	96	84	87	86	106	101	88	96	102	102(25)
SP7106 BMR	Sorghum Partners												92	95	105	101	88					90	95	116	105	102	99(10)
SS130 BMR	Cal/West Seeds	101	103		107	106	110	109	99		93	92	101	96						97	99	93					100(14)
Trudan Headless	Sorghum Partners					118					112	107	109	104	80	90	96			113	126	110	103	89	73	104	102(15)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] BMR (Brown Mid-rib) means that a variety has been developed to produce lower amounts of lignin which usually translates into higher quality.

Table 16. Summary of Kentucky sorghum-sudangrass yield trials 2010-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/ KY Distributor	Lexington																Princeton									Mean3 (#trials)
		10[1,2]	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	17	18	19	20	21	22	23	24	25	
ADV6218	Advanta Seeds														104	108	102							101	131	106	109(6)
ADVS6404 BMR[4] (Brachytic Dwarf)	Advanta Seeds														84	92	79							90	93	81	87(6)
ADVS6520 BMR SCA[5] PS[6]	Advanta Seeds														99	107	93							118	78	109	101(6)
ADV6525 BMR SCA PS	Advanta Seeds															93	98								85	122	99(4)
AS6401 BMR4	Advanta Seeds										84	107	107							112	106						103(5)
AS6402 BMR (Brachytic Dwarf)	Advanta Seeds			91					78	82	67	94	79	89				98	98	91	85	81					86(12)
AS6503 BMR	Advanta Seeds				96	103	90																				96(3)
AS6504 BMR (Dry Stalk)	Advanta Seeds								105	103			95		105			114	112			110					106(7)
Danny Boy II BMR	Dyna-Gro Seeds										117	95	93	106						110	98	98					102(7)
DynaGraze II	Dyna-Gro Seeds											98	104	100							122	104					106(5)
FirstGraze	Dyna-Gro Seeds											109	101	103							118	113					109(5)
FSG 208 BMR	Farm Science Genetics	75																									–
FSG 214 BMR	Farm Science Genetics				99	108	112											109	111								108(5)
FSG 215 BMR	Farm Science Genetics						112																				–
Fullgraze II	Dyna-Gro Seeds										100	105	100	97						108	94	104					101(7)
Fullgraze II BMR	Dyna-Gro Seeds										97	90	96	114	120					106	92	102					102(8)
F75FS13	Dyna-Gro Seeds										94	100	93	95	103	93	108			76	94	89	86	104	88	104	95(14)
Greengrazer V	Farm Science Genetics	166			122	107	92	103	110																		117(6)
GW300 BMR	Gayland Ward Seed		88	78	88	81	73	101	100	98								79									87(9)
HyGain	Turner Seed	118						110	127	117	121	113	112					130	108	121	110	112					116(12)
KFSugar-Pro55S	Byron Seed								110																		–
MS 202 BMR	Farm Science Genetics	106																									–
Nutra-King BMR	Gayland Ward Seed						110	108	96	113	118	103	110	114	119			108	114	105	96	97	107				108(15)
NutraPlus BMR	Public	94	103	106	109	106	96																				102(6)
S6405 BMR	Ramer Seed																109									103	106(2)
S6435 BMR BrDw DS[7]																	88									95	92(2)
Sordan Headless	Sorghum Partners					105						110	103	101	102	101	103				102	100	109	107	109	115	105(13)
Sordan 79	Sorghum Partners											114	116	121	135	123	117				123	109	117	119	131	102	119(12)
Special Effort	Public	93	94	115	120	91	111																				104(6)
SP 4105 BMR	Sorghum Partners											91	88	89	96	84	97				79	76	109	90	78	97	90(12)
SP4408PF[8]	Sorghum Partners																119									106	113(2)
SP4555 BMR	Sorghum Partners												117	110	118	103	105					98	100	96	101	94	104(10)
SPDF708 PAF[8]	Sorghum Partners															124									111		118(2)
SPHG610 PAF	Sorghum Partners																123									101	112(2)
SPHX007DT	Sorghum Partners																101									85	93(2)
SS211	Southern States		104	93	114	103	118	111	121	118					102	102	100	109	87					106	103	100	106(16)
SS220 BMR	Southern States	84		112											60	81	83							73	88	88	84(8)
SS1652SS	Southern States														98	97	88							110	68	85	91(6)
Sugar Graze II	Coffey Seed										110	114	116	110	113					110	122	116	112				114(9)
Surpass BMR	Turner Seed	64						79	84	75	75	81	84	85	74	86	85	88	97	74	70	83	86	88	77	96	82(20)
Super Sugar	Gayland Ward Seed		102	117	107		125	85										91									105(6)
Super Sugar BMR	Gayland Ward Seed							107																			–
Super Sugar (Delayed Maturity)	Gayland Ward Seed					101	82		89	104								95	83								92(6)
Super Sugar Sterile	Gayland Ward Seed					94																					–
Super Sweet 10	Dyna-Gro Seeds										121	106	117	106	120	103	110			118	128	113	112	117	139	113	116(14)
Sweet-For-Ever	Gayland Ward Seed		110	107	81									81									81				92(5)
Sweet-For-Ever BMR	Gayland Ward Seed			78	70		77	104	106	83								77	82								85(8)
SweetSix BMR	Gayland Ward Seed				93	101		91																			95(3)
SweetSix BMR (Dry Stalk)	Gayland Ward Seed						102		72	107			98					103	108			93					98(7)
SWSB8801	Sorghum Partners												90	87	87								101	82			89(5)
SWSB8803	Sorghum Partners													96									95				96(2)
SWSU0029	Sorghum Partners												98	103	107	111	105					117	110	110	116	105	108(10)
Vita-Cane	Gayland Ward Seed			121																							–
Xtragraze BMR	Coffey Seed										79	82	82	87	76					70	75	84	76	88			80(10)
19011 BMR	Gayland Ward Seed															91	87								105	93	94(4)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] BMR (Brown Mid-rib) means that a variety has been developed to produce lower amounts of lignin which usually translates into higher quality.
[5] SCA=Sugar Cane Aphid tolerant
[6] PS=Photoperiod sensitive
[7] DS=Dry Stalk
[8] PAF and PF=Prussic Acid Free

Table 17. Summary of Kentucky forage sorghum yield trials 2013-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington												Princeton						Mean[3] (#trials)
		13[1,2]	14	15	16	17	18	19	20	20	22	23	25	17	19[4]	19	21	22	23	
		All Trials are 1 year yields																		
ADV7232 BMR[5]	Advanta Seed							88	92	89	84	84	106		93	84	92	88	71	88(10)
AF7201 BMR (Brachytic Dwarf)	Advanta Seed	89	81	101	89			94	84	79	87	83	78		74	83	92	85	92	87(14)
AF7203 BMR (Brachytic Dwarf)	Advanta Seed							48						70						59(2)
AF7401 BMR (Brachytic Dwarf)	Advanta Seed	76	94	90	83	86	72	85	77	85	93	94	104	116	87	100	73	85	79	88(15)
AF8301	Advanta Seed							98	103	95	87	107	115		124	85	112	110	120	103(10)
ADV8322	Advanta Seed											104	110						112	109(3)
ADV84841G	Advanta Seed											108	118						103	110(3)
Ensilemaster	Caudill Seed	125	90	101	106	111	129	118	129	93	109	133	113	171	77	85	79	94	108	111(17)
Freya	KWS SAAT SE&Co.KGaA										79	73	71					109	112	89(5)
FSG114 BMR	Farm Science Genetics		94	128	93	125	91	76	91	106				71	89	79				95(10)
FSG115 BMR (Brachytic Dwarf)	Farm Science Genetics		51	31	72	81	74	67	77	92				72	60	74				69(10)
F74FS23 BMR	Dyna-Gro Seed							125	94	107	111	90	88		77	76	92	88	103	97(10)
F74FS72 BMR	Dyna-Gro Seed							93	87	82	139	89	95		59	117	85	79	73	94(10)
F75FS13	Dyna-Gro Seed							107	94	102	79	103	92		109	84	87	71	67	89(10)
F7422 BMR BrDw	Ramer Seed												92							–
GW2120	Gayland Ward Seed	117	89	113	84	107	88	102	91	70	88	98		85	98	115	81	78	81	93(16)
GW400 BMR	Gayland Ward Seed	93	79	128	78	91	88	83	85	67				42			66			82(11)
GW475 BMR	Gayland Ward Seed						80	99	84	82							67			82(5)
GW600 BMR	Gayland Ward Seed		107	111	90		90	100	84	80							101			95(8)
Kallisto	KWS SAAT SE&Co.KGaA										124	101	108					148	152	127(5)
KFFiber-Pro70FS	Byron Seed					65	53							70						63(3)
NK300	Sorghum Partners		126	110	101	116	135	84	104	116	111	93	98	119			93	94	97	106(15)
SD1741 BMR	Sorghum Partners		133	92	103	81	84	95						94						97(7)
SilageKing BMR (Dwarf)	Gayland Ward Seed		48																	–
SiloPro BMR (Brachytic Dwarf)	Gayland Ward Seed			24	74		63			68	80	66	63				87	71	60	66(10)
SP1615	Sorghum Partners								125	158	174	130	126		164	170	166	137	142	160(10)
SP1727	Sorghum Partners											91	92						86	90(3)
SP1792 MS	Sorghum Partners												103							–
SP2606	Sorghum Partners											87	97						84	89(3)
SP2707DT	Sorghum Partners											82	95						92	90(3)
SP3904BD BMR (Brachytic Dwarf)	Sorghum Partners								88	97	75	105	112				101	94	73	93(8)
SP3905BD BMR (Brachytic Dwarf)	Sorghum Partners								81	72	82	83	75				58	73	68	74(8)
SS1515	Southern States							125	105	91	94	104	63		97	75	111	97	101	97(10)
SS2010BDF	Allies Seed/Southern States											60	43						65	56(3)
SS304	Sorghum Partners								121	114	110	106	143				95	108	108	113(8)
SS405	Sorghum Partners		188	183	207	138	202	139	143	188	87	147	142	160	142	171	193	187	155	164(16)
Super Sile 20	Dyna-Gro Seed							107	120	140	89	129	144		106	124	149	103	124	1124(10)
Super Sile 30	Dyna-Gro Seed							121	115	123	95	127	121		129	104	132	118	128	118(10)
SWFS8802	Sorghum Partners									66							64			65(2)
TopTon	Dyna-Gro Seed							131	130	140	116	113	134		84	73	124	80	143	118(10)
XF7203 BMR (Brachytic Dwarf)	Advanta Seed/Ramer Seed					74	73													74(2)
1990	Sorghum Partners		121	89	118	125	177	113						131						125(7)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] This trial was sprayed with an aphicide and the results are not included in the overall mean.
[5] BMR (Brown Mid-rib) means that a variety has been developed to produce lower amounts of lignin which usually translates into higher quality.

Table 18. Summary of Kentucky teff yield trials 2008-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety[4]	Proprietor/Distributor	Lexington																Princeton								Mean[3] (#trials)
		08[1,2]	09	10	11	12	13	14	15	16	19	20	21	22	23	24	25	08	09	19	20	21	22	23	24	
		All Trials are 1 year yields																								
Bonus	Mountain View Seeds																88									–
Corvallis	Smith Seed Services	81	101	91	101	96	100	110	96	102	110	116	92	103	101	108	100	94	112	99	112	92	105	86	81	100(24)
CW0604	Barenbrug USA										101	100	101	102	103	110				97	103	86	107	90	100	100(12)
Dessie	Allied Seed	99	92	96	94	95	97	101	104	105	89	109	105	100	96	83	101	102	87	101	98	127	101	129	109	101(24)
Excaliber	–	109	104	125	108	106	103											109	111							109(8)
Highveld	–	100	121	106	101	109	103	102										111	115							108(9)
HorseCandi	–	99	105	89	108	94	97	80	104	82	86	95	110	98	100	74	100	91	84	103	104	96	89	92	98	95(24)
Moxie	Barenbrug USA						94	96	105	107	110	105	98	103	94	79	98			95	101	115	107	107	95	101(17)
Pharaoh	First Line Seeds	105	85	106	106	97	101	93	97	94	102	90	102	102	102	150	98	95	101	107	104	97	101	81	105	101(24)
Rooiberg	–	112	109	113	108	115	102	88										102	107							106(9)
Summer Delight	Cisco Seeds		91	96	88	93	100	119	101	104	91	90	99		102	94	104		90	99	90	89		95	108	97(20)
Tiffany	Turner Seed	102	93	82	93	102	98	104	97	105	110	101	93	103	97	104	104	102	106	104	98	103	99	107	90	100(24)
VA T1 Brown	Hankins Seed		99	87	91	94	98	104	97	101	100	97	96	94	103	101	105		89		93	104		100	111	98(20)
Velvet	–		100	97	98	95	103	95	99	100	101	98	106	95	100	96	100		94	96	98	92	92	112	102	99(22)
Witkope	–	93	101	115	103	101	104	107										94	100							102(9)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] Check with local dealers for available varieties.

Table 19. Summary of Kentucky crabgrass yield trials 2016-2025 (yield shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	Lexington									Princeton						Mean[3] (#trials)
		2016[1,2]	2018	2019	2020	2021	2022	2023	2024	2025	2019	2020	2021	2022	2023	2024	
		All trials are 1 year yields															
Dal's Big River	Dalrymple Farms						100	99	97	100				103	111	104	102(7)
Impact	Barenbrug USA	107	107	108	108	116	100	91	93	103	105	100	95	106	112	109	104(15)
Mojo w/YJ[4]	Barenbrug USA				98	109	108	92	105	100		97	96	102	104	118	103(11)
Quick-N-Big	Noble Foundation	89	85	81	95	78	91	109	91	90	99	101	100	92	64	69	89(15)
Quick-N-Big Spreader	Dalrymple Farms						101	109	106	107				96	104	97	103(7)
Red River	Noble Foundation	104	108	110	99	97	100	99	107	100	96	102	108	101	104	103	103(15)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.
[4] YJ = yellow jacket coating on the seed

Table 20. Summary of Kentucky spring oats yield trials 2015-2023 (planted mid March to early April) [yield shown as a percentage of the mean of the commercial varieties in the trial].

Variety	Proprietor/Distributor	2015[1,2]	2016	2017	2018	2019	2020	2021	2022	2023	Mean[3] (#trials)
		All trials are 1 year yields									
BCO18006	Seed-Link Inc.						90				
BCO18007	Seed-Link Inc.						82				
CCSO-102	Caldbeck Consulting				95	102	104				100(3)
CCSO-120 (black hulled)	Caldbeck Consulting				106	106	91	104	111		104(5)
Common	Central Farm Supply	89									
Excel	Ag. Alumni Seed, IN	120	101	111	107	115	125	105	111	113	112(9)
Haywire	Cisco Seeds					81	98				90(2)
Jerry	Caudill Seed	107	93	103	99	95	119	104	111	108	104(9)
Persik (black hulled)	Caldbeck Consulting		112	114	127	106	101	98		93	107(7)
PST-241	Caldbeck Consulting	91	86	86	86						87(4)
PSTSO200	Caldbeck Consulting	102	90	87	79						90(4)
PSTSO-288C	Caldbeck Consulting	91	102	88	97						95(4)
PSTSOKMJ06	Caldbeck Consulting							104	94		99(2)
PSTSOPH26 (black hulled)	Caldbeck Consulting							98	110	95	101(3)
Reins	Ag. Alumni Seed, IN	94			102		98	86	77	102	93(6)
Robust	Ag. Alumni Seed, IN	104	111	117	102	94					106(5)
Saber	Ag. Alumni Seed, IN	104			100	97		96	93	96	98(6)
VNK	Public		97	107	101	94	92	105	91		98(7)
021A17815	Ag. Alumni Seed, IN	97	108	87							97(3)

[1] Establishment year.
[2] Use this summary table as a guide in making variety decisions, but refer to specific tables in this report to determine statistical differences in forage yield between varieties.
[3] Mean only presented when respective variety was included in two or more trials.

Table 21. Summary of 2002-2025 Kentucky white clover grazing tolerance trials in Lexington (stand persistence shown as a percent of the mean of the commercial varieties in the test).

Variety	Type	Proprietor	02[1,2]	4	06[3]	6	08[4]	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	Mean[5] (#trials)
			2yr[6]	4yr	2yr	2yr	3yr	4yr	4yr	4yr	4yr	4yr	4yr	3yr	4yr	4yr	4yr	4yr	3yr	4yr	4yr	3yr	
Alice	Intermediate	Barenbrug USA		59	98									93	71	79	97	95	91	76	88	106	87(11)
Barblanca	Intermediate	Barenbrug USA		118	91	151																	120(3)
Canterbury	Dutch	Allied Seed											51	93									72(2)
Colt	Intermediate	Seed Research of OR		114	134	122																	123(3)
Crescendo	Ladino	Cal/West	84			72														88			81(3)
Dusi	Ladino	Barenbrug USA																		113			–
Durana	Intermediate	Pennington		83	105	103		115	102	107	126	86	81	113	152	86	102	77	104	101	106	102	103(18)
GWC-AS10	–[7]	Ampac Seed								77													–
Insight	Ladino	Allied Seed				77																	–
Ivory	Intermediate	DLF Pickseed	132	142																			137(2)
Ivory II	Intermediate	DLF Pickseed					102																–
Kakariki	Ladino	Luisetti Seeds															97			113	130		106(3)
Kopu II	Intermediate	Ampac Seed			77	122	96		93	113	112	86	106	93	87	107		95	106				99(13)
KY Select	Intermediate	KY Agr Ex. Sta.						105		83													94(2)
Neches	–[7]	Barenbrug USA													104				83	88			92(3)
Patriot	Intermediate	Pennington		110	137	122		100	111	110	123	102	132	109	123	107	111	107	118	107	110	106	114(18)
Pinnacle	Ladino	Allied Seed									87												–
Rampart	–[7]	Oregro Seeds						90															–
Regal	Ladino	Public	92		57	54		93		103													80(5)
RegalGraze	Ladino	Cal/West			84	87	105	90	87	93	72	94	81	102	87	107	87	95	85	101	90	90	91(18)
Renovation	Intermediate	Smith Seed											102	100	55		97		97				90(5)
Resolute	Intermediate	Southern States			101	106					65												91(3)
Seminole	Ladino	Saddle Butte Ag. Inc.		75		97	91						89	85									97(5)
Stamina	Intermediate	Mountain View Seeds																			53	87	70(2)
Tillman II	Ladino	Caudill Seed	92																				–
WBDX	Dutch	Saddle Butte Ag. Inc.								70													–
Will	Ladino	Allied Seed			117	87	107	105	108	143	115	133	157	111	120	114	108	131	116	113	122	110	118(18

[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 test. For example, the trial planted in the fall of 2016 was grazed for 4 years so the final persistence report would be "2020 Red and White Clover Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] This trial was planted in the spring of 2006 due to poor establishment of the fall 2005 planting.
[4] This trial was planted in the spring of 2008 due to poor establishment of the fall 2007 planting.
[5] Mean only presented when respective variety was included in two or more trials.
[6] Number of years of data.
[7] Type was not provided by the company.

Table 22. Summary of 2005-2025 Kentucky red clover grazing tolerance trials in Lexington (stand persistence shown as a percent of the mean of the commercial varieties in the test).

Variety	Proprietor	05[1,2]	06	07	08	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean[3] (#trials)
		2yr[4]	1yr	1yr	1yr	1yr	2yr	2yr	2yr	3yr	2yr	2yr	1yr	1yr	2yr	1yr	3yr	3yr	2yr	
AA117ER	ABI Alfalfa	150																		–
Blaze	Mountain View Seeds																125	88	112	108(3)
Barduro	Barenbrug USA													90	70	29	100			72(4)
Cinnamon Plus	Southern States		115	106	111	112	108	122	81											108(7)
Common	Public	6	82	106	91	88	54	44		88				57						68(9)
CW9901	Barenbrug USA													104						–
Freedom!	Barenbrug USA	155	93		104	107	95	56	94	111	73	128	81	142	134	142	100	88	112	107(17)
Freedom! MR	Barenbrug USA	117												118						118(2)
Gallant	Turner Seed									131			85	132	83		75	88	92	98(7)
GA9908	Smith Seed Services								69		102	80			115	55	100			87(6)
Juliet	Caudill Seed			80	90															85(2)
Kenland(cert)	KY Ag Exp Sta	127	108	106	104	93	122	133	113	95	92	104	117	109	83	134	100	117	92	108(18)
Kenton	KY Ag Exp Sta	111																		–
Kenway	KY Ag Exp Sta	61																		–
LS9703	Lewis Seed						122	100	131	82										109(4)
SS0303RCG	Southern States							144	113	92	133	88	117	47	115	139	100	117	92	108(12)
Triple Trust 350	ABI Alfalfa	72																		–

[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 test. For example, the trial planted in the fall of 2019 was grazed for 2 years so the final persistence report would be "2021 Red and White Clover Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data.

Table 23. Summary of 2001-2025 Kentucky alfalfa grazing tolerance trials in Lexington (stand persistence shown as a percent of the grazing tolerant Alfagraze).

Variety	Proprietor	Variety Characteristics[1]																								
		FD	Disease Resistance[2]						01[3,4]	04	05	06	08	09	10	11	12	13	14	16	17	19	20	21	22	Mean5 (#trials)
			Bw	Fw	An	PRR	APH1	APH2	3yr[6]	4yr	4yr	3yr	4yr	4yr	4yr	4yr	4yr	4yr	3yr	4yr	2yr	3yr	4yr	4yr	3yr	
ABT 405	W-L Research	4	HR	HR	HR	HR	R	–	100																	–
AFX469	Alforex Seeds	4	HR	HR	HR	HR	HR	R																91	63	77(2)
Alfabar	Barenbrug USA	3	HR	HR	HR	HR	HR/R	–														50	43			47(2)
Alfagraze	America's Alfalfa	3	MR	R	MR	R	–	–	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100(18)
Alfagraze 300 RR	America's Alfalfa	3	HR	R	HR	HR	HR	–								110										–
Alfagraze 600 RR	America's Alfalfa	6	–	R	HR	R	R	–											12							–
Amerigraze 401+Z	America's Alfalfa	4	HR	HR	HR	HR	R	–	125																	–
Ameristand 403T	America's Alfalfa	4	HR	HR	HR	HR	HR	R			141	144	50		91		144	118	65							108(7)
Ameristand 403TPlus	America's Alfalfa	4	HR	HR	HR	HR	HR	R						133		90				50	150	88	114	145	84	107(8)
Ameristand 407TQ	America's Alfalfa	4	HR	HR	HR	HR	HR	R			136			50		80										89(3)
Apollo	America's Alfalfa	4	R	R	R	R	–	–	25		36	27	25	17	27	70	55	86	24							39(10)
Archer III	America's Alfalfa	5	HR	HR	HR	HR	HR	–						33		83										58(2)
Bulldog-505	Univ. of GA	5	–	HR	–	R	–	–									144	100	57							100(3)
FK 421	Donley Seed Co.	4	HR	H	H	H	H	–	100																	–
GA 409	Preferred Alfalfa Genetics	4	HR	HR	HR	HR	HR	HR																136		–
Grazeking	Southern States	5	MR	HR	HR	R	S	–	50																	–
Integrity	PGI Alfalfa	4	HR	HR	HR	HR	HR	R			172															–
LegenDairy5.0	Croplan Genetics	3	HR	HR	HR	HR	HR	–					0			87										44(2)
PGI 424	Producers Choice	4	HR	HR	HR	HR	R	–							45											–
PGI 459	Producers Choice	4	HR	HR	HR	HR	R	R						17		93										55(2)
Rebel	Target Seed	4	HR	HR	HR	HR	HR	–				79														–
Rugged	Alforex Seeds	3	HR	HR	HR	HR	HR	MR				146												127		137(2)
Rugged II	Alforex Seeds	3	HR	HR	HR	HR	HR	R																145	69	107(2)
Saranac AR (cert.)	Public	4	MR	R	HR	LR	–	–	100													25	43			56(3)
Spredor 3	Syngenta	1	HR	HR	R	MR	S	–			68															–
Spredor 4	Syngenta	2	HR	HR	HR	HR	R	–					25													–
TS 4007	Producers Choice	4	HR	R	HR	HR	HR	–							82											–
TS 4010/A4535	Producers Choice	4	HR	R	HR	HR	HR	–						83	145	120										116(3)
Triple Trust 450	ABI/America's Alfalfa	5	HR	HR	HR	HR	HR	–			145															–
5432	Pioneer	4	HR	HR	–	MR	–	–		51																–

[1] Variety characteristics: FD=fall dormancy, Bw=bacterial wilt, Fw=fusarium wilt, An=anthracnose, PRR=phytophthera root rot, APH-aphanomyces root rot. Information provided by seed companies.
[2] Disease resistance: S=susceptible, LR=low resistance, MR=moderate resistance, R=resistance, HR=high resistance (more detailed disease and insect resistance ratings at www.alfalfa.org/pdf/2024_Alfalfa_Variety_Leaflet.pdf).
[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. 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 the fall of 2011 was grazed for 4 years so final persistence report would be "2015 Alfalfa Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[5] Mean only presented when respective variety was included in two or more trials.
[6] Number of years of data

Table 24. Summary of 2002-2025 Kentucky tall fescue grazing tolerance trials in Lexington (stand persistence shown as a percent of the stand rating of KY 31+).

Variety	Endophyte Status[1]	Proprietor	2002[2,3]	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mean[4] (#trials)
			4yr[5]	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	3-yr	
Advance MaxQ	novel	Pennington Seed					94																	–
Armory	free	Barenbrug USA																		99	100			100(2)
Baguala	free	Allied Seed														99								–
Bariane	free	Barenbrug USA		89		75	47	29																60(4)
BarElite	free	Barenbrug USA						96																–
Barolex	free	Barenbrug USA				78	101	86																88(3)
BarOptima PLUS E34	novel	Barenbrug USA				100		97			98	100	98	100	100	100	100	96	91	100	100	100	100	99(15)
Bronson	free	Ampac Seed								98	98						100							99(3)
Bull	free	Caudill Seed												96			100	98	91					96(4)
Cajun II	free	Smith Seed Services									98				97	100	100	99	96	99	100	100	100	99(10)
Cowgirl	free	Rose Agri-Seed			99								99											99(2)
Dominate	free	Allied Seed														99								–
Drover	free	Barenbrug USA														99								–
Estancia Arkshield	novel	Mountain View Seeds																		100	100	100	100	100(4)
Evergraze	free	Bailey Seed & Grain																			100			–
Festival	free	Pickseed West	101																					–
FSG 402TF	free	Farm Service Genetics														99								–
Flourish	free	Allied Seed											98											–
Goliath	free	Ampac Seed									98						100				100			99(3)
HyMark	free	Fraser Seeds							95			100												98(2)
Jesup MaxQ	novel	Pennington Seed	103	97		68	102	97	97	99	98	100	99	99	99	100	100	100	99		100			97(17)
Jesup MaxQII	novel	Pennington Seed																		100		100	100	100(3)
KY31+	toxic	KY Agri. Exp Sta.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100(21)
KY31-	free	KY Agri. Exp Sta.	103	98	100	83	101	100	98	99	99	100	100	99	100	100	100	99	96	100	100	100	100	99(21)
Lacefield MaxQ II	novel	Pennington Seed				82	102	99	98	98	97			100	99	100	100	99	100	100	100	100	100	98(16)
Ranchero	free	Smith Seed Services																98		96	100	100		99(4)
Select	free	Southern States	100	100		67	100	93	95	97	100	100	99	99	99	101								96(13)
SS0705TFSL	free	Southern States													100	100	100	99	96	100	100	100	100	99(9)
STF43	free	Barenbrug USA																		97	100			99(2)
Stockman	free	Seed Res. of OR			102																			–
Texoma MaxQ II	novel	Pennington Seed				88	100	98												95		100	100	97(6)
Tuscany II	free	Seed Res. of OR					101																	–
Verdant	free	Am.Grass Seed					97																	–

[1] Free-varieties that do not contain an endophyte. Toxic-KY31+ contains a toxic endophyte. Novel-varieties that contain an endophyte that aids persistence but is not toxic to cattle.
[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 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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[4] Mean only presented when respective variety was included in two or more trials.
[5] Number of years of data

Table 25. Summary of 2000-2025 Kentucky orchardgrass grazing tolerance trials in Lexington (stand persistence shown as a percent of the mean of the commercial varieties in the trial).

Variety	Proprietor	2000[1,2]	2001	2002	2003	2004	2005[3]	2007	2009	2010	2011	2012	20133	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mean[4] (#trials)
		4yr[5]	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	3yr	
Abertop	Pennington Seed			38																			–
Albert	Univ. of Wisconsin		115																				–
Amba	DLF-Jenks		71																				–
Ambrosia	Pennington Seed							94															–
Athos	DLF-Jenks		93				60																–
Barlegro	Barenbrug USA																				88		–
Benchmark	Southern States	118	123	114																			118(3)
Benchmark Plus	Southern States			120			152	135	106	106	108	115	146	154									120(7)
Boone	Public	102																					–
Command	Seed Research of OR					81																	–
Crown Royale	Donley Seed		100																				–
Crown Royale Plus	Donley Seed			124																			–
Devour	Mountain View Seeds															145				107	102	100	114(4)
Elise	Pure Seed											97				62							80(2)
Hallmark	James VanLeeuwen		115		113																		114(2)
Harvestar	Columbia Seeds							75		89	94		51	34		60							70(5)
Haymate	Southern States	53	115	100	118																		97(4)
HLR	Barenbrug USA																		90	99			95(2)
Intensiv	Barenbrug USA				51															96	96		94(2)
Mammoth	DLF-Jenks		115																				–
Megabite	Turf Seed		77																				–
Niva	DLF-Jenks			76																			–
Persist	Smith Seed Services						138	107	103	100	96	115	102	123	104	131	116	132	140	107	103	99	114(15)
Persist II	Smith Seed Services																		117	108	103	101	107(4)
Potomac (certified)	Public			116		119									109	82	109				99	99	105(7)
Prairie	Turner Seed	127	121								94		131	90	97	107	60	105	90	106	99	100	100(12)
Prodigy	Caudill Seed												109	119		94	109	97	87		103	99	101(7)
Profile	Scott Seed			116																			–
Profit	Ampac Seed								95	99	102	94	95	90	82					105	104	102	97(9)
Swante	Smith Seed Services																			73			–
Tekapo	Ampac Seed		55	74	118		50	103	95	105	106	80	66	63	77								84(11)
Takena	Smith Seed Services		99																				–
Seco	Southern States							85															–
SS0708OGDT	Southern States													128	131	118	106	109	87		103	99	110(8)
Swante	Smith Seed Services																	57					–

[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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).

[3] Due to high variation during 2005 and 2013 trials these values are not included in the overall mean

[4] Mean only presented when respective variety was included in two or more trials.

[5] Number of years of data

Stand thinning may have been greater for preferred varieties due to closer grazing. See individual trial tables for preference ratings.

Table 26. Summary of 2001-2025 Kentucky perennial ryegrass and festulolium (FL) grazing tolerance trials in Lexington (stand persistence shown as a percent of the mean of the commercial varieties in the trial).

Variety	Type	Proprietor	2001[1,2]	2003	2007	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mean[3]
			3yr[4]	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	4yr	3yr	(#trials)
AGRLP103	–	AgResearch USA		86																–
Albion	tetraploid	Grassland Oregon										112								–
Aries	diploid	Ampac Seed	128																	–
Barfest (FL)	MF x PR[6]	Barenbrug USA					116	112												–
BG-34	diploid	Barenbrug USA										78								–
Boost	tetraploid	Allied Seed				101	83	95	92											93(4)
Calibra	tetraploid	DLF International							106		88	90	98		94					95(5)
Citadel	tetraploid	Donley Seed																		–
Duo (FL)	MF x PR[6]	Ampac Seed				95	72	90	102			65	65							82(6)
Lasso	diploid	DLF-Jenks	120																	–
Linn (certified)	diploid	Public	118	63		95	108	95	91	96	80	69	88	79	99	96	52	98	95	89(16)
Melpetra	tetraploid	Hood River Seed											90							–
PayDay	tetraploid	Mountain View Seeds								101	85			99	90	73	93	105	104	94(8)
Polly II	tetraploid	FS Growmark	63																	–
Power	tetraploid	Ampac Seed			158		107	112	96	89	79	78					89	88	99	100(10)
Quartet	tetraploid	Ampac Seed	70		59															68(2)
Remington	tetraploid	Barenbrug USA		151							138	168	169	124	116	147	133	129		142(9)
Remington PLUS NEA2[5]	tetraploid	Barenbrug USA									145	159			122	151	134	136		141(6)
Spring Green (FL)	MF x PR[6]	Rose Agri-Seed				109	115	115	106			81	88						98	102(7)
Sugarcrest (FL)	MF x PR[6]	Mountain View Seeds																		–
TetraGain	tetraploid	Pure Seed							102					90						96(2)
TetraMag	tetraploid	Mountain View Seeds													89	55		44	102	73(4)
TetraSweet	tetraploid	Mountain View Seeds													89	82			102	91(3)
Victorian	diploid	Caudill Seed								114				109						112(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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Grazing Tolerance Report" archived in the UK Forage website (htpps://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data
[5] Remington PLUS NEA2 contains a non-toxic (novel) endophyte.
[6] MF=meadow fescue, PR=perennial ryegrass, IR=Italian ryegrass.

Table 27. Summary of 2002-2025 Kentucky tall fescue horse grazing tolerance trials with three or more years of data in Lexington (stand persistence shown as a percent of the stand rating of the endophyte free variety KY 31-).

Variety	Endophyte Status[1]	Proprietor/KY Distributor	2002[2,3]	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mean[4] (#trials)
			4-yr[5]	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4yr	3yr	
BarOptima PLUS E34[6]	novel	Barenbrug USA						107			101	101	95	104	99	99	101	100						101(9)
Cajun II	free	Smith Seed Services												96			101				100	100		99(4)
Cowgirl	free	Rose Agri-Seed							105				99											102(2)
Estancia Arkshield	novel	Mountain View Seeds																			100		100	100(2)
Jesup MaxQ	novel	Pennington Seed	98			78			104	97	100	101	97	105	98	100	99	101	99					98(13)
Jesup MaxQII	novel	Pennington Seed																		100	100	100	100	100(4)
KY31+	toxic	KY Agri. Exp.Sta.				102	109	120	107	101	101	101	99	105	99	100	101	100	99	101	100	100	100	103(18)
KY31-	free	KY Agri. Exp.Sta.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100(21)
Lacefield MaxQII	novel	Pennington Seed					105	110		98				104		100	100	100	98	100	100	100	98	101(12)
Seine	free	Seed Research of Oregon			135																			–
Select	free	Southern States	109	94	99	73	104	76	108	98	100	101	98	98	97	100								97(14)
SS0705TFSL	free	Southern States													98	100	100	101	99	101	100	100	100	100(9)
Stockman	free	Seed Research of Oregon			125																			–
Texoma MaxQII	novel	Pennington Seed																		97		100	100	–

[1] Free-varieties that do not contain an endophyte. Toxic-KY31+ contains a toxic endophyte. Novel-varieties that contain an endophyte that aids persistence but is not toxic to cattle.
[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 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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Horse Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[4] Mean only presented when respective variety was included in two or more trials.
[5] Number of years of data
[6] BarOptima PLUS E34 is not recommended for pregnant mares because it produces low levels of the alkaloid ergovaline.

Table 28. Summary of 1999-2025 Kentucky orchardgrass horse grazing tolerance trials with three or more years of data in Lexington (stand persistence shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	1999[1,2]	2000	2001	2002	2005[3]	2006	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mean[4] (#trials)
		3-yr[5]	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4yr	3yr	
Albert	Univ. of Wisconsin			95																		–
Ambrosia	Amer.Grass Seed Prod.						61															–
Benchmark	Southern States	104			85																	95(2)
Benchmark Plus	Southern States				111	157	139	111	114	121	121	137	105									120(8)
Crown Royale	Grassland Oregon			95																		–
Crown Royale Plus	Grassland Oregon				97																	–
Elise	Pure Seed										87											–
Haymate	Southern States	96	85		97																	93(3)
Persist	Smith Seed Services					114		103	101	92	112	146	95	123	109	116	138	116	118	102	123	114(15)
Persist II	Smith Seed Services																				109	–
Potomac	Public				117											65						91(2)
Prairie	Turner Seed			100										92	95	112	91	92	86	113	103	98(9)
Prodigy	Caudill Seed											54					73	91		94		78(4)
Profit	Ampac Seed							93	86		92		108						98	81	77	91(7)
SS-0708OGDT	Southern States									104			92	77	95	107	99			109	97	98(8)
Tekapo	Ampac Seed	101	115		93	30		92	100	83	87	63		108								94(9)

[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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Horse Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Due to high variation during 2005 these values are not included in the overall mean
[4] Mean only presented when respective variety was included in two or more trials.
[5] Number of years of data

Table 29. Summary of 2000-2025 Kentucky perennial ryegrass and festulolium(FL) horse grazing tolerance trials with two or more years of data in Lexington(stand persistence shown as a percentage of the mean of the commercial varieties in the trial).

Variety	Proprietor/KY Distributor	2000[1,2]	2004	2007	2009	2010	2011	2012	2014	2015	2019	2020	2021	2022	Mean[3] (#trials)
		4-yr[4]	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	4-yr	3-yr	
Aries	Ampac Seed		55												–
Duo(FL)	Ampac Seed	96					87			82					88(3)
Granddaddy	Smith Seed Services		145	100	83	96		75	80						97(6)
Linn (certified)	Public										90	42	69	141	86(4)
Mara	Barenbrug USA	104													–
PayDay	Mountain View Seeds										74		105	79	86(3)
Power	Ampac Seed				118	103			120	136		52			106(5)
Quartet	Ampac Seed														–
Remington	Barenbrug USA										111	205	129		156(3)
Remington PLUS NEA2[5]	Barenbrug USA										125				–
Spring Green(FL)	Turf-Seed						113	140		82					112(3)
TetraGain SLT	Pure Seed Testing							84					96		85(2)
TetraMag	Mountain View Seeds													79	–

[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 the fall of 2016 was grazed 4 years so the final report would be "2020 Cool-Season Grass Horse Grazing Tolerance Report" archived in the UK Forage website (https://forages.ca.uky.edu).
[3] Mean only presented when respective variety was included in two or more trials.
[4] Number of years of data
[5] Remington PLUS NEA2 contains a nontoxic (novel) endophyte

Notes

Notes

2025 Long-Term Summary of Kentucky Forage Variety Trials

01-2026