
# The 1995 Alfalfa Report

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## Introduction

Alfalfa *(Medicago sativa)* is historically 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. In 1994, 1.11 million tons of alfalfa hay were produced in Kentucky in addition to that produced for haylage, silage, and grazing. At $108 per ton, the value of this alfalfa hay alone to Kentucky farmers would be almost $120 million. Choosing a good alfalfa variety is a key step in establishing a stand of alfalfa because it can make the difference between growing 3 tons of hay per acre per year or 7 tons as well as thicker, more persistent stands.

This report provides current yield data on alfalfa varieties inincluded in yield trials in Kentucky as well as guidelines for selecting alfalfa varieties.

## Considerations in Selecting an Alfalfa Variety

**Local Adaptation and Persistence.** High yields in variety tests over a range of years and locations within the region are the best indication that a variety is locally adapted and persistent. Several varieties are adapted for use in Kentucky as determined from the test results in this report.

**Winter Hardiness.** Each variety has a fall dormancy rating ranging from 1 (very dormant) to 9 (non-dormant). Varieties with lower dormancy ratings start growing later in the spring and stop growing sooner in the fall. This growth habit can, but does not necessarily, reduce annual yields compared to less dormant varieties. Generally alfalfa should have a fall dormancy rating of 2-5 to perform well in Kentucky and have good winter survival. Ratings of 6 and above are not winter-hardy under Kentucky conditions.

**Disease and Pest Resistance.** In Kentucky, producers should use varieties that have at least an "MR" (moderate resistance) rating to four major diseases of alfalfa: Phytophthora root rot (PRR), anthracnose (An), bacterial wilt (Bw), and fusarium wilt (Fw). In addition, Kentucky research indicates that resistance to Aphanomyces root rot (APH) may also be beneficial, particularly in soils also infested with Phytophthora root rot. Even higher levels of resistance are recommended on farms where the diseases have been diagnosed.

Phytophthora root rot is a fungal disease associated with poorly drained soils or excessive rainfall. This disease causes yellowish to reddish-brown areas on roots and crowns that eventually become black and rotten. The topgrowth of infected plants appears stunted and yellow.

Anthracnose, also caused by a fungus, attacks the stems of alfalfa, preventing water flow to the rest of the shoot and causing sudden wilting. These wilted shoots have a characteristic "shepherd's crook" appearance. Anthracnose can also cause a bluish-black crown rot.

Bacterial wilt and fusarium wilt are infections of the water-conducting tissues of alfalfa roots that do not cause any noticeable root rot. These diseases prevent water flow to leaves resulting in wilting of shoots and the eventual death of infected plants. Roots infected with bacterial wilt often have a yellowish-brown discoloration of the inner woody cylinder of the taproot. Fusarium infection can be recognized by brown to red streaks in the inner woody cylinder of the taproot.

Aphanomyces root rot is another fungal disease associated with poorly drained soils or excessive rainfall. Affected seedlings will be stunted but remain upright, unlike symptoms of damping off. In established plants, root symptoms are not as well defined as those for Phytophthora root rot but brown lesions on the taproot indicate where lateral roots were destroyed. This disease can be associated with Phytophthora root rot and, together, they may form a root disease complex. Aphanomyces root rot is known to affect new seedings on rare occasions in Kentucky but it is still unclear how it affects established alfalfa.

Finally, there is no varietal resistance to Sclerotinia crown and stem rot at this time. And, although confusing claims exist, no varieties have true genetic resistance to the alfalfa weevil and potato leafhopper. Claims of resistance to potato leafhopper is actually resistance to yellowing, commonly called "hopper burn". Incorporating resistance to these and other pests of alfalfa is the goal of alfalfa breeders nationwide.

**Seed Quality.** Buy either certified or Plant Variety Protected (PVP) seed, which will guarantee that the genetics and performance you are paying for are in the bag. Look for the blue tag, which must be attached to all bags of certified seed or look for Plant Variety Protection labelling, which is the proprietor's guarantee. Other information on the label will include the test date, which must be within the previous nine months, and the level of germination and other crop and weed seed. Order seed well in advance of planting time to assure that it will be available when needed.

Description of the Tests

Alfalfa variety tests were established at Lexington (1991), Bowling Green (1992), Princeton (1993), and Mayslick (1994) as part of **The Forage Variety Testing Program**. The soils at all locations are well-suited to alfalfa in that they are

well-drained silt loams (Maury, Pembroke, Crider, and Lowell at Lexington, Bowling Green, Princeton and Mayslick, respectively). The Bowling Green tests are on soils that are naturally infested with both Phytophthora and Aphanomyces root rot pathogens, the Mayslick soil is infested with only Aphanomyces, and the Lexington and Princeton tests are on soils that are not infested with detectable levels of either pathogen. Plots were 4 x 15 feet in a randomized complete block design with four replications. In each test, 20 pounds of seed per acre were planted into a prepared seedbed using a disk drill. Plots were harvested with a sickle-type forage plot harvester. First cuttings in the seedling year are delayed to allow the alfalfa to completely reach maturity as indicated by full bloom, which generally occurs about 80 days after seeding. Otherwise, harvests were taken when the alfalfa was in the bud to early-flower stage. Fresh weights were measured in the field and converted to dry matter production using long-term averages for alfalfa dry matter percent. Management of all tests for establishment, fertility, pest control, and harvest management was according to University of Kentucky Cooperative Extension Service recommendations.

## Results and Discussion

Weather data for Mayslick, Lexington, Bowling Green, and Princeton are presented in Table 1. The Mayslick weather data comes from the Ripley Research Farm 15 miles to the north at Ripley, Ohio. For the most part temperatures across the state were warmer in the winter and early spring as well as in the summer months of July and August. Lexington was cooler in May and Mayslick was cooler in February and September, but warmer in June. Princeton was warmer in October and Bowling Green was warmer throughout the year. Generally speaking, surplusses in precipitation were measured across the state in January, while general deficiencies were measured in February, March, and April. May was a wet month across the state. Lexington and Princeton continued to have surplusses in June while the rest of the state started drying up. It remained dry until August when near to slightly above normal rainfall occurred everywhere except Bowling Green. September was a dry month everywhere but October precipitation was well above normal at all locations where data was available. Precipation was unevenly distributed across the season and within months at all locations as well. In every month except June, at every location, with or without a surplus, there was at least one rainfall event of greater than 1 inch. Several months received all of their precipitation in a matter of 2-3 days. In August, Mayslick received 3.99 inches and Princeton received 2.97 inches, in one day. Precipitation was unevenly distributed across the state such that while Lexington and Bowling Green had surplusses of 3.53 inches and 2.52 inches, respectively, Mayslick and Princeton had deficiencies for the season of 1.79 and 1.66 inches, respectively. Although, keep in mind that the Mayslick data does not include October, which was a surplus month at all the other locations.

Yield data (on an oven-dry basis) for all tests are reported in Tables 2-5. Varieties are listed in order from highest to lowest total production (for the life of the test). Experimental varieties are listed separately at the bottom of the tables and are not

available commercially. Yields are given by cutting for 1995 and by year for each year of production. Percent stand ratings are included for the 1991 seeding at Lexington. Statistical analyses were performed on all alfalfa yield data (including experimentals) to determine if the apparent differences are truly due to variety or just due to chance. The variety with the highest numerical value in each column is marked with two asterisks (**) and those varieties not significantly different from that variety are marked with one asterisk (*). To determine if two varieties are truly different, compare the difference between the two varieties 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 a given location. 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 CV's and larger LSD's.

With the exception of Bowling Green, alfalfa yields across the state averaged two tons/acre greater in 1995 than in 1994. The first three cuttings were very good at Mayslick (Table 2), Lexington (Table 3), and Princeton (Table 5). However, the Bowling Green test (Table 4) did not yield well in those cuttings, leading to a 2 ton/acre yield differential between it and the other tests.

Table 6 summarizes information about proprietors, distributors, fall dormancy, disease resistance, and yield performance across years and locations for all the varieties currently included in the tests discussed in this report. Varieties are listed in alphabetical order with the experimental varieties at the bottom. Remember that experimental varieties are not available for farm use, while commercial varieties can be purchased through dealerships. In table 6, shaded areas indicate that the variety was not in that particular test (labelled at the top of the column) while clear blocks mean that the variety was in the test. A double Asterisk (**) indicates that the variety was the highest yielding variety in the test for that year. A single asterisk (*) means that the variety was not significantly different from the highest yielding variety based on the 5% LSD. It is best to choose a variety that has performed well over several years and locations as indicated by the asterisks. Make sure seed of the variety is properly labelled and will be available when needed.

## Summary

Consistent production of high yields of alfalfa is the result of good variety selection along with the implementation of good management techniques. Soil fertility should be maintained at recommended levels based on soil tests, and pests such as weeds, alfalfa weevil, and potato leafhopper should be controlled using the appropriate cultural and/or chemical methods. Harvesting established stands at the appropriate stage of maturity will produce four to five cuttings annually in Kentucky before mid-September. For further information about alfalfa management, refer to the other College of Agriculture publications listed in Table 7. These publications are available at the local county extension office.

**TABLE 1. TEMPERATURE AND RAINFALL IN MAYSLICK, LEXINGTON, BOWLING GREEN, PRINCETON DURING 1993.**

| | MAYSLICK | | | | LEXINGTON | | | | BOWLING GREEN | | | | PRINCETON | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TEMPERATURE | | RAINFALL | | TEMPERATURE | | RAINFALL | | TEMPERATURE | | RAINFALL | | TEMPERATURE | | RAINFALL | |
| MONTH | F | DEP. | INCHES | DEP. | F | DEP. | INCHES | DEP. | F | DEP. | INCHES | DEP. | F | DEP. | INCHES | DEP. |
| JAN | 32 | +3 | 4.88 | +2.29 | 34 | +3 | 3.75 | +0.89 | 37 | +5 | 4.98 | +1.16 | 37 | +3 | 4.12 | +0.32 |
| FEB | 31 | -2 | 1.86 | -0.80 | 34 | -1 | 1.65 | -1.56 | 38 | +2 | 2.82 | -1.31 | 40 | +1 | 4.21 | -0.22 |
| MAR | 45 | +2 | 2.56 | -1.67 | 48 | +4 | 2.85 | -1.55 | 51 | +5 | 3.64 | -1.46 | 53 | +5 | 2.47 | -2.47 |
| APR | 53 | -1 | 4.01 | -0.03 | 56 | +1 | 3.39 | -0.49 | 60 | +3 | 3.99 | -0.33 | 61 | +2 | 2.84 | -1.96 |
| MAY | 62 | -1 | 8.37 | +3.63 | 63 | -3 | 9.75 | +5.28 | 68 | +1 | 10.54 | +5.60 | 67 | -1 | 7.70 | +2.74 |
| JUN | 73 | +2 | 2.67 | -1.19 | 72 | 0 | 4.75 | +1.09 | 75 | +1 | 3.46 | -0.71 | 74 | -1 | 5.21 | +1.36 |
| JUL | 76 | +2 | 2.27 | -2.50 | 72 | +2 | 3.32 | -1.68 | 80 | +4 | 2.30 | -2.44 | 79 | +1 | 4.14 | -0.15 |
| AUG | 79 | +6 | 4.08 | +0.03 | 79 | +6 | 4.61 | +0.68 | 82 | +8 | 2.87 | -0.64 | 82 | +6 | 4.14 | +0.13 |
| SEP | 64 | -3 | 1.67 | -1.55 | 66 | 0 | 2.68 | -0.55 | 69 | +2 | 2.75 | -0.97 | 69 | -1 | 1.91 | -1.43 |
| OCT | - | - | - | - | 56 | 0 | 3.99 | +1.42 | 59 | +1 | 2.64 | +3.62 | 62 | +2 | 5.05 | +2.00 |

DATA FOR MAYSLICK COMES FROM THE RIPLEY RESEARCH FARM AT RIPLEY, OHIO, 15 MILES NORTH.
TEMPERATURES ARE IN DEGREES FAHRENHEIT.
DEP. IS DEPARTURE FROM THE LONG-TERM AVERAGE FOR THAT LOCATION.

**TABLE 2. DRY MATTER YIELDS (TONS/ACRE) OF ALFALFA VARIETIES SOWN 19 APRIL 1994, ON THE CHARLES BOYD FARM AT MAYSLICK, KENTUCKY.**

| | 1994 | 1995 HARVESTS | | | | | | 1995 | 2-YR |
|---|---|---|---|---|---|---|---|---|---|
| VARIETY | TOTAL | MAY05 | JUN07 | JUL05 | AUG08 | SEP11 | NOV03 | TOTAL | TOTAL |
| **COMMERCIAL VARIETIES - AVAILABLE FOR FARM USE** | | | | | | | | | |
| REWARD | 2.42 | 2.79* | 1.22** | 0.81* | 0.71* | 0.86* | 0.58** | 6.96** | 9.37* |
| LEGACY | 2.96** | 2.65* | 1.01* | 0.71 | 0.65* | 0.86* | 0.52* | 6.39* | 9.35* |
| STERLING | 2.86* | 2.52 | 1.14* | 0.81* | 0.64* | 0.83* | 0.47* | 6.40* | 9.26* |
| RESISTAR | 2.73* | 2.67* | 1.17* | 0.71 | 0.61* | 0.74* | 0.41* | 6.31* | 9.04* |
| GARST630 | 2.58* | 2.72* | 0.91 | 0.73 | 0.64* | 0.88* | 0.54* | 6.42* | 9.00* |
| RUSHMORE | 2.39 | 2.41 | 1.15* | 0.84* | 0.70* | 0.85* | 0.52* | 6.48* | 8.86* |
| APOLLO | 2.48* | 2.47 | 1.01* | 0.75 | 0.73** | 0.89* | 0.52* | 6.36* | 8.84* |
| CRYSTAL | 2.72* | 2.49 | 0.93 | 0.77* | 0.60 | 0.77* | 0.44* | 6.00 | 8.72* |
| 5454 | 2.30 | 2.60* | 1.06* | 0.78* | 0.67* | 0.80* | 0.45* | 6.35* | 8.65* |
| WL323 | 2.37 | 2.60* | 1.04* | 0.73 | 0.62* | 0.80* | 0.44* | 6.23* | 8.60* |
| ARC | 2.38 | 2.65* | 0.99* | 0.62 | 0.57 | 0.75* | 0.48* | 6.07 | 8.45* |
| DK133 | 2.26 | 2.60* | 1.09* | 0.71 | 0.53 | 0.74* | 0.52* | 6.18* | 8.44* |
| MAGNUM-IV | 2.31 | 2.68* | 0.90 | 0.74 | 0.64* | 0.72 | 0.42* | 6.09 | 8.41* |
| SARANAC-AR | 2.37 | 2.42 | 1.02* | 0.80* | 0.62* | 0.78* | 0.38 | 6.02 | 8.39* |
| MORE | 2.21 | 2.62* | 1.00* | 0.76* | 0.61* | 0.75* | 0.37 | 6.12 | 8.33 |
| PASTURE-PLUS | 2.03 | 2.69* | 0.96 | 0.78* | 0.60 | 0.73* | 0.38 | 6.15* | 8.17 |
| MULTISTAR | 2.15 | 2.53 | 1.00* | 0.69 | 0.56 | 0.70 | 0.33 | 5.81 | 7.96 |
| **EXPERIMENTAL VARIETIES - NOT AVAILABLE FOR FARM USE** | | | | | | | | | |
| PGI9047 | 2.79* | 2.81** | 1.04* | 0.79* | 0.70* | 0.93** | 0.56* | 6.82* | 9.61** |
| ABI9236 | 2.25 | 2.65* | 1.06* | 0.76* | 0.67* | 0.79* | 0.33 | 6.26* | 8.51* |
| ABI923AA | 2.19 | 2.41 | 1.06* | 0.86** | 0.67* | 0.74* | 0.31 | 6.05 | 8.25 |
| ABI9237 | 1.87 | 2.61* | 1.05* | 0.82* | 0.61* | 0.73* | 0.37 | 6.20* | 8.06 |
| A9008 | 2.37 | 2.47 | 0.89 | 0.75 | 0.56 | 0.64 | 0.32 | 5.62 | 7.99 |
| A9109 | 2.01 | 2.38 | 0.80 | 0.64 | 0.55 | 0.68 | 0.34 | 5.40 | 7.41 |
| MEAN | 2.39 | 2.58 | 1.02 | 0.75 | 0.63 | 0.78 | 0.43 | 6.20 | 8.59 |
| CV, % | 15.01 | 7.15 | 17.75 | 8.52 | 14.17 | 18.75 | 31.11 | 9.56 | 10.15 |
| LSD, 0.05 | 0.51 | 0.26 | 0.26 | 0.09 | 0.13 | 0.21 | 0.19 | 0.84 | 1.23 |

1994 TOTAL INCLUDES 3 HARVESTS DATED AUG02, SEP06, AND OCT26.

**HIGHEST NUMERICAL VALUE IN THE COLUMN.

*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST NUMERICAL VALUE IN THE COLUMN BASED ON THE 5% LSD.

**TABLE 3. DRY MATTER YIELDS (TONS/ACRE) AND PERCENT STAND RATINGS OF ALFALFA VARIETIES SOWN 11 APRIL 1991, AT LEXINGTON, KENTUCKY.**

| | % STAND | 1991 | 1992 | 1993 | 1994 | 1995 HARVESTS | | | | | | 1995 | 5-YR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIETY | OCT30 95 | TOTAL | TOTAL | TOTAL | TOTAL | MAY10 | JUN08 | JUL07 | AUG07 | SEP11 | OCT30 | TOTAL | TOTAL |
| **COMMERCIAL VARIETIES - AVAILABLE FOR FARM USE** | | | | | | | | | | | | | |
| ICI645 | 93.75** | 2.22 | 5.98 | 6.71 | 5.88** | 2.07** | 1.43* | 1.30* | 0.99* | 0.88 | 0.55* | 7.22** | 28.02* |
| APOLLO-SUPREME | 88.75* | 2.76* | 5.67 | 6.64 | 5.55* | 1.94* | 1.25 | 1.27* | 0.92 | 0.92 | 0.56* | 6.86* | 27.47* |
| AGRIMATE | 91.25* | 2.77** | 5.11 | 6.93* | 5.60* | 1.91 | 1.22 | 1.23* | 1.04** | 1.01* | 0.55* | 6.95* | 27.36* |
| DAWN | 87.50* | 2.47* | 5.39 | 7.42** | 5.27 | 1.85 | 1.19 | 1.14 | 1.03* | 1.02* | 0.54* | 6.77 | 27.32* |
| MULTISTAR | 77.50 | 2.52* | 6.05 | 6.80* | 4.89 | 1.91 | 1.09 | 1.01 | 1.00* | 1.11** | 0.56* | 6.68 | 26.94* |
| VENTURE | 92.50* | 2.49* | 5.47 | 6.54 | 5.51* | 1.86 | 1.25 | 1.37** | 0.94 | 0.82 | 0.58* | 6.83* | 26.83* |
| AGGRESSOR | 91.25* | 2.57* | 5.39 | 6.79* | 5.17 | 2.05* | 1.27 | 1.17 | 0.99* | 0.90 | 0.53 | 6.91* | 26.83* |
| LEGACY | 86.25 | 2.62* | 5.68 | 6.50 | 4.76 | 1.88 | 1.30 | 1.14 | 0.84 | 0.87 | 0.59** | 6.62 | 26.18 |
| CROWN-II | 78.75 | 2.37 | 5.87 | 6.39 | 4.91 | 1.94* | 1.14 | 1.07 | 0.97 | 0.97 | 0.50 | 6.60 | 26.13 |
| WL320 | 82.50 | 2.64* | 5.79 | 6.64 | 4.58 | 1.49 | 1.08 | 1.06 | 1.04** | 1.09* | 0.59** | 6.36 | 26.02 |
| DK-125 | 80.00 | 2.51* | 5.56 | 6.71 | 4.74 | 1.97* | 1.13 | 0.98 | 0.89 | 0.95 | 0.44 | 6.36 | 25.86 |
| WAMPR | 81.25 | 2.57* | 5.41 | 6.61 | 4.84 | 1.78 | 1.17 | 1.07 | 0.91 | 0.94 | 0.52 | 6.39 | 25.82 |
| 2833 | 67.50 | 2.68* | 6.70** | 5.99 | 4.45 | 1.77 | 0.96 | 0.88 | 0.87 | 1.05* | 0.40 | 5.92 | 25.76 |
| UN-72 | 81.25 | 2.68* | 5.81 | 6.51 | 4.61 | 1.76 | 0.84 | 1.03 | 0.85 | 0.91 | 0.54 | 5.94 | 25.55 |
| WL322HQ | 83.75 | 2.18 | 5.45 | 6.35 | 4.71 | 1.66 | 1.27 | 1.13 | 0.88 | 0.84 | 0.50 | 6.27 | 24.98 |
| LIBERTY | 72.50 | 2.70* | 4.95 | 6.17 | 4.86 | 1.75 | 0.92 | 0.81 | 0.76 | 0.98* | 0.45 | 5.68 | 24.36 |
| TERMINATOR | 80.00 | 2.23 | 5.22 | 6.54 | 4.47 | 1.68 | 0.79 | 0.97 | 0.90 | 0.95 | 0.46 | 5.74 | 24.21 |
| WL317 | 86.25 | 2.44 | 4.99 | 5.80 | 4.46 | 1.69 | 0.83 | 1.05 | 1.01* | 0.95 | 0.52 | 6.04 | 23.73 |
| SARANAC-AR | 68.75 | 2.28 | 4.78 | 5.92 | 4.63 | 1.67 | 1.03 | 0.88 | 0.74 | 0.92 | 0.39 | 5.64 | 23.24 |
| **EXPERIMENTAL VARIETIES - NOT AVAILABLE FOR FARM USE** | | | | | | | | | | | | | |
| ABI-9043 | 91.25* | 2.57* | 5.84 | 7.09* | 5.60* | 1.96* | 1.55** | 1.31* | 0.94 | 0.85 | 0.57* | 7.19* | 28.28** |
| AP-8843 | 86.25 | 2.64* | 5.73 | 6.86* | 5.40 | 1.90 | 1.29 | 1.25* | 0.99* | 0.98* | 0.57* | 6.98* | 27.61* |
| AS-G | 87.50* | 2.33 | 5.15 | 6.47 | 4.71 | 1.72 | 1.21 | 1.00 | 0.88 | 0.88 | 0.55* | 6.26 | 24.91 |
| AS-BD | 82.50 | 2.37 | 5.22 | 6.05 | 4.78 | 1.89 | 1.04 | 1.02 | 0.94 | 0.93 | 0.55* | 6.38 | 24.80 |
| MEAN | 83.42 | 2.50 | 5.53 | 6.54 | 4.97 | 1.83 | 1.14 | 1.09 | 0.93 | 0.94 | 0.52 | 6.46 | 26.01 |
| CV, % | 8.21 | 13.47 | 9.83 | 10.72 | 8.99 | 7.85 | 18.79 | 11.55 | 7.28 | 15.35 | 12.32 | 6.49 | 6.15 |
| LSD, 0.05 | 6.77 | 0.33 | 0.54 | 0.69 | 0.44 | 0.14 | 0.21 | 0.12 | 0.07 | 0.14 | 0.06 | 0.41 | 1.58 |

1991 TOTAL INCLUDES 4 HARVESTS DATED JUL10, AUG05, SEP09, AND OCT31.

1992 TOTAL INCLUDES 5 HARVESTS DATED MAY11, JUN15, JUL14, AUG13, AND SEP17.

1993 TOTAL INCLUDES 6 HARVESTS DATED MAY18, JUN07, JUL12, AUG09, SEP14, AND OCT27.

1994 TOTAL INCLUDES 6 HARVESTS DATED APR25, MAY25, JUN27, AUG01, SEP05, AND OCT25.

**HIGHEST NUMERICAL VALUE IN THE COLUMN.

*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST NUMERICAL VALUE IN THE COLUMN BASED ON THE 5% LSD.

**TABLE 4. DRY MATTER YIELDS (TONS/ACRE) OF ALFALFA VARIETIES SOWN 14 APRIL 1992, AT BOWLING GREEN, KENTUCKY.**

| | 1992 | 1993 | 1994 | 1995 HARVESTS | | | | | | 1995 | 4-YR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIETY | TOTAL | TOTAL | TOTAL | MAY02 | JUN05 | JUL05 | AUG09 | SEP13 | NOV01 | TOTAL | TOTAL |
| **COMMERCIAL VARIETIES - AVAILABLE FOR FARM USE** | | | | | | | | | | | |
| APOLLO-SUPREME | 4.80** | 5.56* | 3.27* | 0.63* | 0.92* | 1.05* | 1.11* | 0.56** | 0.36 | 4.62* | 18.25** |
| MAGNUM-III | 4.36* | 5.63* | 3.30* | 0.78** | 0.84* | 0.96* | 1.10* | 0.52* | 0.35 | 4.55* | 17.83* |
| 5373 | 4.24* | 5.44* | 3.16* | 0.52 | 0.87* | 0.96* | 1.22** | 0.50* | 0.32 | 4.39* | 17.22* |
| MULTISTAR | 4.39* | 5.56* | 3.00* | 0.60* | 0.75 | 0.76 | 1.17* | 0.48* | 0.38* | 4.14* | 17.09* |
| LEGACY | 4.47* | 5.95** | 2.54 | 0.48 | 0.77* | 0.90* | 1.13* | 0.54* | 0.27 | 4.08 | 17.04* |
| OVATION | 4.37* | 5.02 | 3.15* | 0.72* | 0.89* | 0.93* | 1.08* | 0.45 | 0.38* | 4.44* | 16.99* |
| ICI630 | 3.60 | 5.46* | 3.37* | 0.59* | 0.89* | 0.98* | 1.06 | 0.50* | 0.40* | 4.41* | 16.85* |
| DAWN | 3.83 | 5.27* | 3.20* | 0.71* | 0.92* | 1.00* | 1.00 | 0.50* | 0.40* | 4.52* | 16.81* |
| WEBFOOT-MPR | 4.06* | 5.40* | 3.04* | 0.53 | 0.77* | 0.87 | 1.18* | 0.53* | 0.34 | 4.22* | 16.72* |
| AGGRESSOR | 4.03* | 5.57* | 2.96* | 0.54* | 0.77* | 0.97* | 1.03 | 0.49* | 0.33 | 4.14* | 16.70* |
| 5454 | 3.39 | 5.64* | 3.39** | 0.60* | 0.82* | 0.80 | 1.10* | 0.53* | 0.34 | 4.19* | 16.61* |
| STINE-9227 | 3.87 | 4.62 | 3.27* | 0.75* | 0.97** | 1.09** | 1.04 | 0.46 | 0.44* | 4.74* | 16.51* |
| DOMINATOR | 3.83 | 4.60 | 3.24* | 0.72* | 0.97** | 1.09** | 1.08* | 0.42 | 0.47** | 4.75** | 16.43 |
| CROWN-II | 3.76 | 5.01 | 3.09* | 0.64* | 0.93* | 0.92* | 1.14* | 0.49* | 0.40* | 4.51* | 16.37 |
| ZENITH | 4.03* | 5.55* | 2.82 | 0.54* | 0.69 | 0.79 | 1.11* | 0.51* | 0.31 | 3.95 | 16.34 |
| DK133 | 4.12* | 5.08 | 2.89* | 0.52 | 0.77* | 0.88 | 0.99 | 0.44 | 0.38* | 3.98 | 16.06 |
| ASSET | 3.61 | 5.51* | 2.88* | 0.46 | 0.67 | 0.85 | 1.20* | 0.49* | 0.33 | 4.00 | 16.00 |
| CIMARRON-VR | 4.22* | 5.25* | 2.67 | 0.45 | 0.64 | 0.87 | 1.13* | 0.42 | 0.34 | 3.84 | 15.99 |
| SARANAC-AR | 4.33* | 4.67 | 2.81 | 0.61* | 0.78* | 0.88 | 1.06 | 0.43 | 0.34 | 4.09* | 15.90 |
| MULTIKING 1 | 4.30* | 4.88 | 2.76 | 0.60* | 0.68 | 0.85 | 1.02 | 0.43 | 0.38* | 3.95 | 15.90 |
| WL322HQ | 3.70 | 4.75 | 3.07* | 0.59* | 0.82* | 0.95* | 1.04 | 0.48* | 0.43* | 4.30* | 15.83 |
| 2852 | 4.15* | 5.18* | 2.65 | 0.51 | 0.63 | 0.77 | 1.06 | 0.47* | 0.34 | 3.79 | 15.77 |
| CF-EDGE | 3.78 | 4.98 | 2.98* | 0.48 | 0.75 | 0.77 | 1.02 | 0.39 | 0.36 | 3.77 | 15.50 |
| DART | 3.45 | 5.04 | 2.82 | 0.41 | 0.84* | 0.90* | 1.04 | 0.50* | 0.37* | 4.06 | 15.37 |
| RESISTAR | 3.75 | 4.71 | 2.83 | 0.55* | 0.73 | 0.77 | 1.03 | 0.47* | 0.35 | 3.90 | 15.19 |
| FORTRESS | 3.54 | 5.21* | 2.76 | 0.46 | 0.70 | 0.63 | 1.10* | 0.45 | 0.30 | 3.63 | 15.14 |
| TRIDENT | 3.51 | 4.74 | 2.55 | 0.35 | 0.59 | 0.70 | 1.10* | 0.47* | 0.27 | 3.47 | 14.27 |
| WAMPR | 3.48 | 5.14 | 2.31 | 0.32 | 0.52 | 0.67 | 1.03 | 0.47* | 0.29 | 3.30 | 14.23 |
| ARC | 3.55 | 4.04 | 2.36 | 0.35 | 0.55 | 0.70 | 0.99 | 0.43 | 0.29 | 3.30 | 13.25 |
| **EXPERIMENTAL VARIETIES - NOT AVAILABLE FOR FARM USE** | | | | | | | | | | | |
| A9008 | 3.60 | 5.15 | 2.72 | 0.58* | 0.83* | 0.88 | 1.14* | 0.45 | 0.36 | 4.25* | 15.72 |
| MEAN | 3.94 | 5.15 | 2.93 | 0.55 | 0.77 | 0.87 | 1.08 | 0.48 | 0.35 | 4.11 | 16.13 |
| CV, % | 14.81 | 10.97 | 13.43 | 32.51 | 19.41 | 16.40 | 10.47 | 15.65 | 21.73 | 11.66 | 8.01 |
| LSD, 0.05 | 0.82 | 0.79 | 0.55 | 0.25 | 0.21 | 0.20 | 0.16 | 0.10 | 0.11 | 0.67 | 1.81 |

1992 HARVEST INCLUDES 3 HARVESTS DATED JUL15, AUG10, AND SEP11.

1993 TOTAL INCLUDES 5 HARVESTS DATED MAY12, JUN09, JUL15, AUG10, AND SEP11.

1994 TOTAL INCLUDES 5 HARVESTS DATED APR26, MAY26, JUN29, SEP07, AND OCT26.

**HIGHEST NUMERICAL VALUE IN THE COLUMN.

*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST NUMERICAL VALUE IN THE COLUMN BASED ON THE 5% LSD.

**TABLE 5. DRY MATTER YIELDS (TONS/ACRE) OF ALFALFA VARIETIES SOWN 23 APRIL 1993, AT PRINCETON, KENTUCKY.**

| | 1993 | 1994 | 1995 HARVESTS | | | | | | 1995 | 3-YR |
|---|---|---|---|---|---|---|---|---|---|---|
| VARIETY | TOTAL | TOTAL | MAY03 | JUN06 | JUL06 | AUG10 | SEP13 | NOV02 | TOTAL | TOTAL |
| **COMMERCIAL VARIETIES - AVAILABLE FOR FARM USE** | | | | | | | | | | |
| CRYSTAL | 1.29* | 3.90* | 1.37* | 1.57** | 1.88** | 1.09** | 0.52* | 0.46* | 6.89** | 12.08* |
| ICI631 | 1.23* | 3.97* | 1.45* | 1.54* | 1.85* | 1.08* | 0.43 | 0.41 | 6.76* | 11.96* |
| APOLLO-SUPREME | 1.36* | 3.79* | 1.39* | 1.36 | 1.81* | 1.06* | 0.51* | 0.43 | 6.57* | 11.72* |
| 5454 | 1.11* | 4.09** | 1.44* | 1.38* | 1.72* | 0.97 | 0.49* | 0.41 | 6.42* | 11.61* |
| FORTRESS | 1.35* | 3.94* | 1.39* | 1.25 | 1.65 | 1.06* | 0.50* | 0.42 | 6.28 | 11.57* |
| MULTIKING-1 | 1.43* | 4.06* | 1.30 | 1.32 | 1.61 | 0.98* | 0.46* | 0.38 | 6.05 | 11.54* |
| 2852 | 1.12* | 3.86* | 1.38* | 1.36 | 1.60 | 1.03* | 0.46* | 0.38 | 6.21 | 11.19* |
| ICI645 | 1.12* | 3.63* | 1.42* | 1.50* | 1.72* | 1.02* | 0.41 | 0.33 | 6.40* | 11.14* |
| WAMPR | 1.07* | 3.69* | 1.35* | 1.42* | 1.69 | 0.99* | 0.43 | 0.47* | 6.36* | 11.12* |
| 5373 | 1.08* | 3.54* | 1.47** | 1.39* | 1.69 | 1.08* | 0.41 | 0.39 | 6.44* | 11.06* |
| ZENITH | 1.48* | 3.54* | 1.36* | 1.21 | 1.59 | 1.00* | 0.42 | 0.43 | 6.02 | 11.04* |
| LEGACY | 1.28* | 3.71* | 1.38* | 1.28 | 1.56 | 0.95 | 0.40 | 0.43 | 5.98 | 10.97* |
| ARCHER | 1.34* | 3.47* | 1.23 | 1.12 | 1.71 | 1.02* | 0.50* | 0.51* | 6.10 | 10.91* |
| WL323 | 1.09* | 3.83* | 1.40* | 1.22 | 1.59 | 0.99* | 0.41 | 0.36 | 5.97 | 10.89* |
| DAWN | 1.09* | 3.52* | 1.40* | 1.33 | 1.67 | 0.98* | 0.43 | 0.37 | 6.18 | 10.79 |
| DK-133 | 1.00 | 3.43* | 1.45* | 1.41* | 1.68 | 1.00* | 0.40 | 0.41 | 6.34* | 10.77 |
| MULTISTAR | 1.08* | 3.65* | 1.43* | 1.28 | 1.62 | 0.92 | 0.40 | 0.36 | 6.02 | 10.75 |
| AGGRESSOR | 1.16* | 3.40 | 1.30 | 1.29 | 1.75* | 0.98* | 0.43 | 0.42 | 6.17 | 10.74 |
| DOMINATOR | 1.09* | 3.51* | 1.31 | 1.37* | 1.72* | 1.00* | 0.41 | 0.32 | 6.12 | 10.72 |
| DART | 1.09* | 3.64* | 1.37* | 1.22 | 1.62 | 0.93 | 0.40 | 0.36 | 5.90 | 10.63 |
| RESISTAR | 1.02 | 3.33 | 1.42* | 1.42* | 1.61 | 0.97 | 0.36 | 0.35 | 6.14 | 10.49 |
| SARANAC-AR | 1.23* | 3.69* | 1.32 | 1.21 | 1.36 | 0.94 | 0.38 | 0.23 | 5.45 | 10.38 |
| ARC | 1.20* | 3.42 | 1.31 | 1.40* | 1.46 | 0.84 | 0.40 | 0.32 | 5.74 | 10.35 |
| **EXPERIMENTAL VARIETIES - NOT AVAILABLE FOR FARM USE** | | | | | | | | | | |
| AS-BG | 1.49** | 4.05* | 1.34* | 1.46* | 1.80* | 1.05* | 0.57** | 0.58** | 6.80* | 12.33** |
| GA-AG-MP | 1.40* | 3.73* | 1.29 | 1.33 | 1.65 | 0.94 | 0.47* | 0.35 | 6.02 | 11.15* |
| A9109 | 1.18* | 3.54* | 1.42* | 1.23 | 1.63 | 0.97 | 0.44 | 0.32 | 6.01 | 10.73 |
| GA-AG-MP1 | 1.14* | 3.17 | 1.32 | 1.31 | 1.61 | 0.94 | 0.45 | 0.23 | 5.86 | 10.17 |
| GA-AG-MPG | 1.03 | 3.23 | 1.23 | 1.14 | 1.57 | 0.83 | 0.38 | 0.20 | 5.36 | 9.61 |
| MEAN | 1.20 | 3.65 | 1.37 | 1.33 | 1.66 | 0.99 | 0.44 | 0.38 | 6.16 | 11.02 |
| CV, % | 25.86 | 13.12 | 7.32 | 11.34 | 7.20 | 8.93 | 18.87 | 24.12 | 6.74 | 9.48 |
| LSD, 0.05 | 0.44 | 0.67 | 0.14 | 0.21 | 0.17 | 0.12 | 0.12 | 0.13 | 0.58 | 1.47 |

1993 TOTAL INCLUDES 2 HARVESTS DATED JUL15 AND OCT26.

1994 TOTAL INCLUDES 6 HARVESTS DATED MAY02, JUN01, JUL03, AUG03, SEP07, AND OCT27.

**HIGHEST NUMERICAL VALUE IN THE COLUMN.

*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST NUMERICAL VALUE IN THE COLUMN BASED ON THE 5% LSD.

**Table 6. Characterization and performance across years and locations of alfalfa varieties**

1995 Kentucky Alfalfa Variety Tests

J.C. Henning, L.M. Lauriault, L.G. Brown, G.D. Lacefield
P.C. Vincelli, and J.C. Parr
-The University of Kentucky and Western Kentucky University-Cooperating

| | | Variety Characteristics[1] | | | | | | Mayslick[2] | | Lexington | | | | | Bowling Green[3] | | | | Princeton | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Disease Resistance[4] | | | | | 1994[5] | | 1991 | | | | | 1992 | | | | 1993 | | |
| Variety | Proprietor/KY Distributor | FD[6] | Bw | Fw | An | PRR | APH | 94[7] | 95 | 91 | 92 | 93 | 94 | 95 | 92 | 93 | 94 | 95 | 93 | 94 | 95 |
| 2833 | Ciba-Geigy | 3 | HR | HR | HR | HR | - | | | * | ** | | | | | | | | | | |
| 2852 | Ciba-Geigy/Bardstown Mill, D. Arnold | 4 | HR | R | MR | R | - | | | | | | | | * | * | | | * | | |
| 329 | CAL-WEST/Scott Seed | 3 | HR | HR | HR | HR | R | | | | | | | | | | | | | | |
| 4J12 | Cargill Hybrids | 2 | HR | HR | HR | HR | - | * | | | | | | | | | | | | | |
| 5373 | Pioneer | 4 | HR | HR | HR | MR | LR | | | | | | | | * | * | | * | * | | * |
| 5454 | Pioneer | 4 | R | HR | HR | HR | LR | | * | | | | | | | * | | * | * | | * |
| A9008 | FFR/Southern States | 4 | HR | HR | R | HR | R | | | | | | | | | | | * | | | |
| Aggressor | America's Alfalfa/Scott Seed | 4 | HR | HR | R | R | MR | | | * | | * | | * | * | * | | * | * | | |
| Agri-Mate | Union Seed Co./ConAgra | 4 | R | R | HR | HR | - | | | ** | | * | | * | | | | | | | |
| Apollo | America's Alfalfa/Scott Seed | 4 | R | R | LR | R | - | * | * | | | | | | | | | | | | |
| Apollo Supreme | America's Alfalfa/Scott Seed | 4 | HR | HR | R | R | S | | | * | | * | | * | ** | * | | * | * | | * |
| Arc | Public | 4 | LR | MR | HR | - | - | | | | | | | | | | | | * | | |
| Archer | America's Alfalfa | 5 | HR | HR | R | R | - | | | | | | | | | | | | * | | |
| Asset | Vista/Allied Seed | 4 | HR | R | R | HR | MR | | | | | | | | | * | | | | | |
| Choice | FFR/Southern States | 4 | HR | R | R | HR | R | | | | | | | | | | | | | | |
| Cimarron VR | Great Plains/Green Seed | 5 | HR | HR | R | R | MR | | | | | | | | * | * | | * | | | |
| CF Edge | Caverndale Farms | 4 | R | R | HR | R | - | | | | | | | | | | | | | | |
| Crown II | Cargill Hybrids | 3 | HR | HR | HR | HR | - | | | * | | * | | | | | * | * | | | |
| Crystal | PGI/MBS/Caverndale Farms | 4 | HR | HR | R | HR | LR | * | | | | | | | | | | | * | * | ** |
| Dart | AgriPro | 3 | HR | HR | R | HR | S | | | | | | | | | | | | * | * | |
| Dawn | AgriPro | 3 | R | HR | R | R | MR | | | * | | ** | | | | * | * | * | * | * | |
| DK-125 | Dekalb Genetics Corporation | 3 | HR | R | HR | R | - | | | * | | * | | | | | | | | | |
| DK-127 | Dekalb Genetics Corporation | 3 | HR | HR | HR | HR | - | | | | | | | | | | | | | | |
| DK-133 | Dekalb Genetics Corporation | 4 | HR | HR | HR | HR | R | | * | | | | | | * | | * | | | | * |
| Dominator | ABI/AgriPro | 4 | HR | HR | HR | HR | R | | | | | | | | | | * | ** | * | * | |
| Excalibur II | Allied Seed | 4 | HR | HR | HR | HR | R | | | | | | | | | | | | | | |
| Fortress | Northrup King | 3 | R | R | R | HR | - | | | | | | | | | * | | | * | * | |
| ICI630 | ICI Seeds | 3 | HR | HR | MR | R | - | * | * | | | | | | | * | * | * | | | |
| ICI631 | ICI Seeds | 4 | HR | HR | R | HR | MR | | | | | | | | | | | | * | * | * |
| ICI645 | ICI Seeds | 4 | HR | R | HR | HR | MR | | | | * | * | ** | ** | | | | | * | * | * |
| Legacy | Genesis Group/Green Seed | 4 | R | R | R | R | R | ** | * | * | | * | | | * | ** | | | * | * | |
| Liberty | Public | 5 | S | - | R | S | - | | | * | | | | | | | | | | | |
| Magnum III | Dairyland | 4 | R | R | MR | R | LR | | | | | | | | * | * | * | * | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Magnum IV | Dairyland | 4 | HR | HR | R | HR | MR | | | | | | | | | | | | | | | |
| More | PGI/MBS/Caverndale Farms | 3 | HR | HR | HR | HR | - | | | | | | | | | | | | | | | |
| MultiKing I | Northrup King | 3 | HR | MR | HR | R | - | | | | | | | | * | | | | * | * | | |
| MultiQueen | CAL-WEST Seeds | 4 | HR | HR | HR | HR | R | | | | | | | | | | | | | | | |
| Multistar | FFR/Southern States | 3 | HR | HR | HR | HR | - | | | * | * | * | | | * | * | * | * | * | * | | |
| Ovation | W-L Research/Geo. W. Hill | 4 | HR | HR | HR | HR | R | | | | | | | | * | | | * | | | | |
| Pasture Plus | PGI/MBS/Caverndale Farms | 3 | HR | HR | R | HR | - | | * | | | | | | | | | | | | | |
| Resistar | FFR/Southern States | 4 | HR | HR | HR | HR | S | * | * | | | | | | | | | | | | | |
| Reward | PGI/MBS | 4 | HR | HR | R | HR | MR | | ** | | | | | | | | | | | | | |
| Rushmore | Northrup King | 4 | HR | HR | HR | HR | HR | | * | | | | | | | | | | | | | |
| Saranac AR | Public | 4 | MR | R | HR | LR | - | | | * | | | | | * | | | | * | * | | |
| Sterling | cargill hybrids | 4 | HR | HR | HR | HR | - | * | * | | | | | | | | | | | | | |
| Stine 9227 | Peterson Seed | 4 | HR | HR | HR | HR | MR | | | | | | | | | | * | * | | | | |
| Supercuts | ABT/Scott Seed | 4 | HR | HR | HR | HR | R | | | | | | | | | | | | | | | |
| Terminator | Plant Genetics | 4 | HR | HR | R | R | - | | | | | * | | | | | | | | | | |
| Trident | ABI/AgriPro | 4 | R | HR | MR | HR | S | | | | | | | | | | | | | | | |
| Un 72 | Union Seed Co. | 3 | R | R | HR | HR | - | | | * | | * | | | | | | | | | | |
| Venture | ABI | 4 | HR | R | HR | HR | R | | | * | | * | * | * | | | | | | | | |
| Wampr | FFR/Southern States | 4 | R | R | R | R | - | | | * | | * | | | | | | | * | * | * | |
| Webfoot MPR | Mich. St. Univ./Great Lakes Hybrids | 3 | HR | HR | HR | HR | R | | | | | | | | * | * | * | * | | | | |
| WL317 | W-L Research/Geo. W. Hill | 3 | HR | HR | R | HR | - | | | * | | | | | | | | | | | | |
| WL320 | W-L Research/Geo. W. Hill | 4 | R | HR | MR | R | LR | | | * | | * | | | | | | | | | | |
| WL322HQ | W-L Research/Geo. W. Hill | 4 | HR | HR | MR | R | - | | | | | * | | | | | * | * | | | | |
| WL323 | W-L Research | 4 | HR | HR | HR | HR | R | | * | | | | | | | | | | * | * | | |
| Zenith | Garst Seed Co. | 3 | HR | HR | HR | HR | R | | | | | | | | * | * | | | * | * | | |
| **EXPERIMENTAL VARIETIES - NOT AVAILABLE FOR FARM USE** | | | | | | | | | | | | | | | | | | | | | | |
| 93-116 | WL-Research/Experimental | 4 | HR | HR | HR | HR | R | | | | | | | | | | | | | | | |
| A9109 | FFR/Experimental | 4 | R | R | HR | HR | - | | | | | | | | | | | | * | | | |
| ABI-9043 | ABI/Experimental | 4 | R | R | R | R | R | | | * | | * | | * | | | | | | | | |
| ABI-9231 | ABI/Experimental | - | - | - | - | - | - | | | | | | | | | | | | | | | |
| ABI-9236 | ABI/Experimental | 3 | R | HR | R | HR | R | | * | | | | | | | | | | | | | |
| ABI-9237 | ABI/Experimental | 3 | R | HR | R | HR | R | | * | | | | | | | | | | | | | |
| ABI-923AA | ABI/Experimental | 3 | R | HR | R | HR | R | | | | | | | | | | | | | | | |
| AP-8843 | ABI/Experimental | 4 | HR | HR | HR | HR | - | | | * | | * | | * | | | | | | | | |
| AS-BD | Allied Seed/Experimental | - | - | - | - | - | - | | | * | | | | | | | | | | | | |
| AS-BG | Allied Seed/Experimental | 4 | R | R | R | R | - | | | | | | | | | | | | ** | | * | |
| AS-G | Allied Seed/Experimental | - | - | - | - | - | - | | | * | | * | | | | | | | | | | |
| GA-APGC | GA Agric. Exp. Sta./Experimental | 3 | R | R | R | R | MR | | | | | | | | | | | | | | | |
| GA-AG-MP | GA Agric. Exp. Sta./Experimental | - | - | - | - | - | - | | | | | | | | | | | | * | * | | |
| GA-AG-MP1 | GA Agric. Exp. Sta./Experimental | - | - | - | - | - | - | | | | | | | | | | | | * | | | |
| GA-AG-MPG | GA Agric. Exp. Sta./Experimental | - | - | - | - | - | - | | | | | | | | | | | | | | | |
| GA-MX | GA Agric. Exp. Sta./Experimental | 7 | MR | HR | R | MR | R | | | | | | | | | | | | | | | |
| PGI-9047 | PGI/MBS/Experimental | 4 | HR | R | HR | R | - | * | * | | | | | | | | | | | | | |
| ZC9346 | ABI/Experimental | - | - | - | - | - | - | | | | | | | | | | | | | | | |

[1] Variety Characteristics

FD Fall Dormancy

Bw Bacterial Wilt

Fw Fusarium Wilt

An Anthracnose

PRR Phytophthora Root Rot

APH Aphanomyces Root Rot

[4] Disease Resistance

S Succeptible

LR Low Resistance

MR Moderate Resistance

R Resistance

HR High Resistance

[5] Establishment Year

[6] Fall Dormancy

2 Vernal

3 Ranger

4 Saranac

5 DuPuits

[7] Harvest Year

Variety was not in the test.

** Highest yielding variety in the test for the year.

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

[2] The Mayslick test is on soil infested with Aphanomyces root rot.

[3] The Bowling Green test is on soil infested with Phytophthora and Aphanomyces root rots.

**Table 7. University of Kentucky agricultural extension publications related to alfalfa management**

| Publication | Title |
|---|---|
| AGR-76 | Alfalfa: The queen of the forage crops |
| AGR-107 | Alfalfa: Quality means profits |
| AGR-64 | Establishing forage crops |
| ------- | Seed tags: What they reveal |
| AGR-90 | Inoculation of forage legumes |
| AGR-18 | Grain and forage crop guide for Kentucky |
| AGR-1 | Lime and fertilizer recommendations |
| AGR-148 | Weed control strategies for alfalfa and other forage legume crops |
| ENT-17 | Insect management recommendations for field crops and livestock |
| PPA-10d | Kentucky plant disease management guide for forage legumes |
| PPA-28 | Alfalfa varieties: Relative disease resistance and winter hardiness |
| AGR-137 | Alfalfa hay: Quality makes the difference |
| ID-97 | Grazing alfalfa |

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P.C. Vincelli: Extension Associate Professor, UK Plant Pathology
J.C. Parr: Research Specialist, UK Entomology