

2010 Long-Term Summary of Kentucky Forage Variety Trials

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Introduction

Forage crops occupy approximately 7 million acres in Kentucky. Forages provide a majority of the nutrition for beef, dairy, horse, goat, sheep, and wildlife in the state. In addition, forage crops play an environmentally friendly role in soil conservation, water quality, and air quality. There are over 60 forage species adapted to the climate and soil conditions of Kentucky. Only 10 to 12 of these species occupy the majority of the acreage, but within these species 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 10 to 12 years. Detailed variety reports and forage management publications are available from your local county agent or at the University of Kentucky forage web site at www.uky.edu/Ag/Forage by clicking on the "Forage Variety Trial" link.

Species in This Report

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

Table 1. Summary of Kentucky Bluegrass Yield Trials 1996-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Proprietor/KY Distributor | Lexington | | | | | | Princeton | Mean ³ (# trials) |
|-----------|---------------------------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------|
| | | 96 ^{1,2} 3yr ⁴ | 03 2yr | 04 3yr | 06 4yr | 07 3yr | 08 2yr | 02 3yr | |
| Adam 1 | Radix Research | | | 98 | | | | | - |
| Barderby | Barenbrug USA | | | | | 94 | | 114 | 104(2) |
| Common | Public | | | | 71 | 66 | 73 | | 70(3) |
| Ginger | ProSeeds Marketing | | 89 | | 118 | 119 | 109 | | 109(4) |
| Kenblue | Public | 90 | | 102 | 133 | | | | 110(3) |
| Lato | Turf Seed Inc. | 110 | | | | 122 | | | 116(2) |
| 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 | | | | | | 119 | | - |
| Slezanka | DLF International Seeds | | 111 | | | | | | - |

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 2004 was harvested 2 years, so the final report would be "2006 Timothy and Kentucky Bluegrass Report" archived in the KY Forage web site at www.uky.edu/Ag/Forage. The '96 and '03 Lexington and '02 Princeton results are in the appropriate tall fescue reports.
³ Mean only presented when respective variety was included in two or more trials.
⁴ Number of years of data.

Table 2. Summary of 2000-2010 Kentucky Perennial Ryegrass Grazing Tolerance Trials (stand persistence shown as a percent of the mean of the commercial varieties in the trial).

| Variety | Proprietor | 2000 ^{1,2} | 2001 | 2003 | 2005 | 2007 | Mean ³ (# trials) |
|------------|---------------------|---------------------|------|------------------|------------------|------------------|------------------------------|
| | | 4yr ⁴ | 3yr | 4yr | 3yr | 3yr | |
| AGRLP103 | AgResearch USA | 133 | | 86 | | | 110(2) |
| Aries | Ampac Seed | | 139 | | | | - |
| BG 34 | Barenbrug USA | | | | 176 ⁵ | 193 ⁵ | 185(2) |
| Citadel | Donley Seed | 112 | | | | | - |
| Granddaddy | Smith Seed Services | | 121 | | | 56 | 89(2) |
| Lasso | DLF-Jenks | | 130 | | | | - |
| Linn | Public | 117 | 129 | 63 | | | 103(3) |
| Maverick | Ampac Seed | | 36 | | | | - |
| Polly II | FFR/Southern States | 37 | 68 | | | | 53(2) |
| Power | Ampac Seed | | | | | 112 | - |
| Quartet | Ampac Seed | | 77 | | 63 | 39 | 60(3) |
| Remington | Barenbrug USA | | | 151 ⁵ | | | - |
| Tonga | Ampac Seed | | | | 61 | | - |

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 2000 was grazed 4 years so the final report would be "2004 Cool-Season Grass Grazing Tolerance Report" archived in the KY Forage web site at www.uky.edu/Ag/Forage.
³ Mean only presented when respective variety was included in two or more trials.
⁴ Number of years of data
⁵ Grazing tolerance values for these entries may have been elevated due to the low survival of the other commercial varieties in the trials for these years.

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

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

Orchardgrass (*Dactylus glomerata*) is a high-quality, productive, cool-season grass that is well adapted to Kentucky conditions. This grass is used for pasture, hay, green chop, and silage, but it requires better management than tall fescue for higher yields, quality, and long stand life. It produces an open, bunch-type sod, making it very compatible with alfalfa or red clover as a pasture and hay crop or as habitat for wildlife.

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

Annual ryegrass (*Lolium multiflorum*) and **perennial ryegrass** (*Lolium perenne*) are high-quality, productive, cool-season grasses used in Kentucky. Both have exceptionally high seedling vigor and are highly palatable to livestock. Annual ryegrasses are increasing in use across Kentucky as more winter-hardy varieties are released and promoted. Annual ryegrass is productive for four to six months and is used primarily for late fall and early to late spring pasture. Perennial ryegrass can be used as a short-lived hay or pasture plant and has growth characteristics similar to tall fescue. It is less persistent than other cool-season grass species. There are both diploid (two sets of chromosomes) and tetraploid (four sets of chromosomes) varieties of perennial ryegrass. Tetraploids have larger tillers and seedheads and wider leaves. Tetraploid types tend to be taller and less dense than diploid types, even in early stages of regrowth. Diploid types produce more tillers, have better stand persistence, and are more tolerant to heavy grazing.

Table 3. Summary of Kentucky Alfalfa Yield Trials 1995-2010 (yield shown as a

| Variety | Proprietor | Variety Characteristics ¹ | | | | | |
|------------------|-------------------|--------------------------------------|---------------------------------|----|----|-----|-----|
| | | FD | Disease Resistance ² | | | | |
| | | | Bw | Fw | An | PRR | APH |
| A-4440 | Producers Choice | 4 | HR | HR | HR | HR | HR |
| A 5225 | Producers Choice | 5 | HR | HR | HR | HR | R |
| Abilene +Z | America's Alf. | 5 | HR | HR | HR | HR | R |
| ABT 205 | W-L Research | 2 | HR | HR | HR | HR | R |
| ABT 350 | W-L Research | 3 | HR | HR | HR | HR | HR |
| ABT 400SCL | W-L Research | 4 | HR | HR | HR | HR | HR |
| ABT 405 | W-L Research | 4 | HR | HR | HR | HR | R |
| AC Longview | Newfield Seeds | - | HR | - | - | - | - |
| Affinity+Z | ABI Alfalfa | 4 | HR | HR | HR | HR | R |
| Alfagraze | America's Alf. | 2 | MR | R | MR | R | - |
| AmeriGraze 401+Z | America's Alf. | 4 | HR | HR | HR | HR | R |
| AmeriStand 403T | America's Alf. | 3 | HR | HR | HR | HR | HR |
| Ameriguard 302+Z | America's Alf. | 3 | HR | HR | HR | HR | HR |
| Anchormate | ProSeed Marketing | - | - | - | - | - | - |
| Apollo | America's Alf. | 4 | R | R | R | R | - |
| Arc (cert.) | Public | 4 | LR | MR | HR | - | - |
| Baralfa 53HR | Barenbrug USA | 5 | HR | R | HR | HR | HR |
| Baralfa 54 | Barenbrug USA | - | R | HR | HR | HR | HR |
| Buffalo | Public | - | - | - | - | - | - |
| Choice | FFR/Sou. St. | 4 | HR | R | R | HR | R |
| Cimarron 3i | Great Plains | 4 | HR | HR | HR | HR | HR |
| Cimarron SR | Great Plains | 4 | HR | HR | HR | HR | MR |
| Cimarron VR | Great Plains | 5 | HR | HR | R | R | MR |
| Demand | ABI Alfalfa | 3 | HR | HR | HR | HR | R |
| Depend+EV | ABI Alfalfa | - | - | - | - | - | - |
| DK 127 | Monsanto | 3 | HR | HR | HR | HR | - |
| DK 133 | Monsanto | 4 | HR | HR | HR | HR | R |
| DK 131HQ | Monsanto | 3 | HR | HR | HR | HR | R |
| DK 140 | Monsanto | 4 | HR | HR | HR | HR | HR |
| DK 141 | Monsanto | 4 | HR | HR | HR | HR | HR |
| DKA-41-18RR | Monsanto | 4 | HR | HR | HR | HR | HR |
| DKA 43-13 | Monsanto | 4 | HR | HR | HR | HR | HR |
| DKA 50-18 | Monsanto | 5 | HR | HR | HR | HR | HR |
| Dominator | America's Alf. | 4 | HR | HR | HR | HR | HR |
| Dynagro Everlast | United Agr. Prod. | 4 | HR | HR | HR | HR | R |
| Emperor | ABI Alfalfa | 4 | HR | HR | HR | HR | HR |
| Enforcer | FFR/Sou. St. | 4 | HR | HR | HR | HR | HR |
| Escalade | Allied Seeds | 5 | HR | HR | HR | HR | HR |
| Evermore | FFR/Sou. St. | 5 | HR | HR | HR | HR | HR |
| Excalibur II | Allied Seeds | 4 | HR | HR | HR | HR | R |
| Expedition | Syngenta | 5 | HR | HR | R | RR | R |
| Feast | Garst Seeds | 3 | HR | HR | HR | HR | R |
| Feast +EV | Garst Seeds | 3 | HR | HR | HR | R | HR |
| FK 421 | Donley Seed | 4 | HR | HR | HR | HR | HR |
| Fortress | Syngenta | 3 | R | R | R | HR | - |
| FSG 406 | Allied Seeds | 4 | HR | HR | HR | HR | HR |
| FSG 408DP | Allied Seeds | 4 | HR | HR | HR | HR | R |
| FSG 505 | Allied Seeds | 5 | HR | HR | HR | HR | R |
| FSG 528SF | Lewis Seed Co. | 5 | HR | R | HR | HR | R |
| Gem | FFR/Sou. St. | 4 | HR | HR | HR | HR | S |
| Geneva | Syngenta | 4 | HR | HR | HR | HR | HR |
| Genoa | Syngenta | 4 | HR | HR | HR | RR | HR |
| GH 744 | Golden Harvest | 4 | HR | HR | HR | HR | MR |
| Goldplus | PGI Alfalfa | 4 | HR | HR | HR | HR | R |
| Grazeking | FFR/Sou. St. | 5 | MR | HR | HR | R | S |
| Haygrazer | Great Plains | 4 | HR | HR | R | R | MR |
| HybridForce 400 | Dairyland | 4 | HR | HR | R | HR | MR |
| Imperial | America's Alf. | 3 | HR | HR | HR | HR | R |
| Innovator+Z | America's Alf. | 3 | HR | HR | HR | HR | R |
| Integrity | PGI Alfalfa | 4 | HR | HR | HR | HR | HR |
| L447HD | Legacy Seeds | 4 | HR | HR | HR | HR | HR |
| Legacy | Green Seed | 4 | R | R | R | R | R |
| LegenDairy 5.0 | Croplan Genetics | 3 | HR | HR | HR | HR | HR |
| LH4 | Pioneer | 3 | HR | HR | HR | R | R |
| Magnum V | Dairyland | 4 | HR | HR | R | HR | HR |
| Magnum V-wet | Dairyland | 3 | HR | HR | R | HR | MR |
| Mariner III | Allied Seeds | 4 | HR | HR | HR | HR | HR |
| Mountaineer 2.0 | Croplan Gen. | 5 | HR | HR | HR | HR | HR |
| Multiqueen | Cal/West | 4 | HR | HR | HR | HR | R |
| Pasture Plus | MBS | 3 | HR | HR | R | HR | MR |

Table 3 varieties are continued on page 4.

percentage of the mean of the commercial varieties in the test).

| Lexington | | | | | | | | | | Princeton | | | | Bowling Green ⁶ | | | | Eden Shale | | Mean ⁷ (# trials) | |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|-----------|-----------|-----------|------------|-----------|---------------------------------|--------|
| 95 ^{3,4} 6yr ⁵ | 97 5yr | 97 6yr | 99 4yr | 00 5yr | 02 5yr | 04 5yr | 06 4yr | 08 3yr | 08 5yr | 99 4yr | 01 4yr | 05 5yr | 08 3yr | 96 7yr | 98 7yr | 03 3yr | 06 4yr | 98 5yr | 03 4yr | | |
| | | | | | | | | 100 | | | | 99 | | | | | | | | | 100(2) |
| | | | | | | | | 103 | | | | | 102 | | | | | | | | 103(2) |
| | | | | 99 | | | | | | 104 | | | | | | | | | | | 102(2) |
| | | 100 | | | | | | | 97 | | | | | | | 105 | | | 101 | | 99(2) |
| | | | | | | | | | | 98 | | | | | 102 | | | | | | 101(3) |
| | | | | | | | | | | 102 | | | | | | | | | | | 102(2) |
| | 101 | 101 | | | | | | | 108 | | | | | 101 | | | | | | | 103(4) |
| | | | | | | 83 | | | | | | | | | | | | | | | - |
| | | 99 | | | | | | | | 101 | | | | 104 | | | | | | | 101(3) |
| | 99 | | | | | | | | | | | | | | | | | | 97 | | 98(2) |
| | 102 | | | 99 | | | | | 102 | 99 | | | | | | | | | 102 | | 101(5) |
| | | | | | | | 98 | 93 | | | 97 | | 96 | | | | | | | | 96(4) |
| | | | 103 | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | 99 | | | | | | | | | | | | | - |
| 80 | 108 | | | | | | | | | | | | | 96 | | | | | | | 95(3) |
| 98 | 101 | 87 | 99 | 91 | 96 | 76 | | | 96 | 100 | 99 | 95 | 89 | 91 | 90 | 98 | | | 94 | | 94(16) |
| | | | | | | | | | | | | 104 | | | | | | | | | - |
| | | | | | | | | | | | | | | | 96 | | | | 99 | | 98(2) |
| | | | | | 90 | 82 | 88 | 92 | | | | 95 | 81 | 93 | | | 81 | | 95 | | 89(9) |
| 110 | | 104 | | | | | | | 106 | | | | | 103 | 97 | | | | 103 | | 104(6) |
| | | 100 | | | | | | | | | | | | | 99 | | | | 96 | | 98(3) |
| | | | 103 | | | | | | | 101 | | | | | | | | | | | 102(2) |
| | | 99 | | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | 99 | | | | | | | - |
| | | | | | | | | | | | | | | 104 | | | | | | | - |
| 111 | | | | | | | | | | | | | | 102 | | | | | | | 107(2) |
| 106 | | | | | | | | | | | | | | 104 | | | | | | | 105(2) |
| | | | 105 | | | | | | | | | | | | | | | | | | - |
| | | 104 | | | 95 | | | | | 102 | 100 | | | | | | | | 103 | 103 | 101(6) |
| | | 99 | | | | | | | | 98 | | | | | | | | 103 | | | 100(3) |
| | | | | | | | 103 | | | | | | | | | | | | | | - |
| | | | | | | | | 100 | | | | | | | | | | | | | - |
| | | | | | | | | 109 | | | | | | | | | | | | | - |
| 102 | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | 101 | | | | 101 | | | | 101(2) |
| | | | | | | | | | | | | | | | 102 | | | | 93 | | 98(2) |
| | | | | | | 90 | | | | | | | | | | | | | | | 86(2) |
| | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | 105 | 101 | | 103 | | 103(3) |
| 107 | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | 107 | 111 | | | | | 96 | | | | | | | | | 105(3) |
| | 101 | | | | | | | | 101 | | | | | | | | | | | | 101(2) |
| | | | | | | 106 | | | | | | | | | | | 101 | | | 96 | 101(3) |
| | | | | | | | | | | | 101 | | | | | | | | | | - |
| | 99 | 96 | | | | | | | 97 | | | | | | 98 | | | | 99 | | 98(5) |
| | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | 105 | | | | | | | 100 | | | | | | | | - |
| | | | | | | | | | | | | | | | | 106 | | | | 108 | 107(2) |
| | | | | | | | | | 107 | | | | | | | | | | | | - |
| | | 100 | | | | | | | 98 | | | | | 101 | | | | | 105 | | 101(4) |
| | | | | 106 | 103 | | | | | 99 | 104 | | | | 101 | | | | 102 | | 103(6) |
| | | | | | | 112 | | 100 | | | | 98 | 108 | | | | | | | | 105(4) |
| | | | | | 104 | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | 90 | | | | | | - |
| | 100 | | | | | | | | | | | | | | | | | | 102 | | 101(2) |
| | 102 | | | | | | | | | | | | | | | | | | 100 | | 101(2) |
| | | | | | | | | | | | 106 | | | | | | | | | | - |
| | | | | | | | | | | | | | | 104 | | | | | | | - |
| | | | | | | | | | | | | | | 101 | | | | | | | - |
| | | | | | | | | | | | | | | | | | 101 | | | | - |
| | | | | | | | | | | | | | | | | | | | | | - |
| 88 | | | | | | | | 107 | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | 96 | | | | | | | 92(2) |
| | | | | | | | | 100 | | | | | | | | | | | 110 | | 104(3) |
| | | | 99 | | | | | | | | | | | | | | | | | | - |
| | | | | 104 | | | | | | | | | | | | | | | | | - |
| | | | | 105 | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | 94 | | | | | | | | - |
| | | | | | | | 108 | | | | | | | | | | | | | | - |
| 103 | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | | | | | | | - |
| | | | | | | | | | | | | | | | 108 | | | | | | - |

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

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

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

Important Selection Considerations

Local Adaptation and Seasonal Yield. Choose a variety/species that is adapted to your region of Kentucky, as indicated by good performance across years and locations in replicated yield trials. Also, look for varieties that are productive in the desired season of use. For management recommendations, check with your county Extension agent or see the forage Web site at www.uky.edu/Ag/Forage.

The following comprehensive bulletins may be especially useful:

- *Grain and Forage Crop Guide for Kentucky* (AGR-18)
- *Establishing Forage Crops* (AGR-64)
- *Rotational Grazing* (ID-143)
- *Forage Identification and Use Guide* (AGR-175)
- *Lime and Fertilizer Recommendations* (AGR-1)

Seed Quality. Buy premium-quality seed that is high in germination and purity and free from weed seed. Buy certified seed or proprietary seed of an improved variety. An improved variety is one that has performed well in independent trials. Other information on the label will include the test date (which must be within the past nine months), the level of germination, and the amount of other crop and weed seed. Order seed well in advance of planting time to assure that it will be available when needed.

Description of the Tests

Yield trials. Plots were seeded at the recommended seeding rate per acre and were planted into a prepared seedbed with a disk drill. Plots were 5 by 15 feet in a randomized complete block design with four replications. Grass plots were fertilized with 60 pounds of actual N per acre in March, after the first cutting, and again in late summer for a total of 180 pounds per acre per season. Other fertilizers (lime, P, and K) were applied as needed according to the University of Kentucky soil test recommendations. The tests were

Table 3. Summary of Kentucky Alfalfa Yield Trials 1995-2010 (yield shown as a

| Variety | Proprietor | Variety Characteristics ¹ | | | | | |
|--------------------|--------------------|--------------------------------------|---------------------------------|----|----|-----|-----|
| | | FD | Disease Resistance ² | | | | |
| | | | Bw | Fw | An | PRR | APH |
| Pegasus | FFR/Sou. St. | 4 | HR | HR | HR | HR | R |
| PerForm | Dairyland Research | 4 | HR | HR | HR | HR | HR |
| PGI 459 | Producers Choice | 4 | HR | HR | HR | HR | R |
| Phirst | UniSouth Genetics | 4 | HR | HR | HR | HR | R |
| Phoenix | FFR/Sou. St. | 5 | HR | HR | HR | HR | R |
| ProGro | PGI Alfalfa | 4 | HR | HR | R | HR | MR |
| Radiant-AM | Ampac Seed | 4 | HR | HR | HR | HR | HR |
| Rebound 5.0 | Croplan Genetics | 4 | HR | HR | HR | HR | HR |
| Regal | Great Plains | 5 | HR | HR | R | HR | MR |
| Reward | PGI Alfalfa | 4 | HR | HR | R | HR | MR |
| Reward II | PGI Alfalfa | 4 | HR | HR | R | HR | R |
| Rushmore | Syngenta | 4 | HR | HR | HR | HR | HR |
| Saranac AR (cert.) | Public | 4 | MR | R | HR | LR | - |
| Spredor 3 | Syngenta | 1 | HR | HR | R | MR | S |
| Stampede | Allied Seeds | 3 | HR | R | R | HR | R |
| Stellar | W-L Research | 4 | HR | HR | HR | HR | LR |
| Summer Gold | Beck's Hybrids | 4 | HR | HR | HR | HR | HR |
| Supercuts | ABI Alfalfa | 4 | HR | HR | HR | HR | S |
| TMF Generation | Mycogen Seeds | 4 | HR | HR | HR | HR | R |
| TMF 4355LH | Mycogen Seeds | 3 | HR | R | HR | HR | R |
| TMF 4464 | Mycogen Seeds | 4 | HR | HR | HR | HR | R |
| Triple Crown | FFR/Sou. St. | 4 | HR | HR | HR | HR | HR |
| TripleTrust 450 | ABI Alfalfa | 5 | HR | HR | HR | HR | HR |
| USG 681HY | UniSouth Genetics | 6 | HR | HR | HR | HR | - |
| ValuePlus 1 | Forage Genetics | 4 | HR | HR | HR | HR | R |
| Vernal | Public | 2 | R | MR | - | - | - |
| Wintergreen | ABI Alfalfa | 3 | HR | HR | HR | HR | R |
| Withstand | FFR/Sou. St. | 4 | HR | HR | HR | HR | HR |
| WL 252HQ | W-L Research | 2 | HR | HR | HR | HR | LR |
| WL 319HQ | W-L Research | 3 | HR | HR | HR | HR | HR |
| WL 323 | W-L Research | 4 | HR | HR | HR | HR | R |
| WL 324 | W-L Research | 3 | HR | HR | HR | HR | HR |
| WL 325HQ | W-L Research | 3 | HR | HR | HR | HR | R |
| WL 326GZ | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 327 | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 332SR | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 338SR | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 342 | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 343HQ | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 348AP | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 355SR | W-L Research | 4 | HR | HR | HR | HR | HR |
| WL 357HQ | W-L Research | 5 | HR | HR | HR | HR | HR |
| WL 363HQ | W-L Research | 5 | HR | HR | HR | HR | HR |
| 329 | Cal/West | 3 | HR | HR | HR | HR | R |
| 4m76 | FFR/Sou. St. | 4.7 | HR | HR | R | HR | R |
| 5-star | Croplan Gen. | 5 | R | HR | R | R | R |
| 5246 | Pioneer | 2 | R | R | HR | HR | R |
| 5312 | Public | 3 | HR | HR | HR | HR | HR |
| 53H81 | Pioneer | 3 | HR | HR | HR | R | HR |
| 53Q60 | Pioneer | 3 | HR | R | HR | HR | R |
| 5454 | Pioneer | 4 | R | HR | HR | HR | LR |
| 54H69 | Pioneer | 4 | HR | HR | HR | HR | R |
| 54V46 | Pioneer | 4 | R | HR | HR | HR | R |
| 54V54 | Pioneer | 4 | HR | HR | HR | HR | HR |
| 54V56 | Pioneer | - | - | - | - | - | - |
| 630 | Garst Seeds | 3 | HR | HR | MR | R | - |
| 631 | Garst Seeds | 4 | HR | R | HR | R | HR |
| 6400HT | Garst Seeds | 4 | HR | HR | HR | HR | HR |
| 6415 | Garst Seeds | 4 | HR | HR | HR | HR | HR |
| 6417 | Garst Seeds | 4 | HR | HR | HR | HR | HR |
| 6420 | Garst Seeds | 4 | HR | R | HR | R | HR |
| 645 | Garst Seeds | 4 | HR | R | HR | HR | MR |
| 6530 | Garst Seeds | 5 | HR | HR | HR | HR | HR |
| 6552 | Garst Seeds | 5 | HR | HR | HR | HR | HR |

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.

| percentage of the mean of the commercial varieties in the test). | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|--------|-------|
| Lexington | | | | | | | | | Princeton | | | | | Bowling Green⁶ | | | | Eden Shale | | Mean⁷ (# trials) | | |
| 95^{3,4} 6yr⁵ | 97 5yr | 97 6yr | 99 4yr | 00 5yr | 02 5yr | 04 5yr | 06 4yr | 08 3yr | 97 5yr | 99 4yr | 01 4yr | 05 5yr | 08 3yr | 96 7yr | 98 7yr | 03 3yr | 06 4yr | 98 5yr | 03 4yr | | | |
| | | | | | | | | | | | 95 | | | | | | | | | | - | |
| | | | | | | | 105 | | | | | | | | | | | | | | - | |
| | | | | | | | | 99 | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | 105 | | | | | | 102 | | | 104(2) | |
| | | | | | | 113 | 100 | 101 | | | | | 98 | | | | 96 | | | | 102(5) | |
| | | | | | | | | | | | | | | | | 95 | | | | | - | |
| | | | | | | | | 98 | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | | | 108 | | | 106(2) | |
| | | | | | | | | | | | | | | | | | 103 | | | 94 | 99(2) | |
| | | | | | | | | | | | 98 | | | | | | | | | | - | |
| | | | | | | | | | | | 99 | 103 | | | | | 94 | | | 103 | 100(4) | |
| 108 | | | | 95 | | | | | 103 | | | | | 99 | | | | | | | 101(4) | |
| 103 | 99 | 95 | 96 | 93 | 87 | 77 | 89 | 92 | 93 | | 92 | 95 | 85 | 101 | 90 | 99 | 89 | 101 | 95 | 93(19) | | |
| | | 95 | | | | | | | | | | | | | | | | | 101 | | 98(2) | |
| | | 95 | | | | | | | | | | | | | | | | 106 | | | 101(2) | |
| | | | | | | | | | | | | | | | | 94 | | | | | - | |
| | | | | | | | 107 | | | | | | | | | | | | | | - | |
| 104 | | | | | | | | | | | | | | | | | | 103 | | | 104(2) | |
| | | | | | | | | | | | | | | | | | | 103 | | | - | |
| | | | 100 | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | 98 | | | | | | | | | | - | |
| | | | | 102 | | | | | | | 100 | | | | | | | | | | 101(2) | |
| | | | | | | | | | | | | 100 | | | | | | 105 | | | 103(2) | |
| | | | | | | | | | | | | | | | 105 | | | | | | - | |
| | | | | 106 | | | | | | | | | | | | | | | | | - | |
| | | | | | 93 | | | | | | | | 95 | | | 91 | | | 96 | | 94(4) | |
| | | | 104 | | | | | | | | | | | | | | | | 101 | | 103(3) | |
| | | | | | | | | 99 | 92 | 103 | | | | | | | | | | | 100(4) | |
| | | | | | | | | | | | | | | | 104 | | | | | 114 | - | |
| | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | 108 | | | | | | | | | | | | | | - | |
| 103 | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | 106 | | | | | | - | |
| | | | 103 | | | | | | | | 101 | | | | 99 | | | | | | 101(3) | |
| | 99 | | | | | | | | | 97 | | | | | | 98 | | | 99 | | 98(4) | |
| | | | | | | | | | | | 105 | | | | | | | | | | 103(2) | |
| | | | | | | | | | | 93 | | | | | | | | | | | - | |
| | | | | | | | | | | | 101 | | | | | | | | | | - | |
| | | | | | | | | | | | | | 102 | | | | | | | | - | |
| | | | | | | | | 98 | 102 | | | | | 93 | | | | | | | 98(3) | |
| | | | | | | | | | | | | | | | | | | 99 | | | - | |
| | | | | | | | | 106 | | | | | | | | | | | | | - | |
| | | | | | | | 123 | | | | | | 106 | | | | | 101 | | 106 | 109(4) | |
| | | | | | | | | | | 101 | | | | | | | | | | | - | |
| 94 | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | 116 | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | | | | | 97 | 99 | 98(2) |
| | | | | | | | | | | | 98 | | | | | | | | | | - | |
| | | | | 103 | | | | | | | | | | | | | | | | | - | |
| | | | | 102 | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | 100 | | | | | | | | | | - | |
| 96 | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | 99 | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | | | | | 99 | - | |
| | | | | | 98 | 94 | | | | | 104 | 105 | | | | | | | | | 100(4) | |
| | | | | | | | | | | | | | | | | | | | | 98 | - | |
| 88 | | | | | | | | | | | | | | | | | | | | | - | |
| | | | 107 | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | 106 | | | | | | | | | | | 106(3) | |
| | | | | | | | | 108 | | | | | | | | | | | | | 103(2) | |
| | | | | | | | | | | | | | 103 | | | | | | | 105 | 104(2) | |
| | | | | | | | | | | 104 | | | | | | | | | | | - | |
| | | | | | | | | 106 | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | 103 | | | | | | - | |
| | | | | | | | | | | | | | | | | | | | | 92 | - | |
| | | | | | | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | 103 | | | | | | | | | | | - | |

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 1995 was harvested for 6 years, so the final yield report would be "2000 Alfalfa Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

⁵ Number of years of data.

⁶ The Bowling Green test is on soil infested with phytophthora and aphanomyces root rots.

⁷ Mean only presented when respective variety was included in two or more trials.

Table 4. Summary of Kentucky Festulolium Yield Trials 1999-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).¹

| Variety | Proprietor | Lexington | | | | | | Princeton | Quicksand | | Mean ⁴ (# trials) |
|--------------|--------------------|---------------------|------|------|------|------|------|-----------|-----------|------|---------------------------------|
| | | 1999 ^{2,3} | 2001 | 2003 | 2005 | 2007 | 2008 | 2000 | 2001 | 2003 | |
| | | 2yr ⁵ | 3yr | 2yr | 3yr | 3yr | 2yr | 2yr | 2yr | 2yr | |
| Duo | Ampac Seed | 104 | | | 84 | | 101 | | | | 96(23) |
| Felina | DLF International | | 101 | | | | | | | | - |
| Hykor | DLF International | | | 98 | | | | | | 98 | 98(2) |
| Spring Green | Turf-Seed | | 88 | | 105 | 100 | 112 | | 97 | | 100(5) |
| Sweet Tart | ProSeeds Marketing | | | | | | 87 | | | | - |
| Vorage | Improved Forages | | | | | | | 99 | | | - |

¹ The festuloliums were in fescue trials from 1999-2005.

² Year trial was established.

³ Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1999 was harvested 2 years, so the final report would be "2001 Tall Fescue Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

⁵ Number of years of data.

harvested using a sickle-type forage plot harvester to simulate a spring cut hay/summer grazing/fall stockpile management system. Fresh weight samples were taken at each harvest to calculate percent dry matter production. Management practices for establishment, fertility, weed control, and harvest timing were in accordance with University of Kentucky recommendations.

Grazing trials. Plots were 5 by 15 feet in a randomized complete block design, with each variety replicated six times. Plots were seeded at the recommended seeding rate per acre and were planted

into a prepared seedbed using a disk drill. Grazing was continuous from April to October.

Plots were grazed down to below 4 inches quickly and were maintained at 2 to 4 inches (sometimes less) for the remainder of the grazing season. Supplemental hay was fed during periods of slowest growth. Visual ratings of percent stand were made in the fall several weeks after the cattle were removed to check stand survival after the grazing season and in the spring prior to grazing to check on winter survival and spring growth. Because trials were seeded in

rows, persistence ratings were based on density within a row and not total ground cover. Grass plots were fertilized with 60 pounds of actual N per acre in the spring and 30 to 40 pounds of actual N in early November after cattle or horses were removed from the pasture. Other fertilizers (lime, P, and K) were applied as needed according to the University of Kentucky soil test recommendations. Management practices for establishment, fertility, and weed control were in accordance with University of Kentucky recommendations.

Table 5. Summary of Kentucky White Clover Grazing trials 2002-2010 (stand persistence shown as a percent of the mean of the commercial varieties in the test).

| Variety | Type | Proprietor | 2002 ^{1,2} | 2004 | 2006 ³ | 2006 | 2008 ⁴ | 2008 | Mean ⁵ (# trials) |
|------------|--------------|-----------------------|---------------------|------|-------------------|------|-------------------|------|---------------------------------|
| | | | 2yr ⁶ | 4yr | 2yr | 2yr | 3yr | 2yr | |
| Alice | Intermediate | Barenbrug USA | | 59 | 98 | | | | 79(2) |
| Barblanca | Intermediate | Barenbrug USA | | 118 | 91 | 151 | | | 120(3) |
| Colt | Intermediate | Seed Research of OR | | 114 | 134 | 122 | | | 123(3) |
| Crescendo | Ladino | Cal/West | 84 | | | 72 | | | 78(2) |
| Durana | Intermediate | Pennington | | 83 | 105 | 103 | | 138 | 107(4) |
| Insight | Ladino | Allied Seed | | | | 77 | | | - |
| Ivory | Intermediate | Cebeco | 132 | 142 | | | | | 137(2) |
| Ivory II | Intermediate | DLF International | | | | | 102 | | - |
| Kopu II | Intermediate | Ampac Seed | | | 77 | 122 | 96 | | 98(3) |
| Patriot | Intermediate | Pennington | | 110 | 137 | 122 | | 117 | 122(4) |
| Rampart | - | Oregro Seeds | | | | | | 86 | - |
| Regal | Ladino | Public | 92 | | 57 | 54 | | 91 | 74(4) |
| RegalGraze | Ladino | Cal/West | | | 84 | 87 | 105 | 60 | 84(4) |
| Resolute | Intermediate | FFR/Southern States | | | 101 | 106 | | | 104(2) |
| Seminole | Ladino | Saddle Butte Ag. Inc. | | 75 | | 97 | 91 | | 88(3) |
| Tillman II | Ladino | Caudill Seed | 92 | | | | | | - |
| Will | Ladino | Allied Seed | | | 117 | 87 | 107 | 109 | 105(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 stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific test. For example, the trial planted in 2002 was grazed for 2 years, so the final persistence report would be "2004 Red and White Clover Grazing Tolerance Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

³ This trial was replanted in the spring of 2006 due to poor establishment in the fall of 2005.

⁴ This trial was replanted in the spring of 2008 due to poor establishment in the fall of 2007.

⁵ Mean only presented when respective variety was included in two or more trials.

⁶ Number of years of data.

Table 6. Summary of Kentucky White Clover Yield Trials 1998-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Type | Proprietor | Lexington | | | | | | | Princeton | | Quicksand | | Eden Shale | Mean ³ (# trials) |
|-------------|--------------|-------------------------|-------------------|-----|-----|-----|-----|-----|-----|-----------|-----|-----------|-----|------------|---------------------------------|
| | | | 02 ^{1,2} | 03 | 04 | 06 | 07 | 08 | 09 | 03 | 05 | 98 | 03 | 03 | |
| | | | 3yr ⁴ | 3yr | 3yr | 2yr | 2yr | 3yr | 2yr | 3yr | 3yr | 3yr | 2yr | 2yr | |
| Advantage | Ladino | Allied Seed, LLC | | 125 | | | | | | | | | | 106 | 116(2) |
| Alice | Intermediate | Barenbrug USA | | | | | | | | | 86 | | | | – |
| Avoca | Dutch | DLF International Seeds | | | | 59 | | | | | 82 | | | | 71(2) |
| Barblanca | Intermediate | Barenbrug USA | | 92 | | | | | | | | | | | – |
| CA Ladino | Ladino | Public | 100 | | 124 | | | | | 103 | | 100 | 98 | | 105(5) |
| Colt | Intermediate | Seed Research of OR | | 90 | | 57 | | | | | 114 | | | | 87(3) |
| Common | Dutch | Public | 100 | | | | 53 | | | | 78 | | | | 77(3) |
| Companion | Ladino | Oregro Seeds | | | | | | 87 | 94 | | | | | | 91(2) |
| Crescendo | Ladino | Cal/West Seeds | 105 | | | 140 | | | | | 109 | | | | 118(3) |
| Excel | Ladino | Allied Seed, LLC | | | 100 | | | | | | | | | | – |
| Durana | Intermediate | Pennington | | 94 | | 94 | 88 | 82 | 85 | 87 | 83 | | 101 | 95 | 90(9) |
| Insight | Ladino | Allied Seed, LLC | | | | 128 | | | | | | | | | – |
| Ivory | Intermediate | Cebeco | 96 | | | | | | | | | | | | – |
| Ivory II | Intermediate | DLF International Seeds | | | | | 86 | | | | | | | | – |
| Jumbo | Ladino | Ampac Seed | 93 | | | | | | | | | | | | – |
| Kopu II | Intermediate | Ampac Seed | 97 | | | 97 | 95 | 95 | 103 | | | | | | 97(4) |
| Patriot | Intermediate | Pennington | | 103 | | 87 | 104 | 113 | 95 | 104 | 100 | | 98 | 99 | 100(9) |
| Pinnacle | Ladino | Allied Seed, LLC | | | | 120 | | | | | 111 | | | | 116(2) |
| Rampart | Ladino | Allied Seed, LLC | | | | | 80 | 89 | 97 | | | | | | 89(3) |
| Regal | Ladino | Public | 99 | 96 | 92 | | 125 | 100 | 116 | 107 | 100 | 100 | 104 | | 104(10) |
| RegalGraze | Ladino | Cal/West Seeds | | | | 127 | 140 | 102 | 103 | | | | | | 118(4) |
| Resolute | Intermediate | FFR/Southern States | | | | 63 | | | | | | | | | – |
| Seminole | Ladino | Saddle Butte Ag. Inc | | | 108 | 70 | 79 | | | | | | | | 86(3) |
| Super Haifa | Intermediate | Allied Seed, LLC | | | 77 | | | | | | | | | | – |
| Tillman II | Ladino | Caudill Seed | 103 | | | | | | | | | | | | – |
| Will | Ladino | Allied Seed, LLC | 107 | | | 162 | 150 | 132 | 107 | | 136 | | | | 132(6) |

¹ Year trial was established.

² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2002 was harvested 3 years, so the final report would be "2004 Red and White Clover Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

⁴ Number of years of data.

Results and Discussion

These tables summarize long-term yield and stand persistence data of commercial varieties that have been entered in the University of Kentucky trials. The data 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 grazing trials, varieties with percentages over 100 persisted better than average, and varieties with percentages less than 100 persisted less than average. Also in the grazing trials,

the alfalfa varieties were compared to Alfagraze, and the fescue varieties were compared to KY31+ instead of the mean of all the commercial varieties. Direct, statistical comparisons of varieties cannot be made using the summary tables, but these comparisons do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have very stable performance; others may have performed very well in wet years or on particular soil types. These details may influence variety choice, and the information can be found in the yearly reports. To determine which yearly report to refer to, see footnote in each table.

Summary

Selecting a good forage variety is an important first step in establishing a productive stand of forage. Proper management, beginning with seedbed preparation and continuing throughout the life of the stand, is necessary for even the highest-yielding variety to produce to its genetic potential. For more detailed information on yield and grazing tolerance within species, go to individual 2010 reports on the forage web site. See below for specific reports. The forage web site contains all reports from 2001 through 2010.

Table 7. Summary of Kentucky Timothy Yield Trials 2000-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Proprietor/KY Distributor | Lexington | | | | | | Quicksand | | Princeton | | Mean ³ (# trials) |
|----------|------------------------------------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------|
| | | 00 ^{1,2} 2yr ⁴ | 01 3yr | 02 4yr | 06 3yr | 07 3yr | 08 2yr | 99 2yr | 01 2yr | 00 3yr | 04 2yr | |
| Alma | Newfield Seeds Co/Caudill Seed Co. | | | | | | | | | | 81 | - |
| Auroro | General Feed and Grain | 100 | | | | | | 98 | | | | 99(2) |
| Barpenta | Barenbrug USA | | | | | 74 | | | | | | - |
| Clair | KY Agric. Exp. Station | | 109 | 115 | 107 | 95 | 107 | | 108 | | 122 | 109(7) |
| Classic | Cebeco International Seeds | 100 | | 88 | | | | 87 | | | | 92(3) |
| Climax | Canada Agr. Res. Station | | | | 79 | 102 | 106 | | | | | 96(3) |
| Colt | FFR Cooperative | 105 | | 101 | 90 | | | 112 | | | 99 | 101(5) |
| Common | Public | | 96 | | | | | | | | | - |
| Derby | FFR Cooperative | | | | 112 | 111 | | | | | 124 | 116(3) |
| Dolina | DLF-Trifolium | 100 | | 91 | | | | | | | | 96(2) |
| Express | Seed Research of Oregon | | | 97 | | 91 | | | | | | 94(2) |
| Hokuei | Snow Brand Seed | 103 | | | | | | | | | | - |
| Hokusei | Snow Brand Seed | 97 | | | | | | 99 | | | | 98(2) |
| Joliette | Newfield Seeds Co/Caudill Seed Co. | | | | | | 87 | | | | 90 | 89(2) |
| Jonaton | Newfield Seeds Co/Caudill Seed Co. | | | | | | | | | | 84 | - |
| Outlaw | Grassland West Company | | | | | | | | 107 | | | - |
| Richmond | Pickseed Canada Inc. | 100 | | | | | | 103 | | | | 102(2) |
| Summit | Allied Seed, LLC | | | 114 | | | | | | | | - |
| Talon | Seed Research of Oregon | | | | 110 | 112 | | | | | | 111(2) |
| Treasure | Seed Research of Oregon | | | | 103 | 115 | | | | | | 109(2) |
| Tundra | DLF-Trifolium | 95 | | | | | | | | | | - |
| Tuukka | Ampac Seed Company | | 95 | 90 | | | | | 92 | 93 | | 93(4) |

¹ Year trial was established.

² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2000 was harvested 2 years, so the final report would be "2002 Timothy Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

⁴ Number of years of data.

Yield and Grazing Tolerance Reports

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

2010 Alfalfa Report (PR-609)

2010 Red and White Clover Report (PR-610)

2010 Orchardgrass Report (PR-611)

2010 Tall Fescue and Bromegrass Report (PR-612)

2010 Annual and Perennial Ryegrass and Festulolium Report (PR-613)

2010 Timothy and Kentucky Bluegrass Report (PR-614)

2010 Alfalfa Grazing Tolerance Report (PR-615)

2010 Red and White Clover Grazing Tolerance Report (PR-616)

2010 Cool-Season Grass Grazing Tolerance Report (PR-617)

2010 Cool-Season Grass Horse Grazing Report (PR-618)

Other Reports Not Included in this Summary Report

2010 Summer Annual Grass Report (PR-619)

Authors

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G.D. Lacefield, Extension Professor, Forages

Table 8. Summary of Kentucky Red Clover Yield Trials 1998-2010 (yield shown as a percentage of the mean of the named commercial varieties in the trial).

| Variety | Proprietor | Lexington | | | | | | | | | | | | Princeton | | | | | | | | | | | | Quicksand | | | | | | | | | | | | Eden Shale | | | Mean ³ # trials | | | | |
|-------------------|---------------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|------------|--|--|-------------------------------|----|--|--|--|
| | | 00 ^{1,2} | | | | 01 | | | | 02 | | | | 03 | | | | 04 | | | | 06 | | | | 08 | | | | 09 | | | | 10 | | | | 11 | | | | 08 | | | |
| | | 3yr ⁴ | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | 3yr | | | | | | | | | |
| AA117ER | ABI Alfalfa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 96(3) | | | | | | | |
| Acclaim | Allied Seed | | | | | | 92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arlington | WI Agr. Exp. Sta. | | | | | | 72 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Belle | Agriotech | 88 | | | | | 82 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 88(3) | | | | | | | | |
| Cherokee | FL Agr. Exp. Sta. | 78 | | | | | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 72(2) | | | | | | | | |
| Cinnamon | FFR/Sou.St. | 111 | | | | | 108 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 109(4) | | | | | | | | |
| Cinnamon Plus | FFR/Sou.St. | | | | | | 97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 108 | | | | | | | | |
| Dominion | Seed Research of OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 109 | | | | | | | | |
| Duration | Cisco Co. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100(5) | | | | | | | |
| Emanwan | Turf-Seed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 97(3) | | | | | | | |
| Freedom! | Barenbrug USA | 108 | | | | | 127 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 96(2) | | | | | | | | |
| Freedom!MR | Barenbrug USA | | | | | | 118 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 109(23) | | | | | | | | |
| FSG 9601 | Allied Seed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 109(11) | | | | | | | | |
| Greenstar | Genesis Turf | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Impact | Specialty Seeds | 106 | | | | | 97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Juliet | Caudill Seed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenland (cert.) | KY Ag. Exp. Sta. | 110 | | | | | 127 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenland (uncert.) | Public | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenstar | KY Ag. Exp. Sta. | 105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenton | KY Ag. Exp. Sta. | 100 | | | | | 119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenway | KY Ag. Exp. Sta. | 106 | | | | | 104 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammoth | Public | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Morning Star | Cal/West Seeds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plus II | Allied Seed | 113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prima | Public | 92 | | | | | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quinequei | Caudill Seed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Gold | Proseeds Marketing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Gold Plus | Turner Seed | 97 | | | | | 97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RedlanGraz | ABI Alfalfa | 95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RedlanGraz II | Americas Alfalfa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Redland Max | ABI Alfalfa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Redstart | Syngenta | 102 | | | | | 78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Robust | Scott Seed | 92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Robust II | Seed Research of OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rocket | Seed Research of OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rojo Diablo | Great Plains | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Royal Red | FFR/Sou.St. | 108 | | | | | 92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rustler | Oregro Seeds | 95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scarlet | Dairyland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sienna | Great Plains | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Solid | Production Service | 97 | | | | | 102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Starfire | Ampac Seed | 97 | | | | | 93 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Starfire II | Cal/West & Ampac | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Triple Trust 350 | ABI Alfalfa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vesna | DLF-Jenks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wildcat | Brett Young Seeds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

¹ Year trial was established.
² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2000 was harvested 3 years, so the final report would be "2002 Red and White Clover Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.
³ Mean only presented when respective variety was included in two or more trials.
⁴ Number of years of data.

Table 9. Summary of Kentucky Tall Fescue Yield Trials 1999-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Proprietor | Lexington | | | | | | Princeton | | | | | | Quicksand | | | | | | Mean ³ (# trials) |
|--------------------|---|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|--|--|---------------------------------|
| | | 1999 ^{1,2} 2yr ⁴ | 2001 3yr | 2003 2yr | 2005 3yr | 2007 3yr | 1998 2yr | 2000 2yr | 2002 3yr | 2004 3yr | 2006 3yr | 2008 2yr | 1999 2yr | 2001 2yr | 2003 2yr | 2005 4yr | | | | |
| Atlas | ProSeeds Marketing | 107 | | | | | | | | | | | | | | | 98(2) | | | |
| Atlas Select | ProSeeds Marketing | | | | | | | | | | 98 | | | | | | - | | | |
| Aprilla | ProSeeds Marketing | | | | | | | | | | 91 | | | | | | - | | | |
| BarElite | Barenbrug USA | | | | 99 | | | | | | | | | | | | - | | | |
| Bariane | Barenbrug USA | | 87 | 103 | | | | | | | | | | | 95 | 95(3) | | | | |
| Barolex | Barenbrug USA | | | | 94 | | | | | | | | | | | | - | | | |
| BarOptima PLUS E34 | Barenbrug USA | | | | 101 | | | | | | | | | | | | - | | | |
| BAR 9TMPO | Barenbrug USA | 96 | | | | | | | | | | 97 | | | | | 97(2) | | | |
| Bronson | Ampac Seed | | | | 91 | 100 | | | | | | | | | 102 | | 98(3) | | | |
| Bull | Improved Forages | | | 98 | 106 | | | 102 | 103 | | | | | 97 | | | 101(5) | | | |
| Carmine | DLF International | | 99 | | | | | | | | | | 97 | | | | 98(2) | | | |
| Cowgirl | Rose-AgriSeeds | | | | | | | | | | 103 | | | | | | - | | | |
| DLF-B | DLF International | 96 | | | | | | | | | | | | | | | - | | | |
| Enhance | Allied Seed | | | | | 107 | | | | | | | | | | | - | | | |
| Festival | Pickseed West | | 107 | | | | | | | | | | 107 | | | | 105(3) | | | |
| Fuego | Advanta Seeds | 99 | | | | | | | | | | | | | | | - | | | |
| Hoedown | DLF International | | 104 | | | | | | | | | | | 106 | | | 105(2) | | | |
| HyMark | Fraser Seeds | | | | | | | | | | 102 | | | | | | - | | | |
| Jesup EF | Pennington Seed | | | | | | 106 | | | | | | | | | | - | | | |
| Jesup MaxQ | Pennington Seed | | | | 102 | 104 | | | 98 | | | | | | 100 | 102 | 99(6) | | | |
| Johnstone | ProSeeds Marketing | 95 | 108 | | | | | | | | | 95 | | | | | 99(3) | | | |
| KENHY | KY Agric. Exp. Sta. | | | | | | | | | 89 | | | | | | | - | | | |
| Kentucky 32 | Oregro Seeds | | | | | | | | | | 96 | | | | | | - | | | |
| Kokanee | Ampac Seed | | 89 | | | | 86 | | | | | | | | | | 88(2) | | | |
| KY31+5 | KY Agric. Exp. Sta. | 102 | 118 | 113 | 112 | 105 | 122 | 108 | 104 | 106 | 101 | 107 | 124 | 98 | 110 | 110 | 109(14) | | | |
| Maximize | Turf-Seed | 96 | 95 | | | | | | | | | 105 | 93 | | | | 97(4) | | | |
| Nanryo | Jap. Grassland ForageSeed/USDA-ARS, El Reno, OK | | | | | 99 | | | | | | | | | | | - | | | |
| Noria | ProSeeds Marketing | | | | | 100 | | | | | | | | | | | - | | | |
| RAD-ERF50 | Radix Research Inc. | | | | | | | | | | 113 | | | | | | - | | | |
| Resolute | Ampac Seed | | | 90 | | | | | | | | | 65 | | | | 78(2) | | | |
| Savory | DLF International | | | | | | | | | 93 | | | | | | | - | | | |
| Seine | Advanta Seeds | 99 | | | | | | | | | | | | | 96 | | 98(2) | | | |
| Select | FFR/Sou. St. | 106 | 106 | 94 | 103 | 102 | 105 | 105 | 95 | 103 | 104 | 107 | 112 | 102 | 91 | 103(15) | | | | |
| Stockman | Seed Research of OR | | | 109 | | | | | | 99 | | | | 105 | | | 104(4) | | | |
| TF0203G | Seed Research of OR | | | | | 90 | | | | | | | | | | | - | | | |
| TF33 | Barenbrug USA | | | | | | 70 | | | | | | | | | | - | | | |
| Tuscany | Forage Genetics | | 112 | | | | | | | | | | | | | | - | | | |
| Tuscany II | Seed Research of OR | | | | | | | | | 100 | | | | | | | - | | | |
| Vulcan | International Seeds | | | | | | 97 | | | | | | | | | | - | | | |

¹ Year trial was established.
² Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1999 was harvested 2 years, so the final report would be "2001 Tall Fescue Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.
³ Mean only presented when respective variety was included in two or more trials.
⁴ Number of years of data.
⁵ "+" indicates variety is endophyte infected.

Table 11. Summary of Kentucky Annual Ryegrass Yield Trials 1999-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Type | Proprietor | Lexington ¹ | | | | | Princeton | | | | | Bowling Green | | | Mean ⁴ (# trials) | | |
|---------------|-----------------------|-------------------------------|------------------------|-----|-----|-----|-----|-----------|-----|-----|-----|-----|---------------|-----|-----|---------------------------------|----|---------|
| | | | 99-03 | 01 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 02 | 04 | 00 | | 03 | |
| Abundant | tetraploid | Ampac Seed | | | | | 26 | | | | | | | | | | | - |
| Acrobat | | Proseeds Marketing | | | | | | | 244 | | | | | | | | | - |
| Andy | Westerwold tetraploid | DLF International | 112 | 105 | | | | | | 99 | | | | | | | | 105(3) |
| Angus I | Westerwold tetraploid | DLF International | | | | | | | | | 80 | | | | | | | - |
| Aurelia | Italian tetraploid | Forage Genetics | | | | | | | | | 130 | | | | | | | 125(2) |
| Avance | Westerwold diploid | DLF International | 113 | | | | | | | 109 | | | | | | | | 111(2) |
| Barextra | Italian tetraploid | Barenbrug USA | | | | | | | | | 117 | | | | | | | - |
| Big Daddy | Westerwold tetraploid | FFR/Sou. St. | 87 | 86 | | | | | | 90 | 85 | | | 104 | | | | 90(5) |
| Bruiser | Westerwold diploid | Ampac Seed | | | | | | | | 111 | 104 | | | | | | | 108(2) |
| Common | | Public | | | | | | | | 85 | 85 | | | 95 | 87 | | | 88(4) |
| DH-3 | Italian tetraploid | Allied Seed | | | | | | 106 | 45 | | | | | | | | | 76(2) |
| Diamond T | Italian tetraploid | Oregro Seeds | | | | | 18 | | | | | | | | | | | - |
| Domino | Italian tetraploid | DLF International | | | | | | | | | 121 | | | | | | | - |
| Fantastic | Westerwold diploid | Ampac Seed | 83 | | | | 105 | 98 | | 90 | | | | | 97 | | | 92(4) |
| Feast | Italian tetraploid | Ampac Seed | | 90 | | | | | | | | | | | | | | - |
| Feast II | Italian tetraploid | Ampac Seed | | 98 | | | | | | | 123 | | | | | | | 98(4) |
| Flying A | Westerwold diploid | Oregro Seeds | | | | | 85 | | 59 | 112 | | | | | | | | - |
| Graze-N-Gro | Westerwold diploid | Oregro Seeds | | | | | | 78 | 100 | | | | | | | | | 96(4) |
| Gulf | Westerwold diploid | Seed Research of OR Public | | 105 | | | | 78 | 78 | 44 | 86 | 81 | 77 | 57 | 86 | | | 73(8) |
| Hercules | Westerwold tetraploid | Barenbrug USA | 114 | | | | | | | | | 110 | | | | | | 112(2) |
| Jackson | Westerwold diploid | The Wax Co. | | | 80 | 100 | 138 | 120 | 100 | 100 | | 87 | | | | | | 98(7) |
| Jeanne | Italian tetraploid | DLF International | | 124 | | | | | | | | | | | | | | - |
| Jumbo | Westerwold tetraploid | Barenbrug USA | | | 103 | | | | | | | | | | 104 | | | 104(2) |
| King | Westerwold diploid | Lewis Seed | | 92 | | | | | | | | | | | | | | - |
| Marshall | Westerwold diploid | The Wax Co. | 87 | 92 | 92 | 120 | 100 | 221 | 116 | 99 | 102 | 97 | | 114 | 106 | | | 109(11) |
| Monarque | Italian tetraploid | Seed Research of OR | | | | | | | | | | 117 | | | | | | - |
| Passarel Plus | Westerwold diploid | Pennington Seed | | | | | | | | | 100 | | | | | | | - |
| Rio | Westerwold diploid | DLF International | 88 | | | | | | | 100 | 97 | | | 102 | | 102 | | 97(4) |
| Spark | tetraploid | DLF International | 87 | | | | | | | | | | | | 83 | | | 85(2) |
| Stockaid | diploid | | | | | | 181 | | | | | | | | | | | - |
| Striker | Westerwold tetraploid | Seed Research of OR | | | | | | 104 | | | | | | | | | | - |
| TAMTBO | Italian tetraploid | Tex. Ag. Exp. Sta. | | | | | | | 80 | | | | | | | | | - |
| Tam 90 | Italian diploid | Tex. Ag. Exp. Sta. | | | | | | | 82 | | 85 | | | | | | | 84(2) |
| TetraPro | Italian tetraploid | Tex. Ag. Exp. Sta. | | | | | | | 67 | | | | | | | | | - |
| Tetralite II | Intermediate | DLF International | | | | | | | | | | 122 | | | | | | - |
| T-Rex | Westerwold tetraploid | SaddleButte | | | | | 25 | | | | | | | | | | | - |
| Winter Star | Italian tetraploid | Ampac Seed | | 87 | | | | | | | 96 | | | | | | | 92(2) |
| Zorro | Italian tetraploid | DLF International | 120 | 127 | | | | | | 135 | 130 | | | 118 | | | | 126(5) |

¹ In annual ryegrass, low yielding varieties usually result from winterkill. Note: Due to severe winterkill, yield results from the 2006 planting were not included in the overall mean.

² Year trial was established.

³ Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1999 was harvested 1 year, so the final report would be "2000 Annual and Perennial Ryegrass Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

Table 12. Summary of Kentucky Perennial Ryegrass Yield Trials 1999-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Type | Proprietor | Lexington | | | | | | | | Princeton | | | Bowling Green | | Mean ^{3,4} (# trials) | |
|---------------|-------------------|-----------------------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|-----|-----------------------------------|--------|
| | | | 99 ^{1,2} 2yr ⁵ | 01 2yr | 03 2yr | 04 3yr | 05 3yr | 06 2yr | 07 3yr | 08 2yr | 00 2yr | 02 3yr | 00 2yr | 03 2yr | | | |
| Aires | diploid | Ampac Seed | 108 | 95 | | | | | | | | | | | | | 94(2) |
| Amazon | tetraploid | AgriBioTech | 113 | | | 99 | | | | | | | | | | | 104(3) |
| Anaconda | tetraploid | Caudill Seed | | | | | | | | | | | | 95 | | 103 | 104(3) |
| Aubisque | tetraploid | Seed Research of OR | | 144 | | | | | | | | | | | | | 122(2) |
| Bandit | tetraploid | Grassland West | | | | | | | | | | | | 106 | 114 | | 110(2) |
| Bastion C-2 | tetraploid | Seed Research of OR | | | 91 | | | | | | | | | | | | - |
| Bestfor | tetraploid | Improved Forages | | | | | | | | | | | | 113 | 107 | 120 | 113(3) |
| Bestfor Plus | hybrid tetraploid | Improved Forages | | 116 | 108 | 108 | 118 | | | | | | | | | | 120(4) |
| BG-34 | diploid | Barenbrug USA | | | | | 83 | 85 | | | | | | | | | 84(2) |
| Bison | hybrid tetraploid | International Seeds | | | | | | | | | | | | | | | - |
| Boost | tetraploid | Allied Seed | | | | | | | 130 | 127 | | | | | | | 140 |
| Boxer | tetraploid | AgriBioTech | 121 | | | | | | | | | | | 106 | | | 129(2) |
| Calibra | tetraploid | DLF International | | | | | | | 95 | | | | | | 112 | | 114(2) |
| CAS MP64 | diploid | Cascade International | | 97 | | | | | | | | | | | | | 104(2) |
| Citadel | tetraploid | Ag Canada | 101 | | | | | | | | | | | 94 | 113 | 103 | 103(4) |
| Derby | tetraploid | Public | | | | | | | | | | | | | 74 | | - |
| Eurostar | tetraploid | Seed Research of OR | | | | | | | 112 | | | | | | | | - |
| Feeder | diploid | Seed Research of OR | | | | | | | 76 | | | | | | | | - |
| Granddaddy | tetraploid | Smith Seed | | 118 | | | | 101 | 109 | | | | | | 111 | | 110(4) |
| GreenGold | tetraploid | Grasslands Oregon | | | | | 96 | | | | | | | | | | - |
| Herbal | tetraploid | ProSeeds Marketing | | | | | | | | 74 | | | | | | | - |
| Lasso | diploid | DLF International | | 98 | | | | | | | | | | | | | - |
| Linn | diploid | Public | 87 | 98 | 98 | 102 | | 98 | 85 | 86 | | | | 87 | 88 | 77 | 91(10) |
| Manhattan | diploid | Barenbrug USA | | | | | | | | | | | | | 85 | | - |
| Mara | diploid | Cropmark seeds | | | 77 | | | | | | | | | | | 64 | - |
| Matrix | diploid | Cropmark seeds | | | | | | | | | | | | | | | - |
| Maverick Gold | hybrid tetraploid | Ampac Seed | | 97 | | | | | | | | | | | 71 | | 84(2) |
| Ortet | tetraploid | Oregro Seeds | | | | | | | | 117 | | | | | | | - |
| Polly II | tetraploid | FFR/Sou. St. | 104 | | | | | | | | | | | 110 | 125 | | 113(3) |
| Polly Plus | hybrid tetraploid | Allied Seed | | 64 | | | | | | | | | | | | | 62(2) |
| Power | tetraploid | Ampac Seed | | | | | | | 110 | 101 | | | | | | | 106(2) |
| Quartermaster | tetraploid | Radix Research | | | | | 122 | | | | | | | | | | - |
| Quartet | tetraploid | Ampac Seed | | 97 | | | 56 | 46 | | | | | | | 113 | | 78(4) |
| RAD-CPS212 | hybrid tetraploid | Radix Research | | | | | 134 | | | | | | | | | | - |
| RAD-MI125 | hybrid tetraploid | Mountain View Seeds | | | | | 120 | | | | | | | | | | - |
| Sampson | diploid | International Seeds | 87 | | | | | | | | | | | | | | - |
| Sierra | diploid | Lewis Seed Co. | | | | | 89 | | | | | | | | | | - |
| Tonga | tetraploid | Kings AgriSeeds | | | | | 96 | | | | | | | | | | - |
| Yatsyn | diploid | Barenbrug USA | 80 | | | | | | | | | | | 89 | | | 85(2) |

1 Year trial was established.

2 Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1999 was harvested 2 years, so the final report would be "2001 Annual and Perennial Ryegrass Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

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

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

5 Number of years of data.

| Variety | Proprietor | Variety Characteristics ¹ | | | | | | | | | | | | | Lexington | | | | | | Mean ⁵ (# trials) | | | | |
|--------------------|-----------------------|--------------------------------------|----|----|-----|----|----|-----|-----|---------------------|-----|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|-------------|-------------|-------------|---------|
| | | Disease Resistance ² | | FD | Bw | Fw | An | PRR | APH | 1994 ^{3,4} | | | 1996 3yr | 1997 4yr | 1998 3yr | 2000 2yr | 2000 3yr | 2001 3yr | 2004 4yr | 2005 4yr | | 2006 3yr | | | |
| | | HR | HR | | | | | | | HR | An | 3yr ⁶ | | | | | | | | | | | 2000 2yr | 2000 3yr | |
| ABT 205 | W-L Research | 2 | HR | HR | HR | HR | HR | R | | | | | | | | | | | | | | | | 89(2) | |
| ABT 350 | W-L Research | 3 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | |
| ABT 405 | W-L Research | 4 | HR | HR | HR | HR | HR | R | | | | 129 | 69 | | | | | | | | | | | | 83(5) |
| Alfagraze | Americas Alfalfa | 2 | MR | R | MR | R | | | | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100(10) |
| Amerigrize 401+Z | Americas Alfalfa | 4 | HR | HR | HR | HR | HR | R | | | | 120 | 53 | | | | | | | | | | | | 78(6) |
| Ameristand 403T | Americas Alfalfa | 4 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | 143(2) |
| Ameristand 407TQ | Americas Alfalfa | 4 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | |
| Apollo | Americas Alfalfa | 4 | R | R | R | R | R | | | | 48 | 75 | 33 | 47 | 17 | 31 | 25 | | | | 141 | 144 | 144 | 144 | 143(2) |
| Arc (certified) | Public | 4 | LR | MR | HR | | | | | | | 38 | | | | | | | | | | | | | |
| Baralfa 54 | Barenbrug USA | - | R | HR | HR | HR | HR | HR | | | | | | 78 | | | | | | | | | | | |
| Cut-n-Graze | Americas Alfalfa | 3 | HR | HR | HR | HR | HR | R | | | 68 | | | | | | | | | | | | | | |
| FK 421 | Donley Seed Co. | 4 | HR | H | H | H | H | H | | | | | | | | | | | | | | | | | |
| Feast | Garst Seeds | 3 | HR | HR | HR | HR | HR | R | | | | 146 | | | 87 | 92 | | | | | | | | | 108(3) |
| Fortress | Syngenta | 3 | R | R | R | R | R | R | | | 40 | 71 | | | | | | | | | | | | | 56(2) |
| Gold Plus | PGI Alfalfa | 4 | HR | HR | HR | HR | HR | R | | | | | | 81 | | | | | | | | | | | |
| Grazeking | FFR/Southern States | 5 | MR | HR | HR | R | S | | | | | 91 | 41 | | | | | | | | | | | | 61(3) |
| Haygrazer | Great Plains Research | 4 | HR | HR | R | R | R | MR | | | | 75 | 39 | | | 38 | | | | | | | | | 51(3) |
| Integrity | PGI Alfalfa | 4 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | |
| Legacy | Green Seed | 4 | R | R | R | R | R | R | | | 32 | | | | | | | | | | | | | | |
| Magnagraze | Dairyland Seed Co. | 3 | HR | HR | R | R | | | | | 56 | | | | | | | | | | | | | | |
| Pasture Plus | MBS | 3 | HR | HR | R | HR | MR | | | | 60 | | | | | | | | | | | | | | |
| Pioneer 98 | Pioneer | 3 | HR | R | HR | R | | | | | | | | 56 | | | | | | | | | | | |
| ProGiro | MBS Inc. | 4 | HR | HR | R | HR | MR | | | | | | | 81 | | | | | | | | | | | |
| Quantum | ABI Alfalfa | 2 | HR | HR | HR | HR | HR | R | | | 71 | | | | | | | | | | | | | | |
| Rebel | Target Seed | 4 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | |
| Rugged | Target Seed | 3 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | | | | | |
| Rushmore | Syngenta | 4 | HR | HR | HR | HR | HR | HR | | | 32 | | | | | | | | | | | | | | |
| Saranac AR (cert.) | Public | 4 | MR | R | HR | LR | | | | | | 77 | | | | | | | | | | | | | 89(2) |
| Spredor 3 | Syngenta | 1 | HR | HR | R | MR | S | | | | 71 | 123 | | 75 | | | | | | | 68 | | | | 96(4) |
| Stampede | Allied Seed | 3 | HR | R | R | HR | HR | HR | | | | 73 | | | | | | | | | | | | | |
| Triple Trust 450 | ABI/America's Alfalfa | 5 | HR | HR | HR | HR | HR | HR | | | | | | | | | | | | | 145 | | | | |
| Wintergreen | ABI Alfalfa | 3 | HR | HR | HR | HR | HR | R | | | 95 | | 57 | 72 | | | | | | | | | | | 75(3) |
| WL 326GZ | W-L Research | 4 | HR | HR | HR | HR | HR | HR | | | | 118 | | 88 | | | | | | | | | | | 103(2) |
| 1.15 Brand | Monsanto | 3 | HR | HR | R | HR | R | | | | | | | | 56 | 85 | | | | | | | | | 71(2) |
| 5373 | Pioneer | 4 | HR | HR | HRT | MR | LR | | | | 21 | | | | | | | | | | | | | | |
| 5432 | Pioneer | 4 | HR | HR | - | MR | | | | | | | | | | | | | | | 51 | | | | |

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.
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 1996 was grazed for 3 years so final persistence report would be "1999 Alfalfa Grazing Tolerance Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.
5 Mean only presented when respective variety was included in two or more trials.
6 Number of years of data.

Table 14. Summary of 1996-2010 Kentucky Tall Fescue Grazing Tolerance Trials (stand persistence shown as a percent of the stand rating of KY 31+).

| Variety | Proprietor | Lexington | | | | | | | | | | | | Princeton | | Mean ³ (# trials) | | |
|--------------------|------------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----|---------------------------------|-----|---------|
| | | 1996 ^{1,2} 3yr ⁴ | 1997 4yr | 1998 3yr | 1999 4yr | 2000 4yr | 2001 4yr | 2002 4yr | 2003 4yr | 2004 4yr | 2005 4yr | 2006 4yr | 2007 3yr | 2008 4yr | | | | |
| Advance MaxQ | Pennington Seed | | | | | | | | | | | | | | | | | |
| Bariane | Barenbrug USA | | | | | | | | | | | 89 | | | 75 | 47 | 72 | 71(4) |
| Barcel | Barenbrug USA | 92 | | | | | | | | | | | | | | | | |
| BarElite | Barenbrug USA | | | | | | | | | | | | | | | | 100 | |
| Barolex | Barenbrug USA | | | | | | | | | | | | | | 78 | 101 | 94 | 91(3) |
| BarOptima PLUS E34 | Barenbrug USA | | | | | | | | | | | | | | 100 | 101 | 101 | 101(2) |
| BAR9TMO | Barenbrug USA | | | | 75 | | | | | | | | | | | | | |
| Bronson | Ampac Seed | | | 39 | | | | | | | | | | | | | | |
| Cattle Club | Green Seed | | 37 | 98 | 70 | 93 | 91 | | | | | | | | | | | 78(2) |
| Carmine | DLF-Jenks | | | | | | 90 | | | | | | | | | | | |
| Cowgirl | Rose Agri-Seed | | | | | | | | | | | | 99 | | | | | |
| Dovey | Barenbrug USA | 92 | | | | | | | | | | | | | | | | |
| Festival | Pickseed West | | | | | | 100 | 101 | | | | | | | | | 89 | 97(3) |
| Festorina | Advanta Seeds | 98 | 86 | | 57 | | | | | | | | | | | | | 80(3) |
| Fuego | Advanta Seeds | | | 27 | | | | | | | | | | | | | | |
| Hoedown | DLF-Jenks | | | | | | | 88 | | | | | | | | | | |
| Jesup EF | Pennington Seed | | 63 | 91 | | | | | | | | 99 | | | | | | 84(3) |
| Jesup MaxQ | Pennington Seed | | | 114 | 79 | | | | | | 103 | 97 | | | 68 | 102 | 99 | 96(8) |
| Johnstone | Proseeds | | 65 | 107 | | | | | | 92 | | | | | | | | 88(3) |
| KY31+ | KY Agric. Exp Sta. | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100(13) |
| KY31- | KY Agric. Exp Sta. | 94 | 90 | 102 | 84 | | | | | 98 | 103 | 98 | 100 | 100 | 82 | 100 | 101 | 96(12) |
| Kenhy | Public | | | 116 | | | | | | | | | | | | | | |
| Kokanee | Ampac Seed | | | | | 43 | | | | | | | | | | | | |
| Martin II | International Seeds | | 59 | | | | | | | | | | | | | | | |
| Maximize | Rose Agri-Seed | | | | | | 99 | | | | | | | | | | | |
| Nanryo | Japanese Grassland For.Seed/ | | | | | | | | | | | | | | | | 101 | |
| Onygun | USDA-ARSEI Reno, OK | | | | | | | | | | | | | | | | | |
| Resolute | Ampac Seed | | | | | | 23 | | | | | | | | | | | |
| Select | FFR/Sou. St. | | | 109 | 69 | 107 | 101 | 100 | 100 | 100 | 100 | 100 | 100 | 67 | 100 | 100 | 98 | 94(10) |
| Southern Cross | | | 25 | | | | | | | | | | | | | | | |
| Stargrazer | FFR/Sou. St. | 90 | | | 52 | 86 | 89 | | | | | | | | | | | 79(4) |
| Stockman | Seed Res. of OR | | | | | | | | | | | | 102 | | | | | |
| TF33 | Barenbrug USA | | | 34 | | | | | | | | | | | | | | |
| Tuscany II | Seed Res. of OR | | | | | | | | | | | | | | 100 | | | |
| Verdant | Am.Grass Seed | | | | | | | | | | | | | | | 97 | | |
| Vulcan | International Seeds | | | 109 | | | | | | | | | | | | | | |

¹ Year trial was established.

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

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

⁴ Number of years of data.

| Variety | Proprietor | Lexington | | | | | | | | | | | | Princeton | | Mean ³ (# trials) | | |
|-------------------|---------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|---------------------------------|--|--|
| | | 1996 ^{1,2} 3yr ⁴ | 1997 4yr | 1998 3yr | 1998 4yr | 1999 4yr | 2000 4yr | 2001 4yr | 2002 4yr | 2003 4yr | 2004 4yr | 2005 4yr | 2007 3yr | 2002 4yr | | | | |
| | | | | | | | | | | | | | | | | | | |
| Aberthop | Pennington Seed | | | | | | | | | | | | | | | | | |
| Albert | Univ. of Wisconsin | | | | | | | 115 | | | | | | | | | | |
| Amba | DLF-Jenks | | | | | | | 71 | | | | | | | | | | |
| Ambrosia | Pennington Seed | | | | | | | | | | | | | | | | | |
| Athos | DLF-Jenks | | | | | | | 93 | | | | | | | | | | |
| Benchmark | FFR/Sou. States | 100 | 105 | 115 | 94 | 118 | 123 | 114 | | | | | | | | | | |
| Benchmark Plus | FFR/Sou. States | | | | | | | 120 | | | | | | | | | | |
| Boone | Public | | | 131 | | 102 | | | | | | | | | | | | |
| Cheyenne | Western Prod. Inc. | | | 94 | | | | | | | | | | | | | | |
| Command | Seed Research of OR | | | | | | | | | | | | | | | | | |
| Crown | Donley Seed | | 86 | 96 | | | | | | | | | | | | | | |
| Crown Royale | Donley Seed | | | | | | 100 | | | | | | | | | | | |
| Crown Royale Plus | Donley Seed | | | | | | | | | | | | | | | | | |
| Hallmark | James VanLeeuwen | 107 | | 104 | 103 | | 115 | 124 | | | | | | | | | | |
| Harvestar | Columbia Seeds | | | | | | | | | | | | | | | | | |
| Haymatt | FFR/Sou. States | 93 | 71 | 102 | 96 | 53 | 115 | 100 | 118 | | | | | | | | | |
| Intensiv | Barenbrug USA | | | | | | | | | | | | | | | | | |
| Mammoth | DLF-Jenks | | | | | | | | | | | | | | | | | |
| Megabite | Turf Seed | | | | | | | | | | | | | | | | | |
| Niva | DLF-Jenks | | | | | | | | | | | | | | | | | |
| Persist | Smith Seed | | | | | | | | | | | | | | | | | |
| Pizza | Advanta Seeds | | | 63 | | | | | | | | | | | | | | |
| Potomac | Public | 98 | | | | | | | | | | | | | | | | |
| Prairie | Turner Seed | | | | | | | | | | | | | | | | | |
| Profile | Scott Seed | 98 | | | | | | | | | | | | | | | | |
| Progress | Scott Seed | 111 | | | | | | | | | | | | | | | | |
| Tekapo | Ampac Seed | 93 | 166 | 92 | 104 | | 55 | 74 | 118 | | | | | | | | | |
| Takena | Smith Seed | | 81 | | | | | | | | | | | | | | | |
| Seco | FFR/Sou. States | | | | | | | | | | | | | | | | | |
| WP300 | Western Prod. Inc. | | | 94 | | | | | | | | | | | | | | |

1 Year trial was established.
2 Use this summary table as a guide in making variety decisions; but refer to specific yearly reports to determine statistical differences in stand persistence between varieties. To find actual persistence ratings, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 1997 was grazed 4 years, so the final report would be "2001 Cool-Season Grass Grazing Tolerance Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.
3 Mean only presented when respective variety was included in two or more trials.
4 Number of years of data.

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



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