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This publication includes lecture notes of papers presented at the 2018 GREEN EXPO Turf and Landscape Conference. 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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PERFORMANCE OF KENTUCKY BLUEGRASS CULTIVARS AND SELECTIONS IN NEW JERSEY TURF TRIALS, 2018

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Kentucky bluegrass (*Poa pratensis* L.) is a cool-season turfgrass that is widely used throughout the northern United States and Canada. The grass has an extensive rhizome system, which is an important trait for its use as a turfgrass. Formation of these underground stems allow for rapid spread and colonization after establishment, improving the recovery of Kentucky bluegrass stands from stress or damage and increasing its popularity in sports field settings.

Although Kentucky bluegrass was once considered the premier lawn grass in the United States, its drawbacks, which include slow germination, poor shade tolerance, disease susceptibility, and high water and fertility requirements, have led to an increase in the popularity of other cool-season turfgrass species (Turgeon, 2008). In addition, the interest in reducing inputs has somewhat reduced the popularity of Kentucky bluegrass for home lawns. The grass can maintain excellent quality, however, when managed properly, thus Kentucky bluegrass is the grass of choice for many professional and high-end sports fields.

Kentucky bluegrass reproduces asexually through seed, known as apomixis. This process is facultative in the species; some sexual reproduction occurs, but this trait is selected against in breeding programs. Only highly apomictic Kentucky bluegrasses are desirable for turfgrass use. This contributes to most of the uniformity seen in cultivars of this species and also allows hybrid vigor to be fixed indefinitely. While there are many advantages to apomixis in the species, it does pose some challenges to breeders, including obtaining hybrids and retaining high levels of apomixis in the new hybrids.

Texas bluegrass (*Poa arachnifera* Torr.), a species native to the American Southwest, is dioecious (male and female flowers on different plants) and is much more tolerant of heat and drought stress than Kentucky bluegrass. Crosses between Texas bluegrass female plants and Kentucky bluegrass have been made to improve the heat and drought tolerance of Kentucky bluegrass to increase its adapted range into the warmer climates.

Collections are made around the world to obtain new germplasm and increase the diversity in the gene pool of Kentucky bluegrass at the New Jersey Agricultural Experiment Station. This is important to broaden the genetic basis of these *Poa* species. These collections are utilized by breeders to enhance resistance to diseases, pests, and abiotic stresses in the development of new cultivars. This germplasm should also prove valuable as breeders develop cultivars for changing climatic conditions.

In addition to breeding work, Rutgers also participates in the National Turfgrass Evaluation Program (NTEP), which is sponsored by the USDA Beltsville Agricultural Research Center and National Turfgrass Federation. NTEP is a program focused on the cooperation of many institutions nationwide to test different turfgrass cultivars and selections in different environments in order to assess their performance in a broad range of locations. Proceedings from all trials conducted by NTEP can be found at <https://www.ntep.org>. Rutgers results are presented in Table 7. Rutgers also co-operates with the Alliance for Low Input Sustainable Turf (A-LIST). A-LIST is a national non-profit organization dedicated to assisting turfgrass managers through the testing

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of quality turfgrasses via transparent protocols, under sustainable management conditions, carried out at universities across the country. Information on A-LIST can be found at <https://www.a-listturf.org>. Rutgers results are presented in Table 6.

PROCEDURES

Seven Kentucky bluegrass trials were seeded from 2015 to 2017. These trials were located at the Rutgers Plant Biology and Pathology Research and Extension Farm in Adelphia (Tables 1, 2, 4 to 7) and the Rutgers Horticultural Farm II in North Brunswick (Table 3), NJ.

These trials were planted by sowing a maximum of 0.53 oz of seed in 3 x 5 ft plots. This maximum rate is equivalent to 2.2 lb of seed per 1000 ft². All trials were arranged in a randomized complete block design with three replications. Mesotrione was applied at the time of seeding and four weeks after emergence at 5 oz per 1000 ft² for control of annual bluegrass and other weeds. Annual nitrogen (20-0-6) rates as well as the mowing heights for each trial are presented in Table 8. Nitrogen rates varied to prevent disease, foster recovery from various stresses, and to conduct a low maintenance trial (Tables 3, 5, 6). Nitrogen application rates never exceeded 0.75 lb per 1000 ft². Mowing heights were maintained by using rotary mowers.

After establishment, annual weeds were controlled using spring applications of Dimension, and broadleaf weeds were controlled with fall and/or spring applications of 2,4-D, dicamba, and/or MCPP when necessary. Imidacloprid was applied in July to control grubs on all tests. Depending on soil test results, soil pH was maintained between 6.0 and 6.5 with granular dolomitic limestone. Tests were irrigated during establishment, and those mowed at 1.5 inches were also irrigated when needed to avoid severe drought stress.

Monthly ratings of all trials were conducted throughout the growing season for overall quality. Overall turf quality ratings are visual assessments that take into account color, brightness, leaf texture, density, uniformity, damage due to disease and insects, and overall attractiveness of the plot. Data for all trials were statistically analyzed using analysis of variance, and means were separated using Fisher's protected least significant difference (LSD) means separation test. Results in Tables 1 to 7 are

presented with selections ranked according to the best overall turf performance (single to multiple-year quality average). In addition to overall quality ratings, supplemental ratings were taken when differences became evident within the trials. These additional ratings include spring green-up (Tables 1, 2, 5, and 6), establishment (Tables 1 to 7), height (Table 3), mesotrione damage (Tables 3 to 7), leaf spot (Tables 1 to 3), stem rust (Tables 3 to 6), summer patch (Tables 4 and 7), summer stress (Tables 5 and 6), drought stress (Tables 5 and 6), seedheads (Tables 5 and 6), genetic color (Table 7), and percent cover (Table 7). Mowing height and fertilizer inputs of all tests are shown in Table 8. Most ratings were based on a 1 to 9 scale, where 9 represents the most desirable trait or characteristic.

RESULTS

Spring Green-up

This trait indicates the wide range of genetic diversity within Kentucky bluegrass. Due to an increase in leaf elongation that occurs in response to increases in temperature and photoperiod (Parsons and Robson, 1980), selections adapted to this region are more sensitive to these conditions and may green up earlier in the spring. Selections that are adapted to higher latitudes need more dramatic changes in temperature and photoperiod before spring green-up will begin. Entries including A11-396, Action, NAI-14-233, PST-21P5135, Twilight, NAI-13-179, Kelly, and Geisha were slow to green up, while PST-K15-177, PST-11-241, A11-49, Tirem, KenBlue, A11-358, and Julia greened up more quickly (Tables 1, 2 and 5).

Establishment

Green cover after establishment is an important characteristic to consumers, sod-growers, and many other turf managers. Kentucky bluegrass is one of the slowest cool-season grasses to form a mature turfgrass stand. Establishment can be influenced by a variety of factors such as genetics, seed quality, environment, management practices, and after-ripening dormancy. Other characteristics that affect establishment and seedling vigor include age of the seed, storage conditions, and environmental conditions at the time of seeding. Establishment ratings were taken on a 1 to 9 scale where 9 represents a plot that has filled in completely. Entries such as A17-229, NAI 14-178, and DLFPS-340/3364 were very slow or failed to establish, while entries such as A16-807, A16-816,

A16-808, A16-20, P-105, SRX 466, Kelly, A04-383 and J-3510 established more quickly (Tables 1 to 7).

Mesotrione Damage

Mesotrione provides pre- and post-emergence control of many weedy grasses and broadleaves. It provides superior control of annual bluegrass when applied at the time of seeding as well as four weeks after emergence. There is some sensitivity, although not as severe as fine fescues, resulting in stunted growth and bleaching. Ratings on a 1 to 9 scale measure the amount of bleaching observed in each selection. Some entries exhibited severe bleaching, such as PPG-KB 1147, PST-K13-139, NAI 14-178 and A-16-17, while others, such as A09-258, A15-1091, SPF 30, SRX 466, A12-287, Kelly, Heidi, Geisha, PST-K17-188AD, PST-11-7, Explorer, PPG-KB 1304, Pulsar, Midnight, J-3510, and A04-383, were almost unaffected by the mesotrione application (Tables 3 to 7).

Leaf Spot

Leaf spot occurs throughout the growing season in cool-season turfgrass, caused by the fungal pathogen *Dreschlera poae* in the cooler seasons and by *Dreschlera bipolaris* in the warmer months of summer. Often referred to as "melting out," leaf spot can coalesce into large patches of infected tissue that look water soaked and die back. Ratings on a 1 to 9 scale show that entries such as A14-9, NAI-13-79, Yellowstone, and many others (refer to Table 3) were less affected by the disease, whereas entries including PST-4-H1, A11-778, and A13-679 were severely affected (Tables 1 to 3).

Low Maintenance

Low maintenance turfgrass has become increasingly important with the impending restrictions on water and fertilizer use in both home lawns and professionally maintained turf. Performance in low input management regimes will become more valuable as these restrictions become more prevalent. Low maintenance turf trials are cut at a higher mowing height and receive less fertilizer with no additional water inputs outside of establishment. Entries that performed well under low maintenance conditions include NAI-13-79, Yellowstone, A14-677, and Bolt, while KB15OT-35, Blue Ghost, and PST-TX8-56 are some of the entries that exhibited lower quality under this management level (Tables 3, 5, and 6).

Summer Patch

Summer patch can be a devastating disease of Kentucky bluegrass, leaving large areas of dead turf that are slow to recover. This disease, caused by *Magnaportheopsis poae*, results in patches characteristic of what is known as a frog's eye pattern, with a central region of turf within a blighted patch. As a root disease, symptoms will appear most rapidly when the turf is exposed to stressors such as heat. Entries with the least summer patch at time of rating include Pick 033, PST-K17-191, A09-794, and MacMillan, while entries such as PST-TX8-56, Blue Ghost, and A16-20 were more severely infected (Tables 4 and 7).

Seed Heads

Seed heads refers to the reproductive organ of turfgrasses. They appear in the spring and, while undesirable in mowed turf, are necessary to produce seed for sale to the consumer. Seed heads can be visible in mowed turf or they can be mowed, but the stems remain and may become discolored, providing poor texture and color to the turf. This is typically an undesirable trait in turfgrass stands. Entries such as A14-677, H03-556, A14-422, and many others listed in Table 5 developed a limited number of visible seed heads, while entries including PST-K15-166, A14-3, PST-K16-178, and PST-T17-49 had the greatest number of visible seed heads (Tables 5 and 6).

Drought Stress

Drought stress refers specifically to the leaf wilting that occurs under drought conditions. Since the low maintenance trials are not irrigated, they suffer from drought stress more regularly than the medium high maintenance trials. This past year, drought stress was not observed (due to adequate rainfall throughout July and August) until early September. Quality under drought stress can be very important in more arid regions, especially when water restrictions are enforced. Entries with the best quality under drought stress include H03-556 and NAI-15-90, while entries such as PST-TX8-56 and NAI 14-178 exhibited the lowest turf quality under drought stress (Tables 5 and 6).

Summer Stress

Summer stress is typically a combination of both heat and drought stress, typically experienced in the summer months. This will result in wilting and eventu-

al tissue senescence in many turfgrasses resulting in a general depression of turf quality. The quality of turf under these conditions can be an important factor, especially in lower maintenance turf stands where irrigation is limited. Entries such as H03-556 and A09-305 maintained quality during summer stress, while NAI 14-178 and Blue Ghost are examples that showed lower quality during summer stress (Tables 5 and 6).

Genetic Color

Contrary to other areas of the world, dark green turfgrasses are typically more appealing to the American populace when compared to lighter green varieties. Breeding for darker green verdure in Kentucky bluegrass varieties is one focus of the Rutgers turfgrass breeding program. Although genetic color of the cultivar is considered when assessing the overall quality rating, individual measures of the depth of green color for each cultivar was also performed. Lighter green entries include BAR PP 71213, Kenblue and A04-383, while the darkest selections include NAI-14-132, J-1319, NAI-14-187 (Table 7)

SUMMARY

Kentucky bluegrass is grown for many uses in a wide 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 and under a broad assortment of conditions. Due to its extensive rhizome system,

Kentucky bluegrass has the potential to recover from very stressful conditions, but work is needed to prevent the initial damage to the turfgrass. Due to its diverse use in the turfgrass industry, improved resistance to important diseases, pests, and abiotic stresses is needed if cultivars are expected to perform well across diverse environments.

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Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2015 at Adelphia, NJ.

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
1 Blue Note	5.9	6.0	5.7	6.0	5.7	6.3	6.0	6.0
2 KB11OT-31	5.7	6.5	5.0	5.7	5.3	1.0	3.3	5.7
3 NuDestiny	5.7	5.9	5.0	6.1	6.7	1.3	3.7	6.0
4 Right	5.7	6.2	5.7	5.1	5.3	4.0	4.0	5.0
5 A15-18	5.7	6.0	5.4	5.6	6.0	5.0	6.7	6.0
6 A15-17	5.6	5.8	5.8	5.3	5.3	6.7	7.7	5.0
7 Legend	5.6	6.4	5.4	5.1	6.7	4.7	5.3	5.3
8 A04-67	5.6	5.7	5.1	6.1	5.3	7.7	7.3	4.3
9 KB13OT-4	5.6	5.6	5.6	5.5	3.3	7.7	6.0	4.7
10 Midnight II	5.6	6.2	4.8	5.7	3.7	1.0	4.0	6.0
11 A12-38	5.5	5.7	5.5	5.4	5.3	3.7	2.7	6.0
12 Prafin	5.5	5.6	5.0	5.9	8.0	1.3	4.0	5.3
13 Everest	5.5	5.8	4.9	5.8	6.7	1.7	3.3	4.7
14 Midnight	5.5	6.1	4.4	6.0	5.7	1.0	4.0	5.7
15 Bluebank	5.5	6.1	4.9	5.4	5.3	1.0	4.0	6.3
16 PST-K13-137	5.5	5.9	4.9	5.6	3.3	4.3	5.0	6.7
17 Liberator	5.5	6.0	4.6	5.8	7.7	1.3	4.3	5.7
18 A07-385	5.4	5.6	5.0	5.8	8.3	3.0	4.7	6.3
19 Midnight II	5.4	5.7	4.8	5.8	5.0	1.0	4.0	5.3
20 Rugby II	5.4	6.0	4.6	5.7	4.7	1.0	4.3	6.0
21 NAI-13-6	5.4	5.5	5.5	5.3	2.3	5.0	6.7	6.3
22 PST-K13-143	5.4	5.5	5.2	5.5	2.7	4.3	5.3	4.0
23 NAI-14-128	5.4	5.3	5.2	5.6	3.3	4.0	4.7	6.7
24 Blue Coat	5.4	5.5	5.1	5.6	6.3	4.0	3.7	4.7
25 J-1136	5.4	6.1	4.6	5.4	8.0	1.0	2.7	5.3

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
26 Hampton	5.3	5.7	4.9	5.4	7.3	5.0	5.3	4.7
27 PST-K15-177	5.3	5.4	5.0	5.6	3.3	2.7	4.7	8.0
28 Award	5.3	5.7	4.6	5.5	6.3	1.3	4.3	5.0
29 A15-276	5.2	5.5	5.0	5.2	4.3	4.7	4.0	4.7
30 J-1853	5.2	5.6	4.7	5.4	6.3	1.0	3.3	5.0
31 Beyond	5.2	5.6	4.5	5.5	5.7	1.3	3.7	5.3
32 A14-15	5.2	5.5	5.0	5.2	5.0	4.0	4.3	5.0
33 A11-49	5.2	5.5	4.8	5.3	3.7	2.3	3.7	7.7
34 A12-38	5.2	5.2	5.3	5.1	4.0	4.3	4.0	6.7
35 PST-K15-157	5.2	5.5	5.0	5.1	3.0	6.7	6.0	6.0
36 PST-T13-46	5.2	5.1	5.0	5.5	3.3	3.7	5.0	6.0
37 PST-11-7	5.2	5.7	4.2	5.6	3.3	4.0	5.7	7.0
38 NuGlade	5.2	5.6	4.5	5.4	5.3	1.0	3.7	5.3
39 A15-14	5.2	5.4	5.0	5.1	5.7	1.3	4.3	4.7
40 A14-5	5.2	5.4	5.3	4.7	5.3	5.7	5.3	5.7
41 Aries	5.1	5.3	4.9	5.1	8.0	6.7	7.3	4.0
42 Rush II	5.1	5.9	4.2	5.3	5.7	1.3	3.3	5.3
43 A06-8	5.1	5.4	5.0	4.9	2.7	5.3	6.0	6.7
44 A11-38	5.1	5.5	4.7	5.0	3.3	4.7	5.7	4.7
45 A15-9	5.1	5.5	4.6	5.0	4.3	4.3	4.3	6.7
46 A05-361	5.1	5.3	4.9	5.0	3.3	6.0	5.3	4.0
47 KB11OT-4	5.1	6.1	4.7	4.4	5.0	1.7	3.3	7.0
48 Everglade	5.1	5.1	4.7	5.4	8.0	1.3	4.0	5.0
49 Impact	5.1	5.2	4.8	5.2	6.7	1.0	3.7	5.0
50 Prosperity	5.1	5.0	5.1	5.1	6.0	4.3	5.0	6.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
51 A10-245*	5.1	5.2	5.0	5.0	4.3	4.3	5.0	6.0
52 PST-T13-39	5.0	5.7	4.3	5.1	3.7	7.0	6.7	5.0
53 A15-21	5.0	5.4	4.8	4.9	5.7	2.3	4.7	3.3
54 A06-60	5.0	5.8	4.6	4.7	1.7	5.3	6.0	6.0
55 PST-T13-45	5.0	5.3	5.3	4.5	1.7	6.7	5.7	2.3
56 Pulsar	5.0	4.9	4.6	5.5	2.3	2.0	4.3	6.3
57 NAI-14-13	5.0	5.0	4.9	5.1	1.3	5.3	6.0	5.3
58 PST-T13-38	5.0	4.9	4.7	5.4	3.7	2.3	6.7	5.3
59 PST-T13-42	5.0	5.4	4.6	5.0	4.7	6.7	6.3	6.3
60 RAD-1376	5.0	4.8	4.9	5.4	3.7	4.3	5.0	4.7
61 NAI-14-126	5.0	5.1	4.8	5.1	2.7	2.7	3.7	5.7
62 PST-K15-161	5.0	5.0	4.7	5.4	2.7	4.7	6.0	4.0
63 A10-251*	5.0	5.3	4.9	4.8	4.0	7.7	7.0	4.0
64 A13-3	5.0	5.7	4.3	4.9	3.0	3.3	4.3	7.0
65 KB13OT-16	5.0	5.4	5.0	4.6	3.7	4.7	4.3	6.7
66 PST-K13-140	5.0	5.4	4.6	5.0	4.3	7.0	7.0	3.3
67 KB13OT-20	5.0	5.5	4.8	4.6	3.3	4.0	5.0	6.7
68 PST-K15-171	5.0	4.8	5.0	5.1	2.3	1.0	4.0	7.3
69 A05-853	5.0	4.6	4.9	5.4	6.0	2.7	4.7	4.0
70 PST-K15-162	5.0	5.5	4.5	4.9	3.7	6.3	5.7	5.0
71 PST-T13-44	5.0	5.5	4.9	4.5	4.7	7.0	5.7	6.0
72 Ginney II	5.0	5.4	4.7	4.8	5.7	1.0	3.3	5.3
73 Fullback	4.9	5.1	4.9	4.9	5.7	6.0	5.7	5.7
74 Glacier	4.9	5.2	4.9	4.7	6.0	4.7	4.7	3.3
75 A15-10	4.9	5.0	4.6	5.2	5.3	6.3	7.0	4.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
76 Bluechip Plus	4.9	5.7	4.4	4.7	6.7	2.0	4.3	4.7
77 RAD-2868	4.9	5.6	4.8	4.3	4.0	2.3	5.3	3.0
78 PST-K15-150	4.9	4.8	4.8	5.1	1.3	4.3	4.3	5.0
79 Pivot	4.9	5.3	4.4	4.9	5.7	5.0	6.0	5.0
80 PST-K15-174	4.9	5.2	5.0	4.5	3.0	5.3	5.3	6.3
81 RAD-7PH6	4.9	5.1	4.7	4.9	7.7	7.3	6.0	3.0
82 Shannon	4.9	5.0	4.5	5.1	7.0	6.0	6.0	3.7
83 Lunar	4.9	5.2	4.6	4.8	6.0	4.3	5.7	4.0
84 Bolt	4.9	5.3	3.9	5.4	7.3	6.0	6.3	4.3
85 United	4.9	4.7	4.3	5.6	2.3	1.7	4.3	6.0
86 A13-1	4.9	5.5	4.6	4.5	3.0	2.7	4.0	6.0
87 KB13OT-17	4.9	5.3	4.6	4.7	2.3	3.3	4.3	5.0
88 PST-K15-167	4.9	5.1	5.1	4.4	3.7	1.7	3.3	5.0
89 Dauntless	4.8	4.9	4.7	5.0	6.3	6.3	6.0	5.0
90 RAD-2276	4.8	5.1	4.2	5.3	5.3	3.0	4.7	4.7
91 A11-42	4.8	5.0	4.7	4.8	4.7	6.0	5.3	4.7
92 Diva	4.8	4.9	5.0	4.6	6.3	5.7	5.3	3.0
93 PST-K15-168	4.8	4.8	4.9	4.8	1.7	3.0	4.7	5.3
94 Rubix	4.8	5.1	4.4	5.0	5.0	6.3	6.7	4.3
95 NAI-13-39	4.8	4.7	4.6	5.1	1.7	4.0	5.3	6.0
96 PST-11-241	4.8	4.7	4.5	5.1	2.0	5.0	5.0	7.7
97 A15-7	4.8	5.1	4.6	4.7	4.0	4.0	5.3	3.0
98 A15-15	4.8	5.4	4.3	4.6	4.3	2.0	4.0	6.7
99 Limousine	4.8	4.7	4.5	5.2	3.7	4.7	4.7	5.0
100 PST-K15-172	4.8	5.1	4.5	4.7	3.0	4.3	4.3	4.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016- 2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
101 A13-1	4.8	5.6	4.3	4.4	2.0	4.7	3.7	5.7
102 NAI-11-644	4.8	4.6	4.5	5.2	2.3	3.3	4.7	6.7
103 NuBlue Plus	4.8	5.2	4.4	4.8	5.7	1.7	3.3	5.0
104 MVS-280*	4.7	5.4	4.6	4.2	3.0	5.7	6.7	3.3
105 Yellowstone	4.7	5.1	4.3	4.8	5.3	2.3	5.3	4.7
106 Aviator II	4.7	4.6	4.6	4.9	1.3	4.3	5.3	6.3
107 My Holiday Lawn	4.7	5.4	4.2	4.6	5.3	2.0	4.0	5.7
108 CRS 630	4.7	4.9	4.4	4.9	5.7	5.0	7.0	5.0
109 NAI-14-210	4.7	4.6	4.7	4.9	1.7	5.7	5.7	5.7
110 NAI-13-33	4.7	4.7	4.5	4.9	1.7	5.0	6.3	5.3
111 KB13OT-12	4.7	5.1	4.3	4.7	2.0	1.0	3.7	5.3
112 A12-37	4.7	5.2	4.0	4.9	4.0	2.7	3.7	6.0
113 A12-9	4.7	4.9	4.5	4.7	2.3	6.0	7.0	3.7
114 A00-1400	4.7	4.9	4.4	4.7	3.3	2.7	4.0	6.0
115 A12-28	4.7	4.7	4.9	4.5	4.7	5.0	5.7	3.7
116 PST-K15-163A	4.7	5.2	4.1	4.7	4.7	4.3	5.7	4.3
117 LTP-11-41	4.7	4.8	4.5	4.7	6.3	5.3	4.3	4.0
118 Apollo	4.7	5.1	4.4	4.4	4.7	3.7	4.7	6.0
119 Prosperity	4.7	5.0	4.5	4.5	3.0	4.7	5.0	7.3
120 A15-4	4.6	5.1	4.5	4.3	5.3	6.0	5.0	6.0
121 A12-8	4.6	4.7	4.5	4.7	1.7	4.0	4.7	5.0
122 NAI-14-205	4.6	5.0	4.2	4.7	2.3	7.7	5.7	4.7
123 A07-1230	4.6	5.2	4.3	4.4	3.7	4.7	5.0	5.3
124 A12-31	4.6	5.0	4.1	4.7	3.3	7.0	6.7	4.0
125 RAD-1391	4.6	4.7	4.2	4.9	2.3	7.0	5.7	5.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016- 2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
126 KB13OT-18	4.6	4.8	4.7	4.3	2.7	5.7	6.3	5.3
127 A06-3	4.6	5.1	4.3	4.4	3.7	4.7	5.3	6.7
128 A05-314	4.6	5.1	3.8	4.9	4.0	3.3	5.0	5.0
129 A15-6	4.6	5.3	4.0	4.5	4.0	3.3	5.0	6.3
130 Gladstone	4.6	5.0	3.9	4.8	4.0	2.7	4.0	5.3
131 A13-3	4.6	5.2	4.0	4.5	2.0	3.3	4.0	7.3
132 Zinger	4.6	5.1	4.2	4.5	7.0	5.0	5.7	4.7
133 A15-5	4.6	5.2	4.6	3.9	4.7	4.3	3.7	3.3
134 KB13OT-19	4.6	4.8	4.6	4.4	4.0	4.7	6.3	5.3
135 Rubicon	4.6	4.8	4.1	4.8	3.3	6.3	5.7	3.7
136 PST-K15-195	4.5	5.2	4.1	4.3	3.3	7.0	5.0	5.0
137 NAI-13-131	4.5	4.3	4.7	4.5	2.3	3.3	4.3	4.7
138 CRS 632	4.5	4.9	4.3	4.4	6.7	5.3	5.3	4.3
139 Volt	4.5	5.3	4.0	4.2	7.3	6.7	6.7	4.0
140 Twilight	4.5	4.6	4.2	4.8	1.7	1.3	3.3	5.3
141 A12-265	4.5	4.6	4.4	4.5	2.3	4.3	3.7	6.0
142 PST-11A-75	4.5	4.7	4.1	4.7	2.3	3.3	4.3	6.0
143 A13-18	4.5	5.2	3.9	4.4	4.0	6.0	5.7	4.0
144 KB13OT-13	4.5	4.8	4.3	4.4	5.3	5.7	5.7	3.3
145 A14-10	4.5	5.1	4.3	4.1	5.0	3.7	4.0	6.0
146 PST-K11-122	4.5	4.7	4.0	4.8	1.7	4.7	5.7	3.0
147 A15-2	4.5	4.5	4.3	4.6	1.7	6.7	6.3	4.3
148 PST-K15-176	4.5	5.0	4.4	4.0	3.7	8.0	7.0	4.0
149 A15-19	4.5	5.4	3.3	4.7	4.7	1.3	4.3	1.7
150 Wild Horse	4.4	4.9	4.2	4.3	5.7	6.0	6.0	4.0

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(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016- 2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
151 Arrowhead	4.4	4.7	4.2	4.4	7.0	4.0	6.0	5.3
152 NAI-13-34	4.4	4.2	3.9	5.2	1.0	1.0	3.7	6.7
153 PST-K13-141	4.4	4.7	4.4	4.3	2.3	4.3	5.0	4.3
154 KB13OT-6	4.4	5.1	4.2	4.0	3.3	6.0	5.7	6.3
155 CRS 631	4.4	4.8	4.0	4.4	5.3	5.7	5.3	5.0
156 NAI-13-32	4.4	4.0	4.3	5.0	1.0	2.0	4.0	6.3
157 Alexa II	4.4	4.4	4.2	4.7	1.3	1.3	3.7	5.3
158 A13-21	4.4	4.1	4.2	5.0	1.7	4.7	6.0	4.0
159 RAD-2221	4.4	5.1	4.0	4.1	3.7	3.3	5.3	5.0
160 P-105	4.4	4.5	4.1	4.6	3.0	3.7	4.3	3.7
161 Gaelic	4.4	5.1	4.0	4.1	5.3	5.0	5.0	4.3
162 Fahrenheit 90*	4.4	4.8	4.2	4.1	5.0	4.3	5.0	4.0
163 A11-396	4.4	4.5	4.1	4.5	3.7	1.7	3.7	5.3
164 PST-IT5-86	4.4	4.9	4.2	4.0	2.3	3.3	3.3	4.3
165 A05-1405	4.4	4.5	4.4	4.2	2.0	3.7	3.0	4.7
166 PST-K15-165	4.3	5.1	3.8	4.1	4.7	4.0	5.3	5.7
167 KB11OT-47	4.3	4.7	4.0	4.3	3.0	3.7	5.0	3.3
168 A10-873	4.3	4.5	4.0	4.4	6.0	4.0	5.0	4.0
169 A12-293	4.3	4.7	4.3	4.0	4.7	3.3	4.3	6.0
170 NAI-13-15	4.3	4.6	3.8	4.6	1.0	4.0	5.3	6.3
171 PST-K13-139	4.3	5.0	3.8	4.2	3.3	4.3	5.0	3.7
172 RAD-2191	4.3	4.9	3.9	4.2	2.0	1.0	4.0	5.3
173 RAD-2250	4.3	4.6	4.4	4.0	4.0	4.3	4.7	3.7
174 NAI-14-212	4.3	4.3	4.3	4.3	2.0	3.7	4.7	4.0
175 A15-8	4.2	4.8	3.8	4.1	5.0	2.7	3.3	3.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
		2016- 2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
176	NAI-14-105	4.2	3.9	4.6	4.2	1.0	5.3	6.0	6.0
177	A14-8	4.2	4.2	3.9	4.5	4.7	2.3	4.0	4.3
178	NAI-13-130	4.2	3.8	4.3	4.6	1.3	3.3	5.0	5.7
179	Selway	4.2	4.2	4.3	4.1	6.7	5.3	4.7	2.3
180	Jumpstart	4.2	4.4	4.2	3.9	7.0	7.7	6.3	2.0
181	NAI-14-211	4.2	3.8	4.7	4.1	1.3	4.7	5.0	5.3
182	PST-K15-166	4.2	4.2	4.1	4.3	3.7	5.3	6.3	5.3
183	PST-11-1-3	4.2	4.5	4.1	4.0	4.7	3.7	5.7	3.3
184	RAD-2140	4.2	4.3	4.2	4.1	4.0	5.7	5.3	3.7
185	A13-5	4.2	4.4	4.1	4.1	2.7	3.3	5.0	7.0
186	PST-K11-124	4.2	4.7	3.7	4.2	3.0	3.0	4.3	4.7
187	PST-K15-170	4.2	4.3	4.2	4.1	3.3	1.3	3.3	6.7
188	PST-T13-34	4.2	4.6	3.7	4.2	1.7	3.3	5.0	5.0
189	Blitz	4.2	4.4	4.0	4.1	5.7	6.0	6.3	2.7
190	Bewitched	4.2	4.0	3.8	4.7	1.0	1.3	3.7	6.3
191	PST-10-138	4.2	4.3	4.1	4.0	1.7	4.0	4.7	6.7
192	NAI-14-15	4.1	4.2	4.0	4.2	1.0	4.0	5.7	6.0
193	PST-K15-169	4.1	4.0	4.2	4.1	1.0	3.0	3.3	5.0
194	A13-332	4.1	4.7	3.8	3.8	5.7	6.0	6.3	3.7
195	RAD-1405	4.1	4.0	4.2	4.1	5.0	5.3	3.7	4.0
196	Gaelic	4.1	4.6	3.7	4.0	5.7	6.0	6.0	4.7
197	Noble	4.1	4.8	3.7	3.7	5.7	4.3	4.3	6.7
198	Raven	4.0	4.3	4.1	3.7	7.3	3.3	3.7	5.3
199	PST-K15-158	4.0	4.1	3.9	4.1	1.3	5.7	6.0	2.7
200	PST-K15-173	4.0	4.2	3.9	4.0	2.0	4.0	5.3	5.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
201 NAI-13-105	4.0	4.2	3.9	3.9	3.7	7.7	6.0	3.3
202 PST-K15-160	4.0	4.2	4.0	3.8	4.0	5.3	5.3	4.7
203 PST-T13-43	4.0	4.1	4.0	4.0	3.0	3.7	4.0	5.0
204 PST-K11-118	4.0	4.2	4.1	3.7	2.0	6.0	5.7	3.7
205 NAI-12-38	4.0	4.3	4.1	3.5	3.0	5.7	5.7	4.3
206 SPF 30	4.0	4.3	3.7	3.9	7.7	3.7	4.7	4.3
207 A12-266	3.9	4.5	3.6	3.7	4.7	2.3	4.0	5.0
208 A11-778	3.9	3.9	4.3	3.6	3.0	5.3	5.0	1.3
209 NAI-13-107	3.9	3.5	4.2	4.0	1.0	2.3	4.7	5.7
210 A13-347	3.9	4.5	3.5	3.8	6.0	6.0	5.7	2.7
211 Zip	3.9	4.0	3.6	4.1	4.3	4.7	5.0	3.7
212 PST-K15-164A	3.9	4.2	3.9	3.6	1.3	6.0	5.7	5.0
213 Black Jack	3.9	4.6	3.3	3.8	3.3	5.3	5.3	4.3
214 Gateway	3.9	3.9	3.9	3.9	1.0	6.3	6.3	3.3
215 RAD 553	3.9	4.3	4.0	3.4	6.3	3.7	4.7	2.7
216 Arc	3.9	4.6	3.6	3.4	4.3	5.7	5.3	3.3
217 A13-313	3.9	3.8	4.1	3.7	4.3	7.7	7.7	2.0
218 RAD-2027	3.8	4.3	3.7	3.5	4.3	2.0	4.0	4.7
219 A11-396	3.8	4.1	3.7	3.7	5.0	7.0	5.0	1.0
220 RAD-1971	3.8	4.1	4.0	3.4	3.7	5.3	6.0	3.0
221 NAI-3840	3.8	3.4	3.7	4.3	1.0	4.0	5.0	7.0
222 NAI-14-217	3.8	3.2	4.0	4.1	1.0	3.7	4.3	4.7
223 00-3487	3.8	4.3	3.3	3.7	4.3	4.0	4.7	6.0
224 NAI-14-201	3.8	3.8	3.8	3.7	1.0	5.7	5.3	6.0
225 NAI-13-121	3.7	3.6	3.7	3.9	1.7	3.7	4.7	5.7

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
		2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
226	PST-105-69	3.7	4.0	3.5	3.7	2.0	4.7	5.0	3.7
227	Corsair	3.7	4.1	3.6	3.5	3.0	5.3	5.3	3.0
228	Arc	3.7	4.0	3.6	3.5	2.0	6.3	5.7	4.3
229	NAI-13-1	3.7	4.1	3.6	3.3	2.0	7.0	5.7	1.7
230	Rockstar	3.7	4.0	3.4	3.6	2.0	7.7	6.3	4.0
231	RAD-1677	3.7	4.1	3.4	3.5	2.3	7.3	6.3	4.3
232	PST-K11-125	3.5	4.2	3.3	3.1	2.0	3.7	4.0	6.7
233	Bluestar	3.5	4.1	3.2	3.3	4.7	3.0	4.0	4.7
234	NAI-14-214	3.5	3.3	3.7	3.6	1.7	5.7	5.0	4.3
235	NAI-14-219	3.5	3.2	3.6	3.5	1.3	4.0	5.3	4.0
236	A15-11	3.5	3.3	3.7	3.3	4.3	8.7	7.3	1.3
237	NAI-15-0153	3.4	3.5	3.4	3.4	2.0	3.3	6.0	4.0
238	NAI-14-175	3.4	3.5	2.9	3.7	1.3	2.7	4.3	3.7
239	KB13OT-3	3.3	3.7	3.1	3.2	3.7	5.0	4.7	4.3
240	PST-K15-159	3.3	4.2	3.1	2.6	2.0	6.7	3.7	4.0
241	NAI-14-183	3.2	3.2	3.1	3.5	2.3	6.0	5.3	3.0
242	GO-MRC	3.2	3.5	3.2	2.8	4.3	7.7	6.7	3.7
243	PST-8-56	3.2	4.0	2.9	2.6	1.3	5.0	4.0	4.0
244	NAI-13-124	3.1	3.0	2.9	3.4	1.7	4.3	5.0	3.3
245	NAI-14-202	3.1	2.2	3.3	3.8	1.0	5.7	5.3	4.3
246	PST-11-149	3.0	3.5	2.8	2.7	2.7	6.0	3.3	2.7
247	RAD-2010	3.0	3.4	3.0	2.6	6.3	6.7	5.7	1.3
248	NAI-14-104	3.0	2.8	2.8	3.3	1.7	6.0	5.7	1.7
249	NAI-14-207	2.9	2.5	3.1	3.2	1.0	3.3	4.0	2.3
250	NAI-13-118	2.9	2.3	2.7	3.6	1.0	4.3	5.3	2.0

(Continued)

Table 1. Kentucky bluegrass high maintenance turf trial, 2015 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----				Establishment ² 16 Oct. 2015	Leaf Spot ³ 10 May 2016	Spring Green-up ⁴ -----	
	2016-2018 Avg.	2016 Avg.	2017 Avg.	2018 Avg.			13 April 2017	13 April 2018
251 Action	2.8	2.3	3.4	2.9	7.3	8.3	7.0	1.0
252 RAD-2015	2.7	2.9	2.5	2.8	3.0	8.0	7.3	2.0
253 NAI-14-228	2.7	2.2	2.5	3.3	1.3	4.0	4.3	1.7
254 NAI-14-223	2.6	1.9	2.6	3.3	2.0	6.0	5.7	1.0
255 NAI-14-114	2.6	1.8	2.6	3.3	1.0	5.0	4.7	1.3
256 NAI-13-119	2.6	1.8	2.6	3.3	1.0	4.3	5.3	5.3
257 PST-21P5135	2.1	2.7	1.8	1.7	4.7	8.7	3.7	1.0
∞ LSD at 5% =	0.7	0.8	0.9	0.8	1.6	1.6	1.5	1.3

¹9 = best turf quality

²9 = best establishment

³9 = least disease

⁴9 = earliest spring green-up

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass parental background

Table 2. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
1 RAD-3240	6.4	6.4	6.4	6.7	6.3	5.0
2 A16-228*	6.1	6.3	5.8	4.0	5.7	4.0
3 A04TB-258*	6.1	5.9	6.2	3.3	4.7	5.7
4 A06-11	6.0	6.1	5.9	5.7	7.3	6.0
5 Avalanche	6.0	5.9	6.1	7.7	6.7	6.3
6 PST-T15-46	6.0	6.3	5.6	3.7	4.7	7.0
7 A05-361	5.9	5.9	5.9	7.3	5.7	6.0
8 LTP-11-41	5.9	5.6	6.2	8.3	5.7	5.0
9 Bolt	5.9	6.0	5.8	8.3	5.7	6.0
10 A16-231*	5.9	6.4	5.3	4.3	5.7	3.3
11 Jersey	5.7	5.1	6.3	5.7	7.0	7.3
12 A05TB-258*	5.7	5.5	5.9	3.7	5.3	6.3
13 A99-3122	5.7	5.6	5.8	6.7	5.7	7.0
14 A07-782	5.7	5.6	5.8	6.3	3.0	6.7
15 PST-C-74	5.7	5.6	5.8	7.3	6.7	5.7
16 KB13OT-4	5.6	5.5	5.8	8.0	6.7	3.7
17 Legend	5.6	5.5	5.7	7.3	4.3	7.0
18 A10-245	5.6	5.7	5.5	7.0	6.0	7.3
19 A14-26	5.6	5.5	5.7	6.0	3.7	7.3
20 A06-8	5.6	5.3	5.8	6.0	6.0	6.3
21 PST-K15-157	5.6	5.8	5.4	6.0	6.3	6.7
22 PST-T14-37	5.6	5.3	5.8	4.3	5.7	6.7
23 Blue Note	5.5	5.1	6.0	6.3	6.7	7.3
24 Pulsar	5.5	5.3	5.6	7.0	3.0	5.0
25 A04-67	5.5	5.2	5.8	8.0	7.7	5.3
26 PST-K12-129	5.4	5.5	5.3	6.7	6.3	7.3
27 A10-244	5.4	5.1	5.7	4.0	5.3	6.3
28 A12-57	5.4	5.5	5.2	2.0	5.3	3.7
29 NAI-14-176	5.4	5.1	5.6	6.7	3.7	6.3
30 A16-220*	5.4	5.5	5.2	6.3	3.0	4.7
31 Bluestar	5.3	4.9	5.7	7.3	6.7	7.0
32 NAI-14-128	5.3	4.9	5.7	6.7	4.0	8.0
33 A12-30	5.3	5.0	5.6	6.7	5.0	7.0
34 A16-14	5.3	5.2	5.4	5.3	5.3	7.0
35 Midnight	5.3	5.2	5.4	7.3	3.0	5.3

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
36 A16-225*	5.3	5.3	5.3	6.3	4.7	6.0
37 Yellowstone	5.3	5.0	5.5	7.3	4.7	6.0
38 Diva	5.3	5.5	5.0	6.7	7.0	4.0
39 A16-222*	5.3	5.2	5.3	5.3	2.7	6.0
40 A16-8	5.2	5.0	5.4	5.0	5.0	4.3
41 A11-38	5.2	4.8	5.6	5.0	5.7	5.3
42 Glade	5.2	5.5	5.0	6.3	4.3	4.3
43 A14-20	5.2	5.2	5.3	3.7	7.0	6.0
44 A14-2	5.2	5.4	5.0	7.0	5.7	8.0
45 A10-249	5.2	5.3	5.1	4.7	3.7	6.7
46 Bluecoat	5.2	4.8	5.7	8.0	4.7	7.0
47 NAI-13-79	5.2	5.1	5.3	5.3	1.7	4.7
48 PST-K15-172	5.2	5.3	5.1	7.3	5.0	5.0
49 PST-K13-137	5.2	4.7	5.7	7.0	6.3	8.3
50 Orion	5.2	5.2	5.2	5.0	5.7	4.0
51 A16-15	5.2	5.0	5.3	5.3	5.3	7.3
52 A14-424	5.2	5.0	5.3	7.7	7.3	4.0
53 Pivot	5.2	5.2	5.2	6.7	3.7	4.7
54 Mystere H2O	5.2	5.0	5.3	5.7	4.3	6.7
55 NAI-14-130	5.2	5.0	5.3	6.3	4.0	7.7
56 NAI-14-133	5.1	4.9	5.4	6.3	3.0	7.7
57 PST-K15-168	5.1	5.5	4.8	5.7	5.0	6.7
58 A16-221*	5.1	5.2	5.1	5.3	2.7	4.7
59 A16-2	5.1	5.0	5.3	6.0	5.7	6.0
60 A98-879	5.1	5.1	5.1	5.7	5.7	5.3
61 PST-T14-40	5.1	5.2	5.0	7.3	6.0	3.7
62 A14-9	5.1	4.8	5.4	5.3	4.3	8.7
63 Rubicon	5.1	5.0	5.2	4.7	7.0	6.3
64 NAI-14-132	5.1	5.0	5.2	5.0	3.3	7.3
65 A16-224*	5.1	5.0	5.2	5.0	2.7	4.7
66 A16-245*	5.1	5.6	4.6	6.0	2.7	5.0
67 A06-33	5.1	5.0	5.2	4.3	6.0	6.7
68 A16-6	5.1	4.6	5.6	6.3	4.0	8.0
69 A13-1	5.1	5.2	5.0	6.0	2.3	7.0
70 Hampton	5.1	5.3	4.9	8.3	4.3	5.7

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
71 Arrowhead	5.1	4.5	5.6	7.3	4.7	7.7
72 PST-11-112	5.1	4.8	5.4	7.7	5.3	7.7
73 Twilight	5.1	4.8	5.3	7.7	1.7	5.0
74 NAI-14-124	5.1	4.7	5.4	7.0	3.7	7.7
75 A16-12	5.0	4.7	5.4	6.7	5.7	7.0
76 Apollo H2O	5.0	5.2	4.9	7.3	3.7	6.7
77 PST-K14-144	5.0	4.9	5.1	6.7	4.3	5.3
78 A14-10	5.0	4.9	5.1	5.7	4.3	6.0
79 PST-K13-141	5.0	5.2	4.8	5.7	5.0	5.0
80 A11-49	5.0	4.9	5.1	5.3	2.3	8.3
81 KB13OT-17	5.0	5.2	4.8	3.7	5.0	4.0
82 PST-K15-178	5.0	5.1	4.9	7.3	5.3	3.0
83 A14-15	5.0	4.8	5.2	4.0	5.0	7.0
84 Dauntless	5.0	4.9	5.1	6.7	5.3	6.0
85 Bluebank	5.0	4.7	5.2	5.7	3.0	7.3
86 A14-422	5.0	5.1	4.8	7.3	6.7	3.0
87 A14-31	5.0	5.0	4.9	6.0	4.7	6.0
88 KB15OT-22	5.0	4.9	5.0	4.7	5.7	4.7
89 A16-253*	5.0	5.2	4.7	5.3	2.7	5.0
90 A16-7	4.9	4.9	5.0	5.0	4.0	8.0
91 A14-13	4.9	5.0	4.9	7.0	3.3	5.3
92 Rubix	4.9	4.4	5.5	6.7	6.0	7.0
93 NAI-13-10	4.9	4.4	5.5	1.7	6.3	6.0
94 A14-4	4.9	4.7	5.1	5.7	6.0	6.3
95 A13-332	4.9	4.9	4.9	7.7	7.0	3.7
96 KB15OT-29	4.9	4.6	5.3	8.3	5.7	4.0
97 PST-R14-279	4.9	4.8	5.0	6.7	5.7	6.3
98 PST-K15-171	4.9	4.9	4.9	4.0	3.7	8.0
99 KB15OT-24	4.9	4.7	5.1	4.7	6.3	4.0
100 A13-325	4.9	4.6	5.2	6.3	7.3	5.3
101 A11-398	4.9	5.0	4.7	8.3	3.3	6.7
102 NAI-14-127	4.9	4.4	5.4	6.7	3.0	7.7
103 PST-K13-140	4.9	4.7	5.1	7.7	7.0	6.3
104 Appalachian	4.9	5.0	4.8	7.0	7.0	3.3
105 A07-385	4.9	4.2	5.5	8.7	4.3	7.0

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
106 A16-4	4.8	4.8	4.9	7.7	5.3	6.3
107 A10-241	4.8	4.9	4.8	4.7	3.3	7.0
108 Fahrenheit 90	4.8	4.8	4.9	5.3	4.7	4.0
109 A16-226*	4.8	4.9	4.8	4.7	2.3	4.7
110 A16-18	4.8	4.6	5.0	8.7	6.3	7.0
111 United	4.8	4.2	5.4	7.7	3.0	4.7
112 NAI-14-122	4.8	4.6	5.1	6.3	4.0	7.0
113 NAI-14-126	4.8	4.6	5.0	6.7	3.7	7.3
114 PST-K15-177	4.8	4.8	4.8	3.7	5.3	7.0
115 A11-53	4.8	4.3	5.2	5.7	2.0	8.0
116 A10-871	4.8	4.7	4.8	4.3	2.7	6.3
117 A16-17	4.8	4.9	4.6	7.7	3.0	6.7
118 A13-347	4.8	4.7	4.9	9.0	8.0	3.0
119 Bluedevil/Prafin	4.8	4.6	4.9	7.3	5.7	5.3
120 A14-233	4.8	4.4	5.1	7.3	7.0	5.7
121 PST-T14-39	4.8	4.5	5.0	4.3	6.3	5.3
122 A14-3	4.7	4.6	4.9	4.0	3.7	6.7
123 NAI-14-178	4.7	4.4	5.1	1.0	6.3	6.3
124 A11-47	4.7	4.6	4.9	7.3	2.7	7.7
125 PST-K14-152	4.7	4.5	5.0	6.0	5.7	6.0
126 A16-219*	4.7	4.9	4.6	6.0	3.7	4.0
127 PST-11-7	4.7	4.3	5.2	7.3	5.3	7.7
128 NAI-15-110	4.7	4.9	4.5	6.7	6.0	4.7
129 PST-K15-167	4.7	4.8	4.6	6.0	4.0	5.7
130 PST-T14-41	4.7	4.7	4.7	4.0	5.3	6.3
131 MVS-280*	4.7	4.8	4.6	2.7	5.3	3.7
132 NAI-14-187	4.7	4.6	4.8	5.7	4.7	6.7
133 PST-4-C2	4.7	5.0	4.4	6.7	4.0	4.0
134 A14-345	4.7	4.5	4.8	6.7	4.0	5.7
135 PST-105-69	4.7	4.8	4.5	6.3	5.3	4.3
136 A13-683	4.7	4.9	4.4	6.0	6.0	3.7
137 PST-K15-166	4.7	5.0	4.3	7.7	6.3	6.3
138 A16-230*	4.7	4.7	4.6	4.7	2.3	5.0
139 A16-20	4.6	5.0	4.3	8.3	8.0	1.7
140 CRS630	4.6	4.5	4.7	6.7	5.7	5.0

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
141 NAI-13-39	4.6	4.5	4.7	6.7	5.7	5.3
142 Tirem	4.6	5.1	4.2	6.7	8.7	3.0
143 PST-K13-139	4.6	4.6	4.7	3.7	5.3	4.0
144 PST-K15-169	4.6	4.5	4.8	6.7	2.7	5.0
145 A14-14	4.6	4.8	4.4	6.7	4.7	6.0
146 A12-34	4.6	4.7	4.5	4.0	5.7	6.3
147 PST-K15-163A	4.6	4.6	4.6	6.0	5.0	4.7
148 A16-16	4.6	5.2	4.0	6.3	4.3	3.7
149 A09-231	4.6	4.4	4.8	6.7	5.7	5.7
150 A05-853	4.6	4.9	4.2	6.0	4.0	5.7
151 A10-238	4.6	4.6	4.6	5.7	4.0	8.0
152 RAD-3285	4.6	5.0	4.2	7.3	3.0	3.7
153 Aries	4.6	4.3	4.8	7.3	6.0	6.0
154 Fullback	4.5	4.4	4.6	6.0	5.0	7.0
155 Gladestone	4.5	4.1	5.0	2.0	3.7	5.3
156 KB13OT-13	4.5	4.8	4.3	6.7	6.7	3.7
157 PST-K15-173	4.5	4.3	4.7	2.7	4.7	6.3
158 Jumpstart	4.5	4.6	4.5	6.7	7.7	4.0
159 PST-K15-179	4.5	5.0	4.0	6.0	5.0	5.7
160 Lunar	4.5	4.4	4.6	7.0	4.3	5.0
161 A11-778	4.5	4.7	4.2	7.7	7.3	1.3
162 Slingshot	4.5	4.3	4.7	7.0	4.7	5.0
163 A11-770	4.5	4.5	4.4	9.0	6.7	2.3
164 KB15OT-47	4.5	4.3	4.6	4.0	4.7	6.0
165 A16-19	4.4	4.0	4.8	8.0	6.0	5.7
166 A14-234	4.4	4.3	4.5	6.0	5.3	5.0
167 PST-K15-158	4.4	4.5	4.3	6.0	7.0	2.7
168 A14-229	4.4	4.7	4.2	5.3	4.7	3.7
169 A12-267	4.4	4.3	4.5	7.3	3.7	5.3
170 NAI-14-155	4.4	4.6	4.2	5.0	6.0	5.3
171 A15-4	4.4	4.5	4.3	5.3	5.3	4.0
172 NAI-14-121	4.4	4.3	4.4	4.7	3.0	5.0
173 PST-T15-43	4.4	4.3	4.4	4.7	5.0	7.0
174 A13-313	4.4	4.7	4.0	7.7	7.0	4.3
175 RAD-3383	4.4	4.8	3.9	5.0	5.0	3.0

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
176 Moonshine	4.3	4.3	4.4	7.0	5.0	5.3
177 P-105	4.3	4.1	4.6	1.3	4.3	4.0
178 PST-T13-32	4.3	4.3	4.3	3.7	4.0	4.3
179 Endurance	4.3	4.2	4.4	3.3	4.3	6.7
180 A16-10	4.3	4.5	4.0	6.7	4.7	5.0
181 Courtyard	4.3	4.0	4.5	5.3	2.7	6.7
182 A12-266	4.2	4.4	4.1	6.3	2.7	7.3
183 A13-5	4.2	4.3	4.2	3.3	4.3	7.3
184 A14-280	4.2	4.9	3.5	5.3	5.0	3.0
185 KB15OT-20	4.2	4.4	4.0	7.0	5.3	6.0
186 Volt	4.2	4.2	4.1	7.3	5.0	6.0
187 PST-11-13	4.2	3.8	4.6	8.0	6.0	3.7
188 KB13OT-19	4.2	3.9	4.4	4.3	5.0	5.3
189 KB15OT-32	4.2	4.1	4.3	2.7	3.0	4.0
190 SPF 30	4.2	4.3	4.0	7.7	4.0	5.0
191 Rockstar	4.2	4.3	4.0	5.7	5.3	5.0
192 PST-K15-160	4.2	4.4	3.9	4.7	6.3	4.3
193 Nobel	4.1	4.2	4.1	6.0	5.0	5.3
194 PST-10-38	4.1	4.2	4.1	4.3	4.0	5.7
195 NAI-15-89	4.1	4.4	3.8	7.0	5.7	4.0
196 A16-5	4.0	4.5	3.6	4.3	5.3	2.0
197 Shannon	4.0	4.1	3.9	8.0	6.7	3.3
198 A13-9	4.0	4.2	3.8	5.3	4.0	4.7
199 KB15OT-21	4.0	3.9	4.1	1.3	5.0	5.0
200 Prosperity	4.0	3.9	4.1	7.3	4.0	8.3
201 Wild Horse	4.0	3.8	4.1	7.7	4.7	6.7
202 A16-1	4.0	4.2	3.7	6.3	5.0	6.7
203 PST-Paulina Falls River- DARK	3.9	4.3	3.5	7.3	6.0	2.3
204 A16-21	3.9	4.8	3.0	8.0	6.3	2.0
205 NAI-15-100	3.9	3.7	4.0	1.7	6.0	4.3
206 A13-679	3.9	3.9	3.8	9.0	7.0	1.7
207 RAD-3169	3.9	4.2	3.5	6.3	6.7	2.7
208 KB15OT-9	3.8	3.9	3.7	7.0	4.3	3.3
209 A14-246	3.8	3.6	3.9	7.3	4.0	7.3
210 Gaelic	3.7	3.8	3.7	7.3	4.0	6.3

(Continued)

Table 2. Kentucky bluegrass high maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Spring Green-up ³ 12 April 2018	Leaf Spot ⁴ 30 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.			
211 Arc	3.7	4.2	3.2	6.7	6.0	3.7
212 Midnight II	3.7	4.0	3.4	6.3	5.0	4.3
213 PST-K15-180	3.7	3.9	3.4	3.7	4.0	5.0
214 PST-K14-154	3.6	4.0	3.2	5.3	4.3	5.0
215 A16-11	3.6	4.0	3.2	6.0	4.7	5.0
216 RAD-3302	3.6	3.9	3.3	7.3	5.3	2.0
217 KB15OT-25	3.6	3.3	3.8	2.7	3.7	4.3
218 KB15OT-50	3.6	3.8	3.3	4.3	4.7	4.7
219 PST-K14-146	3.6	3.5	3.6	5.7	3.7	7.7
220 NAI-13-118	3.5	3.6	3.4	6.0	5.0	1.7
221 RAD-2363	3.4	3.5	3.3	3.0	5.3	3.3
222 KB15OT-35	3.3	3.3	3.2	2.3	4.3	5.3
223 PST-4-H1	3.1	3.9	2.3	7.7	8.3	1.0
224 PST-TX8-56	2.9	3.3	2.5	5.7	4.0	6.3
LSD at 5% =	0.6	0.7	0.7	1.4	1.5	1.4

¹ 9 = best turf quality

² 9 = best establishment

³ 9 = earliest spring green-up

⁴ 9 = least disease

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass background

Table 3. Performance of Kentucky bluegrass cultivars and selections in a low maintenance turf trial seeded in September 2016 at North Brunswick, NJ.

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
1	NAI-13-79	5.7	5.9	5.4	4.3	8.3	7.5	6.5	7.7	9.0
2	Yellowstone	5.6	5.8	5.4	4.7	7.0	6.8	4.8	3.7	9.0
3	A16-14	5.5	5.8	5.1	4.0	6.3	3.6	7.7	5.3	9.0
4	NAI-13-39	5.5	5.3	5.6	4.0	7.3	6.8	5.0	5.3	8.7
5	A16-222*	5.4	5.6	5.2	4.3	7.7	7.7	5.3	7.0	9.0
6	A99-3122	5.4	5.5	5.2	5.7	7.3	6.7	6.0	7.3	9.0
7	A16-225*	5.4	5.2	5.5	3.3	7.7	7.6	3.7	5.3	9.0
8	Glade	5.4	6.2	4.5	5.0	8.0	7.5	5.5	6.7	7.7
9	A09-231	5.3	5.3	5.4	4.7	5.7	6.0	4.3	5.3	8.7
10	A16-220*	5.3	5.6	5.0	4.3	7.3	7.8	4.8	7.3	9.0
11	Hampton	5.3	5.8	4.8	7.3	5.0	7.5	7.2	3.7	9.0
12	A16-224*	5.2	5.5	5.0	5.3	7.7	8.1	4.8	6.7	9.0
13	A07-782	5.2	5.8	4.5	4.0	9.0	7.7	5.8	4.7	7.3
14	A05TB-258*	5.2	5.3	5.0	1.3	7.7	5.4	7.0	7.7	9.0
15	A16-16	5.1	5.5	4.7	3.7	6.0	5.3	3.8	7.7	7.7
16	Bluebank	5.1	5.5	4.7	5.3	7.3	8.3	5.3	7.0	8.7
17	NAI-14-124	5.1	5.4	4.8	5.3	7.0	8.6	6.7	3.3	9.0
18	A16-231*	5.1	5.9	4.3	2.7	8.3	6.0	6.8	5.0	6.0
19	Pivot	5.1	5.1	5.0	6.0	5.7	7.2	5.3	1.7	9.0
20	KB15OT-20	5.1	5.3	4.8	5.3	6.3	7.4	5.3	2.7	9.0

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(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
21	KB15OT-22	5.1	5.0	5.1	2.3	6.3	2.4	4.8	6.7	7.7
22	A14-2	5.0	5.6	4.4	6.0	6.3	4.8	6.7	6.0	8.7
23	A16-2	5.0	5.1	4.9	4.7	6.7	7.5	4.2	5.7	8.3
24	A12-266*	5.0	5.3	4.6	6.0	6.7	7.1	4.3	6.3	8.7
25	A05-853	5.0	5.2	4.8	3.3	6.3	3.6	3.7	6.3	4.7
26	Midnight	5.0	5.7	4.2	7.7	6.3	8.6	5.0	7.3	8.7
27	Slingshot	4.9	5.2	4.6	3.0	7.0	5.0	5.2	5.0	8.7
28	A16-219*	4.9	5.5	4.4	6.7	7.3	7.4	5.0	7.0	9.0
29	A04TB-258*	4.9	5.5	4.4	1.0	8.3	4.2	7.0	6.0	9.0
30	LTP-11-41	4.9	4.8	5.0	5.7	6.0	8.4	5.2	2.7	9.0
31	Aries	4.9	5.3	4.5	8.7	4.3	7.9	4.2	5.0	9.0
32	KB15OT-9	4.9	5.0	4.8	2.7	7.3	4.4	4.2	4.7	9.0
33	A12-30	4.9	5.4	4.4	4.0	6.7	8.9	6.2	3.7	8.3
34	NAI-13-10	4.9	5.0	4.7	2.3	8.3	4.5	6.2	5.3	9.0
35	KB13OT-4	4.9	5.1	4.6	3.7	7.3	8.2	5.5	4.7	6.3
36	PST-C-74	4.9	5.4	4.4	5.3	6.7	6.6	6.8	6.0	8.3
37	A16-228*	4.9	5.6	4.2	2.3	8.0	6.2	6.3	3.3	5.3
38	MVS-280*	4.9	5.3	4.4	2.0	7.3	6.3	7.7	7.0	9.0
39	United	4.9	4.9	4.9	6.3	8.7	8.4	4.0	6.7	9.0
40	A11-398	4.9	4.3	5.4	4.0	7.7	7.2	4.7	3.7	9.0
41	Blue Devil/Prafin	4.9	5.1	4.6	6.3	6.0	8.4	5.3	6.0	9.0
42	A12-57	4.9	5.3	4.4	2.0	8.0	6.2	6.7	6.7	8.3
43	A16-17	4.8	5.2	4.4	6.0	5.3	2.7	5.0	6.7	9.0
44	A14-234	4.8	4.8	4.9	3.7	8.0	7.5	4.8	5.7	9.0
45	A14-246	4.8	4.6	5.0	5.7	8.3	8.3	5.8	1.0	8.7

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
46	A06-11	4.8	5.1	4.5	4.3	8.0	5.9	6.0	7.7	9.0
47	Diva	4.8	4.7	4.9	4.3	7.0	5.8	5.8	5.3	7.0
48	Twilight	4.8	5.2	4.3	6.7	7.3	8.5	4.0	6.7	9.0
49	NAI-14-122	4.8	4.9	4.6	4.3	7.0	7.4	6.5	3.3	8.7
50	A11-47	4.8	5.3	4.2	7.3	4.3	6.5	5.7	4.3	9.0
51	A16-221*	4.8	5.1	4.4	4.3	7.3	7.5	3.8	3.7	9.0
52	A16-253*	4.8	5.9	3.7	5.0	6.0	4.6	6.3	2.3	7.0
53	NAI-14-133	4.8	5.1	4.4	5.0	7.0	8.4	6.3	2.0	9.0
54	A16-10	4.7	4.7	4.8	5.0	7.7	7.2	5.0	4.7	8.7
55	A16-12	4.7	5.0	4.5	5.7	5.7	5.3	6.0	3.7	9.0
56	A07-385	4.7	5.2	4.3	5.7	3.7	7.5	3.5	3.0	7.3
57	NAI-14-128	4.7	5.3	4.2	5.0	6.7	7.8	7.3	3.0	9.0
58	KB15OT-29	4.7	5.0	4.5	4.0	6.0	5.3	4.5	5.7	8.0
59	A14-10	4.7	5.0	4.5	4.7	7.3	5.6	6.5	4.3	8.7
60	CRS630	4.7	4.8	4.6	5.7	6.3	7.0	4.0	5.0	9.0
61	A12-34	4.7	5.0	4.4	3.0	7.7	4.9	6.0	7.0	8.7
62	KB13OT-17	4.7	5.0	4.4	4.7	6.7	3.8	7.0	5.7	9.0
63	KB13OT-19	4.7	5.2	4.2	2.3	8.3	4.1	4.7	4.0	9.0
64	A14-422	4.7	4.8	4.6	4.3	5.0	6.8	2.3	5.3	7.0
65	Prosperity	4.7	5.1	4.2	8.3	6.7	8.9	6.5	1.0	9.0
66	NAI-14-127	4.7	4.8	4.5	4.7	6.0	7.2	6.2	2.7	9.0
67	A16-7	4.6	4.8	4.5	4.3	7.7	6.7	6.3	6.7	9.0
68	A14-20	4.6	4.6	4.7	2.7	8.0	3.9	6.2	6.7	7.3
69	A10-244	4.6	4.7	4.6	3.3	7.3	4.1	6.8	6.7	9.0
70	Dauntless	4.6	4.8	4.4	5.7	7.0	7.4	4.5	4.3	9.0

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
71	Pulsar	4.6	5.0	4.2	6.0	7.7	8.5	4.3	6.3	9.0
72	NAI-14-126	4.6	4.8	4.4	3.7	7.3	8.2	7.2	2.7	9.0
73	Appalachian	4.6	4.6	4.7	5.0	6.0	6.6	2.8	3.7	5.0
74	Gaelic	4.6	5.0	4.2	6.3	5.7	6.4	5.5	4.0	8.7
75	A16-6	4.6	5.1	4.1	5.7	6.0	7.2	6.3	3.7	9.0
76	A12-267	4.6	5.0	4.2	4.7	4.7	2.7	2.5	5.7	6.0
77	Gladstone	4.6	5.0	4.2	4.3	6.7	7.1	6.5	4.7	8.7
78	Orion	4.6	5.1	4.1	3.0	7.0	3.8	4.5	4.3	8.7
79	KB15OT-32	4.6	4.4	4.7	1.7	8.3	4.8	6.2	6.0	8.3
80	Blue Note	4.6	5.2	3.9	4.3	7.3	6.9	4.8	6.0	9.0
81	NAI-14-132	4.6	4.9	4.2	4.7	7.7	8.2	7.3	3.0	9.0
82	Fahrenheit 90*	4.6	5.0	4.1	5.3	5.7	5.1	3.8	3.7	8.0
83	A14-424	4.5	4.7	4.4	4.3	6.0	7.9	2.5	4.0	3.7
84	A16-245*	4.5	5.4	3.7	4.7	6.3	5.0	6.5	2.0	6.0
85	Volt	4.5	5.1	4.0	8.0	4.0	7.0	4.5	4.3	8.7
86	A16-4	4.5	4.3	4.7	4.7	7.7	8.5	3.7	5.3	8.3
87	A05-361	4.5	4.8	4.2	2.7	7.3	6.7	6.2	6.0	8.3
88	Rockstar	4.5	4.9	4.1	3.7	6.3	4.9	4.3	4.0	8.7
89	A16-18	4.5	4.6	4.4	5.3	6.7	7.7	5.2	4.0	9.0
90	A13-325	4.5	4.1	4.8	3.3	7.0	3.8	3.3	1.3	7.7
91	A14-233	4.5	4.6	4.4	4.7	4.3	7.2	4.0	2.7	8.3
92	Bolt	4.5	4.8	4.2	8.0	4.0	4.5	4.2	5.3	8.3
93	A16-230*	4.5	5.3	3.6	4.3	7.3	4.9	6.7	3.0	6.7
94	A11-38	4.5	5.1	3.8	5.0	6.7	5.6	3.5	4.3	7.7
95	A13-5	4.5	4.6	4.3	3.0	7.3	3.1	7.2	3.7	9.0

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
96	KB13OT-13	4.4	4.6	4.2	4.3	7.3	4.3	4.0	3.3	3.0
97	Nobel	4.4	4.7	4.2	6.0	5.0	6.4	5.5	2.0	8.7
98	A13-332	4.4	4.3	4.5	5.7	6.0	6.2	2.7	1.0	6.7
99	Apollo H2O	4.4	4.9	3.9	5.0	7.0	6.9	6.2	6.7	9.0
100	NAI-14-187	4.4	4.7	4.1	3.7	6.7	7.6	7.3	3.0	9.0
101	KB15OT-47	4.4	4.7	4.1	2.3	7.7	4.8	4.8	3.7	9.0
102	A13-313	4.4	3.8	5.0	5.7	5.7	4.9	2.5	1.0	8.0
103	A06-8	4.4	4.9	3.8	4.7	8.7	6.3	7.0	6.0	9.0
104	A13-1	4.4	5.3	3.5	5.3	6.7	5.8	6.7	7.7	9.0
105	A10-871	4.4	5.1	3.6	4.3	6.0	5.2	6.7	5.0	8.0
106	A14-345	4.4	4.9	3.8	4.7	7.3	7.9	4.3	5.3	7.0
107	A16-21	4.4	4.3	4.4	6.7	6.3	6.2	2.0	1.7	4.3
108	A16-226*	4.4	5.6	3.1	4.0	7.3	4.5	4.7	2.3	4.3
109	A10-245	4.3	4.8	3.8	6.0	6.3	5.1	7.3	6.3	9.0
110	Lunar	4.3	4.8	3.9	6.7	5.7	6.8	5.5	3.0	9.0
111	A11-53	4.3	5.0	3.6	4.3	7.3	6.9	6.5	7.0	9.0
112	Bluestar	4.3	4.8	3.9	6.0	6.3	5.9	5.3	5.3	8.7
113	A06-33	4.3	4.6	4.0	3.7	7.3	4.8	7.5	6.0	9.0
114	A13-683	4.3	4.3	4.3	4.7	7.0	6.2	2.7	1.7	4.3
115	A04-67	4.3	4.4	4.2	6.3	6.0	8.3	5.2	3.7	8.0
116	SPF 30	4.3	4.4	4.2	5.3	5.3	5.8	3.5	5.7	8.7
117	NAI-14-176	4.3	4.6	4.0	5.3	7.0	8.6	6.2	1.7	9.0
118	Arrowhead	4.3	4.3	4.3	7.7	6.0	8.9	5.2	1.7	8.7
119	A16-1	4.3	4.7	3.8	5.3	5.7	6.0	4.3	3.7	9.0
120	A11-49	4.3	5.0	3.6	3.7	7.3	7.5	6.3	7.0	9.0

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
121	Fullback	4.3	4.9	3.6	7.3	5.0	7.0	5.8	4.0	8.7
122	KB15OT-21	4.3	3.9	4.6	1.0	8.3	4.2	6.3	3.3	8.7
123	A16-252*	4.3	5.1	3.4	3.0	8.3	5.4	5.0	6.0	8.0
124	A14-4	4.3	4.6	3.9	5.0	8.3	5.8	6.5	4.7	9.0
125	Mystere H2O	4.3	4.6	3.9	6.0	6.7	7.2	6.5	6.7	9.0
126	A98-879	4.3	4.6	3.9	5.3	7.0	7.4	5.0	3.7	9.0
127	Jersey	4.2	4.3	4.2	4.7	7.7	8.6	5.0	4.7	9.0
128	A10-249	4.2	5.0	3.4	4.3	7.3	4.2	7.2	5.7	9.0
129	NAI-14-130	4.2	4.3	4.1	2.7	7.3	7.1	7.3	2.7	9.0
130	NAI-15-110	4.2	4.6	3.9	4.7	7.0	5.1	3.5	2.3	6.7
131	A16-8	4.2	4.4	4.0	4.7	7.0	6.3	5.0	7.3	7.3
132	A16-15	4.2	4.7	3.7	3.0	8.3	3.9	7.5	3.3	9.0
133	Jumpstart	4.2	4.5	3.9	7.0	4.3	6.2	3.8	1.3	6.3
134	KB15OT-24	4.2	4.4	4.0	3.7	7.7	4.6	5.8	1.0	9.0
135	Legend	4.2	4.6	3.8	6.0	7.0	6.6	6.7	3.7	9.0
136	A14-26	4.2	5.0	3.3	2.7	7.7	6.2	6.8	3.0	9.0
137	NAI-15-89	4.2	4.4	3.9	4.3	6.0	4.8	4.5	5.3	6.7
138	Wild Horse	4.1	4.2	4.0	6.7	6.7	7.2	3.5	3.3	9.0
139	A11-778	4.1	4.7	3.6	4.0	5.7	5.9	1.7	3.7	1.0
140	A10-241	4.1	4.7	3.5	3.7	7.3	5.1	6.7	4.0	8.7
141	A14-9	4.1	4.7	3.5	5.0	6.7	6.4	6.5	7.3	9.0
142	P-105	4.1	4.0	4.2	1.7	7.0	2.8	3.3	1.7	8.0
143	A14-3	4.1	4.5	3.7	4.3	6.3	4.2	7.0	6.3	9.0
144	A16-11	4.0	4.3	3.8	5.7	7.0	7.1	4.8	3.7	8.7
145	NAI-14-121	4.0	4.5	3.6	3.0	6.7	6.9	5.8	1.7	9.0

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

	Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
		2017- 2018 Avg.	2017 Avg.	2018 Avg.						
146	A14-14	4.0	4.0	3.9	5.3	8.0	7.3	5.8	3.3	9.0
147	A14-31	4.0	4.6	3.3	4.3	6.3	5.1	7.3	5.3	9.0
148	A10-238	4.0	4.5	3.4	8.0	6.0	7.1	5.7	5.0	9.0
149	A16-19	3.9	4.1	3.7	5.0	7.0	8.0	4.2	5.3	9.0
150	Bluecoat	3.9	4.4	3.4	6.3	6.0	8.8	4.8	2.0	9.0
151	A13-9	3.9	4.4	3.4	4.7	8.0	6.8	6.8	1.3	9.0
152	A13-347	3.9	4.3	3.5	8.0	4.7	6.7	1.7	1.0	3.7
153	A13-679	3.9	4.0	3.7	7.7	2.7	8.7	2.0	7.0	1.7
154	A14-15	3.8	4.4	3.2	3.0	8.3	6.2	6.5	4.3	8.7
155	NAI-14-155	3.8	3.7	3.9	2.7	7.0	4.8	4.7	5.0	8.7
156	NAI-14-178	3.8	4.4	3.1	3.0	7.3	3.5	5.3	5.3	9.0
157	Rubicon	3.8	4.6	2.9	6.3	6.3	5.5	5.7	5.3	8.0
158	KB15OT-50	3.8	3.9	3.6	3.7	7.0	5.8	4.3	2.3	7.7
159	Arc	3.7	3.9	3.4	6.0	6.0	7.3	2.8	4.7	5.0
160	Shannon	3.6	3.8	3.5	6.7	5.0	5.5	2.5	1.7	4.3
161	A14-280	3.6	4.1	3.1	6.7	6.3	6.1	3.3	1.3	3.0
162	A15-4	3.6	4.1	3.0	3.7	8.0	4.9	4.3	6.0	7.3
163	NAI-15-100	3.5	3.6	3.3	2.0	8.3	4.0	4.8	2.7	7.3
164	A11-770	3.4	3.6	3.3	4.7	6.7	8.9	1.8	1.0	2.0
165	A16-20	3.4	3.8	3.0	5.3	5.7	7.3	1.2	4.0	2.7
166	A14-229	3.4	4.3	2.5	4.7	9.0	8.2	3.3	3.0	2.3
167	NAI-13-118	3.4	3.2	3.5	4.0	7.0	5.3	1.7	1.3	4.3
168	A16-5	3.3	2.8	3.7	3.3	7.7	4.9	2.3	3.3	6.7
169	KB15OT-25	3.2	3.2	3.2	1.3	7.7	5.5	5.8	4.0	9.0
170	Rubix	3.2	3.8	2.6	6.0	6.7	6.0	4.0	3.0	8.3

(Continued)

Table 3. Kentucky bluegrass low maintenance turf trial, 2016 (continued).

Cultivar or Selection	-----Turf Quality ¹ -----			Establishment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. 2016 Avg.	Leaf Spot ⁵ June 2017 Avg.	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot ⁶ 24 May 2018
	2017- 2018 Avg.	2017 Avg.	2018 Avg.						
171 KB15OT-35	2.7	2.7	2.7	2.3	8.3	6.8	5.8	1.0	9.0
LSD at 5% =	0.7	0.8	1.0	1.8	1.4	1.5	1.4	1.6	1.4

¹9 = best turf quality

²9 = best establishment

³9 = tallest growth

⁴9 = least bleaching response; average of three ratings made on 19, 21, and 24 October, 2016

⁵9 = least leaf spot; average of two ratings made on 9 June, 2017

⁶9 = least disease

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass background

Table 4. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
1 A16-8	6.8	4.7	6.0	8.3	7.3
2 A09-794	6.6	4.3	3.0	9.0	8.3
3 A17-3	6.5	5.7	8.0	8.7	7.7
4 A04-383	6.5	6.0	6.0	9.0	8.0
5 PPG-KB 1317	6.5	4.0	3.0	8.7	7.0
6 Tattoo	6.5	4.7	5.3	8.0	7.3
7 A09-258	6.5	8.7	9.0	7.3	8.0
8 Martha	6.5	4.0	5.7	8.3	7.0
9 LTP-11-41	6.5	7.7	8.3	8.7	6.3
10 A09-793	6.4	4.7	4.7	9.0	7.7
11 A04-340	6.4	4.7	4.7	8.3	7.3
12 A09-789	6.3	5.7	3.7	9.0	6.7
13 SRX 466	6.3	7.0	9.0	6.7	7.0
14 Heidi	6.3	6.3	9.0	8.0	7.0
15 PICK 033	6.3	7.0	7.3	7.0	8.3
16 A14-15	6.3	5.0	6.7	6.7	7.7
17 A04-66	6.2	5.0	8.7	7.0	7.7
18 A05-361	6.2	4.7	8.3	8.0	6.3
19 A11-49	6.2	5.0	6.0	8.0	6.7
20 A14-3	6.2	5.0	3.3	6.3	7.3
21 A17-4	6.1	5.7	2.7	9.0	7.3
22 A17-5	6.1	4.7	3.0	8.0	7.0
23 PST-K17-191	6.1	5.0	5.7	8.0	8.3
24 Blue Velvet	6.1	5.0	8.3	6.3	7.3
25 P-105	6.1	6.0	8.0	6.5	7.5
26 A11-26	6.0	4.7	5.7	7.3	6.7
27 A14-220	6.0	5.3	8.0	5.7	6.3
28 A16-21	6.0	5.3	3.3	9.0	8.0
29 Keeneland	6.0	5.0	6.3	6.7	7.0
30 Bolt	6.0	5.0	3.3	8.0	7.3
31 A16-19	6.0	6.3	7.3	6.7	6.7
32 A17-8	5.9	4.0	8.3	7.3	7.3
33 A05-351	5.9	4.3	6.0	8.0	6.7
34 Touche	5.9	4.7	3.3	8.7	7.0
35 SRX 2758	5.9	7.0	8.7	7.7	6.3

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
36 A15-8	5.9	4.3	4.0	9.0	5.7
37 PST-T14-37	5.9	4.7	6.7	7.3	7.0
38 Blue Note	5.9	4.3	5.0	7.0	6.0
39 A12-298	5.8	5.3	3.0	8.0	6.3
40 Legend	5.8	4.0	4.7	5.7	7.3
41 MacMillan	5.8	4.0	1.7	8.7	8.3
42 A15-7	5.8	3.7	4.0	9.0	5.7
43 A16-4	5.8	5.7	8.7	7.0	6.3
44 A15-481	5.8	4.7	3.0	9.0	7.3
45 PPG-KB 1532	5.7	3.0	2.3	8.0	6.3
46 STR 2553	5.7	5.7	5.0	5.0	7.7
47 NAI-15-90	5.7	2.7	1.7	8.7	7.0
48 A11-40	5.7	5.0	6.0	7.7	5.7
49 A09-305	5.7	5.3	5.7	8.3	5.7
50 Hampton	5.7	4.7	6.3	6.7	6.7
51 Bluebank	5.7	7.7	8.3	5.0	7.0
52 PST-T17-48	5.7	4.3	6.0	7.7	8.0
53 A16-6	5.6	5.3	8.0	5.3	7.3
54 A05-295	5.6	4.7	7.0	6.7	6.0
55 Jackrabbit	5.6	5.7	6.7	6.7	6.3
56 Jersey	5.6	5.3	6.7	8.0	6.0
57 A15-6	5.6	4.7	3.7	5.7	7.3
58 PPG-KB 1524	5.6	5.0	3.3	7.0	7.3
59 Mercury	5.6	3.0	1.7	9.0	7.7
60 A16-807	5.6	9.0	8.7	8.7	6.7
61 Yellowstone	5.6	4.3	7.0	7.0	5.7
62 A17-1	5.5	5.0	4.0	8.3	7.3
63 A17-6	5.5	3.7	5.0	6.7	6.7
64 PST-K13-141	5.5	4.7	7.3	7.3	6.3
65 A13-3	5.5	4.7	7.0	5.3	7.0
66 PPG-KB 1539	5.5	4.7	8.3	5.0	7.3
67 Comet	5.5	3.3	3.3	7.3	7.7
68 A15-1157	5.5	8.0	7.3	6.0	7.3
69 PPG-KB 1147	5.5	2.0	1.7	9.0	6.3
70 A05-347	5.5	4.0	4.3	7.3	6.7

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
71 SRX 5321	5.5	5.7	7.3	5.3	6.7
72 RAD-553	5.5	5.7	3.7	9.0	5.7
73 UN	5.5	4.3	5.3	5.7	7.7
74 PST-K17-190AD	5.4	4.3	5.0	6.0	6.7
75 A15-9	5.4	5.0	6.7	4.7	6.7
76 Powerplay	5.4	5.7	6.7	5.3	7.0
77 Blue Star	5.4	5.7	6.0	6.0	6.0
78 A11-778	5.4	4.7	3.3	9.0	5.3
79 NAI-15-112	5.4	5.3	5.7	6.3	7.0
80 A12-287	5.4	7.0	9.0	7.0	6.3
81 Crest 5K-12	5.3	4.7	4.7	6.7	6.3
82 Granite	5.3	6.3	8.7	5.7	6.7
83 Lunar	5.3	5.0	5.0	6.3	5.7
84 PST-T14-40	5.3	5.3	4.7	7.7	5.0
85 A14-677	5.3	6.0	7.0	8.7	5.3
86 Sombrero	5.3	6.3	7.0	6.3	5.7
87 BAR PP7158V	5.3	4.3	4.7	6.0	5.7
88 Milagro	5.2	5.3	6.3	7.0	7.3
89 PST-T15-42	5.2	3.7	3.7	7.7	6.0
90 Mystere H2O	5.2	4.3	5.7	6.7	6.7
91 Prosperity	5.2	6.0	8.3	5.3	6.3
92 A15-490	5.2	7.0	5.0	7.3	5.7
93 A16-816	5.2	9.0	8.7	9.0	5.0
94 A14-281	5.2	3.3	2.3	9.0	6.0
95 Arcadia	5.2	5.3	8.0	5.3	7.3
96 Julia	5.2	5.0	2.3	9.0	6.3
97 Jumpstart	5.2	4.7	4.7	7.3	6.3
98 PST-K17-184	5.2	5.0	6.7	6.7	6.0
99 PST-T17-47	5.2	4.3	5.7	5.0	7.0
100 Arrowhead	5.2	5.0	8.0	4.3	7.0
101 H03-556	5.1	5.7	6.3	7.3	5.3
102 NAI-13-34	5.1	3.3	7.7	6.0	6.3
103 A16-2	5.1	4.7	5.0	6.0	5.3
104 A17-9	5.1	4.7	6.0	7.0	6.0
105 A12-33	5.1	4.3	4.3	6.7	7.0

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
106 A06-671	5.1	5.0	6.7	5.0	7.0
107 Quantum Leap	5.1	6.0	7.3	5.3	6.0
108 RAD-2437	5.1	3.7	3.7	9.0	5.3
109 A13-695	5.1	3.3	4.3	7.3	5.7
110 A15-10	5.1	5.3	4.7	6.0	5.7
111 A14-365	5.1	4.7	4.3	4.3	6.7
112 PST-K17-182	5.1	4.0	3.0	7.3	5.7
113 RAD-3428	5.1	1.7	2.3	8.7	5.7
114 A06-8	5.1	3.3	4.0	7.0	6.7
115 PPG-KB 1316	5.0	4.0	3.0	6.3	5.7
116 PST-105-191	5.0	4.0	5.7	5.7	6.7
117 PST-K11-118	5.0	4.0	6.0	5.7	6.7
118 Ginney II	5.0	5.3	8.0	4.0	6.7
119 A12-28	5.0	3.7	6.3	5.0	6.0
120 Rhapsody	5.0	3.0	4.3	6.0	6.7
121 Babe	5.0	5.7	6.0	5.0	5.3
122 PST-K16-178	5.0	6.0	8.3	5.0	6.0
123 A15-470	5.0	5.7	3.7	8.3	5.0
124 A11-358	5.0	3.3	4.3	8.3	4.3
125 Hampton	5.0	5.7	7.3	7.3	6.7
126 NAI-15-97	4.9	5.3	6.0	6.7	6.0
127 MVS-280	4.9	2.0	5.7	9.0	7.7
128 A14-306	4.9	5.0	5.3	8.0	5.0
129 PST-11-7	4.9	5.0	9.0	3.7	6.0
130 Aries	4.9	5.0	6.3	4.7	6.0
131 A11-71	4.9	4.3	4.3	6.0	5.7
132 A15-1091	4.9	8.0	9.0	7.7	5.7
133 NAI-14-127	4.9	4.0	5.7	7.7	4.3
134 Fullback	4.9	4.3	4.7	6.3	6.0
135 A14-362	4.8	5.0	4.0	4.0	6.0
136 Fullback	4.8	5.7	6.0	7.3	6.0
137 Slingshot	4.8	5.0	5.0	5.7	6.3
138 Shannon	4.7	5.3	5.3	6.0	4.3
139 NAI-15-60	4.7	4.0	4.7	8.7	5.7
140 A15-1089	4.7	6.3	5.3	7.0	5.0

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
141 A16-808	4.7	9.0	8.0	9.0	5.3
142 A12-8	4.7	2.0	2.0	6.7	7.3
143 Prafin/Bluedevil	4.7	5.0	8.0	6.3	5.7
144 RAD-3764	4.7	5.0	7.3	6.0	5.0
145 PST-K15-172	4.7	2.0	4.3	7.7	6.7
146 PST-K17-187	4.7	3.3	4.3	7.7	5.0
147 PST-K17-188AD	4.7	5.3	9.0	5.0	5.3
148 PST-K17-185	4.6	4.7	4.3	6.3	6.3
149 KenBlue	4.6	5.7	4.3	9.0	4.0
150 RAD-2375	4.6	4.7	6.7	6.7	5.7
151 A99-2123	4.6	4.3	5.0	4.7	6.0
152 Armada	4.6	4.0	3.7	5.3	6.3
153 Rhythm	4.6	6.0	7.3	4.3	5.0
154 BAR PP 71654	4.6	4.3	5.0	4.0	5.7
155 NAI-11-644	4.6	3.0	4.7	6.3	5.0
156 Volt	4.6	7.0	8.7	6.0	5.0
157 A14-422	4.6	7.3	7.0	8.3	4.3
158 PST-K15-177	4.6	2.3	6.0	8.0	7.0
159 PST-K17-189AD	4.6	5.3	8.3	4.0	6.0
160 Bluecoat	4.6	5.5	7.5	6.0	5.0
161 Noble	4.5	5.7	8.0	5.3	5.7
162 NAI 15-105	4.5	4.3	5.3	5.7	5.0
163 PST-105-69	4.5	3.0	2.7	6.0	6.7
164 PST-T15-44	4.5	3.3	3.7	7.7	5.0
165 A14-299	4.5	6.0	7.3	4.3	4.7
166 A15-474	4.5	5.3	3.3	8.3	5.3
167 A14-307	4.5	4.7	6.3	8.0	5.3
168 Cocktail	4.5	4.0	5.3	5.3	6.7
169 SPF 30	4.5	7.7	9.0	5.0	4.3
170 PST-K17-186	4.5	4.0	3.0	7.7	4.7
171 PST-T17-49	4.5	4.0	4.0	7.0	5.0
172 NAI-15-89	4.5	4.3	6.0	6.0	4.7
173 A14-258	4.5	5.0	5.7	4.3	4.7
174 A15-21	4.5	6.3	7.3	9.0	4.0
175 A14-334	4.5	4.3	5.0	8.0	6.0

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
176 A15-5	4.4	5.0	2.7	9.0	5.0
177 Dauntless	4.4	5.0	5.7	4.3	5.3
178 Diva	4.4	5.3	7.0	7.0	5.3
179 Aramintha	4.4	4.7	4.0	5.7	5.7
180 Fielder	4.4	5.0	6.0	4.0	5.3
181 A17-229*	4.4	1.0	3.5	7.7	6.0
182 A06-26	4.4	3.0	4.7	6.0	4.7
183 SR 2100	4.4	6.7	8.7	3.0	5.3
184 A14-373	4.3	5.7	8.3	4.7	5.7
185 PST-K10-110	4.3	3.3	5.3	7.0	6.0
186 PST-T14-39	4.3	3.3	2.7	7.7	6.0
187 PST-K15-158	4.3	2.3	3.7	8.3	5.3
188 A16-1	4.3	5.0	6.3	5.7	4.0
189 Explorer	4.3	4.7	9.0	4.3	5.3
190 NAI 14-126	4.3	1.7	5.0	7.0	5.3
191 NAI 14-133	4.3	3.7	5.3	6.7	5.0
192 Aviator II	4.3	4.0	4.7	8.3	4.0
193 Wildhorse	4.3	3.3	3.7	4.3	6.3
194 A17-2	4.2	3.7	4.3	7.3	5.0
195 NAI 14-128	4.2	4.0	5.0	6.3	4.7
196 A14-258	4.2	5.0	5.7	4.7	5.3
197 PST-K15-169	4.2	3.7	8.0	4.0	5.3
198 Geisha	4.2	6.3	9.0	4.7	6.0
199 Rubix	4.1	5.3	4.3	5.3	5.3
200 PST-K17-183	4.1	3.0	5.0	7.3	4.7
201 PST-K17-192	4.1	4.3	6.0	6.3	6.3
202 PST-K17-196	4.1	4.3	7.3	4.7	5.3
203 15-24 5623-2	4.1	1.3	4.7	9.0	5.0
204 PST-K15-167	4.1	3.0	4.0	5.3	6.3
205 PST-T17-50	4.1	2.7	4.0	5.0	5.7
206 Spitfire	4.0	5.3	6.0	6.7	4.7
207 Selway	4.0	4.0	3.0	8.0	5.0
208 A16-20	4.0	8.3	8.7	9.0	2.3
209 Gaelic	4.0	4.3	5.0	5.0	4.3
210 Rockstar	4.0	4.0	5.0	4.7	3.3

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
211 A14-330	3.9	2.7	3.7	5.3	4.7
212 NAI 14-122	3.9	3.3	5.0	6.0	5.7
213 Bandera	3.9	5.7	8.0	3.3	5.3
214 PST-K15-166	3.9	2.3	3.3	8.3	6.0
215 NAI-15-106	3.9	4.3	5.0	6.7	4.0
216 RAD-3763	3.9	4.3	5.3	5.0	4.3
217 A16-10	3.9	5.3	5.7	6.0	3.3
218 A17-7	3.9	4.3	6.3	6.3	4.0
219 A14-439	3.9	4.3	5.7	4.3	4.0
220 Harmonie	3.9	4.0	5.7	6.0	4.3
221 PST-K15-163A	3.8	2.3	4.0	6.7	4.7
222 Touchdown	3.7	6.7	5.7	8.3	3.0
223 PST-K13-140	3.7	4.7	5.7	4.3	5.3
224 Kelly	3.7	6.7	9.0	3.0	4.7
225 Crest	3.7	4.3	5.0	6.0	3.7
226 NAI 14-187	3.7	2.3	4.7	6.7	5.3
227 NAI 14-176	3.7	3.0	4.7	6.0	5.0
228 A16-11	3.7	4.3	4.7	5.3	3.0
229 A03TB-663*	3.6	1.3	4.3	8.7	4.7
230 NAI 14-132	3.6	2.3	5.0	6.7	5.0
231 PST-T17-51	3.6	3.7	3.7	5.3	5.7
232 PST-K13-139	3.3	1.7	2.0	7.5	4.7
233 PST-K16-179	3.3	3.3	4.3	6.7	3.3
234 A16-5	3.3	2.7	2.7	9.0	3.7
235 NAI 14-178	3.3	1.3	3.7	7.0	6.0
236 PST-T15-43	3.2	2.7	4.3	8.3	4.7
237 PST-K17-194	3.2	3.3	4.0	5.0	5.0
238 Zedor	3.2	2.3	5.0	5.7	4.0
239 PST-K16-180	3.1	2.3	3.7	7.7	4.0
240 PST-K13-143	3.0	2.3	3.0	7.0	5.0
241 NAI-BRX-17	3.0	1.7	2.7	6.7	5.0
242 BlackJack	2.9	2.7	4.0	7.0	2.7
243 PST-K15-173	2.9	2.0	3.0	6.3	4.3
244 GO-MOR	2.8	4.7	5.7	4.3	3.7
245 Rubicon	2.8	1.3	3.3	6.5	5.0

(Continued)

Table 4. Kentucky bluegrass high maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 9 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Stem Rust ⁴ 2 Nov. 2017	Summer Patch ⁴ 21 Aug. 2018
246 Corsair	2.8	2.7	6.3	4.7	3.3
247 PST-K17-193	2.8	1.3	4.0	8.3	3.7
248 PST-TX8-56	2.8	3.3	3.7	5.7	1.0
249 NAI-15-108	2.6	3.3	3.7	7.7	3.7
250 PST-K15-160	2.5	2.3	2.0	7.3	4.3
251 Blue Ghost	1.5	1.3	2.0	5.0	2.3
LSD at 5% =	0.8	1.2	1.8	1.5	1.5

¹ 9 = best turf quality

² 9 = best establishment

³ 9 = least bleaching response

⁴ 9 = least disease

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass background

Table 5. Performance of Kentucky bluegrass cultivars and selections in a low maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
1 A14-677	6.4	7.3	6.7	5.0	6.0	9.0	6.3	3.7
2 Bolt	6.4	7.7	4.7	4.3	4.0	8.3	6.7	6.0
3 H03-556	6.3	7.3	3.7	5.3	6.3	9.0	8.0	7.0
4 A14-422	6.3	8.0	7.7	6.3	6.7	9.0	5.3	4.7
5 PICK 033	6.2	7.7	3.3	7.3	4.3	7.7	5.3	4.7
6 A09-793	6.2	7.0	7.3	6.0	4.7	8.0	6.7	5.0
7 A12-287	6.1	7.3	5.7	6.0	6.7	9.0	5.7	5.0
8 A09-305	6.0	6.7	3.0	5.7	4.0	4.7	8.0	4.0
9 Heidi	5.9	7.7	3.0	7.7	4.3	7.7	4.3	5.0
10 PST-K17-190AD	5.9	6.7	3.7	4.7	4.3	6.0	6.7	5.0
11 PPG-KB 1147	5.9	3.0	6.3	2.3	4.0	7.3	6.3	6.0
12 PPG-KB 1317	5.8	5.3	6.3	3.3	6.3	6.0	7.7	6.7
13 A17-3	5.8	7.3	5.3	6.7	6.0	8.0	5.7	4.0
14 A11-40	5.8	5.7	5.3	5.3	5.7	8.0	5.7	6.0
15 A04-383	5.8	7.0	7.7	6.0	7.0	8.0	5.3	3.7
16 PST-K17-191	5.8	6.3	3.7	5.3	4.7	7.7	5.7	4.0
17 A09-794	5.7	5.7	7.7	4.0	5.0	6.0	6.0	5.7
18 Cocktail	5.7	5.0	2.3	3.7	3.3	7.3	4.7	3.0
19 Touche	5.7	5.3	4.7	2.7	4.3	7.3	6.0	6.0
20 A15-8	5.7	4.7	7.0	3.0	4.0	7.3	6.0	5.3
21 A09-258	5.7	8.7	3.0	9.0	6.7	9.0	4.7	2.3
22 SPF 30	5.7	8.0	3.3	7.7	4.0	8.7	5.7	3.3
23 A11-71	5.7	5.7	4.3	4.0	4.7	7.0	6.7	3.7
24 A09-789	5.7	5.7	7.3	3.3	3.7	7.7	6.0	4.7
25 Jersey	5.7	7.0	5.0	4.7	4.7	5.7	5.7	3.0

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(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

	Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
26	RAD-553	5.6	6.0	8.3	4.3	4.7	8.3	6.7	5.7
27	Tattoo	5.6	4.0	4.3	3.7	4.3	6.0	6.3	4.0
28	PST-105-191	5.6	4.7	3.3	4.7	4.0	5.3	6.7	3.7
29	A05-361	5.6	6.3	4.0	7.7	4.3	7.7	6.0	4.3
30	A17-8	5.5	4.7	3.7	8.0	5.3	8.7	5.0	4.7
31	Jumpstart	5.5	6.0	4.7	4.7	4.3	8.0	5.3	3.0
32	KenBlue	5.5	7.3	6.0	4.3	7.3	9.0	6.7	4.7
33	Hampton	5.5	6.0	4.7	7.3	3.7	6.3	4.0	4.3
34	A14-258	5.5	7.0	3.0	5.3	4.0	7.7	6.0	4.0
35	A11-26	5.5	5.7	3.3	5.0	4.3	6.3	7.0	5.3
36	Martha	5.5	6.7	4.3	5.7	5.0	5.7	6.3	4.7
37	PST-T14-40	5.5	7.3	3.3	5.3	4.3	7.3	6.3	4.7
38	A14-306	5.5	6.3	4.3	6.0	4.0	7.7	5.0	3.0
39	NAI-15-89	5.5	6.0	2.7	4.7	3.7	7.3	4.7	3.7
40	NAI-15-90	5.4	3.0	6.7	2.0	4.3	5.7	6.3	7.0
41	Yellowstone	5.4	5.7	3.7	6.0	3.3	6.7	4.3	4.7
42	A04-340	5.4	5.7	4.3	6.0	3.7	6.3	5.3	3.7
43	SRX 2758	5.4	7.7	3.3	7.3	3.3	7.0	5.3	3.0
44	PST-K13-141	5.4	6.3	3.3	6.0	5.3	5.7	6.7	3.7
45	NAI-15-106	5.4	5.3	4.7	3.3	5.7	7.3	6.3	5.7
46	RAD-2375	5.4	5.0	3.7	3.0	6.7	9.0	5.3	3.7
47	SRX 466	5.3	9.0	4.0	8.7	4.0	8.0	4.7	3.0
48	PST-K17-184	5.3	6.7	4.0	5.7	3.3	4.3	5.7	5.3
49	PST-K17-186	5.3	4.7	6.0	3.3	4.7	7.7	5.7	3.3
50	PPG-KB 1532	5.2	3.7	5.7	2.3	6.3	4.7	6.7	5.0

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(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
51 NAI-15-112	5.2	6.3	3.3	5.3	4.0	6.3	6.0	3.0
52 Babe	5.2	7.0	2.7	5.0	4.0	6.3	5.0	3.3
53 P-105	5.2	9.0	4.7	7.3	5.0	9.0	5.3	3.7
54 A14-220	5.2	7.0	2.3	6.7	4.0	6.7	6.3	4.7
55 LTP-11-41	5.2	7.7	3.3	8.0	4.7	7.7	6.3	5.3
56 Keeneland	5.1	6.0	3.3	6.0	4.0	6.3	6.0	3.3
57 NAI 15-105	5.1	3.7	4.3	3.3	4.3	7.7	5.7	3.3
58 NAI-15-97	5.1	6.3	3.3	4.7	4.3	6.7	5.0	2.7
59 RAD-2437	5.1	5.0	6.7	4.3	4.7	6.7	6.0	2.7
60 A17-5	5.1	4.7	5.0	3.3	4.3	5.7	4.0	4.3
61 A13-3	5.1	5.0	2.7	6.0	4.3	6.7	5.3	5.7
62 Blue Note	5.0	5.7	3.7	3.3	4.3	5.0	4.7	4.0
63 PST-105-69	5.0	5.7	3.3	3.3	3.7	8.3	4.0	2.0
64 PST-T14-39	5.0	4.0	5.3	2.7	3.3	5.7	4.3	2.3
65 A11-358	5.0	3.3	6.7	2.7	7.3	8.7	7.0	3.3
66 BAR PP 71654	5.0	6.3	3.3	6.0	3.3	6.3	4.3	3.7
67 Legend	5.0	6.3	3.3	4.0	4.7	4.3	5.7	4.0
68 A15-470	5.0	8.3	5.0	5.0	3.7	7.3	6.0	2.3
69 PPG-KB 1539	4.9	4.7	3.7	5.0	3.7	5.7	6.0	4.3
70 A14-334	4.9	5.3	5.3	3.7	3.3	7.7	4.0	2.0
71 A15-7	4.9	4.7	6.3	3.3	5.0	7.7	6.3	4.0
72 A16-6	4.9	7.3	2.3	5.7	4.0	5.3	4.0	4.0
73 A04-66	4.9	6.3	4.0	8.0	4.0	7.7	4.3	3.7
74 A06-671	4.9	6.7	3.7	5.0	4.0	7.0	5.0	2.7
75 A11-778	4.9	6.3	7.3	2.7	5.3	9.0	5.7	4.0

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

	Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
	76 A16-19	4.9	7.7	2.3	5.7	4.0	3.3	4.0	2.3
	77 A15-10	4.9	6.0	3.0	3.7	4.3	5.7	4.7	3.7
	78 A05-295	4.9	5.3	4.3	6.3	4.0	6.3	3.7	4.3
	79 A14-258	4.9	7.0	2.7	4.7	5.3	8.3	4.7	3.3
	80 Julia	4.9	5.7	7.3	2.3	7.3	8.7	5.7	3.3
	81 PST-K17-185	4.8	6.0	3.7	4.3	3.3	4.7	5.3	3.3
	82 Dauntless	4.8	6.7	3.0	5.3	3.7	6.3	4.3	2.7
	83 PST-K11-118	4.8	5.0	4.7	3.7	5.0	4.3	5.3	3.3
	84 Granite	4.8	8.3	1.7	8.7	3.7	8.0	4.0	2.7
110	85 PST-K17-182	4.8	4.0	5.7	3.0	4.0	3.7	6.0	3.7
	86 PST-T15-42	4.8	5.0	4.3	4.0	4.7	8.0	5.7	3.3
	87 A14-299	4.8	7.7	1.7	4.3	3.7	7.0	4.0	3.7
	88 Sombrero	4.7	8.3	4.0	5.0	4.3	6.3	4.7	3.0
	89 Prafin/Bluedevil	4.7	6.7	2.7	6.3	3.3	6.0	4.7	3.0
	90 A12-298	4.7	6.3	5.0	3.3	4.0	4.3	4.7	2.3
	91 Arcadia	4.7	7.7	1.7	6.3	4.0	6.3	4.3	3.3
	92 Blue Velvet	4.7	6.0	2.7	6.3	3.7	8.0	3.7	3.7
	93 Jackrabbit	4.7	7.0	3.7	4.3	5.3	7.7	4.7	3.3
	94 Blue Star	4.7	7.0	2.0	5.0	3.7	5.3	4.0	3.7
	95 Shannon	4.7	7.0	3.3	4.7	4.7	5.7	4.7	3.3
	96 PST-K17-187	4.7	3.7	4.3	3.7	4.0	5.0	4.3	4.0
	97 A16-4	4.7	7.7	3.0	6.3	4.3	5.7	5.0	2.7
	98 A16-2	4.7	6.0	3.0	3.3	4.3	4.7	4.3	2.7
	99 Rhapsody	4.7	4.0	4.7	2.7	5.0	5.7	4.7	4.7
	100 Selway	4.7	5.7	5.3	3.3	5.0	6.7	5.0	4.7

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
101 A16-20	4.7	9.0	6.3	8.7	6.3	9.0	6.0	3.7
102 A17-9	4.6	4.0	4.3	4.7	3.0	4.3	5.3	4.7
103 A05-351	4.6	6.0	4.7	4.7	3.7	6.7	4.7	2.7
104 SRX 5321	4.6	6.7	3.7	4.7	4.3	6.3	4.7	3.7
105 PST-K15-163A	4.6	4.0	4.7	3.0	3.7	6.3	5.3	2.7
106 PST-T17-48	4.6	4.3	4.0	4.7	5.0	4.3	4.0	3.7
107 Volt	4.6	7.7	3.7	6.3	4.0	6.3	4.7	2.7
108 A11-49	4.6	6.3	3.3	6.0	3.3	7.7	4.0	3.3
109 A14-307	4.6	6.3	4.0	6.0	3.0	8.0	3.7	2.0
110 Crest 5K-12	4.6	4.7	4.7	4.0	4.7	6.0	4.0	2.3
111 PPG-KB 1316	4.6	5.3	5.0	2.7	4.0	6.0	5.0	3.7
112 Powerplay	4.6	7.0	3.7	5.3	3.3	4.0	4.0	4.3
113 PST-K15-166	4.6	3.0	7.7	3.0	5.0	2.7	5.3	3.3
114 Explorer	4.5	6.3	3.0	7.3	3.3	7.3	3.7	3.3
115 Fielder	4.5	6.3	2.3	5.0	4.0	5.7	4.0	2.0
116 STR 2553	4.5	7.3	4.3	4.7	4.7	3.7	5.0	3.3
117 BAR PP7158V	4.5	6.3	3.3	6.0	4.0	8.0	5.0	2.7
118 Aviator II	4.5	5.0	4.0	4.3	4.7	4.3	4.7	5.7
119 Bluecoat	4.5	7.3	3.3	7.3	2.0	7.3	4.7	3.3
120 PST-K13-139	4.5	2.0	6.7	1.3	5.3	5.3	4.7	4.3
121 A12-28	4.5	5.0	2.7	4.3	4.3	6.0	4.7	3.0
122 A16-8	4.5	4.3	4.7	5.7	4.0	7.7	6.0	4.3
123 GO-MOR	4.5	6.3	2.7	3.7	4.3	8.0	5.7	4.7
124 PST-T15-44	4.5	4.3	4.7	3.7	4.3	6.7	4.3	3.3
125 RAD-3428	4.5	2.3	6.7	1.7	5.0	4.0	4.0	2.3

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
126 Aries	4.5	7.7	2.3	5.0	3.7	5.3	4.0	2.3
127 A16-21	4.5	5.7	7.0	2.7	4.7	8.3	6.0	4.7
128 PST-T17-47	4.5	5.0	2.7	5.0	4.0	5.7	3.3	2.0
129 PST-K15-172	4.4	2.7	5.3	2.0	4.3	4.0	4.7	3.7
130 PST-T14-37	4.4	5.7	2.7	7.0	3.3	6.0	2.7	2.7
131 Fullback	4.4	6.0	2.7	4.0	4.7	5.7	4.3	3.0
132 A15-481	4.4	6.3	7.3	3.3	4.7	7.7	4.7	2.3
133 A15-9	4.4	5.7	2.7	5.7	3.0	7.3	4.3	3.7
134 A14-15	4.4	6.3	3.0	6.0	3.3	6.7	5.0	3.3
135 A16-10	4.4	7.0	2.0	5.7	4.0	5.7	4.0	2.0
136 NAI 14-132	4.4	3.7	4.0	5.0	2.0	7.0	4.3	2.7
137 PST-K15-158	4.4	3.7	5.0	3.0	5.0	6.0	6.3	5.3
138 Slingshot	4.4	5.3	3.7	3.7	4.0	4.7	3.0	2.7
139 A15-5	4.3	4.7	6.7	3.0	5.7	3.7	5.0	3.3
140 Bluebank	4.3	7.3	1.7	6.3	3.0	6.3	3.7	3.0
141 Hampton	4.3	7.7	5.3	7.7	6.7	9.0	4.7	4.3
142 Lunar	4.3	6.3	3.7	5.0	3.7	4.7	4.7	3.0
143 NAI-13-34	4.3	4.7	3.3	4.3	4.0	7.0	3.0	3.3
144 A17-1	4.3	5.0	6.3	3.3	5.0	5.0	6.0	4.0
145 NAI-14-127	4.3	5.3	4.3	5.7	2.3	5.7	4.0	3.0
146 A13-695	4.3	4.7	3.3	4.0	5.3	9.0	5.0	2.0
147 A14-439	4.3	6.3	2.7	4.3	4.3	6.0	4.0	2.0
148 A14-373	4.3	8.0	1.7	6.7	3.0	5.3	4.0	2.3
149 PST-K17-188AD	4.3	6.3	3.0	6.3	3.3	5.0	4.7	3.0
150 Mystere H2O	4.3	5.0	3.7	5.7	4.3	4.3	4.3	2.3

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
151 Diva	4.3	7.7	4.3	6.3	5.3	7.3	4.7	3.7
152 MVS-280*	4.3	2.3	7.3	3.7	6.7	7.3	7.0	2.7
153 A17-4	4.2	6.3	8.3	3.0	5.3	6.3	4.7	4.3
154 Armada	4.2	5.3	3.0	4.3	3.3	4.7	3.7	2.3
155 RAD-3764	4.2	7.3	2.7	6.0	4.7	6.7	3.7	2.3
156 A14-3	4.2	7.3	3.7	4.0	4.0	2.7	5.3	4.0
157 Milagro	4.2	6.3	3.3	6.7	3.7	5.7	4.0	2.7
158 NAI 14-133	4.2	4.3	3.7	6.0	2.0	6.3	4.0	3.3
159 PST-K13-140	4.2	5.3	2.0	5.0	3.7	6.0	3.0	3.0
160 A17-6	4.2	4.3	5.0	4.7	5.0	4.3	5.0	2.7
161 PPG-KB 1524	4.2	6.3	4.3	3.0	5.0	4.0	5.3	3.0
162 Quantum Leap	4.2	7.3	2.0	6.0	3.3	7.7	3.7	3.0
163 A15-21	4.1	7.3	3.7	6.3	3.3	8.0	4.7	3.3
164 Rhythm	4.1	7.0	2.3	4.7	3.0	6.0	3.0	2.3
165 NAI 14-122	4.1	3.7	3.7	5.7	2.3	6.3	4.0	3.0
166 PST-K16-178	4.1	7.3	3.3	7.3	3.3	2.7	4.3	2.0
167 A12-8	4.1	2.7	5.3	2.3	4.3	5.0	5.3	4.0
168 NAI 14-128	4.1	4.0	3.7	5.7	2.0	6.3	3.3	3.0
169 Prafin	4.1	7.3	2.0	7.0	4.0	6.0	3.0	2.0
170 A17-2	4.1	4.3	4.7	3.3	4.7	5.7	4.0	2.7
171 A12-33	4.1	6.0	3.7	4.3	3.7	6.7	4.0	3.0
172 A99-2123	4.1	6.3	2.0	6.3	3.7	5.7	5.0	3.3
173 A14-330	4.1	2.7	5.0	2.0	4.5	6.3	4.3	2.3
174 Mercury	4.1	3.3	8.3	2.0	5.0	3.7	4.3	3.3
175 NAI 14-176	4.1	3.0	3.7	4.0	2.7	5.7	4.3	3.0

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

	Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
176	A15-6	4.0	5.3	3.3	3.0	4.7	4.7	4.7	3.7
177	NAI 14-187	4.0	2.7	4.0	4.7	2.7	6.0	3.7	3.7
178	PST-K17-189AD	4.0	6.3	2.3	7.3	2.3	5.7	3.0	2.7
179	PST-K17-192	4.0	5.7	3.3	4.7	2.7	7.0	4.7	4.0
180	A06-8	4.0	4.0	5.3	3.0	4.7	4.3	4.3	3.3
181	PST-K15-169	4.0	6.0	2.7	6.7	3.3	5.0	2.7	2.7
182	A15-1091	4.0	7.7	2.7	8.7	6.7	9.0	4.0	5.7
183	A05-347	4.0	5.0	4.0	4.3	4.3	5.7	4.3	3.3
184	PST-11-7	4.0	6.3	2.7	6.0	2.7	6.7	3.7	2.0
185	A17-7	3.9	5.0	3.7	4.3	4.3	6.3	4.0	1.7
186	A14-281	3.9	3.3	8.0	2.3	4.0	7.3	4.7	2.7
187	MacMillan	3.9	5.3	7.7	3.3	4.3	3.7	4.0	2.7
188	Ginney II	3.9	7.0	2.3	7.7	2.7	7.0	3.0	3.0
189	NAI-BRX-17	3.9	2.3	6.0	2.0	2.0	3.7	3.3	3.7
190	Comet	3.9	4.7	4.0	3.3	4.7	4.7	3.7	3.7
191	A16-1	3.9	5.7	3.0	4.3	3.7	6.3	4.0	2.0
192	Aramintha	3.9	5.3	3.3	3.0	4.3	4.3	4.0	2.7
193	Noble	3.9	7.7	2.7	6.0	4.0	5.0	4.7	2.7
194	A16-5	3.8	4.3	5.7	3.3	5.0	7.3	5.0	2.3
195	Spitfire	3.8	7.0	4.3	4.7	4.3	6.0	4.3	2.0
196	PST-K10-110	3.8	5.3	4.3	5.0	4.3	4.0	3.7	2.7
197	Rockstar	3.8	4.7	3.7	4.3	4.3	7.0	4.3	2.7
198	NAI-11-644	3.8	3.3	4.7	4.3	3.0	3.3	3.7	3.3
199	Wildhorse	3.8	5.3	2.0	3.3	3.3	5.7	3.0	2.3
200	NAI 14-126	3.8	2.3	4.7	5.0	2.7	6.3	3.0	2.7

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(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

	Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
201	PST-T17-51	3.8	3.3	3.7	2.3	2.5	3.3	2.7	1.7
202	A14-362	3.8	5.3	2.3	4.3	2.0	5.3	3.7	2.7
203	SR 2100	3.7	6.0	4.0	4.0	3.0	5.0	4.3	3.7
204	RAD-3763	3.7	5.3	3.0	5.0	3.7	8.0	4.0	2.0
205	A06-26	3.7	5.3	3.0	5.0	4.0	4.3	4.7	3.3
206	PST-K17-193	3.7	2.0	6.0	4.7	5.0	6.3	4.0	2.3
207	PST-K17-183	3.7	3.0	4.7	4.0	5.0	3.3	4.7	2.3
208	PST-K17-194	3.7	4.0	4.3	3.3	4.3	6.7	4.3	2.3
209	Prosperity	3.7	8.0	2.0	8.0	3.3	6.7	4.0	2.7
210	Arrowhead	3.7	6.7	1.0	6.3	3.3	4.3	2.7	3.0
211	A03TB-663*	3.7	2.0	7.3	3.0	5.3	6.3	4.7	4.0
212	Touchdown	3.6	8.0	5.3	4.0	6.0	9.0	4.7	1.7
213	PST-T17-49	3.6	3.3	4.7	3.7	3.7	2.7	3.0	3.0
214	A16-11	3.6	6.3	2.0	4.3	4.0	6.0	3.0	1.7
215	A14-365	3.5	5.3	1.3	5.3	2.3	6.7	3.0	2.3
216	Fullback	3.5	5.0	4.7	3.3	5.3	8.0	4.7	3.3
217	Gaelic	3.5	5.0	3.0	3.7	4.0	5.7	3.7	1.7
218	BlackJack	3.5	2.7	5.0	3.3	5.0	6.7	4.0	2.3
219	PST-K15-167	3.5	4.7	1.7	4.0	2.3	4.7	3.0	2.7
220	PST-T15-43	3.4	3.3	6.3	1.7	3.0	5.0	2.7	2.3
221	Harmonie	3.4	4.7	3.3	4.0	4.0	7.7	4.0	2.7
222	Orion	3.4	3.3	2.7	3.0	4.0	6.5	4.7	2.7
223	Bandera	3.4	6.0	1.3	6.3	2.3	6.0	2.7	2.3
224	Rubix	3.3	5.0	2.3	2.7	3.0	6.3	3.3	2.0
225	PST-K16-179	3.3	4.3	4.0	4.3	4.0	5.0	4.0	1.7

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
226 PST-T17-50	3.3	3.7	3.7	3.0	3.0	3.7	3.3	2.7
227 PST-K17-196	3.3	4.7	3.5	5.0	3.3	5.0	3.7	2.0
228 NAI-15-60	3.2	4.3	5.0	3.0	4.7	5.3	4.0	4.7
229 PST-K15-160	3.2	3.0	4.7	2.0	4.3	6.7	4.0	2.7
230 Kelly	3.1	9.0	1.0	7.0	1.7	7.0	3.0	1.7
231 NAI-15-108	3.1	3.7	5.3	3.0	4.0	6.0	3.3	2.7
232 Crest	3.0	5.7	2.3	4.0	2.7	5.7	2.7	1.7
233 Zedor	3.0	2.7	5.3	4.3	3.0	5.0	3.3	1.3
234 Geisha	2.9	7.0	1.3	6.3	1.7	7.0	2.3	1.3
235 PST-K15-177	2.9	3.0	4.3	4.3	4.0	3.7	2.7	1.7
236 PST-K16-180	2.7	3.7	4.7	4.0	3.0	4.7	3.0	1.7
237 Rubicon	2.6	2.0	5.0	2.0	3.5	6.5	2.7	2.3
238 PST-K15-173	2.6	2.0	4.5	2.0	3.0	5.0	2.3	2.3
239 Corsair	2.4	3.7	2.7	5.3	3.0	5.3	2.3	1.7
240 NAI 14-178	2.3	1.3	6.5	1.3	4.0	6.3	1.7	1.0
241 PST-TX8-56	2.1	3.3	4.0	3.3	3.0	6.0	2.3	1.0
242 Blue Ghost	1.8	1.7	8.0	2.0	.	5.5	2.0	1.3
LSD at 5% =	0.9	1.5	1.7	1.6	1.3	1.5	1.6	1.5

¹9 = best turf quality

²9 = best establishment

³9 = least disease

⁴9 = least bleaching response

⁵9 = earliest spring green-up

(Continued)

Table 5. Kentucky bluegrass low maintenance turf trial, 2017 (continued).

⁶9 = fewest seed heads

⁷9 = best quality under summer stress

⁸9 = best quality under drought stress

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass parental background

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the Alliance for Low Input Sustainable Turf (A-LIST), seeded in September 2017 at Adelphia, NJ.

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
1 A11-40	6.1	6.8	5.0	4.0	7.3	8.5	5.8	5.0
2 Yellowstone	6.0	5.8	3.8	4.3	6.0	5.5	5.8	4.0
3 Keeneland	6.0	7.0	4.0	5.5	6.3	7.3	5.8	4.8
4 SR 2150	5.8	7.5	3.8	4.3	5.5	6.8	4.0	5.8
5 SRX 2758	5.8	9.0	3.3	7.5	7.0	8.0	5.5	4.8
6 Martha	5.7	8.5	7.0	6.8	6.5	6.3	6.8	7.5
7 PPG-KB 1131	5.4	7.8	2.0	5.3	3.5	8.0	4.3	5.3
8 LTP-11-41	5.4	9.0	4.3	7.8	7.3	8.8	6.8	6.0
9 Jackrabbit	5.3	8.3	4.3	4.5	7.0	7.8	5.3	4.5
10 SRX 466	5.1	8.5	3.5	7.0	7.3	8.8	4.5	5.0
11 Legend	5.1	7.0	3.5	2.8	6.0	5.3	5.0	5.5
13 United	5.1	8.3	3.8	3.5	5.5	6.5	5.5	3.5
12 Fullback	5.1	8.5	1.8	7.0	4.0	8.3	3.8	5.3
14 Bluebank	4.9	8.5	2.3	6.0	3.3	7.5	4.3	4.5
15 Zinfandel	4.7	5.0	5.3	3.5	5.3	7.5	4.5	7.0
16 Merlot	4.5	5.5	3.8	3.5	5.3	4.3	4.0	5.0
17 A11-38	4.4	5.5	4.0	2.5	4.8	6.8	4.5	3.3
18 A12-34	4.1	4.3	5.5	2.8	4.5	4.5	4.0	4.5
20 MVS-130	4.1	3.8	5.5	4.5	4.0	5.8	3.8	3.0
19 Champagne	4.1	4.0	4.5	2.3	5.8	6.3	4.8	2.5
21 Hampton	4.0	7.5	2.8	5.5	5.8	8.5	3.8	3.5
22 Bordeaux	3.3	3.0	5.8	2.3	4.8	4.0	3.8	2.8
23 PPG-KB 1320	3.0	8.3	2.0	7.0	3.0	8.3	4.3	1.0

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(Continued)

Table 6. Kentucky bluegrass turf trial, 2017 (A-LIST) (continued).

Cultivar or Selection	Turf Quality ¹ 2018 Avg.	Establishment ² 6 Oct. 2017	Stem Rust ³ 3 Nov. 2017	Mesotrione Damage ⁴ 16 Oct. 2017	Spring Green-up ⁵ 19 April 2018	Seed Heads ⁶ 30 May 2018	Summer Stress ⁷ 11 July 2018	Drought Stress ⁸ 6 Sept. 2018
LSD at 5% =	0.7	1.1	1.1	1.3	1.2	1.2	1.2	1.3

¹9 = best turf quality

²9 = best establishment

³9 = least disease

⁴9 = least bleaching response

⁵9 = earliest spring green-up

⁶9 = fewest seed heads

⁷9 = best quality under summer stress

⁸9 = best quality under drought stress

Table 7. Performance of Kentucky bluegrass cultivars and selections in a turf trial organized by the National Turfgrass Evaluation Program (NTEP), seeded in September 2017 at Adelphia, NJ.

Cultivar or Selection	Turf Quality ¹	Establishment ² (%)	Mesotrione Damage ³	-----Genetic Color ⁴ -----			Summer Patch ⁵	Cover ⁶
	2018 Avg.	6 Oct. 2017	16 Oct. 2017	10 May 2018	9 Nov. 2018	2018 Avg.	21 Aug. 2018	2 Oct. 2018
1 PPG-KB 1304	7.1	69.0	9.0	5.7	7.7	6.7	8.0	95.0
2 MVS-280*	6.8	64.0	6.0	7.0	9.0	8.0	9.0	96.3
3 DLFPS-340/3556	6.7	68.0	5.0	8.0	5.7	6.8	7.3	93.3
4 J-3510	6.7	94.0	9.0	8.3	8.0	8.2	7.7	96.3
5 Barserati	6.6	83.7	4.7	4.3	3.3	3.8	8.7	99.0
6 A11-26	6.6	78.3	7.0	7.7	7.0	7.3	7.0	95.0
7 A04-383†	6.6	97.3	9.0	4.0	2.7	3.3	8.7	99.0
8 GO-2425	6.6	65.0	3.3	7.7	6.7	7.2	6.7	97.7
9 A99-2897	6.5	79.0	6.0	8.0	8.7	8.3	8.0	97.7
10 A-16-17	6.5	65.0	1.0	4.3	4.0	4.2	7.3	96.0
11 Barvette HGT	6.4	83.7	7.0	3.0	4.0	3.5	8.0	99.0
12 GO-2628	6.4	73.0	4.0	7.3	7.0	7.2	8.0	97.7
13 DLFPS-340/3553	6.3	64.3	8.7	6.0	6.7	6.3	7.0	85.0
14 A13-1	6.2	55.0	2.7	7.0	7.7	7.3	8.7	96.3
15 J-1138	6.1	90.7	8.3	8.0	7.7	7.8	7.3	94.7
16 BAR PP 79366	6.1	37.0	3.0	7.3	6.3	6.8	7.7	97.7
17 GO-22B23	6.1	67.0	3.0	7.3	6.0	6.7	6.7	94.7
18 DLFPS-340/3500	5.9	28.3	2.7	7.7	6.7	7.2	7.7	99.0
19 AKB3128	5.9	85.0	5.7	6.0	7.7	6.8	6.3	95.0
20 BAR PP 7236V	5.9	84.0	3.3	3.7	3.3	3.5	9.0	97.7
21 LTP-11-41	5.8	81.0	8.7	6.0	7.3	6.7	6.0	83.3
22 DLFPS-340/3550	5.8	75.3	6.7	8.3	7.7	8.0	7.7	95.0
23 A06-8	5.8	61.7	3.0	6.7	6.7	6.7	7.0	86.7
24 PST-K15-172	5.8	75.7	4.3	7.7	5.7	6.7	7.7	96.3
25 Twilight	5.7	87.0	8.7	8.7	8.3	8.5	6.7	88.3

(Continued)

Table 7. Kentucky bluegrass turf trial, 2017 (NTEP) (continued).

Cultivar or Selection	Turf Quality ¹	Establishment ² (%)	Mesotrione Damage ³	-----Genetic Color ⁴ -----			Summer Patch ⁵	Cover ⁶
	2018 Avg.	6 Oct. 2017	16 Oct. 2017	10 May 2018	9 Nov. 2018	2018 Avg.	21 Aug. 2018	2 Oct. 2018
26 BAR PP 7K426	5.7	79.0	4.3	5.0	4.7	4.8	8.0	96.0
27 DLFPS-340/3494	5.7	62.7	4.7	8.3	4.0	6.2	7.3	97.7
28 DLFPS-340/3551	5.7	65.0	3.0	8.0	6.3	7.2	8.0	93.3
29 J-1319	5.7	87.7	8.0	9.0	9.0	9.0	5.3	80.0
30 Jersey	5.6	80.0	5.0	6.0	4.7	5.3	5.0	81.7
31 Pulsar	5.6	88.0	9.0	7.7	7.3	7.5	6.3	91.7
32 Yellowstone	5.6	51.0	4.3	7.0	7.0	7.0	6.0	88.3
33 United	5.6	87.3	8.3	7.7	7.3	7.5	7.0	93.0
34 Midnight	5.6	93.7	9.0	7.3	7.3	7.3	7.3	91.7
35 A11-40	5.6	79.7	5.3	4.0	6.0	5.0	5.0	68.3
36 AKB3179	5.6	71.3	6.7	8.0	5.7	6.8	5.7	80.0
37 DLFPS-340/3552	5.6	66.0	3.0	6.3	6.0	6.2	7.3	94.7
38 BAR PP 71213	5.5	56.0	2.3	3.0	2.0	2.5	6.7	95.0
39 A-16-2	5.5	59.7	4.0	7.0	6.0	6.5	5.7	85.0
40 Skye	5.4	56.7	3.3	7.3	6.7	7.0	7.0	92.7
41 J-2726	5.3	75.0	5.3	8.3	6.0	7.2	5.7	85.0
42 After Midnight	5.3	79.3	7.7	8.3	9.0	8.7	7.3	91.7
43 PST-K11-118	5.3	65.0	5.3	3.3	3.7	3.5	7.0	93.3
44 Blue Devil	5.3	81.0	8.3	8.3	8.0	8.2	6.3	90.0
45 DLFPS-340/3455	5.3	80.7	5.3	4.0	6.0	5.0	6.3	83.3
46 Pivot	5.2	67.0	6.3	7.3	6.0	6.7	7.0	86.7
47 PST-K13-141	5.2	80.0	6.7	6.7	7.7	7.2	7.3	95.0
48 PST-T14-139	5.2	49.3	2.3	6.3	7.0	6.7	7.3	95.0
49 BAR PP 7309V	5.2	67.3	2.7	5.0	4.7	4.8	6.3	88.3
50 PPG-KB 1131	5.2	63.0	6.7	8.3	7.7	8.0	7.0	90.0

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(Continued)

Table 7. Kentucky bluegrass turf trial, 2017 (NTEP) (continued).

Cultivar or Selection	Turf Quality ¹	Establishment ² (%)	Mesotrione Damage ³	-----Genetic Color ⁴ -----			Summer Patch ⁵	Cover ⁶
	2018 Avg.	6 Oct. 2017	16 Oct. 2017	10 May 2018	9 Nov. 2018	2018 Avg.	21 Aug. 2018	2 Oct. 2018
51 DLFPS-340/3438	5.2	61.0	3.0	7.3	7.3	7.3	6.7	85.0
52 PST-K15-177	5.2	54.3	5.3	8.7	8.7	8.7	6.3	91.7
53 PST-K15-157	5.1	72.7	6.0	7.3	8.7	8.0	5.7	78.3
54 DLFPS-340/3548	5.1	61.0	4.0	6.3	8.0	7.2	5.7	70.0
55 AKB3241	5.0	49.3	5.0	8.0	7.0	7.5	7.7	93.3
56 NK-1	5.0	74.3	3.0	7.7	7.3	7.5	7.0	91.7
57 PST-11-7	5.0	70.0	7.7	7.0	4.3	5.7	6.3	86.7
58 DLFPS-340/3446	4.9	68.7	3.7	7.3	7.7	7.5	6.7	86.7
59 KH3492	4.9	69.3	4.0	5.7	4.7	5.2	5.3	73.3
60 BAR PP 79494	4.8	59.3	6.0	8.3	8.0	8.2	6.0	81.7
61 NAI-15-80	4.8	36.7	3.7	8.3	6.7	7.5	6.0	85.0
62 NAI-14-132	4.8	45.0	5.0	9.0	9.0	9.0	4.7	75.0
63 RAD 553	4.7	78.0	3.3	5.0	4.3	4.7	6.3	83.3
64 A12-34	4.7	33.7	2.7	9.0	8.0	8.5	6.0	88.3
65 NAI-14-128	4.6	47.3	5.0	8.7	8.7	8.7	4.3	71.7
66 NAI-14-133	4.6	50.7	4.3	7.7	8.3	8.0	5.7	73.3
67 Shamrock	4.6	73.7	5.7	7.0	5.7	6.3	4.0	70.0
68 Prosperity	4.6	93.3	8.7	8.3	7.0	7.7	4.7	68.3
69 Babe	4.6	78.3	6.0	4.7	6.0	5.3	5.7	78.3
70 MVS-130	4.5	35.0	5.0	8.7	8.7	8.7	5.7	85.0
71 A16-7	4.5	49.3	5.3	7.7	7.3	7.5	5.3	75.0
72 PST-K15-167	4.4	73.0	5.0	7.0	5.7	6.3	7.3	90.0
73 NAI-14-176	4.3	39.3	5.0	8.3	9.0	8.7	4.0	61.7
74 DLFPS-340/3549	4.3	45.3	3.0	5.0	4.7	4.8	4.7	71.7
75 A11-38	4.3	54.3	2.7	5.0	5.0	5.0	5.3	75.0

(Continued)

Table 7. Kentucky bluegrass turf trial, 2017 (NTEP) (continued).

Cultivar or Selection	Turf Quality ¹	Establishment ² (%)	Mesotrione Damage ³	-----Genetic Color ⁴ -----			Summer Patch ⁵	Cover ⁶ (%)
	2018 Avg.	6 Oct. 2017	16 Oct. 2017	10 May 2018	9 Nov. 2018	2018 Avg.	21 Aug. 2018	2 Oct. 2018
76 Aviator II	4.2	65.0	5.0	7.7	8.3	8.0	4.3	51.7
77 NAI-14-187	4.2	29.3	5.0	9.0	8.7	8.8	4.3	66.7
78 NAI-14-122	4.1	39.3	5.0	8.7	8.0	8.3	4.7	68.3
79 A-15-6	4.1	38.7	3.0	8.0	8.0	8.0	5.3	88.3
80 A16-1	4.0	62.3	4.0	6.7	5.3	6.0	3.3	65.0
81 RAD-1776	3.9	61.7	2.0	4.3	5.0	4.7	5.0	71.7
82 PST-K13-139	3.9	41.0	2.3	7.0	8.0	7.5	3.7	45.0
83 Selway	3.9	62.3	2.3	4.7	4.0	4.3	4.7	78.3
84 Orion	3.7	54.3	3.0	5.0	6.0	5.5	5.3	80.0
85 DLFPS-340/3444	3.6	64.0	4.0	6.0	4.7	5.3	4.0	61.7
86 NAI-14-178	3.4	17.3	2.0	4.7	5.7	5.2	5.3	86.7
87 PPG-KB 1320	2.9	66.7	8.3	8.7	5.0	7.0	1.7	23.3
88 Kenblue	2.7	93.7	5.7	2.7	2.7	2.7	2.0	33.3
89 DLFPS-340/3364	2.6	12.0	3.7	8.3	7.7	8.0	6.0	85.0
90 Blue Knight	2.2	51.7	4.0	7.3	6.0	6.5	3.0	40.0
LSD at 5% =	0.7	14.5	1.4	1.5	1.6	1.2	1.4	13.4

¹9 = best turf quality

²100 = complete turf establishment

³9 = least bleaching response

⁴9 = darkest genetic color

⁵9 = least disease

⁶100 = complete turf cover

*Texas bluegrass hybrid in which plants contain a percentage of Texas bluegrass genetics in a Kentucky bluegrass parental background

† Additional entry not included in other NTEP trials

Table 8. Yearly nitrogen (N) applied and mowing height (Ht) on Kentucky bluegrass tests established at Adelphia and North Brunswick, NJ.

	2016		2017		2018	
	Ht ²	N ¹	Ht	N	Ht	NHt
Table 1 (2015 Adelphia).....	4.40	1.5	4.75	1.5	2.75	1.5
Table 2 (2016 Adelphia).....			4.00	1.5	3.50	1.5
Table 3 (2016 North Brunswick)			2.48	3.0	2.30	3.0
Table 4 (2017 Adelphia).....					4.25	1.5
Table 5 (2017 Adelphia).....					1.25	3.0
Table 6 (2017 Adelphia A-LIST).....					1.25	3.0
Table 7 (2017 Adelphia NTEP).....					4.25	1.5

¹Annual N applied (lb/1000 ft²)

²Mowing height in inches