

# 2005 RUTGERS Turfgrass Proceedings



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# **2005 RUTGERS TURFGRASS PROCEEDINGS**

**of the**

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The Rutgers Turfgrass Proceedings is published yearly by the Rutgers Center for Turfgrass Science, Rutgers Cooperative Extension, and the New Jersey Agricultural Experiment Station, Cook College, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

This publication includes lecture notes of papers presented at the 2005 New Jersey Turfgrass Expo. Publication of these lectures provides a readily available source of information covering a wide range of topics and includes technical and popular presentations of importance to the turfgrass industry.

This proceedings also includes research papers that contain original research findings and reviews of selected subjects in turfgrass science. These papers are presented primarily to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

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Dr. Ann Brooks Gould, Editor  
Dr. Bruce B. Clarke, Coordinator

# PERFORMANCE OF KENTUCKY BLUEGRASS CULTIVARS AND SELECTIONS IN NEW JERSEY TURF TRIALS

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Kentucky bluegrass (*Poa pratensis* L.) is one of the most widely used cool-season turfgrasses in the northern United States and Canada. Kentucky bluegrass has the ability to develop dense stands of dark green turf with clean mowing quality in a wide range of soils and climates. Its extensive rhizome system provides excellent sod strength as well as the ability to recuperate after stress periods and fill in damaged areas quickly. As a result, Kentucky bluegrass is used extensively for soil stabilization and conservation, forage, and turf. Kentucky bluegrass is utilized on more than 35 million acres of pastures and on over 40 million lawns in the northeastern and north central United States, as well as in large areas of Canada and Europe (Duell, 1985).

Kentucky bluegrass topped the list of fairway grasses for northern golf courses in the early 1900s. After fairway heights were reduced below 0.75 inch, however, this turfgrass was not competitive against invasion of annual bluegrass (*Poa annua* L.) and was more susceptible to summer patch (caused by *Magnaporthe poae*) (Dernoeden, 1997). These liabilities, along with slow establishment rates, diminished the popularity of Kentucky bluegrasses for fairways, particularly as improved perennial ryegrasses (*Lolium perenne* L.) and creeping bentgrasses (*Agrostis stolonifera* L.) became available. The recent pandemics of gray leaf spot (caused by the fungus *Pyricularia grisea*), resulting in severe damage of perennial ryegrass fairways on golf courses, has renewed interest among some turf professionals in the use of Kentucky bluegrass for roughs and fairways. Novel methods of annual bluegrass control in Kentucky bluegrass turf stands are currently being investigated and could potentially increase the overall utility of this species in less than optimum environments. Kentucky bluegrasses are also being tested throughout the country for tolerance to traffic and low

mowing heights to determine which cultivars can tolerate current golf course fairway conditions.

Since Kentucky bluegrass reproduces through an asexual process called apomixis, improvements in cultivar performance is challenging. The advantage of apomixis is that it provides the opportunity to utilize hybrid vigor and to produce true-to-type seed from superior plants generation after generation. Over the past several decades more than 200 cultivars of Kentucky bluegrass have been released. Kentucky bluegrass cultivars have been developed through a number of approaches that include: i) selection of naturalized ecotypes or highly apomictic plants found in old pastures or turfs; ii) blending of highly apomictic single plants (called composites); and iii) selection of single, highly apomictic plants from breeding programs using intraspecific and interspecific hybridization.

Kentucky bluegrass can perform poorly during summer months, especially in the transition zone and southern states, due to heat and drought stress as well as insect and disease pressure. Currently, Rutgers has been utilizing interspecific hybridization for the development of Texas bluegrass (*Poa arachnifera* Torr.) x Kentucky bluegrass hybrids to try to incorporate valuable traits from Texas bluegrass into Kentucky bluegrass. Texas bluegrass, native to Texas and parts of Oklahoma, is a dioecious species that is more tolerant of heat and drought stress conditions than Kentucky bluegrasses. Texas x Kentucky bluegrass crosses were made as early as 1908 by George H. Oliver who noticed a wide variation in first generation hybrids including plants that were more heat and drought tolerant and more productive than Kentucky bluegrass (Vinall and Hein, 1937). Hybrid evaluation for fertile, highly apomictic offspring with improved performance is currently underway at Rut-

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gers. This breeding strategy of crossing female Texas bluegrass plants with Kentucky bluegrass could expand the adaptation of Kentucky bluegrass through transition zone areas into southern states where better heat and drought tolerance is needed.

The Kentucky bluegrass improvement program at Rutgers involves extensive field evaluation of collections from the United States, Europe, and Asia, new material developed in the breeding program, as well as cultivars and selections developed by other breeders. Recent collection trips to Holland, Scotland, Greece, Italy, Poland, Bulgaria, China, Romania, Sweden, Germany, Portugal, Finland, France, Spain, Norway, the Slovak Republic, Sicily, Uzbekistan, and Kyrgyzstan have enhanced the diversity of germplasm incorporated into the Kentucky bluegrass hybridization program. In addition, the turfgrass research program at Rutgers participates in the National Turfgrass Evaluation Program (NTEP), which is sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc.

## PROCEDURES

Eight trials were seeded in either August or September from 2002 to 2004 at North Brunswick or Adelphia (Tables 1 to 9). All tests were conducted under medium-high maintenance regimes. The soils at the two research farms are moderately fertile and fairly well drained.

Entries in each test were sown by hand using a maximum of 0.53 oz of seed per 3 X 5 ft plot (2.2 lb/1000 ft<sup>2</sup>). Each test was arranged in a randomized complete block design with three replications. Annual nitrogen (N) applied and mowing heights for each trial are presented in Table 10. The amount of N applied varied between tests to permit the evaluation of characteristics known to respond to N level. No single N application exceeded 0.75 lb/1000 ft<sup>2</sup>. Mowing was frequent enough to avoid scalping and the accumulation of clippings, using reel mowers to maintain a mowing height of 1.5 inches.

After establishment, annual weeds were controlled using a spring or fall application of dithiopyr or bensulide, and broadleaf weeds were controlled with a fall or spring application of 2,4-D, dicamba, or MCPP. In North Brunswick trichlorfon was applied in July for cutworm control. In both locations imidaclo-

prid was applied in August to control grubs. Soil pH was maintained between 6.0 and 6.5 with agricultural limestone, depending on soil test results. Tests were irrigated during establishment and also when needed to avoid severe drought stress.

All tests were rated frequently throughout the growing season for turf quality (e.g., color, brightness, leaf texture, density, uniformity, and amount of disease and insect damage). Other characteristics were evaluated separately when differences became evident. These characteristics included spring green-up (Tables 1 to 6), leaf spot (Tables 2 to 6), summer patch (Table 3), stem rust (Tables 7 to 9), establishment (Tables 7 to 9), seed heads (Tables 4 to 6), and worn turf quality (Table 7). All ratings were based on a 1 to 9 scale, where 9 represented the most favorable turf quality or desirable turf characteristic. Ratings were conducted by a number of researchers throughout the season to reduce individual preferences toward a particular trait.

## RESULTS

Results are presented in Tables 1 through 9. Entries are ranked according to their overall (multi-year) quality average. Additional characteristics observed in various tests are discussed below.

### Spring Green-up

This trait is obvious during late winter or early spring and reflects the wide range of genetic diversity within Kentucky bluegrass (Tables 1 to 6). Some cultivars that green up early in the season include Serene, Glenmont, Mallard, Pacific 320, Limousine, SR 2284, and Brooklawn. Some cultivars that were typically late to green up include Royce, Rythum, Bravado, and Princeton P-105. Many of the cultivars and selections in the evaluation trials are specifically adapted to New Jersey and the mid-Atlantic region and typically have early spring green-up. The mid-Atlantic region is characterized by shorter days and warmer temperatures during the growing season. Due to an increase in leaf elongation that occurs in response to increases in temperature and day length (Parsons and Robson, 1980), cultivars adapted to this region may green up earlier in the spring. Other cultivars and selections adapted to higher latitudes, including many of the compact type cultivars, may need a more dramatic change in day length before spring growth is initiated.

## Leaf Spot

Leaf spot (caused by the pathogen *Drechslera poae*) is a foliar disease that affects Kentucky bluegrass primarily under the cloudy wet conditions of spring. Differences in tolerance to this disease were evident among many of the cultivars and selections tested (Tables 2 to 6). Leaf spot is often associated with plants that have low carbohydrate levels in the leaf tissue. This may be due to the cultivar's ability to quickly green up in the spring, thus using stored carbohydrates. Cultivars slower to green up often have more stored carbohydrates and are better tolerant of this disease (Smiley, 1992). Some cultivars and selections with good resistance include Hallmark, Bedazzled, Arrow, Bewitched, and Kingfisher. Cultivars and selections found to be susceptible include Dragon, Cynthia, Sonic, RSP, and Appalachian.

## Summer Patch

Summer patch is a warm weather disease of Kentucky bluegrass that appears as circular patches of dead turf with a green center (the classic "frog's eye" symptom). Disease development is greater during stressful summer conditions. Some cultivars and selections that appear tolerant to this disease include Beyond, A03-1, H99-338, Bedazzled, and Midnight. Cultivars severely damaged by this pathogen include Champagne, Champlain, Bordeaux, and NuBlue (Table 3).

## Stem Rust

Stem rust (caused by the fungus *Puccinia graminis*) is a severe disease of Kentucky bluegrass. Symptoms are observed as brick red flecks on infected leaf tissue; eventually the epidermis ruptures, releasing red to orange spores, and the leaf dies. Some Kentucky bluegrass cultivars are tolerant to this disease including Bewitched, Champlain, and Mercury. Some cultivars, however, such as Fairfax, Liberator, and Shamrock, exhibit some susceptibility (Tables 7 to 9).

## Establishment

Rapid establishment is important to consumers, sod-growers, and other turf managers who establish Kentucky bluegrass from seed. Kentucky bluegrass is one of the slowest cool-season grasses to establish a mature stand. Establishment can be influenced by factors such as genetics, seed quality, environment, management practices, and after-ripening dor-

mancy. Some cultivars that rapidly establish include Midnight, Langara, NuBlue, and Total Eclipse. Others, such as Princeton P-105, Sonic, and Champagne, are slow to establish (Tables 8 and 9), which is more typical of this species. Caution should be exercised when interpreting seedling vigor and establishment of a given cultivar. Different seed lots can vary greatly depending on age of the seed, storage, and after-ripening dormancy.

## Seed Heads

Even under mowed conditions, some Kentucky bluegrass cultivars devote energy to seed head production. This can be observed even under a mowing height as low as 1.5 inches. Although the appearance of seed heads is transient, it is a wasteful process that reduces the amount of available energy for plant growth, thus reducing the plant's ability to recuperate from stress. It is also unsightly during the spring in cultivars that exhibit this trait. This characteristic was particularly pronounced in the selections 1A2-888, 109-1060, and 1A2-511 (Table 5). The cultivars Rugby II, Beyond, and Cabernet show higher turf quality in the spring because they rarely produce seed heads in a mowed situation (Table 4).

## Worn Turf Quality

Kentucky bluegrass is used extensively for sports fields in the temperate areas of the world due to its ability to spread laterally through rhizomes. Rhizomes help the field recover from traffic stress commonly associated with recreational uses. As a result, the demand for traffic tolerant Kentucky bluegrass has continued to increase due to increased use of sports fields, parks, golf courses, and other recreational areas (Park et al. 2005). Large amounts of variability exist within Kentucky bluegrass in its ability to withstand and recuperate from traffic. Worn turf quality can be used to assess turf performance under traffic where a rating of 9 represents a dense stand of turfgrass exhibiting 100% ground cover and no annual bluegrass after simulated traffic. Some cultivars and selections are extremely tolerant of traffic (e.g., Bewitched, Washington, and A03-137) whereas others can be damaged (Bravado, A99-2923, and A99-2933) (Table 7).

## SUMMARY

Kentucky bluegrass is grown for many uses under a diverse range of soil, environmental, and management conditions. As a result, there is a demand

for cultivars that produce a durable, high quality turf for an assortment of uses under a broad range of conditions. Improved resistance to important disease and insect pests, heat, drought, close mowing, shade, and wear is needed in cultivars that are expected to perform well in many situations.

### ACKNOWLEDGMENTS

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Table 1. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2002 at North Brunswick, NJ.

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005
	2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.	
1 A97-1287	6.3	5.9	6.4	6.6	5.3
2 A94-682	6.2	6.0	6.7	5.8	5.0
3 A99-2783	6.2	5.4	6.4	6.6	5.3
4 Bewitched	6.1	6.4	6.1	5.7	3.3
5 Zinfandel	6.1	6.1	6.4	5.7	4.0
6 A99-2573	5.9	5.9	6.2	5.7	5.3
7 A99-2950	5.8	5.5	5.7	6.5	4.7
8 A99-2904	5.7	5.7	5.4	6.0	3.3
9 Royce	5.7	6.2	5.5	5.4	3.7
10 Bedazzled	5.7	5.9	5.9	5.4	4.7
11 A99-269	5.7	6.2	5.4	5.4	4.7
12 A99-2993	5.7	6.3	5.2	5.5	3.3
13 A99-2897	5.7	5.7	5.5	5.7	4.3
14 A97-1412	5.7	6.1	5.4	5.6	4.0
15 A96-425	5.6	5.7	6.1	5.2	4.3
16 H98-767	5.6	5.7	5.5	5.6	3.7
17 Goldstar	5.6	5.7	5.6	5.6	4.3
18 Hunnington	5.6	5.3	5.6	5.9	5.3
19 A99-3119	5.6	6.4	5.4	4.9	3.7
20 Cabernet	5.6	5.2	5.4	6.1	5.3
21 H98-753	5.5	6.4	5.5	4.7	3.7
22 Washington	5.5	6.1	5.8	4.6	5.7
23 A99-2670	5.5	6.2	5.1	5.1	4.0
24 A98-737	5.5	5.2	6.2	5.0	3.0
25 A97-1586	5.4	6.1	5.3	4.7	3.7
26 A99-2678	5.4	6.2	5.5	4.6	3.3
27 A99-3117	5.4	6.0	5.4	4.9	3.7
28 H98-30	5.4	6.4	5.0	4.9	3.3
29 PST C-74	5.4	6.0	5.3	4.9	3.7
30 H99-1523	5.4	5.7	5.1	5.4	3.3
31 A99-2964	5.4	5.6	5.3	5.3	2.3
32 Rythum	5.4	5.7	6.3	4.1	2.7
33 H97-473	5.4	5.8	5.7	4.6	3.7
34 A99-523	5.3	6.3	5.1	4.6	4.0
35 H99-1740	5.3	5.0	4.9	6.0	6.3

(Continued)

Table 1 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.	
36	A98-290	5.3	5.6	5.7	4.6	3.3
37	Mystique	5.3	6.0	5.8	4.3	4.3
38	Bravado	5.3	5.0	5.6	5.4	3.3
39	A99-2620	5.3	6.1	5.3	4.5	3.3
40	A99-2927	5.3	5.6	5.3	4.9	4.0
41	A99-2705	5.3	6.1	5.3	4.5	3.7
42	PST H92-203	5.3	5.8	5.0	5.0	4.0
43	A99-2723	5.2	5.6	5.7	4.4	3.7
44	A96-357	5.2	5.1	5.0	5.6	3.7
45	A99-2235	5.2	5.4	5.4	4.8	3.3
46	A98-969	5.2	5.9	5.8	3.9	5.7
47	H97-696	5.2	4.9	5.3	5.5	1.7
48	A97-1436	5.2	5.8	5.2	4.5	3.7
49	A99-2674	5.2	6.2	5.2	4.2	3.7
50	Mystere	5.2	5.8	5.5	4.3	4.3
51	A00-891	5.1	5.8	4.8	4.9	3.7
52	A96-368	5.1	5.3	5.2	4.8	4.3
53	Royce	5.1	5.8	5.2	4.4	4.3
54	P-107	5.1	6.1	5.4	3.8	3.3
55	A98-365	5.1	5.2	5.3	4.8	2.7
56	A97-882	5.0	5.3	5.0	4.8	5.7
57	A95-1048	5.0	4.9	6.1	4.0	5.0
58	A99-2342	5.0	5.2	4.4	5.4	2.3
59	A99-2609	5.0	5.0	4.6	5.4	3.7
60	1052 Z	5.0	5.2	5.0	4.9	3.3
61	A99LM-15 (TBxKB Hybrid <sup>3</sup> )	5.0	5.6	4.9	4.6	5.3
62	Limousine	4.9	5.4	5.1	4.4	6.0
63	H98-1087	4.9	5.4	5.0	4.4	3.3
64	H99-164	4.9	4.9	5.3	4.6	6.0
65	Landmark	4.9	5.7	5.3	3.6	5.0
66	H99-163	4.8	5.2	5.0	4.2	6.0
67	A99-2108	4.8	5.3	5.4	3.8	5.3
68	A96-726	4.8	4.7	4.8	4.9	4.3
69	Brooklawn	4.8	5.1	5.2	4.1	6.0
70	A99-712	4.8	5.1	5.2	4.0	5.7

(Continued)



Table 1 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.	
71	Princeton P-105	4.8	5.2	4.7	4.3	2.0
72	Pacific 320	4.7	4.9	5.0	4.3	6.3
73	Boutique	4.7	4.3	5.0	4.9	3.7
74	Brooklawn	4.7	5.3	4.8	4.1	5.7
75	Brunswick	4.7	4.7	5.2	4.3	5.0
76	H2-31	4.7	5.2	5.4	3.6	5.3
77	B5-144	4.7	4.9	4.8	4.4	6.3
78	A99-2427	4.7	4.5	4.8	4.7	4.3
79	Sonic	4.7	5.3	4.2	4.4	5.3
80	Lakeshore	4.7	5.1	4.9	4.0	5.0
81	A98-869	4.6	5.5	5.1	3.4	5.3
82	Bonaire	4.6	4.8	4.8	4.2	5.7
83	A95-1087	4.6	5.0	4.5	4.2	2.3
84	A00-1586	4.6	5.2	4.8	3.6	5.0
85	A93-201	4.6	4.7	4.6	4.5	5.0
86	Advocate	4.6	4.9	4.5	4.4	2.7
87	A95-51	4.5	4.6	4.3	4.8	4.3
88	A99-707	4.5	4.8	4.6	4.1	6.0
89	A98-1033	4.4	5.2	5.0	3.1	5.3
90	Blackberry	4.4	4.6	4.3	4.5	3.0
91	Bordeaux	4.4	4.5	4.2	4.5	3.7
92	A97-959	4.4	4.8	4.4	4.0	4.3
93	Champagne	4.4	4.1	4.3	4.8	4.0
94	Champlain	4.3	4.7	4.6	3.8	2.3
95	PST-222	4.3	4.6	4.8	3.4	2.7
96	A99-3110	4.2	4.4	4.0	4.3	2.0
97	Blue Ridge	4.2	4.5	4.7	3.5	3.0
98	A98-1403	4.1	4.5	4.1	3.8	3.0
99	Dragon	4.1	4.1	4.0	4.3	4.7
100	A99-486	4.1	3.8	4.2	4.3	4.0
101	A98-475	3.9	4.0	4.3	3.3	3.7
102	Appalachian	3.8	3.6	3.8	4.1	5.3
103	America	3.7	3.8	4.6	2.7	3.0
104	5618-1 (TBxKB Hybrid)	3.6	3.4	3.8	3.7	5.0
105	Washington	3.6	3.2	3.8	3.7	5.7

(Continued)

Table 1 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005
	2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.	
LSD at 5% =	0.6	0.8	0.8	1.2	1.2

<sup>1</sup>9 = best turf quality

<sup>2</sup>9 = earliest spring green-up

<sup>3</sup>Texas x Kentucky bluegrass hybrid

Table 2. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2002 at Adelphia, NJ.

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
1	H98-30	6.1	6.3	5.7	6.2	6.7	6.0
2	P-107	6.0	6.1	6.1	5.7	2.7	4.7
3	Langara	6.0	6.3	5.8	5.8	6.3	6.3
4	Zinfandel	6.0	6.3	5.7	5.9	3.0	7.3
5	Serene	5.9	5.9	5.7	6.2	7.3	5.7
6	A97-1409	5.8	5.9	5.8	5.7	6.0	7.0
7	Moonshadow	5.8	5.8	5.7	5.8	2.3	6.0
8	Avid	5.7	6.1	5.6	5.5	2.3	8.3
9	Hallmark	5.7	6.1	5.3	5.8	2.3	7.3
10	A94-MH94	5.7	6.2	5.3	5.6	3.7	6.7
11	Bedazzled	5.7	5.4	5.4	6.2	6.0	8.3
12	A99-2897	5.6	5.3	5.9	5.7	4.3	6.7
13	A95-1048	5.6	6.2	5.9	4.8	6.7	5.0
14	A99-2674	5.6	5.8	5.4	5.7	4.7	5.7
15	SR 2284	5.6	5.8	5.4	5.7	6.0	6.7
16	A96-425	5.6	5.2	5.7	6.0	5.0	6.7
17	Unique	5.6	5.9	5.3	5.6	5.0	6.3
18	A97-1436	5.5	5.6	5.6	5.4	3.7	6.3
19	Perfection	5.5	5.2	5.4	6.0	1.3	5.7
20	A99-2235	5.5	5.8	5.3	5.4	3.3	6.7
21	Showcase	5.5	5.4	5.5	5.6	5.0	5.7
22	Brilliant	5.5	5.8	5.1	5.6	5.3	5.7
23	Avalanche	5.5	5.4	5.7	5.4	8.0	4.0
24	A99-2783	5.5	4.5	5.8	6.1	6.3	6.0
25	A99-2723	5.5	5.7	5.1	5.6	4.3	6.7
26	Mystique	5.5	5.7	5.3	5.3	5.3	5.0
27	H98-768	5.4	5.7	5.3	5.3	5.7	6.7
28	Excursion	5.4	5.0	5.7	5.5	1.7	5.3
29	A99-3270	5.4	5.9	5.1	5.2	4.7	6.3
30	A97-1287	5.4	4.4	5.5	6.3	6.3	7.7
31	Odyssey	5.4	5.1	5.2	5.8	1.7	5.7
32	Princeton P-105	5.4	4.5	5.7	5.9	2.3	5.3
33	Mystere	5.4	5.8	5.1	5.2	3.3	5.7
34	A99-2620	5.3	5.4	5.4	5.2	5.7	5.3
35	A99-2993	5.3	5.7	5.2	5.1	4.3	6.0

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
36	H98-711	5.3	5.8	5.1	5.2	6.0	5.7
37	A98-2128	5.3	4.9	5.7	5.3	2.7	6.7
38	H98-46	5.3	5.7	4.9	5.4	4.7	6.7
39	H98-1087	5.3	5.4	4.9	5.7	4.3	6.7
40	Midnight	5.3	5.2	5.2	5.5	1.3	5.0
41	Goldstar	5.3	5.4	5.1	5.3	4.7	6.3
42	A99-2950	5.3	4.8	5.3	5.8	4.7	6.3
43	A99-3117	5.3	5.5	5.1	5.2	3.0	6.7
44	Arrow	5.3	5.3	5.2	5.4	5.0	7.0
45	A97-1530	5.3	5.6	4.9	5.3	5.0	6.0
46	A99-269	5.3	5.5	5.0	5.3	4.0	5.7
47	A99-712	5.3	4.8	5.6	5.3	6.0	5.0
48	Royce	5.3	5.6	5.1	5.1	4.0	6.0
49	A97-1412	5.3	5.8	4.8	5.1	5.0	5.0
50	A99-2231	5.2	5.7	5.0	5.0	5.7	5.7
51	Argos	5.2	5.2	5.2	5.3	5.3	6.3
52	A99-523	5.2	5.7	4.8	5.1	4.3	6.0
53	H98-753	5.2	5.4	4.8	5.4	5.0	6.7
54	Arcadia	5.2	4.9	5.0	5.7	1.3	5.7
55	PST H92-203	5.2	5.5	5.0	5.1	5.7	5.0
56	Bravado	5.2	4.7	5.3	5.5	5.7	6.0
57	A99-3119	5.2	5.7	4.9	4.9	4.3	6.7
58	A99-2573	5.2	4.7	5.4	5.4	6.3	3.0
59	H99-1523	5.2	5.4	4.8	5.2	4.0	6.3
60	H92-203	5.2	5.2	4.9	5.4	5.3	6.0
61	A99-2670	5.2	5.3	5.0	5.2	4.7	6.7
62	A99-2904	5.2	5.5	4.9	5.0	4.7	6.3
63	H97-473	5.2	5.4	5.0	5.1	3.7	5.7
64	Landmark	5.2	5.1	5.1	5.3	8.0	4.0
65	A96-368	5.1	5.6	4.9	4.9	4.7	7.3
66	Bewitched	5.1	4.1	5.4	5.9	1.0	7.0
67	Valor	5.1	5.0	4.9	5.4	4.7	5.3
68	A99-2678	5.1	5.2	4.8	5.3	4.0	6.3
69	H98-767	5.1	5.1	5.0	5.2	4.0	5.7
70	A98-1033	5.1	4.9	5.2	5.2	6.3	5.3

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
71	A99-2927	5.1	5.3	4.8	5.2	4.0	6.0
72	Washington	5.1	4.9	5.2	5.1	8.0	5.0
73	PST C-74	5.1	5.3	4.8	5.0	4.7	6.3
74	SRX 205	5.1	4.8	5.1	5.2	2.0	5.7
75	North Star	5.1	4.6	5.8	4.8	1.3	6.7
76	Alpine	5.0	5.0	5.9	4.2	1.3	4.7
77	America	5.0	4.8	5.7	4.6	1.0	5.3
78	A97-1586	5.0	5.2	4.8	5.1	4.3	6.7
79	SRX 2554	5.0	5.4	5.3	4.3	2.3	5.7
80	Wildwood	5.0	5.2	4.9	4.9	2.3	6.3
81	OAN-64	5.0	4.4	5.2	5.4	5.7	6.0
82	A98-475	5.0	5.0	5.0	5.0	7.0	6.3
83	SRX 26351	5.0	5.6	4.7	4.7	5.0	6.3
84	SRX-2114	5.0	4.8	5.1	5.1	1.7	6.3
85	Bariris	5.0	5.0	5.0	5.0	5.0	6.0
86	A95-1087	5.0	5.5	4.5	5.0	4.3	8.0
87	A99-2964	5.0	4.5	5.0	5.5	3.3	7.0
88	Rythum	5.0	4.4	5.5	5.0	1.7	5.7
89	Moonlight	5.0	5.3	4.7	4.9	4.3	5.7
90	A98-365	5.0	5.0	4.8	5.2	2.3	6.0
91	A99-2342	5.0	5.2	4.3	5.5	3.7	6.7
92	A99-2108	5.0	5.2	4.9	4.7	6.3	7.0
93	Mallard	5.0	5.0	4.6	5.4	6.0	7.0
94	A98-737	5.0	4.7	5.0	5.1	1.3	5.3
95	A99-2609	5.0	4.5	4.7	5.7	5.7	6.7
96	A93-485	4.9	4.4	5.2	5.2	8.3	4.7
97	H97-696	4.9	4.5	5.1	5.1	1.7	5.7
98	Glenmont	4.9	4.8	4.8	5.1	5.0	7.3
99	Mercury	4.9	5.6	4.3	4.8	4.0	5.3
100	Cabernet	4.9	4.5	5.1	5.2	8.3	5.0
101	A98-1403	4.9	5.0	5.0	4.7	3.0	5.3
102	A98-305	4.9	5.2	4.5	5.0	5.0	5.7
103	A98-969	4.9	4.7	5.2	4.7	4.3	5.3
104	H99-164	4.9	4.5	5.4	4.7	5.3	5.7
105	Lakeshore	4.8	4.8	5.1	4.6	5.7	4.7

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
106	Advocate	4.8	5.2	4.9	4.4	4.0	5.7
107	A99-354	4.8	4.5	4.9	5.0	5.7	4.7
108	BMX 02 0337	4.8	4.9	4.6	5.0	6.0	7.3
109	A95-51	4.8	4.8	4.9	4.7	5.0	5.0
110	Midnight II	4.8	4.2	5.2	5.0	1.0	4.7
111	A96-468	4.8	4.9	4.7	4.7	4.3	7.3
112	A97-904	4.8	4.5	5.2	4.7	6.0	5.3
113	SRX 2205	4.8	4.0	5.1	5.3	6.0	6.7
114	Kingfisher	4.8	4.4	4.8	5.1	4.7	7.7
115	A01-845 (TBxKB Hybrid <sup>4</sup> )	4.8	4.7	5.2	4.5	5.7	3.7
116	A98-869	4.7	4.8	4.8	4.7	5.3	5.0
117	Blackstone	4.7	4.7	4.7	4.9	4.0	6.3
118	A96-357	4.7	4.6	4.4	5.2	2.0	6.3
119	Baritone	4.7	4.7	4.6	4.9	5.7	5.3
120	A98-290	4.7	5.0	4.5	4.7	2.3	6.0
121	Blackberry	4.7	5.3	4.3	4.6	2.3	6.3
122	Bonaire	4.7	4.3	5.3	4.6	5.7	5.0
123	Champlain	4.7	4.1	4.7	5.4	2.7	6.0
124	A00-1586	4.7	5.1	4.5	4.5	6.0	4.7
125	A00TB-99 (TBxKB Hybrid)	4.7	3.8	4.9	5.3	3.7	4.7
126	Pick 453	4.7	4.1	4.8	5.2	3.3	6.3
127	A96-415	4.7	4.2	4.3	5.5	5.0	7.0
128	Dragon	4.7	4.8	4.6	4.7	7.0	3.3
129	Limousine	4.7	3.9	5.0	5.1	3.3	4.7
130	A98-518	4.7	4.6	4.3	5.1	5.3	5.7
131	Baronie	4.7	4.9	4.7	4.5	6.0	5.7
132	Champagne	4.7	4.6	4.7	4.7	6.7	4.0
133	Boutique	4.7	4.5	4.6	4.9	6.0	7.0
134	H99-163	4.7	4.4	5.2	4.4	5.3	5.7
135	Bordeaux	4.7	4.8	4.2	5.0	5.7	6.0
136	PST-222	4.6	4.9	4.2	4.8	3.7	6.7
137	A99-707	4.6	4.9	4.5	4.3	6.7	4.0
138	Hunnington	4.6	3.7	5.0	5.0	7.3	4.0
139	Brooklawn	4.6	4.5	4.9	4.3	5.7	4.3
140	A93-201	4.5	4.2	4.8	4.6	6.7	4.7

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
141	A97-882	4.5	4.2	5.0	4.4	6.3	4.7
142	A96-726	4.5	4.1	4.5	5.0	5.3	6.0
143	Shamrock	4.5	4.4	4.7	4.5	6.7	5.7
144	OAN-211	4.5	4.6	4.7	4.2	7.7	4.0
145	Blue Ridge	4.5	4.1	4.8	4.7	5.3	6.7
146	A99-486	4.5	4.0	4.2	5.2	4.7	6.3
147	A99-2427	4.5	4.1	4.6	4.8	3.3	6.0
148	A00-891	4.5	5.2	4.2	4.0	4.7	6.3
149	Touchdown	4.5	4.3	4.8	4.3	7.3	4.7
150	Livingston	4.4	4.4	4.5	4.3	6.3	4.0
151	Rampart	4.4	4.3	4.1	4.8	3.0	7.0
152	Pacific 320	4.4	4.6	4.5	4.1	5.3	4.7
153	A96-423	4.4	4.4	4.1	4.5	4.7	6.3
154	A00-57	4.4	4.1	4.5	4.4	5.3	3.7
155	Brunswick	4.3	4.0	4.7	4.3	6.3	4.3
156	Blacksburg	4.3	4.3	4.3	4.4	4.0	4.7
157	Baronette	4.3	4.6	4.1	4.3	6.3	6.0
158	H2-31	4.3	3.4	4.3	5.2	4.3	5.7
159	Cynthia	4.3	4.1	4.5	4.3	5.0	3.3
160	Barrister	4.3	3.7	4.6	4.5	1.7	4.7
161	Canon	4.3	4.1	4.4	4.2	5.0	4.0
162	99-216	4.2	4.0	4.4	4.3	4.0	5.3
163	A01-844 (TBxKB Hybrid)	4.2	4.4	4.2	4.2	6.0	4.0
164	A96-305	4.2	4.5	3.8	4.4	3.0	5.3
165	B5-144	4.2	4.2	4.5	3.9	3.3	4.7
166	Fairfax	4.2	4.0	4.7	3.8	4.3	4.7
167	A99-3110	4.2	4.1	4.0	4.4	2.7	6.7
168	SRX 2U17	4.2	4.0	4.6	3.9	4.0	5.3
169	A99-2771	4.2	3.3	4.4	4.8	7.3	4.3
170	A99LM-16 (TBxKB Hybrid)	4.2	3.9	4.4	4.2	2.0	4.0
171	Explorer	4.1	3.9	4.0	4.6	1.3	5.7
172	Parade	4.1	4.5	3.8	4.0	5.7	5.3
173	RSP	4.1	3.7	4.4	4.2	7.3	2.7
174	A01-874 (TBxKB Hybrid)	4.1	4.2	4.0	4.0	4.3	4.3
175	A00TB-63 (TBxKB Hybrid)	4.0	3.3	4.7	4.2	1.7	3.7

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005
		2003-2005 Avg.	2003 Avg.	2004 Avg.	2005 Avg.		
176	Cheetah	4.0	4.4	3.9	3.8	4.3	3.3
177	CIS-KFLO	4.0	4.4	3.8	3.9	4.3	4.7
178	Katie	4.0	3.7	4.0	4.4	5.0	6.3
179	Pick 1343	4.0	3.9	4.0	4.1	4.7	5.3
180	A99LM-15 (TBxKB Hybrid)	3.9	3.3	4.1	4.5	7.7	5.0
181	SRX 20RF	3.9	4.3	3.9	3.6	3.3	6.3
182	A01-900 (TBxKB Hybrid)	3.9	3.5	3.6	4.5	5.7	3.3
183	A94-976	3.8	4.1	3.5	3.9	5.0	6.0
184	99-126	3.8	3.0	4.0	4.3	4.7	6.3
185	SR 2100	3.7	3.4	3.9	3.9	2.3	5.3
186	SRX 27921	3.7	3.5	3.9	3.8	3.3	6.0
187	Muddy Pk	3.7	3.7	3.7	3.5	8.3	2.0
188	Appalachian	3.6	3.4	3.7	3.9	8.0	3.3
189	Sonic	3.6	3.9	3.8	3.2	4.7	1.7
190	A96-742	3.6	3.6	3.8	3.5	8.0	2.0
191	Marquis	3.6	3.0	3.6	4.1	6.3	3.7
192	Revielle (TBxKB Hybrid)	3.5	3.3	3.1	4.1	5.3	5.3
193	A96-715	3.3	3.1	3.0	3.7	4.7	6.0
194	99-226	3.2	3.0	3.0	3.6	4.0	4.0
195	LF 303	2.1	1.9	2.4	1.9	5.0	2.7
	LSD at 5% =	0.5	0.7	0.7	0.7	1.5	1.3

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = earliest spring green-up<sup>3</sup>9 = least disease<sup>4</sup>Texas x Kentucky bluegrass hybrid



Table 3. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2003 at North Brunswick, NJ.

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005	Summer Patch <sup>3</sup> July 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
1	Beyond	6.3	6.0	6.5	1.3	8.3	7.3
2	Excursion	6.2	6.6	5.7	2.0	8.3	6.0
3	H99-338	6.2	5.7	6.7	3.0	6.7	7.3
4	Bedazzled	6.1	6.0	6.2	3.3	7.3	6.7
5	Midnight	6.0	5.7	6.3	2.7	9.0	6.7
6	Liberator	6.0	6.5	5.5	1.7	8.7	4.7
7	A03-1	6.0	6.0	5.9	3.3	7.0	7.7
8	Impact	6.0	5.9	6.1	1.3	8.3	7.0
9	Rugby II	6.0	6.2	5.8	1.3	8.3	6.3
10	H94-305	6.0	5.8	6.1	6.0	5.3	6.3
11	A03-6	5.9	5.6	6.3	6.3	3.7	6.7
12	H99-334	5.9	5.6	6.2	7.0	4.0	6.3
13	A99-2103	5.9	6.3	5.5	2.3	7.3	6.0
14	A99-2717	5.9	6.3	5.5	3.7	5.3	5.7
15	A03-34	5.9	5.8	6.0	4.0	8.3	5.7
16	NuGlade	5.9	6.4	5.4	1.3	8.7	5.3
17	A00-1400	5.8	7.1	4.5	3.3	9.0	5.3
18	Award	5.8	6.1	5.5	1.0	8.7	6.0
19	RSP	5.8	5.5	6.1	6.3	5.3	5.7
20	A97-1468	5.8	6.3	5.4	3.7	6.3	6.3
21	A99-2559	5.8	5.9	5.7	5.7	6.3	6.3
22	A03-8	5.8	5.4	6.2	6.7	4.3	6.3
23	H98-30	5.8	5.5	6.0	3.0	8.7	5.3
24	H99-384	5.8	6.0	5.5	4.7	7.0	5.0
25	A03-3	5.7	6.0	5.4	3.7	7.0	5.7
26	A03-51	5.7	6.6	4.8	3.7	8.0	5.3
27	PST C-74	5.7	5.8	5.5	3.0	5.7	5.7
28	Bluemoon	5.7	5.9	5.5	1.0	8.7	5.3
29	Shiraz	5.7	6.2	5.1	5.0	8.3	4.7
30	Hunnington	5.7	5.2	6.2	4.0	7.3	5.0
31	A03-5	5.6	5.7	5.6	7.7	4.3	6.3
32	Bluestone	5.6	6.3	4.9	1.7	8.0	5.0
33	A99-2950	5.6	5.1	6.1	2.7	8.0	6.7
34	A03-84	5.6	6.6	4.6	3.7	8.3	5.0
35	A03-70	5.6	6.0	5.2	2.7	5.7	5.3

(Continued)

Table 3 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005	Summer Patch <sup>3</sup> July 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
36	H98-487	5.6	5.5	5.6	2.0	6.0	5.3
37	Total Eclipse	5.6	6.4	4.8	2.3	8.7	5.0
38	A03-24	5.6	5.1	6.0	5.7	3.7	5.7
39	A03-62	5.6	5.4	5.7	3.0	6.3	6.7
40	A97-1573	5.6	6.0	5.2	3.0	8.0	5.7
41	A99-2674	5.6	5.9	5.2	3.7	6.0	5.0
42	H94-467	5.6	5.0	6.1	6.7	3.7	4.3
43	A00-62	5.5	5.9	5.2	3.7	6.0	4.7
44	A03-29	5.5	5.0	6.0	6.0	5.3	6.3
45	A03-69	5.5	5.0	6.0	5.3	4.7	6.0
46	A99-2226	5.5	5.5	5.5	4.0	5.7	4.7
47	Mystere	5.5	5.5	5.5	2.7	7.0	5.0
48	A03-26	5.5	5.1	5.8	5.7	3.7	5.3
49	A97-1560	5.5	5.7	5.3	2.7	5.3	5.3
50	A00-4135	5.5	5.0	6.0	3.3	8.7	5.7
51	A97-1481	5.5	6.1	4.9	3.7	6.3	5.0
52	H98-46	5.5	5.3	5.7	3.0	5.7	6.0
53	A97-1287	5.5	6.0	4.9	4.3	7.3	6.0
54	A03-4	5.4	5.7	5.2	3.3	8.3	4.7
55	A99-2525	5.4	5.2	5.7	3.3	6.7	5.3
56	A00-8	5.4	5.5	5.4	5.3	4.3	5.3
57	A00-247	5.4	5.4	5.4	3.0	5.0	5.7
58	Cabernet	5.4	5.0	5.8	5.0	6.0	6.0
59	A97-1263	5.4	5.7	5.1	2.7	5.7	4.7
60	A99-425	5.4	6.1	4.7	5.0	8.3	5.7
61	A98-1315	5.4	5.0	5.8	4.7	6.3	5.3
62	A03-21	5.4	5.2	5.5	3.7	7.3	6.0
63	A94-703	5.4	5.5	5.2	5.3	7.3	6.3
64	A99-2108	5.4	6.0	4.7	4.7	6.3	5.0
65	A03-75	5.4	5.3	5.5	3.0	5.7	5.3
66	A03-50	5.4	6.3	4.4	2.3	9.0	4.7
67	Pinot	5.3	5.2	5.5	2.3	8.3	6.7
68	A99-2426	5.3	5.2	5.5	3.3	5.3	6.3
69	A00-4199	5.3	5.3	5.4	3.7	8.0	5.0
70	Rambo	5.3	5.8	4.8	2.0	8.3	5.0

(Continued)

Table 3 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005	Summer Patch <sup>3</sup> July 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
71	A03-77	5.3	5.1	5.5	3.3	8.7	5.3
72	A99-2110	5.3	6.1	4.5	3.7	8.0	4.7
73	A99-712	5.3	5.1	5.4	5.0	4.7	4.3
74	A99-707	5.3	4.5	6.1	4.0	5.3	5.0
75	A93-485	5.3	5.5	5.1	4.7	8.7	5.0
76	A03-23	5.3	5.4	5.1	5.0	2.0	5.7
77	A03-56	5.3	5.7	4.8	4.7	8.7	4.7
78	A00-4135	5.3	5.3	5.2	2.3	8.3	5.3
79	A99-2723	5.3	6.0	4.5	4.3	5.3	5.7
80	A03-35	5.2	5.3	5.1	3.7	8.3	4.7
81	A03-64	5.2	5.4	5.1	3.3	5.0	5.7
82	A03-71	5.2	4.8	5.6	2.7	5.3	5.3
83	A03-76	5.2	4.8	5.6	3.0	5.3	6.0
84	A03-28	5.2	5.8	4.6	3.7	4.7	5.0
85	A96-454	5.2	5.9	4.5	4.0	7.7	5.3
86	A99-2499	5.2	5.3	5.1	3.7	5.0	5.0
87	H92-389	5.2	5.3	5.0	3.3	8.0	4.3
88	A03-61	5.1	5.3	5.0	3.0	5.7	4.3
89	A00-4036	5.1	5.9	4.4	2.7	8.7	4.7
90	Chicago II	5.1	5.4	4.8	1.7	8.7	5.3
91	A97-1290	5.1	5.3	4.9	4.0	5.7	5.7
92	A96-1338	5.1	5.8	4.4	5.0	8.3	4.3
93	Diva	5.1	5.4	4.8	4.3	8.0	4.7
94	A03-12	5.1	4.7	5.4	5.3	7.7	6.7
95	A03-33	5.0	5.8	4.2	4.3	7.3	4.7
96	A03-37	5.0	5.6	4.4	3.7	8.3	4.7
97	A03-59	5.0	5.5	4.5	3.7	4.3	5.0
98	A97-1304	5.0	6.1	3.9	4.3	6.0	4.7
99	489-12 (TBxKB Hybrid <sup>4</sup> )	5.0	4.5	5.4	4.3	8.0	5.0
100	Sonoma	5.0	6.1	3.9	4.3	7.3	4.0
101	A99-2427	5.0	5.3	4.6	2.3	7.3	5.3
102	A03-38	4.9	5.4	4.4	3.7	8.0	4.3
103	A03-86	4.9	5.7	4.2	4.0	7.3	5.3
104	H01-229	4.9	5.8	4.0	2.7	6.3	5.0
105	Boutique	4.9	6.2	3.7	3.3	8.3	4.3

(Continued)

Table 3 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005	Summer Patch <sup>3</sup> July 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
106	A03-66	4.9	5.6	4.2	3.7	8.3	4.3
107	Blackberry	4.9	5.0	4.8	3.0	6.7	5.0
108	A00-4019	4.9	4.7	5.1	1.7	7.0	5.0
109	Bedazzled	4.9	6.0	3.8	3.3	8.7	4.3
110	A03-65	4.9	5.3	4.4	2.7	5.3	4.0
111	A97-1328	4.9	5.8	3.9	4.0	6.0	3.7
112	A98-233	4.9	5.4	4.3	2.7	8.0	5.0
113	A97-1371	4.8	5.5	4.2	3.0	7.3	4.3
114	A03-81	4.8	5.4	4.2	4.0	7.7	3.3
115	A99-2921	4.8	5.3	4.3	2.7	7.3	5.7
116	Royce	4.8	5.4	4.2	3.3	4.7	4.7
117	Mystique	4.8	5.2	4.4	3.7	5.3	4.3
118	8489 (TBxKB Hybrid)	4.8	5.0	4.5	4.0	6.7	5.3
119	A03-79	4.8	5.0	4.6	3.0	8.0	5.7
120	A03-63	4.8	5.3	4.2	3.3	7.3	5.0
121	A99-3110	4.8	5.3	4.2	3.0	6.7	4.3
122	Freedom II	4.8	5.2	4.3	2.0	6.7	4.7
123	Wild Horse	4.8	5.1	4.4	3.3	7.0	4.3
124	A97-1303	4.7	5.4	4.1	3.0	5.0	5.3
125	A99LM-15 (TBxKB Hybrid)	4.7	5.5	4.0	3.7	7.0	4.7
126	A95-1087	4.7	5.5	3.9	3.7	7.3	4.3
127	A03-9	4.7	5.0	4.4	4.3	6.0	4.0
128	H99-164	4.7	5.4	4.0	4.0	7.3	4.7
129	Princeton P-105	4.7	5.1	4.2	1.7	8.7	4.3
130	Sonic	4.7	4.5	4.8	2.7	5.0	5.3
131	A98-969	4.7	5.4	3.9	3.7	7.7	4.3
132	A99-2280	4.7	5.1	4.2	4.0	7.7	4.3
133	A97-1333	4.6	5.3	3.9	3.7	7.0	4.0
134	H97-646	4.6	5.1	4.1	4.7	8.3	3.3
135	H01-494	4.6	4.5	4.7	5.7	2.0	5.7
136	A98-1038	4.6	5.3	3.8	4.0	7.7	3.7
137	A01-781	4.5	4.6	4.5	4.3	5.7	4.0
138	A95-1048	4.5	5.6	3.5	5.0	8.0	3.7
139	A96-975	4.5	4.9	4.2	3.0	6.3	4.0
140	A97-805	4.5	5.0	4.0	4.0	6.0	4.0

(Continued)

Table 3 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Leaf Spot <sup>3</sup> May 2005	Summer Patch <sup>3</sup> July 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
141	A96-368	4.5	5.5	3.5	2.7	8.7	4.3
142	Muddy Pk	4.5	4.7	4.3	6.0	4.0	4.3
143	A03-42	4.5	5.3	3.6	5.7	7.0	2.7
144	A99-3094	4.5	5.9	3.1	3.3	8.3	3.7
145	A98-861	4.5	4.9	4.0	2.7	7.0	4.3
146	Champagne	4.4	4.8	4.1	3.7	6.7	3.7
147	Champlain	4.4	5.2	3.7	3.3	8.0	3.7
148	Eagleton	4.4	5.4	3.4	4.0	7.7	5.3
149	A03-72	4.4	4.6	4.2	2.7	6.3	5.3
150	Bordeaux	4.4	5.3	3.5	4.3	6.7	3.0
151	A96-1201	4.4	5.5	3.3	2.3	6.3	3.7
152	Brooklawn	4.4	5.0	3.7	5.0	7.3	3.7
153	A99-3182	4.3	4.9	3.8	3.3	7.0	3.3
154	H01-727	4.3	3.9	4.6	2.7	6.3	4.7
155	A03-45	4.3	4.7	3.9	3.7	8.3	4.0
156	Blue Chip	4.3	4.8	3.8	2.0	6.0	3.7
157	A96-715	4.3	4.7	3.9	3.7	6.7	4.7
158	A00-4149	4.3	5.4	3.1	3.0	8.3	2.7
159	A99-2631	4.3	4.9	3.6	4.0	6.7	4.0
160	A97-959	4.2	5.1	3.3	4.0	6.0	3.7
161	A00-4058	4.1	4.9	3.3	4.3	7.7	3.3
162	Durham	4.1	4.9	3.3	4.3	6.0	3.7
163	A02-947	4.0	3.3	4.7	3.0	6.3	4.7
164	A03-153	3.8	5.2	2.5	3.7	5.7	2.3
165	A00-1037	3.8	4.5	3.1	4.7	6.0	3.3
166	NuBlue	3.7	4.8	2.7	4.3	7.0	2.7
	LSD at 5% =	0.8	0.7	1.2	1.8	1.6	1.8

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = earliest spring green-up<sup>3</sup>9 = least disease<sup>4</sup>Texas x Kentucky bluegrass hybrid

Table 4. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2003 at Adelphia, NJ. (Test 1.)

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
	2004- 2005 Avg.	2004 Avg.	2005 Avg.			
1 Shiraz	6.7	6.9	6.4	5.0	7.3	9.0
2 A00-1400	6.3	6.4	6.2	3.0	8.0	9.0
3 A99-354	6.3	6.5	6.1	7.7	8.7	7.7
4 A03-84	6.3	6.4	6.1	4.0	5.0	8.7
5 A99-425	6.2	6.2	6.2	5.0	4.7	9.0
6 Moon Shadow	6.2	6.5	5.8	2.7	6.0	6.0
7 A99-2559	6.1	5.9	6.3	7.0	9.0	7.0
8 H98-30	6.1	6.3	5.9	5.3	8.0	8.3
9 Diva	6.1	6.1	6.0	3.0	4.3	8.3
10 A96-1338	6.0	6.1	6.0	5.3	9.0	7.7
11 A03-3	6.0	6.4	5.6	5.7	8.7	6.0
12 Monte Carlo	6.0	6.3	5.7	4.0	3.0	7.3
13 2RAD-343	6.0	6.1	6.0	5.7	9.0	7.7
14 Langara	6.0	5.9	6.0	5.7	6.0	8.7
15 A97-1573	6.0	6.5	5.5	5.0	2.7	7.7
16 Rugby II	6.0	6.1	5.9	1.7	8.3	5.3
17 A97-1409	6.0	6.0	5.9	1.7	8.3	5.7
18 Royale	6.0	6.5	5.4	3.7	6.7	7.7
19 Beyond	5.9	6.1	5.7	1.7	8.0	5.0
20 Princeton P-105	5.9	5.8	5.9	3.0	7.3	7.7
21 Hallmark	5.9	6.1	5.6	3.3	6.0	6.3
22 A99-2723	5.8	6.2	5.4	2.7	3.7	7.3
23 Absolute	5.8	6.1	5.5	2.0	5.7	8.0
24 Blue Ridge	5.8	6.0	5.7	5.0	4.3	8.7
25 SR 2284	5.8	6.2	5.5	6.7	3.7	7.7
26 Cabernet	5.8	5.9	5.7	4.0	8.0	4.7
27 A03-66	5.8	6.4	5.2	5.0	5.3	6.7
28 A99-3119	5.8	6.2	5.4	2.7	4.0	7.0
29 A03-56	5.8	5.6	6.0	4.3	8.7	8.0
30 Bluestone	5.8	6.0	5.6	1.3	8.7	4.7
31 A97-1468	5.8	6.2	5.4	2.7	2.3	7.3
32 Midnight	5.8	5.7	5.8	1.3	8.0	5.7
33 Liberator	5.8	5.6	5.9	1.0	7.7	5.0
34 OAN-64	5.8	5.8	5.7	3.7	7.0	8.0
35 A97-1560	5.7	6.1	5.3	3.0	3.0	7.7

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
36	Excursion	5.7	5.6	5.8	1.7	7.7	5.3
37	BAR Pp 0573	5.7	6.1	5.3	4.0	2.3	7.7
38	A97-1287	5.7	6.2	5.2	4.3	7.3	7.7
39	Total Eclipse	5.7	5.8	5.5	2.7	6.7	5.3
40	A96-975	5.7	6.1	5.3	4.3	5.7	6.7
41	A00-4036	5.7	5.6	5.8	1.0	5.0	8.7
42	A03-1	5.6	5.5	5.8	5.3	8.0	5.0
43	Bedazzled	5.6	5.8	5.5	5.3	3.3	7.3
44	A03-37	5.6	5.6	5.6	6.3	9.0	7.3
45	Perfection	5.6	6.2	5.0	2.0	8.0	5.3
46	A95-1048	5.6	6.3	4.9	5.0	7.7	8.0
47	A93-485	5.6	5.5	5.7	4.7	8.3	8.0
48	Wildwood	5.6	5.7	5.5	3.7	6.3	7.7
49	A99-2950	5.6	5.4	5.7	5.7	3.7	7.3
50	BAR Pp 0468	5.6	6.1	5.0	2.3	2.7	5.7
51	A96-454	5.6	5.7	5.4	5.3	3.3	8.7
52	A03-61	5.5	5.7	5.3	3.3	2.3	6.7
53	A03-71	5.5	5.9	5.2	2.7	2.3	7.3
54	A00-247	5.5	5.8	5.2	4.0	4.0	7.7
55	A99-2226	5.5	5.9	5.1	3.3	2.3	7.3
56	Award	5.5	5.7	5.4	2.0	7.7	5.0
57	Sonoma	5.5	5.9	5.2	4.7	5.0	8.3
58	NuGlade	5.5	5.7	5.3	1.7	7.7	5.0
59	Royce	5.5	5.8	5.2	3.0	4.0	7.7
60	Pick 711	5.5	5.7	5.3	2.7	1.7	7.0
61	Arcadia	5.5	5.9	5.1	1.0	7.0	5.0
62	A00-4135	5.5	5.6	5.4	2.3	3.0	7.3
63	A97-1481	5.5	6.0	4.9	3.0	3.3	7.7
64	Boutique	5.5	5.9	5.0	5.0	5.7	8.7
65	Blue Velvet	5.5	5.7	5.3	2.0	8.0	5.0
66	A03-50	5.5	5.6	5.3	2.0	7.0	6.0
67	A03-70	5.5	5.6	5.3	2.7	3.7	7.7
68	A96-368	5.5	5.8	5.1	5.0	5.0	9.0
69	A99-2108	5.5	6.0	4.9	6.7	6.3	8.0
70	A99-2674	5.5	5.8	5.1	3.3	3.0	6.3

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
71	A99-2110	5.4	5.8	5.1	2.7	4.3	7.7
72	H01-229	5.4	5.6	5.3	3.0	8.0	7.7
73	H99-338	5.4	5.3	5.6	3.7	7.3	6.0
74	3RAD-504	5.4	6.1	4.7	3.3	8.3	6.3
75	Odyssey	5.4	5.8	5.0	1.3	8.0	4.0
76	PST C-74	5.4	5.7	5.1	3.3	3.0	6.7
77	A99-3110	5.4	6.3	4.5	3.3	2.3	7.0
78	A94-703	5.4	5.6	5.2	4.3	7.7	6.0
79	Mystique	5.4	6.2	4.6	2.3	3.0	7.3
80	Barrister	5.4	5.4	5.3	1.7	7.0	4.7
81	Showcase	5.4	5.6	5.2	3.3	2.0	7.0
82	A97-1328	5.4	5.7	5.0	3.0	4.3	7.7
83	A03-4	5.4	5.1	5.6	4.7	8.0	7.7
84	A97-805	5.4	5.4	5.3	4.3	5.7	6.0
85	A99-2499	5.4	5.8	4.9	2.7	2.7	7.7
86	HS-03	5.3	5.6	5.0	2.7	6.0	8.7
87	Pick 768	5.3	5.7	5.0	2.7	2.7	7.0
88	A03-75	5.3	5.7	4.9	2.7	2.3	7.0
89	Mystere	5.3	5.5	5.2	2.7	3.7	6.7
90	A99-2921	5.3	5.5	5.1	4.7	6.0	8.0
91	Mercury	5.3	5.8	4.8	4.3	3.7	5.7
92	A03-51	5.3	5.0	5.5	3.7	4.0	5.7
93	A03-65	5.3	5.5	5.0	3.3	2.0	7.0
94	A97-1304	5.3	5.8	4.7	2.3	2.7	7.7
95	BAR Pp 0471	5.3	5.4	5.1	1.7	2.7	6.0
96	Rampart	5.3	5.5	5.0	3.3	6.0	9.0
97	A97-1371	5.2	5.6	4.9	3.0	5.0	6.7
98	BlueMoon	5.2	5.7	4.7	1.3	8.0	4.7
99	A03-77	5.2	5.4	5.0	3.7	6.3	8.7
100	A97-1303	5.2	6.1	4.4	3.3	3.0	7.3
101	Champlain	5.2	5.4	5.0	3.7	5.3	7.7
102	A03-79	5.2	5.7	4.7	5.7	4.0	8.3
103	H94-305	5.2	5.2	5.2	7.0	9.0	6.0
104	A99-3182	5.2	5.4	5.0	4.3	7.0	7.0
105	A00-4019	5.2	5.0	5.4	1.0	5.7	5.7

(Continued)



Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
106	A03-35	5.2	5.3	5.1	4.0	6.3	7.7
107	H98-487	5.2	5.3	5.0	2.3	4.7	7.3
108	Mallard	5.2	5.6	4.7	3.7	3.0	8.0
109	A03-76	5.1	5.7	4.6	3.0	2.3	7.3
110	A99-2426	5.1	5.7	4.6	3.7	2.7	7.0
111	A00-62	5.1	5.0	5.3	6.7	7.3	7.3
112	A99-2231	5.1	5.4	4.8	3.3	2.0	6.7
113	Baritone	5.1	5.3	5.0	3.0	6.3	6.7
114	PST-1201	5.1	5.6	4.6	3.7	8.0	6.3
115	A03-12	5.1	5.2	5.0	6.3	7.7	5.7
116	A98-1315	5.1	4.9	5.3	4.3	7.3	7.3
117	Bewitched	5.1	5.0	5.2	2.0	6.3	8.0
118	A03-54	5.1	4.9	5.3	6.7	5.3	7.3
119	Impact	5.1	5.0	5.1	1.7	7.7	5.3
120	Bordeaux	5.1	5.6	4.6	3.3	2.7	7.7
121	1567	5.1	5.2	4.9	4.3	2.7	7.3
122	A03-38	5.1	5.0	5.1	5.3	6.7	6.7
123	SRX 26351	5.1	5.4	4.7	4.3	2.0	7.7
124	A03-34	5.1	5.1	5.0	6.0	7.7	7.0
125	A99-2717	5.1	5.1	5.0	3.7	3.7	6.3
126	Indigo	5.1	5.3	4.8	3.3	3.0	8.0
127	A03-33	5.0	5.2	4.9	4.0	7.3	6.7
128	Hunnington	5.0	5.1	5.0	4.7	6.0	5.7
129	A97-1686	5.0	5.3	4.8	5.3	3.0	8.0
130	Chicago II	5.0	5.2	4.8	3.7	6.0	8.3
131	Kingfisher	5.0	5.3	4.7	4.0	4.3	8.0
132	A03-62	5.0	5.4	4.5	3.3	2.3	6.7
133	Bariris	5.0	5.3	4.7	3.7	6.0	7.3
134	A99-2103	5.0	5.2	4.7	2.7	1.3	6.7
135	A98-969	5.0	5.2	4.7	3.7	6.0	8.3
136	A00-4199	5.0	5.2	4.7	2.3	4.3	6.3
137	Pinot	4.9	5.2	4.7	3.0	4.0	7.7
138	3257	4.9	4.6	5.3	3.0	4.3	7.7
139	A98-233	4.9	4.7	5.1	2.7	4.7	7.3
140	Rambo	4.9	5.2	4.6	2.7	7.0	5.3

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
141	Eagleton	4.9	5.0	4.8	2.7	7.3	3.7
142	America	4.9	5.0	4.7	3.7	3.3	6.7
143	SRX 00509	4.9	5.0	4.8	3.0	1.3	7.0
144	SRX 003180	4.9	4.5	5.3	4.3	7.0	7.0
145	A95-1087	4.9	5.0	4.7	3.7	1.7	7.7
146	Shamrock	4.9	5.2	4.5	5.0	5.3	8.0
147	BAR VB 9601	4.9	5.0	4.7	3.0	4.7	7.3
148	A99-712	4.8	4.9	4.8	3.3	8.7	6.0
149	SRX 00451	4.8	5.1	4.6	3.3	1.7	7.0
150	Blackberry	4.8	5.5	4.2	3.0	2.3	7.3
151	H94-467	4.8	5.0	4.6	6.3	9.0	1.7
152	SRX 2U17	4.8	5.2	4.4	3.3	5.7	6.7
153	A00-4058	4.8	5.2	4.4	3.0	6.0	7.3
154	Lakeshore	4.8	5.0	4.6	5.3	5.7	7.7
155	Explorer	4.8	5.4	4.2	2.0	6.3	5.3
156	BlueChip	4.8	4.9	4.6	4.3	3.0	7.0
157	Rythum	4.8	4.7	4.8	2.0	6.0	5.7
158	Barimpala	4.8	4.8	4.7	4.7	8.7	5.0
159	A98-1038	4.7	5.1	4.4	4.7	5.0	7.7
160	H97-615	4.7	5.1	4.4	5.7	7.0	6.0
161	Baronette	4.7	5.3	4.2	5.3	5.7	7.3
162	Argos	4.7	4.7	4.8	5.0	5.7	8.0
163	Pick 453	4.7	5.0	4.4	2.7	4.0	9.0
164	A03-63	4.7	4.9	4.5	4.0	3.3	7.3
165	BAR VB 3115B	4.7	4.9	4.5	3.3	7.3	8.7
166	Bar Pp 0566	4.7	5.0	4.3	4.7	2.3	7.0
167	Pick 46	4.7	4.5	4.9	3.7	2.0	6.3
168	SR 2100	4.7	4.9	4.4	3.3	4.7	8.7
169	Champagne	4.7	5.0	4.3	4.3	5.0	7.0
170	A01-781	4.7	5.3	4.0	4.7	8.0	6.3
171	A97-1263	4.7	4.8	4.5	3.0	2.0	6.7
172	A00-4149	4.6	4.7	4.6	3.3	3.7	8.3
173	KBB-03	4.6	5.0	4.3	4.7	6.7	6.0
174	RSP	4.6	5.1	4.1	6.3	8.3	1.3
175	A03-72	4.6	4.9	4.4	3.3	2.0	6.7

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
176	A98-305	4.6	4.7	4.5	3.7	1.3	5.7
177	Bartender	4.6	4.7	4.6	6.7	4.0	5.3
178	99AN-50	4.6	5.0	4.2	3.3	8.3	5.3
179	Freedom II	4.6	4.5	4.6	2.7	4.7	7.0
180	Baronie	4.6	4.8	4.4	4.7	2.7	7.0
181	Baron	4.6	4.6	4.6	3.7	2.0	5.0
182	A98-869	4.6	5.2	3.9	5.3	4.3	6.7
183	Glenmont	4.6	4.5	4.6	4.0	4.0	8.0
184	3248	4.6	4.1	5.0	4.3	6.3	7.3
185	A99-707	4.6	4.8	4.3	6.7	8.7	5.0
186	VB 20935	4.6	4.7	4.4	2.7	6.7	8.0
187	A99-2427	4.5	4.8	4.2	3.0	2.7	5.3
188	A97-1290	4.5	4.6	4.4	5.7	1.3	6.7
189	A00-TXKB-03 (TBxKB Hybrid <sup>5</sup> )	4.5	4.2	4.8	2.7	4.7	4.7
190	2RAD-345	4.5	4.9	4.1	4.3	2.7	7.3
191	Cynthia	4.5	5.1	3.9	4.3	7.3	4.7
192	2RAD-341	4.5	5.1	3.8	4.7	9.0	1.3
193	H01-494	4.5	4.4	4.5	5.7	7.7	3.0
194	K991	4.5	4.8	4.1	4.7	5.7	8.0
195	H92-389	4.4	4.3	4.6	3.7	2.7	5.7
196	SRX 2ORF	4.4	4.7	4.2	3.3	5.0	7.3
197	3283	4.4	5.0	3.8	4.7	4.3	7.3
198	Wild Horse	4.4	4.4	4.3	4.7	5.0	6.3
199	Brooklawn	4.4	4.4	4.3	5.7	4.7	7.0
200	A97-959	4.3	4.6	4.1	4.7	3.7	7.3
201	Sonic	4.3	5.1	3.5	5.3	9.0	1.7
202	Limousine	4.3	4.5	4.1	3.3	3.7	5.3
203	Muddy Pk	4.3	4.5	4.1	4.3	9.0	3.0
204	2RAD-338	4.3	4.7	3.9	1.3	6.3	5.0
205	A98-407	4.3	4.4	4.1	4.0	2.0	6.0
206	Barcrista	4.2	4.7	3.7	6.3	4.7	7.7
207	Cheetah	4.2	4.8	3.6	5.0	7.3	5.0
208	A99-2525	4.2	4.0	4.3	3.0	4.7	7.3
209	A99-2280	4.2	4.3	4.1	4.7	4.3	6.3
210	2RAD-308	4.2	4.6	3.8	3.0	7.0	5.3

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
211	Pick 1343	4.2	4.5	3.9	5.3	2.7	5.3
212	H99-164	4.2	4.1	4.2	5.3	3.0	6.0
213	7SE 13	4.2	4.4	3.9	2.3	1.0	5.3
214	NuBlue	4.1	4.5	3.7	5.3	4.0	6.7
215	FairFax	4.1	4.7	3.6	4.7	5.0	6.0
216	Canon	4.1	4.3	4.0	3.7	1.7	5.0
217	IS-KFLO	4.0	4.6	3.4	4.7	3.0	7.0
218	SRX 00332	4.0	3.9	4.1	3.0	1.0	6.0
219	Wellington	4.0	4.2	3.7	5.7	8.7	1.7
220	WP 301	4.0	4.0	4.0	5.3	7.0	4.3
221	Marquis	4.0	4.2	3.7	4.7	3.0	3.7
222	SRX 003078	3.9	3.7	4.0	2.7	4.7	9.0
223	2RAD-76	3.8	4.2	3.4	5.0	8.3	1.3
224	A02-949 (TBxKB Hybrid)	3.8	4.1	3.5	2.7	5.0	5.7
225	SRX 27921	3.8	4.2	3.4	3.3	2.0	5.0
226	SRX 003064	3.7	3.5	3.9	3.7	3.7	6.7
227	Cadet	3.7	3.7	3.6	5.3	4.0	7.7
228	IS-KB310	3.4	3.5	3.4	2.7	4.0	6.0
229	Blue Angel	3.4	4.0	2.8	7.7	8.7	1.0
230	Moonstruck	3.4	3.8	3.0	8.0	9.0	1.0
231	3249	3.3	3.6	3.0	5.3	5.3	7.7
	LSD at 5% =	0.7	1.0	0.7	1.3	1.2	1.6

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = earliest spring green-up<sup>3</sup>9 = least seed heads<sup>4</sup>9 = least disease<sup>5</sup>Texas x Kentucky bluegrass hybrid

Table 5. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2003 at Adelphia, NJ. (Test 2.)

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
	2004- 2005 Avg.	2004 Avg.	2005 Avg.			
1 109-961	6.2	5.9	6.5	3.0	6.7	8.0
2 Prosperity	6.1	6.1	6.0	1.0	8.0	7.7
3 Serene	5.9	5.9	5.9	6.0	7.3	5.7
4 Blue-tastic	5.9	5.9	5.8	3.3	7.3	7.3
5 101-389	5.7	5.9	5.5	3.7	7.7	8.7
6 Midnight II	5.6	5.4	5.8	1.3	8.7	5.7
7 NorthStar	5.6	5.3	5.9	2.0	7.0	7.0
8 Apollo	5.5	5.5	5.6	2.0	6.3	5.3
9 1A2-53	5.5	5.5	5.4	3.7	5.3	6.0
10 Voyager II	5.5	5.4	5.5	2.0	6.7	5.0
11 109-1121	5.4	5.2	5.5	3.3	3.3	7.3
12 Moonlight	5.4	5.4	5.4	3.0	7.0	6.0
13 102-46	5.4	5.3	5.4	4.7	4.7	4.3
14 H99-384	5.3	5.2	5.3	7.0	5.0	6.3
15 Blueberry	5.3	4.9	5.6	2.0	8.0	7.3
16 102-1048	5.3	5.6	4.9	1.5	5.0	5.0
17 Blackstone	5.2	5.3	5.1	4.0	7.0	4.3
18 Unique	5.1	5.0	5.4	2.0	5.7	5.0
19 H99-132	5.1	5.2	5.1	3.0	4.7	5.0
20 Brilliant	5.1	5.2	5.0	2.7	7.0	4.7
21 109-507	5.1	4.9	5.3	2.0	4.3	5.3
22 109-285	5.1	5.3	4.9	1.0	7.7	5.3
23 Moon Beam	5.1	4.9	5.3	4.0	7.0	8.0
24 109-1110	5.0	4.9	5.2	2.0	6.0	7.3
25 102-145	5.0	4.7	5.3	4.0	7.7	8.3
26 Pp-23651	5.0	4.8	5.2	5.0	4.7	6.7
27 Y2K-169	5.0	4.7	5.3	2.3	7.3	5.7
28 102-360	5.0	5.0	4.9	2.0	7.0	5.7
29 A0-32	5.0	5.1	4.8	3.0	6.7	5.0
30 1A1-326	5.0	5.2	4.7	1.0	6.3	6.7
31 A99LM-15 (TBxKB Hybrid <sup>5</sup> )	4.9	5.1	4.9	6.7	4.0	4.3
32 Midnight	4.9	4.9	5.0	1.3	8.0	4.3
33 101-98	4.9	5.5	4.4	2.7	6.7	6.7
34 Y2K-31	4.9	4.8	5.0	2.3	6.3	6.0
35 102-110	4.9	4.5	5.3	4.7	6.0	7.7

(Continued)

Table 5 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
		2004- 2005 Avg.	2004 Avg.	2005 Avg.			
36	1B7-166	4.9	4.9	5.0	2.3	5.3	4.7
37	102-21	4.9	4.7	5.0	1.7	7.0	5.0
38	101-519	4.9	4.6	5.1	3.7	5.0	6.7
39	109-760	4.8	4.6	5.1	2.0	6.7	5.7
40	Midnight Star	4.8	4.7	4.9	3.0	6.3	6.3
41	Y2K-132	4.8	4.9	4.6	3.0	7.0	7.7
42	Moonshine	4.7	4.7	4.8	4.7	4.3	4.3
43	109-256	4.7	4.3	5.2	3.0	5.3	6.7
44	1QG-36	4.7	4.5	4.8	2.7	6.7	6.0
45	A00TB-101 (TBxKB Hybrid)	4.7	4.6	4.7	5.7	5.3	3.3
46	B5-114	4.7	5.0	4.3	2.0	5.7	5.3
47	Longhorn (TBxKB Hybrid)	4.7	4.5	4.8	5.7	5.7	4.3
48	PST-1304	4.7	4.5	4.8	1.3	6.3	3.7
49	1A2-888	4.6	4.5	4.8	1.7	1.7	7.0
50	102-427	4.6	4.6	4.8	1.3	6.3	8.3
51	109-1060	4.6	4.2	5.0	4.0	1.7	5.7
52	102-371	4.6	3.8	5.3	2.3	4.0	5.7
53	109-155	4.6	4.3	4.9	1.7	5.0	4.7
54	102-524	4.5	4.6	4.4	3.7	5.3	6.0
55	Opti-Green	4.5	4.4	4.6	3.0	5.0	4.0
56	102-158	4.4	3.9	4.9	3.7	2.3	4.7
57	Blacksburg II	4.4	4.2	4.7	5.3	5.3	4.7
58	102-390	4.4	4.2	4.6	2.3	6.7	7.3
59	High Noon	4.4	4.6	4.2	4.3	4.0	3.7
60	1A2-511	4.4	4.6	4.1	3.7	1.7	4.0
61	102-354	4.3	3.9	4.7	2.7	6.0	8.7
62	102-349	4.3	4.2	4.4	2.3	3.0	4.5
63	102-388	4.3	4.3	4.3	1.7	7.0	3.3
64	1A1-338	4.3	3.9	4.6	2.0	6.3	5.3
65	1A2-517	4.3	4.5	4.0	2.0	5.5	4.0
66	109-210	4.2	4.2	4.4	2.0	4.7	4.0
67	102-23	4.2	4.1	4.4	3.0	4.7	6.7
68	102-384	4.1	4.2	4.1	3.3	7.3	5.7
69	109-1122	4.1	3.9	4.3	4.3	3.7	6.3
70	102-43	4.1	3.6	4.6	3.0	5.3	7.0

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
	2004- 2005 Avg.	2004 Avg.	2005 Avg.			
71 102-26	4.1	4.2	4.0	3.3	4.3	5.0
72 Y2K-186	4.1	4.2	3.9	2.0	6.3	7.3
73 1A2-551	4.0	4.2	3.9	4.0	2.3	3.7
74 102-1	3.9	3.8	4.0	4.0	4.7	6.5
75 102-542	3.9	4.3	3.5	3.0	1.7	5.3
76 1A2-501	3.8	3.9	3.7	3.7	3.3	4.7
77 102-159	3.7	3.2	4.3	3.7	3.0	4.3
78 102-444	3.4	3.5	3.3	3.3	5.3	3.3
79 102-1011	3.4	3.7	3.2	4.0	2.3	2.7
80 102-19	3.3	3.0	3.5	1.7	5.7	6.0
LSD at 5% =	0.9	1.1	0.9	1.1	1.3	1.6

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = earliest spring green-up<sup>3</sup>9 = least seed heads<sup>4</sup>9 = least disease<sup>5</sup>Texas x Kentucky bluegrass hybrid

Table 6. Performance of Kentucky and Texas bluegrass cultivars and selections in a turf trial seeded in September 2003 at Adelphia, NJ.

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 2005	Seed Heads <sup>3</sup> May 2005	Leaf Spot <sup>4</sup> May 2005
	2004- 2005 Avg.	2004 Avg.	2005 Avg.			
1 A03TB-258	6.0	5.5	6.4	2.3	7.7	4.3
2 Langara (KB <sup>5</sup> )	5.9	5.9	5.8	2.7	5.3	5.3
3 A03TB-252	5.8	5.6	5.9	3.3	8.0	6.3
4 Midnight (KB)	5.7	5.7	5.7	1.3	8.7	4.7
5 SRX 2TK95	5.3	5.4	5.3	1.0	8.7	6.0
6 A99LM-15	5.2	5.2	5.1	6.3	5.0	5.7
7 A02-949	5.1	4.9	5.2	4.0	4.3	5.0
8 Baron (KB)	5.0	5.2	4.8	2.3	6.3	4.3
9 PST C-74 (KB)	5.0	4.7	5.3	1.7	7.7	5.0
10 Eagleton (KB)	4.7	4.8	4.7	3.7	5.7	4.7
11 A03TB-243	4.6	4.8	4.5	5.3	3.0	3.7
12 RSP (KB)	4.6	4.9	4.3	5.0	9.0	1.7
13 Brooklawn (KB)	4.5	4.6	4.4	3.7	4.7	4.3
14 A02-947	4.5	4.1	4.8	3.3	5.7	5.0
15 A02-284	4.4	4.8	4.1	7.0	8.7	2.0
16 A03TB-247	4.4	4.4	4.4	5.3	3.7	4.0
17 A03TB-256	4.4	4.9	3.9	7.0	3.3	3.0
18 A03TB-248	4.2	4.1	4.3	5.3	3.7	5.7
19 A99LM-18	3.9	4.2	3.7	3.3	2.7	2.7
20 A03TB-246	3.9	4.2	3.7	5.7	3.7	4.3
21 02-29B	3.4	3.8	3.0	6.3	9.0	1.7
22 A03TB-255	3.3	3.1	3.4	4.3	4.3	3.7
23 A03TB-254	3.2	3.6	2.9	2.3	6.3	2.3
24 A02-972	2.7	2.8	2.6	5.7	4.0	1.7
25 A03TB-257	2.2	1.5	2.9	3.7	3.0	3.3
LSD at 5% =	0.5	0.5	0.6	1.2	1.1	1.1

<sup>1</sup>9 = best turf quality

<sup>2</sup>9 = earliest spring green-up

<sup>3</sup>9 = least seed heads

<sup>4</sup>9 = least disease

<sup>5</sup>Kentucky bluegrass standard



Table 7. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2004 at New Brunswick, NJ.

Cultivar or Selection	Turf Quality <sup>1</sup>	Establishment <sup>2</sup>	Stem Rust <sup>3</sup>	-----Worn Turf Quality <sup>1</sup> -----		
	2005 Avg.	Nov. 2004	Nov. 2004	Oct. 2005	Nov. 2005	2005 Avg.
1 Bewitched	6.8	4.3	7.3	7.3	6.3	6.8
2 A97-1287	6.6	5.7	7.0	7.3	5.0	6.2
3 Diva	6.5	7.3	6.3	5.7	5.3	5.5
4 A03-84	6.4	6.0	6.0	6.0	5.0	5.5
5 A01-245	6.2	5.7	6.0	7.0	5.7	6.3
6 Bedazzled	6.1	6.0	6.0	4.7	4.7	4.7
7 A04-69	6.1	5.3	5.7	5.7	4.3	5.0
8 A01-250	6.1	5.0	6.7	7.0	5.3	6.2
9 A99-3124	6.1	5.3	7.0	6.3	5.3	5.8
10 A99-523	6.0	7.7	5.3	7.0	5.0	6.0
11 A03-137	6.0	7.0	7.0	7.0	5.0	6.0
12 A97-1560	5.9	5.0	6.7	6.0	5.7	5.8
13 Washington	5.9	5.7	7.7	6.7	5.3	6.0
14 A98-339	5.8	6.3	7.3	5.7	5.3	5.5
15 A99-2758	5.8	3.0	7.0	6.3	5.0	5.7
16 A99-2923	5.8	5.0	5.7	2.7	3.0	2.8
17 A01-299	5.8	6.0	4.7	4.0	4.0	4.0
18 A96-324	5.8	4.3	5.7	5.3	5.0	5.2
19 PST C-74	5.8	4.3	6.7	6.3	5.7	6.0
20 A01-247	5.7	3.7	6.7	6.7	5.3	6.0
21 A04-46	5.7	4.7	7.3	6.7	5.0	5.8
22 RSP	5.7	5.3	4.7	8.3	5.7	7.0
23 A01-324	5.7	7.3	5.0	4.0	4.3	4.2
24 A95-1048	5.7	6.7	6.0	4.7	4.3	4.5
25 Bravado	5.7	6.7	5.7	4.0	4.0	4.0
26 Eagleton	5.6	8.0	5.7	4.7	4.3	4.5
27 A98-108	5.6	5.3	5.7	4.3	4.0	4.2
28 A04-49	5.6	2.3	7.3	6.0	5.0	5.5
29 A99-2108	5.5	6.7	6.0	5.3	4.7	5.0
30 H04-23	5.5	4.7	7.0	7.3	6.0	6.7
31 NuGlade	5.5	6.0	4.0	6.3	5.0	5.7
32 H94-467	5.5	5.7	4.3	8.3	5.7	7.0
33 A04-66	5.5	3.7	6.3	5.0	4.3	4.7
34 Pinot	5.5	7.0	5.7	3.0	3.7	3.3
35 A99-2559	5.4	6.7	4.3	6.0	5.7	5.8

(Continued)

Table 7 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup>	Establishment <sup>2</sup>	Stem Rust <sup>3</sup>	-----Worn Turf Quality <sup>1</sup> -----		
		2005 Avg.	Nov. 2004	Nov. 2004	Oct. 2005	Nov. 2005	2005 Avg.
36	A95-418	5.4	4.3	7.0	4.7	4.0	4.3
37	A04-68	5.4	3.0	5.7	4.7	4.0	4.3
38	Cabernet	5.4	4.7	3.7	6.3	4.3	5.3
39	A03-63	5.3	5.0	7.0	3.3	4.0	3.7
40	A04-71	5.2	3.7	5.3	7.0	6.0	6.5
41	A93-201	5.2	6.7	5.3	5.0	4.7	4.8
42	Princeton P-105	5.2	4.7	6.3	7.0	5.0	6.0
43	Brunswick	5.1	5.0	6.0	6.7	3.7	5.2
44	H04-88	4.9	4.7	6.3	3.0	3.7	3.3
45	H04-22	4.9	3.0	7.3	6.3	4.7	5.5
46	A04-73	4.9	5.7	4.7	2.3	3.0	2.7
47	A99-2852	4.9	4.0	5.3	4.0	3.7	3.8
48	H99-338	4.8	5.7	4.7	5.3	5.0	5.2
49	A98-689	4.8	6.7	4.7	5.0	4.0	4.5
50	A04-32	4.7	3.7	7.3	5.7	5.7	5.7
51	A97-959	4.7	6.3	3.3	7.3	5.3	6.3
52	Sonic	4.7	4.7	6.7	5.0	5.0	5.0
53	Bonaire	4.7	5.7	4.7	6.3	5.0	5.7
54	A04-48	4.6	3.3	6.3	5.0	4.3	4.7
55	Wild Horse	4.6	3.7	5.7	6.0	4.3	5.2
56	H01-492	4.4	5.3	2.3	7.0	5.0	6.0
57	A04-63	4.3	4.3	3.7	6.3	4.0	5.2
58	U-2005	4.1	7.3	2.7	3.0	2.3	2.7
59	A03TB-251 (TBxKB Hybrid <sup>4</sup> )	4.1	7.0	2.0	1.7	3.0	2.3
60	H01-912	4.0	4.3	4.3	5.7	4.0	4.8
61	489-2	4.0	2.0	6.7	3.0	3.0	3.0
62	U-1807	3.9	7.0	3.3	2.7	3.0	2.8
63	A02-976 (TBxKB Hybrid)	3.4	2.3	7.7	1.3	2.3	1.8
64	A03TB-246 (TBxKB Hybrid)	3.3	2.3	7.7	2.7	3.3	3.0
65	A03TB-252 (TBxKB Hybrid)	3.3	3.0	6.0	2.3	2.7	2.5
LSD at 5% =		0.7	1.5	1.8	1.4	1.1	1.0

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = most rapid seedling emergence<sup>3</sup>9 = least disease<sup>4</sup>Texas x Kentucky bluegrass hybrid

Table 8. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2004 at Adelphia, NJ.

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
1	A99-2559	7.1	6.7	5.3	4.0	7.3	5.7
2	Champlain	6.6	4.0	6.7	7.7	7.0	7.3
3	H98-30	6.6	6.0	6.3	5.7	6.3	6.0
4	A00-2882	6.6	5.3	6.0	6.0	6.3	6.2
5	A96-324	6.5	4.0	7.0	9.0	7.0	8.0
6	A99-3182	6.5	5.3	5.0	4.3	6.7	5.5
7	A01-324	6.5	5.7	6.0	5.0	7.3	6.2
8	Midnight II	6.4	6.3	6.3	3.0	6.0	4.5
9	Y2K-59	6.3	4.0	7.3	6.0	5.7	5.8
10	SR 2284	6.3	4.7	7.7	5.0	7.7	6.3
11	Liberator	6.3	4.7	7.0	2.0	6.7	4.3
12	3606-8	6.3	3.0	8.3	7.7	6.0	6.8
13	Mercury	6.2	3.7	8.0	9.0	8.3	8.7
14	Award	6.2	5.0	6.7	2.3	7.0	4.7
15	3590-10	6.2	2.3	8.3	6.7	6.0	6.3
16	A99-3124	6.2	3.7	7.0	5.0	7.0	6.0
17	A03-56	6.2	6.3	4.0	7.0	5.0	6.0
18	AKBO47	6.2	4.0	7.7	5.0	5.3	5.2
19	NuDestiny	6.2	5.0	6.7	3.7	6.3	5.0
20	A97-1560	6.1	4.7	7.0	4.3	6.3	5.3
21	PST C-74	6.1	3.7	8.3	5.0	7.0	6.0
22	A04-46	6.1	4.0	5.7	5.0	6.3	5.7
23	103-412	6.1	2.0	8.0	6.7	6.3	6.5
24	109-752	6.1	5.7	5.3	4.3	5.7	5.0
25	Midnight	6.1	6.7	6.0	2.7	6.3	4.5
26	SRX 00553	6.1	5.0	7.3	3.3	6.7	5.0
27	A99-2231	6.1	5.3	7.0	4.0	6.0	5.0
28	A00-4135	6.1	4.3	6.7	4.0	4.7	4.3
29	Preakness	6.1	4.3	7.0	5.7	5.0	5.3
30	3604-10	6.1	3.3	7.3	7.0	6.0	6.5
31	A00-247	6.1	5.3	6.7	4.7	6.7	5.7
32	A04-68	6.0	2.7	6.3	7.0	5.3	6.2
33	H99-338	6.0	5.7	5.7	3.3	5.0	4.2
34	Odyssey	6.0	5.7	6.7	2.3	8.0	5.2
35	Everglade	6.0	5.0	6.7	3.7	5.7	4.7

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
36	3590-6 Mix	6.0	1.3	8.0	6.3	6.0	6.2
37	SRX A0035	6.0	1.0	8.3	6.3	7.7	7.0
38	A03-137	6.0	7.7	3.0	6.0	6.0	6.0
39	H98-768	6.0	5.7	7.7	4.0	6.7	5.3
40	NuGlade	6.0	5.0	6.3	3.0	7.0	5.0
41	Chicago II	6.0	4.0	7.7	3.7	7.0	5.3
42	A98-108	5.9	5.0	7.3	5.0	8.0	6.5
43	A98-339	5.9	5.0	7.0	5.3	6.0	5.7
44	A03-38	5.9	4.7	6.3	5.3	6.3	5.8
45	Washington	5.9	3.7	6.3	8.0	4.3	6.2
46	109-996	5.9	4.3	6.0	5.0	5.0	5.0
47	Arcadia	5.9	5.7	6.3	2.3	5.0	3.7
48	Shiraz	5.9	5.0	7.0	5.7	4.7	5.2
49	MSP 3635	5.9	6.0	6.7	3.7	6.3	5.0
50	1A1-199	5.9	2.3	7.0	6.7	6.0	6.3
51	Royce	5.9	6.0	6.3	4.7	6.7	5.7
52	Langara	5.9	5.0	5.7	5.3	6.7	6.0
53	A99-3117	5.9	6.7	5.7	4.0	5.7	4.8
54	Showcase	5.9	3.7	7.7	4.3	7.0	5.7
55	Tsunami	5.9	5.3	6.3	2.0	7.0	4.5
56	A97-1481	5.9	4.3	7.3	4.7	5.7	5.2
57	A97-1686	5.9	5.0	6.3	3.0	5.7	4.3
58	Everest	5.9	4.3	7.0	4.0	6.0	5.0
59	A01-195	5.8	2.3	6.3	8.3	8.3	8.3
60	A99-2213	5.8	5.0	7.0	3.7	6.7	5.2
61	A01-245	5.8	4.7	8.0	3.7	6.3	5.0
62	A03-84	5.8	5.3	6.3	2.7	7.3	5.0
63	H98-46	5.8	4.0	7.3	4.7	6.7	5.7
64	Moonlight	5.8	6.3	5.7	4.3	6.7	5.5
65	A99-354	5.8	4.3	6.7	2.3	5.3	3.8
66	A97-1287	5.7	4.3	7.7	5.0	4.7	4.8
67	A03-71	5.7	3.7	7.3	4.3	7.0	5.7
68	A00-4036	5.7	6.3	7.7	2.0	5.7	3.8
69	101-73	5.7	3.7	7.3	4.7	6.7	5.7
70	Brilliant	5.7	7.0	6.0	4.7	5.0	4.8

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
71	Bluestone	5.7	6.7	5.7	2.7	6.3	4.5
72	Cabernet	5.7	4.0	6.0	4.3	5.7	5.0
73	A01-299	5.7	5.0	6.7	3.3	6.7	5.0
74	A99-2426	5.7	4.3	7.0	4.3	6.7	5.5
75	A99-2433	5.7	6.7	5.3	4.3	6.0	5.2
76	A99-523	5.7	5.3	6.3	3.3	6.3	4.8
77	A04-66	5.7	1.3	7.0	7.3	4.7	6.0
78	RSP	5.7	2.7	6.7	6.3	5.3	5.8
79	H01-229	5.7	6.7	6.3	9.0	4.7	6.8
80	H94-305	5.7	7.0	4.0	5.7	5.3	5.5
81	H98-711	5.7	4.3	8.0	3.3	6.7	5.0
82	Royce	5.6	4.3	6.7	5.7	6.0	5.8
83	Beyond	5.6	4.7	6.3	2.0	6.7	4.3
84	Freedom III	5.6	4.7	6.3	4.0	7.0	5.5
85	A95-1930	5.6	5.7	4.0	5.3	4.0	4.7
86	A04-84	5.6	1.3	7.0	7.0	5.0	6.0
87	MSP 3633	5.6	6.7	6.3	3.7	5.3	4.5
88	Kingfisher	5.6	5.3	7.0	3.3	7.3	5.3
89	A04-69	5.6	2.7	7.0	6.7	4.7	5.7
90	A01-250	5.6	5.7	7.0	3.0	6.3	4.7
91	Voyager II	5.6	4.7	7.0	4.3	6.7	5.5
92	A99-269	5.6	6.0	6.3	3.7	5.3	4.5
93	A00-57	5.6	4.7	5.3	6.0	4.3	5.2
94	A97-1303	5.5	5.7	6.3	3.7	4.7	4.2
95	Apollo	5.5	5.3	7.0	3.0	7.0	5.0
96	2369-5	5.5	1.0	8.0	7.3	9.0	8.2
97	A99-2545	5.5	3.3	7.0	5.0	5.0	5.0
98	103-732	5.5	2.7	6.7	6.0	6.7	6.3
99	Rhythm	5.4	5.0	7.0	3.3	6.3	4.8
100	A99-378	5.4	2.3	7.7	4.7	5.3	5.0
101	Bedazzled	5.4	5.7	6.0	4.3	4.7	4.5
102	A00-8	5.4	5.7	4.3	4.3	5.3	4.8
103	Princeton P-105	5.4	1.0	7.7	7.0	7.3	7.2
104	Absolute	5.4	3.3	6.7	3.3	6.3	4.8
105	H94-467	5.4	4.7	5.7	6.0	4.3	5.2

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup>	Establishment <sup>2</sup>	Seedling Vigor <sup>3</sup>	-----Stem Rust <sup>4</sup> -----		
		2005 Avg.	Sept. 2004	Sept. 2004	Oct. 2004	Nov. 2004	2004 Avg.
106	A04-32	5.4	1.3	8.3	7.0	6.0	6.5
107	A04-73	5.4	4.0	5.3	6.0	5.7	5.8
108	A98-305	5.4	3.0	7.3	4.7	6.3	5.5
109	Bordeaux	5.4	5.0	5.7	3.0	7.3	5.2
110	A01-247	5.3	4.0	7.0	3.7	6.0	4.8
111	A03-3	5.3	6.0	6.0	4.3	3.3	3.8
112	3597-1	5.3	2.7	8.7	6.7	5.3	6.0
113	Gamma	5.3	3.7	8.3	4.3	5.0	4.7
114	NAK-3271	5.3	2.3	7.0	5.7	3.7	4.7
115	Impact	5.3	5.3	6.7	2.3	6.7	4.5
116	103-354	5.2	1.7	8.0	7.3	5.0	6.2
117	A98-969	5.2	5.0	6.3	4.7	5.0	4.8
118	U-2005	5.2	4.0	7.0	7.3	6.7	7.0
119	MSP 3629	5.2	5.7	6.3	4.3	5.7	5.0
120	103-585	5.2	1.7	7.3	7.3	5.0	6.2
121	H97-545	5.2	5.0	5.0	7.7	7.0	7.3
122	H97-186	5.2	7.3	3.3	4.0	4.7	4.3
123	A02-956	5.2	1.7	7.0	7.7	9.0	8.3
124	H99-1726	5.2	6.7	3.7	5.3	6.0	5.7
125	A99-325	5.2	5.7	5.7	3.3	4.7	4.0
126	A00-62	5.1	5.7	5.3	2.7	6.3	4.5
127	SR 2100	5.1	5.7	6.0	3.7	6.0	4.8
128	Rambo	5.1	4.0	7.7	3.7	5.3	4.5
129	H01-912	5.1	2.3	6.3	5.7	2.7	4.2
130	A04-71	5.1	1.7	9.0	7.7	4.0	5.8
131	103-68	5.1	1.3	8.0	5.7	6.0	5.8
132	103-737	5.1	1.0	8.0	7.3	6.3	6.8
133	1A3-94	5.1	1.3	7.3	8.0	7.7	7.8
134	NAK-3248	5.1	3.3	7.7	5.7	3.3	4.5
135	U-1807	5.1	2.7	7.7	7.7	6.7	7.2
136	Y2K-169	5.1	3.0	8.0	5.7	3.7	4.7
137	NAK-3261	5.1	2.3	8.3	5.0	3.7	4.3
138	A98-689	5.0	3.0	7.7	5.7	5.0	5.3
139	P-107	5.0	1.0	7.7	6.7	7.7	7.2
140	Harmony	5.0	6.3	8.7	1.7	6.3	4.0

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
141	Bewitched	5.0	3.0	8.0	5.7	2.7	4.2
142	A04-48	5.0	1.0	8.0	7.7	7.7	7.7
143	A99-2758	5.0	1.3	7.3	7.3	4.7	6.0
144	Diva	5.0	4.3	7.0	5.7	3.0	4.3
145	103-348	5.0	3.0	6.3	4.7	4.0	4.3
146	103-692	5.0	1.0	8.0	7.0	7.3	7.2
147	SW AG514	5.0	3.7	8.3	4.3	4.3	4.3
148	H01-492	5.0	3.7	5.3	8.3	6.0	7.2
149	A04-49	5.0	1.0	8.0	7.0	4.3	5.7
150	A04-63	5.0	2.7	6.7	4.7	3.7	4.2
151	A99-2852	5.0	2.7	6.7	6.3	4.0	5.2
152	Bronco	5.0	5.0	5.3	4.7	5.0	4.8
153	NAK-3257	5.0	2.0	8.0	6.3	2.7	4.5
154	H99-1733	5.0	6.7	4.0	5.3	5.3	5.3
155	Rugby II	5.0	3.7	6.7	4.7	6.3	5.5
156	3RAD-503J	4.9	4.0	7.7	9.0	6.0	7.5
157	Rampart	4.9	4.0	6.3	6.7	3.3	5.0
158	H97-108	4.9	3.3	6.3	5.0	5.7	5.3
159	Total Eclipse	4.9	6.3	5.0	3.0	6.0	4.5
160	Blackberry	4.9	2.3	7.3	6.7	3.7	5.2
161	101-390	4.9	2.0	8.0	7.3	6.0	6.7
162	Eagleton	4.9	6.0	5.7	6.0	5.7	5.8
163	High Noon	4.9	2.7	7.0	6.7	3.7	5.2
164	A96-323	4.9	5.7	6.3	3.0	5.7	4.3
165	A02-947	4.9	1.0	7.3	7.7	7.7	7.7
166	A95-1048	4.8	4.7	7.3	5.7	6.3	6.0
167	103-314	4.8	1.0	8.0	7.3	5.7	6.5
168	102-48	4.8	3.0	7.7	5.7	3.7	4.7
169	Sonoma	4.8	5.0	6.7	4.3	4.7	4.5
170	Alpine	4.8	4.7	5.7	3.7	5.0	4.3
171	SRX 27832	4.8	4.3	6.0	3.7	2.7	3.2
172	A97-1409	4.8	4.0	6.0	5.3	3.7	4.5
173	MSP 3630	4.8	5.3	4.7	4.7	5.3	5.0
174	2RAD-148J	4.8	1.0	9.0	7.7	6.7	7.2
175	Bravado	4.7	3.3	7.0	4.7	4.0	4.3

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
176	103-344	4.7	2.0	8.0	6.0	4.3	5.2
177	102-45-BS	4.7	1.0	8.0	7.0	5.0	6.0
178	Arrow	4.7	4.3	6.3	4.3	5.7	5.0
179	A00-4135	4.7	1.3	8.0	6.3	3.7	5.0
180	SRX 26370	4.7	4.7	6.3	5.3	4.0	4.7
181	A99-3110	4.7	2.0	7.3	6.0	4.0	5.0
182	Sonic	4.7	1.0	7.7	7.0	8.3	7.7
183	Bewitched	4.6	2.0	8.3	7.3	2.0	4.7
184	A00-891	4.6	2.3	8.0	7.0	5.0	6.0
185	A02-949	4.6	1.0	7.3	7.0	7.3	7.2
186	1A3-459	4.6	1.0	8.0	7.0	7.0	7.0
187	Cynthia	4.5	5.3	6.3	5.3	4.0	4.7
188	AKB287	4.5	1.0	8.3	7.0	6.0	6.5
189	H97-307	4.5	6.3	3.0	4.0	6.0	5.0
190	A97-959	4.5	6.3	6.0	3.3	3.3	3.3
191	101-376	4.5	2.0	7.0	7.0	6.0	6.5
192	103-265	4.4	1.0	8.3	7.0	5.0	6.0
193	103-609	4.4	1.0	8.7	6.7	6.0	6.3
194	102-9	4.4	1.3	7.7	5.0	4.7	4.8
195	1A3-365	4.4	1.0	8.0	6.7	6.7	6.7
196	Champagne	4.4	1.0	7.0	6.7	5.0	5.8
197	Brunswick	4.4	2.0	6.7	7.3	6.0	6.7
198	A03-63	4.4	4.0	6.3	5.7	2.7	4.2
199	A99-2108	4.3	4.7	5.7	5.0	3.7	4.3
200	1A3-147	4.3	1.0	7.3	6.7	6.7	6.7
201	A03-66	4.3	4.7	6.3	4.3	3.0	3.7
202	A01-845	4.3	1.0	8.7	7.3	7.3	7.3
203	MSP 3631	4.3	4.7	6.0	5.7	4.0	4.8
204	103-363	4.3	1.7	7.7	7.7	3.0	5.3
205	102-307	4.3	1.0	6.7	7.0	5.7	6.3
206	1A3-163	4.3	1.0	7.3	7.0	6.7	6.8
207	1A3-167	4.3	1.7	7.0	6.3	5.3	5.8
208	1A3-452	4.3	1.7	9.0	6.3	4.3	5.3
209	Argos	4.2	1.7	7.7	5.0	4.3	4.7
210	Dragon	4.2	4.7	6.0	5.0	5.0	5.0

(Continued)



Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Sept. 2004	Seedling Vigor <sup>3</sup> Sept. 2004	-----Stem Rust <sup>4</sup> -----		
					Oct. 2004	Nov. 2004	2004 Avg.
211	1A3-159	4.2	1.0	7.0	7.3	6.7	7.0
212	Brooklawn	4.2	5.0	5.7	4.3	3.0	3.7
213	Baron	4.2	5.3	6.7	2.3	3.3	2.8
214	A98-233	4.2	3.0	7.3	4.7	6.0	5.3
215	Pinot	4.1	6.0	6.7	3.3	3.0	3.2
216	A00-4083	4.1	4.7	9.0	3.7	6.0	4.8
217	A98-999	4.1	5.0	6.0	4.7	4.7	4.7
218	103-362	4.1	1.0	8.0	7.0	6.3	6.7
219	102-68	4.1	1.0	8.0	6.7	5.7	6.2
220	102-158	4.1	3.0	7.0	3.0	3.3	3.2
221	103-118	4.1	1.0	8.3	5.3	4.3	4.8
222	1A1-899	4.1	3.3	7.7	4.3	1.7	3.0
223	1A3-472	4.0	1.0	7.3	7.0	8.0	7.5
224	Pinot	4.0	4.0	7.3	1.3	2.3	1.8
225	NuBlue	4.0	6.0	5.0	4.0	5.3	4.7
226	103-360	3.9	1.7	8.3	5.7	2.3	4.0
227	North Star	3.9	1.7	8.7	4.7	3.0	3.8
228	Lakeshore	3.9	1.0	7.0	6.3	3.3	4.8
229	102-339	3.9	3.0	7.3	5.3	2.0	3.7
230	Blue Chip	3.9	4.3	7.0	2.0	4.0	3.0
231	Diva	3.9	3.0	7.0	5.0	2.0	3.5
232	3RAD-515JM	3.9	2.3	8.3	5.0	5.3	5.2
233	103-273	3.8	1.0	8.0	7.3	7.3	7.3
234	103-762	3.8	1.0	8.3	6.7	2.7	4.7
235	Eva	3.8	1.0	8.3	7.0	4.0	5.5
236	A03-77	3.8	5.7	5.0	4.7	2.0	3.3
237	Canon	3.8	1.7	8.3	5.3	3.0	4.2
238	Bonaire	3.8	1.0	7.7	5.7	3.7	4.7
239	103-117	3.7	1.0	9.0	7.0	4.7	5.8
240	109-1121	3.7	1.0	9.0	7.0	2.3	4.7
241	Y2K-136	3.6	2.3	7.7	5.3	2.0	3.7
242	103-434	3.6	1.3	8.3	6.7	3.0	4.8
243	103-651	3.6	1.0	8.0	7.0	4.0	5.5
244	Moonshine	3.6	1.3	7.7	6.3	3.7	5.0
245	103-31	3.6	1.0	8.0	7.0	5.0	6.0

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup>	Establishment <sup>2</sup>	Seedling Vigor <sup>3</sup>	-----Stem Rust <sup>4</sup> -----		
		2005 Avg.	Sept. 2004	Sept. 2004	Oct. 2004	Nov. 2004	2004 Avg.
246	Shamrock	3.6	4.0	6.7	5.3	3.3	4.3
247	A93-201	3.5	5.3	5.7	4.3	3.7	4.0
248	103-433	3.5	1.0	8.7	7.0	6.3	6.7
249	A97-904	3.5	1.3	7.7	5.7	3.7	4.7
250	103-435	3.5	1.0	8.0	6.0	3.7	4.8
251	102-137	3.5	1.3	7.3	5.7	3.7	4.7
252	102-239	3.5	1.7	6.0	6.3	6.7	6.5
253	1A3-134	3.5	1.0	7.3	6.0	7.3	6.7
254	101-362	3.5	3.3	7.7	2.3	4.3	3.3
255	1A3-675	3.4	1.3	7.3	5.3	4.0	4.7
256	3RAD-474J	3.4	2.3	7.3	5.7	5.0	5.3
257	1A3-647	3.3	1.0	8.3	6.7	5.0	5.8
258	Wild Horse	3.3	1.0	8.3	6.3	4.0	5.2
259	1A3-56	3.3	1.0	9.0	7.3	2.7	5.0
260	103-444	3.3	1.0	8.7	7.0	3.7	5.3
261	1A3-111	3.3	1.0	7.7	6.3	5.0	5.7
262	103-719	3.2	1.0	8.7	6.3	4.0	5.2
263	1A3-71	3.2	1.0	8.7	6.7	3.7	5.2
264	102-13	3.1	2.0	8.7	6.0	2.7	4.3
265	102-297	3.1	1.0	7.3	6.7	3.7	5.2
266	Fairfax	3.1	1.0	8.7	6.3	2.7	4.5
267	1A3-156	3.0	1.0	7.7	5.7	6.0	5.8
268	1A3-187	3.0	1.0	7.3	7.0	5.3	6.2
269	1A3-57	2.9	1.3	9.0	6.3	2.0	4.2
270	NAK-3259	2.9	3.0	7.7	5.3	3.0	4.2
271	1A3-54	2.9	2.3	6.7	5.7	2.0	3.8
272	1A3-330	2.9	1.0	7.3	6.3	4.0	5.2
273	1A3-343	2.9	1.0	7.0	6.7	2.0	4.3
274	NAK-3249	2.9	1.0	7.0	6.3	3.3	4.8
275	1A3-12	2.8	1.7	8.7	5.0	1.7	3.3
276	1A3-671	2.8	1.0	8.3	6.7	5.0	5.8
277	1A3-84	2.8	3.0	7.7	7.3	3.7	5.5
278	102-334	2.8	1.3	7.0	6.0	2.7	4.3
279	103-662	2.7	1.0	7.7	7.0	6.3	6.7
280	1A3-524	2.4	1.0	8.0	6.3	3.3	4.8

(Continued)

Table 8 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup>	Establishment <sup>2</sup>	Seedling Vigor <sup>3</sup>	-----Stem Rust <sup>4</sup> -----		
		2005 Avg.	Sept. 2004	Sept. 2004	Oct. 2004	Nov. 2004	2004 Avg.
281	1A3-137	2.3	1.0	7.7	7.0	8.0	7.5
282	103-541	2.3	1.0	8.0	6.7	5.0	5.8
283	NAK-3268	2.3	2.3	8.3	5.0	3.7	4.3
284	1A1-30	2.2	2.3	7.7	5.0	1.0	3.0
285	1A3-72	2.2	1.0	8.0	6.7	7.0	6.8
286	PpH 8570	1.7	1.0	8.7	6.7	2.3	4.5
LSD at 5% =		0.9	1.2	1.0	1.3	1.8	1.1

<sup>1</sup>9 = best turf quality

<sup>2</sup>9 = most rapid seedling emergence

<sup>3</sup>9 = best seedling vigor

<sup>4</sup>9 = least disease

Table 9. Performance of Kentucky and Texas bluegrass cultivars and selections in a turf trial seeded in September 2004 at Adelphia, NJ.

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Oct. 2004	Stem Rust <sup>3</sup> Nov. 2004
1	Moonshadow (KB <sup>4</sup> )	7.6	5.3	6.7
2	Langara (KB)	6.9	6.3	6.3
3	A00TB-101	6.6	5.0	7.0
4	Cabernet (KB)	6.4	5.0	3.7
5	Princeton P-105 (KB)	6.2	5.0	7.0
6	Eagleton (KB)	5.8	5.0	4.7
7	RSP (KB)	5.8	5.0	4.0
8	A02-943	5.7	3.7	8.3
9	PST C-74 (KB)	5.7	4.7	5.3
10	A02-943	5.7	4.0	9.0
11	A02-949	5.6	3.0	8.7
12	Fahrenheit 90	5.4	3.7	7.3
13	Midnight (KB)	5.3	7.0	1.7
14	A04TB-4	5.3	3.7	6.0
15	A03TB-252	5.3	3.7	7.0
16	A01-845	5.2	2.3	7.0
17	A01-856	5.2	3.0	7.3
18	A04TB-33	5.1	3.7	7.0
19	A02-953	5.1	3.7	6.7
20	A02-956	5.1	3.3	9.0
21	A99LM-15	5.0	5.7	2.7
22	A01-856	5.0	3.3	8.0
23	SRXA01844	4.9	5.0	5.3
24	3777	4.8	3.3	6.0
25	A04TB-8	4.8	4.0	8.3
26	A02-947	4.8	2.3	8.3
27	Longhorn	4.8	2.0	8.5
28	A04TB-11	4.7	3.7	5.7
29	A03TB-251	4.7	7.7	2.3
30	A02-284	4.7	3.7	9.0
31	A02-976	4.6	3.3	7.7
32	A01-852	4.5	4.7	5.3
33	Brunswick (KB)	4.5	4.7	4.3
34	02-28	4.4	3.3	6.0
35	A04TB-7	4.3	1.7	8.3

(Continued)

Table 9 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 2005 Avg.	Establishment <sup>2</sup> Oct. 2004	Stem Rust <sup>3</sup> Nov. 2004
36	A04TB-3	4.1	4.3	8.0
37	A02-969	4.1	3.7	7.7
38	A01-900	4.1	4.7	7.0
39	A01-849	4.1	2.3	9.0
40	3855-11	3.9	2.0	9.0
41	A03TB-256	3.8	3.0	8.5
42	A02-962	3.7	2.3	8.7
43	A04TB-35	3.3	2.3	8.3
44	A03TB-246	3.3	4.0	7.7
45	A02-975	3.0	2.7	6.3
	LSD at 5% =	0.6	0.9	1.6

<sup>1</sup>9 = best turf quality

<sup>2</sup>9 = most rapid seedling establishment

<sup>3</sup>9 = least disease

<sup>4</sup>Kentucky bluegrass standard

Table 10. Yearly nitrogen (N) applied and mowing height (Ht) on Kentucky and Texas bluegrass tests established at Adelphia and North Brunswick, NJ.

	2003		2004		2005	
	N <sup>1</sup>	Ht <sup>2</sup>	N	Ht	N	Ht
Table 1 (2002 North Brunswick)	3.0	1.5	2.0	1.5	2.3	1.5
Table 2 (2002 Adelphia)	4.4	1.5	5.0	1.5	3.0	1.5
Table 3 (2003 North Brunswick)			2.2	1.5	2.5	1.5
Table 4 (2003 Adelphia)			3.4	1.5	4.5	1.5
Table 5 (2003 Adelphia)			3.0	1.5	4.5	1.5
Table 6 (2003 Adelphia)			2.4	1.5	3.0	1.5
Table 7 (2004 North Brunswick)					4.1	1.5
Table 8 (2004 Adelphia)					5.0	1.5
Table 9 (2004 Adelphia)					4.7	1.5

<sup>1</sup>Annual N applied (lb/1000 ft<sup>2</sup>)

<sup>2</sup>Mowing height in inches