

2015 Orchardgrass Report

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Introduction

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

This report provides current yield data on orchardgrass varieties included in yield trials in Kentucky as well as guidelines for selecting orchardgrass varieties. Table 11 shows a summary of all orchardgrass varieties tested in Kentucky for the last 12 years. The UK Forage Extension website, at www.uky.edu/Ag/Forage, contains electronic versions of all forage variety testing reports from Kentucky and surrounding states and from a large number of other forage publications.

Important Selection Considerations

Maturity. Orchardgrass varieties will range in maturity from early to late, based on the date of heading. In this report, early-maturing varieties will in general have higher first-cutting yields than later-maturing varieties because they are more mature at the date of first cutting. Orchardgrass typically matures earlier in the spring than red clover or alfalfa. Later-maturing varieties are preferred for use with red clover or alfalfa because they are at a more optimal stage of maturity when the legume is ready for cutting.

Local adaptation and seasonal yield. Choose a variety adapted to Kentucky, as indicated by good performance across years and locations in replicated yield trials such as those presented in this publication. Also, look for varieties that are productive in the desired season of use.

Table 1. Temperature and rainfall at Lexington, Kentucky, in 2012, 2013, 2014, and 2015.

| | 2012 | | | | 2013 | | | | 2014 | | | | 2015 ² | | | |
|-------|------|------------------|----------|-------|------|-----|----------|--------|------|-----|----------|-------|-------------------|-----|----------|--------|
| | Temp | | Rainfall | | Temp | | Rainfall | | Temp | | Rainfall | | Temp | | Rainfall | |
| | °F | DEP ¹ | IN | DEP | °F | DEP | IN | DEP | °F | DEP | IN | DEP | °F | DEP | IN | DEP |
| JAN | 38 | +7 | 4.80 | +1.94 | 38 | +7 | 4.50 | +1.64 | 25 | -6 | 2.28 | -0.58 | 32 | +1 | 2.17 | -0.69 |
| FEB | 40 | +5 | 5.39 | +2.18 | 36 | +1 | 1.78 | -1.43 | 30 | -5 | 5.47 | +2.26 | 26 | 14 | 3.08 | -0.13 |
| MAR | 56 | +12 | 5.64 | +1.24 | 39 | -5 | 5.47 | +1.07 | 39 | -5 | 3.08 | -1.32 | 45 | +1 | 7.34 | +2.94 |
| APR | 56 | +1 | 3.26 | -0.62 | 55 | 0 | 4.46 | +0.58 | 58 | +3 | 5.27 | -1.89 | 57 | +2 | 13.19 | +9.31 |
| MAY | 69 | +5 | 4.02 | -0.45 | 65 | +1 | 5.23 | +0.76 | 66 | +2 | 5.72 | +1.25 | 69 | +5 | 3.02 | -1.45 |
| JUN | 73 | +1 | 2.42 | -1.24 | 72 | 0 | 7.32 | +3.66 | 75 | +3 | 2.93 | -0.73 | 75 | +3 | 8.20 | +4.54 |
| JUL | 81 | +5 | 2.50 | -2.50 | 72 | -4 | 9.33 | +4.33 | 74 | -2 | 3.18 | -1.82 | 77 | +1 | 10.22 | +5.22 |
| AUG | 75 | 0 | 1.68 | -2.25 | 72 | -3 | 3.68 | -0.25 | 76 | +1 | 6.53 | +2.60 | 74 | -1 | 3.49 | -0.44 |
| SEP | 67 | -1 | 6.40 | +3.20 | 67 | -1 | 2.21 | -0.99 | 69 | +1 | 3.63 | +4.3 | 72 | +4 | 3.49 | +0.29 |
| OCT | 55 | -2 | 2.00 | -0.57 | 55 | -2 | 7.02 | +4.45 | 57 | 0 | 5.55 | +2.98 | 59 | +2 | 2.78 | +0.21 |
| NOV | 43 | -2 | 1.81 | -0.65 | 41 | -4 | 3.06 | -0.33 | 41 | -4 | 2.79 | -0.60 | | | | |
| DEC | 42 | +6 | 9.57 | +4.94 | 36 | 0 | 4.19 | +0.21 | 40 | +4 | 2.47 | -1.51 | | | | |
| Total | | | 49.49 | +4.94 | | | 58.25 | +13.70 | | | 49.4 | +4.85 | | | 56.98 | +19.80 |

¹ DEP is departure from the long-term average.

² 2015 data is for the ten months through October.

Table 2. Temperature and rainfall at Princeton, Kentucky, in 2012, 2013, 2014, and 2015.

| | 2012 | | | | 2013 | | | | 2014 | | | | 2015 ² | | | |
|-------|------|------------------|----------|--------|------|-----|----------|-------|------|-----|----------|-------|-------------------|-----|----------|-------|
| | Temp | | Rainfall | | Temp | | Rainfall | | Temp | | Rainfall | | Temp | | Rainfall | |
| | °F | DEP ¹ | IN | DEP | °F | DEP | IN | DEP | °F | DEP | IN | DEP | °F | DEP | IN | DEP |
| JAN | 40 | +6 | 3.01 | -0.79 | 38 | +4 | 6.31 | +2.51 | 30 | -4 | 1.70 | -2.10 | 34 | 0 | 1.51 | -2.29 |
| FEB | 54 | +6 | 1.73 | -2.70 | 39 | +1 | 3.09 | -1.34 | 32 | -6 | 4.75 | +0.32 | 28 | -10 | 4.16 | -0.27 |
| MAR | 60 | +13 | 3.27 | -1.67 | 42 | -5 | 4.34 | -0.60 | 43 | -4 | 7.43 | -0.51 | 46 | -1 | 6.83 | +1.89 |
| APR | 60 | +1 | 0.62 | -4.18 | 57 | -2 | 5.72 | +0.92 | 59 | 0 | 8.5 | +3.70 | 60 | +1 | 7.38 | +2.58 |
| MAY | 71 | +4 | 1.36 | -3.60 | 66 | -1 | 4.26 | -0.70 | 68 | +1 | 1.96 | -3.00 | 68 | +1 | 3.52 | -1.44 |
| JUN | 74 | -5 | 2.38 | -1.47 | 74 | -1 | 7.55 | +3.70 | 76 | +1 | 3.25 | -0.60 | 76 | +1 | 2.85 | -1.00 |
| JUL | 83 | +5 | 1.40 | -2.89 | 75 | -3 | 4.44 | +0.15 | 73 | -5 | 1.56 | -2.73 | 79 | +1 | 8.83 | +4.54 |
| AUG | 77 | 0 | 4.27 | +0.26 | 75 | -2 | 5.59 | +1.58 | 78 | 0 | 9.33 | +5.32 | 73 | -4 | 2.90 | -1.11 |
| SEP | 69 | -2 | 5.45 | +1.82 | 71 | 0 | 5.37 | +2.04 | 69 | -2 | 0.97 | -2.36 | 71 | 0 | 0.82 | -2.51 |
| OCT | 57 | -2 | 2.94 | -0.11 | 59 | 0 | 4.04 | +0.99 | 59 | 0 | 4.36 | +1.31 | 60 | +1 | 4.15 | +1.10 |
| NOV | 45 | -2 | 2.11 | -2.52 | 44 | -3 | 1.37 | -3.26 | 41 | -6 | 2.02 | -2.61 | | | | |
| DEC | 45 | +6 | 4.77 | -0.27 | 38 | -1 | 5.41 | +0.37 | 40 | +1 | 1.84 | -3.20 | | | | |
| Total | | | 33.01 | -18.12 | | | 57.49 | +6.36 | | | 44.67 | -6.46 | | | 42.95 | +1.49 |

¹ DEP is departure from the long-term average.

² 2015 data is for the ten months through October.

Table 3. Temperature and rainfall at Quicksand, Kentucky, in 2013, 2014, and 2015.

| | 2013 | | | | 2014 | | | | 2015 ² | | | |
|-------|------|------------------|----------|-------|------|-----|----------|-------|-------------------|-----|----------|-------|
| | Temp | | Rainfall | | Temp | | Rainfall | | Temp | | Rainfall | |
| | °F | DEP ¹ | IN | DEP | °F | DEP | IN | DEP | °F | DEP | IN | DEP |
| JAN | 38 | +7 | 5.61 | +2.37 | 29 | -2 | 2.66 | -0.63 | 33 | +2 | 1.89 | -1.40 |
| FEB | 38 | +5 | 1.81 | -1.79 | 36 | +3 | 4.52 | +0.92 | 27 | -6 | 3.67 | +0.07 |
| MAR | 40 | -1 | 4.55 | +0.21 | 43 | +2 | 5.68 | +1.34 | 46 | +5 | 6.51 | +2.17 |
| APR | 56 | +3 | 3.55 | -0.55 | 58 | +5 | 5.12 | +1.02 | 57 | +4 | 9.51 | +5.41 |
| MAY | 64 | +2 | 3.98 | -0.50 | 65 | +3 | 2.71 | -1.77 | 67 | +5 | 2.54 | -1.94 |
| JUN | 73 | +3 | 6.44 | +2.62 | 75 | +5 | 1.81 | -2.01 | 74 | +4 | 3.06 | -0.76 |
| JUL | 75 | +1 | 5.24 | -0.01 | 72 | -2 | 7.14 | +1.89 | 76 | +2 | 7.91 | +2.66 |
| AUG | 73 | 0 | 5.85 | +1.84 | 74 | +1 | 7.94 | +3.93 | 73 | 0 | 3.48 | -0.53 |
| SEP | 68 | +2 | 1.71 | -1.81 | 69 | +3 | 1.93 | -1.59 | 70 | +4 | 2.05 | -1.47 |
| OCT | 58 | +4 | 2.07 | -0.84 | 57 | +3 | 6.36 | +3.45 | 57 | +3 | 2.51 | -0.40 |
| NOV | 43 | +1 | 3.05 | -0.83 | 41 | -1 | 3.10 | -0.78 | | | | |
| DEC | 40 | +7 | 6.84 | +2.70 | 41 | +8 | 2.41 | -1.73 | | | | |
| Total | | | 50.70 | +3.36 | | | 51.38 | +4.04 | | | 43.13 | +3.81 |

¹ DEP is departure from the long-term average.

² 2015 data is for the ten months through October.

Seed quality. Buy premium-quality seed 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 percentage of other crop and weed seed. Order seed well in advance of planting time to assure it will be available when needed.

Description of the Tests

Data from five studies are reported. Orchardgrass varieties were sown at Lexington (2012, 2013, and 2014), Princeton (2012), and Quicksand (2013). The soils at Lexington (Maury), Princeton (Crider), and Quicksand (Nolin) are well-drained silt loams and are well-suited to orchardgrass production. Seedlings were made at the rate of 20 pounds per acre into a prepared seedbed with a disk drill. Plots were 5 feet by 20 feet in a randomized complete block design with four replications with a harvest plot area of 5 feet by 15 feet. Nitrogen was top-dressed at 60 pounds per acre of actual nitrogen in March, after the first cutting, and again in late summer, for a total of 180 pounds per acre per season. The tests were harvested using a sickle-type forage plot harvester to simulate a spring cut hay/summer grazing/fall stockpile management system. Fresh weight samples were taken at each harvest to calculate percent dry matter production. Management practices for establishment, fertility (P, K, and lime based on regular soil tests), weed control, and harvest timing were in accordance with University of Kentucky recommendations.

Results and Discussion

Weather data for Lexington, Princeton, and Quicksand are presented in tables 1, 2, and 3.

Ratings for maturity (see Table 4 for maturity scale), stand persistence, and dry matter yields (tons per acre) are reported in Tables 5 through 9. Yields are given by cutting date for 2015 and as total annual production. Stated yields are adjusted for percent weeds; therefore, tonnage given is for crop only. Varieties

Table 4. Descriptive scheme for the stages of development in perennial forage grasses.

| Code | Description | Remarks |
|---|--|---|
| Leaf development | | |
| 11 | First leaf unfolded | Applicable to regrowth of established (plants) and to primary growth of seedlings. |
| 12 | 2 leaves unfolded | Further subdivision by means of leaf development index (see text). |
| 13 | 3 leaves unfolded | |
| • | ••••• | |
| 19 | 9 or more leaves unfolded | |
| Sheath elongation | | |
| 20 | No elongated sheath | Denotes first phase of new spring growth after overwintering. This character is used instead of tillering which is difficult to record in established stands. |
| 21 | 1 elongated sheath | |
| 22 | 2 elongated sheaths | |
| 23 | 3 elongated sheaths | |
| • | ••••• | |
| 29 | 9 or more elongated sheaths | |
| Tillering (alternative to sheath elongation) | | |
| 21 | Main shoot only | Applicable to primary growth of seedlings or to single tiller transplants. |
| 22 | Main shoot and 1 tiller | |
| 23 | Main shoot and 2 tillers | |
| 24 | Main shoot and 3 tillers | |
| • | ••••• | |
| 29 | Main shoot and 9 or more tillers | |
| Stem elongation | | |
| 31 | First node palpable | More precisely an accumulation of nodes. Fertile and sterile tillers distinguishable. |
| 32 | Second node palpable | |
| 33 | Third node palpable | |
| 34 | Fourth node palpable | |
| 35 | Fifth node palpable | |
| 37 | Flag leaf just visible | |
| 39 | Flag leaf ligule/collar just visible | |
| Booting | | |
| 45 | Boot swollen | |
| Inflorescence emergence | | |
| 50 | Upper 1 to 2 cm of inflorescence visible | |
| 52 | ¼ of inflorescence emerged | |
| 54 | ½ of inflorescence emerged | |
| 56 | ¾ of inflorescence emerged | |
| 58 | Base of inflorescence just visible | |
| Anthesis | | |
| 60 | Preanthesis | Inflorescence-bearing internode is visible. No anthers are visible. |
| 62 | Beginning of anthesis | First anthers appear. |
| 64 | Maximum anthesis | Maximum pollen shedding. |
| 66 | End of anthesis | No more pollen shedding. |
| Seed ripening | | |
| 75 | Endosperm milky | Inflorescence green |
| 85 | Endosperm soft doughy | No seeds loosening when inflorescence is hit on palm. |
| 87 | Endosperm hard doughy | Inflorescence losing chlorophyll; a few seeds loosening when inflorescence hit on palm |
| 91 | Endosperm hard | Inflorescence-bearing internode losing chlorophyll; seeds loosening in quantity when inflorescence hit on palm. |
| 93 | Endosperm hard and dry | Final stage of seed development; most seeds shed. |

Source: J. Allan Smith and Virgil W. Hayes. 14th International Grasslands Conference Proc. p. 416-418. June 14-24, 1981, Lexington, Kentucky.

are listed by descending total yield. Experimental varieties, listed separately at the bottom of the tables, are not available commercially.

Statistical analyses were performed on all data (including experimentals) to determine if the apparent differences are truly due to varietal differences or just to chance. In the tables, the varieties

not significantly different from the top variety in that column are marked with one asterisk (*). To determine if two varieties are truly different, compare the difference between them to the Least Significant Difference (LSD) at the bottom of the column. If the difference is equal to or greater than the LSD, the varieties are truly different when grown under

the conditions at the given locations. The Coefficient of Variation (CV), which is a measure of the variability of the data, is included for each column of means. Low variability is desirable, and increased variability within a study results in higher CVs and larger LSDs.

Table 10 summarizes information about distributors and yield performance across locations for all varieties currently included in tests discussed in this publication. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Remember that experimental varieties are not available for farm use; commercial varieties can be purchased through distributors. In Table 10, an open block indicates that the variety was not in that particular test (labeled at the top of the column); an “x” in the block means that the variety was in the test but yielded significantly less than the top-yielding variety. A single asterisk (*) means that the variety was not significantly different from the top-yielding variety in that study, based on the 0.05 LSD. It is best to choose a variety that has performed well over several years and locations. Remember to consider the distribution of yield across the growing season when evaluating productivity of orchardgrass varieties (tables 5 through 9).

Table 11 is a summary of yield data from 2002 to 2015 of commercial varieties that have been entered in the Kentucky trials. The data is listed as a percentage of the mean of the commercial varieties entered in each specific trial. In other words, the mean for each trial is 100 percent—varieties with percentages over 100 yielded better than average, and varieties with percentages less than 100 yielded lower than average. Direct, statistical comparisons of varieties cannot be made using the summary Table 9, but these comparisons do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have stable performance; others may have performed well in wet years or on particular soil types. These details may influence variety choice, and the information can be found in the yearly reports. See the footnote in Table 11 to determine to which yearly report to refer.

Table 5. Dry-matter yields, seedling vigor, and stand persistence of orchardgrass varieties sown September 7, 2012, at Lexington, Kentucky.

| Variety | Seedling Vigor ¹ Oct 15, 2012 | Maturity ² | | | Disease ³ | | | Percent Stand | | | | | | Yield (tons/acre) | | | | | | 3-year Total | |
|--|---|-----------------------|--------|--------|----------------------|--------|--------|---------------|--------|--------|-------|--------|-------|-------------------|-------|-------|-------|--------|--------|--------------|--------|
| | | 2013 | | 2014 | 2014 | | 2015 | | 2013 | | 2014 | | 2015 | | 2013 | | 2014 | | 2015 | | |
| | | May 20 | May 12 | May 12 | May 20 | May 12 | May 12 | May 12 | Mar 20 | Oct 29 | Apr 9 | Oct 30 | Apr 6 | Oct 29 | Total | Total | Total | May 12 | Jun 17 | | Aug 7 |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | | | | | | | | | | | | |
| Checkmate | 4.1 | 57.5 | 52.5 | 52.0 | 4.5 | 100 | 100 | 100 | 100 | 82 | 90 | 88 | 88 | 5.37 | 3.12 | 3.12 | 0.82 | 0.39 | 1.23 | 2.44 | 10.93* |
| Prairie | 4.1 | 60.5 | 56.0 | 56.0 | 4.5 | 100 | 100 | 100 | 100 | 92 | 92 | 89 | 90 | 5.46 | 3.08 | 3.08 | 0.88 | 0.44 | 0.78 | 2.10 | 10.64* |
| Persist | 3.4 | 62.0 | 56.5 | 56.0 | 5.0 | 100 | 100 | 100 | 100 | 97 | 94 | 93 | 94 | 5.13 | 3.04 | 3.04 | 0.74 | 0.29 | 0.75 | 1.78 | 9.95* |
| Profit | 4.0 | 57.0 | 49.8 | 52.8 | 4.3 | 100 | 100 | 100 | 100 | 80 | 84 | 81 | 79 | 5.25 | 2.85 | 2.85 | 0.59 | 0.32 | 0.62 | 1.53 | 9.63* |
| Prodigy | 2.8 | 57.0 | 55.5 | 56.5 | 4.0 | 100 | 100 | 100 | 100 | 95 | 95 | 91 | 91 | 4.76 | 2.66 | 2.66 | 0.76 | 0.35 | 0.78 | 1.89 | 9.31* |
| Benchmark Plus | 3.1 | 62.0 | 56.0 | 56.5 | 5.8 | 100 | 100 | 100 | 100 | 89 | 87 | 86 | 86 | 4.72 | 2.60 | 2.60 | 0.79 | 0.35 | 0.68 | 1.82 | 9.14* |
| Potomac | 4.3 | 62.0 | 56.0 | 56.5 | 4.8 | 100 | 100 | 100 | 100 | 95 | 93 | 93 | 91 | 4.59 | 2.54 | 2.54 | 0.69 | 0.36 | 0.88 | 1.93 | 9.06* |
| Elise | 3.4 | 55.0 | 51.5 | 53.0 | 3.5 | 99 | 98 | 99 | 98 | 50 | 68 | 58 | 64 | 4.17 | 2.15 | 2.15 | 0.52 | 0.41 | 0.86 | 1.79 | 8.11 |
| Tekapo | 3.0 | 56.0 | 53.3 | 56.0 | 3.3 | 100 | 100 | 100 | 100 | 35 | 53 | 33 | 35 | 4.20 | 2.08 | 2.08 | 0.49 | 0.25 | 0.64 | 1.38 | 7.66 |
| Experimental Varieties | | | | | | | | | | | | | | | | | | | | | |
| PPG-OGT01 | 3.8 | 60.5 | 55.5 | 52.3 | 5.0 | 100 | 100 | 100 | 100 | 75 | 83 | 81 | 80 | 5.33 | 2.78 | 2.78 | 0.68 | 0.34 | 0.99 | 2.00 | 10.11* |
| OG 0201 | 4.0 | 58.5 | 54.0 | 51.3 | 4.3 | 100 | 100 | 100 | 100 | 93 | 94 | 88 | 90 | 5.16 | 2.69 | 2.69 | 0.66 | 0.35 | 0.72 | 1.73 | 9.58* |
| PPG-OGT03 | 3.9 | 55.5 | 48.5 | 45.0 | 3.5 | 100 | 100 | 100 | 100 | 50 | 81 | 70 | 74 | 5.02 | 2.47 | 2.47 | 0.47 | 0.46 | 0.76 | 1.70 | 9.19* |
| PPG-OGT02 | 3.6 | 56.0 | 50.8 | 49.0 | 4.5 | 100 | 100 | 100 | 100 | 86 | 90 | 85 | 86 | 4.80 | 2.65 | 2.65 | 0.53 | 0.28 | 0.91 | 1.72 | 9.17* |
| PPG-OGT06 | 3.5 | 54.5 | 50.5 | 47.5 | 3.8 | 100 | 100 | 100 | 100 | 35 | 70 | 50 | 65 | 4.61 | 2.28 | 2.28 | 0.44 | 0.43 | 0.95 | 1.82 | 8.70* |
| Mean | 3.6 | 58.1 | 53.3 | 52.8 | 4.3 | 100 | 100 | 100 | 100 | 75 | 84 | 77 | 79 | 4.90 | 2.64 | 2.64 | 0.64 | 0.36 | 0.82 | 1.83 | 9.37 |
| CV% | 27.0 | 2.7 | 5.8 | 5.9 | 14.9 | 1 | 1 | 1 | 1 | 22 | 12 | 12 | 12 | 16.15 | 24.51 | 24.51 | 31.52 | 34.41 | 44.81 | 27.23 | 17.38 |
| LSD0.05 | 1.4 | 2.3 | 4.4 | 4.5 | 0.9 | 1 | 2 | 1 | 2 | 23 | 14 | 14 | 14 | 1.13 | 0.93 | 0.93 | 0.29 | 0.18 | 0.53 | 0.71 | 2.33 |

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 4 for complete scale.

³ Disease score based on a scale of 1 to 9 with 9 being almost all leaves affected.

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

Table 6. Dry matter yields, seedling vigor, and stand persistence of orchardgrass varieties sown September 5, 2013, at Lexington, Kentucky.

| Variety | Seedling Vigor ¹ Oct 14, 2013 | Maturity ² | | Disease ³ | | Percent Stand | | | | Yield (tons/acre) | | | | | 2-year Total |
|--|---|-----------------------|--------|----------------------|--------|---------------|--------|-------|--------|-------------------|--------|--------|-------|-------|--------------|
| | | 2014 | 2015 | 2014 | 2013 | 2014 | 2015 | | | 2014 | 2015 | | | | |
| | | May 7 | May 12 | Jun 16 | Oct 14 | Apr 2 | Oct 30 | Apr 6 | Oct 29 | Total | May 12 | Jun 16 | Aug 7 | Total | |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | | | | | | |
| Prairie | 3.5 | 52.0 | 56.5 | 6.8 | 99 | 94 | 97 | 96 | 95 | 4.33 | 2.23 | 0.19 | 1.03 | 3.45 | 7.79* |
| Benchmark Plus | 3.3 | 53.0 | 56.0 | 7.8 | 100 | 91 | 96 | 95 | 95 | 4.03 | 1.40 | 0.13 | 0.85 | 2.38 | 6.41 |
| Potomac | 4.3 | 51.8 | 56.5 | 7.0 | 99 | 97 | 97 | 95 | 95 | 3.65 | 1.67 | 0.15 | 0.88 | 2.70 | 6.36 |
| Persist | 3.4 | 52.0 | 57.0 | 6.8 | 100 | 95 | 98 | 98 | 98 | 3.60 | 1.91 | 0.14 | 0.65 | 2.70 | 6.29 |
| Prodigy | 5.0 | 50.5 | 53.5 | 7.5 | 100 | 98 | 99 | 97 | 97 | 3.83 | 1.34 | 0.15 | 0.82 | 2.31 | 6.14 |
| Profit | 3.9 | 50.0 | 50.3 | 6.3 | 100 | 96 | 100 | 97 | 97 | 3.57 | 1.40 | 0.14 | 0.74 | 2.28 | 5.85 |
| Harvestar | 3.4 | 36.8 | 50.0 | 5.5 | 100 | 75 | 95 | 79 | 90 | 3.63 | 1.06 | 0.20 | 0.89 | 2.16 | 5.78 |
| Tekapo | 3.4 | 36.5 | 57.0 | 4.3 | 100 | 36 | 64 | 38 | 38 | 2.95 | 1.07 | 0.15 | 0.88 | 2.11 | 5.06 |
| Experimental Varieties | | | | | | | | | | | | | | | |
| OG61M2 | 3.0 | 37.0 | 47.8 | 4.8 | 99 | 73 | 90 | 70 | 74 | 3.62 | 0.91 | 0.13 | 0.96 | 1.99 | 5.61 |
| OG62 | 3.6 | 49.8 | 49.0 | 5.5 | 99 | 75 | 94 | 90 | 91 | 3.69 | 1.05 | 0.15 | 0.70 | 1.90 | 5.59 |
| Mean | 3.7 | 46.9 | 53.4 | 6.2 | 100 | 83 | 93 | 85 | 87 | 3.69 | 1.40 | 0.15 | 0.84 | 2.40 | 6.09 |
| CV,% | 14.4 | 10.8 | 6.0 | 15.0 | 1 | 16 | 9 | 7 | 8 | 9.13 | 24.95 | 51.09 | 25.05 | 17.61 | 9.96 |
| LSD,0.05 | 0.8 | 7.4 | 4.6 | 1.3 | 2 | 20 | 12 | 9 | 10 | 0.49 | 0.51 | 0.11 | 0.31 | 0.61 | 0.88 |

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 4 for complete scale.

³ Disease score based on a scale of 1 to 9 with 9 being almost all leaves affected.

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

Summary

Selecting a good orchardgrass variety is an important first step in establishing a productive stand of grass. Proper management, beginning with seedbed preparation and continuing throughout the life of the stand, is necessary for even the highest-yielding variety to produce to its genetic potential.

The following is a list of University of Kentucky Cooperative Extension publications related to orchardgrass management. They are available from your county Extension office and are listed in the "Publications" section of the UK Forage website, www.uky.edu/Ag/Forage:

- Lime and Fertilizer Recommendations (AGR-1)
- Grain and Forage Crop Guide for Kentucky (AGR-18)
- Renovating Hay and Pasture Fields (AGR-26)
- Orchardgrass (AGR-58)
- Establishing Forage Crops (AGR-64)
- Forage Identification and Use Guide (AGR-175)
- Rotational Grazing (ID-143)
- Rating Scale for Brown Stripe of Orchardgrass (PPFS-AG-F-07)

Table 7. Dry-matter yields, seedling vigor, and stand persistence of orchardgrass varieties sown September 4, 2014, at Lexington, Kentucky.

| Variety | Seedling Vigor ¹ Oct 9, 2014 | Maturity ² | | Percent Stand | | | Yield (tons/acre) | | | |
|--|--|-----------------------|-------|---------------|--------|--------|-------------------|--------|-------|--|
| | | 2015 | 2014 | 2015 | | 2015 | | | | |
| | | May 12 | Oct 9 | Apr 2 | Oct 29 | May 12 | Jun 17 | Aug 11 | Total | |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | |
| Potomac | 4.8 | 54.0 | 100 | 100 | 100 | 2.42 | 0.79 | 1.35 | 4.56* | |
| Persist | 4.1 | 57.0 | 100 | 100 | 100 | 1.93 | 0.69 | 1.48 | 4.10* | |
| Prairie | 3.5 | 55.5 | 100 | 100 | 100 | 2.14 | 0.61 | 1.20 | 3.95* | |
| Profit | 4.0 | 46.8 | 100 | 100 | 100 | 2.01 | 0.67 | 1.24 | 3.93* | |
| Benchmark Plus | 4.3 | 55.5 | 100 | 100 | 100 | 1.97 | 0.61 | 1.31 | 3.89* | |
| SS-0708OGDT | 4.4 | 49.3 | 100 | 100 | 100 | 1.49 | 0.63 | 1.19 | 3.31 | |
| Tekapo | 3.3 | 51.8 | 100 | 97 | 98 | 0.81 | 0.46 | 0.97 | 2.24 | |
| Experimental Varieties | | | | | | | | | | |
| B-14.0521 | 3.3 | 55.0 | 98 | 99 | 99 | 2.06 | 0.71 | 1.28 | 4.05* | |
| B-14.0519 | 3.3 | 54.5 | 98 | 99 | 99 | 2.09 | 0.74 | 1.16 | 4.00* | |
| B-14.0515 | 2.6 | 52.3 | 100 | 98 | 99 | 1.71 | 0.64 | 1.33 | 3.68 | |
| GO-OG131E | 4.0 | 50.3 | 100 | 98 | 100 | 1.54 | 0.61 | 1.22 | 3.37 | |
| GO-BXCR | 4.0 | 44.8 | 100 | 100 | 100 | 1.75 | 0.65 | 0.85 | 3.25 | |
| BAR DGLF47 | 3.0 | 43.5 | 100 | 95 | 97 | 1.27 | 0.58 | 1.32 | 3.17 | |
| GO-MOSO | 3.8 | 51.5 | 98 | 98 | 99 | 1.63 | 0.63 | 0.89 | 3.15 | |
| Mean | 3.7 | 51.5 | 99 | 99 | 99 | 1.77 | 0.64 | 1.20 | 3.62 | |
| CV,% | 13.5 | 7.1 | 1 | 2 | 1 | 21.58 | 21.51 | 26.50 | 16.66 | |
| LSD,0.05 | 0.7 | 5.2 | 2 | 3 | 2 | 0.55 | 0.20 | 0.45 | 0.86 | |

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 4 for complete scale.

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

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Table 8. Dry-matter yields, seedling vigor, and stand persistence of orchardgrass varieties sown September 12, 2012, at Princeton, Kentucky.

| Variety | Seedling Vigor ¹ Oct 29, 2012 | Maturity ² | | | | | | Percent Stand | | | | | | Yield (tons/acre) | | | | | | | | | | |
|--|---|-----------------------|--------|--------|--------|-------|--------|---------------|--------|--------|--------|-------|--------|-------------------|--------|-------|-------|-------|-------|--------|--------|--------|--------|--|
| | | 2013 | | 2014 | | 2015 | | 2013 | | 2014 | | 2015 | | 2013 | | 2014 | | 2015 | | | | | | |
| | | May 14 | May 20 | May 20 | May 20 | May 7 | May 20 | Mar 19 | Oct 29 | Mar 19 | Oct 25 | Apr 4 | Oct 22 | Apr 14 | Oct 23 | Total | Total | Total | May 7 | Jun 10 | Aug 12 | Total | | |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | | | | | | | | | | | | | | | |
| Benchmark Plus | 3.5 | 59.0 | 62.0 | 57.5 | 59 | 98 | 98 | 98 | 96 | 89 | 89 | 89 | 89 | 89 | 59 | 6.62 | 1.85 | 6.62 | 1.54 | 0.56 | 0.38 | 2.47 | 10.95* | |
| Checkmate | 3.4 | 56.5 | 59.5 | 50.3 | 100 | 100 | 100 | 100 | 97 | 89 | 88 | 88 | 88 | 53 | 6.41 | 1.63 | 6.41 | 1.44 | 0.67 | 0.73 | 2.83 | 10.87* | | |
| Prairie | 3.4 | 59.0 | 62.0 | 54.0 | 100 | 99 | 99 | 99 | 98 | 94 | 97 | 94 | 97 | 64 | 6.17 | 1.87 | 6.17 | 1.57 | 0.57 | 0.51 | 2.65 | 10.69* | | |
| Profit | 5.0 | 55.5 | 58.0 | 48.8 | 100 | 100 | 100 | 100 | 98 | 91 | 93 | 93 | 93 | 59 | 6.37 | 1.68 | 6.37 | 1.52 | 0.50 | 0.44 | 2.45 | 10.50* | | |
| Persist | 3.6 | 58.0 | 62.0 | 56.0 | 100 | 100 | 100 | 100 | 100 | 85 | 98 | 85 | 98 | 66 | 6.09 | 1.90 | 6.09 | 1.56 | 0.45 | 0.49 | 2.49 | 10.48* | | |
| Prodigy | 4.1 | 58.0 | 62.0 | 49.5 | 100 | 99 | 99 | 99 | 98 | 90 | 88 | 90 | 88 | 58 | 6.23 | 1.65 | 6.23 | 1.26 | 0.56 | 0.72 | 2.53 | 10.41* | | |
| Potomac | 4.1 | 59.0 | 62.0 | 56.5 | 99 | 99 | 99 | 99 | 97 | 95 | 96 | 95 | 96 | 59 | 6.08 | 1.56 | 6.08 | 1.36 | 0.50 | 0.53 | 2.39 | 10.03* | | |
| Elise | 2.6 | 54.5 | 59.0 | 46.3 | 98 | 96 | 96 | 96 | 83 | 86 | 86 | 86 | 86 | 39 | 6.08 | 1.53 | 6.08 | 1.25 | 0.62 | 0.54 | 2.42 | 10.03* | | |
| Tekapo | 2.9 | 55.5 | 60.0 | 52.3 | 98 | 97 | 97 | 97 | 65 | 78 | 70 | 78 | 70 | 58 | 4.99 | 1.35 | 4.99 | 1.05 | 0.49 | 0.54 | 2.08 | 8.41 | | |
| Experimental Varieties | | | | | | | | | | | | | | | | | | | | | | | | |
| PPG-OG103 | 3.4 | 53.0 | 56.0 | 45.0 | 100 | 100 | 100 | 100 | 92 | 89 | 91 | 89 | 91 | 68 | 6.83 | 1.64 | 6.83 | 1.43 | 0.65 | 0.55 | 2.63 | 11.11* | | |
| PPG-OG102 | 4.1 | 55.5 | 59.5 | 47.5 | 98 | 98 | 98 | 98 | 91 | 91 | 93 | 91 | 93 | 74 | 6.97 | 1.67 | 6.97 | 1.32 | 0.62 | 0.42 | 2.36 | 11.00* | | |
| PPG-OG101 | 3.8 | 56.5 | 61.5 | 54.0 | 100 | 100 | 100 | 100 | 97 | 93 | 93 | 93 | 93 | 71 | 6.41 | 1.78 | 6.41 | 1.55 | 0.73 | 0.46 | 2.73 | 10.92* | | |
| OG 0201 | 3.6 | 56.0 | 57.0 | 47.5 | 100 | 100 | 100 | 100 | 98 | 81 | 85 | 81 | 85 | 55 | 6.36 | 1.76 | 6.36 | 1.38 | 0.59 | 0.53 | 2.50 | 10.62* | | |
| PPG-OG-106 | 2.9 | 53.0 | 58.0 | 46.3 | 100 | 97 | 97 | 97 | 80 | 81 | 84 | 81 | 84 | 59 | 6.31 | 1.38 | 6.31 | 1.24 | 0.59 | 0.55 | 2.38 | 10.08* | | |
| Mean | 3.6 | 56.4 | 59.9 | 50.8 | 99 | 99 | 99 | 99 | 92 | 88 | 89 | 88 | 89 | 60 | 6.28 | 1.66 | 6.28 | 1.39 | 0.58 | 0.53 | 2.50 | 10.43 | | |
| CV,% | 19.6 | 2.5 | 4.0 | 6.0 | 1 | 2 | 2 | 2 | 5 | 12 | 9 | 12 | 9 | 30 | 8.25 | 13.03 | 8.25 | 15.41 | 19.37 | 41.50 | 12.84 | 7.71 | | |
| LSD,0.05 | 1.0 | 2.0 | 3.4 | 4.4 | 2 | 2 | 2 | 2 | 6 | 15 | 11 | 15 | 11 | 26 | 0.74 | 0.31 | 0.74 | 0.31 | 0.16 | 0.31 | 0.46 | 1.15 | | |

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

² Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 4 for complete scale.

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

Table 9. Dry-matter yields, seedling vigor, and stand persistence of orchardgrass varieties sown August 29, 2013 at Quicksand, Kentucky.

| Variety | Seedling Vigor ¹ Oct 3, 2013 | Percent Stand | | | | | Yield (tons/acre) | | | | | 2-year Total |
|--|--|---------------|--------|-------|-------|--------|-------------------|--------|-------|--------|-------|--------------|
| | | 2013 | 2014 | | 2015 | | 2014 | 2015 | | | | |
| | | Oct 3 | Mar 27 | Nov 3 | Apr 8 | Oct 29 | Total | May 11 | Aug 3 | Sep 24 | Total | |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | | | |
| Potomac | 4.5 | 100 | 100 | 100 | 100 | 100 | 5.24 | 1.62 | 1.64 | 0.69 | 3.95 | 9.19* |
| Prairie | 3.9 | 100 | 100 | 100 | 100 | 100 | 4.87 | 1.50 | 1.22 | 0.71 | 3.43 | 8.31* |
| Benchmark Plus | 4.5 | 100 | 100 | 99 | 99 | 99 | 4.66 | 1.44 | 1.37 | 0.73 | 3.53 | 8.19* |
| Profit | 4.0 | 100 | 100 | 100 | 100 | 99 | 4.51 | 1.46 | 1.21 | 0.78 | 3.45 | 7.96 |
| Persist | 1.8 | 100 | 98 | 98 | 98 | 98 | 4.13 | 1.63 | 1.22 | 0.85 | 3.71 | 7.84 |
| Harvestar | 2.3 | 99 | 97 | 97 | 98 | 97 | 4.70 | 1.46 | 1.28 | 0.37 | 3.10 | 7.81 |
| Prodigy | 3.5 | 100 | 100 | 100 | 100 | 99 | 4.24 | 1.56 | 1.08 | 0.64 | 3.29 | 7.53 |
| Tekapo | 3.4 | 100 | 99 | 98 | 98 | 98 | 3.92 | 1.37 | 1.15 | 0.61 | 3.13 | 7.06 |
| Experimental Varieties | | | | | | | | | | | | |
| OG62 | 3.5 | 100 | 98 | 98 | 98 | 98 | 6.14 | 1.75 | 1.44 | 0.79 | 3.99 | 10.13* |
| OG61M2 | 2.5 | 98 | 96 | 97 | 95 | 95 | 4.73 | 1.52 | 1.31 | 0.65 | 3.49 | 8.22* |
| Mean | 3.4 | 100 | 99 | 99 | 98 | 98 | 4.72 | 1.53 | 1.29 | 0.68 | 3.51 | 8.22 |
| CV,% | 28.2 | 1 | 2 | 2 | 2 | 2 | 18.57 | 15.30 | 22.35 | 35.52 | 14.90 | 16.30 |
| LSD,0.05 | 1.4 | 1 | 3 | 3 | 3 | 3 | 1.27 | 0.34 | 0.42 | 0.32 | 0.76 | 1.94 |

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.

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

Table 10. Performance of orchardgrass varieties across years and locations in Kentucky.

| Variety | Proprietor/KY Distributor | Lexington | | | | | | Princeton | | | Quicksand | |
|--|------------------------------|-------------------|----|----|------|----------------|------|-----------|----|----|-----------|----|
| | | 2012 ¹ | | | 2013 | | 2014 | 2012 | | | 2013 | |
| | | 13 ² | 14 | 15 | 14 | 15 | 15 | 13 | 14 | 15 | 14 | 15 |
| Commercial Varieties-Available for Farm Use | | | | | | | | | | | | |
| Benchmark Plus | FFR/Southern States | * | * | * | * | x ³ | * | * | * | * | x | * |
| Checkmate | Seed Res. of Oregon/Pickseed | * | * | * | | | | * | * | * | | |
| Elise | PureSeed | x | x | * | | | | x | x | * | | |
| Harvestar | Columbia Seeds | | | | x | x | | | | | x | x |
| Persist | Smith Seed Services | * | * | * | x | x | * | * | * | * | x | * |
| Potomac | Public | * | * | * | x | x | * | * | * | * | * | * |
| Prairie | Turner Seed Company | * | * | * | * | * | * | * | * | * | * | * |
| Prodigy | Caudill Seed | * | * | * | x | x | | * | * | * | x | * |
| Profit | Ampac Seed Company | * | * | x | x | x | * | * | * | * | x | * |
| SS-0708OGDT | FFR/Southern States | | | | | | x | | | | | |
| Tekapo | Ampac Seed Company | x | x | x | x | x | x | x | x | x | x | x |
| Experimental Varieties | | | | | | | | | | | | |
| B-14.0515 | Blue Moon Farms | | | | | | x | | | | | |
| B-14.0519 | Blue Moon Farms | | | | | | * | | | | | |
| B-14.0521 | Blue Moon Farms | | | | | | * | | | | | |
| BAR DGLF47 | Barenbrug | | | | | | x | | | | | |
| GO-BXCR | Grassland Oregon | | | | | | x | | | | | |
| GO-MOSO | Grassland Oregon | | | | | | x | | | | | |
| GO-OG131E | Grassland Oregon | | | | | | x | | | | | |
| OG 0201 | BrettYoung Seed | * | * | * | | | | * | * | * | | |
| OG62 | DLF International | | | | x | x | | | | | * | * |
| OG61M2 | DLF International | | | | x | x | | | | | x | * |
| PPG OG 101 | Mountain View Seeds | * | * | * | | | | * | * | * | | |
| PPG-OG 102 | Mountain View Seeds | * | * | x | | | | * | * | x | | |
| PPG-OG 103 | Mountain View Seeds | * | * | x | | | | * | * | * | | |
| PPG-OG-106 | Mountain View Seeds | * | * | * | | | | * | x | * | | |

¹ Establishment year.

² Harvest year.

³ "x" in the box indicates the variety was in the test but yielded significantly less than the top ranked variety in the test. Open box indicates the variety was not in the test.

*Not significantly different from the highest yielding variety in the test.

Table 11. Summary of Kentucky orchardgrass yield trials 2002-2015 (yield shown as a percentage of the mean of the commercial varieties in the trial).

| Variety | Proprietor | Lexington | | | | | | | | Princeton | | | | | | | | Quicksand | | | | | Mean ³ (#trials) |
|-------------------|---------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|--|--|--|--------------------------------|
| | | 2003 ^{1,2} 3-yr ⁴ | 2006 4-yr | 2007 3-yr | 2009 3-yr | 2011 3-yr | 2012 3-yr | 2013 2-yr | 2002 3-yr | 2004 3-yr | 2006 3-yr | 2008 3-yr | 2010 3-yr | 2012 3-yr | 2003 3-yr | 2005 4-yr | 2010 3-yr | 2013 2-yr | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Abertop | Pennington | | | | | | | 71 | | | | | | | | | | | | | | | |
| Ambassador | DLF International Seeds | | | | | | | 95 | | | | | | | | | | | | | | | |
| Ambrosia | American Grass Seed Prod. | | | | | | | 113 | | 90 | | | | | | | | | | | | | |
| Benchmark | FFR/Sou. St. | | | | | | | 107 | 103 | 107 | 104 | 102 | 107 | 107 | 102 | 94 | 103 | 103 | 103(15) | | | | |
| Benchmark Plus | FFR/Sou. St. | | 100 | 108 | 105 | 106 | 97 | | | | | | | | | | | | 100(2) | | | | |
| Bounty | Allied Seed | | 101 | | | | | | | | | | | | 98 | | | | 101(2) | | | | |
| Century | Seed Research of Oregon | | 98 | | | | 117 | | | | | | 106 | | 104 | | | | 108(3) | | | | |
| Checkmate | Seed Research of Oregon | | | 102 | | | | | | | | | | | | | | | | | | | |
| Christoss | Proseeds Marketing | | | 92 | | | | | | | | | | | | | | | | | | | |
| Command | Seed Research of Oregon | | | | | | | 87 | | | | | | | | | | | | | | | |
| Crown | Donley Seed | | | | 97 | | | 101 | | | 105 | | | | | | | | | | | | |
| Crown Royale Plus | Donley Seed | | | | | | | 108 | | | | | | 97 | | | | | 101(3) | | | | |
| Elise | Rose-AgriSeed | | | | | | 86 | | | | 98 | | | | | | | | 103(2) | | | | |
| Endurance | DLF International Seeds | | | | | | | | | 104 | | | | | | | | | 94(3) | | | | |
| Extend | Allied Seed | | | | | 107 | | | | | | 105 | | | | 108 | | | | | | | |
| Hallmark | James VanLeeuwen | 102 | | | | | | 103 | 93 | 98 | | | | 96 | | | | | 105(4) | | | | |
| Harvestar | Columbia Seeds | | 91 | 97 | | | | | | | 106 | | | | 100 | | 98 | | 100(4) | | | | |
| Haymaster | FFR/Sou. St. | | 94 | | 102 | | | | | | | | | | 97 | | | | 99(6) | | | | |
| Haymate | FFR/Sou. St. | | | | | | | 106 | | | | | | 103 | | | | | 98(3) | | | | |
| Icon | Seed Research of Oregon | | 105 | | | | | | | | | | | | 98 | | | | 105(2) | | | | |
| Intensiv | Barenbrug | 102 | | | | | | | | | | | | | | | | | 102(2) | | | | |
| Lazuly | Proseeds Marketing | | | | | | | | | | 97 | | | | | | | | | | | | |
| LG-31 | DLF International Seeds | | | | | | | 92 | | | | | | | | | | | | | | | |
| Megabite | Turf-Seed | | | | | | | | | | 106 | | | | | | | | | | | | |
| Niva | DLF International Seeds | | | | | | | 81 | | | | | | | | | | | | | | | |
| Paiute | DLF International Seeds | | 108 | | | | | | | | | | | | | | | | | | | | |
| Persist | Smith Seed | 123 | 105 | 106 | 107 | 112 | 106 | 101 | | | | 105 | 102 | 108 | 101 | 102 | 98 | | 106(14) | | | | |
| Potomac | Public | | | | 103 | 96 | 97 | 102 | 98 | | | 108 | 101 | 98 | | 94 | 115 | | 100(10) | | | | |
| Prairie | Turner Seed | | 107 | 101 | 109 | 106 | 113 | 125 | 104 | | | 100 | 104 | 105 | 107 | 120 | 104 | | 107(15) | | | | |
| Prodigy | Caudill Seed | | | | 101 | | 99 | 99 | | | | 103 | 101 | | | | 94 | | 100(6) | | | | |
| Proft | Ampac Seed | | | 107 | 96 | 98 | 103 | 94 | | | | 103 | 102 | 102 | | 115 | 100 | | 102(10) | | | | |
| RAD-LCF 25 | Radix Research | | | | | | | | | | | | 99 | | | 102 | | | 101(2) | | | | |
| Shawnee | Rose-AgriSeed | | | | | | | | | | | 86 | | | | | | | | | | | |
| Shiloh II | Proseeds Marketing | | | | | | | | | | | | | | | | | | | | | | |
| Takena | Smith Seed | | | | | | | 100 | | | | | | | | | | | | | | | |
| Tekena II | Smith Seed | 110 | 102 | | | | | | | | | | | | | | | | | | | | |
| Tekapo | Ampac Seed | | 91 | 81 | 82 | 78 | 82 | 81 | | | | 98 | 86 | 92 | 82 | 105 | 81 | 88 | 106(5) | | | | |
| Tucker | Oregro Seeds | | | | 96 | | | | | | | 96 | 102 | 96 | | 85 | | | 87(14) | | | | |
| Udder | Improved Forages | | | | | | | 102 | | | | | | | | | | | 95(5) | | | | |
| Vaillant | Proseeds Marketing | | | | | | | | | | | | | | | | | | 103(5) | | | | |
| Vision | Cropmark Seeds | 63 | | | | | | | | | | | | 67 | | | | | | | | | |

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 2012 was harvested three years, so the final report would be "2015 Orchardgrass Report" archived in the KY Forage website at www.uky.edu/Ag/Forage.

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

⁴ Number of years of data.



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