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# **1998 RUTGERS TURFGRASS PROCEEDINGS**

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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 University 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. Articles appearing in these proceedings are divided into two sections.

The first section includes lecture notes of papers presented at the 1998 New Jersey Turfgrass Expo. Publication of the New Jersey Turfgrass Expo Notes provides a readily available

source of information covering a wide range of topics. The Expo Notes include technical and popular presentations of importance to the turfgrass industry.

The second section includes research papers containing original research findings and reviews covering selected subjects in turfgrass science. The primary objective of this section is to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

Special thanks are given to those who have submitted papers for this proceedings, to the New Jersey Turfgrass Association for financial assistance, and to those individuals who have provided support to the Rutgers Turf Research Program at Cook College - Rutgers, The State University of New Jersey.

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

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

Stacy A. Bonos, Ronald F. Bara, William K. Dickson, Dirk A. Smith, Melissa M. Mohr,  
James A. Murphy, and William A. Meyer<sup>1</sup>

Kentucky bluegrass (*Poa pratensis* L.) is a hardy, persistent, and attractive grass used extensively for turf throughout the northern half of the United States. It is adapted to a wide range of soils and climates, and has extensive rhizomes that provide excellent sod strength and survival. 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 in the northeastern and northcentral United States, as well as large areas of Canada and Europe. Kentucky bluegrass is considered a premier lawn grass, contributing to the turf of over 40 million lawns throughout the subarctic, temperate, and subtropical (high altitude) climates of the United States.

There are two main uses of Kentucky bluegrass: forage and conservation, and specialized turf. Prior to the release of Merion in 1947, common Kentucky bluegrasses were the predominant type used for turf. The common-type bluegrasses have excellent performance when used for soil conservation, pastures, and lower maintenance turf. Early maturity, good stress tolerance, and the ability to survive dry summers in a dormant state are some of the beneficial characteristics of common-type bluegrasses. These common-type bluegrasses can suffer extensive turf loss, however, from leaf spot and melting out disease under conditions of close mowing in humid environments. The discovery of Merion by Joseph Valentine in the early 1930s

greatly increased the usefulness of Kentucky bluegrass as a turf in regions with a humid temperate climate due to its resistance to leaf spot. Turf-type Kentucky bluegrasses have a lower, more prostrate growth habit, respond well to higher maintenance regimes, tolerate closer mowing, and have greater resistance to leaf spot disease (caused by *Drechslera* and *Bipolaris* spp.) than common type bluegrasses.

The facultative, apomictic breeding behavior of Kentucky bluegrass contributes to the development of many unique genotypes that are adapted to many different environments. Although apomixis presents a challenge to breeders who attempt to improve Kentucky bluegrass, it also provides the opportunity to produce true-to-type seed from superior genotypes generation after generation. Kentucky bluegrass cultivars have been developed through a number of approaches that include i) selection of naturalized ecotypes; ii) selection of successful, highly apomictic plants found in old pastures or turfs; iii) blending of highly apomictic single plants; and iv) selection of single, highly apomictic plants from breeding programs using intraspecific and interspecific hybridization.

The Kentucky bluegrass improvement program at Rutgers involves extensive field evaluations of collections from both United States and Europe, new material developed in the breeding program, and cultivars and selections developed by other breeders. In addition, the turf-

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<sup>1</sup> Graduate Assistant, Principal Laboratory Technician, Turfgrass Research Farm Supervisor, Principal Laboratory Technician, Soils and Plants Technician, Associate Extension Specialist in Turfgrass Management, and Research Professor, respectively, New Jersey Agricultural Experiment Station, Cook College, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901.

grass 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

Ten trials were seeded in September or October between 1993 and 1997 at North Brunswick or Adelphia New Jersey (Tables 1 to 10). One low maintenance test was located at Adelphia (Table 4) and one at North Brunswick (Table 7). The other tests were conducted under medium-high maintenance regimes. Two of the tests contained all the entries from the NTEP sponsored 1995 National Kentucky Bluegrass Medium-High Maintenance Trial (Tables 5 and 6), and one of the tests contained all the entries from the NTEP sponsored 1995 National Kentucky Bluegrass Low Maintenance Trial (Table 7). 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 lbs/1000 ft<sup>2</sup>), except for the two tests seeded in 1995 at North Brunswick (Table 5 and 7), which utilized 4 X 6 ft plots. An unplanted 6 inch border was left around each plot. Each test was arranged in a randomized complete block design with three replications. Annual nitrogen applied and mowing heights for each trial are presented in Table 12. The amount of nitrogen applied varied between tests to permit the evaluation of characteristics known to respond to nitrogen level. No single nitrogen application exceeded 1.0 lb/1000 ft<sup>2</sup>. Mowing was frequent enough to avoid excessive defoliation and the accumulation of clippings (two or three times per week during active growth). Reel mowers were used to maintain a 1.5 inch height of cut, whereas rotary mowers were employed at a higher cut.

After establishment, summer annual weeds were controlled by a spring application of DCPA, bensulide, or dithiopyr (Dimension), and broad-

leaf weeds were controlled by an autumn application of 2,4-D and dicamba. Bensulide was applied in August 1998 for *Poa annua* control on the 1994, 1995 (high-maintenance test), and 1996 tests at North Brunswick. No other pesticides were applied.

In general, soil pH was maintained between 6.0 and 6.5 with agricultural limestone. Tests were irrigated during establishment and also when needed to avoid severe drought stress. Low maintenance tests (Tables 4 and 7) were irrigated only during establishment. The trial seeded in 1993 was initially maintained under medium-high maintenance conditions but since 1996 has been carried at low maintenance.

All tests were rated frequently throughout the growing season for turf quality (color, brightness, leaf texture, density, uniformity, and amount of disease and insect damage). Other characteristics were evaluated separately on some tests when differences between entries were apparent. These characteristics included spring green-up (Tables 5, 6, 7, and 9), stripe smut disease (caused by *Ustilago striiformis*) (Table 6), leaf spot disease (Tables 5, 6, and 10), genetic color (Tables 5 and 10), percent green cover (Tables 5, 6, and 7), billbug (*Sphenophorous* spp.) damage (Tables 4 and 6), seedling vigor (Table 10), percent annual bluegrass (Table 5), summer patch (caused by *Magnaporthe poa*) (Table 5), plant height (Table 10), yellowing (Table 10), and wear quality (Table 1). All ratings were based on a 1 to 9 scale, where 9 represented the most favorable turf quality or desirable turf characteristic. Ratings were scored by more than one person on many occasions to reduce individual preferences toward a particular trait. Resistance to powdery mildew (caused by *Erysiphe graminis*) was evaluated under greenhouse conditions during the winter of 1996/1997. Although this data was reported in the 1997 proceedings (Bonos et al., 1998), it has been included in the current proceedings to assist in the classification of Kentucky bluegrass genotypes (Table 11).

## RESULTS

Results are presented in Tables 1 through 11. Entries in Tables 1 through 10 are ranked according to their overall (multi-year) quality average.

Many distinct types of Kentucky bluegrass have been released and can be classified into groups based on growth and performance characteristics. Descriptions of the various types of Kentucky bluegrass follow, and are based on observation of many Rutgers turfgrass evaluation trials. It should be noted that this classification system continues to be refined as more cultivars are developed and their distinct characteristics are expressed in research trials. This method of classification is used to present data in Tables 5 and 6.

### Compact Type

Cultivars within this group are characterized by a low, compact growth habit and possess good to excellent resistance to leaf spot disease. Many cultivars can form a highly attractive turf after green-up in late spring. In general, these cultivars have long winter dormancy, and a purple coloration can be observed on many cultivars during cold weather. However, some cultivars do exhibit better winter performance. Performance during summer heat and drought stress is variable, but some cultivars produce very good turf quality. Poor to excellent recovery from summer stress has been observed in the group. Entries in this group exhibited good resistance to stripe smut disease.

### Midnight Type

Within the compact type, a number of cultivars exhibit growth and performance characteristics similar the cultivar Midnight and are classified as a subgroup called the Midnight type. These cultivars characteristically have long winter dormancy with late spring green-up, have a very dark green color with good turf quality and good heat tolerance, and are susceptible to powdery mildew (Table 11).

### America Type

Within the compact type, a number of cultivars exhibit growth and performance characteristics similar to the cultivar America and are classified as a subgroup called the America type. These cultivars have a finer leaf texture and higher density than other compact type cultivars. The America type has moderate winter dormancy, which is exhibited in some cultivars as yellowing or bleaching of leaf tips. Moderate recovery from summer stress was observed within this group. This type has good resistance to most races of powdery mildew.

### Julia Type

A number of cultivars exhibit growth and performance characteristics similar to the cultivar Julia. These cultivars form a high quality turf but have moderate winter performance. They also exhibit good resistance to leaf spot but can be damaged by brown patch. The Julia type is typically susceptible to dollar spot disease; ratings from 1997 (Table 6), however, indicated that the Julia type cultivars were moderately susceptible to this disease.

### CELA Type (Challenger, Eclipse, Liberty, Adelphi type).

These cultivars exhibit early spring green-up, moderate to good stripe smut and leaf spot resistance, and variable winter color and dormancy.

### Bellevue Type

These cultivars form a turf with medium-low growth, medium wide leaves, and medium shoot density. Excellent cool-season vigor exists in this group, which is evident by excellent color retention and turf quality during the winter and early spring green-up. Cultivars within this type can become stemmy in turf plots due to seed head formation in late spring. Bellevue type cultivars have moderate recuperative ability from summer stress, good resistance to leaf spot, and moderate resistance to stripe smut disease. This type is moderately to highly susceptible to billbug damage.

### **Aggressive Type**

This group of cultivars is recognized for its aggressive lateral growth habit and the development of a turf with high shoot density. An aggressive dense growth may be advantageous for turf subject to high traffic and can hasten the development of a mature sod. Aggressive cultivars can dominate other species or cultivars when used in blends or mixtures. If aggressive cultivars dominate a stand, this could lead to the rapid expression of the cultivar's strengths or weaknesses. The characteristics of spring green-up and disease susceptibility varies considerably among these cultivars. Winter dormancy and color, as well as recovery from summer stress, is variable within this group.

### **Mid-Atlantic Ecotype**

This group of cultivars forms a vigorous turf of medium-high density with a deep, extensive root and rhizome system. In general, this group has moderate susceptibility to leaf spot disease; exceptions are Livingston and SR 2000, which have good resistance. The ability to recover from leaf spot damage and other stresses is excellent as a result of the type's deep, extensive rhizome system. Most of the cultivars have good tolerance of summer stress and exhibit good recovery after summer stress. This group has moderate to good winter performance.

**BVMG Type** (Baron, Victa, Merit, Gnome type).

This widely used group of cultivars has very high seed yield potential and can generally produce medium-good quality turf in the absence of stripe smut. These cultivars have medium-low growth, medium-wide leaves, and produce a medium-density turf. The BVMG type can become stemmy in turf plots due to seed head formation in late spring. These cultivars have moderate resistance to leaf spot disease; however, all BVMG type entries evaluated in long term trials at Rutgers have been observed to be susceptible to a new race of stripe smut disease. This group of cultivars generally has poor winter color and longer winter dormancy, and can also suffer significant billbug damage. Recov-

ery from summer stress ranges from poor to moderate.

### **Shamrock Type**

Cultivars within this type exhibit characteristics similar to the cultivar Shamrock. These cultivars have moderate winter color, moderate resistance to leaf spot disease, and moderate susceptibility to billbug feeding. This type has the potential for high seed yield production, but unlike the BVMG type, exhibit good tolerance to stripe smut disease. Tolerance to summer stress is variable within this type.

### **Common Type** (formerly Midwest Ecotypes)

These cultivars and selections are frequently referred to as "common" Kentucky bluegrass and are characterized by an erect growth habit and narrow leaf blades. Common type should not be confused with the seed label term "variety-not-stated" or "VNS," although the term "common" is often unfortunately used to inaccurately describe VNS seed. Common type Kentucky bluegrasses are typically used for conservation purposes, permanent pastures, and low maintenance utility turf. Many of these cultivars were selections of naturalized ecotypes found in old pastures of the midwestern United States. These cultivars produce seed early and economically, exhibit good stress tolerance, and often survive summer drought in a dormant condition.

Common type cultivars are susceptible to leaf spot disease and may be extensively damaged by this disease during the cool, humid conditions of winter and spring. Poor turf quality and excessive purple coloration is typical in some of these cultivars during winter. These cultivars are best adapted to high cutting heights in regions with cool nights, bright sun, and low humidity. Common type cultivars are suited for low maintenance utility turf areas where soil stabilization and conservation are needed.

### **Cheri Type**

These cultivars possess growth and performance characteristics similar to the cultivar

Cheri. They will produce a turf of medium-low growth and medium density with medium-wide leaves. These cultivars have moderate resistance to leaf spot, good resistance to stripe smut disease, and are moderately susceptible to dollar spot. Seed yield potential of these cultivars is relatively high, and moderate winter dormancy is exhibited.

### **Other Turf Types**

This group of cultivars and selections possess characteristics intermediate between two or more of the previously discussed groups. Further study is needed to identify new types of cultivars or recognize the characteristics of a cultivar that are common to a known group.

### **ACKNOWLEDGMENTS**

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### **LITERATURE CITED**

Bonos, S. A., Murphy, J. A., Bara, R. F., Dickson, W. K., Smith, D. A., Secks, M. E., and Meyer, W. A. 1998. Pages R-31 to R-82 *in* 1997 Rutgers Turfgrass Proceedings, A. B. Gould, ed. Rutgers Center for Turfgrass Science and New Jersey Turfgrass Association, New Brunswick, NJ. Vol. 29.

Table 1. Performance of Kentucky bluegrass cultivars and selections in a medium-high maintenance turf trial seeded in October 1993 at Adelphia, NJ.

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>3</sup> July 1998	Wear Quality <sup>4</sup> Aug. 1998
		1995-1998 Avg.	1994 <sup>2</sup> Avg.	1995 Avg.	1996 Avg.	1997 Avg.		
1	A85-301	6.7	6.4	6.9	6.7	6.6	6.3	5.0
2	A83-876	6.5	7.2	6.8	6.8	6.5	6.1	5.3
3	A90-327	6.5	5.4	6.7	6.6	6.8	5.8	5.7
4	A91-706	6.4	7.4	6.7	6.8	6.8	5.4	3.3
5	A83-70	6.4	6.8	7.0	6.1	6.1	6.4	4.7
6	H86-1286	6.3	5.7	6.6	5.8	6.5	6.3	5.0
7	Ram I	6.3	7.6	6.3	6.9	6.6	5.2	4.0
8	Glade	6.1	6.1	6.5	6.0	6.4	5.5	4.7
9	Eclipse	6.0	5.3	5.8	5.7	6.0	6.5	5.0
10	Midnight	5.9	6.3	6.9	6.6	5.6	4.7	3.3
11	Princeton-104	5.9	4.9	6.0	5.6	6.0	6.0	4.7
12	J-308	5.9	6.0	6.2	5.5	5.7	6.1	5.7
13	Princeton P-105	5.8	6.2	6.0	5.6	6.0	5.6	4.1
14	SR 2109	5.8	5.7	5.8	5.9	5.6	5.9	4.1
15	Wildwood	5.8	5.2	6.7	5.5	6.1	5.0	4.0
16	Julia	5.8	5.8	6.0	5.9	5.8	5.5	4.3
17	A91-507	5.7	5.0	5.4	5.4	6.2	5.9	6.3
18	Washington	5.6	5.9	5.7	5.5	6.2	4.9	2.7
19	C-74	5.6	7.4	5.7	5.5	5.6	5.5	5.3
20	Rita	5.4	7.0	5.1	5.2	5.4	4.9	3.7

(Continued)

Table 1 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>3</sup> July 1998	Wear Quality <sup>4</sup> Aug. 1998	
		1995-1998 Avg.	1994 <sup>2</sup> Avg.	1995 Avg.	1996 Avg.	1997 Avg.			1998 Avg.
21	NuStar	5.4	5.3	6.0	5.0	5.7	5.1	7.3	4.0
22	Plush	5.4	5.3	5.6	5.0	5.3	5.5	8.7	5.3
23	H90-1149	5.3	7.3	5.7	5.3	5.2	4.8	7.2	4.0
24	Cheri	5.2	4.6	4.6	5.1	5.5	5.8	7.7	5.3
25	Amazon	5.2	4.9	5.0	4.9	5.2	5.7	7.7	5.3
26	H87-199	5.2	6.2	5.7	4.9	5.5	4.7	5.7	3.7
27	A91-609	5.1	5.7	5.6	5.6	4.6	4.7	6.0	4.3
28	A82-1095	5.1	6.2	5.7	4.4	4.7	5.7	7.0	4.7
29	Adelphi	5.0	5.5	5.2	4.9	5.2	4.9	6.4	3.7
30	Limousine	5.0	4.0	5.9	4.7	4.8	4.7	6.7	3.0
31	Belturf	5.0	5.6	5.0	5.1	5.7	4.1	6.3	3.3
32	A84-587	4.9	5.7	5.2	4.6	5.4	4.4	7.0	3.4
33	Shamrock	4.9	5.9	4.9	4.8	4.7	5.3	7.5	3.5
34	Freedom	4.9	5.6	4.9	5.1	4.6	5.1	7.7	4.3
35	Classic	4.9	7.0	5.4	4.6	4.4	5.1	7.0	4.3
36	Suffolk	4.9	5.3	4.4	4.9	4.6	5.5	7.3	4.3
37	H86-190	4.8	6.6	5.0	4.7	4.9	4.8	8.0	3.3
38	Belmont	4.8	3.2	5.1	4.6	4.4	5.1	8.0	4.0
39	A82-1272	4.8	7.0	4.5	4.6	5.1	4.9	7.3	3.7
40	Nassau	4.8	6.8	4.4	4.5	4.8	5.3	7.7	4.7

Table 1 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>3</sup> July 1998	Wear Quality <sup>4</sup> Aug. 1998	
		1995-1998 Avg.	1994 <sup>2</sup> Avg.	1995 Avg.	1996 Avg.	1997 Avg.			1998 Avg.
41	Fylking	4.7	6.2	4.8	4.9	4.4	4.7	7.7	3.7
42	Apex	4.7	5.4	4.7	4.4	4.8	4.8	6.3	3.7
43	Penn Pro	4.7	3.4	5.0	5.2	4.4	4.1	5.0	2.7
44	Huntsville	4.7	3.8	4.3	4.5	4.9	4.9	8.3	4.7
45	Dragon	4.6	5.9	5.6	4.8	3.9	3.9	7.2	2.7
46	Trenton	4.6	5.6	4.9	4.9	4.3	4.3	6.0	3.0
47	Sydsport	4.6	3.8	4.2	4.2	4.9	5.0	6.7	3.3
48	Rugby	4.6	5.1	4.7	4.6	4.3	4.7	7.3	3.3
49	1757	4.5	5.2	4.6	4.7	4.2	4.7	8.0	3.7
50	Georgetown	4.4	4.2	4.3	4.3	4.3	4.7	8.0	4.0
51	Wabash	4.4	3.3	4.1	4.4	5.1	3.9	8.0	3.0
52	NuBlue	4.3	4.6	5.1	4.4	3.9	3.9	5.3	2.3
53	Merion	4.3	3.0	5.2	4.0	4.0	4.1	7.7	3.0
54	S-21	4.2	3.0	4.6	3.8	4.4	4.0	7.3	4.3
55	Pomeroy	4.2	3.7	4.1	3.5	4.6	4.4	7.7	4.3
56	Baron	3.9	4.0	4.8	3.3	3.4	3.9	7.3	3.0
	LSD at 5% =	0.7	---	1.0	1.0	0.9	1.1	1.7	1.7

<sup>1</sup>9 = best turf quality<sup>2</sup>1994 Turf Quality rating is the average of first replicate only<sup>3</sup>9 = least billbug damage<sup>5</sup>9 = best turf quality with wear applied

Table 2. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 1994 at Adelphia, NJ. (Medium-High Maintenance Test.)

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				
		1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.
1	Midnight	7.1	7.0	7.9	6.7	6.6
2	Princeton P-105	6.6	6.5	7.1	6.1	6.6
3	ZPS-2183	6.6	6.5	7.0	6.3	6.5
4	Wildwood	6.6	7.1	7.2	5.9	6.1
5	SR 2109	6.5	6.2	6.8	6.7	6.5
6	Blacksburg	6.3	6.7	7.0	5.1	6.6
7	A91-706	6.3	6.1	7.2	5.9	6.0
8	Unique	6.2	6.8	6.3	6.0	5.7
9	America	6.2	7.0	6.0	5.8	5.9
10	C-74	6.2	6.6	6.4	5.9	5.8
11	H90-1149	6.2	6.5	6.0	5.9	6.2
12	A91-630	6.2	5.6	6.5	6.3	6.2
13	A91-624	6.0	6.0	5.4	6.6	6.1
14	Apex	6.0	6.1	6.7	5.4	5.9
15	A83-876	6.0	6.6	6.0	5.6	5.8
16	NuStar	6.0	5.1	6.6	6.2	6.0
17	H86-697	5.9	6.2	5.9	6.0	5.5
18	Aspen	5.9	5.6	6.3	6.2	5.4
19	Princeton 104	5.9	5.4	5.8	6.2	6.1
20	A91-626	5.9	5.2	6.4	6.1	5.8
21	SR A82-2005	5.9	6.5	5.6	5.4	5.9
22	Champagne	5.8	5.6	6.1	6.1	5.5
23	NJ-1190	5.8	6.7	5.5	4.9	6.2
24	Ram I	5.8	6.0	6.0	5.8	5.6
25	Eclipse	5.8	5.7	5.9	5.8	5.7
26	H86-1019	5.7	6.1	6.0	5.3	5.6
27	Julia	5.7	5.5	6.5	5.3	5.4
28	Glade	5.7	5.4	6.1	5.7	5.4
29	Rita	5.6	6.3	5.5	5.5	5.5
30	Shamrock	5.6	5.5	5.1	5.9	6.0

(Continued)

Table 2 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				
		1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.
31	LTP-620	5.5	5.4	5.7	5.7	5.2
32	Washington	5.5	5.0	5.7	5.7	5.8
33	Limousine	5.5	6.3	5.5	5.0	5.3
34	A91-628	5.5	5.3	5.3	5.6	5.6
35	A91-725	5.5	5.2	5.8	6.0	4.9
36	Preakness	5.4	5.7	5.5	5.6	4.6
37	NuBlue	5.4	5.2	5.5	5.7	5.4
38	Fylking	5.4	4.7	6.3	5.6	4.9
39	A91-625	5.3	4.8	5.7	5.5	5.2
40	Trenton	5.3	5.1	5.5	5.5	5.0
41	Cheri	5.2	5.4	4.8	5.6	4.9
42	Freedom	5.1	5.5	5.0	5.0	5.0
43	Adelphi	5.1	5.5	5.3	4.6	5.1
44	Rugby	5.0	5.3	5.2	4.7	4.8
45	Kelly	5.0	4.9	5.1	5.1	4.7
46	1757	5.0	5.1	4.9	4.8	4.9
47	Penn Pro	5.0	4.6	4.6	5.4	5.2
48	Amazon	4.9	4.8	4.8	5.0	5.1
49	Sydsport	4.9	5.2	4.6	5.0	4.9
50	Liberty	4.9	5.1	4.8	5.0	4.8
51	Belmont	4.9	5.0	5.0	4.8	4.8
52	Classic	4.9	5.4	5.0	4.7	4.4
53	Livingston	4.8	4.6	4.9	5.0	4.8
54	H90-1121	4.8	4.4	5.0	5.0	4.8
55	Suffolk	4.7	5.0	5.4	4.2	4.1
56	Georgetown	4.7	5.1	4.5	4.6	4.4
57	A34	4.6	4.5	4.4	4.7	4.8
58	Baron	4.6	4.6	5.0	4.6	4.1
59	PST-BM3	4.5	4.4	5.0	4.5	4.1
60	Nimbus	4.5	4.6	4.1	4.5	4.8

(Continued)

Table 2 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				
	1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.
61 Merit	4.5	4.7	4.5	4.4	4.2
62 Plush	4.2	3.9	4.0	4.3	4.4
63 Canterbury	4.0	5.0	3.9	3.6	3.7
64 Bel 21	3.9	3.7	4.0	4.3	3.6
65 Huntsville	3.9	3.5	4.0	3.8	4.2
66 S-21	3.1	2.5	3.2	3.1	3.3
LSD at 5% =	0.6	0.7	0.8	0.9	0.7

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

Table 3. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 1994 at Adelphia, NJ. (Medium-High Maintenance Test.) (Murphy/Huff Test.)

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				
		1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.
1	Moonlight	7.1	7.4	7.7	6.6	6.6
2	Midnight	6.7	6.1	7.7	6.2	6.7
3	Blacksburg	6.2	5.8	7.0	5.6	6.3
4	Unique	5.7	6.3	5.9	5.3	5.5
5	America	5.6	6.1	6.0	5.0	5.3
6	A118	5.4	6.0	5.7	5.1	5.0
7	Baron	4.2	4.2	4.8	4.1	3.8
LSD at 5% =		0.5	0.7	0.7	0.7	0.7

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

Table 4. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 1994 at Adelphia, NJ. (Low Maintenance Test.)

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>2</sup>
	1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.	1998 Avg.
1 Midnight	5.9	6.5	7.5	5.2	4.4	3.3
2 Blacksburg	5.7	6.3	7.2	5.6	3.5	1.0
3 Preakness	5.4	5.5	5.3	5.5	5.2	4.8
4 Apex	5.4	6.2	6.2	4.1	4.9	4.5
5 H86-1019	5.3	6.0	6.2	5.5	3.8	2.3
6 A89-352	5.2	5.3	5.1	5.0	5.4	7.5
7 Eagleton	5.1	4.9	4.9	5.3	5.8	7.2
8 SR 2109	5.1	6.1	6.1	4.6	3.7	2.7
9 Wildwood	5.1	5.8	6.2	4.4	4.1	3.0
10 Rita	5.1	5.6	5.9	5.0	4.1	3.2
11 H86-697	5.1	6.1	5.2	5.1	3.8	3.8
12 Cheri	5.1	5.3	5.2	4.9	4.9	5.0
13 A82-2005	5.1	6.7	5.8	4.8	3.1	2.2
14 Unique	5.0	6.0	4.9	4.3	4.6	4.5
15 Ram I	5.0	6.0	6.2	4.4	3.5	2.2
16 H90-1149	5.0	6.0	5.8	4.5	3.6	2.7
17 A91-714	5.0	5.8	5.8	4.7	3.7	3.3
18 H90-1121	4.9	5.1	4.5	4.7	5.4	6.5
19 A91-706	4.9	5.5	6.2	4.5	3.3	1.7
20 Princeton P-105	4.8	5.3	4.8	4.5	4.2	3.5
21 Princeton 104	4.8	5.1	5.5	5.1	3.6	3.8
22 H86-920	4.8	5.4	5.9	4.2	3.8	2.8
23 H86-788	4.8	5.5	5.0	4.8	4.0	3.3
24 Nimbus	4.7	5.1	4.9	4.7	4.0	3.8
25 Eclipse	4.7	5.2	5.1	4.4	4.0	4.0
26 Washington	4.6	5.0	5.3	4.7	3.2	2.2
27 Shamrock	4.6	5.0	5.0	4.6	3.9	3.0
28 NuStar	4.6	4.9	5.0	4.5	3.9	3.7
29 Champagne	4.6	5.1	5.1	5.1	3.2	2.7
30 A91-626	4.6	5.7	4.6	4.4	3.6	2.8

(Continued)

Table 4 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>2</sup>
		1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.	1998 Avg.
31	A91-625	4.6	5.3	5.3	4.5	3.3	2.8
32	A83-876	4.6	6.3	5.2	3.6	3.2	2.8
33	ZPS-2183	4.5	5.2	5.6	4.1	3.0	1.8
34	Sydsport	4.5	4.6	4.3	4.5	4.7	3.8
35	RSP	4.5	5.2	4.3	4.8	3.8	4.8
36	Livingston	4.5	4.7	4.9	4.9	3.7	3.7
37	Fylking	4.5	5.0	5.3	4.6	3.3	3.8
38	Adelphi	4.5	4.9	4.8	4.1	4.2	5.5
39	Limousine	4.4	5.0	4.9	4.3	3.5	3.0
40	H86-749	4.4	4.7	4.3	4.5	4.0	4.6
41	Baron	4.4	4.5	4.3	4.4	4.5	4.8
42	America	4.4	5.8	4.7	3.8	3.1	3.2
43	A84-562	4.4	5.1	3.9	4.3	4.4	5.0
44	Suffolk	4.3	4.6	4.5	4.2	3.8	4.0
45	Belmont	4.3	4.5	4.7	3.7	4.5	3.5
46	Bel 21	4.3	4.6	3.9	4.4	4.3	3.8
47	Plush	4.2	4.6	4.5	4.3	3.5	4.8
48	Classic	4.2	5.1	4.5	3.5	3.4	3.7
49	Julia	4.1	5.2	4.5	3.4	3.3	2.2
50	Freedom	4.1	4.9	5.2	3.3	3.0	2.8
51	Rugby	4.0	5.1	4.5	3.6	2.8	2.7
52	1757	4.0	4.8	4.6	3.9	2.5	1.8
53	Kelly	3.9	4.4	3.7	3.6	3.8	3.7
54	Huntsville	3.9	4.5	3.1	4.1	4.0	5.0
55	Belturf	3.9	4.9	3.1	3.6	4.1	4.8
56	Aspen	3.9	4.8	4.5	3.3	3.1	2.8
57	A84-587	3.9	4.4	4.2	3.8	3.1	3.2
58	Penn Pro	3.8	3.6	4.5	4.2	2.9	2.2
59	Glade	3.8	4.7	3.3	3.7	3.3	2.8
60	Georgetown	3.8	4.7	4.2	3.3	3.1	1.8

(Continued)

Table 4 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----					Billbug Damage <sup>2</sup>
	1995-1998 Avg.	1995 Avg.	1996 Avg.	1997 Avg.	1998 Avg.	1998 Avg.
61 Amazon	3.8	4.3	4.0	3.4	3.4	3.0
62 Merit	3.7	4.4	4.0	3.4	2.8	2.0
63 Trenton	3.6	4.4	4.2	3.1	2.8	2.5
64 A34	3.5	3.5	3.5	3.3	3.5	3.5
65 S-21	3.4	3.6	2.8	3.7	3.6	4.3
66 Liberty	3.4	4.5	3.4	2.7	2.9	2.7
67 NuBlue	3.3	4.2	2.7	3.0	3.3	2.8
68 Canterbury	3.1	3.7	3.6	2.8	2.2	3.5
LSD at 5% =	0.7	0.7	1.2	1.1	1.3	1.7

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

<sup>2</sup>9 = least billbug damage

Table 5. Performance of Kentucky bluegrass cultivars and selections seeded in September 1995 at North Brunswick, NJ. (Includes NTEP Medium-High Maintenance Test-1.)

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual	Sum-	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----				Winter Color <sup>4</sup> Color <sup>5</sup>		
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		Blue-grass (%) July 1998	mer-Patch (%) Aug. 1998		April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>COMPACT TYPE</b>															
1	Moonlight	6.3	6.1	7.1	5.8	8.7	25.0	10.7	56.7	5.0	3.7	2.7	5.3	5.0	8.3
2	Princeton P-105	6.1	5.4	6.0	7.0	5.3	11.7	3.0	90.3	4.7	3.7	2.7	5.0	4.0	7.3
3	Blackstone	5.9	5.6	6.7	5.5	4.3	7.3	15.0	60.0	6.0	5.3	5.5	5.3	5.7	8.0
4	Blacksburg	5.5	4.7	6.5	5.4	6.7	4.0	16.7	45.0	3.7	3.7	5.8	5.3	4.7	6.3
5	Indigo	5.4	5.4	6.2	4.5	5.7	23.3	25.0	40.0	4.7	4.0	4.8	5.7	4.0	7.0
6	Platini	5.4	5.0	5.5	5.6	4.3	13.0	4.3	62.7	3.3	4.7	5.2	6.3	4.0	6.7
7	Apex	5.4	5.1	6.0	5.0	8.0	3.3	6.0	17.3	2.7	2.0	2.2	2.3	2.7	6.7
8	ZPS-2183	5.2	4.1	6.1	5.5	6.7	7.3	14.0	41.7	4.3	5.0	6.8	5.3	4.3	5.7
9	Glade	5.2	5.4	5.1	5.1	3.0	7.3	5.3	46.3	3.3	3.7	3.0	4.0	3.3	6.7
10	Alpine	5.0	4.8	5.6	4.5	8.7	6.7	46.7	27.3	2.7	2.0	1.7	1.3	2.7	6.0
11	SR 2109	4.9	5.1	5.3	4.4	8.3	5.0	41.7	11.7	6.0	6.0	6.2	4.7	5.3	7.0
12	H94-283	4.9	5.0	6.0	3.7	4.7	30.0	13.3	40.0	4.3	5.3	3.5	5.0	3.0	8.0
13	Wildwood	4.7	4.7	5.4	4.1	7.3	4.7	48.3	14.3	4.3	3.0	3.5	3.3	4.7	7.0
14	Ram I	4.2	4.7	4.4	3.5	3.7	9.7	58.3	3.7	3.3	3.3	4.7	3.7	4.0	7.0

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue- grass (%) July 1998	Sum- mer- Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>MIDNIGHT TYPE</b>															
1	Midnight	6.4	6.3	6.4	6.4	6.7	6.7	9.0	60.3	3.3	3.0	1.5	3.3	3.0	7.7
2	Liberator	6.1	5.2	6.7	6.3	8.0	8.0	7.7	58.3	4.3	2.7	2.2	2.7	4.3	8.0
3	Odyssey	5.9	4.8	6.5	6.4	7.3	12.3	5.7	58.3	3.3	2.3	2.5	3.0	3.3	8.0
4	Rugby II	5.6	4.9	6.5	5.4	7.0	5.7	15.0	43.3	4.0	2.0	2.2	2.7	3.3	8.0
5	NuGlade	5.4	4.4	6.0	5.7	7.3	13.3	15.0	56.7	3.3	2.0	2.3	3.3	3.0	7.7
6	Award	5.4	4.3	5.9	5.8	8.3	16.3	23.0	58.3	4.0	2.7	2.3	2.3	3.3	8.0
7	Impact	5.3	4.7	6.1	5.1	7.0	17.7	35.3	43.3	3.7	2.7	2.5	2.7	3.7	8.0
8	Total Eclipse	5.3	5.1	5.6	5.1	6.3	12.3	26.7	27.3	4.0	3.0	2.2	2.0	4.0	8.0
9	Quantum Leap	5.1	4.7	6.0	4.6	7.0	14.0	17.3	36.7	4.0	2.7	3.2	3.0	3.3	7.7
10	Arcadia	5.1	4.5	6.2	4.5	7.3	20.7	27.3	19.3	4.0	3.7	3.7	3.3	3.7	7.7
11	Absolute	4.8	4.9	5.4	4.1	8.0	8.3	61.7	8.7	5.7	3.0	4.8	3.0	5.0	7.3
<b>AMERICA TYPE</b>															
1	H94-294	5.6	6.3	6.3	4.3	8.0	63.3	21.7	43.3	5.0	4.7	3.2	4.3	4.7	7.7
2	America	5.5	5.3	6.0	5.1	5.7	27.3	14.0	73.3	4.3	5.0	3.7	6.3	4.0	6.3
3	Apollo	5.3	4.9	6.2	4.9	7.0	31.7	17.3	63.3	4.7	3.7	2.8	5.3	4.3	6.7
4	PST-B2-42	5.3	4.5	6.1	5.3	4.7	18.3	7.3	73.3	4.3	3.3	3.0	5.0	4.7	5.7
5	Unique	5.2	5.1	5.9	4.6	5.0	39.0	16.0	53.3	4.0	5.0	4.2	5.3	5.0	6.3

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue- grass (%) July 1998	Sum- mer- Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>AMERICA TYPE (continued)</b>															
6	PST-BO-141	5.1	4.4	5.9	5.0	5.7	22.3	8.3	56.7	5.0	4.0	3.3	5.7	5.0	6.7
7	H94-224	4.7	5.0	5.2	3.8	3.7	50.0	46.7	13.3	4.7	4.0	2.7	5.0	3.7	7.7
<b>JULIA TYPE</b>															
1	A93-418	5.8	5.9	5.9	5.5	7.3	15.0	9.0	73.3	4.7	4.3	2.8	5.0	4.0	7.7
2	A88-1145	5.6	5.9	4.3	5.1	7.6	14.4	20.2	43.3	4.0	4.2	3.3	4.8	3.7	7.2
3	Julia	5.0	5.6	5.0	4.4	4.7	20.0	30.0	16.0	4.0	5.0	4.3	5.0	4.3	6.3
4	ZPS-309	4.8	4.9	5.0	4.6	4.0	18.3	23.3	33.3	5.0	5.0	4.5	5.0	5.3	7.3
5	Caliber	4.6	4.5	5.0	4.3	3.0	17.3	15.7	38.3	4.7	6.0	5.5	7.0	4.7	6.3
6	H90-1197	4.5	4.5	4.8	4.4	3.7	23.3	25.7	18.3	4.0	4.3	3.5	5.0	4.7	6.0
<b>CELA TYPE</b>															
1	Jefferson	5.8	5.3	6.3	5.7	4.0	6.3	4.3	65.0	4.7	5.3	5.8	6.7	4.7	7.3
2	Eclipse	5.5	5.3	6.1	5.2	6.3	13.3	15.0	30.0	5.7	4.7	4.3	6.7	4.3	7.0
3	Challenger	4.7	5.2	5.3	3.7	6.3	25.0	48.3	10.0	6.0	4.3	5.7	4.0	5.7	7.3

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue- grass (%) July 1998	Sum- mer- Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>AGGRESSIVE TYPE</b>															
1	North Star	5.6	5.5	5.9	5.2	7.7	2.7	3.0	10.0	3.0	2.0	1.5	3.0	3.0	7.3
2	Princeton 104	5.5	5.4	5.2	6.0	4.7	2.7	5.0	26.7	6.0	5.7	5.8	4.7	5.0	7.0
3	Limousine	5.3	5.3	5.6	5.0	5.0	6.3	9.3	30.0	3.3	4.0	4.3	5.7	4.0	5.3
4	H86-1030	5.2	4.6	6.2	4.9	4.7	6.7	5.7	68.3	7.3	8.7	7.5	6.0	7.0	4.7
5	A34	4.5	4.4	4.5	4.6	3.0	9.3	16.7	33.3	3.3	5.7	5.0	5.3	4.0	6.0
6	Touchdown	4.0	3.8	4.6	3.6	5.3	8.3	60.0	6.3	3.3	3.7	6.3	4.7	4.0	5.0
<b>MID-ATLANTIC TYPE</b>															
1	ZPS-204	5.7	6.0	6.0	5.2	4.0	30.0	26.7	68.3	4.3	5.3	4.5	6.0	4.0	7.7
2	SR 2000	5.6	6.3	5.9	4.6	7.7	33.3	11.0	35.0	5.7	5.3	4.0	5.0	5.0	8.0
3	H90-1142	5.3	5.4	5.4	5.1	3.3	18.3	23.3	61.7	6.7	7.3	4.2	7.7	6.7	6.7
4	Monopoly	5.2	4.2	5.6	5.8	3.3	11.0	6.0	94.3	3.0	5.3	4.0	7.0	3.0	5.3
5	Livingston	5.0	4.9	5.5	4.6	5.0	31.7	28.3	20.0	6.0	5.3	4.7	5.3	6.0	6.7
6	Eagleton	4.8	4.8	5.7	3.8	3.3	63.3	33.3	43.3	5.3	4.3	3.8	5.7	5.3	6.3
7	Bel-21	4.5	3.9	4.9	4.6	2.0	61.7	21.7	58.3	3.0	4.3	3.0	7.0	3.0	6.0
8	Muddy Pk	4.1	4.0	4.4	3.9	2.7	53.3	25.0	55.0	4.3	5.0	5.3	6.7	4.7	5.0
9	Preakness	4.1	4.0	4.7	3.5	3.3	76.7	56.7	21.7	3.7	4.3	4.5	5.0	3.0	7.0

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Summer-Green			-----Spring Green-up <sup>3</sup> -----				Winter Color <sup>4</sup> Color <sup>5</sup>		
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		Blue-grass (%) July 1998	Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>SHAMROCK TYPE</b>															
1	A90-1413	5.3	5.3	5.7	4.9	4.7	28.3	25.0	60.0	5.3	5.0	3.7	5.3	5.0	6.7
2	A93-405	5.3	5.2	5.6	5.0	3.7	38.3	35.0	56.7	5.0	4.0	4.0	5.3	4.7	6.7
3	A93-427	5.2	5.0	5.6	5.0	3.7	25.0	21.7	36.7	4.3	3.7	3.7	5.0	4.3	7.0
4	Champagne	5.2	4.9	5.8	4.9	4.7	12.3	13.3	32.7	4.7	5.0	4.2	6.3	4.7	6.3
5	SR 2100	5.2	5.1	5.5	4.9	5.3	6.3	10.7	19.3	3.3	3.3	3.0	2.3	4.0	8.0
6	A91-625	4.9	4.8	5.2	4.6	4.7	33.3	27.3	35.0	4.3	5.0	3.8	5.0	4.3	7.3
7	A93-427	4.9	4.8	5.4	4.4	3.3	36.7	33.3	31.7	5.0	4.3	3.7	5.0	4.3	7.0
8	NJ-GD	4.8	5.2	4.9	4.2	4.0	32.3	21.7	32.7	3.3	5.3	5.8	6.0	3.3	7.0
9	A88-744	4.7	4.9	5.4	3.9	4.7	48.3	26.7	32.3	5.0	5.3	3.2	4.3	4.3	8.0
10	Shamrock	4.7	4.8	5.0	4.2	5.7	15.0	30.0	20.7	4.0	4.3	4.5	5.3	4.0	7.3
11	H86-697	4.5	6.0	4.5	3.2	7.0	45.0	66.7	6.0	6.7	6.3	5.8	3.0	6.3	7.7
12	LTP-620	3.8	4.0	4.3	3.3	2.7	48.3	43.3	10.7	5.3	4.7	4.8	4.0	5.0	6.7
13	H86-690	3.2	3.2	3.8	2.6	3.3	23.3	50.0	4.7	5.3	5.0	5.7	4.3	4.3	7.3

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual	Sum-	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		Blue- grass (%) July 1998	mer- Patch (%) Aug. 1998		April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>OTHER TYPE</b>															
1	Pick 8	5.9	5.1	6.5	6.0	5.7	6.7	4.7	75.0	5.0	4.0	4.5	5.0	5.7	7.0
2	Washington	5.6	4.8	6.4	5.7	3.0	5.0	4.7	71.7	4.3	6.3	5.8	7.0	3.3	7.0
3	H90-1149	5.3	5.4	5.9	4.6	5.7	31.7	31.7	25.0	6.7	5.7	5.2	4.3	5.3	8.0
4	Ba 81-058	5.3	5.3	6.1	4.5	6.3	33.3	35.0	33.3	6.7	5.0	5.0	5.0	5.7	8.0
5	Baronie	5.2	4.8	5.5	5.2	4.7	15.7	20.7	56.7	5.7	7.0	5.3	6.3	5.3	7.0
6	NuStar	5.2	4.9	5.6	4.9	6.0	8.0	9.0	46.7	3.3	3.3	3.0	4.7	3.3	5.7
7	H94-461	5.1	4.6	5.6	5.1	7.3	13.0	20.0	43.3	5.7	4.3	2.7	3.0	5.0	7.7
8	BAR VB 3115B	4.9	4.3	5.3	5.1	5.3	5.7	21.7	33.3	4.7	3.3	3.8	6.7	5.0	4.7
9	BAR VB 233	4.9	4.5	5.3	4.8	4.3	7.3	14.0	20.0	3.7	5.3	4.5	5.7	4.0	7.0
10	PST-P46	4.9	4.9	5.2	4.5	6.0	10.0	51.7	24.0	5.0	3.3	2.7	2.3	4.7	7.3
11	BAR VB 5649	4.8	4.5	5.1	4.9	4.3	11.0	11.7	22.7	5.3	4.0	4.8	5.7	5.3	6.0
12	BAR VB 6820	4.7	4.1	5.5	4.4	8.3	3.0	23.3	5.3	3.7	2.0	2.5	1.7	3.0	6.0
13	Ascot	4.6	5.1	5.6	3.2	7.7	25.7	71.7	3.7	4.0	2.3	3.0	2.0	3.0	7.3
14	Chicago	4.6	4.6	5.4	3.8	5.3	21.7	33.3	9.7	5.0	4.7	3.8	3.7	4.3	7.3
15	Ba 81-227	4.6	4.4	5.0	4.4	4.0	25.0	17.3	14.3	4.0	4.7	4.0	5.3	4.0	7.0

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue-grass (%) July 1998	Summer-Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>OTHER TYPE (continued)</b>															
16	Plush	4.5	4.0	5.2	4.2	2.0	13.3	10.0	38.3	5.0	4.7	4.7	4.7	4.3	5.7
17	Bronco	4.4	4.2	5.0	4.1	3.7	19.0	20.0	23.3	3.7	4.7	2.3	3.3	3.7	5.7
18	Explorer	4.4	4.1	5.1	4.0	5.0	10.7	28.3	8.7	4.3	3.3	3.8	4.0	4.7	7.0
19	Rambo	4.4	4.0	5.2	3.9	4.3	7.7	23.3	8.7	4.7	4.0	4.3	4.3	4.0	6.7
20	Seabring	4.4	4.7	5.0	3.3	7.3	33.3	66.7	6.3	4.3	2.3	2.2	3.0	4.7	8.0
21	Conni	4.3	4.4	4.3	4.2	5.0	3.7	33.3	9.3	3.7	2.7	2.2	3.0	3.7	4.7
22	Serene	4.3	3.8	4.8	4.4	5.3	14.0	33.3	11.7	5.0	3.3	2.8	4.0	3.3	6.7
23	HV 242	4.3	4.5	4.5	4.0	3.7	18.3	19.7	10.0	5.0	3.7	4.8	5.0	4.0	6.7
24	Ba 81-270	4.3	4.5	4.4	3.9	5.0	20.7	28.3	9.7	4.0	4.0	3.0	4.0	3.7	6.0
25	ASP200	4.3	4.5	4.6	3.8	4.7	4.3	71.7	11.3	4.3	3.3	2.8	2.3	4.3	7.0
26	Nassau	4.2	5.3	4.4	3.0	4.3	35.0	50.0	10.7	7.3	5.7	5.8	3.3	6.3	6.7
27	MED-1580	4.2	4.3	4.7	3.6	4.3	6.0	31.7	6.0	3.0	3.3	3.3	3.3	3.7	6.3
28	Allure	4.2	4.4	4.2	4.0	4.3	15.7	31.7	13.3	4.0	4.3	3.7	4.7	3.7	5.7
29	Ba 75-490	4.1	3.2	4.7	4.5	1.3	35.0	16.7	55.0	4.7	6.7	7.0	8.3	4.0	8.0
30	Chateau	4.1	4.1	4.4	3.8	5.0	7.3	43.3	9.3	3.0	4.0	2.7	4.0	5.0	6.3

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual	Sum-	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----				Winter Color <sup>4</sup> Color <sup>5</sup>		
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		Blue- grass (%) July 1998	Patch (%) Aug. 1998		April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>OTHER TYPE (continued)</b>															
31	Bartitia	4.0	5.0	4.4	2.7	7.3	25.7	74.3	5.7	4.0	4.0	3.8	1.3	4.0	6.7
32	Coventry	4.0	4.0	4.2	3.9	4.3	13.3	26.7	10.7	3.3	4.0	2.7	4.3	3.7	5.7
33	Bluechip	4.0	3.5	5.0	3.6	6.0	20.0	38.3	6.3	4.0	3.0	3.8	3.0	3.7	7.3
34	Nimbus	4.0	3.8	4.5	3.6	5.0	8.3	36.7	8.3	4.3	3.7	6.3	4.0	4.3	5.7
35	LKB-95	4.0	3.7	4.5	3.6	4.0	3.7	55.0	10.7	3.0	4.0	4.8	4.7	3.7	5.3
36	Sidekick	3.9	3.4	4.7	3.7	3.0	46.7	43.3	25.3	5.7	4.7	5.3	5.3	5.0	6.3
37	SRX-2205	3.9	3.7	4.8	3.2	4.7	21.7	50.0	8.0	2.3	3.3	3.8	3.0	3.0	5.3
38	NJ-54	3.8	2.6	5.1	3.7	5.0	19.0	30.0	20.7	3.3	3.3	5.7	6.0	4.0	4.3
39	Pick-855	3.8	3.6	4.6	3.2	4.0	15.0	41.7	11.3	5.0	4.7	6.3	3.3	5.7	6.0
40	VB 16015	3.7	3.6	4.4	3.2	5.3	36.7	53.3	8.3	5.7	3.3	3.8	3.0	5.0	8.3
41	NJ 1190	3.7	3.5	4.1	3.6	3.3	10.0	48.3	15.7	4.7	4.3	7.0	5.3	4.7	5.3
42	PST-BO-165	3.7	3.4	4.3	3.5	4.0	31.7	55.0	8.0	4.0	3.3	3.3	5.0	3.3	6.7
43	Misty	3.5	3.8	3.8	3.0	3.7	28.3	65.0	3.7	5.7	4.0	5.2	1.7	5.0	6.3
44	J-1555	3.5	3.2	4.6	2.7	3.3	27.7	60.0	10.0	3.7	4.0	4.2	3.3	3.0	6.7
45	Compact	3.4	3.9	3.7	2.8	3.0	35.0	56.7	4.0	3.3	2.7	4.5	4.7	3.7	4.3

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Summer-Green			-----Spring Green-up <sup>3</sup> -----				Winter Color <sup>4</sup> Color <sup>5</sup>		
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		Blue- grass (%) July 1998	Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>OTHER TYPE (continued)</b>															
46	Ba 75-163	3.4	3.8	3.8	2.5	3.0	66.7	55.0	15.3	4.0	3.7	3.7	3.7	3.3	8.0
47	Ba 76-197	3.3	3.7	3.6	2.5	3.0	61.7	65.0	8.7	3.0	3.3	3.5	2.7	3.3	5.3
48	Pepaya	3.1	3.2	3.7	2.5	6.3	10.7	86.0	1.7	2.3	2.0	2.5	1.3	3.0	5.7
49	Lipoa	2.9	2.9	3.8	2.0	4.7	7.7	81.0	3.0	3.0	3.3	5.2	2.3	2.7	6.7
50	Baruzo	2.9	2.9	3.9	1.8	3.0	36.7	92.7	1.7	2.3	2.3	3.5	1.0	2.7	6.7
51	Cardiff	2.7	2.8	3.5	1.9	6.7	40.0	75.0	3.3	4.3	3.7	6.7	3.0	4.0	6.7
52	Sodnet	2.6	1.9	3.7	2.2	6.7	28.3	81.3	2.7	2.7	2.0	4.7	1.3	1.7	7.3
<b>BELLEVUE TYPE</b>															
1	Georgetown	5.1	5.2	5.2	5.0	4.0	24.0	31.7	44.0	6.3	7.3	5.8	7.3	5.7	7.0
2	Suffolk	5.0	4.8	5.3	4.8	3.3	14.0	21.7	43.3	7.3	7.7	5.2	8.0	6.3	7.0
3	Classic	4.9	4.8	5.0	4.9	3.7	11.7	26.7	33.0	7.0	7.7	4.3	7.7	6.0	7.0
4	Haga	4.6	4.7	4.9	4.1	3.3	11.7	25.0	29.7	6.3	6.7	4.7	6.7	5.7	6.3

(Continued)

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue- grass (%) July 1998	Sum- mer- Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----		Winter Color <sup>4</sup>		Nov. 1996		
	1996- 1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998		Feb. 1996	
<b>BVMG TYPE</b>															
1	Dragon	4.7	4.7	5.4	4.2	3.3	40.0	15.7	38.3	4.3	4.7	5.0	4.7	5.3	7.3
2	Raven	4.6	4.2	5.6	4.1	6.3	18.3	28.3	22.7	3.7	3.0	3.0	3.7	4.0	6.0
3	Crest	4.6	4.6	5.3	4.0	6.0	20.0	31.7	14.0	4.7	4.0	3.2	4.0	5.0	5.7
4	Ba 70-060	4.6	4.6	5.3	3.9	6.0	46.7	38.3	12.3	4.3	4.0	3.8	3.3	5.0	6.7
5	Ba 77-702	4.6	4.0	5.2	4.5	6.0	5.7	18.3	16.3	3.0	3.0	2.5	4.0	4.0	6.0
6	Abbey	4.6	4.4	5.3	4.0	6.0	13.3	25.0	16.7	3.7	3.7	3.5	3.7	4.3	6.0
7	Marquis	4.6	4.3	5.2	4.2	5.3	20.7	28.3	14.0	3.7	3.3	4.0	3.7	4.0	6.0
8	Ba 81-220	4.5	4.2	5.5	3.9	5.3	20.0	41.7	23.3	3.7	3.3	4.3	4.0	4.0	6.0
9	Baron	4.4	4.1	5.3	3.9	6.0	11.0	38.3	11.7	3.0	2.7	2.5	3.3	4.3	6.0
10	Goldrush	4.4	4.6	5.2	3.4	6.0	30.0	41.7	10.7	3.3	3.3	3.3	3.0	4.0	6.3
11	Ba 73-373	4.4	4.4	5.2	3.6	5.7	29.0	46.7	10.0	3.3	3.7	3.7	3.7	4.7	6.3
12	Ba 75-173	4.4	4.5	5.1	3.5	6.0	40.0	50.0	13.3	4.3	4.0	3.5	3.0	4.7	6.3
13	Fortuna	4.3	4.1	5.3	3.4	6.0	33.3	40.0	13.7	3.7	4.0	4.0	4.0	4.0	6.0
14	Ba 81-113	3.2	3.4	4.0	2.3	4.0	45.0	81.7	3.7	4.0	3.3	4.0	2.3	3.7	6.0

Table 5 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Leaf Spot <sup>2</sup> May 1997	Annual Blue-grass (%) July 1998	Summer-Patch (%) Aug. 1998	Green Turf (%) Sept. 1998	-----Spring Green-up <sup>3</sup> -----			Winter Color <sup>4</sup> Color <sup>5</sup>			
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.					April 1996	May 1996	1997 Avg.	April 1998	Feb. 1996	Nov. 1996	
<b>COMMON TYPE</b>															
1	A91-702	4.6	4.6	5.4	3.7	4.0	31.7	36.7	15.0	5.3	5.7	7.5	5.7	3.7	7.3
2	A91-703	4.4	4.6	5.3	3.4	4.0	25.0	38.3	13.0	5.0	4.7	6.3	5.3	4.0	7.3
3	Kenblue	2.6	2.1	3.4	2.4	1.0	28.3	50.0	13.0	3.3	4.3	6.3	4.7	4.0	5.3
4	EXP# 1589	2.5	2.2	2.9	2.5	1.0	40.0	33.3	6.3	5.0	6.3	7.3	4.3	5.0	5.7
LSD at 5% =		0.7	0.9	0.8	1.0	1.4	27.8	26.9	26.6	1.0	1.2	1.3	1.5	1.0	0.9

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = least leaf spot disease<sup>3</sup>9 = earliest spring green-up<sup>4</sup>9 = brightest green color<sup>5</sup>9 = darkest green color

Table 6. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 1995 at Adelphia, NJ. (Includes NTEP Medium-High Maintenance Test-2.)

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>3</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>COMPACT TYPE</b>																		
1	Moonlight	6.4	6.8	6.3	6.1	3.7	8.3	9.0	8.3	91.7	2.7	4.3	7.0	9.0	8.0	7.7	8.0	8.3
2	SR 2109	6.3	6.2	6.2	6.4	5.7	7.7	9.0	6.7	83.3	5.0	6.0	7.0	8.7	8.7	7.7	6.7	6.3
3	Blacksburg	6.0	6.0	5.9	5.9	5.0	7.7	9.0	5.0	81.7	5.7	6.0	7.7	9.0	8.7	7.3	6.0	4.0
4	Blackstone	5.9	6.8	5.3	5.7	6.0	6.7	9.0	7.0	80.0	6.7	4.7	6.7	9.0	9.0	5.3	4.7	4.3
5	Indigo	5.8	6.0	5.9	5.7	4.2	6.4	8.7	6.5	79.2	4.5	5.4	7.0	8.7	7.7	7.4	6.7	7.8
6	Princeton P-105	5.8	6.0	5.7	5.8	2.7	6.7	9.0	6.0	85.0	1.7	6.0	6.3	9.0	7.7	7.7	7.0	6.0
7	ZPS-2183	5.8	5.4	6.2	5.7	6.3	7.3	9.0	6.0	83.3	8.7	5.7	8.3	9.0	7.7	7.7	7.0	7.3
8	H94-451	5.7	6.4	5.4	5.4	4.7	6.7	9.0	7.7	76.7	3.3	5.7	6.3	9.0	6.3	6.7	6.3	6.0
9	AG 508 PSW	5.7	6.2	5.4	5.6	3.0	7.3	9.0	7.3	46.7	1.3	4.7	7.3	8.0	8.0	7.7	6.3	5.0
10	Alpine	5.7	5.9	5.6	5.6	1.3	7.3	9.0	7.3	78.3	1.0	5.3	7.0	8.7	7.0	7.7	6.3	3.3
11	Wildwood	5.6	6.2	5.4	5.3	4.3	8.3	9.0	6.7	50.0	3.3	5.7	7.0	7.3	9.0	8.0	8.0	5.0
12	H94-283	5.6	5.9	5.6	5.3	4.0	6.7	9.0	7.3	90.0	3.3	3.3	7.0	9.0	3.7	7.7	8.0	8.3
13	Platini	5.0	5.1	4.6	5.4	6.0	6.0	9.0	3.0	76.7	2.7	5.0	7.0	7.7	7.0	5.0	5.0	3.3
14	Glade	4.9	5.4	4.9	4.5	4.0	5.3	9.0	3.7	60.0	2.7	3.3	5.0	9.0	8.7	6.7	6.3	5.3
15	Ram I	4.6	3.9	4.7	5.3	4.3	6.3	9.0	6.3	71.7	3.0	5.7	6.0	8.3	3.3	6.7	5.7	5.7
16	Nugget	4.5	4.5	4.1	4.8	1.0	7.0	9.0	6.7	58.3	1.0	2.7	7.0	7.0	5.0	6.7	5.3	3.7
17	Amazon	4.0	4.1	3.8	4.1	2.7	6.0	9.0	5.7	61.7	1.3	4.0	6.3	6.7	6.0	5.7	4.0	3.3
<b>MIDNIGHT TYPE</b>																		
1	Total Eclipse	6.3	6.8	6.2	6.1	3.3	8.0	9.0	6.3	86.7	1.7	5.0	7.3	9.0	8.7	7.7	8.0	6.7
2	Quantum Leap	6.2	6.7	6.5	5.5	3.0	7.0	8.3	7.0	85.0	2.0	6.0	6.7	8.7	8.3	7.3	6.3	6.7
3	Midnight	6.2	6.5	5.8	6.3	3.0	7.7	9.0	7.7	81.7	1.0	5.3	7.0	9.0	8.7	7.7	7.3	6.3
4	Liberator	6.1	6.5	5.7	6.2	5.0	7.7	6.7	6.3	81.7	2.0	5.3	7.3	9.0	9.0	7.3	7.3	5.7
5	Impact	6.1	6.4	6.2	5.6	3.3	7.3	9.0	5.3	89.3	2.0	4.7	7.7	9.0	9.0	7.3	7.0	6.3

(Continued)

Table 6 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997
		1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.													
<b>MIDNIGHT TYPE (continued)</b>																		
6	Award	6.0	6.5	5.4	6.1	3.0	8.0	9.0	6.7	90.0	2.0	4.7	7.7	9.0	9.0	7.3	7.0	6.3
7	NuGlade	6.0	6.0	6.1	6.0	3.7	7.3	9.0	6.7	91.7	1.3	5.0	7.0	9.0	9.0	7.3	7.0	5.7
8	Odyssey	5.9	6.2	5.9	5.5	3.0	7.7	9.0	6.3	79.3	2.0	6.0	7.0	9.0	8.7	7.3	6.3	6.0
9	Arcadia	5.6	6.3	5.9	4.5	3.0	7.3	9.0	5.0	56.7	2.0	5.0	7.0	9.0	9.0	7.3	7.3	6.3
10	Absolute	5.5	6.3	5.6	4.6	3.3	7.0	3.7	5.0	53.3	3.7	4.3	7.7	8.7	9.0	7.3	7.0	6.7
11	Rugby II	5.5	6.1	5.5	4.9	3.7	7.0	9.0	5.0	65.0	1.3	5.7	7.0	8.7	8.7	7.0	6.3	5.3
12	MED-1580	4.5	4.9	4.6	3.9	4.0	5.7	5.3	4.3	55.0	3.0	4.3	6.0	7.7	6.3	6.3	4.7	3.7
<b>AMERICA TYPE</b>																		
1	A95-284	6.3	6.7	6.0	6.2	6.0	7.3	9.0	6.3	87.7	5.0	4.7	6.7	9.0	5.7	7.3	7.0	7.0
2	Laguna	6.2	6.6	6.3	5.7	5.7	7.3	9.0	7.3	78.3	5.0	5.3	7.0	9.0	7.0	8.3	8.7	7.0
3	A95-289	6.2	6.2	6.4	6.1	4.0	7.0	9.0	7.0	90.0	4.3	4.7	7.3	9.0	6.0	7.7	7.3	7.3
4	H94-296	5.8	6.1	5.7	5.6	3.7	7.0	9.0	7.3	91.0	4.7	4.7	7.0	8.0	6.0	7.7	8.3	8.0
5	C-74	5.7	6.0	5.7	5.4	3.3	5.8	9.0	6.4	77.5	2.0	4.7	7.0	9.0	8.5	7.5	6.0	7.4
6	A95-288	5.7	5.5	6.1	5.4	4.0	5.3	9.0	7.0	81.7	5.3	4.7	6.7	9.0	5.7	7.3	7.7	7.0
7	PST-B2-42	5.6	5.8	5.6	5.4	4.0	6.3	9.0	6.7	81.7	3.3	3.7	7.3	9.0	8.0	8.0	6.7	7.7
8	Unique	5.6	5.8	5.5	5.4	4.3	5.7	9.0	5.7	85.0	3.0	5.0	7.0	9.0	8.0	6.0	5.0	7.7
9	H94-285	5.5	6.0	5.3	5.2	3.0	6.3	9.0	7.3	90.0	3.7	3.3	7.0	9.0	8.3	6.7	5.0	6.3
10	H94-282	5.4	6.0	5.1	5.2	4.3	6.3	9.0	6.7	94.3	4.3	5.0	7.0	9.0	2.3	6.0	6.0	6.7
11	America	5.4	5.7	5.1	5.6	3.3	6.7	9.0	6.3	91.7	3.0	4.3	6.7	9.0	8.3	6.3	5.3	6.7
12	Apollo	5.4	5.7	5.1	5.3	3.7	7.3	9.0	5.7	85.0	3.0	3.3	6.7	9.0	8.0	5.7	4.3	7.0
13	PST-BO-141	5.3	5.6	5.1	5.2	4.3	6.3	9.0	6.0	83.3	3.3	4.3	7.0	9.0	7.7	7.0	5.0	7.0
14	H94-728	5.2	5.9	5.1	4.5	2.0	6.3	9.0	7.0	85.0	2.0	3.0	6.7	9.0	2.7	6.7	6.7	7.0

(Continued)

Table 6 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>3</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997
		1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.													
<b>JULIA TYPE</b>																		
1	A93-421	6.1	6.2	5.9	6.1	4.0	8.0	9.0	6.0	80.0	3.3	5.0	7.3	8.3	8.0	7.7	7.0	6.0
2	H92-558	5.9	6.6	5.3	5.9	3.7	8.0	9.0	6.7	66.7	2.0	4.3	7.7	6.7	8.7	7.7	6.7	5.3
3	A88-1145	5.9	6.2	5.5	6.0	3.7	7.9	9.0	6.8	81.1	2.4	3.8	7.3	7.5	8.5	7.4	6.8	5.8
4	A93-417	5.8	6.2	5.6	5.5	3.7	8.0	9.0	7.0	81.7	2.7	4.3	7.3	8.0	7.7	7.7	6.3	5.3
5	A93-453	5.6	6.3	5.0	5.6	2.7	7.7	9.0	7.0	73.3	2.0	3.7	7.0	7.3	7.7	7.3	6.3	6.0
6	Julia	5.2	5.3	4.9	5.3	5.7	6.7	9.0	6.5	77.0	3.3	5.0	7.0	7.5	8.5	7.7	7.0	6.2
7	ZPS-309	5.0	5.0	5.1	5.0	7.7	5.7	9.0	2.7	48.3	5.0	5.3	7.0	8.7	4.0	5.0	3.7	3.7
8	Caliber	4.8	4.3	4.9	5.0	5.3	5.7	7.3	4.7	68.3	5.3	5.0	7.0	8.0	4.3	4.7	4.0	4.7
<b>CELA TYPE</b>																		
1	Jefferson	5.7	5.3	5.5	6.2	4.3	5.9	9.0	7.2	90.0	4.9	4.2	5.3	8.5	6.5	7.4	6.9	7.0
2	Challenger	5.5	6.1	5.5	4.9	5.7	7.3	9.0	6.0	83.3	5.7	6.3	7.0	9.0	4.3	7.0	5.7	6.0
3	Eclipse	5.3	5.2	5.8	4.8	5.0	7.7	9.0	5.0	50.0	4.3	5.0	7.3	8.3	5.7	7.0	6.0	6.7
4	Liberty	5.0	4.9	4.6	5.5	5.7	7.0	9.0	6.0	83.3	4.7	6.3	7.0	9.0	3.0	4.7	4.3	5.3
<b>BELLEVUE TYPE</b>																		
1	Freedom	5.6	5.5	5.1	6.1	7.0	5.3	9.0	4.0	91.7	5.3	7.3	5.7	9.0	5.0	3.3	3.3	4.7
2	Haga	4.9	4.9	4.4	5.2	4.0	5.0	7.7	4.3	86.7	4.0	5.3	6.7	9.0	5.0	4.3	4.0	3.7
3	Suffolk	4.8	4.5	4.5	5.4	6.3	5.7	9.0	3.7	75.0	5.0	6.3	5.3	9.0	4.3	3.7	3.0	3.0
4	Classic	4.7	4.7	4.1	5.4	7.0	5.3	9.0	3.3	66.7	5.0	6.3	6.7	8.7	3.7	3.7	2.3	3.3
<b>AGGRESSIVE TYPE</b>																		
1	Princeton 104	5.5	4.8	5.7	6.0	5.7	7.7	9.0	6.7	85.0	5.0	5.3	7.0	8.3	8.0	7.0	5.7	6.7
2	North Star	5.4	6.1	5.3	4.7	2.0	8.3	9.0	5.7	35.0	1.3	3.7	7.0	6.3	8.0	8.0	6.7	4.7
3	Touchdown	5.0	4.4	5.2	5.4	5.7	6.8	9.0	4.9	71.7	5.7	4.2	7.2	8.7	7.4	7.4	6.2	5.4
4	Limousine	4.6	5.1	4.3	4.6	3.7	6.3	5.0	5.3	51.7	4.0	3.0	7.3	6.7	9.0	5.3	2.7	2.3

(Continued)

Table 6 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>MID-ATLANTIC TYPE</b>																		
1	ZPS-204	5.8	6.0	5.6	5.6	4.7	7.0	9.0	7.0	90.0	4.0	5.3	7.3	9.0	8.3	7.7	6.7	7.7
2	Preakness	5.5	5.6	5.2	5.7	4.0	5.5	8.3	6.4	85.9	3.7	4.0	5.5	8.9	8.2	5.9	5.2	5.9
3	Livingston	5.4	5.0	5.5	5.6	5.0	5.7	9.0	5.7	88.3	5.3	5.3	6.3	9.0	6.3	5.7	6.0	6.0
4	Eagleton	5.0	4.3	5.2	5.4	3.4	4.4	9.0	8.7	88.9	3.9	4.0	4.9	9.0	5.5	7.4	6.7	7.4
5	Monopoly	4.9	4.2	4.7	5.7	5.3	5.0	8.0	6.3	88.3	2.3	5.7	5.7	9.0	5.3	4.0	5.0	4.0
6	Plush	4.8	4.3	5.1	5.1	3.0	4.3	9.0	8.3	86.7	4.3	4.3	4.0	9.0	5.0	8.0	6.0	7.3
7	A84-587	4.5	4.1	4.5	4.9	4.3	4.3	9.0	7.0	83.3	5.3	4.0	5.7	9.0	7.3	3.3	4.0	3.0
8	SR 2000	4.4	5.0	4.4	3.6	4.3	7.3	9.0	4.3	53.3	3.7	4.0	6.7	9.0	8.0	6.0	4.3	6.3
9	Bel 21	4.0	3.9	4.2	4.1	3.0	4.5	5.4	5.4	75.9	2.7	3.9	5.2	9.0	6.7	5.9	4.3	5.9
10	RSP	3.9	3.7	3.8	4.2	3.7	2.0	9.0	7.7	83.3	4.7	5.3	2.0	9.0	7.0	7.3	4.3	2.3
11	Muddy Pk	3.8	3.4	3.9	4.0	4.2	2.0	9.0	6.7	75.0	5.3	4.2	3.9	8.5	7.7	4.5	4.5	3.9
<b>OTHER TYPE</b>																		
1	H94-461	5.9	6.5	6.1	5.2	4.0	7.7	9.0	7.0	81.7	3.0	5.3	7.0	8.0	8.7	7.7	8.3	6.3
2	Rita	5.8	6.3	5.6	5.4	5.5	7.2	9.0	5.5	84.2	4.9	5.2	6.7	8.9	7.2	7.4	6.4	7.5
3	H90-1149	5.8	5.8	6.2	5.5	5.7	6.7	9.0	6.7	78.3	6.7	6.3	7.0	9.0	7.0	7.0	6.0	8.0
4	H86-697	5.7	6.6	5.2	5.3	5.3	7.0	9.0	5.0	65.0	5.3	5.0	7.3	9.0	8.0	6.3	5.7	4.7
5	A93-372	5.7	6.4	5.4	5.3	3.0	7.0	9.0	6.7	85.0	3.0	4.0	7.7	9.0	7.0	7.3	6.7	6.7
6	Pick 8-15-94W	5.6	6.0	5.3	5.4	5.0	6.7	9.0	4.3	68.3	3.7	5.7	7.3	8.3	6.3	6.7	5.0	3.7
7	BA 81-058	5.6	5.6	5.6	5.6	6.0	6.7	9.0	6.3	90.0	6.3	5.3	7.3	9.0	5.7	7.0	6.7	6.3
8	PST-P46	5.5	6.3	5.2	4.9	4.0	7.7	9.0	5.3	56.7	2.7	4.3	7.0	8.0	8.7	8.3	7.7	4.7
9	93KB 5	5.5	6.1	5.3	5.3	3.7	7.3	9.0	8.0	80.0	2.3	5.7	6.0	7.7	8.0	8.0	6.7	3.3
10	NJ-1190	5.5	6.0	4.7	5.8	5.7	5.0	9.0	6.3	80.0	6.3	4.7	6.0	6.7	8.3	6.0	4.3	2.3

(Continued)

Table 6 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>OTHER TYPE (continued)</b>																		
11	BAR VB 6820	5.4	4.7	5.5	6.0	3.3	8.0	9.0	7.7	75.0	3.3	5.3	7.3	9.0	8.3	8.0	6.3	4.7
12	Ascot	5.3	5.3	5.3	5.3	3.0	8.0	9.0	5.7	78.3	1.3	4.7	7.0	8.0	2.0	7.7	6.3	7.0
13	Seabring	5.2	5.5	4.9	5.1	2.7	6.7	9.0	6.7	88.3	2.3	3.0	7.3	9.0	1.0	6.0	5.3	4.7
14	Bartitia	5.2	5.3	5.7	4.8	3.3	7.0	9.0	6.0	55.0	3.7	5.7	7.0	7.0	8.0	7.7	6.7	5.7
15	Pick 247 PSW	5.2	5.2	5.3	5.3	3.7	5.7	9.0	7.3	85.0	2.7	4.7	7.0	9.0	7.3	6.3	4.7	7.7
16	Cardiff	5.2	5.1	5.2	5.5	5.3	5.7	9.0	6.3	76.7	6.0	5.3	6.3	9.0	6.3	6.3	3.7	4.3
17	Conni	5.2	5.3	4.6	5.7	3.7	7.3	9.0	7.0	75.0	1.7	5.0	6.0	7.3	8.0	7.3	5.3	3.0
18	Allure	5.1	5.2	5.1	4.9	2.7	6.0	9.0	6.3	63.3	1.7	5.3	7.0	6.0	7.0	6.7	6.0	5.3
19	BAR VB 5649	5.1	5.2	4.4	5.7	6.0	6.3	9.0	3.7	73.3	5.0	5.0	7.3	6.3	6.0	4.3	3.7	4.0
20	Chateau	5.1	5.1	4.8	5.6	3.0	5.3	9.0	7.3	80.0	1.7	5.0	7.3	7.0	5.0	6.0	4.3	5.3
21	Explorer	5.1	5.1	5.0	5.1	3.7	6.7	6.7	5.3	63.3	3.3	4.7	7.0	7.7	7.7	5.3	4.0	4.7
22	BA 81-270	5.0	5.0	4.6	5.3	2.7	6.3	9.0	5.3	71.7	1.0	4.0	7.0	7.7	5.0	6.7	4.3	4.0
23	Fylking	5.0	4.8	5.2	4.9	3.0	7.0	9.0	6.7	51.7	1.3	5.7	6.7	9.0	8.0	7.3	6.0	4.7
24	AG 496 PSW	5.0	4.5	5.4	5.0	3.3	5.3	5.7	6.0	73.3	2.3	4.3	7.7	7.7	7.7	7.3	7.0	5.3
25	Rambo	4.9	5.0	4.7	5.1	3.7	6.7	9.0	4.7	66.7	3.0	3.3	6.7	7.3	7.7	6.3	3.3	4.0
26	BAR VB 3115B	4.9	5.1	4.9	4.8	4.0	7.0	9.0	5.3	46.7	1.3	4.7	6.7	7.7	8.7	7.7	6.7	5.7
27	BAR VB 233	4.9	4.8	4.9	5.0	5.3	5.3	9.0	2.7	55.0	4.0	5.0	7.7	7.7	5.3	4.7	4.7	3.7
28	Chicago	4.9	4.8	4.7	5.1	3.7	7.0	9.0	5.0	68.3	3.3	4.3	6.7	8.0	6.3	6.0	4.0	4.3
29	NuStar	4.9	4.7	4.9	5.1	2.7	7.0	9.0	5.0	66.7	2.3	4.7	7.0	8.3	8.0	6.7	5.7	6.0
30	Coventry	4.8	4.9	4.9	4.5	1.7	5.0	9.0	5.0	71.7	1.0	4.0	7.0	7.7	5.7	6.7	4.3	5.0
31	Misty	4.8	4.9	4.9	4.8	6.0	4.7	9.0	6.7	78.3	5.7	4.3	6.0	9.0	7.3	6.3	5.3	3.7
32	SRX 2205	4.8	4.8	5.0	4.7	3.0	6.3	9.0	6.3	73.3	1.0	5.0	6.0	8.3	8.0	6.7	5.7	5.3
33	Bronco	4.8	4.5	5.1	4.9	2.0	6.3	9.0	5.7	83.3	1.7	4.0	6.0	9.0	7.3	7.3	6.7	7.3
34	LKB-95	4.8	4.3	4.5	5.5	4.7	5.7	9.0	5.0	81.7	3.7	5.3	6.0	7.7	7.7	6.0	4.7	4.0
35	Washington	4.8	4.2	5.4	5.0	3.9	5.2	9.0	6.7	70.9	4.9	3.4	6.0	9.0	8.0	7.3	6.7	6.0

(Continued)

Table 6 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>OTHER TYPE (continued)</b>																		
36	ASP200	4.7	6.2	4.3	3.8	5.0	5.7	2.3	3.0	58.3	3.0	4.0	6.3	8.7	8.7	5.0	4.0	3.3
37	VB 16015	4.7	5.1	4.5	4.6	5.3	6.3	4.7	4.7	83.3	6.0	5.3	7.3	9.0	2.0	4.0	2.7	3.3
38	Baronie	4.7	4.4	4.7	5.0	6.3	5.7	9.0	2.7	58.3	5.7	6.0	6.0	9.0	3.7	2.7	2.7	5.0
39	D3WN 763	4.7	3.5	5.3	5.2	3.7	5.3	9.0	6.7	85.0	4.3	5.0	6.7	9.0	2.3	7.0	7.7	7.7
40	Nimbus	4.5	4.7	4.6	4.2	6.4	7.2	6.8	5.4	52.5	5.5	4.7	6.7	8.5	8.7	6.7	5.7	4.2
41	Serine	4.5	4.6	4.1	4.7	3.0	6.7	7.7	5.0	66.7	1.7	3.7	6.7	7.7	7.3	6.0	3.7	4.0
42	PST-B9-196	4.5	4.5	4.5	4.5	4.7	6.3	9.0	4.3	63.3	4.3	4.0	7.7	7.0	6.3	6.3	5.0	6.3
43	Pick 855	4.5	4.4	4.3	4.9	4.3	4.3	9.0	6.3	80.0	5.3	5.7	4.7	9.0	7.0	4.3	3.7	3.7
44	Canterbury	4.5	4.3	4.2	4.8	5.4	4.7	7.0	4.2	70.8	5.4	5.8	6.2	9.0	3.0	3.7	3.2	4.2
45	Nassau	4.5	4.2	4.2	5.1	5.7	5.0	9.0	6.7	85.0	5.7	5.3	7.0	9.0	2.7	3.3	4.3	4.3
46	VB 16015	4.4	5.0	4.2	4.0	5.3	6.0	9.0	5.3	75.0	5.3	4.0	7.0	9.0	1.0	5.7	4.0	4.3
47	HV 242	4.4	4.8	3.8	4.4	5.3	5.3	9.0	2.7	58.3	4.0	4.3	7.0	7.3	5.0	3.7	2.3	1.7
48	Sodnet	4.4	4.5	4.2	4.3	3.7	7.3	9.0	4.0	51.7	5.0	3.7	6.7	9.0	6.7	6.0	4.3	3.3
49	PTE	4.3	4.6	3.6	4.6	5.0	6.3	9.0	5.7	83.3	5.3	4.3	7.0	9.0	2.0	2.7	3.3	4.3
50	PST-BO-165	4.3	4.5	4.0	4.6	2.7	6.0	9.0	5.7	46.7	2.0	3.7	7.0	6.3	3.7	5.3	4.0	3.3
51	BA 75-163	4.2	4.7	3.9	4.2	3.0	6.0	9.0	5.3	61.7	4.0	2.7	7.3	9.0	4.0	4.7	5.3	3.7
52	JC91 L II	4.2	4.6	3.9	3.9	3.3	6.3	9.0	4.3	55.0	2.3	3.7	5.7	9.0	5.3	6.0	3.7	2.3
53	Pepaya	4.2	4.2	3.8	4.7	3.0	7.0	9.0	5.7	53.3	1.3	4.3	7.0	7.7	2.0	5.7	4.7	2.7
54	Wx5 955-2	4.2	3.6	4.6	4.2	3.3	5.3	9.0	5.3	68.3	4.0	4.0	5.3	9.0	5.3	5.3	5.7	5.3
55	KBGJB91-B	4.1	4.3	4.7	3.4	2.7	3.7	3.7	6.0	70.0	2.0	4.3	6.3	9.0	3.0	6.3	6.0	4.3
56	NTT 683	4.1	4.1	3.8	4.6	1.3	7.0	9.0	6.0	61.7	1.0	2.3	7.0	9.0	4.7	6.7	3.7	3.0
57	BH 95-199	4.1	3.9	3.7	4.7	5.7	6.7	9.0	5.7	85.0	5.0	4.0	7.0	9.0	3.0	3.3	2.7	3.0
58	KB-02-06Ax23	4.1	3.8	4.5	4.0	2.7	5.3	9.0	3.3	56.7	3.7	4.0	7.0	9.0	3.0	2.7	2.7	3.0
59	BA 81-227	4.1	3.6	4.5	4.2	2.7	5.7	9.0	5.0	53.3	1.3	4.0	6.3	8.0	3.3	5.3	4.0	4.0
60	NJ-54	4.1	3.0	4.6	4.7	3.3	5.3	9.0	5.3	70.0	4.0	4.7	6.7	8.3	2.3	6.7	7.0	6.7

(Continued)

Table 6 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>OTHER TYPE (continued)</b>																		
61	J-1555	4.0	4.2	4.2	3.6	3.7	5.7	6.0	4.7	60.0	3.7	5.0	6.0	8.0	7.7	5.7	4.0	4.3
62	KB-02-04x35	4.0	3.9	4.1	4.0	2.3	5.3	7.3	5.7	60.0	3.0	3.7	6.7	9.0	3.7	3.3	2.7	5.0
63	BA 75-490	4.0	3.7	3.8	4.5	5.7	2.7	9.0	6.0	86.7	6.7	3.3	4.0	9.0	4.0	4.7	3.0	4.7
64	Merion	4.0	3.7	4.0	4.4	3.7	4.7	9.0	6.3	80.0	6.7	3.0	6.3	9.0	5.3	7.0	5.0	5.0
65	BA 76-197	3.9	3.0	4.0	4.6	2.7	4.3	9.0	6.7	88.3	2.7	4.0	6.3	8.3	4.0	4.7	3.7	4.3
66	Sidekick	3.8	3.0	3.7	4.6	4.7	4.3	9.0	6.0	85.0	5.0	4.7	5.0	9.0	1.7	2.0	2.3	4.0
67	Lipoa	3.7	4.6	3.0	3.6	4.3	5.3	9.0	6.7	51.7	3.7	3.0	6.0	7.7	3.0	5.7	3.0	2.3
68	Baruzo	3.7	4.1	3.0	4.0	3.0	4.7	9.0	5.0	61.7	2.3	3.7	4.0	9.0	3.3	3.3	2.7	2.3
69	Compact	3.3	3.1	3.6	3.2	5.0	3.0	9.0	6.0	60.0	3.7	3.3	5.7	8.7	3.7	5.7	2.3	3.3
<b>SHAMROCK TYPE</b>																		
1	NJ-GD	5.4	5.4	5.3	5.6	4.7	6.3	9.0	6.3	76.7	4.3	3.7	7.0	8.7	7.0	7.0	5.7	6.7
2	A91-625	5.2	5.7	4.9	5.1	5.3	5.3	9.0	5.7	81.7	4.7	3.7	6.7	9.0	7.0	4.7	5.7	4.7
3	Champagne	5.2	5.2	5.5	4.8	5.3	5.0	9.0	3.7	70.0	4.7	5.0	6.7	9.0	7.3	5.7	5.7	6.0
4	Shamrock	5.0	5.0	4.8	5.2	5.3	6.3	9.0	5.0	63.3	5.3	4.0	7.3	8.7	6.3	5.7	5.7	5.0
5	A91-624	4.9	5.3	4.5	4.8	5.7	5.7	9.0	5.2	79.2	6.0	3.5	6.4	9.0	4.7	5.5	5.5	3.7
6	H86-690	4.3	4.1	4.9	3.9	3.7	4.7	9.0	5.3	55.0	5.3	2.7	7.0	9.0	6.0	6.0	7.0	5.7
7	SR 2100	4.1	4.5	4.4	3.5	3.0	6.3	3.0	4.3	51.7	3.3	4.3	6.7	8.3	7.7	4.3	3.3	4.7
8	A88-744	3.8	4.4	3.1	3.9	4.3	5.3	7.0	4.7	66.7	4.0	3.0	7.0	9.0	5.7	2.3	2.0	2.7
9	LTP-620	3.7	3.3	3.7	4.0	5.0	4.7	9.0	4.0	58.3	5.3	5.3	6.3	9.0	4.3	3.3	2.0	2.7

(Continued)

Table 6 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997
		1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.													
<b>CHERI TYPE</b>																		
1	A93-238	5.1	5.4	4.7	5.2	2.3	6.3	9.0	6.0	71.7	1.7	3.7	6.0	7.0	6.7	6.7	6.0	4.3
2	A91-391	4.9	5.5	4.3	4.8	2.3	5.7	9.0	7.0	75.0	1.7	4.0	7.0	6.0	5.7	6.3	4.7	3.0
3	A82-1095	4.9	5.4	5.0	4.5	2.7	4.7	9.0	6.0	65.0	2.7	4.3	6.3	5.7	6.0	7.0	5.3	4.7
4	Cheri	4.9	5.4	5.0	4.5	2.3	5.7	4.7	5.3	60.0	2.3	5.0	6.7	7.7	4.7	7.3	5.0	5.7
5	Sydsport	4.8	4.9	4.6	5.0	2.3	6.3	9.0	7.3	73.3	1.3	4.0	7.0	7.0	5.3	5.7	4.7	4.0
6	Cobalt	4.4	5.3	3.7	4.8	2.3	5.0	9.0	5.7	68.3	2.0	3.3	6.3	6.3	6.0	6.0	4.3	3.7
7	A82-1091	4.3	4.8	3.8	4.3	2.7	5.7	9.0	5.0	60.0	2.3	4.0	6.7	7.0	6.0	4.7	3.3	2.3
<b>BVMG TYPE</b>																		
1	Crest	4.4	5.1	4.7	3.3	2.7	4.0	1.0	5.0	75.0	1.7	4.0	6.7	9.0	4.3	7.0	6.3	4.7
2	BA 70-060	4.4	4.4	5.0	3.8	3.3	3.0	1.0	4.7	80.0	3.0	5.3	6.7	9.0	6.7	6.0	5.7	6.0
3	Dragon	4.4	4.2	4.1	4.9	6.3	4.7	5.0	5.7	78.3	5.7	5.0	6.7	9.0	1.0	3.7	3.0	3.3
4	Fortuna	4.3	4.5	5.0	3.5	2.3	4.0	1.3	4.7	71.7	2.3	5.0	7.0	8.0	8.0	6.7	6.0	6.7
5	Raven	4.3	4.5	4.7	3.6	2.3	4.0	1.7	4.3	60.0	2.7	4.7	6.7	7.7	8.3	6.0	6.7	6.3
6	BA 73-373	4.3	4.4	4.4	3.9	3.0	4.3	2.0	4.7	65.0	2.7	5.3	7.0	7.7	7.0	5.0	5.0	3.7
7	Abbey	4.3	4.1	4.4	4.3	3.0	4.7	2.3	4.0	65.0	3.0	5.3	7.0	9.0	4.3	3.7	4.7	5.3
8	BA 75-173	4.2	4.5	4.4	3.6	2.3	4.0	1.7	4.3	65.0	2.3	4.7	7.0	7.7	4.7	4.3	3.7	4.7
9	BA 81-220	4.2	4.4	4.7	3.6	2.7	4.0	1.3	4.0	68.3	3.0	4.0	6.3	9.0	4.7	6.0	6.0	5.3
10	Marquis	4.2	4.2	4.7	3.6	2.3	4.0	1.0	5.0	73.3	3.0	4.7	7.0	8.3	8.3	6.7	6.3	4.7
11	BlueChip	4.1	4.6	4.5	3.3	3.3	4.3	1.0	4.0	41.7	3.0	4.3	7.0	8.3	7.7	6.3	5.0	6.0
12	BA 77-702	4.0	4.0	4.8	3.4	2.7	3.7	1.3	4.3	68.3	2.3	5.7	6.7	9.0	6.0	5.7	6.3	7.0
13	BA 81-113	4.0	3.8	4.1	4.0	3.0	4.0	2.0	4.7	85.0	3.3	5.0	7.0	8.3	1.7	4.7	3.7	4.3
14	Goldrush	3.8	4.4	4.3	2.8	2.3	3.7	1.3	3.7	46.7	2.0	4.3	6.7	8.3	8.3	6.3	5.7	5.0
15	Baron	3.8	3.8	4.4	3.3	2.3	3.3	1.0	4.0	76.7	1.7	5.3	7.0	8.3	4.0	5.7	5.3	5.7
16	BlueStar	3.7	3.8	3.6	3.8	3.3	4.0	1.0	5.3	80.0	1.3	3.7	7.0	9.0	4.0	3.7	3.3	3.0

(Continued)

Table 6 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Winter Color <sup>2</sup> Feb. 1998	Leaf Spot <sup>3</sup> May 1998	Stripe Smut <sup>4</sup> May 1998	Bill-bug <sup>5</sup> July 1998	Green Cover (%) Sept. 1998	Spring Green-up <sup>6</sup> March 1997	Bright Color <sup>7</sup> Dec. 1997	Leaf Spot <sup>8</sup> April 1997	Dollar Spot <sup>8</sup> Aug. 1997	Stem-ness <sup>9</sup> May 1997	Bill-bug <sup>5</sup> July 1997	Heat Tol. <sup>10</sup> July 1997	Drought Tol. <sup>11</sup> Aug. 1997	
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.														
<b>COMMON TYPE</b>																		
1	A91-703	4.9	4.5	5.2	5.0	4.7	5.5	9.0	6.2	73.3	6.2	4.0	6.2	9.0	3.5	6.9	7.9	5.9
2	A91-702	4.6	4.1	4.7	5.0	5.7	5.0	9.0	6.3	85.0	6.7	4.3	7.0	9.0	2.7	6.7	7.7	4.3
3	H86-749	3.8	3.1	4.1	4.3	5.0	2.0	9.0	7.3	76.7	5.7	3.3	3.3	9.0	3.7	4.7	3.3	5.3
4	S-21	3.4	2.9	4.3	3.1	4.0	1.0	9.0	6.7	65.0	7.7	3.3	2.7	9.0	7.0	7.0	6.7	3.7
5	Huntsville	3.3	3.1	3.7	3.1	3.7	1.7	8.3	7.0	81.7	5.7	3.7	3.0	9.0	6.7	6.0	5.3	5.3
6	Kenblue	3.1	2.3	3.6	3.3	5.0	1.0	9.0	6.0	70.0	6.3	3.0	2.3	9.0	7.7	7.7	6.7	4.0
7	Exp# 1589	3.1	2.9	3.8	2.7	4.0	1.0	9.0	5.7	60.0	8.0	4.0	3.0	9.0	6.3	5.0	5.7	3.0
8	South Dakota Cert	3.0	2.5	3.3	3.3	4.0	1.0	9.0	7.0	70.0	5.7	2.7	2.3	9.0	5.7	7.0	4.0	3.3
LSD at 5% =		0.7	0.7	1.0	1.0	1.3	1.3	1.3	2.2	27.1	1.5	1.6	1.1	1.4	1.8	1.7	1.9	1.9

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = best winter color<sup>3</sup>9 = least leaf spot<sup>4</sup>9 = least stripe smut<sup>5</sup>9 = least billbug damage<sup>6</sup>9 = earliest spring green-up<sup>7</sup>9 = brightest green color<sup>8</sup>9 = least dollar spot<sup>9</sup>9 = least amount of stems<sup>10</sup>9 = best heat tolerance<sup>11</sup>9 = best drought tolerance

Table 7. Performance of Kentucky bluegrass cultivars and selections in a turf trial established in September 1995 at North Brunswick, NJ. (Includes NTEP Low Maintenance Test.)

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 1998	Green Cover (%) Oct. 1998
		1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		
1	SR 2109	5.0	4.9	5.7	4.5	5.0	56.7
2	North Star	4.8	6.1	5.0	3.2	1.7	45.0
3	H94-451	4.8	5.2	5.5	3.7	5.7	48.3
4	Bartitia	4.7	5.4	4.9	3.9	2.7	70.0
5	H94-224	4.7	4.9	5.6	3.7	4.0	45.0
6	Moonlight	4.7	5.3	5.4	3.4	4.0	45.0
7	Bar VB 3115B	4.6	4.8	5.1	3.9	4.3	63.3
8	Indigo	4.6	5.5	4.6	3.5	4.7	56.7
9	Blackstone	4.6	5.4	4.9	3.4	7.7	70.0
10	Baruzo	4.5	5.9	4.8	2.8	5.0	48.3
11	Preakness	4.5	4.5	5.3	3.8	5.0	50.0
12	A91-620	4.5	5.1	4.8	3.5	5.0	50.0
13	A91-624	4.5	4.9	5.0	3.5	8.3	42.0
14	A90-924	4.4	4.9	4.6	3.8	4.5	41.7
15	A90-1129	4.4	4.9	4.9	3.4	5.0	40.0
16	Midnight	4.4	5.6	4.5	3.2	2.3	40.0
17	A90-1331	4.3	4.7	4.7	3.4	5.7	43.3
18	Champagne	4.3	4.9	4.5	3.5	6.0	45.0
19	Ram I	4.3	5.0	4.7	3.3	3.7	61.7
20	SR 2000	4.3	4.3	4.2	4.3	5.7	68.3
21	BH 95-199	4.2	4.4	4.6	3.7	5.3	38.3
22	A91-538	4.2	3.3	5.5	3.9	8.7	51.7
23	A90-1099	4.2	4.2	4.9	3.6	8.0	41.7
24	H90-1149	4.2	4.5	4.8	3.3	6.0	38.3
25	H86-920	4.2	5.3	4.3	3.0	5.7	46.7
26	Eagleton	4.1	4.1	4.5	3.8	5.3	59.1
27	Baron	4.1	4.4	4.8	3.2	3.3	45.0
28	Dragon	4.1	3.9	5.1	3.3	5.7	48.3
29	Nassau	4.1	4.5	4.4	3.3	5.0	45.0
30	A90-1413	4.1	4.7	4.4	3.3	4.3	50.0

(Continued)

Table 7 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 1998	Green Cover (%) Oct. 1998
		1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		
31	A93-405	4.1	4.2	4.7	3.4	5.0	40.0
32	Bar VB 233	4.0	4.5	4.0	3.3	5.0	45.0
33	Bar VB 6820	4.0	5.1	4.3	2.7	3.3	20.0
34	Baronie	4.0	4.2	4.4	3.6	6.3	48.3
35	Monopoly	4.0	3.7	4.5	3.9	5.3	56.7
36	A91-625	4.0	4.4	4.6	3.1	5.0	43.3
37	A93-427	4.0	4.2	4.5	3.3	5.3	30.0
38	Princeton 104	4.0	4.6	4.1	3.3	6.7	43.3
39	Touchdown	4.0	4.8	4.1	3.2	4.0	46.7
40	Plush	4.0	3.8	4.4	3.9	5.7	55.0
41	Alpine	4.0	4.9	4.3	3.0	2.7	34.3
42	D3 WN	4.0	3.5	4.9	3.5	5.3	73.3
43	NJ-1190	4.0	4.7	3.9	3.5	7.3	35.0
44	SR 2205	4.0	4.3	4.7	3.0	5.3	35.0
45	SR 2100	4.0	4.4	4.4	3.1	2.0	38.3
46	Princeton P-105	4.0	4.2	4.2	3.5	7.3	50.0
47	A93-372	4.0	4.4	4.7	3.0	5.0	35.0
48	Bar VB 5649	3.9	4.0	4.1	3.5	4.7	50.0
49	Crest	3.9	4.0	4.3	3.2	6.7	30.0
50	Washington	3.9	4.3	4.1	3.4	6.3	43.3
51	PST-B9-196	3.8	3.8	4.5	3.1	5.7	43.3
52	VB 16015	3.8	4.5	4.3	2.6	6.3	31.7
53	MTT 683	3.8	3.9	4.4	3.2	3.0	34.3
54	Bel 21	3.8	3.4	4.3	3.9	4.3	73.3
55	Shamrock	3.8	4.5	3.6	3.1	6.3	27.7
56	Bronco	3.8	4.0	4.1	3.2	2.3	35.0
57	America	3.7	4.2	4.0	2.9	3.3	51.7
58	Blue Star	3.6	3.8	3.6	3.4	5.0	43.3
59	Lipoa	3.6	4.0	3.9	3.0	8.3	24.3
60	Canterbury	3.5	3.6	3.9	2.9	7.0	45.0

(Continued)

Table 7 (continued).

Cultivar or Selection	-----Turf Quality <sup>1</sup> -----				Spring Green-up <sup>2</sup> April 1998	Green Cover (%) Oct. 1998
	1996-1998 Avg.	1996 Avg.	1997 Avg.	1998 Avg.		
61 Muddy Pk	3.5	3.9	3.3	3.4	8.0	70.0
62 Caliber	3.4	3.6	3.6	3.1	7.7	51.7
63 South Dakota	3.0	2.9	3.2	2.8	8.0	41.7
64 Exp # 1589	3.0	2.6	3.4	3.0	8.7	46.7
65 Kenblue	2.9	2.5	3.4	2.7	8.7	43.3
LSD at 5% =	0.7	0.8	0.9	0.9	1.6	26.6

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

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

Table 8. Performance of Kentucky bluegrass cultivars and selections in a turf trial established in September 1996 at North Brunswick, NJ.

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----		
		1997-1998 Avg.	1997 Avg.	1998 Avg.
1	A95-439	7.2	7.0	7.3
2	Impact	7.1	7.3	6.9
3	Award	7.0	7.1	6.8
4	Rugby II	7.0	7.2	6.7
5	Total Eclipse	6.6	7.2	6.1
6	Midnight	6.5	6.7	6.4
7	Liberator	6.4	6.7	6.1
8	Blackstone	6.4	6.4	6.3
9	NuGlade	6.3	6.7	6.0
10	H94-329	6.2	6.6	5.8
11	H94-324	6.2	7.0	5.4
12	Laguna	6.1	6.4	5.9
13	Indigo	6.1	5.7	6.4
14	A93-453	6.0	6.1	5.8
15	Rambo	6.0	5.9	6.0
16	H92-558	5.9	6.1	5.7
17	H94-321	5.8	6.0	5.6
18	ZPS-P154	5.8	6.0	5.5
19	H94-232	5.7	5.8	5.7
20	Alpine	5.7	5.5	5.8
21	Chicago	5.6	5.9	5.3
22	H94-195	5.6	5.1	6.0
23	America	5.6	5.3	5.8
24	A91-706	5.6	5.3	5.8
25	A95-414	5.5	5.8	5.3
26	A93-417	5.5	5.9	5.1
27	A93-421	5.5	5.4	5.6
28	Ba 82-228	5.5	5.5	5.4
29	Princeton P-105	5.4	5.5	5.4
30	A95-1009	5.4	5.4	5.4

(Continued)

Table 8 (continued).

		-----Turf Quality <sup>1</sup> -----		
Cultivar or Selection		1997-1998 Avg.	1997 Avg.	1998 Avg.
31	H94-461	5.4	5.9	4.8
32	Wildwood	5.4	5.4	5.3
33	A96-103	5.4	5.8	4.9
34	A93-354	5.3	5.5	5.1
35	H94-283	5.3	5.3	5.3
36	H94-224	5.3	5.5	5.1
37	H94-451	5.3	6.0	4.7
38	H94-227	5.3	5.6	5.0
39	Preakness	5.3	5.3	5.2
40	A93-200	5.2	4.9	5.5
41	Eclipse	5.2	4.7	5.6
42	Limousine	5.1	5.3	4.9
43	Champagne	5.1	5.3	4.9
44	H94-418	5.0	5.5	4.5
45	A95-410	5.0	5.1	4.9
46	Ba 84-166	5.0	5.2	4.8
47	Dellwood	5.0	4.5	5.5
48	A91-624	5.0	5.6	4.4
49	A93-372	5.0	5.7	4.2
50	A93-330	4.9	4.7	5.0
51	H94-730	4.9	5.4	4.4
52	H94-225	4.9	4.8	4.9
53	H86-697	4.9	5.4	4.4
54	NuStar	4.9	4.7	5.1
55	Glade	4.9	5.5	4.4
56	Ba 83-113	4.9	5.3	4.4
57	Blue Moon	4.9	5.4	4.3
58	Ram I	4.8	5.1	4.6
59	J-1555	4.8	5.1	4.5
60	Julia	4.8	4.8	4.7

(Continued)

Table 8 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----		
		1997-1998 Avg.	1997 Avg.	1998 Avg.
61	H90-1186	4.7	5.2	4.3
62	A88-744	4.7	5.4	4.0
63	H90-1190	4.7	5.0	4.3
64	H94-314	4.6	4.6	4.7
65	Nottingham	4.6	4.8	4.4
66	Bel 21	4.6	4.4	4.7
67	A91-625	4.5	4.5	4.5
68	Blue Chip	4.5	4.9	4.1
69	Caliber	4.5	4.5	4.4
70	Cheri	4.4	4.3	4.5
71	Shamrock	4.4	4.2	4.6
72	Eagleton	4.4	4.2	4.5
73	Ba 84-021	4.3	5.2	3.4
74	Baron	4.2	4.7	3.8
75	A93-201	4.2	4.1	4.3
76	Touchdown	4.2	4.2	4.2
77	Muddy Pk	4.2	4.0	4.3
78	Dragon	4.2	4.0	4.4
79	Classic	4.0	4.2	3.8
80	Nassau	3.7	4.0	3.3
81	Ba 82-230	3.6	4.0	3.2
82	Ba 84-176	3.0	3.0	3.0
83	Kenblue	2.9	2.8	2.9
	LSD at 5% =	0.7	1.0	0.7

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

Table 9. Performance of Kentucky bluegrass cultivars and selections in a test seeded in September 1996 at Adelphia, NJ.

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 10 1998
		1997- 1998 Avg.	1997 Avg.	1998 Avg.	
1	Liberator	7.1	7.1	7.1	2.7
2	Total Eclipse	6.8	7.4	6.2	2.7
3	Midnight	6.8	7.0	6.5	2.3
4	A95-439	6.6	6.7	6.6	5.0
5	Moonlight	6.6	7.0	6.1	3.3
6	NuGlade	6.6	6.6	6.5	3.0
7	Award	6.5	6.8	6.1	2.3
8	Impact	6.4	7.0	5.8	2.7
9	Blackstone	6.3	6.5	6.0	6.0
10	A96-103	6.3	6.4	6.1	4.7
11	A93-417	6.2	6.6	5.8	5.3
12	Rugby II	6.2	6.5	5.8	2.7
13	Laguna	6.1	6.3	5.9	5.1
14	Indigo	6.1	5.9	6.4	4.7
15	A95-414	6.1	6.0	6.1	4.3
16	A93-372	6.0	6.3	5.7	4.3
17	ZPS-P154	5.9	6.2	5.6	4.7
18	A95-1009	5.9	5.9	5.8	5.0
19	H86-697	5.9	6.4	5.3	5.3
20	H94-461	5.9	5.9	5.8	3.3
21	H94-451	5.8	5.8	5.8	5.0
22	SR 2109	5.8	5.6	6.0	7.3
23	Wildwood	5.8	5.8	5.8	3.3
24	A94-1200	5.8	6.0	5.5	5.3
25	H92-558	5.7	6.0	5.4	4.7
26	Princeton P-105	5.7	5.5	5.9	4.0
27	H94-321	5.6	5.6	5.6	7.3
28	SRX 2205	5.6	5.9	5.3	4.7
29	H94-224	5.6	5.9	5.3	4.7
30	A85-301	5.6	5.6	5.6	6.0

(Continued)

Table 9 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 10 1998
		1997- 1998 Avg.	1997 Avg.	1998 Avg.	
31	A93-453	5.6	5.8	5.3	6.3
32	H94-324	5.6	5.9	5.3	4.3
33	A93-421	5.5	5.9	5.1	4.3
34	A91-706	5.5	5.4	5.5	4.7
35	H94-232	5.4	5.5	5.3	4.7
36	H94-418	5.4	5.7	5.1	3.7
37	America	5.4	5.4	5.4	5.0
38	H94-195	5.4	5.7	5.1	4.7
39	Jefferson	5.4	5.4	5.3	7.7
40	C-74	5.4	5.9	4.8	4.3
41	H94-730	5.3	5.5	5.0	4.0
42	H94-225	5.3	5.5	5.1	5.2
43	H94-690	5.3	5.4	5.3	6.3
44	A91-624	5.3	5.2	5.4	6.3
45	Champagne	5.3	5.4	5.2	5.7
46	A93-200	5.3	5.4	5.1	5.7
47	A91-625	5.3	5.2	5.3	5.3
48	Limousine	5.3	5.7	4.8	6.0
49	H90-1186	5.3	5.8	4.7	7.3
50	Caliber	5.2	5.7	4.6	7.3
51	Eclipse	5.2	5.3	5.1	6.3
52	Preakness	5.2	5.8	4.7	7.0
53	Blue Moon	5.2	5.8	4.6	3.3
54	Baron	5.2	5.1	5.3	4.0
55	Shamrock	5.2	5.4	4.9	5.7
56	H94-329	5.2	5.4	4.9	5.7
57	Alpine	5.2	4.7	5.6	1.7
58	SR 2000	5.2	5.3	5.1	4.3
59	H90-1190	5.1	5.7	4.6	7.0
60	Julia	5.1	5.6	4.6	7.7

(Continued)

Table 9 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 10 1998
		1997- 1998 Avg.	1997 Avg.	1998 Avg.	
61	H86-690	5.1	4.7	5.5	3.7
62	H94-227	5.1	5.4	4.8	5.7
63	A95 410	5.1	5.2	4.9	4.3
64	Rambo	5.1	5.6	4.6	6.0
65	A93-354	5.0	5.2	4.8	4.7
66	Shamrock	5.0	5.1	4.9	5.7
67	A93-201	5.0	5.0	5.0	6.3
68	Chicago	5.0	5.1	4.9	4.0
69	Washington	5.0	4.8	5.1	8.7
70	Ba 84-166	4.9	5.0	4.9	3.7
71	A88-744	4.9	5.4	4.4	4.7
72	Shade Blue	4.9	5.1	4.8	6.0
73	H94-220	4.9	5.2	4.6	3.3
74	A91-702	4.9	4.7	5.1	7.7
75	Unique	4.9	4.7	5.1	3.3
76	H94-314	4.9	4.7	5.1	7.7
77	JV 91 I	4.9	5.2	4.6	4.7
78	Ba 82-228	4.9	5.2	4.5	6.3
79	Eagleton	4.9	4.9	4.9	4.3
80	H94-283	4.9	5.2	4.5	4.3
81	A93-464	4.8	4.7	4.8	5.7
82	Blue Chip	4.7	4.6	4.9	3.7
83	J-333	4.7	4.6	4.8	7.3
84	J-1555	4.7	4.8	4.5	4.3
85	Nottingham	4.7	4.8	4.6	4.0
86	JV 91 L2	4.7	4.9	4.4	6.0
87	SRX 2207B	4.7	5.2	4.1	6.0
88	A91-703	4.7	4.7	4.6	6.7
89	SR 2100	4.7	4.9	4.4	3.3
90	Cheri	4.6	5.1	4.2	6.7

(Continued)

Table 9 (continued).

	Cultivar or Selection	-----Turf Quality <sup>1</sup> -----			Spring Green-up <sup>2</sup> April 10 1998
		1997- 1998 Avg.	1997 Avg.	1998 Avg.	
91	Ba 83-113	4.6	5.1	4.1	4.3
92	Ba 84-176	4.5	4.8	4.3	4.3
93	Touchdown	4.5	4.6	4.4	5.0
94	Dellwood	4.4	4.3	4.6	8.0
95	Ba 84-021	4.4	5.1	3.7	4.3
96	PTE	4.4	5.0	3.7	6.7
97	Nassau	4.3	4.5	4.1	5.0
98	Ba 82-230	4.2	4.2	4.3	7.0
99	OFI-25	4.2	4.0	4.4	7.3
100	Dragon	4.1	4.3	4.0	7.0
101	Classic	4.1	4.0	4.1	7.3
102	PST BM3	4.1	4.1	4.0	8.0
103	Bel 21	4.0	4.3	3.7	6.0
104	Muddy Pk	4.0	4.0	3.9	8.3
105	Kenblue	3.4	3.4	3.5	8.3
LSD at 5% =		0.7	0.8	0.8	1.5

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

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

Table 10. Performance of Kentucky bluegrass cultivars and selections in a medium-high maintenance turf trial established in September 1997 at Adelphia, NJ.

	Cultivar or Selection	Turf Quality <sup>1</sup>	Seedling Vigor <sup>2</sup>	Plant Height <sup>3</sup>	Color <sup>4</sup>	Yellowing <sup>5</sup>	Leaf Spot <sup>6</sup>
		1998 Avg.	Sept. 1997	Oct. 1997	Oct. 1997	Feb. 1998	May 1998
1	A91-706	6.6	5.3	5.7	7.3	5.0	7.0
2	H92-166	6.4	5.3	3.0	8.3	6.0	6.7
3	A94-682	6.3	6.3	5.0	6.3	4.7	7.0
4	A93-453	6.2	4.7	5.3	8.0	3.3	8.7
5	A96-394	6.2	5.7	4.3	7.3	7.3	7.3
6	Blackstone	6.2	6.0	4.7	7.7	4.7	6.7
7	Moonlight	6.2	6.0	3.3	9.0	3.7	8.3
8	Laguna	6.1	5.9	4.9	6.2	5.7	6.5
9	SR 2109	6.1	4.5	4.0	7.2	8.9	7.8
10	H94-288	6.1	6.0	4.0	6.3	5.0	7.7
11	H94-461	6.1	5.0	4.3	7.7	4.0	8.7
12	Washington	6.1	5.3	5.3	6.3	6.0	6.3
13	95 AN-10	6.0	4.3	5.0	7.0	5.3	7.3
14	H90-1193	6.0	5.7	6.0	7.3	6.7	6.7
15	H94-747	6.0	4.7	2.3	8.7	4.3	7.7
16	Midnight	6.0	5.7	4.0	8.0	4.3	7.7
17	Blacksburg	5.9	4.7	3.0	8.7	5.0	8.0
18	Caliber	5.9	5.3	5.7	6.3	6.0	7.0
19	A93-238	5.8	4.7	3.7	6.3	1.7	6.7
20	A93-421	5.8	4.7	5.0	8.0	4.3	8.0
21	A95-1073	5.8	4.3	4.3	6.7	5.7	7.7
22	A95-439	5.8	4.7	3.7	8.0	4.7	6.7
23	A96-494	5.8	4.7	4.3	8.0	4.0	9.0
24	A96-742	5.8	5.7	5.0	8.7	5.3	6.3
25	Arcadia	5.8	4.7	3.7	7.7	5.0	7.7
26	H92-392	5.8	6.3	5.0	5.7	4.7	5.7
27	H94-690	5.8	5.0	5.0	8.0	7.0	7.0
28	Julia	5.8	6.0	5.7	6.7	5.3	7.3
29	Liberator	5.8	5.7	4.0	8.3	4.7	8.7
30	North Star	5.8	5.7	2.7	7.3	1.0	8.7

(Continued)

Table 10 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 1998 Avg.	Seedling Vigor <sup>2</sup> Sept. 1997	Plant Height <sup>3</sup> Oct. 1997	Color <sup>4</sup> Oct. 1997	Yellowing <sup>5</sup> Feb. 1998	Leaf Spot <sup>6</sup> May 1998
31	A90-1128	5.7	5.0	6.0	6.7	7.0	6.5
32	A91-635	5.7	4.7	5.7	6.3	6.3	6.0
33	A95-1009	5.7	4.3	3.7	9.0	7.7	8.3
34	H94-195	5.7	4.3	5.0	7.0	2.7	6.7
35	H94-550	5.7	5.0	3.3	9.0	4.7	8.0
36	IBC-170	5.7	5.7	5.0	6.7	4.7	6.7
37	York Harbor G+T-4	5.7	6.0	5.3	8.7	4.3	6.7
38	ZPS-P154	5.7	4.7	3.3	7.7	6.3	6.7
39	A90-287	5.6	5.0	5.3	8.3	3.7	8.3
40	A91-646	5.6	5.3	5.3	5.7	7.3	6.7
41	A93-200	5.6	5.3	6.0	5.3	4.7	6.7
42	A93-201	5.6	5.0	5.7	6.0	4.3	7.0
43	Award	5.6	5.7	4.0	9.0	4.7	7.3
44	Challenger	5.6	7.0	6.0	5.0	4.7	5.7
45	H94-707	5.6	3.0	3.7	6.3	4.0	7.7
46	Impact	5.6	6.0	4.3	7.7	4.7	7.0
47	NuGlade	5.6	4.7	4.0	8.3	4.7	6.7
48	Rugby	5.6	5.0	5.7	5.0	4.3	6.0
49	ZPS-2183	5.6	5.3	4.7	6.7	4.0	7.3
50	A95-410	5.5	4.7	5.3	6.3	4.7	7.3
51	A96-396	5.5	5.0	4.7	7.0	8.7	8.0
52	A96-757	5.5	5.3	5.0	8.7	7.3	7.0
53	B2-42	5.5	5.7	3.7	7.0	4.0	6.7
54	BO-141	5.5	5.3	4.3	6.7	4.0	6.7
55	H86-697	5.5	5.0	5.0	8.3	9.0	7.3
56	H92-543	5.5	4.7	4.3	6.3	6.0	7.7
57	H92-612	5.5	5.0	5.7	5.7	4.7	6.7
58	H94-201	5.5	4.7	4.7	6.7	6.0	7.0
59	Ram I	5.5	6.7	6.7	4.7	2.3	5.0
60	Rita	5.5	5.3	5.7	6.3	4.7	6.7

(Continued)

Table 10 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 1998 Avg.	Seedling Vigor <sup>2</sup> Sept. 1997	Plant Height <sup>3</sup> Oct. 1997	Color <sup>4</sup> Oct. 1997	Yellowing <sup>5</sup> Feb. 1998	Leaf Spot <sup>6</sup> May 1998
61	Wildwood	5.5	5.0	5.3	8.0	4.3	7.7
62	York Harbor G+T-11	5.5	5.3	5.0	7.0	2.7	7.3
63	H92-203	5.4	5.7	4.3	6.3	3.7	7.4
64	A93-417	5.4	4.0	5.3	8.3	3.7	8.0
65	America	5.4	5.0	4.0	5.7	5.3	6.7
66	Freedom	5.4	5.7	6.3	5.7	6.7	5.7
67	A88-1054	5.4	5.3	6.3	5.7	5.7	7.0
68	H94-232	5.4	4.7	4.3	7.7	1.7	7.0
69	H94-293	5.4	5.7	4.7	6.3	7.7	8.0
70	NuBlue	5.4	5.0	5.0	6.0	3.3	7.0
71	Opti-green	5.4	6.3	4.7	6.7	1.0	6.7
72	SR 2205	5.4	5.3	5.3	6.0	3.0	6.7
73	ZPS-204	5.3	4.4	5.5	6.3	6.2	7.2
74	Champagne	5.3	5.0	5.7	6.0	6.7	6.7
75	A93-372	5.3	5.3	5.0	7.7	3.3	6.7
76	A93-427	5.3	5.0	5.3	7.3	7.0	6.3
77	A94-314	5.3	4.7	5.0	7.3	7.3	7.0
78	A95-1055	5.3	4.7	4.3	7.0	4.7	7.7
79	A96-481	5.3	4.7	3.3	6.7	2.3	8.0
80	Dragon	5.3	6.0	5.0	6.3	5.3	5.3
81	FairFax	5.3	5.0	4.3	5.7	2.3	6.7
82	H94-340	5.3	4.3	3.7	8.3	4.3	6.7
83	Liberty	5.3	6.3	6.7	4.7	3.3	5.3
84	SRX 2207B	5.3	4.7	4.7	6.3	1.0	7.3
85	Total Eclipse	5.3	5.3	5.0	7.7	5.0	7.7
86	Unique	5.3	3.7	3.0	6.7	5.7	7.7
87	ZPS-309	5.3	5.0	5.0	7.7	7.7	7.0
88	H94-321	5.2	5.5	6.0	7.2	3.9	5.0
89	A96-352	5.2	4.3	4.0	6.3	2.3	7.7
90	B3-171	5.2	5.3	3.7	6.7	4.3	6.7

(Continued)

Table 10 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 1998 Avg.	Seedling Vigor <sup>2</sup> Sept. 1997	Plant Height <sup>3</sup> Oct. 1997	Color <sup>4</sup> Oct. 1997	Yellowing <sup>5</sup> Feb. 1998	Leaf Spot <sup>6</sup> May 1998
91	A97-30	5.2	5.7	4.7	6.7	6.7	7.0
92	H94-566	5.2	5.0	6.0	5.0	5.3	5.3
93	Princeton P-105	5.2	4.3	4.3	6.7	3.0	7.0
94	SCEC-219	5.2	5.0	4.0	6.7	4.3	5.3
95	Shamrock	5.2	5.0	5.7	6.0	4.3	6.7
96	A91-625	5.1	4.3	5.7	6.0	7.0	7.0
97	B3-203	5.1	5.7	3.7	6.7	4.7	6.7
98	Blue Chip	5.1	4.7	4.0	7.3	5.3	5.7
99	Cobalt	5.1	4.7	5.0	7.3	5.3	6.7
100	H92-558	5.1	4.7	5.0	7.3	4.0	8.7
101	H94-290	5.1	4.3	3.7	7.7	7.0	7.7
102	RSP	5.1	6.7	7.3	3.3	2.7	3.3
103	A88-1239	5.1	4.3	4.3	5.7	5.3	7.0
104	Rambo	5.1	4.7	5.0	8.7	5.3	7.3
105	A91-703	5.0	6.3	7.0	4.0	5.0	5.0
106	A91-390	5.0	5.0	7.0	3.7	5.0	3.3
107	Baron	5.0	4.3	3.3	7.3	4.3	5.7
108	Chicago	5.0	4.7	5.0	7.7	5.0	6.0
109	H94-283	5.0	5.0	4.0	8.3	5.3	7.0
110	H94-319	5.0	4.3	5.7	5.7	1.0	5.0
111	H94-374	5.0	5.0	5.7	7.3	7.3	6.3
112	Misty	5.0	5.0	4.0	7.0	6.7	6.3
113	NuStar	5.0	5.0	5.0	7.7	3.7	5.7
114	A91-702	4.8	6.3	7.0	3.7	5.7	5.0
115	Glade	4.8	6.0	3.3	8.0	3.3	4.3
116	Nassau	4.8	4.7	5.0	6.7	7.3	7.0
117	Preakness	4.8	6.7	5.0	7.7	2.0	4.0
118	SR 2100	4.8	5.0	5.7	6.3	2.0	8.0
119	Aspen	4.7	5.0	5.0	7.3	5.7	6.0
120	H94-329	4.7	4.0	4.7	6.3	4.3	6.7

(Continued)

Table 10 (continued).

	Cultivar or Selection	Turf Quality <sup>1</sup> 1998 Avg.	Seedling Vigor <sup>2</sup> Sept. 1997	Plant Height <sup>3</sup> Oct. 1997	Color <sup>4</sup> Oct. 1997	Yellowing <sup>5</sup> Feb. 1998	Leaf Spot <sup>6</sup> May 1998
121	Huntington	4.7	5.3	5.7	7.3	3.7	5.7
122	H86-749	4.6	6.3	5.7	6.0	5.7	3.0
123	Kelly	4.6	5.3	4.0	7.0	3.3	5.3
124	Muddy Pk	4.6	5.7	6.7	4.0	3.3	2.7
125	Sodnet	4.6	3.3	3.3	8.0	5.0	7.0
126	Dellwood	4.5	5.7	5.7	6.0	5.3	3.7
127	J-1555	4.5	6.0	5.3	6.7	5.0	5.7
128	Limousine	4.4	5.0	5.7	6.7	3.0	3.3
129	SCEC-196	4.3	6.3	6.7	5.0	6.7	2.3
130	SR 2000	4.3	3.0	4.0	6.7	4.7	7.3
131	Suffolk	4.3	6.0	6.7	5.3	4.7	5.0
132	Voyager	4.3	4.0	5.3	5.7	5.3	4.0
133	Kenblue	3.9	6.0	7.3	4.3	4.0	1.7
134	SCEC-133	3.9	6.0	6.7	5.0	4.3	1.3
135	94 AN-8	3.7	3.3	3.3	8.0	2.3	5.7
136	SCEC-204	3.5	5.0	5.7	6.0	5.3	2.3
137	94 AN-5	3.4	5.7	5.7	6.7	6.0	1.7
138	SCEC-157	3.3	3.7	5.7	3.7	4.7	1.3
139	Denim	3.2	5.3	5.3	6.7	3.3	3.3
140	S-21	3.1	6.7	7.3	3.3	1.7	1.0
141	95 AN-26	3.0	3.3	4.3	7.3	3.3	4.0
142	H92-207	2.7	3.7	4.7	7.0	3.7	4.3
143	SCEC-215	2.0	6.3	5.7	5.0	7.3	1.3
	LSD at 5% =	0.9	0.9	1.0	1.2	1.7	1.2

<sup>1</sup>9 = best turf quality<sup>2</sup>9 = most seedling vigor<sup>3</sup>9 = tallest<sup>4</sup>9 = darkest green color<sup>5</sup>9 = least yellowing<sup>6</sup>9 = least leaf spot disease

Table 11. Performance of Kentucky bluegrass cultivars and selections in a trial established in the greenhouse in 1996 at North Brunswick, NJ. (1995 NTEP Medium-High Maintenance Test entries only.)

	Cultivar or Selection	Powdery Mildew <sup>1</sup> 1997 Avg.
<b>COMPACT TYPE</b>		
1	Glade	8.7
2	Blackstone	8.3
3	Moonlight	7.7
4	Princeton P-105	7.7
5	Wildwood	5.7
6	Blacksburg	4.7
7	SR 2109	4.7
8	ZPS-2183	4.7
9	Platini	3.3
<b>MIDNIGHT TYPE</b>		
1	Med-1580	5.3
2	Abolute	2.7
3	NuGlade	1.7
4	Arcadia	1.7
5	Quantum Leap	1.7
6	Total Eclipse	1.3
7	Odyssey	1.3
8	Impact	1.3
9	Midnight	1.0
10	Rugby II	1.0
11	Liberator	1.0
12	Award	1.0
<b>AMERICA TYPE</b>		
1	Unique	9.0
2	PST-B2-42	9.0
3	Apollo	9.0
4	PST-BO-141	7.7
5	America	7.0

(Continued)

Table 11 (continued).

	Cultivar or Selection	Powdery Mildew <sup>1</sup> 1997 Avg.
<b>JULIA TYPE</b>		
1	ZPS-309	3.3
2	Caliber	3.0
<b>CELA TYPE</b>		
1	Eclipse	5.7
2	Jefferson	3.3
3	Challenger	2.7
<b>BELLEVUE TYPE</b>		
1	Haga	2.3
2	Classic	1.0
<b>AGGRESSIVE TYPE</b>		
1	Limousine	5.3
2	North Star	3.0
<b>MID-ATLANTIC TYPE</b>		
1	SR2000	7.3
2	Livingston	2.0
<b>OTHER TYPE</b>		
1	Compact	9.0
2	Baruzo	9.0
3	LKB-95	9.0
4	Conni	9.0
5	Ba 75-490	8.3
6	BAR VB 3115B	8.3
7	SRX-2205	8.3
8	Misty	8.0
9	Pick 8-15-94W	7.7
10	APS200	7.3

(Continued)

Table 11 (continued).

	Cultivar or Selection	Powdery Mildew <sup>1</sup> 1997 Avg.
<b>OTHER TYPE (continued)</b>		
11	Rambo	6.7
12	Pick-855	6.3
13	Ba 76-197	5.7
14	Sidekick	5.7
15	PST-P46	5.7
16	Ascot	5.3
17	Ba 81-227	5.0
18	Seabring	4.0
19	NJ-1190	4.0
20	Nimbus	3.7
21	Bar VB 233	3.3
22	Allure	3.3
23	Ba 81-270	3.0
24	Bartitia	3.0
25	HV-242	3.0
26	NJ-54	3.0
27	Cardiff	3.0
28	Ba 75-163	3.0
29	PST-BO-165	3.0
30	Serene	3.0
31	Explorer	2.7
32	Bar VB 6820	2.7
33	Coventry	2.3
34	Sodnet	2.3
35	Chateau	2.3
36	Lipoa	2.3
37	Pepaya	2.3
38	J-1555	2.3
39	VB 16015	2.0
40	Nustar	2.0

(Continued)

Table 11 (continued).

	Cultivar or Selection	Powdery Mildew <sup>1</sup> 1997 Avg.
<b>OTHER TYPE (continued)</b>		
41	Chicago	2.0
42	Ba 81-058	1.7
43	Baronie	1.7
<b>SHAMROCK TYPE</b>		
1	NJ-GD	4.3
2	Shamrock	3.0
3	Champagne	2.7
4	LTP-620	2.7
5	H86-690	2.0
6	SR 2100	1.7
7	A88-744	1.7
<b>BVMG TYPE</b>		
1	Raven	2.7
2	Ba-77-702	2.7
3	Marquis	2.3
4	Abbey	2.3
5	Baron	2.0
6	Fortuna	2.0
7	Ba 75-173	2.0
8	Goldrush	2.0
9	Ba 70-060	2.0
10	Ba 73-373	2.0
11	Ba 81-113	2.0
12	Ba 81-220	2.0
13	Dragon	2.0
14	Bluechip	2.0

(Continued)

Table 11 (continued).

	Cultivar or Selection	Powdery Mildew <sup>1</sup> 1997 Avg.
	<b>COMMON TYPE</b>	
1	Kenblue	6.7
	LSD at 5% =	1.1

<sup>1</sup>9 = least powdery mildew

Table 12. Yearly nitrogen (N) applied and mowing height (Ht) on Kentucky bluegrass tests established at North Brunswick and Adelphia, NJ.

	1995		1996		1997		1998	
	N <sup>1</sup>	Ht <sup>2</sup>	N	Ht	N	Ht	N	Ht
Table 1 (1993 Adelphia) .....	5.5	2.0	2.1	1.5	3.3	1.5	1.4	1.5
Table 2 (1994 Adelphia) .....	5.6	1.5	3.6	1.5	2.8	1.5	2.4	1.5
Table 3 (1994 Adelphia) .....	6.6	1.5	3.6	1.5	2.8	1.5	2.4	1.5
Table 4 (1994 Adelphia) .....	0.7	2.5	0	2.5	0.7	2.5	0	2.5
Table 5 (1995 North Brunswick) .....			3.8	1.5	4.6	1.5	2.5	1.5
Table 6 (1995 Adelphia) .....			4.9	1.5	5.2	1.5	3.6	1.5
Table 7 (1995 North Brunswick) .....			1.6	3.0	1.7	3.0	0.6	3.0
Table 8 (1996 North Brunswick) .....					3.7	1.5	2.3	1.5
Table 9 (1996 Adelphia) .....					4.3	1.5	4.5	1.5
Table 10 (1997 Adelphia) .....					2.0	1.5	3.5	1.5

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

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