



Performance of Kentucky Bluegrass Cultivars in Michigan: 2001-2003

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Kentucky bluegrass is the most widely used turfgrass in Michigan. It is used in home lawns, institutional grounds, parks and athletic fields. The species is persistent and attractive and has a medium to fine leaf texture and medium to dark green color when properly fertilized. Plants produce extensive underground stems, called rhizomes, which provide good sod-forming characteristics and recuperative potential superior to that of most other turfgrasses. It is cold and wear tolerant but has only moderate heat and drought tolerance. It makes optimal growth during the spring and fall, but without irrigation it becomes dormant during hot, dry periods in the summer. It recovers quickly with the advent of cooler temperatures and adequate soil moisture.

Plants perform best when grown on well-drained soils in open, sunny areas. This grass species does not tolerate poorly drained soils or extensive shade. Kentucky bluegrass generally requires more nitrogen (N) fertilizer than other cool-season grasses and tends to produce a significant amount of thatch. Mowing height should be maintained at 2.5 to 3 inches except during hot, humid conditions when the mowing height should be raised to 3 to 4 inches. When planted from seed, Kentucky bluegrass requires up to two weeks for seed emergence.

The National Turfgrass Evaluation Program (NTEP) Kentucky bluegrass test was established in September 2000 at the Hancock Turfgrass Research Center at Michigan State University. The test comprised of 98 commercial cultivars (see table for a sampling of 22 of the 98 cultivars used). The trial was mowed three times per week at a height of 2.5 inches. Three to four pounds of N per 1000 square feet were applied each growing season. Plants were irrigated whenever necessary to prevent wilting. The plots were visually evaluated once per month during the growing season for turfgrass quality and other parameters. "Quality" means the overall appearance of the turf. Components include density, texture, uniformity, color, and freedom from disease and insect damage. Quality was rated using a scale of 1 to 9, where 9 equals the highest quality. Entries are listed in order of highest seasonal average quality for 2001, 2002 and 2003 to lowest seasonal average quality for the three years combined. Differences between two entries are statistically significant only if the numerical difference between two entries exceeds the LSD value listed in the table. For example, if cultivar 'A' is 0.4 units higher in quality than cultivar 'B', this difference is significant because the LSD value is 0.4 or less (2002). If the LSD is greater than 0.4, then the numerical difference between the two cultivars is not significant.

Few differences in turfgrass quality were found among the Kentucky bluegrass entries in this test during 2001-03. In spite of differences in growing conditions between 2001 and 2003, the average turfgrass quality of some improved cultivars varied little among seasons. The entries showing the best seasonal average quality over the three-year test period are listed in the table. For more information, visit: <http://www.ntep.org> under Michigan State University data.

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Turfgrass quality of Kentucky bluegrass cultivars for 2001-2003. Trial established September 2000 at the Hancock Turfgrass Research Center, Michigan State University.

Entry	Quality 2001	Quality 2002	Quality 2003	Average quality
AWARD	7.3	6.0	6.9	6.7
NORTH STAR	7.0	6.4	6.5	6.6
BOUTIQUE	7.1	5.9	6.8	6.6
ALPINE	7.4	5.7	6.6	6.6
UNIQUE	7.2	5.6	6.9	6.6
BLACKSTONE	7.1	5.8	6.8	6.6
BLUE KNIGHT	7.1	5.8	6.8	6.6
TOTAL ECLIPSE	7.2	6.0	6.5	6.6
EXCURSION (J-1648)	7.3	5.9	6.4	6.6
NU DESTINY (J-2695)	7.2	5.9	6.4	6.5
LANGARA	7.2	6.1	6.3	6.5
NUGLADE	7.3	5.8	6.5	6.5
ARROW (A97-1567)	7.2	5.5	6.8	6.5
MOONLIGHT	6.9	5.8	6.8	6.5
TSUNAMI (J-2487)	7.0	6.0	6.5	6.5
BARRISTER (J-1655)	7.1	5.9	6.4	6.5
BEDAZZLED	7.1	5.7	6.6	6.5
FREEDOM II	7.2	5.6	6.6	6.5
IMPACT	7.0	6.0	6.4	6.5
JULIA	7.3	5.6	6.5	6.5
WILDWOOD	7.4	5.5	6.5	6.5
HALLMARK	7.3	5.5	6.5	6.5
AVALANCHE (PST-1701)	7.1	5.6	6.4	6.4
GINNEY (J - 1368)	7.0	5.8	6.5	6.4
PERFECTION (J - 1515)	7.0	5.9	6.4	6.4
ODYSSEY	7.0	5.8	6.5	6.4
QUANTUM LEAP	7.1	5.7	6.5	6.4
RUGBY II	6.9	6.0	6.4	6.4
SERENE	7.2	5.7	6.4	6.4
SR2284 (SRX2284)	7.2	5.6	6.5	6.4
GLENMONT (H94-293)	7.1	5.6	6.6	6.4
MOONSHADOW (PICK113-3)	7.1	5.7	6.4	6.4
BARONETTE (BA81-058)	7.1	5.6	6.5	6.4
EVEREST	7.1	5.8	6.3	6.4
PRINCETON 105	7.0	5.7	6.5	6.4
BORDEAUX	7.0	5.6	6.5	6.4
JEFFERSON	7.4	5.4	6.3	6.4
RAMBO	7.2	5.7	6.2	6.4
ARCADIA	7.1	5.6	6.3	6.3
BARIRIS	7.2	5.3	6.5	6.3
BEYOND (J-1880)	7.0	5.5	6.5	6.3
BLUEMAX (PST-B5-89)	6.8	5.7	6.5	6.3
LIMERICK	7.1	5.4	6.5	6.3
ROYCE (A98-304)	7.0	5.5	6.5	6.3
SONOMA	7.1	5.5	6.4	6.3
EVERGLADE	6.9	5.7	6.3	6.3
APOLLO	7.0	5.6	6.3	6.3
BLACKSBURG II (PST-1BMY)	7.1	5.3	6.5	6.3
CHAMPLAIN (A98-1275)	6.9	5.5	6.5	6.3
CHELSEA	7.2	5.5	6.2	6.3
COVENTRY	7.1	5.3	6.5	6.3
EAGLETON	7.2	5.1	6.6	6.3
FAIRFAX	6.9	5.3	6.7	6.3
LIBERATOR	7.0	5.5	6.4	6.3

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Turfgrass quality of Kentucky bluegrass cultivars for 2001-2003. (continued)

Entry	Quality 2001	Quality 2002	Quality 2003	Average quality
LIMOUSINE	7.0	5.4	6.5	6.3
RITA	7.0	5.2	6.7	6.3
SHOWCASE	7.0	5.5	6.4	6.3
ASCOT	6.9	5.5	6.4	6.3
BLUE RIDGE (A97-1449)	6.9	5.5	6.4	6.3
CABERNET	7.0	5.5	6.3	6.3
GOLDRUSH	7.0	5.3	6.5	6.3
GOLDSTAR (A98-296)	6.9	5.5	6.4	6.3
VOYAGER II (PST-1QG-27)	7.1	5.4	6.3	6.3
BLUE SAPPHIRE (NA-K991)	6.8	5.4	6.5	6.2
CHATEAU	6.7	5.3	6.7	6.2
ENVICTA	6.8	5.4	6.5	6.2
H92-558	6.8	5.7	6.2	6.2
MARQUIS	6.9	5.3	6.5	6.2
MERCURY (PICK-232)	7.1	5.5	6.1	6.2
MIDNIGHT	7.1	5.5	6.1	6.2
MIDNIGHT II (A98-739)	6.9	5.5	6.3	6.2
ROYALE (A97-1336)	7.1	5.4	6.2	6.2
ALLURE	6.9	5.3	6.4	6.2
BOOMERANG	6.8	5.4	6.4	6.2
CHICAGO II	6.7	5.6	6.3	6.2
AWESOME (J - 1420)	7.0	5.5	6.1	6.2
MALLARD (A97-1439)	6.9	5.6	6.1	6.2
SHAMROCK	6.8	5.3	6.5	6.2
BARON	6.9	5.3	6.3	6.2
CHAMPAGNE	7.0	5.4	6.1	6.2
KENBLUE	7.3	5.2	6.0	6.2
LAKESHORE (A93-200)	6.8	5.4	6.3	6.2
LILY	6.8	5.4	6.3	6.2
MONTE CARLO (A96-402)	7.1	5.3	6.1	6.2
BARONIE	6.9	5.2	6.3	6.1
BRILLIANT	6.9	5.3	6.2	6.1
BROOKLAWN	6.8	5.3	6.3	6.1
JULIUS	7.1	5.3	6.0	6.1
MISTY	6.7	5.5	6.2	6.1
ABBAY	6.8	5.5	6.0	6.1
BARTITIA	6.9	5.2	6.2	6.1
JEWEL	7.0	5.1	6.2	6.1
WASHINGTON	7.1	5.2	6.0	6.1
WELLINGTON	7.2	5.1	6.0	6.1
BARITONE	6.9	5.3	6.1	6.1
BODACIOUS	6.6	5.4	6.2	6.1
BARZAN	6.7	5.4	6.0	6.0
RAVEN	6.6	5.3	6.1	6.0
<i>LSD VALUE</i>	<i>0.7</i>	<i>0.4</i>	<i>1.1</i>	

Sources of Seed

The following list of seed companies is included to help the reader who may not be able to find sources of some varieties of seed — it is not intended as a recommendation of these companies, or as an inclusive/exclusive listing.

CSI/GEOTURF INC.
1225 76th Street
Byron Center, MI 49315
Phone: 888-208-5772

J. MOLLEMA & SONS
4660 E. Paris, S.E.
Grand Rapids, MI 49512
Phone: 800-234-4769

MICHIGAN STATE SEED SOLUTIONS
717 N. Clinton
Grand Ledge, MI 48837
Phone: 800-647-8873, 517-627-2164

RHINO SEED AND LANDSCAPE SUPPLY
850 Old US-23
Brighton, MI 48114
Phone: 810-632-5640

SOUTHERN MICHIGAN SEED
48580 County Road 352
Decatur, MI 49045
Phone: 269-423-7051

STANDISH MILLING COMPANY INC.
1331 West Cedar Street
Standish, MI 48658
Phone: 989-846-6911

SWEENEY SEED COMPANY
110 South Washington Street
Mount Pleasant, MI 48858
Phone: 800-344-2482

TRI TURF
3751 Blair Townhall Road
Traverse City, MI 49684
Phone: 800-636-7039

Other Publications in this Series

(The following publications and other materials on lawns, turfgrasses and related topics are available online at: www.web2.msue.msu.edu/bulletins/intro.cfm or from your MSU county Extension office — look under “Government, County” in your phone book.)

E-2910, Establishing a New Lawn Using Seed

E-2911, Nine Steps for Establishing a New Lawn Using Sod

E-2912, Turfgrass Species and Cultivar Selection

E-2913, Calendar for Lawn Care

E-2917, Performance of Bentgrass Cultivars and Selection Under Putting Green and Fairway Conditions (for golf courses)

E-2923, Performance of Tall Fescue Turfgrass Cultivars for 2002-03

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