Kentucky bluegrass Variety Trial

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Kentucky bluegrass (*Poa pratensis* L.) is the most important and most used cool-season turf worldwide. Known for its boat-shaped leaf-tips, racing-striped leaves, and white-fleshed rhizomes, the Kentucky bluegrasses are highly variable in terms of their morphologies. Noticeable differences in such characteristics as leaf texture, shoot density, color, growth habit, adaptation, fertility needs, and disease resistance exist among cultivars. Here at MSU, we can readily see many of these differences in this variety trial, which is sponsored by the National Turfgrass Evaluation Program (NTEP).

Over 100 cultivars are represented in 6 ft by 6 ft plots with three replications. These plots were seeded at a rate of 1.5 lb of seed per 1,000 sq ft (M) on September 8, 1995. The seeded plots were then stabilized with a hydro-mulch. A starter fertilizer, 15-30-15, was applied at planting at a 1 lb N/M rate. Urea, 46-0-0, provided 1.5 lb N/M biweekly for six weeks until October 25 when urea was applied again, this time at a 1 lb N/M rate. This spring we applied 1.5 lb N/M on May 29 and 1 lb N/M on July 1, both times using urea. Weed control consisted of pre-plant sterilization with Basamid on August 1, 1995, and an application of LESCO Three-Way herbicide on May 21, 1996. No other pesticides have been applied. They area is mowed as needed to remove not more than 40% of the leaves. The height-of-cut is three inches and clippings are returned. We irrigate as needed to avoid visual wilt, which means that this summer we have irrigated almost daily. In relative terms, these are high-maintenance plots compared to the low-maintenance Kentucky bluegrass trial that was also established last fall.

That table that appears on the following pages shows a listing of the cultivars. The order of listing is based on the mean-quality ratings for this year to date. Other data shown are for spring green-up and percent germination, both rated on May 18.

KENTUCKY BLUEGRASS VARIETAL CHARACTERISTICS1

(listed in descending order by average visual quality)
Rated on a scale of 1 to 9, with 9 being best.

| Variety | Company Sponsor | % Germ- ination ² | | |
|--------------|------------------------------|---------------------------------|------|------|
| BAR VB 233 | Barenbrug Holland | 5.00 | 5.33 | 7.00 |
| Haga | E.F. Burlingham & Sons | 5.67 | 6.67 | 6.90 |
| LKB-95 | Lesco, Inc. | 6.00 | 5.00 | 6.77 |
| PST-B2-42 | Pure Seed Testing/ Turf-Seed | 4.33 | 5.67 | 6.77 |
| Baronie | Barenbrug USA | 6.00 | 6.67 | 6.77 |
| BAR VB 5649 | Barenbrug Holland | 3.33 | 4.67 | 6.67 |
| HV 130 | Advanta Seeds West, Inc. | 4.67 | 5.00 | 6.67 |
| Pick-3561 | Pickseed West, Inc. | 5.00 | 5.33 | 6.67 |
| Coventry | O.M. Scott & Sons | 4.33 | 5.33 | 6.67 |
| Pla5tini | DLF/Trifolium | 4.67 | 5.67 | 6.67 |
| Jefferson | Jonathan Green & Sons | 5.33 | 6.00 | 6.67 |
| Classic | Peterson Seed Company | 5.00 | 6.00 | 6.57 |
| H86-690 | Jonathan Green & Sons | 4.67 | 5.67 | 6.57 |
| J-2579 | Jacklin Seed Company | 5.67 | 5.67 | 6.53 |
| Ba 77-702 | O.M. Scott & Sons | 5.33 | 5.33 | 6.47 |
| SRX 2205 | Seed Research of OR, Inc. | 4.67 | 5.00 | 6.47 |
| ZPS-309 | Zajac Performance Seeds | 4.33 | 5.00 | 6.47 |
| ZPS-2183 | Zajac Performance Seeds | 4.33 | 5.33 | 6.47 |
| Chateau | Finelawn Research, Inc. | 4.67 | 6.00 | 6.43 |
| NJ-GD | C.R. Funk-Rutgers University | 4.67 | 5.00 | 6.43 |
| Pick 8 | Pickseed West, Inc. | 4.00 | 5.00 | 6.43 |
| SR 2109 | Seed Research of OR, Inc. | 4.33 | 5.33 | 6.43 |
| PST-A7-245A | Pure Seed Testing/Turf-Seed | 4.67 | 5.33 | 6.43 |
| BAR VB 3115B | Barenbrug Holland | 4.33 | 5.33 | 6.37 |
| Wildwood | Lesco, Inc. | 4.67 | 5.33 | 6.33 |
| LTP-621 | Lebanon Turf Products | 4.67 | 5.00 | 6.33 |
| Marquis | Roberts Seed Co. | 4.33 | 5.33 | 6.33 |
| SR 2100 | Seed Research of OR, Inc. | 4.67 | 5.00 | 6.33 |

LSD Value⁵ 0.95 0.98

0.65

| Variety | Company Sponsor | % Germ- ination ² | Green- Up ³ | |
|---------------|------------------------------|---------------------------------|---------------------------|------|
| Ba 70-060 | O.M. Scott & Sons | 4.33 | 5.33 | 6.33 |
| Ba 75-173 | O.M. Scott & Sons | 4.67 | 5.33 | 6.33 |
| Blacksburg | Turf-Seed, Inc. | 4.67 | 5.33 | 6.33 |
| Cardiff | International Seeds, Inc. | 4.33 | 5.67 | 6.33 |
| Princeton 105 | Loft's Seed, Inc. | 4.33 | 5.00 | 6.23 |
| HV 242 | Advanta Seeds West, Inc. | 4.00 | 5.00 | 6.23 |
| Raven | Olsen-Fennel Seed Co. | 5.00 | 5.67 | 6.23 |
| J-1561 | Jacklin Seed Company | 4.00 | 4.67 | 6.23 |
| Limousine | Jacklin Seed Company | 4.00 | 4.67 | 6.23 |
| Ba 81-058 | O.M. Scott & Sons | 4.00 | 5.33 | 6.23 |
| Ba 81-270 | O.M. Scott & Sons | 4.67 | 5.67 | 6.23 |
| PST-P46 | Pure-Seed Testing, Inc. | 4.00 | 5.33 | 6.23 |
| PST-A7-60 | Pure Seed Testing/Turf-Seed | 4.33 | 5.00 | 6.23 |
| NJ 1190 | Pure Seed Testing/Turf-Seed | 4.00 | 5.33 | 6.23 |
| ZPS-429 | Zajac Performance Seeds | 4.33 | 5.33 | 6.23 |
| Glade | Standard Entry | 4.67 | 5,33 | 6.23 |
| Kenblue | Standard Entry | 5.33 | 6.00 | 6.23 |
| Baruzo | Barenbrug USA | 4.33 | 4.33 | 6.23 |
| NuStar | Jacklin Seed Company | 4.00 | 4.67 | 6.23 |
| Shamrock | Lesco, Inc. | 4.00 | 4.67 | 6.20 |
| Ba 76-197 | O.M. Scott & Sons | 4.67 | 5.33 | 6.20 |
| Allure | International Seeds, Inc. | 5.33 | 6.00 | 6.20 |
| A88-744 | Loft's Seed, Inc. | 3.67 | 4.67 | 6.13 |
| MED-1497 | Medalist America | 4.67 | 5.33 | 6.13 |
| Ba 81-227 | O.M. Scott & Sons | 3.67 | 5.00 | 6.13 |
| PST-638 | C.R. Funk-Rutgers University | 4.33 | 5.33 | 6.13 |
| Compact | DLF/Trifolium | 4.67 | 5.00 | 6.13 |
| MED-18 | Medalist America | 4.67 | 4.67 | 6.10 |
| MED-1580 | Medalist America | 4.33 | 4.33 | 6.10 |
| Caliber | Peterson Seed Company | 4.67 | 5.33 | 6.10 |
| Pick-855 | Pickseed West, Inc. | 3.67 | 5.00 | 6.10 |
| Ba 75-490 | O.M. Scott & Sons | 3.67 | 4.33 | 6.10 |

LSD Value⁵

0.95

0.98

0.65

| Variety | Company Sponsor | % Germ- ination ² | Green- Up ³ | Visual Quality ⁴ |
|------------|------------------------------|---------------------------------|---------------------------|--------------------------------|
| Ba 87-102 | O.M. Scott & Sons | 4.67 | 5.00 | 6.10 |
| LTP-620 | Lebanon Turf Products | 3.67 | 5.00 | 6.10 |
| PST-BO-165 | Pure Seed Testing/Turf-Seed | 4.00 | 5.67 | 6.10 |
| Conni | DLF/Trifolium | 4.33 | 5.00 | 6.10 |
| Nimbus | Jonathan Green & Sons | 5.33 | 6.00 | 6.10 |
| NJ-54 | C.R. Funk-Rutgers University | 3.67 | 4.33 | 6.10 |
| Baron | Standard Entry | 4.33 | 5.00 | 6.00 |
| America | Pickseed West, Inc. | 4.33 | 5.67 | 6.00 |
| MED-1991 | Medalist America | 5.00 | 6.00 | 6.00 |
| Eclipse | Jacklin Seed Company | 4.00 | 5.00 | 6.00 |
| Award | Jacklin Seed Company | 4.67 | 5.33 | 6.00 |
| J-1576 | Jacklin Seed Company | 4.33 | 4.67 | 6.00 |
| J-2582 | Jacklin Seed Company | 4.00 | 5.67 | 6.00 |
| Ba 76-372 | O.M. Scott & Sons | 4.33 | 5.33 | 6.00 |
| Ba 79-260 | O.M. Scott & Sons | 4.00 | 5.33 | 6.00 |
| Unique | Turf-Seed, Inc. | 4.00 | 5.33 | 6.00 |
| Livingston | Turf-Seed, Inc. | 4.00 | 5.67 | 6.00 |
| BA 75-163 | O.M. Scott & Sons | 3.67 | 4.67 | 5.90 |
| J-1555 | Jacklin Seed Company | 4.00 | 5.00 | 5.90 |
| J-1567 | Jacklin Seed Company | 3.67 | 5.00 | 5.90 |
| Abbey | O.M. Scott & Sons | 4.00 | 5.00 | 5.90 |
| PST-BO-141 | Pure Seed Testing/ Turf-Seed | 3.67 | 5.00 | 5.90 |
| Challenger | Turf-Seed, Inc. | 3.67 | 5.00 | 5.90 |
| Bartitia | Barenbrug USA | 4.00 | 4.67 | 5.90 |
| Lipoa | Deutsche Saatveredelung | 4.33 | 4.67 | 5.87 |
| Midnight | Standard Entry | 4.33 | 5.00 | 5.87 |
| Ba 73-373 | O.M. Scott & Sons | 4.00 | 5.00 | 5.80 |
| Fortuna | International Seeds, Inc. | 4.33 | 5.67 | 5.80 |
| NuGlade | Jacklin Seed Company | 4.00 | 4.67 | 5.77 |
| ZPS-2572 | Zajac Performance Seeds | 4.33 | 5.33 | 5.77 |
| Ascot | O.M. Scott & Sons | 4.33 | 4.67 | 5.77 |
| Ba 81-113 | O.M. Scott & Sons | 4.33 | 5.33 | 5.77 |

LSD Value⁵ 0.95

0.98

0.65

| Variety | Company Sponsor | % Germ- ination ² | Green- Up ³ | Visual Quality ⁴ |
|-------------|------------------------------|---------------------------------|---------------------------|--------------------------------|
| Ba 81-220 | O.M. Scott & Sons | 4.00 | 5.00 | 5.77 |
| J-1936 | Jacklin Seed Company | 4.33 | 5.33 | 5.70 |
| DP 37-192 | DLF/Trifolium | 4.00 | 4.67 | 5.67 |
| BAR VB 6820 | Barenbrug Holland | 3.67 | 4.67 | 5.67 |
| SR 2000 | Seed Research of OR, Inc. | 4.33 | 4.67 | 5.67 |
| Sodnet | Turf Merchants, Inc. | 3.67 | 4.33 | 5.67 |
| VB 16015 | International Seeds, Inc. | 4.00 | 5.00 | 5.67 |
| PST-A418 | Pure Seed Testing/ Turf-Seed | 3.33 | 5.00 | 5.57 |
| PST-B3-180 | Olsen-Fennel Seed Co. | 4.00 | 5.00 | 5.57 |
| TCR-1738 | Jacklin Seed Company | 3.67 | 4.33 | 5.47 |
| Sidekick | O.M. Scott & Sons | 4.33 | 5.67 | 5.43 |
| | LSD Value ⁵ | 0.95 | 0.98 | 0.65 |

¹Maintained with medium-high inputs (see text).

²The mean of three replications for percent of seed that had emerged on 4/18/96.

³The mean of three replications for color rated on 4/18/96.

⁴The mean of three replications and three 1995 observation dates for visual quality.

⁵With 95% confidence, two varieties can be considered statistically different if they differ by at least the LSD (Least Significant Difference) value.