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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, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

This publication includes lecture notes of papers presented at the 2019 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, 2019

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INTRODUCTION

Kentucky bluegrass (*Poa pratensis* L.) is a cool-season turfgrass that is widely used throughout the northern United States and Canada. The rhizomatous growth and sod-forming capability of Kentucky bluegrass is one of its most important traits that led to its widespread popularity. The formation of these underground stems allows rapid spreading and colonization after establishment. These rhizomes can improve the recovery of Kentucky bluegrass stands from stress or damage owing to its popularity in sports field settings. Although Kentucky bluegrass was once considered the premier lawn grass in the United States, the drawbacks of Kentucky bluegrass including slow germination, poor shade tolerance, disease susceptibility and high water and fertility requirements have led to the increased popularity in other cool-season turfgrass species (Turgeon, 2008). Additionally, the interest in reducing inputs has somewhat reduced the popularity of Kentucky bluegrass for home lawns. However, Kentucky bluegrass can maintain excellent quality when managed properly and is the grass of choice for many professional and high-end sports fields.

Kentucky bluegrass reproduces asexually through seed, a process known as apomixis. This process is facultative in the species resulting in varying rates of sexual reproduction. Only highly apomictic Kentucky bluegrasses, those producing predominantly clonal seed, are desirable for turfgrass use. This contributes to most of the uniformity seen in cultivars of this species; it 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* L.), 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 NJ 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 our cooperation with the Alliance for Low Input Sustainable Turf (A-LIST), Rutgers also participates in the National Turfgrass Evaluation Program (NTEP), which is sponsored by the USDA Beltsville Agricultural Research Center and National Turfgrass Federation, Inc. A-LIST is a national, non-profit organization dedicated to assisting turfgrass managers through the testing of quality turfgrasses, under sustainable management conditions, carried out at universities across the country. Information on A-LIST, including national results can be found at <http://www.a-listturf.org>. NTEP is a program focused on the cooperation of many institutions nationwide to test different turfgrass cultivars and selections in a variety of environments to assess their performance in a broad range of locations. Proceedings from all trials conducted by NTEP can be found at <http://www.ntep.org>.

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PROCEDURES

Seven Kentucky bluegrass trials were seeded from 2016 to 2018. These trials were located at the Rutgers Plant Biology and Pathology Research and Extension Farm at Adelphia, NJ (Tables 1, 3, 4, 5, 6, and 7) and North Brunswick, NJ (Table 2). These trials were planted by sowing a maximum of 0.53 oz of seed in 3 x 5 ft plots (2.2 lbs of seed per 1000 ft²). The trials were all arranged in a randomized complete block design with three replications. Mesotrione was applied at the time of seeding and four weeks after emergence at 5oz per 1000 ft² for control of annual bluegrass and other weeds. Annual nitrogen (19-0-9) rates as well as the mowing heights for each trial are presented in table 8. Nitrogen rates were not constant for all the fields to manage diseases or foster recovery from various stresses as well as to conduct low maintenance trials (Tables 2, 4 and 5). Single nitrogen application rates never exceeded 0.75 lb N/1000 ft². Mowing heights were maintained as outlined in table 8 by using rotary mowers.

After establishment, annual weeds were controlled using spring applications of dithiopyr 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 June to control grubs on all tests presented. Depending on soil test results, soil pH was maintained between 6.0 and 6.5 with granular dolomitic limestone. Tests were irrigated during establishment with standard tests mowed at 1.5 inches receiving irrigation when needed to avoid severe drought stress and low maintenance tests mowed at 3 inches without any supplemental irrigation.

Monthly ratings of all trials were conducted throughout the growing season for overall quality. Overall turf quality ratings are visual assessments that consider color, 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 1-7 are presented with selections grouped according to species and 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. While ratings from previous years are included in the tables, only the supplemental ratings from the year under review will be discussed. Please review previous proceedings for discussion on previous ratings of interest. Supplemental ratings in 2019 include summer patch (Tables 1, 3, and 6), spring green-up (Tables 3 and 6), genetic color (Tables 5 and 6), establishment (Table 7), and stem rust (Table 7).

RESULTS

Turf Quality

Turf quality, as the overall measure of performance as a turfgrass, provides a comprehensive evaluation of entries. This measure reflects turfgrass traits including, but not limited to, texture and density as well as biotic and abiotic stress factors present at the time of rating. Entries with the highest turf quality under standard management include A04TB-258, Martha, PPG-KB 1304, Twilight and Granite while PST-4-H1, Blue Ghost, PPG-KB 1320, Prafin, and Bluestar (Tables 1, 3, 6, and 7). Under low management conditions, A05-853, A16-225, H03-556, Bolt, and A11-40 produced the highest quality turf while KB15OT-35, PST-TX8-56, and PPG-KB 1320 had the lowest turf quality (Tables 2, 4, and 5).

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 A05-853, A16-225, H03-556, and Bolt while Rubix, KB15OT-35, and PST-TX8-56 are some of the entries that exhibited lower quality under this management level (Tables 2 and 4).

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 *Magnaporthiopsis 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 stress factors such as heat. Over the past several years, timely early summer rains have provided conditions conducive for disease epidemics in NJ. Entries with the least summer patch at time of rating include Bolt, A07-782, A10-280, A13-1, PST-K15-182, and Barserati, while entries such as PST-T14-37, A16-20, and PPG-KB 1320 were more severely infected (Tables 1, 3, and 6).

Spring Green-up

This trait varies widely among Kentucky bluegrass genotypes. 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 PST-K15-169, A17-9, PST-K15-167, Twilight, and BAR PP 79494 were slow to green up while A12-287, KenBlue, A15-1091, Hampton, Barserati, and PPG-KB 1304 were quicker to green up (Tables 3 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 color 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 Fullback, Barvette HGT, and BAR PP 71213 while the darker entries include A12-34, MVS-130, Bordeaux, Prosperity, After Midnight, New Moon, J-1319, Comanche, NAI-14-122, Blue Devil, NAI-14-132, United, and Blue Gem. (Tables 5 and 6).

Establishment

Green cover after establishment is an important characteristic to consumers, sod-growers, and many other turf managers alike. 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. Entries such as A15-2, PST-T14-39, KB16OT-2, NAI-13-79, Blue Ghost, Prafin, and Bluestar were slow to establish while entries such as A18-9 and A17-835 established more quickly (Table 7).

Stem Rust

Stem rust can be a potentially devastating disease on Kentucky bluegrass caused by the fungus *Puccinia graminis*. Light yellowing of the turf gives way to brick red pustules that colonize the individual leaves. The pustules create a reddish appearance in the turf when allowed to persist. The red spores are released when disturbed and can discolor materials that touch them including shoes, bags, and pants making this disease even more problematic. The most susceptible selections in the trial include Prosperity, Blue Ghost, and PST-K18-198 while some of the most resistant selections include Touche, Avalanche, Granite, and Bolt (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 incredibly stressful conditions, but work is needed to prevent the initial damage to the turfgrass. Improved resistance to important diseases, pests, and abiotic stresses is needed if cultivars are to perform well across diverse environments.

ACKNOWLEDGMENTS

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Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.				
1 A04TB-258	6.5	5.9	6.2	7.5	4.7	5.0	5.7	7.0
2 RAD-3240	6.3	6.4	6.4	6.1	6.3	5.0	5.0	7.0
3 Avalanche	6.2	5.9	6.1	6.7	6.7	7.3	6.3	7.7
4 Bolt	6.2	6.0	5.8	6.8	5.7	6.7	6.0	8.3
5 LTP-11-41	6.2	5.6	6.2	6.8	5.7	4.7	5.0	7.7
6 A07-782	6.1	5.6	5.8	7.0	3.0	3.3	6.7	8.0
7 Jersey	6.1	5.1	6.3	6.8	7.0	5.0	7.3	7.0
8 A04-67	6.0	5.2	5.8	7.0	7.7	8.0	5.3	6.7
9 PST-T15-46	5.9	6.3	5.6	5.9	4.7	4.3	7.0	5.7
10 KB13OT-4	5.9	5.5	5.8	6.5	6.7	6.0	3.7	6.3
11 Legend	5.9	5.5	5.7	6.4	4.3	4.7	7.0	7.7
12 A05-361	5.9	5.9	5.9	5.8	5.7	5.3	6.0	7.7
13 A16-228	5.9	6.3	5.8	5.6	5.7	6.7	4.0	7.0
14 A06-11	5.8	6.1	5.9	5.4	7.3	6.7	6.0	7.3
15 PST-C-74	5.8	5.6	5.8	6.0	6.7	4.0	5.7	7.7
16 Blue Note	5.7	5.1	6.0	6.0	6.7	5.7	7.3	7.7
17 A16-231	5.7	6.4	5.3	5.3	5.7	7.0	3.3	5.0
18 Glade	5.6	5.5	5.0	6.3	4.3	4.3	4.3	6.3
19 Yellowstone	5.6	5.0	5.5	6.3	4.7	4.7	6.0	5.3
20 Bluestar	5.6	4.9	5.7	6.1	6.7	6.0	7.0	7.0

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Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
21	Pulsar	5.6	5.3	5.6	5.8	3.0	2.7	5.0	6.7
22	A99-3122	5.6	5.6	5.8	5.3	5.7	5.3	7.0	5.7
23	NAI-13-79	5.6	5.1	5.3	6.2	1.7	3.0	4.7	6.7
24	Midnight	5.6	5.2	5.4	6.1	3.0	3.0	5.3	6.3
25	A16-220	5.5	5.5	5.2	5.9	3.0	2.7	4.7	6.0
26	A10-245	5.5	5.7	5.5	5.4	6.0	5.0	7.3	7.0
27	A16-222	5.5	5.2	5.3	6.1	2.7	3.0	6.0	6.3
28	A16-14	5.5	5.2	5.4	5.9	5.3	5.7	7.0	7.0
29	PST-K14-144	5.5	4.9	5.1	6.3	4.3	4.0	5.3	5.7
30	United	5.4	4.2	5.4	6.7	3.0	3.0	4.7	6.7
31	NAI-14-128	5.4	4.9	5.7	5.7	4.0	2.3	8.0	6.0
32	PST-K12-129	5.4	5.5	5.3	5.5	6.3	4.7	7.3	5.3
33	A11-49	5.4	4.9	5.1	6.3	2.3	4.7	8.3	6.7
34	A16-221	5.4	5.2	5.1	5.9	2.7	3.0	4.7	6.0
35	Pivot	5.4	5.2	5.2	5.9	3.7	3.0	4.7	6.0
36	NAI-13-10	5.4	4.4	5.5	6.3	6.3	6.0	6.0	7.0
37	A13-1	5.4	5.2	5.0	6.0	2.3	4.3	7.0	6.3
38	PST-K13-137	5.4	4.7	5.7	5.8	6.3	6.0	8.3	5.7
39	A06-8	5.4	5.3	5.8	5.0	6.0	5.7	6.3	5.3
40	Twilight	5.4	4.8	5.3	6.0	1.7	2.3	5.0	7.0

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
41	A11-398	5.4	5.0	4.7	6.3	3.3	4.3	6.7	5.7
42	A11-53	5.4	4.3	5.2	6.5	2.0	4.7	8.0	6.3
43	A11-38	5.4	4.8	5.6	5.6	5.7	5.0	5.3	7.7
44	A16-2	5.3	5.0	5.3	5.8	5.7	6.3	6.0	5.7
45	Diva	5.3	5.5	5.0	5.5	7.0	6.7	4.0	6.3
46	A12-30	5.3	5.0	5.6	5.4	5.0	4.7	7.0	5.0
47	A10-244	5.3	5.1	5.7	5.2	5.3	5.3	6.3	7.3
48	A10-249	5.3	5.3	5.1	5.6	3.7	4.3	6.7	6.3
49	KB15OT-29	5.3	4.6	5.3	6.1	5.7	5.0	4.0	7.7
50	Orion	5.3	5.2	5.2	5.5	5.7	4.7	4.0	7.0
51	A14-424	5.3	5.0	5.3	5.6	7.3	6.7	4.0	5.7
52	A07-385	5.3	4.2	5.5	6.2	4.3	3.7	7.0	6.3
53	Rubix	5.3	4.4	5.5	6.0	6.0	7.0	7.0	5.0
54	A16-245	5.3	5.6	4.6	5.7	2.7	1.7	5.0	7.0
55	A16-225	5.3	5.3	5.3	5.3	4.7	3.0	6.0	6.7
56	Rubicon	5.3	5.0	5.2	5.6	7.0	7.7	6.3	5.3
57	A14-2	5.3	5.4	5.0	5.4	5.7	5.7	8.0	7.0
58	A16-17	5.3	4.9	4.6	6.3	3.0	4.0	6.7	7.7
59	A12-57	5.3	5.5	5.2	5.0	5.3	4.7	3.7	5.3
60	A14-26	5.2	5.5	5.7	4.5	3.7	1.7	7.3	4.7

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
61	Bluebank	5.2	4.7	5.2	5.7	3.0	2.7	7.3	7.0
62	A16-12	5.2	4.7	5.4	5.6	5.7	6.0	7.0	5.7
63	Chloe	5.2	4.6	5.6	5.5	4.0	4.7	8.0	5.3
64	PST-K15-157	5.2	5.8	5.4	4.5	6.3	5.3	6.7	4.7
65	A11-47	5.2	4.6	4.9	6.2	2.7	4.7	7.7	5.0
66	Hampton	5.2	5.3	4.9	5.5	4.3	5.7	5.7	6.0
67	PST-T14-40	5.2	5.2	5.0	5.4	6.0	4.7	3.7	6.7
68	A16-224	5.2	5.0	5.2	5.4	2.7	3.0	4.7	5.7
69	NAI-14-124	5.2	4.7	5.4	5.5	3.7	1.3	7.7	6.0
70	Arrowhead	5.2	4.5	5.6	5.4	4.7	5.0	7.7	5.7
71	A06-33	5.2	5.0	5.2	5.4	6.0	7.0	6.7	6.3
72	A16-226	5.2	4.9	4.8	5.9	2.3	2.3	4.7	6.3
73	KB15OT-22	5.2	4.9	5.0	5.6	5.7	5.3	4.7	7.0
74	A14-9	5.2	4.8	5.4	5.3	4.3	5.3	8.7	7.0
75	A14-345	5.2	4.5	4.8	6.2	4.0	4.3	5.7	6.7
76	A12-267	5.2	4.3	4.5	6.7	3.7	4.3	5.3	7.7
77	A14-233	5.2	4.4	5.1	6.0	7.0	6.3	5.7	6.0
78	PST-K13-141	5.2	5.2	4.8	5.4	5.0	5.7	5.0	6.7
79	A16-7	5.1	4.9	5.0	5.6	4.0	5.0	8.0	7.0
80	A98-879	5.1	5.1	5.1	5.2	5.7	5.0	5.3	5.0

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.				
81	A16-8	5.1	5.0	5.4	5.0	5.3	4.3	6.3
82	NAI-14-132	5.1	5.0	5.2	5.2	3.3	7.3	5.7
83	Bluecoat	5.1	4.8	5.7	4.9	4.7	2.0	7.0
84	A05-853	5.1	4.9	4.2	6.2	4.0	5.3	5.7
85	Mystere H2O	5.1	5.0	5.3	5.0	4.3	5.0	6.7
86	A14-15	5.1	4.8	5.2	5.3	5.0	5.0	7.0
87	A10-871	5.1	4.7	4.8	5.7	2.7	4.0	6.3
88	Dauntless	5.1	4.9	5.1	5.3	5.3	6.0	6.0
89	PST-11-112	5.1	4.8	5.4	5.1	5.3	6.0	7.7
90	Apollo H2O	5.1	5.2	4.9	5.2	3.7	4.7	6.7
91	NAI-14-133	5.1	4.9	5.4	5.0	3.0	1.3	7.7
92	NAI-14-122	5.1	4.6	5.1	5.6	4.0	2.3	7.0
93	A14-10	5.1	4.9	5.1	5.2	4.3	4.3	6.0
94	NAI-14-130	5.1	5.0	5.3	4.9	4.0	2.0	7.7
95	A14-20	5.1	5.2	5.3	4.7	7.0	4.7	6.0
96	A14-422	5.1	5.1	4.8	5.3	6.7	5.3	3.0
97	PST-11-7	5.0	4.3	5.2	5.7	5.3	5.3	7.7
98	A14-3	5.0	4.6	4.9	5.7	3.7	5.0	6.7
99	A16-230	5.0	4.7	4.6	5.8	2.3	2.3	5.0
100	PST-R14-279	5.0	4.8	5.0	5.3	5.7	6.0	6.3

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
101	A16-253	5.0	5.2	4.7	5.2	2.7	2.3	5.0	5.7
102	Bluedevil/Prafin	5.0	4.6	4.9	5.5	5.7	5.0	5.3	6.0
103	A11-770	5.0	4.5	4.4	6.1	6.7	7.7	2.3	5.3
104	A14-13	5.0	5.0	4.9	5.1	3.3	3.3	5.3	3.3
105	NAI-14-176	5.0	5.1	5.6	4.3	3.7	1.3	6.3	5.0
106	A13-325	5.0	4.6	5.2	5.2	7.3	5.7	5.3	6.0
107	NAI-14-127	5.0	4.4	5.4	5.2	3.0	1.3	7.7	5.3
108	KB15OT-24	5.0	4.7	5.1	5.1	6.3	6.3	4.0	6.7
109	PST-K15-172	5.0	5.3	5.1	4.4	5.0	3.7	5.0	5.3
110	A16-15	4.9	5.0	5.3	4.4	5.3	5.0	7.3	5.7
111	A16-219	4.9	4.9	4.6	5.3	3.7	3.3	4.0	6.0
112	PST-105-69	4.9	4.8	4.5	5.4	5.3	6.7	4.3	6.0
113	Fahrenheit 90	4.9	4.8	4.9	5.0	4.7	4.7	4.0	6.7
114	PST-K13-140	4.9	4.7	5.1	4.9	7.0	6.7	6.3	4.7
115	A14-234	4.9	4.3	4.5	5.8	5.3	6.3	5.0	6.3
116	Orion	4.9	4.4	5.1	5.2	5.7	5.0	5.0	6.3
117	A16-4	4.9	4.8	4.9	4.9	5.3	5.7	6.3	5.3
118	Appalachian	4.9	5.0	4.8	4.8	7.0	7.3	3.3	6.0
119	KB13OT-17	4.9	5.2	4.8	4.6	5.0	5.0	4.0	6.0
120	NAI-13-39	4.8	4.5	4.7	5.3	5.7	6.0	5.3	7.0

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
121	PST-4-C2	4.8	5.0	4.4	5.2	4.0	4.3	4.0	4.7
122	P-105	4.8	4.1	4.6	5.8	4.3	4.3	4.0	6.3
123	Aries	4.8	4.3	4.8	5.4	6.0	6.3	6.0	5.3
124	NAI-14-126	4.8	4.6	5.0	4.9	3.7	1.0	7.3	5.7
125	PST-K15-178	4.8	5.1	4.9	4.5	5.3	4.3	3.0	6.3
126	Finish Line	4.8	4.4	5.1	5.0	6.3	7.7	6.3	4.0
127	A14-4	4.8	4.7	5.1	4.6	6.0	3.7	6.3	6.0
128	CRS630	4.8	4.5	4.7	5.1	5.7	5.7	5.0	5.0
129	A13-683	4.8	4.9	4.4	5.0	6.0	8.3	3.7	6.0
130	PST-K14-152	4.8	4.5	5.0	4.8	5.7	4.7	6.0	4.7
131	A10-241	4.8	4.9	4.8	4.6	3.3	5.0	7.0	5.7
132	A13-332	4.8	4.9	4.9	4.4	7.0	5.0	3.7	6.0
133	Gladestone	4.7	4.1	5.0	5.1	3.7	5.0	5.3	5.0
134	Slingshot	4.7	4.3	4.7	5.2	4.7	6.0	5.0	6.0
135	A09-231	4.7	4.4	4.8	4.9	5.7	5.7	5.7	5.0
136	KB13OT-13	4.7	4.8	4.3	5.0	6.7	6.3	3.7	6.0
137	A14-31	4.7	5.0	4.9	4.2	4.7	4.0	6.0	5.7
138	Fullback	4.7	4.4	4.6	4.9	5.0	5.0	7.0	6.0
139	PST-K15-169	4.7	4.5	4.8	4.7	2.7	1.3	5.0	6.0
140	A13-347	4.7	4.7	4.9	4.4	8.0	6.7	3.0	6.7

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
141	PST-T14-37	4.7	5.3	5.8	2.9	5.7	3.7	6.7	1.7
142	A10-280	4.6	4.8	4.6	4.5	5.3	6.7	3.7	6.7
143	KB15OT-47	4.6	4.3	4.6	4.9	4.7	5.0	6.0	5.3
144	PST-K15-171	4.6	4.9	4.9	3.9	3.7	3.7	8.0	3.0
145	Jumpstart	4.6	4.6	4.5	4.7	7.7	7.3	4.0	5.3
146	PST-K15-166	4.6	5.0	4.3	4.4	6.3	5.3	6.3	5.7
147	PST-T14-39	4.6	4.5	5.0	4.2	6.3	5.0	5.3	3.7
148	A16-18	4.6	4.6	5.0	4.1	6.3	5.7	7.0	3.7
149	A16-16	4.6	5.2	4.0	4.5	4.3	5.3	3.7	5.0
150	PST-K13-139	4.6	4.6	4.7	4.4	5.3	5.0	4.0	4.3
151	NAI-15-110	4.6	4.9	4.5	4.3	6.0	4.7	4.7	5.3
152	PST-K15-168	4.6	5.5	4.8	3.4	5.0	3.0	6.7	2.7
153	SPF 30	4.5	4.3	4.0	5.3	4.0	4.7	5.0	6.0
154	A11-778	4.5	4.7	4.2	4.6	7.3	6.7	1.3	6.0
155	PST-T15-43	4.5	4.3	4.4	4.8	5.0	4.7	7.0	5.7
156	A14-229	4.5	4.7	4.2	4.7	4.7	1.0	3.7	5.7
157	PST-K15-163A	4.5	4.6	4.6	4.3	5.0	4.3	4.7	5.0
158	NAI-15-89	4.5	4.4	3.8	5.2	5.7	5.3	4.0	5.7
159	Endurance	4.5	4.2	4.4	4.8	4.3	5.0	6.7	5.3
160	Lunar	4.5	4.4	4.6	4.4	4.3	4.3	5.0	4.7

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
161	PST-K15-173	4.4	4.3	4.7	4.2	4.7	5.0	6.3	3.3
162	A10-238	4.4	4.6	4.6	4.2	4.0	4.7	8.0	6.3
163	Heartland	4.4	4.6	4.8	3.9	4.7	1.7	6.7	4.3
164	A16-19	4.4	4.0	4.8	4.4	6.0	6.3	5.7	3.0
165	Courtyard	4.4	4.0	4.5	4.7	2.7	3.3	6.7	6.0
166	Moonshine	4.4	4.3	4.4	4.5	5.0	5.7	5.3	5.3
167	PST-K15-177	4.4	4.8	4.8	3.6	5.3	4.0	7.0	2.3
168	Rockstar	4.4	4.3	4.0	4.8	5.3	5.7	5.0	5.0
169	PST-T13-32	4.4	4.3	4.3	4.5	4.0	3.3	4.3	4.3
170	PST-T14-41	4.4	4.7	4.7	3.7	5.3	4.3	6.3	4.3
171	A15-4	4.3	4.5	4.3	4.2	5.3	5.3	4.0	4.7
172	PST-K15-167	4.3	4.8	4.6	3.6	4.0	2.0	5.7	4.7
173	Nobel	4.3	4.2	4.1	4.7	5.0	5.7	5.3	5.3
174	KB13OT-19	4.3	3.9	4.4	4.6	5.0	5.0	5.3	5.3
175	A13-679	4.3	3.9	3.8	5.1	7.0	6.7	1.7	6.0
176	A16-10	4.3	4.5	4.0	4.3	4.7	5.7	5.0	5.0
177	NAI-14-121	4.3	4.3	4.4	4.1	3.0	3.3	5.0	5.0
178	A12-34	4.3	4.7	4.5	3.7	5.7	4.7	6.3	5.0
179	A14-14	4.3	4.8	4.4	3.6	4.7	5.3	6.0	4.7
180	PST-K15-158	4.2	4.5	4.3	3.9	7.0	3.3	2.7	3.7

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
181	KB15OT-32	4.2	4.1	4.3	4.4	3.0	4.3	4.0	6.7
182	RAD-3383	4.2	4.8	3.9	4.0	5.0	5.3	3.0	3.7
183	A16-20	4.2	5.0	4.3	3.4	8.0	7.3	1.7	1.7
184	A12-266	4.2	4.4	4.1	4.1	2.7	4.3	7.3	5.0
185	Tirem	4.2	5.1	4.2	3.3	8.7	7.0	3.0	4.7
186	Wild Horse	4.2	3.8	4.1	4.5	4.7	5.7	6.7	4.3
187	Volt	4.2	4.2	4.1	4.1	5.0	6.0	6.0	4.3
188	A14-280	4.2	4.9	3.5	4.1	5.0	5.0	3.0	3.3
189	Shannon	4.1	4.1	3.9	4.4	6.7	5.3	3.3	3.3
190	RAD-3285	4.1	5.0	4.2	3.3	3.0	3.0	3.7	3.7
191	A13-313	4.1	4.7	4.0	3.7	7.0	7.7	4.3	4.0
192	Prosperity	4.1	3.9	4.1	4.4	4.0	4.3	8.3	6.7
193	A16-1	4.1	4.2	3.7	4.4	5.0	5.0	6.7	4.7
194	A13-9	4.1	4.2	3.8	4.3	4.0	5.0	4.7	6.0
195	PST-K15-160	4.0	4.4	3.9	3.8	6.3	5.3	4.3	3.7
196	NAI-14-155	4.0	4.6	4.2	3.3	6.0	5.3	5.3	5.0
197	PST-Paulina Falls River-DARK	4.0	4.3	3.5	4.2	6.0	6.3	2.3	4.3
198	Arc	4.0	4.2	3.2	4.5	6.0	6.3	3.7	4.7
199	A13-5	4.0	4.3	4.2	3.6	4.3	5.3	7.3	4.7
200	PST-K15-179	4.0	5.0	4.0	3.0	5.0	3.7	5.7	2.7

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019	
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.					
201	A14-246	4.0	3.6	3.9	4.5	4.0	5.3	7.3	3.7
202	Midnight II	4.0	4.0	3.4	4.5	5.0	4.7	4.3	6.0
203	NAI-15-100	3.9	3.7	4.0	4.0	6.0	5.7	4.3	5.0
204	KB15OT-20	3.9	4.4	4.0	3.4	5.3	3.7	6.0	3.0
205	PST-11-13	3.9	3.8	4.6	3.4	6.0	5.3	3.7	3.7
206	A16-21	3.9	4.8	3.0	3.8	6.3	5.0	2.0	5.3
207	A16-5	3.9	4.5	3.6	3.5	5.3	5.0	2.0	4.7
208	PST-10-38	3.9	4.2	4.1	3.3	4.0	4.0	5.7	2.7
209	Gaelic	3.8	3.8	3.7	3.9	4.0	5.3	6.3	4.3
210	PST-K14-146	3.8	3.5	3.6	4.2	3.7	3.7	7.7	4.0
211	KB15OT-9	3.7	3.9	3.7	3.6	4.3	4.7	3.3	3.3
212	KB15OT-21	3.7	3.9	4.1	3.2	5.0	4.7	5.0	3.7
213	RAD-3302	3.7	3.9	3.3	3.8	5.3	5.0	2.0	4.3
214	KB15OT-25	3.7	3.3	3.8	3.8	3.7	4.7	4.3	6.0
215	A16-11	3.6	4.0	3.2	3.6	4.7	4.3	5.0	3.7
216	NAI-13-118	3.6	3.6	3.4	3.7	5.0	5.3	1.7	6.0
217	RAD-3169	3.5	4.2	3.5	2.8	6.7	5.7	2.7	3.3
218	PST-K14-154	3.5	4.0	3.2	3.2	4.3	4.7	5.0	2.7
219	PST-K15-180	3.5	3.9	3.4	3.2	4.0	4.7	5.0	3.3
220	KB15OT-50	3.4	3.8	3.3	3.1	4.7	5.3	4.7	3.0

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(Continued)

Table 1. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2016 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Spring Green-up ³ 12 Apr. 2018	Leaf Spot ⁴ 30 May 2018	Summer Patch ⁵ 26 Sep. 2019
	2017-2019 Avg.	2017 Avg.	2018 Avg.	2019 Avg.				
221 KB15OT-35	3.2	3.3	3.2	3.1	4.3	4.7	5.3	3.7
222 RAD-2363	3.2	3.5	3.3	2.8	5.3	5.7	3.3	3.7
223 PST-TX8-56	2.9	3.3	2.5	2.8	4.0	4.7	6.3	4.7
224 PST-4-H1	2.8	3.9	2.3	2.3	8.3	7.0	1.0	2.0
LSD @ 5%=	0.6	0.7	0.7	1.0	1.4	1.5	1.4	2.0

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¹9 = Best turf quality

²9 = Best establishment

³9 = Best spring green-up

⁴9 = Least leaf spot

⁵9 = Least summer patch

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
1	A05-853	5.3	5.2	4.8	6.0	3.3	6.3	3.6	3.7	4.7	6.3
2	A16-225	5.3	5.2	5.5	5.2	3.3	7.7	7.6	3.7	9.0	5.3
3	A07-782	5.1	5.8	4.5	5.1	4.0	9.0	7.7	5.8	7.3	4.7
4	A16-222	5.1	5.6	5.2	4.4	4.3	7.7	7.7	5.3	9.0	7.0
5	Glade	5.1	6.2	4.5	4.6	5.0	8.0	7.5	5.5	7.7	6.7
6	A14-234	5.1	4.8	4.9	5.6	3.7	8.0	7.5	4.8	9.0	5.7
7	A16-14	5.1	5.8	5.1	4.3	4.0	6.3	3.6	7.7	9.0	5.3
8	NAI-13-79	5.0	5.9	5.4	3.8	4.3	8.3	7.5	6.5	9.0	7.7
9	A16-224	5.0	5.5	5.0	4.6	5.3	7.7	8.1	4.8	9.0	6.7
10	A07-385	5.0	5.2	4.3	5.5	5.7	3.7	7.5	3.5	7.3	3.0
11	KB13OT-4	5.0	5.1	4.6	5.1	3.7	7.3	8.2	5.5	6.3	4.7
12	A16-231	5.0	5.9	4.3	4.7	2.7	8.3	6.0	6.8	6.0	5.0
13	A16-16	4.9	5.5	4.7	4.6	3.7	6.0	5.3	3.8	7.7	7.7
14	NAI-13-39	4.9	5.3	5.6	3.8	4.0	7.3	6.8	5.0	8.7	5.3
15	A11-47	4.9	5.3	4.2	5.2	7.3	4.3	6.5	5.7	9.0	4.3
16	Yellowstone	4.9	5.8	5.4	3.4	4.7	7.0	6.8	4.8	9.0	3.7
17	Pivot	4.9	5.1	5.0	4.4	6.0	5.7	7.2	5.3	9.0	1.7
18	A16-228	4.8	5.6	4.2	4.8	2.3	8.0	6.2	6.3	5.3	3.3
19	KB15OT-22	4.8	5.0	5.1	4.4	2.3	6.3	2.4	4.8	7.7	6.7
20	LTP-11-41	4.8	4.8	5.0	4.7	5.7	6.0	8.4	5.2	9.0	2.7

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
21	A99-3122	4.8	5.5	5.2	3.7	5.7	7.3	6.7	6.0	9.0	7.3
22	Diva	4.8	4.7	4.9	4.9	4.3	7.0	5.8	5.8	7.0	5.3
23	A12-267	4.8	5.0	4.2	5.2	4.7	4.7	2.7	2.5	6.0	5.7
24	KB15OT-9	4.8	5.0	4.8	4.6	2.7	7.3	4.4	4.2	9.0	4.7
25	A11-398	4.8	4.3	5.4	4.6	4.0	7.7	7.2	4.7	9.0	3.7
26	A12-266	4.8	5.3	4.6	4.3	6.0	6.7	7.1	4.3	8.7	6.3
27	A16-220	4.8	5.6	5.0	3.7	4.3	7.3	7.8	4.8	9.0	7.3
28	Midnight	4.7	5.7	4.2	4.3	7.7	6.3	8.6	5.0	8.7	7.3
29	A10-280	4.7	5.3	4.4	4.4	2.0	7.3	6.3	7.7	9.0	7.0
30	Bluebank	4.7	5.5	4.7	3.9	5.3	7.3	8.3	5.3	8.7	7.0
31	A16-221	4.7	5.1	4.4	4.5	4.3	7.3	7.5	3.8	9.0	3.7
32	A14-422	4.7	4.8	4.6	4.7	4.3	5.0	6.8	2.3	7.0	5.3
33	A14-246	4.7	4.6	5.0	4.5	5.7	8.3	8.3	5.8	8.7	1.0
34	A16-21	4.7	4.3	4.4	5.3	6.7	6.3	6.2	2.0	4.3	1.7
35	A14-424	4.6	4.7	4.4	4.8	4.3	6.0	7.9	2.5	3.7	4.0
36	A16-12	4.6	5.0	4.5	4.4	5.7	5.7	5.3	6.0	9.0	3.7
37	A09-231	4.6	5.3	5.4	3.2	4.7	5.7	6.0	4.3	8.7	5.3
38	Fahrenheit 90	4.6	5.0	4.1	4.7	5.3	5.7	5.1	3.8	8.0	3.7
39	KB13OT-13	4.6	4.6	4.2	4.9	4.3	7.3	4.3	4.0	3.0	3.3
40	Hampton	4.6	5.8	4.8	3.2	7.3	5.0	7.5	7.2	9.0	3.7

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
41	A11-778	4.6	4.7	3.6	5.4	4.0	5.7	5.9	1.7	1.0	3.7
42	PST-C-74	4.6	5.4	4.4	3.9	5.3	6.7	6.6	6.8	8.3	6.0
43	Appalachian	4.6	4.6	4.7	4.4	5.0	6.0	6.6	2.8	5.0	3.7
44	KB15OT-20	4.5	5.3	4.8	3.5	5.3	6.3	7.4	5.3	9.0	2.7
45	Twilight	4.5	5.2	4.3	3.9	6.7	7.3	8.5	4.0	9.0	6.7
46	A16-219	4.5	5.5	4.4	3.7	6.7	7.3	7.4	5.0	9.0	7.0
47	A04TB-258	4.5	5.3	5.0	3.2	1.3	7.7	5.4	7.0	9.0	7.7
48	KB15OT-29	4.5	5.0	4.5	4.0	4.0	6.0	5.3	4.5	8.0	5.7
49	Blue Devil	4.5	5.1	4.6	3.7	6.3	6.0	8.4	5.3	9.0	6.0
50	A13-325	4.5	4.1	4.8	4.4	3.3	7.0	3.8	3.3	7.7	1.3
51	Slingshot	4.4	5.2	4.6	3.5	3.0	7.0	5.0	5.2	8.7	5.0
52	A16-253	4.4	5.9	3.7	3.7	5.0	6.0	4.6	6.3	7.0	2.3
53	A12-57	4.4	5.3	4.4	3.6	2.0	8.0	6.2	6.7	8.3	6.7
54	United	4.4	4.9	4.9	3.5	6.3	8.7	8.4	4.0	9.0	6.7
55	A12-30	4.4	5.4	4.4	3.5	4.0	6.7	8.9	6.2	8.3	3.7
56	A14-2	4.4	5.6	4.4	3.2	6.0	6.3	4.8	6.7	8.7	6.0
57	Orion	4.4	5.1	4.1	4.0	3.0	7.0	3.8	4.5	8.7	4.3
58	KB13OT-17	4.4	5.0	4.4	3.8	4.7	6.7	3.8	7.0	9.0	5.7
59	A14-233	4.4	4.6	4.4	4.2	4.7	4.3	7.2	4.0	8.3	2.7
60	Gaelic	4.4	5.0	4.2	3.9	6.3	5.7	6.4	5.5	8.7	4.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
61	A14-20	4.4	4.6	4.7	3.9	2.7	8.0	3.9	6.2	7.3	6.7
62	Bolt	4.4	4.8	4.2	4.2	8.0	4.0	4.5	4.2	8.3	5.3
63	Prospertiy	4.4	5.1	4.2	3.8	8.3	6.7	8.9	6.5	9.0	1.0
64	A13-683	4.4	4.3	4.3	4.5	4.7	7.0	6.2	2.7	4.3	1.7
65	NAI-14-124	4.3	5.4	4.8	2.8	5.3	7.0	8.6	6.7	9.0	3.3
66	Gladstone	4.3	5.0	4.2	3.8	4.3	6.7	7.1	6.5	8.7	4.7
67	Aries	4.3	5.3	4.5	3.2	8.7	4.3	7.9	4.2	9.0	5.0
68	KB13OT-19	4.3	5.2	4.2	3.6	2.3	8.3	4.1	4.7	9.0	4.0
69	A14-10	4.3	5.0	4.5	3.5	4.7	7.3	5.6	6.5	8.7	4.3
70	A13-313	4.3	3.8	5.0	4.2	5.7	5.7	4.9	2.5	8.0	1.0
71	A16-230	4.3	5.3	3.6	4.0	4.3	7.3	4.9	6.7	6.7	3.0
72	Pulsar	4.3	5.0	4.2	3.7	6.0	7.7	8.5	4.3	9.0	6.3
73	A06-11	4.3	5.1	4.5	3.3	4.3	8.0	5.9	6.0	9.0	7.7
74	Jumpstart	4.3	4.5	3.9	4.5	7.0	4.3	6.2	3.8	6.3	1.3
75	A14-4	4.3	4.6	3.9	4.3	5.0	8.3	5.8	6.5	9.0	4.7
76	A16-226	4.3	5.6	3.1	4.1	4.0	7.3	4.5	4.7	4.3	2.3
77	KB15OT-32	4.3	4.4	4.7	3.7	1.7	8.3	4.8	6.2	8.3	6.0
78	NAI-14-122	4.3	4.9	4.6	3.2	4.3	7.0	7.4	6.5	8.7	3.3
79	Lunar	4.3	4.8	3.9	4.1	6.7	5.7	6.8	5.5	9.0	3.0
80	A11-38	4.3	5.1	3.8	3.9	5.0	6.7	5.6	3.5	7.7	4.3

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
81	A14-345	4.2	4.9	3.8	4.0	4.7	7.3	7.9	4.3	7.0	5.3
82	A13-679	4.2	4.0	3.7	5.0	7.7	2.7	8.7	2.0	1.7	7.0
83	A13-332	4.2	4.3	4.5	3.9	5.7	6.0	6.2	2.7	6.7	1.0
84	Mystere H2O	4.2	4.6	3.9	4.1	6.0	6.7	7.2	6.5	9.0	6.7
85	A05-361	4.2	4.8	4.2	3.6	2.7	7.3	6.7	6.2	8.3	6.0
86	A10-244	4.2	4.7	4.6	3.4	3.3	7.3	4.1	6.8	9.0	6.7
87	NAI-14-128	4.2	5.3	4.2	3.2	5.0	6.7	7.8	7.3	9.0	3.0
88	SPF 30	4.2	4.4	4.2	4.0	5.3	5.3	5.8	3.5	8.7	5.7
89	A16-10	4.2	4.7	4.8	3.1	5.0	7.7	7.2	5.0	8.7	4.7
90	A16-2	4.2	5.1	4.9	2.6	4.7	6.7	7.5	4.2	8.3	5.7
91	A16-18	4.2	4.6	4.4	3.6	5.3	6.7	7.7	5.2	9.0	4.0
92	A16-4	4.2	4.3	4.7	3.5	4.7	7.7	8.5	3.7	8.3	5.3
93	CRS630	4.2	4.8	4.6	3.1	5.7	6.3	7.0	4.0	9.0	5.0
94	A10-871	4.2	5.1	3.6	3.7	4.3	6.0	5.2	6.7	8.0	5.0
95	KB15OT-21	4.1	3.9	4.6	3.9	1.0	8.3	4.2	6.3	8.7	3.3
96	NAI-13-10	4.1	5.0	4.7	2.6	2.3	8.3	4.5	6.2	9.0	5.3
97	A16-245	4.1	5.4	3.7	3.3	4.7	6.3	5.0	6.5	6.0	2.0
98	Chloe	4.1	5.1	4.1	3.2	5.7	6.0	7.2	6.3	9.0	3.7
99	A12-34	4.1	5.0	4.4	3.0	3.0	7.7	4.9	6.0	8.7	7.0
100	NAI-14-133	4.1	5.1	4.4	2.8	5.0	7.0	8.4	6.3	9.0	2.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
101	A04-67	4.1	4.4	4.2	3.7	6.3	6.0	8.3	5.2	8.0	3.7
102	A16-7	4.1	4.8	4.5	3.0	4.3	7.7	6.7	6.3	9.0	6.7
103	A06-33	4.1	4.6	4.0	3.6	3.7	7.3	4.8	7.5	9.0	6.0
104	Dauntless	4.1	4.8	4.4	3.0	5.7	7.0	7.4	4.5	9.0	4.3
105	A13-5	4.1	4.6	4.3	3.3	3.0	7.3	3.1	7.2	9.0	3.7
106	Rockstar	4.1	4.9	4.1	3.2	3.7	6.3	4.9	4.3	8.7	4.0
107	A16-15	4.1	4.7	3.7	3.8	3.0	8.3	3.9	7.5	9.0	3.3
108	NAI-14-155	4.0	3.7	3.9	4.6	2.7	7.0	4.8	4.7	8.7	5.0
109	A16-17	4.0	5.2	4.4	2.5	6.0	5.3	2.7	5.0	9.0	6.7
110	A14-26	4.0	5.0	3.3	3.7	2.7	7.7	6.2	6.8	9.0	3.0
111	Nobel	4.0	4.7	4.2	3.3	6.0	5.0	6.4	5.5	8.7	2.0
112	P-105	4.0	4.0	4.2	3.9	1.7	7.0	2.8	3.3	8.0	1.7
113	Apollo H2O	4.0	4.9	3.9	3.3	5.0	7.0	6.9	6.2	9.0	6.7
114	KB15OT-47	4.0	4.7	4.1	3.3	2.3	7.7	4.8	4.8	9.0	3.7
115	NAI-14-127	4.0	4.8	4.5	2.8	4.7	6.0	7.2	6.2	9.0	2.7
116	A98-879	4.0	4.6	3.9	3.5	5.3	7.0	7.4	5.0	9.0	3.7
117	NAI-14-132	4.0	4.9	4.2	2.9	4.7	7.7	8.2	7.3	9.0	3.0
118	NAI-14-176	4.0	4.6	4.0	3.4	5.3	7.0	8.6	6.2	9.0	1.7
119	A16-8	4.0	4.4	4.0	3.5	4.7	7.0	6.3	5.0	7.3	7.3
120	Volt	4.0	5.1	4.0	2.9	8.0	4.0	7.0	4.5	8.7	4.3

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
121	A16-252	4.0	5.1	3.4	3.3	3.0	8.3	5.4	5.0	8.0	6.0
122	Arrowhead	4.0	4.3	4.3	3.3	7.7	6.0	8.9	5.2	8.7	1.7
123	NAI-15-89	4.0	4.4	3.9	3.6	4.3	6.0	4.8	4.5	6.7	5.3
124	A06-8	4.0	4.9	3.8	3.1	4.7	8.7	6.3	7.0	9.0	6.0
125	Jersey	3.9	4.3	4.2	3.4	4.7	7.7	8.6	5.0	9.0	4.7
126	Fullback	3.9	4.9	3.6	3.3	7.3	5.0	7.0	5.8	8.7	4.0
127	Shannon	3.9	3.8	3.5	4.5	6.7	5.0	5.5	2.5	4.3	1.7
128	A14-31	3.9	4.6	3.3	3.8	4.3	6.3	5.1	7.3	9.0	5.3
129	A10-245	3.9	4.8	3.8	3.0	6.0	6.3	5.1	7.3	9.0	6.3
130	NAI-14-126	3.9	4.8	4.4	2.4	3.7	7.3	8.2	7.2	9.0	2.7
131	NAI-14-130	3.9	4.3	4.1	3.1	2.7	7.3	7.1	7.3	9.0	2.7
132	NAI-15-110	3.9	4.6	3.9	3.1	4.7	7.0	5.1	3.5	6.7	2.3
133	A11-770	3.8	3.6	3.3	4.7	4.7	6.7	8.9	1.8	2.0	1.0
134	KB15OT-24	3.8	4.4	4.0	3.1	3.7	7.7	4.6	5.8	9.0	1.0
135	A13-347	3.8	4.3	3.5	3.7	8.0	4.7	6.7	1.7	3.7	1.0
136	A10-241	3.8	4.7	3.5	3.2	3.7	7.3	5.1	6.7	8.7	4.0
137	Bluestar	3.8	4.8	3.9	2.8	6.0	6.3	5.9	5.3	8.7	5.3
138	A16-11	3.8	4.3	3.8	3.3	5.7	7.0	7.1	4.8	8.7	3.7
139	A13-1	3.8	5.3	3.5	2.6	5.3	6.7	5.8	6.7	9.0	7.7
140	Heartland	3.8	4.7	4.1	2.6	3.7	6.7	7.6	7.3	9.0	3.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018	
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.							
141	NAI-14-121	3.8	4.5	3.6	3.3	3.0	6.7	6.9	5.8	9.0	1.7
142	A16-1	3.8	4.7	3.8	2.8	5.3	5.7	6.0	4.3	9.0	3.7
143	A14-14	3.8	4.0	3.9	3.3	5.3	8.0	7.3	5.8	9.0	3.3
144	Legend	3.7	4.6	3.8	2.9	6.0	7.0	6.6	6.7	9.0	3.7
145	Blue Note	3.7	5.2	3.9	2.1	4.3	7.3	6.9	4.8	9.0	6.0
146	Wild Horse	3.7	4.2	4.0	2.9	6.7	6.7	7.2	3.5	9.0	3.3
147	NAI-13-118	3.7	3.2	3.5	4.4	4.0	7.0	5.3	1.7	4.3	1.3
148	A10-238	3.7	4.5	3.4	3.1	8.0	6.0	7.1	5.7	9.0	5.0
149	A14-3	3.7	4.5	3.7	2.8	4.3	6.3	4.2	7.0	9.0	6.3
150	A11-49	3.7	5.0	3.6	2.4	3.7	7.3	7.5	6.3	9.0	7.0
151	Arc	3.6	3.9	3.4	3.6	6.0	6.0	7.3	2.8	5.0	4.7
152	A14-9	3.6	4.7	3.5	2.7	5.0	6.7	6.4	6.5	9.0	7.3
153	NAI-15-100	3.6	3.6	3.3	3.9	2.0	8.3	4.0	4.8	7.3	2.7
154	Bluecoat	3.6	4.4	3.4	2.9	6.3	6.0	8.8	4.8	9.0	2.0
155	A16-19	3.6	4.1	3.7	2.9	5.0	7.0	8.0	4.2	9.0	5.3
156	A11-53	3.6	5.0	3.6	2.0	4.3	7.3	6.9	6.5	9.0	7.0
157	A14-15	3.5	4.4	3.2	3.0	3.0	8.3	6.2	6.5	8.7	4.3
158	A13-9	3.5	4.4	3.4	2.8	4.7	8.0	6.8	6.8	9.0	1.3
159	A10-249	3.5	5.0	3.4	2.0	4.3	7.3	4.2	7.2	9.0	5.7
160	KB15OT-50	3.4	3.9	3.6	2.8	3.7	7.0	5.8	4.3	7.7	2.3

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(Continued)

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

Entry	-----Turf Quality ¹ -----				Establish- ment ² 31 Oct. 2016	Height ³ 24 Oct. 2016	Mesotrione Damage ⁴ Oct. Avg ⁷ 2016	Leaf Spot ⁵ Jun Avg ⁸ 2017	Stem Rust ⁶ 10 Oct. 2017	Leaf Spot 24 May 2018
	2017-19 Avg.	2017 Avg.	2018 Avg.	2019 Avg.						
161 A14-280	3.4	4.1	3.1	3.1	6.7	6.3	6.1	3.3	3.0	1.3
162 A16-5	3.3	2.8	3.7	3.5	3.3	7.7	4.9	2.3	6.7	3.3
163 A15-4	3.3	4.1	3.0	2.9	3.7	8.0	4.9	4.3	7.3	6.0
164 A14-229	3.3	4.3	2.5	3.2	4.7	9.0	8.2	3.3	2.3	3.0
165 Finish Line	3.3	4.4	3.1	2.3	3.0	7.3	3.5	5.3	9.0	5.3
166 Rubicon	3.3	4.6	2.9	2.3	6.3	6.3	5.5	5.7	8.0	5.3
167 KB15OT-25	3.3	3.2	3.2	3.3	1.3	7.7	5.5	5.8	9.0	4.0
168 A16-20	3.0	3.8	3.0	2.3	5.3	5.7	7.3	1.2	2.7	4.0
169 Rubix	2.9	3.8	2.6	2.2	6.0	6.7	6.0	4.0	8.3	3.0
170 KB15OT-35	2.8	2.7	2.7	2.8	2.3	8.3	6.8	5.8	9.0	1.0
LSD @ 5%=	0.7	0.8	1.0	1.1	1.8	1.4	1.5	1.4	1.4	1.6

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¹9 = Best turf quality

²9 = Best establishment

³9 = Tallest growth

⁴9 = Least bleaching response

⁵9 = Least leaf spot

⁶9 = Least stem rust

⁷Mesotrione damage is the average three ratings made on October 19, 21, and 24

⁸Leaf spot rating is the average of two ratings made on June 9

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
1	Martha	6.8	6.5	7.1	4.0	8.3	5.7	7.0	5.0	9.0
2	A17-3	6.7	6.5	6.9	5.7	8.7	8.0	7.7	6.7	9.0
3	PICK 033	6.6	6.3	7.0	7.0	7.0	7.3	8.3	6.7	9.0
4	PST-K17-191	6.5	6.1	7.0	5.0	8.0	5.7	8.3	8.7	9.0
5	A04-383	6.4	6.5	6.3	6.0	9.0	6.0	8.0	6.0	9.0
6	LTP-11-41	6.4	6.5	6.2	7.7	8.7	8.3	6.3	4.7	8.5
7	A16-8	6.3	6.8	5.8	4.7	8.3	6.0	7.3	5.3	8.7
8	Touche	6.3	5.9	6.7	4.7	8.7	3.3	7.0	5.0	9.0
9	A14-15	6.3	6.3	6.4	5.0	6.7	6.7	7.7	3.7	9.0
10	Bolt	6.3	6.0	6.6	5.0	8.0	3.3	7.3	5.7	8.8
11	A17-5	6.3	6.1	6.5	4.7	8.0	3.0	7.0	6.7	8.8
12	A09-794	6.2	6.6	5.9	4.3	9.0	3.0	8.3	6.3	8.7
13	A04-340	6.2	6.4	6.0	4.7	8.3	4.7	7.3	4.0	8.3
14	SRX 466	6.2	6.3	6.1	7.0	6.7	9.0	7.0	5.7	8.7
15	A04-66	6.2	6.2	6.1	5.0	7.0	8.7	7.7	6.0	9.0
16	A14-3	6.2	6.2	6.1	5.0	6.3	3.3	7.3	4.0	9.0
17	A11-49	6.1	6.2	6.1	5.0	8.0	6.0	6.7	3.7	8.3
18	Blue Note	6.0	5.9	6.2	4.3	7.0	5.0	6.0	6.7	8.8
19	A17-8	6.0	5.9	6.1	4.0	7.3	8.3	7.3	6.0	8.7
20	A11-26	6.0	6.0	6.0	4.7	7.3	5.7	6.7	4.0	8.0

(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
21	A05-361	6.0	6.2	5.8	4.7	8.0	8.3	6.3	7.0	7.2
22	SRX 5321	6.0	5.5	6.5	5.7	5.3	7.3	6.7	3.7	9.0
23	A13-3	5.9	5.5	6.3	4.7	5.3	7.0	7.0	3.7	9.0
24	A17-1	5.9	5.5	6.2	5.0	8.3	4.0	7.3	4.7	9.0
25	A09-793	5.9	6.4	5.3	4.7	9.0	4.7	7.7	5.3	7.5
26	PPG-KB 1539	5.9	5.5	6.2	4.7	5.0	8.3	7.3	3.3	9.0
27	Heidi	5.9	6.3	5.4	6.3	8.0	9.0	7.0	5.0	8.5
28	A05-351	5.8	5.9	5.7	4.3	8.0	6.0	6.7	3.3	8.7
29	Chloe	5.8	5.6	6.0	5.3	5.3	8.0	7.3	5.0	8.3
30	Blue Velvet	5.8	6.1	5.6	5.0	6.3	8.3	7.3	2.7	9.0
31	A15-6	5.8	5.6	6.0	4.7	5.7	3.7	7.3	4.7	9.0
32	P-105	5.8	6.1	5.6	6.0	6.5	8.0	7.5	6.5	9.0
33	Tattoo	5.8	6.5	5.1	4.7	8.0	5.3	7.3	4.3	7.7
34	Legend	5.8	5.8	5.7	4.0	5.7	4.7	7.3	4.3	8.0
35	PPG-KB 1317	5.8	6.5	5.0	4.0	8.7	3.0	7.0	4.0	6.7
36	A09-258	5.7	6.5	5.0	8.7	7.3	9.0	8.0	8.7	9.0
37	Blue Star	5.7	5.4	6.0	5.7	6.0	6.0	6.0	6.3	9.0
38	Keeneland	5.7	6.0	5.4	5.0	6.7	6.3	7.0	4.0	8.8
39	A12-298	5.7	5.8	5.5	5.3	8.0	3.0	6.3	6.0	8.8
40	A16-19	5.7	6.0	5.3	6.3	6.7	7.3	6.7	7.3	7.8

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
41	A15-1157	5.6	5.5	5.8	8.0	6.0	7.3	7.3	7.7	9.0
42	A11-40	5.6	5.7	5.6	5.0	7.7	6.0	5.7	8.0	6.7
43	Bluebank	5.6	5.7	5.6	7.7	5.0	8.3	7.0	3.0	8.5
44	SRX 2758	5.6	5.9	5.3	7.0	7.7	8.7	6.3	5.7	7.7
45	PPG-KB 1532	5.6	5.7	5.4	3.0	8.0	2.3	6.3	4.0	7.0
46	STR 2553	5.6	5.7	5.4	5.7	5.0	5.0	7.7	3.3	9.0
47	A16-4	5.5	5.8	5.3	5.7	7.0	8.7	6.3	7.3	7.0
48	A09-789	5.5	6.3	4.7	5.7	9.0	3.7	6.7	6.0	7.5
49	Comet	5.5	5.5	5.5	3.3	7.3	3.3	7.7	5.3	8.5
50	PST-K13-141	5.5	5.5	5.4	4.7	7.3	7.3	6.3	5.3	8.7
51	A05-295	5.5	5.6	5.3	4.7	6.7	7.0	6.0	6.7	8.0
52	A15-481	5.5	5.8	5.2	4.7	9.0	3.0	7.3	7.7	8.5
53	Jackrabbit	5.5	5.6	5.3	5.7	6.7	6.7	6.3	6.0	8.5
54	PPG-KB 1524	5.4	5.6	5.3	5.0	7.0	3.3	7.3	5.3	8.0
55	Sombrero	5.4	5.3	5.6	6.3	6.3	7.0	5.7	5.3	8.7
56	PST-T14-37	5.4	5.9	5.0	4.7	7.3	6.7	7.0	4.3	6.2
57	PST-K11-118	5.4	5.0	5.8	4.0	5.7	6.0	6.7	6.0	8.7
58	A17-229	5.4	4.4	6.3	1.0	7.7	3.5	6.0	5.3	8.8
59	A15-9	5.4	5.4	5.3	5.0	4.7	6.7	6.7	3.3	9.0
60	MacMillan	5.4	5.8	4.9	4.0	8.7	1.7	8.3	5.3	8.5

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
61	A17-4	5.4	6.1	4.6	5.7	9.0	2.7	7.3	3.7	8.5
62	Powerplay	5.4	5.4	5.3	5.7	5.3	6.7	7.0	3.0	8.7
63	Yellowstone	5.4	5.6	5.1	4.3	7.0	7.0	5.7	3.7	6.5
64	A14-220	5.3	6.0	4.7	5.3	5.7	8.0	6.3	5.7	7.7
65	PST-T17-48	5.3	5.7	5.0	4.3	7.7	6.0	8.0	6.7	8.8
66	NAI-15-90	5.3	5.7	4.9	2.7	8.7	1.7	7.0	3.7	7.5
67	A15-10	5.3	5.1	5.5	5.3	6.0	4.7	5.7	7.7	7.7
68	Arcadia	5.3	5.2	5.4	5.3	5.3	8.0	7.3	3.3	9.0
69	Mystere H2O	5.3	5.2	5.3	4.3	6.7	5.7	6.7	4.3	7.7
70	Mercury	5.3	5.6	5.0	3.0	9.0	1.7	7.7	5.0	8.5
71	PST-T17-47	5.3	5.2	5.4	4.3	5.0	5.7	7.0	6.3	8.5
72	A12-33	5.3	5.1	5.4	4.3	6.7	4.3	7.0	3.3	9.0
73	A15-7	5.3	5.8	4.7	3.7	9.0	4.0	5.7	5.7	5.7
74	Milagro	5.2	5.2	5.2	5.3	7.0	6.3	7.3	4.3	9.0
75	PST-T15-42	5.2	5.2	5.2	3.7	7.7	3.7	6.0	7.0	8.7
76	A16-807	5.2	5.6	4.9	9.0	8.7	8.7	6.7	4.7	5.2
77	A16-21	5.2	6.0	4.5	5.3	9.0	3.3	8.0	6.3	8.3
78	A14-365	5.2	5.1	5.3	4.7	4.3	4.3	6.7	3.0	8.5
79	Rhapsody	5.2	5.0	5.4	3.0	6.0	4.3	6.7	5.0	8.8
80	Lunar	5.2	5.3	5.0	5.0	6.3	5.0	5.7	5.3	8.0

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
81	PPG-KB 1147	5.2	5.5	4.9	2.0	9.0	1.7	6.3	5.3	6.2
82	A05-347	5.2	5.5	4.9	4.0	7.3	4.3	6.7	3.7	8.2
83	PST-105-191	5.2	5.0	5.3	4.0	5.7	5.7	6.7	4.0	8.2
84	Hampton	5.1	5.7	4.6	4.7	6.7	6.3	6.7	4.7	7.3
85	A12-8	5.1	4.7	5.5	2.0	6.7	2.0	7.3	4.0	8.8
86	A06-8	5.1	5.1	5.1	3.3	7.0	4.0	6.7	4.7	8.2
87	Quantum Leap	5.1	5.1	5.1	6.0	5.3	7.3	6.0	2.7	9.0
88	Arrowhead	5.1	5.2	5.0	5.0	4.3	8.0	7.0	4.7	8.7
89	Crest 5K-12	5.1	5.3	4.9	4.7	6.7	4.7	6.3	6.0	8.0
90	Granite	5.1	5.3	4.9	6.3	5.7	8.7	6.7	3.0	9.0
91	Jersey	5.1	5.6	4.6	5.3	8.0	6.7	6.0	5.0	6.2
92	A14-362	5.1	4.8	5.3	5.0	4.0	4.0	6.0	3.0	8.3
93	Julia	5.1	5.2	5.0	5.0	9.0	2.3	6.3	9.0	7.5
94	Ginney II	5.1	5.0	5.1	5.3	4.0	8.0	6.7	2.3	8.3
95	A13-695	5.1	5.1	5.0	3.3	7.3	4.3	5.7	8.0	8.7
96	A11-778	5.1	5.4	4.7	4.7	9.0	3.3	5.3	7.3	6.7
97	RAD-3428	5.0	5.1	5.0	1.7	8.7	2.3	5.7	6.3	8.2
98	A12-28	5.0	5.0	5.0	3.7	5.0	6.3	6.0	5.7	7.7
99	NAI-15-112	5.0	5.4	4.6	5.3	6.3	5.7	7.0	6.0	8.8
100	A17-6	5.0	5.5	4.5	3.7	6.7	5.0	6.7	5.3	8.5

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
101	Slingshot	5.0	4.8	5.2	5.0	5.7	5.0	6.3	6.3	8.2
102	Jumpstart	5.0	5.2	4.8	4.7	7.3	4.7	6.3	6.0	7.3
103	A15-490	5.0	5.2	4.7	7.0	7.3	5.0	5.7	5.0	5.7
104	Aries	5.0	4.9	5.0	5.0	4.7	6.3	6.0	7.0	7.7
105	Babe	5.0	5.0	4.9	5.7	5.0	6.0	5.3	7.0	7.0
106	NAI-13-34	4.9	5.1	4.7	3.3	6.0	7.7	6.3	2.3	7.5
107	A12-287	4.9	5.4	4.5	7.0	7.0	9.0	6.3	9.0	8.7
108	A09-305	4.9	5.7	4.1	5.3	8.3	5.7	5.7	5.7	5.2
109	PST-K17-185	4.9	5.2	4.6	5.0	6.7	6.7	6.0	3.0	6.2
110	BAR PP 71654	4.9	4.6	5.1	4.3	4.0	5.0	5.7	3.7	7.8
111	PST-11-7	4.9	4.9	4.8	5.0	3.7	9.0	6.0	5.7	7.8
112	PST-K17-190AD	4.9	5.4	4.3	4.3	6.0	5.0	6.7	5.0	4.8
113	Prosperity	4.9	5.2	4.5	6.0	5.3	8.3	6.3	5.0	6.0
114	Dauntless	4.8	4.4	5.2	5.0	4.3	5.7	5.3	6.0	7.8
115	PST-K15-172	4.8	4.7	5.0	2.0	7.7	4.3	6.7	3.7	8.7
116	A11-71	4.8	4.9	4.8	4.3	6.0	4.3	5.7	6.3	7.3
117	A15-8	4.8	5.9	3.8	4.3	9.0	4.0	5.7	4.7	3.8
118	PST-K17-187	4.8	4.7	5.0	3.3	7.7	4.3	5.0	4.0	7.2
119	Bluedevil	4.8	4.7	4.9	5.0	6.3	8.0	5.7	2.7	8.3
120	A16-816	4.8	5.2	4.4	9.0	9.0	8.7	5.0	5.7	4.2

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019
121 Rubix	4.8	4.1	5.4	5.3	5.3	4.3	5.3	7.7	7.7
122 PST-T14-40	4.8	5.3	4.2	5.3	7.7	4.7	5.0	4.3	5.7
123 A14-677	4.8	5.3	4.2	6.0	8.7	7.0	5.3	8.3	6.0
124 A15-1089	4.8	4.7	4.8	6.3	7.0	5.3	5.0	4.3	8.7
125 A10-280	4.8	4.9	4.6	2.0	9.0	5.7	7.7	6.3	8.5
126 A15-470	4.8	5.0	4.5	5.7	8.3	3.7	5.0	5.3	5.7
127 NAI-15-97	4.7	4.9	4.5	5.3	6.7	6.0	6.0	5.7	7.5
128 PST-105-69	4.7	4.5	4.9	3.0	6.0	2.7	6.7	5.3	8.3
129 A14-299	4.7	4.5	4.9	6.0	4.3	7.3	4.7	4.7	7.8
130 PST-K10-110	4.7	4.3	5.0	3.3	7.0	5.3	6.0	3.7	8.3
131 A15-1091	4.7	4.9	4.5	8.0	7.7	9.0	5.7	9.0	7.2
132 Fullback	4.7	4.9	4.5	4.3	6.3	4.7	6.0	5.0	8.5
133 PST-T15-44	4.7	4.5	4.8	3.3	7.7	3.7	5.0	7.0	6.5
134 Hampton	4.6	5.0	4.3	5.7	7.3	7.3	6.7	9.0	7.0
135 RAD-553	4.6	5.5	3.8	5.7	9.0	3.7	5.7	3.7	6.7
136 PST-K16-178	4.6	5.0	4.2	6.0	5.0	8.3	6.0	4.0	7.8
137 PPG-KB 1316	4.6	5.0	4.2	4.0	6.3	3.0	5.7	3.7	5.7
138 A16-2	4.6	5.1	4.1	4.7	6.0	5.0	5.3	6.0	4.2
139 NAI-15-60	4.6	4.7	4.5	4.0	8.7	4.7	5.7	7.0	8.0
140 PST-K15-169	4.5	4.2	4.9	3.7	4.0	8.0	5.3	2.0	8.7

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
141	SR 2100	4.5	4.4	4.7	6.7	3.0	8.7	5.3	5.0	7.3
142	Aramintha	4.5	4.4	4.6	4.7	5.7	4.0	5.7	5.3	8.5
143	Armada	4.5	4.6	4.4	4.0	5.3	3.7	6.3	5.7	8.0
144	Bluecoat	4.5	4.6	4.5	5.5	6.0	7.5	5.0	3.0	8.0
145	NAI-14-127	4.5	4.9	4.1	4.0	7.7	5.7	4.3	2.7	5.7
146	A11-358	4.5	5.0	4.0	3.3	8.3	4.3	4.3	8.3	3.3
147	A14-307	4.5	4.5	4.5	4.7	8.0	6.3	5.3	4.3	7.0
148	Noble	4.5	4.5	4.4	5.7	5.3	8.0	5.7	4.7	7.5
149	PST-K17-189AD	4.5	4.6	4.4	5.3	4.0	8.3	6.0	5.7	7.8
150	NAI 14-128	4.5	4.2	4.7	4.0	6.3	5.0	4.7	2.7	7.7
151	Rhythm	4.4	4.6	4.3	6.0	4.3	7.3	5.0	4.0	7.7
152	A06-671	4.4	5.1	3.8	5.0	5.0	6.7	7.0	4.7	5.2
153	H03-556	4.4	5.1	3.7	5.7	7.3	6.3	5.3	8.7	4.3
154	A14-334	4.4	4.5	4.4	4.3	8.0	5.0	6.0	4.3	6.8
155	NAI 14-126	4.4	4.3	4.5	1.7	7.0	5.0	5.3	2.7	6.8
156	RAD-2375	4.4	4.6	4.1	4.7	6.7	6.7	5.7	7.3	8.8
157	RAD-3764	4.4	4.7	4.1	5.0	6.0	7.3	5.0	5.7	5.8
158	Explorer	4.4	4.3	4.5	4.7	4.3	9.0	5.3	3.0	8.5
159	A99-2123	4.4	4.6	4.1	4.3	4.7	5.0	6.0	5.3	6.2
160	Kenblue	4.4	4.6	4.1	5.7	9.0	4.3	4.0	9.0	7.7

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
161	Fielder	4.4	4.4	4.3	5.0	4.0	6.0	5.3	5.3	6.5
162	Shannon	4.4	4.7	4.0	5.3	6.0	5.3	4.3	5.3	4.5
163	A14-281	4.4	5.2	3.5	3.3	9.0	2.3	6.0	5.7	7.2
164	NAI 14-122	4.3	3.9	4.7	3.3	6.0	5.0	5.7	2.7	8.2
165	Diva	4.3	4.4	4.2	5.3	7.0	7.0	5.3	7.3	8.3
166	Geisha	4.3	4.2	4.5	6.3	4.7	9.0	6.0	4.3	8.3
167	A06-26	4.3	4.4	4.3	3.0	6.0	4.7	4.7	3.7	7.0
168	A16-808	4.3	4.7	3.9	9.0	9.0	8.0	5.3	6.3	3.3
169	BAR PP7158V	4.3	5.3	3.4	4.3	6.0	4.7	5.7	5.3	1.8
170	NAI 14-133	4.3	4.3	4.3	3.7	6.7	5.3	5.0	2.7	6.2
171	PST-T14-39	4.3	4.3	4.2	3.3	7.7	2.7	6.0	5.7	7.5
172	NAI-11-644	4.3	4.6	3.9	3.0	6.3	4.7	5.0	3.7	4.0
173	Wildhorse	4.2	4.3	4.2	3.3	4.3	3.7	6.3	6.3	6.3
174	PST-K15-158	4.2	4.3	4.2	2.3	8.3	3.7	5.3	4.0	7.2
175	NAI 15-105	4.2	4.5	3.9	4.3	5.7	5.3	5.0	4.7	5.2
176	PST-K17-188AD	4.2	4.7	3.7	5.3	5.0	9.0	5.3	6.0	5.0
177	PST-K17-182	4.2	5.1	3.3	4.0	7.3	3.0	5.7	5.7	3.0
178	A15-474	4.2	4.5	3.8	5.3	8.3	3.3	5.3	7.7	7.2
179	PST-K17-184	4.2	4.6	3.7	4.7	6.3	4.3	6.3	5.7	5.0
180	A14-306	4.2	4.9	3.5	5.0	8.0	5.3	5.0	4.0	3.2

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
181	NAI 14-178	4.2	3.3	5.0	1.3	7.0	3.7	6.0	6.3	7.3
182	PST-K17-196	4.2	4.1	4.2	4.3	4.7	7.3	5.3	2.3	6.5
183	Volt	4.1	4.6	3.7	7.0	6.0	8.7	5.0	6.7	4.2
184	PST-K13-140	4.1	3.7	4.5	4.7	4.3	5.7	5.3	7.7	7.7
185	A03TB-663	4.1	3.6	4.5	1.3	8.7	4.3	4.7	6.3	6.8
186	PST-T17-49	4.1	4.5	3.7	4.0	7.0	4.0	5.0	4.0	4.7
187	NAI-15-89	4.1	4.5	3.7	4.3	6.0	6.0	4.7	5.3	5.2
188	PST-K15-166	4.1	3.9	4.2	2.3	8.3	3.3	6.0	3.7	7.3
189	PST-K15-167	4.1	4.1	4.1	3.0	5.3	4.0	6.3	2.3	8.5
190	A14-373	4.1	4.3	3.8	5.7	4.7	8.3	5.7	5.7	4.3
191	A14-258	4.1	4.5	3.6	5.0	4.3	5.7	4.7	5.0	4.5
192	Selway	4.0	4.0	4.1	4.0	8.0	3.0	5.0	5.3	6.2
193	PST-K17-186	4.0	4.5	3.5	4.0	7.7	3.0	4.7	4.7	3.7
194	SPF 30	4.0	4.5	3.4	7.7	5.0	9.0	4.3	4.7	3.3
195	A17-9	4.0	5.1	2.8	4.7	7.0	6.0	6.0	1.0	3.2
196	NAI 14-187	4.0	3.7	4.2	2.3	6.7	4.7	5.3	2.3	6.7
197	Kelly	4.0	3.7	4.2	6.7	3.0	9.0	4.7	3.3	7.8
198	Bandera	3.9	3.9	4.0	5.7	3.3	8.0	5.3	3.0	6.3
199	PST-K17-192	3.9	4.1	3.7	4.3	6.3	6.0	6.3	4.3	4.7
200	A14-422	3.9	4.6	3.2	7.3	8.3	7.0	4.3	7.0	2.3

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
201	RAD-2437	3.9	5.1	2.7	3.7	9.0	3.7	5.3	5.3	2.0
202	PST-K15-163A	3.9	3.8	4.0	2.3	6.7	4.0	4.7	5.7	6.7
203	PST-K15-177	3.9	4.6	3.2	2.3	8.0	6.0	7.0	3.7	3.0
204	Harmonie	3.9	3.9	3.8	4.0	6.0	5.7	4.3	4.7	7.2
205	Spitfire	3.9	4.0	3.7	5.3	6.7	6.0	4.7	5.0	6.0
206	PST-T17-51	3.8	3.6	4.1	3.7	5.3	3.7	5.7	5.0	7.5
207	Rockstar	3.8	4.0	3.6	4.0	4.7	5.0	3.3	6.3	5.0
208	A17-2	3.8	4.2	3.4	3.7	7.3	4.3	5.0	5.0	6.3
209	Cocktail	3.8	4.5	3.0	4.0	5.3	5.3	6.7	4.7	2.2
210	NAI-BRX-17	3.7	3.0	4.5	1.7	6.7	2.7	5.0	3.7	7.2
211	Gaelic	3.7	4.0	3.5	4.3	5.0	5.0	4.3	5.7	4.3
212	NAI 14-132	3.7	3.6	3.8	2.3	6.7	5.0	5.0	3.0	6.7
213	NAI 14-176	3.7	3.7	3.7	3.0	6.0	4.7	5.0	2.3	4.5
214	A16-1	3.7	4.3	3.0	5.0	5.7	6.3	4.0	6.7	3.3
215	PST-T17-50	3.7	4.1	3.2	2.7	5.0	4.0	5.7	4.0	4.0
216	A14-439	3.6	3.9	3.4	4.3	4.3	5.7	4.0	6.0	5.0
217	Rubicon	3.6	2.8	4.4	1.3	6.5	3.3	5.0	6.7	6.8
218	PST-K13-143	3.6	3.0	4.2	2.3	7.0	3.0	5.0	4.3	7.8
219	A14-330	3.6	3.9	3.2	2.7	5.3	3.7	4.7	4.0	2.8
220	PST-T15-43	3.5	3.2	3.8	2.7	8.3	4.3	4.7	4.3	6.5

(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
221	A14-258	3.5	4.2	2.7	5.0	4.7	5.7	5.3	5.0	3.5
222	Crest	3.4	3.7	3.2	4.3	6.0	5.0	3.7	4.0	6.5
223	RAD-3763	3.4	3.9	2.9	4.3	5.0	5.3	4.3	4.7	4.0
224	PST-K17-183	3.4	4.1	2.7	3.0	7.3	5.0	4.7	4.3	3.2
225	Aviator II	3.4	4.3	2.5	4.0	8.3	4.7	4.0	5.7	3.0
226	A17-7	3.3	3.9	2.7	4.3	6.3	6.3	4.0	6.3	3.0
227	A15-21	3.2	4.5	1.9	6.3	9.0	7.3	4.0	4.7	1.3
228	A15-5	3.2	4.4	1.9	5.0	9.0	2.7	5.0	4.3	1.8
229	PST-K17-194	3.1	3.2	3.0	3.3	5.0	4.0	5.0	4.0	2.8
230	Touchdown	3.1	3.7	2.5	6.7	8.3	5.7	3.0	7.3	3.0
231	PST-K13-39	3.1	3.3	2.8	1.7	7.5	2.0	4.7	4.3	3.0
232	NAI-15-106	3.1	3.9	2.2	4.3	6.7	5.0	4.0	6.0	2.2
233	PST-K15-173	3.0	2.9	3.1	2.0	6.3	3.0	4.3	4.0	3.8
234	A16-11	3.0	3.7	2.3	4.3	5.3	4.7	3.0	6.0	2.7
235	Zedor	3.0	3.2	2.7	2.3	5.7	5.0	4.0	4.0	5.0
236	A16-10	2.9	3.9	2.0	5.3	6.0	5.7	3.3	6.0	2.2
237	PST-K17-193	2.9	2.8	3.0	1.3	8.3	4.0	3.7	4.0	3.2
238	Corsair	2.6	2.8	2.5	2.7	4.7	6.3	3.3	5.7	5.0
239	A16-5	2.6	3.3	2.0	2.7	9.0	2.7	3.7	5.3	2.2
240	PST-K15-160	2.5	2.5	2.6	2.3	7.3	2.0	4.3	5.0	4.5

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(Continued)

Table 3. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Establish-	Mesotrione	Stem	Summer	Spring	Summer	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 9 Oct. 2017	Damage ³ 16 Oct. 2017	Rust ⁴ 2 Nov. 2017	Patch ⁵ 21 Aug. 2018	Green-up ⁶ 8 Apr. 2019	Patch Avg. ⁷ 2019	
241	GO-MOR	2.5	2.8	2.2	4.7	4.3	5.7	3.7	7.7	2.2
242	A16-20	2.5	4.0	1.0	8.3	9.0	8.7	2.3	8.0	1.0
243	PST-K16-179	2.4	3.3	1.5	3.3	6.7	4.3	3.3	4.7	1.7
244	PST-K16-180	2.4	3.1	1.7	2.3	7.7	3.7	4.0	4.0	2.0
245	NAI-15-108	2.4	2.6	2.1	3.3	7.7	3.7	3.7	6.0	4.2
246	BlackJack	2.2	2.9	1.5	2.7	7.0	4.0	2.7	5.3	1.5
247	PST-TX8-56	2.0	2.8	1.2	3.3	5.7	3.7	1.0	5.7	1.3
248	Blue Ghost	1.8	1.5	2.1	1.3	5.0	2.0	2.3	5.0	3.2
LSD at 5%=		0.7	0.8	0.9	1.2	1.5	1.8	1.5	1.1	1.8

¹9 = Best turf quality

²9 = Best establishment

³9 = Least bleaching response

⁴9 = Least stem rust

⁵9 = Least summer patch

⁶9 = Best spring green-up

⁷Average of ratings from 16 August and 2 October 2019

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct. 2017	3 Nov. 2017	16 Oct. 2017	19 Apr. 2018	30 May 2018	11 July 2018	6 Sep. 2018	18 Apr. 2018	21 May 2018	
1	H03-556	6.5	6.3	6.7	7.3	3.7	5.3	6.3	9.0	8.0	7.0	6.0	9.0
2	Bolt	6.5	6.4	6.5	7.7	4.7	4.3	4.0	8.3	6.7	6.0	3.7	8.0
3	PICK 033	6.2	6.2	6.3	7.7	3.3	7.3	4.3	7.7	5.3	4.7	4.7	7.3
4	Touche	6.1	5.7	6.5	5.3	4.7	2.7	4.3	7.3	6.0	6.0	3.3	7.7
5	A14-677	5.9	6.4	5.4	7.3	6.7	5.0	6.0	9.0	6.3	3.7	5.3	9.0
6	Heidi	5.9	5.9	5.8	7.7	3.0	7.7	4.3	7.7	4.3	5.0	5.0	8.3
7	A09-305	5.8	6.0	5.6	6.7	3.0	5.7	4.0	4.7	8.0	4.0	2.7	8.3
8	A11-40	5.8	5.8	5.7	5.7	5.3	5.3	5.7	8.0	5.7	6.0	3.3	8.3
9	PST-105-191	5.7	5.6	5.9	4.7	3.3	4.7	4.0	5.3	6.7	3.7	3.3	4.0
10	PST-K17-191	5.6	5.8	5.4	6.3	3.7	5.3	4.7	7.7	5.7	4.0	5.7	5.0
11	PST-K17-184	5.6	5.3	5.8	6.7	4.0	5.7	3.3	4.3	5.7	5.3	3.3	3.3
12	NAI 15-105	5.5	5.1	5.9	3.7	4.3	3.3	4.3	7.7	5.7	3.3	4.0	4.7
13	A17-3	5.5	5.8	5.2	7.3	5.3	6.7	6.0	8.0	5.7	4.0	5.0	5.7
14	Martha	5.5	5.5	5.5	6.7	4.3	5.7	5.0	5.7	6.3	4.7	3.7	5.7
15	Hampton	5.5	5.5	5.4	6.0	4.7	7.3	3.7	6.3	4.0	4.3	6.0	7.7
16	A09-793	5.5	6.2	4.8	7.0	7.3	6.0	4.7	8.0	6.7	5.0	3.7	6.0
17	NAI-15-89	5.5	5.5	5.4	6.0	2.7	4.7	3.7	7.3	4.7	3.7	4.0	2.7
18	A11-71	5.4	5.7	5.1	5.7	4.3	4.0	4.7	7.0	6.7	3.7	4.3	4.3
19	A14-422	5.4	6.3	4.6	8.0	7.7	6.3	6.7	9.0	5.3	4.7	5.3	9.0
20	A11-26	5.4	5.5	5.3	5.7	3.3	5.0	4.3	6.3	7.0	5.3	3.0	4.3

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
21	SPF 30	5.4	5.7	5.1	8.0	3.3	7.7	4.0	8.7	5.7	3.3	3.3	4.3
22	NAI-15-90	5.4	5.4	5.3	3.0	6.7	2.0	4.3	5.7	6.3	7.0	2.3	2.7
23	PST-T14-40	5.4	5.5	5.2	7.3	3.3	5.3	4.3	7.3	6.3	4.7	3.3	3.7
24	A04-340	5.3	5.4	5.1	5.7	4.3	6.0	3.7	6.3	5.3	3.7	3.7	5.3
25	PPG-KB 1147	5.3	5.9	4.6	3.0	6.3	2.3	4.0	7.3	6.3	6.0	3.0	4.7
26	Julia	5.3	4.9	5.6	5.7	7.3	2.3	7.3	8.7	5.7	3.3	8.3	6.0
27	Blue Note	5.3	5.0	5.5	5.7	3.7	3.3	4.3	5.0	4.7	4.0	5.7	4.7
28	A05-361	5.2	5.6	4.9	6.3	4.0	7.7	4.3	7.7	6.0	4.3	5.7	6.3
29	A14-258	5.2	5.5	4.9	7.0	3.0	5.3	4.0	7.7	6.0	4.0	4.0	5.0
30	Cocktail	5.2	5.7	4.7	5.0	2.3	3.7	3.3	7.3	4.7	3.0	2.3	4.7
31	A12-287	5.2	6.1	4.3	7.3	5.7	6.0	6.7	9.0	5.7	5.0	4.3	9.0
32	NAI-15-106	5.2	5.4	5.0	5.3	4.7	3.3	5.7	7.3	6.3	5.7	4.3	3.7
33	Jumpstart	5.2	5.5	4.8	6.0	4.7	4.7	4.3	8.0	5.3	3.0	4.3	5.7
34	A14-299	5.2	4.8	5.5	7.7	1.7	4.3	3.7	7.0	4.0	3.7	3.3	4.3
35	A04-383	5.2	5.8	4.5	7.0	7.7	6.0	7.0	8.0	5.3	3.7	3.3	7.0
36	Sombrero	5.1	4.7	5.4	8.3	4.0	5.0	4.3	6.3	4.7	3.0	4.7	4.0
37	Tattoo	5.1	5.6	4.6	4.0	4.3	3.7	4.3	6.0	6.3	4.0	3.7	7.0
38	PPG-KB 1317	5.1	5.8	4.3	5.3	6.3	3.3	6.3	6.0	7.7	6.7	3.3	1.3
39	A11-358	5.1	5.0	5.1	3.3	6.7	2.7	7.3	8.7	7.0	3.3	6.0	9.0
40	BAR PP 71654	5.1	5.0	5.1	6.3	3.3	6.0	3.3	6.3	4.3	3.7	4.0	7.7

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May
				2017	2017	2017	2018	2018	2018	2018	2018	2018
41 A15-10	5.0	4.9	5.2	6.0	3.0	3.7	4.3	5.7	4.7	3.7	5.3	3.0
42 A15-470	5.0	5.0	5.1	8.3	5.0	5.0	3.7	7.3	6.0	2.3	6.0	6.3
43 Yellowstone	5.0	5.4	4.6	5.7	3.7	6.0	3.3	6.7	4.3	4.7	3.3	4.0
44 A17-8	5.0	5.5	4.5	4.7	3.7	8.0	5.3	8.7	5.0	4.7	4.0	4.3
45 A17-5	5.0	5.1	4.9	4.7	5.0	3.3	4.3	5.7	4.0	4.3	4.7	2.7
46 SRX 2758	5.0	5.4	4.6	7.7	3.3	7.3	3.3	7.0	5.3	3.0	5.0	7.0
47 Jersey	5.0	5.7	4.3	7.0	5.0	4.7	4.7	5.7	5.7	3.0	4.7	3.7
48 A09-258	5.0	5.7	4.3	8.7	3.0	9.0	6.7	9.0	4.7	2.3	6.3	9.0
49 A14-334	5.0	4.9	5.0	5.3	5.3	3.7	3.3	7.7	4.0	2.0	4.7	4.0
50 Babe	5.0	5.2	4.8	7.0	2.7	5.0	4.0	6.3	5.0	3.3	5.3	2.7
51 SRX 466	5.0	5.3	4.6	9.0	4.0	8.7	4.0	8.0	4.7	3.0	5.0	7.3
52 PST-K13-141	5.0	5.4	4.6	6.3	3.3	6.0	5.3	5.7	6.7	3.7	4.3	3.7
53 Dauntless	4.9	4.8	5.1	6.7	3.0	5.3	3.7	6.3	4.3	2.7	5.7	2.7
54 RAD-553	4.9	5.6	4.2	6.0	8.3	4.3	4.7	8.3	6.7	5.7	2.3	8.3
55 PST-K17-190AD	4.9	5.9	3.9	6.7	3.7	4.7	4.3	6.0	6.7	5.0	4.7	1.0
56 A05-295	4.9	4.9	4.9	5.3	4.3	6.3	4.0	6.3	3.7	4.3	4.3	7.0
57 P-105	4.9	5.2	4.6	9.0	4.7	7.3	5.0	9.0	5.3	3.7	5.3	7.0
58 Blue Star	4.9	4.7	5.0	7.0	2.0	5.0	3.7	5.3	4.0	3.7	5.3	4.0
59 A09-789	4.9	5.7	4.1	5.7	7.3	3.3	3.7	7.7	6.0	4.7	4.0	5.0
60 KenBlue	4.9	5.5	4.2	7.3	6.0	4.3	7.3	9.0	6.7	4.7	4.7	9.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
61	PST-T14-39	4.8	5.0	4.7	4.0	5.3	2.7	3.3	5.7	4.3	2.3	5.3	1.7
62	RAD-2375	4.8	5.4	4.3	5.0	3.7	3.0	6.7	9.0	5.3	3.7	4.7	8.7
63	SRX 5321	4.8	4.6	5.0	6.7	3.7	4.7	4.3	6.3	4.7	3.7	3.7	6.3
64	PST-K11-118	4.8	4.8	4.8	5.0	4.7	3.7	5.0	4.3	5.3	3.3	6.0	3.3
65	PST-K17-186	4.8	5.3	4.3	4.7	6.0	3.3	4.7	7.7	5.7	3.3	4.0	6.0
66	A09-794	4.8	5.7	3.9	5.7	7.7	4.0	5.0	6.0	6.0	5.7	2.3	4.7
67	PPG-KB 1532	4.8	5.2	4.4	3.7	5.7	2.3	6.3	4.7	6.7	5.0	3.7	1.3
68	LTP-11-41	4.8	5.2	4.4	7.7	3.3	8.0	4.7	7.7	6.3	5.3	4.3	5.7
69	A14-220	4.8	5.2	4.3	7.0	2.3	6.7	4.0	6.7	6.3	4.7	2.7	4.0
70	Volt	4.7	4.6	4.8	7.7	3.7	6.3	4.0	6.3	4.7	2.7	5.7	4.0
71	PST-K17-187	4.7	4.7	4.8	3.7	4.3	3.7	4.0	5.0	4.3	4.0	3.7	2.0
72	Chloe	4.7	4.9	4.6	7.3	2.3	5.7	4.0	5.3	4.0	4.0	5.7	3.0
73	A04-66	4.7	4.9	4.6	6.3	4.0	8.0	4.0	7.7	4.3	3.7	4.7	6.7
74	A15-8	4.7	5.7	3.7	4.7	7.0	3.0	4.0	7.3	6.0	5.3	3.0	7.7
75	A05-351	4.7	4.6	4.8	6.0	4.7	4.7	3.7	6.7	4.7	2.7	3.0	5.0
76	Shannon	4.7	4.7	4.7	7.0	3.3	4.7	4.7	5.7	4.7	3.3	4.7	3.0
77	A16-2	4.7	4.7	4.7	6.0	3.0	3.3	4.3	4.7	4.3	2.7	5.0	3.3
78	Legend	4.7	5.0	4.4	6.3	3.3	4.0	4.7	4.3	5.7	4.0	4.3	7.0
79	Hampton	4.6	4.3	4.9	7.7	5.3	7.7	6.7	9.0	4.7	4.3	7.7	6.7
80	A06-671	4.6	4.9	4.4	6.7	3.7	5.0	4.0	7.0	5.0	2.7	4.0	4.3

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May
				2017	2017	2017	2018	2018	2018	2018	2018	2018
81 Selway	4.6	4.7	4.6	5.7	5.3	3.3	5.0	6.7	5.0	4.7	4.3	6.3
82 Jackrabbit	4.6	4.7	4.5	7.0	3.7	4.3	5.3	7.7	4.7	3.3	5.0	4.3
83 A16-4	4.6	4.7	4.5	7.7	3.0	6.3	4.3	5.7	5.0	2.7	5.0	3.3
84 A14-306	4.6	5.5	3.7	6.3	4.3	6.0	4.0	7.7	5.0	3.0	4.3	2.0
85 PST-T17-47	4.6	4.5	4.7	5.0	2.7	5.0	4.0	5.7	3.3	2.0	4.3	4.7
86 PST-K17-185	4.6	4.8	4.3	6.0	3.7	4.3	3.3	4.7	5.3	3.3	4.3	5.0
87 Aries	4.6	4.5	4.6	7.7	2.3	5.0	3.7	5.3	4.0	2.3	5.0	3.0
88 A13-3	4.6	5.1	4.0	5.0	2.7	6.0	4.3	6.7	5.3	5.7	3.7	7.3
89 A12-28	4.5	4.5	4.6	5.0	2.7	4.3	4.3	6.0	4.7	3.0	5.0	2.0
90 Arcadia	4.5	4.7	4.3	7.7	1.7	6.3	4.0	6.3	4.3	3.3	3.3	6.7
91 NAI-15-97	4.5	5.1	3.9	6.3	3.3	4.7	4.3	6.7	5.0	2.7	4.3	7.0
92 NAI-15-112	4.5	5.2	3.8	6.3	3.3	5.3	4.0	6.3	6.0	3.0	4.0	6.3
93 PST-K15-158	4.5	4.4	4.6	3.7	5.0	3.0	5.0	6.0	6.3	5.3	3.3	1.3
94 A16-21	4.5	4.5	4.4	5.7	7.0	2.7	4.7	8.3	6.0	4.7	6.7	7.0
95 PST-T15-42	4.5	4.8	4.2	5.0	4.3	4.0	4.7	8.0	5.7	3.3	5.7	2.7
96 A15-1091	4.4	4.0	4.9	7.7	2.7	8.7	6.7	9.0	4.0	5.7	8.0	6.7
97 RAD-3764	4.4	4.2	4.6	7.3	2.7	6.0	4.7	6.7	3.7	2.3	4.7	3.0
98 PST-T15-44	4.4	4.5	4.4	4.3	4.7	3.7	4.3	6.7	4.3	3.3	5.3	3.0
99 GO-MOR	4.4	4.5	4.3	6.3	2.7	3.7	4.3	8.0	5.7	4.7	5.7	7.7
100 Blue Velvet	4.4	4.7	4.1	6.0	2.7	6.3	3.7	8.0	3.7	3.7	2.7	8.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
101	A11-49	4.4	4.6	4.2	6.3	3.3	6.0	3.3	7.7	4.0	3.3	3.3	4.7
102	A11-778	4.4	4.9	3.9	6.3	7.3	2.7	5.3	9.0	5.7	4.0	4.3	8.7
103	Granite	4.4	4.8	4.0	8.3	1.7	8.7	3.7	8.0	4.0	2.7	3.0	7.3
104	PPG-KB 1539	4.4	4.9	3.8	4.7	3.7	5.0	3.7	5.7	6.0	4.3	3.3	7.0
105	A15-7	4.4	4.9	3.8	4.7	6.3	3.3	5.0	7.7	6.3	4.0	5.3	6.7
106	PST-105-69	4.4	5.0	3.8	5.7	3.3	3.3	3.7	8.3	4.0	2.0	3.3	2.0
107	Keeneland	4.4	5.1	3.6	6.0	3.3	6.0	4.0	6.3	6.0	3.3	4.3	6.0
108	A14-307	4.4	4.6	4.1	6.3	4.0	6.0	3.0	8.0	3.7	2.0	4.7	3.7
109	A16-19	4.3	4.9	3.7	7.7	2.3	5.7	4.0	3.3	4.0	2.3	6.7	2.0
110	RAD-2437	4.3	5.1	3.5	5.0	6.7	4.3	4.7	6.7	6.0	2.7	4.7	7.7
111	A12-298	4.3	4.7	3.9	6.3	5.0	3.3	4.0	4.3	4.7	2.3	3.3	3.3
112	A13-695	4.3	4.3	4.3	4.7	3.3	4.0	5.3	9.0	5.0	2.0	6.7	5.3
113	PST-K17-192	4.3	4.0	4.5	5.7	3.3	4.7	2.7	7.0	4.7	4.0	4.7	1.7
114	PST-K15-163A	4.3	4.6	3.9	4.0	4.7	3.0	3.7	6.3	5.3	2.7	3.7	1.7
115	BAR PP7158V	4.3	4.5	4.0	6.3	3.3	6.0	4.0	8.0	5.0	2.7	3.7	3.3
116	Crest 5K-12	4.3	4.6	3.9	4.7	4.7	4.0	4.7	6.0	4.0	2.3	5.7	1.7
117	Mystere H2O	4.2	4.3	4.2	5.0	3.7	5.7	4.3	4.3	4.3	2.3	4.0	3.7
118	PST-K15-166	4.2	4.6	3.9	3.0	7.7	3.0	5.0	2.7	5.3	3.3	5.0	1.3
119	PST-K17-182	4.2	4.8	3.7	4.0	5.7	3.0	4.0	3.7	6.0	3.7	4.3	2.3
120	Fullback	4.2	3.5	4.9	5.0	4.7	3.3	5.3	8.0	4.7	3.3	5.7	3.7

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
121	A14-439	4.2	4.3	4.2	6.3	2.7	4.3	4.3	6.0	4.0	2.0	3.7	1.7
122	Diva	4.2	4.3	4.1	7.7	4.3	6.3	5.3	7.3	4.7	3.7	6.7	5.0
123	A10-280	4.2	4.3	4.1	2.3	7.3	3.7	6.7	7.3	7.0	2.7	4.7	2.7
124	A14-258	4.2	4.9	3.5	7.0	2.7	4.7	5.3	8.3	4.7	3.3	3.0	3.7
125	Aviator II	4.2	4.5	3.8	5.0	4.0	4.3	4.7	4.3	4.7	5.7	3.7	3.3
126	NAI-13-34	4.2	4.3	4.0	4.7	3.3	4.3	4.0	7.0	3.0	3.3	4.0	7.3
127	A15-9	4.2	4.4	3.9	5.7	2.7	5.7	3.0	7.3	4.3	3.7	4.3	8.0
128	PPG-KB 1316	4.2	4.6	3.7	5.3	5.0	2.7	4.0	6.0	5.0	3.7	3.3	6.3
129	Rhapsody	4.2	4.7	3.6	4.0	4.7	2.7	5.0	5.7	4.7	4.7	2.7	5.0
130	Fullback	4.1	4.4	3.8	6.0	2.7	4.0	4.7	5.7	4.3	3.0	4.3	5.0
131	Fielder	4.1	4.5	3.7	6.3	2.3	5.0	4.0	5.7	4.0	2.0	4.7	1.3
132	Rockstar	4.1	3.8	4.4	4.7	3.7	4.3	4.3	7.0	4.3	2.7	6.3	2.3
133	A14-373	4.1	4.3	3.9	8.0	1.7	6.7	3.0	5.3	4.0	2.3	5.3	4.3
134	A03TB-663	4.1	3.7	4.5	2.0	7.3	3.0	5.3	6.3	4.7	4.0	5.3	4.0
135	RAD-3428	4.1	4.5	3.7	2.3	6.7	1.7	5.0	4.0	4.0	2.3	5.7	3.3
136	Explorer	4.1	4.5	3.6	6.3	3.0	7.3	3.3	7.3	3.7	3.3	3.7	8.0
137	A17-7	4.1	3.9	4.2	5.0	3.7	4.3	4.3	6.3	4.0	1.7	5.7	1.7
138	A14-330	4.1	4.1	4.0	2.7	5.0	2.0	4.5	6.3	4.3	2.3	3.7	1.3
139	A16-10	4.1	4.4	3.7	7.0	2.0	5.7	4.0	5.7	4.0	2.0	6.3	1.7
140	A14-15	4.0	4.4	3.7	6.3	3.0	6.0	3.3	6.7	5.0	3.3	4.0	3.3

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
141	A16-20	4.0	4.7	3.4	9.0	6.3	8.7	6.3	9.0	6.0	3.7	6.7	9.0
142	A17-6	4.0	4.2	3.9	4.3	5.0	4.7	5.0	4.3	5.0	2.7	5.7	1.0
143	PST-K13-140	4.0	4.2	3.8	5.3	2.0	5.0	3.7	6.0	3.0	3.0	5.3	1.7
144	Lunar	4.0	4.3	3.7	6.3	3.7	5.0	3.7	4.7	4.7	3.0	4.3	1.7
145	Bluedevil	4.0	4.7	3.3	6.7	2.7	6.3	3.3	6.0	4.7	3.0	3.3	7.0
146	A15-481	4.0	4.4	3.6	6.3	7.3	3.3	4.7	7.7	4.7	2.3	5.3	2.7
147	STR 2553	4.0	4.5	3.5	7.3	4.3	4.7	4.7	3.7	5.0	3.3	3.7	3.7
148	Milagro	4.0	4.2	3.8	6.3	3.3	6.7	3.7	5.7	4.0	2.7	4.3	1.3
149	A17-4	4.0	4.2	3.7	6.3	8.3	3.0	5.3	6.3	4.7	4.3	4.0	5.0
150	A17-1	4.0	4.3	3.7	5.0	6.3	3.3	5.0	5.0	6.0	4.0	3.3	5.3
151	Slingshot	4.0	4.4	3.6	5.3	3.7	3.7	4.0	4.7	3.0	2.7	4.0	2.7
152	A12-33	4.0	4.1	3.9	6.0	3.7	4.3	3.7	6.7	4.0	3.0	3.7	7.0
153	A16-8	4.0	4.5	3.4	4.3	4.7	5.7	4.0	7.7	6.0	4.3	2.7	3.0
154	NAI-BRX-17	4.0	3.9	4.0	2.3	6.0	2.0	2.0	3.7	3.3	3.7	2.3	1.7
155	PST-K15-172	4.0	4.4	3.5	2.7	5.3	2.0	4.3	4.0	4.7	3.7	2.3	1.0
156	Powerplay	4.0	4.6	3.3	7.0	3.7	5.3	3.3	4.0	4.0	4.3	3.7	3.0
157	Armada	3.9	4.2	3.6	5.3	3.0	4.3	3.3	4.7	3.7	2.3	4.3	2.7
158	PST-K13-39	3.9	4.5	3.3	2.0	6.7	1.3	5.3	5.3	4.7	4.3	3.3	1.7
159	A17-9	3.9	4.6	3.2	4.0	4.3	4.7	3.0	4.3	5.3	4.7	1.3	2.7
160	Bluebank	3.9	4.3	3.4	7.3	1.7	6.3	3.0	6.3	3.7	3.0	3.3	6.7

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
161	Orion	3.8	3.4	4.3	3.3	2.7	3.0	4.0	6.5	4.7	2.7	4.7	1.0
162	A06-8	3.8	4.0	3.6	4.0	5.3	3.0	4.7	4.3	4.3	3.3	4.7	2.3
163	A99-2123	3.8	4.1	3.5	6.3	2.0	6.3	3.7	5.7	5.0	3.3	3.7	3.3
164	PST-T17-48	3.8	4.6	3.0	4.3	4.0	4.7	5.0	4.3	4.0	3.7	4.0	2.0
165	A16-1	3.8	3.9	3.7	5.7	3.0	4.3	3.7	6.3	4.0	2.0	5.7	2.0
166	A05-347	3.8	4.0	3.6	5.0	4.0	4.3	4.3	5.7	4.3	3.3	3.7	7.3
167	PST-T14-37	3.8	4.4	3.1	5.7	2.7	7.0	3.3	6.0	2.7	2.7	4.3	3.3
168	PPG-KB 1524	3.8	4.2	3.3	6.3	4.3	3.0	5.0	4.0	5.3	3.0	5.3	1.7
169	Quantum Leap	3.8	4.2	3.3	7.3	2.0	6.0	3.3	7.7	3.7	3.0	3.3	5.7
170	A14-3	3.8	4.2	3.3	7.3	3.7	4.0	4.0	2.7	5.3	4.0	3.7	2.7
171	Rubix	3.7	3.3	4.1	5.0	2.3	2.7	3.0	6.3	3.3	2.0	5.7	4.7
172	Noble	3.7	3.9	3.5	7.7	2.7	6.0	4.0	5.0	4.7	2.7	5.7	5.3
173	Spitfire	3.7	3.8	3.5	7.0	4.3	4.7	4.3	6.0	4.3	2.0	5.3	3.3
174	Ginney II	3.7	3.9	3.4	7.0	2.3	7.7	2.7	7.0	3.0	3.0	3.3	7.7
175	Rhythm	3.7	4.1	3.2	7.0	2.3	4.7	3.0	6.0	3.0	2.3	3.7	3.3
176	NAI-11-644	3.7	3.8	3.5	3.3	4.7	4.3	3.0	3.3	3.7	3.3	4.7	1.7
177	A12-8	3.7	4.1	3.2	2.7	5.3	2.3	4.3	5.0	5.3	4.0	3.0	1.0
178	NAI-14-127	3.7	4.3	3.0	5.3	4.3	5.7	2.3	5.7	4.0	3.0	2.0	1.0
179	Bluecoat	3.7	4.5	2.8	7.3	3.3	7.3	2.0	7.3	4.7	3.3	2.7	2.3
180	Comet	3.6	3.9	3.4	4.7	4.0	3.3	4.7	4.7	3.7	3.7	4.7	2.0

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads	
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May	
				2017	2017	2017	2018	2018	2018	2018	2018	2018	
181	A15-5	3.6	4.3	2.9	4.7	6.7	3.0	5.7	3.7	5.0	3.3	4.3	3.3
182	Wildhorse	3.6	3.8	3.4	5.3	2.0	3.3	3.3	5.7	3.0	2.3	5.0	2.3
183	A17-2	3.6	4.1	3.1	4.3	4.7	3.3	4.7	5.7	4.0	2.7	3.3	6.3
184	Prafin	3.6	4.1	3.1	7.3	2.0	7.0	4.0	6.0	3.0	2.0	4.3	5.7
185	Prosperity	3.6	3.7	3.5	8.0	2.0	8.0	3.3	6.7	4.0	2.7	5.3	7.0
186	A06-26	3.6	3.7	3.5	5.3	3.0	5.0	4.0	4.3	4.7	3.3	3.3	4.3
187	PST-T17-51	3.6	3.8	3.4	3.3	3.7	2.3	2.5	3.3	2.7	1.7	4.7	1.7
188	A14-365	3.6	3.5	3.6	5.3	1.3	5.3	2.3	6.7	3.0	2.3	3.0	2.3
189	RAD-3763	3.6	3.7	3.4	5.3	3.0	5.0	3.7	8.0	4.0	2.0	4.7	6.3
190	SR 2100	3.5	3.7	3.3	6.0	4.0	4.0	3.0	5.0	4.3	3.7	4.3	3.0
191	A16-5	3.5	3.8	3.2	4.3	5.7	3.3	5.0	7.3	5.0	2.3	5.7	3.3
192	A15-6	3.5	4.0	3.0	5.3	3.3	3.0	4.7	4.7	4.7	3.7	4.3	4.7
193	PST-K10-110	3.5	3.8	3.2	5.3	4.3	5.0	4.3	4.0	3.7	2.7	4.0	4.7
194	PST-K15-169	3.5	4.0	3.0	6.0	2.7	6.7	3.3	5.0	2.7	2.7	2.7	1.7
195	A14-362	3.5	3.8	3.2	5.3	2.3	4.3	2.0	5.3	3.7	2.7	3.0	2.3
196	PST-K17-189AD	3.5	4.0	3.0	6.3	2.3	7.3	2.3	5.7	3.0	2.7	5.0	2.0
197	A15-21	3.5	4.1	2.9	7.3	3.7	6.3	3.3	8.0	4.7	3.3	4.0	5.3
198	NAI 14-133	3.5	4.2	2.8	4.3	3.7	6.0	2.0	6.3	4.0	3.3	2.0	1.7
199	PST-K17-188AD	3.5	4.3	2.7	6.3	3.0	6.3	3.3	5.0	4.7	3.0	5.7	1.0
200	A16-11	3.5	3.6	3.4	6.3	2.0	4.3	4.0	6.0	3.0	1.7	5.3	2.0

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(Continued)

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 6 Oct. 2017	Rust ³ 3 Nov. 2017	Damage ⁴ 16 Oct. 2017	Green-up ⁵ 19 Apr. 2018	Heads ⁶ 30 May 2018	Stress ⁷ 11 July 2018	Stress ⁸ 6 Sep. 2018	Green-up 18 Apr. 2018	Heads 21 May 2018	
201	Aramintha	3.5	3.9	3.1	5.3	3.3	3.0	4.3	4.3	4.0	2.7	4.3	2.3
202	PST-K16-178	3.5	4.1	2.8	7.3	3.3	7.3	3.3	2.7	4.3	2.0	3.7	1.0
203	PST-T15-43	3.5	3.4	3.5	3.3	6.3	1.7	3.0	5.0	2.7	2.3	4.7	1.3
204	PST-K17-183	3.5	3.7	3.3	3.0	4.7	4.0	5.0	3.3	4.7	2.3	4.0	3.7
205	Mercury	3.5	4.1	2.9	3.3	8.3	2.0	5.0	3.7	4.3	3.3	5.0	1.0
206	PST-11-7	3.5	4.0	2.9	6.3	2.7	6.0	2.7	6.7	3.7	2.0	5.3	1.7
207	NAI-15-60	3.4	3.2	3.6	4.3	5.0	3.0	4.7	5.3	4.0	4.7	6.3	3.3
208	NAI 14-176	3.4	4.1	2.8	3.0	3.7	4.0	2.7	5.7	4.3	3.0	2.3	1.0
209	Arrowhead	3.4	3.7	3.2	6.7	1.0	6.3	3.3	4.3	2.7	3.0	5.7	2.0
210	Kelly	3.4	3.1	3.6	9.0	1.0	7.0	1.7	7.0	3.0	1.7	5.0	1.0
211	NAI 14-122	3.4	4.1	2.6	3.7	3.7	5.7	2.3	6.3	4.0	3.0	2.7	2.3
212	NAI 14-132	3.4	4.4	2.4	3.7	4.0	5.0	2.0	7.0	4.3	2.7	1.7	2.0
213	Gaelic	3.4	3.5	3.2	5.0	3.0	3.7	4.0	5.7	3.7	1.7	6.3	2.7
214	NAI 14-128	3.4	4.1	2.6	4.0	3.7	5.7	2.0	6.3	3.3	3.0	1.7	1.7
215	Harmonie	3.4	3.4	3.3	4.7	3.3	4.0	4.0	7.7	4.0	2.7	3.7	4.3
216	NAI-15-108	3.3	3.1	3.6	3.7	5.3	3.0	4.0	6.0	3.3	2.7	4.3	2.3
217	MacMillan	3.3	3.9	2.7	5.3	7.7	3.3	4.3	3.7	4.0	2.7	5.3	1.0
218	NAI 14-187	3.3	4.0	2.6	2.7	4.0	4.7	2.7	6.0	3.7	3.7	2.3	1.3
219	A14-281	3.3	3.9	2.6	3.3	8.0	2.3	4.0	7.3	4.7	2.7	5.3	2.7
220	PST-K15-160	3.3	3.2	3.3	3.0	4.7	2.0	4.3	6.7	4.0	2.7	5.7	2.0

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed	
	2018-19 Avg.	2018 Avg.	2019 Avg.	ment ² 6 Oct. 2017	Rust ³ 3 Nov. 2017	Damage ⁴ 16 Oct. 2017	Green-up ⁵ 19 Apr. 2018	Heads ⁶ 30 May 2018	Stress ⁷ 11 July 2018	Stress ⁸ 6 Sep. 2018	Green-up 18 Apr. 2018	Heads 21 May 2018	
221	PST-K17-193	3.3	3.7	2.8	2.0	6.0	4.7	5.0	6.3	4.0	2.3	4.0	6.3
222	PST-K17-194	3.3	3.7	2.8	4.0	4.3	3.3	4.3	6.7	4.3	2.3	4.0	3.0
223	Touchdown	3.2	3.6	2.8	8.0	5.3	4.0	6.0	9.0	4.7	1.7	6.7	7.0
224	NAI 14-126	3.2	3.8	2.6	2.3	4.7	5.0	2.7	6.3	3.0	2.7	2.3	2.0
225	Crest	3.2	3.0	3.3	5.7	2.3	4.0	2.7	5.7	2.7	1.7	4.0	1.0
226	Zedor	3.1	3.0	3.2	2.7	5.3	4.3	3.0	5.0	3.3	1.3	4.0	2.7
227	Bandera	3.1	3.4	2.8	6.0	1.3	6.3	2.3	6.0	2.7	2.3	4.0	3.0
228	NAI 14-178	3.1	2.3	3.8	1.3	6.5	1.3	4.0	6.3	1.7	1.0	6.7	7.3
229	BlackJack	3.1	3.5	2.7	2.7	5.0	3.3	5.0	6.7	4.0	2.3	5.3	1.7
230	PST-T17-50	3.0	3.3	2.7	3.7	3.7	3.0	3.0	3.7	3.3	2.7	2.7	3.0
231	PST-K17-196	3.0	3.3	2.6	4.7	3.5	5.0	3.3	5.0	3.7	2.0	3.3	4.0
232	PST-T17-49	3.0	3.6	2.3	3.3	4.7	3.7	3.7	2.7	3.0	3.0	4.0	2.0
233	Geisha	2.9	2.9	3.0	7.0	1.3	6.3	1.7	7.0	2.3	1.3	5.0	3.0
234	PST-K15-167	2.9	3.5	2.4	4.7	1.7	4.0	2.3	4.7	3.0	2.7	2.7	1.0
235	Rubicon	2.9	2.6	3.2	2.0	5.0	2.0	3.5	6.5	2.7	2.3	6.0	5.0
236	PST-K16-179	2.8	3.3	2.3	4.3	4.0	4.3	4.0	5.0	4.0	1.7	5.0	4.3
237	PST-K15-173	2.7	2.6	2.8	2.0	4.5	2.0	3.0	5.0	2.3	2.3	4.0	1.7
238	PST-K16-180	2.6	2.7	2.4	3.7	4.7	4.0	3.0	4.7	3.0	1.7	5.7	4.3
239	PST-K15-177	2.6	2.9	2.3	3.0	4.3	4.3	4.0	3.7	2.7	1.7	6.0	1.0
240	Corsair	2.4	2.4	2.4	3.7	2.7	5.3	3.0	5.3	2.3	1.7	5.3	2.3

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

Entry	-----Turf Quality ¹ -----			Establish-	Stem	Mesotrione	Spring	Seed	Summer	Drought	Spring	Seed
	2018-19	2018	2019	ment ²	Rust ³	Damage ⁴	Green-up ⁵	Heads ⁶	Stress ⁷	Stress ⁸	Green-up	Heads
	Avg.	Avg.	Avg.	6 Oct.	3 Nov.	16 Oct.	19 Apr.	30 May	11 July	6 Sep.	18 Apr.	21 May
				2017	2017	2017	2018	2018	2018	2018	2018	2018
241 PST-TX8-56	2.1	2.1	2.1	3.3	4.0	3.3	3.0	6.0	2.3	1.0	6.0	6.7
LSD at 5%= ^a	0.7	0.9	0.9	1.5	1.7	1.6	1.3	1.5	1.6	1.5	1.5	1.5

¹9 = Best turf quality

²9 = Best establishment

³9 = Least stem rust

⁴9 = Least bleaching response

⁵9 = Best spring green-up

⁶9 = Least seed heads

⁷9 = Best quality under summer stress

⁸9 = Best quality under drought stress

Table 5. Performance of Kentucky bluegrass cultivars and selections organized by Alliance for Low Input Sustainable Turf (A-LIST), seeded in September 2017 at Adelphia, NJ.

Entry	-----Turf Quality ¹ -----			Percent	Density ³	Genetic	
	2018-2019 Avg.	2018 Avg.	2019 Avg.	Cover ² 29 Oct. 2019	29 Oct. 2019	Color ⁴ 2 May 2019	
1	A11-40	6.3	6.1	6.6	86.3	7.5	4.0
2	Martha	6.0	5.7	6.2	93.8	8.3	7.0
3	SR 2150	5.5	5.8	5.3	86.3	7.3	4.8
4	Yellowstone	5.5	6.0	5.0	86.3	6.8	5.0
5	Keeneland	5.4	6.0	4.7	86.3	6.3	6.5
6	LTP-11-41	5.3	5.4	5.3	80.0	5.5	6.0
7	SRX 2758	5.2	5.8	4.6	90.0	7.5	6.3
8	Fullback	5.1	5.1	5.1	85.0	6.5	3.5
9	SRX 466	4.9	5.1	4.7	83.8	5.5	6.0
10	Jackrabbit	4.9	5.3	4.5	80.0	6.5	7.3
11	PPG-KB 1131	4.9	5.4	4.4	86.3	7.0	7.3
12	Legend	4.7	5.1	4.3	82.5	6.0	7.8
13	United	4.7	5.1	4.3	90.0	7.5	7.0
14	Zinfandel	4.5	4.7	4.4	87.5	6.3	7.5
15	A11-38	4.4	4.4	4.5	80.0	5.0	5.0
16	Bluebank	4.4	4.9	3.8	83.8	6.0	7.8
17	Champagne	4.3	4.1	4.5	87.5	5.8	5.0
18	Merlot	4.0	4.5	3.4	88.8	6.0	7.0
19	Hampton	3.8	4.0	3.6	85.0	6.3	6.8
20	A12-34	3.6	4.1	3.2	80.0	5.5	8.0
21	MVS-130	3.5	4.1	2.9	83.8	6.0	8.0
22	Bordeaux	2.8	3.3	2.4	75.0	4.0	8.0
23	PPG-KB 1320	2.5	3.0	2.0	56.3	2.5	7.3
LSD at 5%=		0.6	0.7	0.7	7	1.3	0.7

¹9 = Best turf quality

²100 = Complete turf cover

³9 = Densest turf

⁴9 = Darkest genetic color

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the National Turfgrass Evaluation Program, seeded in September 2017 at Adelphia, NJ.

Entry No.	Entry	-----Turf Quality ¹ -----			Percent												
		2018-19 Avg.	2018 Avg.	2019 Avg.	Establish-ment ² 6 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Genetic Color ⁴ Avg. ¹¹ 2018	Summer Patch ⁵ 21 Aug. 2018	Percent Cover ⁶ 2 Oct. 2018	Spring Green-up ⁷ 8 Apr. 2019	Genetic Color 2 May 2019	Summer Patch Avg. ¹² 2019	Percent Cover 23 Sep. 2019	Density ⁸ 18 Oct. 2019	Uniformity ⁹ 28 Oct. 2019	Texture ¹⁰ 28 Oct. 2019	
1	NT-74 PPG-KB 1304	7.2	7.1	7.3	69.0	9.0	6.7	8.0	95.0	8.3	4.7	8.7	93.0	7.3	7.7	5.7	
2	NT-67 A11-26	7.0	6.6	7.3	78.3	7.0	7.3	7.0	95.0	4.3	7.3	8.1	90.0	8.3	8.3	7.3	
3	NT-27 Barserati	6.8	6.6	7.0	83.7	4.7	3.8	8.7	99.0	8.3	5.0	9.0	99.0	6.7	8.3	7.3	
4	NT-76 A-16-17	6.8	6.5	7.1	65.0	1.0	4.2	7.3	96.0	5.7	3.0	8.8	97.7	8.3	9.0	6.7	
5	NT-03 A99-2897	6.6	6.5	6.8	79.0	6.0	8.3	8.0	97.7	5.7	8.3	8.9	93.3	6.7	8.0	5.7	
6	NT-47 Starr	6.6	6.4	6.9	73.0	4.0	7.2	8.0	97.7	4.3	7.0	8.1	85.0	6.7	7.7	6.7	
7	NT-02 A13-1	6.6	6.2	7.0	55.0	2.7	7.3	8.7	96.3	4.7	6.7	9.0	95.0	8.0	8.3	4.0	
8	NT-48 Cloud	6.6	6.6	6.6	65.0	3.3	7.2	6.7	97.7	5.0	6.7	8.7	96.3	6.0	6.7	5.3	
9	NT-46 Bombay	6.6	6.1	7.0	67.0	3.0	6.7	6.7	94.7	5.3	7.0	8.7	88.0	7.3	7.7	6.0	
10	NT-19 NuRush	6.5	6.7	6.3	94.0	9.0	8.2	7.7	96.3	2.7	8.0	8.7	86.7	7.3	7.7	5.3	
11	90 A04-383	6.4	6.6	6.2	97.3	9.0	3.3	8.7	99.0	6.0	3.0	8.7	91.7	8.3	9.0	6.0	
12	NT-52 DLFPS-340/3553	6.4	6.3	6.6	64.3	8.7	6.3	7.0	85.0	7.7	5.7	7.9	88.3	6.7	8.0	6.0	
13	NT-51 DLFPS-340/3556	6.4	6.7	6.1	68.0	5.0	6.8	7.3	93.3	3.3	7.3	8.1	75.0	5.7	7.0	5.0	
14	NT-22 BAR PP 79366	6.4	6.1	6.7	37.0	3.0	6.8	7.7	97.7	3.0	7.7	8.4	88.3	8.0	9.0	6.3	
15	NT-71 A10-280	6.3	6.8	5.7	64.0	6.0	8.0	9.0	96.3	8.0	5.7	8.4	91.7	8.0	7.0	4.7	
16	NT-16 J-1138	6.1	6.1	6.1	90.7	8.3	7.8	7.3	94.7	3.3	8.0	8.4	88.3	8.0	8.7	5.7	
17	NT-54 DLFPS-340/3500	6.1	5.9	6.3	28.3	2.7	7.2	7.7	99.0	3.0	7.0	8.4	88.3	8.0	7.7	6.0	
18	NT-60 DLFPS-340/3550	6.1	5.8	6.3	75.3	6.7	8.0	7.7	95.0	4.0	7.3	8.2	90.0	6.3	7.0	6.0	
19	NT-23 Barvette HGT	6.0	6.4	5.6	83.7	7.0	3.5	8.0	99.0	8.0	2.3	8.9	97.7	8.0	8.7	7.7	
20	NT-25 BAR PP 7236V	5.9	5.9	5.8	84.0	3.3	3.5	9.0	97.7	6.7	2.7	7.8	83.3	7.3	7.3	6.3	

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the National Turfgrass Evaluation Program, seeded in September 2017 at Adelphia, NJ.

Entry No.	Entry	-----Turf Quality ¹ -----			Percent												
		2018-19 Avg.	2018 Avg.	2019 Avg.	Establish-ment ² 6 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Genetic Color ⁴ Avg. ¹¹ 2018	Summer Patch ⁵ 21 Aug. 2018	Percent Cover ⁶ 2 Oct. 2018	Spring Green-up ⁷ 8 Apr. 2019	Genetic Color 2 May 2019	Summer Patch Avg. ¹² 2019	Percent Cover 23 Sep. 2019	Density ⁸ 18 Oct. 2019	Uniformity ⁹ 28 Oct. 2019	Texture ¹⁰ 28 Oct. 2019	
21	NT-87	PST-K15-172	5.9	5.8	5.9	75.7	4.3	6.7	7.7	96.3	3.7	5.3	8.9	99.0	7.3	8.3	5.3
22	NT-45	Skye	5.9	5.4	6.3	56.7	3.3	7.0	7.0	92.7	6.0	7.0	8.6	93.3	6.0	7.3	5.0
23	NT-09	AKB3128	5.8	5.9	5.7	85.0	5.7	6.8	6.3	95.0	5.7	7.0	7.9	85.0	6.3	7.0	6.0
24	NT-61	DLFPS-340/3551	5.8	5.7	5.9	65.0	3.0	7.2	8.0	93.3	4.7	7.3	8.0	86.7	6.3	7.0	5.3
25	NT-32	Blue Gem	5.8	5.6	5.9	88.0	9.0	7.5	6.3	91.7	2.7	9.0	8.0	88.3	7.0	8.0	6.0
26	NT-20	BAR PP 71213	5.8	5.5	6.0	56.0	2.3	2.5	6.7	95.0	5.7	2.3	7.7	88.3	8.0	8.0	5.7
27	NT-04	Syrah	5.7	5.8	5.6	81.0	8.7	6.7	6.0	83.3	6.0	4.7	6.3	81.7	6.0	7.3	7.3
28	NT-62	DLFPS-340/3552	5.7	5.6	5.8	66.0	3.0	6.2	7.3	94.7	4.0	7.0	8.3	93.0	8.0	8.7	6.3
29	NT-88	Midnight	5.6	5.6	5.7	93.7	9.0	7.3	7.3	91.7	2.3	8.7	8.4	81.7	7.3	7.0	5.0
30	NT-33	United	5.6	5.6	5.6	87.3	8.3	7.5	7.0	93.0	2.7	9.0	7.8	83.3	6.3	7.3	4.7
31	NT-82	PST-K11-118	5.5	5.3	5.7	65.0	5.3	3.5	7.0	93.3	6.3	4.7	5.8	76.7	6.3	5.7	5.7
32	NT-15	After Midnight	5.5	5.3	5.7	79.3	7.7	8.7	7.3	91.7	4.0	9.0	7.3	81.7	5.7	7.7	5.3
33	NT-81	PST-K13-141	5.5	5.2	5.7	80.0	6.7	7.2	7.3	95.0	6.0	7.0	8.0	88.0	7.3	6.7	5.7
34	NT-89	PST-T14-139	5.4	5.2	5.5	49.3	2.3	6.7	7.3	95.0	6.3	4.3	7.8	80.0	7.0	7.7	6.7
35	NT-70	PPG-KB 1131	5.4	5.2	5.6	63.0	6.7	8.0	7.0	90.0	2.7	8.0	8.0	85.0	8.3	7.7	5.3
36	NT-55	DLFPS-340/3438	5.4	5.2	5.6	61.0	3.0	7.3	6.7	85.0	5.3	6.7	7.8	86.7	5.7	7.3	5.7
37	NT-30	Twilight	5.4	5.7	5.0	87.0	8.7	8.5	6.7	88.3	2.0	8.7	6.6	81.7	5.7	5.7	5.3
38	NT-24	BAR PP 7K426	5.3	5.7	5.0	79.0	4.3	4.8	8.0	96.0	6.0	4.3	6.9	76.7	5.0	6.0	5.3
39	NT-14	Yellowstone	5.3	5.6	5.1	51.0	4.3	7.0	6.0	88.3	4.3	5.3	5.3	65.0	4.3	5.7	4.7
40	NT-78	A06-8	5.3	5.8	4.7	61.7	3.0	6.7	7.0	86.7	5.7	7.0	5.3	66.7	4.3	5.7	5.0

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(Continued)

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the National Turfgrass Evaluation Program, seeded in September 2017 at Adelphia, NJ.

Entry No.	Entry	-----Turf Quality ¹ -----			Percent												
		2018-19 Avg.	2018 Avg.	2019 Avg.	Establish-ment ² 6 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Genetic Color ⁴ Avg. ¹¹ 2018	Summer Patch ⁵ 21 Aug. 2018	Percent Cover ⁶ 2 Oct. 2018	Spring Green-up ⁷ 8 Apr. 2019	Genetic Color 2 May 2019	Summer Patch Avg. ¹² 2019	Percent Cover 23 Sep. 2019	Density ⁸ 18 Oct. 2019	Uniformity ⁹ 28 Oct. 2019	Texture ¹⁰ 28 Oct. 2019	
41	NT-11	AKB3241	5.3	5.0	5.5	49.3	5.0	7.5	7.7	93.3	5.7	7.3	8.3	93.3	5.7	7.3	7.0
42	NT-12	NK-1	5.2	5.0	5.4	74.3	3.0	7.5	7.0	91.7	4.7	6.7	7.7	80.0	6.3	7.0	5.0
43	NT-73	A-16-2	5.1	5.5	4.6	59.7	4.0	6.5	5.7	85.0	7.0	6.3	4.0	58.3	3.0	4.0	4.7
44	NT-44	Blue Devil	5.1	5.3	4.9	81.0	8.3	8.2	6.3	90.0	3.0	9.0	7.0	85.0	6.3	7.0	5.0
45	NT-29	Jersey	5.0	5.6	4.4	80.0	5.0	5.3	5.0	81.7	5.7	4.3	4.7	53.3	3.7	5.3	5.7
46	NT-01	A11-40	5.0	5.6	4.5	79.7	5.3	5.0	5.0	68.3	7.3	3.7	5.0	73.3	4.0	6.0	5.7
47	NT-18	J-2726	5.0	5.3	4.7	75.0	5.3	7.2	5.7	85.0	3.7	7.7	5.4	61.7	4.3	4.7	5.0
48	NT-21	BAR PP 7309V	5.0	5.2	4.8	67.3	2.7	4.8	6.3	88.3	5.3	4.7	5.4	75.0	4.7	6.3	5.0
49	NT-17	J-1319	5.0	5.7	4.3	87.7	8.0	9.0	5.3	80.0	4.0	9.0	5.6	73.3	3.7	5.7	3.7
50	NT-10	AKB3179	5.0	5.6	4.4	71.3	6.7	6.8	5.7	80.0	3.7	7.3	5.2	70.0	4.7	6.0	6.7
51	NT-86	New Moon	4.9	5.2	4.7	54.3	5.3	8.7	6.3	91.7	4.0	9.0	4.8	50.0	5.0	5.3	5.7
52	NT-26	BAR PP 79494	4.9	4.8	5.0	59.3	6.0	8.2	6.0	81.7	2.0	8.7	7.1	83.3	6.0	6.7	5.3
53	NT-43	Pivot	4.8	5.2	4.4	67.0	6.3	6.7	7.0	86.7	6.0	6.3	5.7	68.3	4.7	5.3	5.0
54	NT-59	DLFPS-340/3455	4.8	5.3	4.4	80.7	5.3	5.0	6.3	83.3	6.0	3.0	3.9	56.7	3.7	4.3	5.0
55	NT-50	DLFPS-340/3446	4.8	4.9	4.6	68.7	3.7	7.5	6.7	86.7	6.3	7.3	5.1	61.7	3.3	5.7	5.0
56	NT-84	PST-11-7	4.8	5.0	4.6	70.0	7.7	5.7	6.3	86.7	6.3	7.3	5.2	18.3	4.0	4.3	4.7
57	NT-38	Amaze	4.7	4.6	4.7	50.7	4.3	8.0	5.7	73.3	4.0	8.0	5.4	76.7	5.3	5.7	5.7
58	NT-75	A-15-6	4.6	4.1	5.1	38.7	3.0	8.0	5.3	88.3	5.3	8.0	6.9	83.3	5.0	7.3	5.0
59	NT-13	KH3492	4.6	4.9	4.2	69.3	4.0	5.2	5.3	73.3	7.0	5.7	4.9	61.7	3.7	4.3	4.3
60	NT-83	PST-K15-157	4.5	5.1	3.9	72.7	6.0	8.0	5.7	78.3	6.7	7.0	4.1	56.7	4.0	4.7	7.0

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(Continued)

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the National Turfgrass Evaluation Program, seeded in September 2017 at Adelphia, NJ.

Entry No.	Entry	-----Turf Quality ¹ -----			Percent												
		2018-19 Avg.	2018 Avg.	2019 Avg.	Establish-ment ² 6 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Genetic Color ⁴ Avg. ¹¹ 2018	Summer Patch ⁵ 21 Aug. 2018	Percent Cover ⁶ 2 Oct. 2018	Spring Green-up ⁷ 8 Apr. 2019	Genetic Color 2 May 2019	Summer Patch Avg. ¹² 2019	Percent Cover 23 Sep. 2019	Density ⁸ 18 Oct. 2019	Uniformity ⁹ 28 Oct. 2019	Texture ¹⁰ 28 Oct. 2019	
61	NT-66	A12-34	4.5	4.7	4.3	33.7	2.7	8.5	6.0	88.3	4.7	9.0	7.4	85.0	6.0	5.3	5.3
62	NT-40	Finish Line	4.5	3.4	5.5	17.3	2.0	5.2	5.3	86.7	7.7	5.0	5.8	61.7	6.3	6.0	7.7
63	NT-31	NAI-15-80	4.5	4.8	4.1	36.7	3.7	7.5	6.0	85.0	4.3	8.0	5.9	76.7	5.0	5.7	6.3
64	NT-57	DLFPS-340/3548	4.4	5.1	3.7	61.0	4.0	7.2	5.7	70.0	6.0	4.7	4.2	50.0	3.3	4.7	4.0
65	NT-08	Babe	4.4	4.6	4.2	78.3	6.0	5.3	5.7	78.3	6.3	5.7	4.6	63.3	2.7	5.0	5.0
66	NT-65	A16-7	4.4	4.5	4.3	49.3	5.3	7.5	5.3	75.0	4.7	8.3	6.2	73.3	4.7	6.3	4.0
67	NT-85	PST-K15-167	4.4	4.4	4.4	73.0	5.0	6.3	7.3	90.0	2.0	6.7	6.7	70.0	5.3	6.0	5.0
68	NT-37	NAI-14-132	4.4	4.8	3.9	45.0	5.0	9.0	4.7	75.0	3.3	9.0	5.4	73.3	5.3	4.7	6.3
69	NT-63	MVS-130	4.3	4.5	4.2	35.0	5.0	8.7	5.7	85.0	3.0	9.0	4.0	60.0	4.3	4.3	6.3
70	NT-36	NAI-14-128	4.3	4.6	3.9	47.3	5.0	8.7	4.3	71.7	3.0	9.0	5.1	76.7	4.3	5.3	5.3
71	NT-06	RAD 553	4.2	4.7	3.8	78.0	3.3	4.7	6.3	83.3	5.3	3.3	4.9	60.0	4.7	4.3	4.7
72	NT-07	Selway	4.1	3.9	4.4	62.3	2.3	4.3	4.7	78.3	6.7	4.0	5.8	71.7	5.3	6.0	6.3
73	NT-53	DLFPS-340/3494	4.1	5.7	2.4	62.7	4.7	6.2	7.3	97.7	2.3	6.0	1.4	30.0	1.7	2.7	3.3
74	NT-77	Prosperity	4.0	4.6	3.3	93.3	8.7	7.7	4.7	68.3	5.0	9.0	4.0	38.3	3.7	3.0	5.3
75	NT-72	Shamrock	3.9	4.6	3.1	73.7	5.7	6.3	4.0	70.0	6.7	7.0	2.1	23.3	1.3	2.0	3.0
76	NT-56	DLFPS-340/3549	3.9	4.3	3.4	45.3	3.0	4.8	4.7	71.7	6.0	6.3	3.9	50.0	3.0	4.3	5.3
77	NT-41	Heartland	3.8	4.2	3.5	29.3	5.0	8.8	4.3	66.7	3.0	8.3	4.9	71.7	4.7	4.7	5.0
78	NT-69	A11-38	3.8	4.3	3.3	54.3	2.7	5.0	5.3	75.0	5.3	4.0	2.7	31.7	1.7	3.3	4.3
79	NT-34	NAI-14-122	3.7	4.1	3.3	39.3	5.0	8.3	4.7	68.3	3.3	9.0	4.3	68.3	4.3	5.7	6.0
80	NT-39	Comanche	3.7	4.3	3.1	39.3	5.0	8.7	4.0	61.7	3.7	9.0	3.9	65.0	4.0	4.7	5.0

(Continued)

Table 6. Performance of Kentucky bluegrass cultivars and selections organized by the National Turfgrass Evaluation Program, seeded in September 2017 at Adelphia, NJ.

Entry No.	Entry	-----Turf Quality ¹ -----			Percent												
		2018-19 Avg.	2018 Avg.	2019 Avg.	Establish-ment ² 6 Oct. 2017	Mesotrione Damage ³ 16 Oct. 2017	Genetic Color ⁴ Avg. ¹¹ 2018	Summer Patch ⁵ 21 Aug. 2018	Percent Cover ⁶ 2 Oct. 2018	Spring Green-up ⁷ 8 Apr. 2019	Genetic Color 2 May 2019	Summer Patch Avg. ¹² 2019	Percent Cover 23 Sep. 2019	Density ⁸ 18 Oct. 2019	Uniformity ⁹ 28 Oct. 2019	Texture ¹⁰ 28 Oct. 2019	
81	NT-35 Orion	3.7	3.7	3.7	54.3	3.0	5.5	5.3	80.0	5.0	5.0	3.6	51.7	2.7	3.3	4.7	
82	NT-28 RAD-1776	3.7	3.9	3.4	61.7	2.0	4.7	5.0	71.7	7.3	4.7	3.1	36.7	2.3	3.7	4.7	
83	NT-64 A16-1	3.2	4.0	2.5	62.3	4.0	6.0	3.3	65.0	6.0	6.0	1.3	16.7	1.0	2.3	3.0	
84	NT-42 Aviator II	3.2	4.2	2.2	65.0	5.0	8.0	4.3	51.7	5.7	8.7	1.8	31.7	2.0	4.0	2.3	
85	NT-49 DLFPS-340/3364	3.2	2.6	3.8	12.0	3.7	8.0	6.0	85.0	5.0	8.7	6.3	65.0	5.0	6.3	4.3	
86	NT-80 Paloma	3.0	3.9	2.0	41.0	2.3	7.5	3.7	45.0	5.3	6.3	1.6	21.7	1.7	2.3	4.7	
87	NT-58 DLFPS-340/3444	2.9	3.6	2.2	64.0	4.0	5.3	4.0	61.7	6.3	5.0	1.7	26.7	1.0	1.0	3.7	
88	NT-79 Kenblue	2.4	2.7	2.1	93.7	5.7	2.7	2.0	33.3	8.3	3.0	2.4	30.0	2.7	1.0	3.7	
89	NT-05 Blue Knight	2.1	2.2	2.0	51.7	4.0	6.5	3.0	40.0	3.0	7.3	2.4	38.3	1.7	1.7	3.0	
90	NT-68 PPG-KB 1320	2.0	2.9	1.0	66.7	8.3	7.0	1.7	23.3	5.0	8.5	1.0	15.0	1.0	1.5	3.0	
LSD @ 5%= [†]		0.7	0.7	1	14.5	1.4	1.2	1.4	13.4	1.4	1.2	1.6	18.2	1.8	1.6	1.5	

¹9 = Best turf quality

²100 = Complete turf establishment

³9 = Least bleaching response

⁴9 = Darkest genetic color

⁵9 = Least summer patch

⁶100 = Complete turf cover

⁷9 = Best spring green-up

⁸9 = Densest turf

⁹9 = Most uniform turf

¹⁰9 = Finest texture

¹¹Average of ratings from 10 May and 9 November 2018

¹²Average of ratings from 16 August, 23 September and, 2 October 2019

[†] = Additional entry not included in other NTEP trials

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019	
1	Twilight	6.9	7.7	6.7
2	Granite	6.9	6.0	7.7
3	A12-38	6.8	5.7	7.3
4	A11-26	6.7	6.3	7.3
5	Midnight	6.5	6.0	6.7
6	A09-305	6.4	7.0	7.3
7	A12-30	6.4	4.3	6.7
8	Pulsar	6.4	7.0	6.0
9	RAD-3240	6.4	6.3	5.3
10	Bolt	6.4	4.0	7.7
11	Blue Velvet	6.4	3.3	6.7
12	Touche	6.3	4.0	8.0
13	A18-9	6.3	8.3	4.0
14	Blue Bank	6.3	7.0	5.7
15	KB13OT-12	6.2	7.3	6.0
16	United	6.2	7.0	6.3
17	A18-7	6.2	7.7	6.7
18	Rugby II	6.1	6.7	6.7
19	A18-5	6.1	6.0	4.7
20	10-2233	6.1	6.0	6.7
21	Explorer	6.1	4.7	5.3
22	KB16OT-3	6.1	6.7	5.0
23	PST-K17-191	6.1	4.7	5.3
24	Skye	6.0	6.0	5.0
25	Jersey	6.0	6.0	6.0
26	Zinfandel	6.0	5.3	6.7
27	A14-420	6.0	5.0	6.7
28	Tirem	5.9	6.7	7.0
29	A16-2	5.9	5.3	6.0
30	Heidi	5.9	5.0	6.3
31	A17-869	5.9	6.3	5.7
32	A17-835	5.9	8.0	4.3
33	A16-538	5.9	5.3	4.3
34	Avalanche	5.8	6.3	7.7
35	A16-540	5.8	5.7	6.3

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019
36	PST-K17-182	5.8	5.3
37	PST-K8-76NO	5.8	3.7
38	J-299	5.8	6.7
39	Prosperity	5.8	6.3
40	J-2495	5.8	5.3
41	Dauntless Select	5.8	4.7
42	Legend	5.8	3.3
43	A17-889	5.7	7.7
44	A17-814	5.7	7.3
45	A09-794	5.7	5.7
46	Hampton	5.7	4.7
47	PST-K18-199	5.7	4.5
48	KB15OT-29	5.7	6.7
49	Keeneland	5.7	6.3
50	PST-K17-189AD	5.7	6.5
51	Shamrock	5.6	5.7
52	Martha	5.6	3.7
53	Champagne	5.6	5.7
54	A12-267	5.6	5.7
55	PST-TX8-56	5.6	5.7
56	A18-11	5.6	4.7
57	Arcadia	5.6	4.7
58	PST-T15-44	5.6	6.0
59	Green Star	5.6	5.7
60	NAI-11-644	5.6	4.7
61	A16-10	5.6	4.3
62	KB15OT-39	5.6	3.3
63	NAI 14-133	5.6	2.7
64	A18-6	5.5	6.7
65	Award	5.5	6.3
66	A09-789	5.5	6.3
67	KB13OT-16	5.5	5.7
68	Denali II	5.5	6.3
69	Paragon	5.5	5.3
70	A16-8	5.5	4.7

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019	
71	SPF 30	5.5	7.0	6.3
72	Gaelic	5.5	6.3	4.0
73	KB13OT-19	5.5	6.0	3.7
74	A16-12	5.5	5.3	4.7
75	Quantum Leap	5.5	4.7	5.7
76	Sombrero	5.4	5.3	4.0
77	Limousine	5.4	4.7	4.7
78	NAI-15-89	5.4	7.0	7.0
79	Nugget (B)	5.4	4.7	3.0
80	Powerplay	5.4	4.0	4.3
81	PST-K17-186	5.3	5.3	5.3
82	Crest	5.3	5.0	6.7
83	Bandera	5.3	4.0	4.7
84	Beyond	5.3	6.7	5.3
85	A17-863	5.3	6.7	5.7
86	Everest	5.3	6.3	6.0
87	Jumpstart	5.3	5.7	3.0
88	RAD-3909	5.3	5.3	3.7
89	J-924	5.3	5.3	4.0
90	Kelly	5.3	6.7	4.0
91	Courtyard	5.3	5.7	4.7
92	Babe	5.3	4.3	5.7
93	PST-K15-167	5.3	3.7	3.7
94	Geisha	5.2	6.0	4.7
95	Rhythm	5.2	4.7	6.0
96	H03-556	5.2	4.7	4.0
97	Deep Blue	5.2	7.0	6.0
98	NAI-17-2	5.2	6.3	3.7
99	Blue Note	5.2	4.7	5.3
100	A15-17	5.2	4.7	6.3
101	Jackrabbit	5.2	5.0	4.0
102	PST-K17-196	5.2	3.3	3.7
103	Abbey	5.1	6.3	4.3
104	Rockstar	5.1	5.7	5.3
105	Fahrenheit 90	5.1	4.7	4.3

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019	
106	SR 2100	5.1	4.3	6.0
107	PST-K17-187	5.1	4.3	3.7
108	Aries	5.1	3.3	6.3
109	NAI 14-128	5.1	2.7	3.7
110	NAI-17-13	5.1	6.3	3.3
111	Noble	5.1	6.0	3.3
112	PST-11-7	5.1	4.0	2.7
113	NAI 14-176	5.0	3.3	3.3
114	Heartland	5.0	2.3	2.7
115	PST-K16-178	5.0	6.7	3.7
116	A17-806	5.0	5.3	6.3
117	GO-SWM	4.9	6.0	3.7
118	Lunar	4.9	5.7	4.7
119	PST-K17-188AD	4.9	5.3	2.7
120	Selway	4.9	5.0	2.0
121	A18-8	4.9	4.7	3.7
122	NAI-15-90	4.9	4.0	4.3
123	Corsair	4.9	3.7	4.3
124	PST-K17-193	4.9	3.3	4.0
125	KB15OT-24	4.9	5.3	3.7
126	PST-T17-49	4.9	5.3	3.0
127	A18-1	4.9	4.3	5.7
128	A18-10	4.9	3.7	3.3
129	A14-31	4.9	3.7	5.0
130	A06-8	4.9	2.0	7.0
131	NAI-17-49	4.9	5.3	4.0
132	Bluecoat	4.9	4.7	3.7
133	A09-793	4.9	4.7	4.0
134	Moonshine	4.8	5.7	4.3
135	KB13OT-4	4.8	5.7	4.7
136	Baron	4.8	5.0	5.3
137	RAD-3956	4.8	4.0	6.7
138	NAI-14-132	4.8	3.0	3.3
139	PST-K16-179	4.8	3.7	3.3
140	Midnight II	4.8	4.7	4.7

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019	
141	PST-K13-141	4.8	4.0	4.7
142	Morocco	4.7	7.0	4.0
143	Bewitched	4.7	5.3	3.7
144	Aviator II	4.7	5.3	3.7
145	Arrowhead	4.7	5.0	3.3
146	Milagro	4.7	5.0	2.7
147	A18-204	4.7	3.7	2.3
148	Diva	4.7	6.3	3.0
149	P-105	4.7	5.7	3.0
150	PST-K11-118	4.7	4.3	5.0
151	PST-K15-169	4.7	3.7	3.3
152	NAI 14-122	4.7	2.0	2.7
153	Felder	4.7	5.0	3.7
154	NAI-15-80	4.6	4.0	4.0
155	Dauntless	4.6	2.7	5.0
156	A17-878	4.6	7.0	7.3
157	A17-849	4.6	4.7	4.3
158	NAI-14-127	4.6	3.3	3.7
159	A16-824	4.6	6.7	3.3
160	A14-426	4.6	5.3	3.7
161	Blueberry	4.6	5.0	5.3
162	RAD-3285	4.6	4.7	3.0
163	PST-K17-185	4.6	4.7	3.3
164	PST-K17-183	4.6	2.7	2.0
165	A17-853	4.5	4.7	3.7
166	A18-3	4.5	3.7	4.3
167	Wildhorse	4.5	5.0	4.7
168	A14-439	4.5	5.0	3.3
169	J-920	4.5	5.0	4.3
170	A98-363	4.5	3.3	4.3
171	A14-423	4.5	5.7	6.0
172	PST-K17-192	4.5	4.0	3.0
173	A12-34	4.4	4.0	3.7
174	A16-806	4.4	5.3	2.7
175	Bordeaux	4.4	5.7	3.3

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019	
176	RAD-2375	4.4	5.3	2.0
177	PST-T17-47	4.3	3.3	3.7
178	NAI-14-126	4.3	1.7	3.0
179	Kenblue	4.3	5.7	4.0
180	PST-K15-177	4.3	3.0	2.3
181	NAI-15-112	4.3	5.0	2.0
182	PST-K15-163A	4.2	4.3	1.7
183	PST-K17-194	4.2	4.3	3.0
184	Rhapsody	4.2	4.0	3.7
185	Comet	4.2	3.7	3.3
186	A18-206	4.2	3.3	4.3
187	PST-T15-43	4.2	2.3	2.7
188	Touchdown	4.2	6.0	3.0
189	ARC	4.1	3.7	2.3
190	MacMillan	4.1	2.7	3.3
191	PST-K17-190AD	4.1	5.3	2.7
192	A18-12	4.1	5.0	4.0
193	PST-105-69	4.1	3.7	2.3
194	A18-14	4.1	2.3	4.3
195	NAI-15-111	4.0	3.0	1.7
196	KB16OT-1	4.0	6.7	2.0
197	PST-K15-173	4.0	1.7	5.7
198	KB11OT-47	4.0	2.3	3.0
199	Rubix	3.9	1.3	3.3
200	NAI-13-131	3.9	4.0	4.7
201	A18-2	3.9	3.7	5.7
202	Shannon	3.9	1.7	3.7
203	RAD-3988	3.8	4.7	4.0
204	PST-K15-160	3.8	2.7	3.0
205	A18-207	3.8	2.0	3.3
206	PST-K18-198	3.8	4.3	1.0
207	A13-679	3.8	4.0	4.3
208	PST-K15-158	3.8	2.3	4.3
209	PST-K16-180	3.8	2.3	4.7
210	A12-300	3.7	3.3	2.7

(Continued)

Table 7. Performance of Kentucky bluegrass cultivars and selections in a high maintenance turf trial seeded in September 2018 at Adelphia, NJ.

Entry	Turf Quality ¹ Avg. 2019	Establishment ² 9 Oct. 2018	Stem [†] Rust ³ 2 Nov. 2019
211	NAI-12-41	3.7	2.7
212	RAD-3832	3.7	4.3
213	PST-K18-197	3.7	3.3
214	Endurance	3.6	2.7
215	A16-5	3.6	2.3
216	A18-208	3.6	2.3
217	A18-205	3.6	2.0
218	PST-K15-172	3.6	1.3
219	Finish Line	3.6	1.3
220	Rubicon	3.6	2.3
221	RAD-3651	3.5	3.0
222	RAD-3813	3.5	2.7
223	PST-K13-139	3.5	2.7
224	A18-209	3.5	3.7
225	A18-4	3.4	2.0
226	Mercury	3.4	1.3
227	A18-13	3.3	1.7
228	Blackjack	3.2	2.0
229	A15-1088	3.2	1.3
230	NAI-17-89	3.0	2.3
231	NAI-17-90	3.0	2.3
232	NAI-17-88	3.0	2.3
233	Volt	2.9	1.7
234	PST-T17-50	2.8	2.0
235	A15-2	2.8	1.0
236	PST-T14-39	2.7	1.0
237	KB16OT-2	2.5	1.0
238	NAI-13-79	2.5	1.0
239	Blue Ghost	1.8	1.0
240	Prafin	1.4	1.0
241	Bluestar	1.4	1.0
LSD @ 5%=	1.0	1.8	1.8

¹9 = Best turf quality

²9 = Best establishment

³9 = Least stem rust

[†]Rating may include some crown rust

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

Turf Trial	-----2016-----		-----2017-----		-----2018-----		-----2019-----	
	N ¹	Ht ²	N	Ht	N	Ht	N	Ht
Table 1 (2016 Adelphia)	2.25	1.5	4	1.5	3.5	1.5	1.5	1.5
Table 2 (2016 North Brunswick)	1	3	2.48	3	2.3	3	0.5 [†]	3
Table 3 (2017 Adelphia)	–	–	2.05	1.5	4.25	1.5	1.5	1.5
Table 4 (2017 Adelphia)	–	–	1.25	3	1.25	3	1.25	3
Table 5 (2017 Adelphia)	–	–	2.05	1.5	4.25	1.5	3	1.5
Table 6 (2017 Adelphia)	–	–	1.25	3	1.25	3	1.25	3
Table 7 (2018 Adelphia)	–	–	–	–	2.25	1.5	3.7	1.5

¹Annual N applied (lbs/1000 ft²)

²Mowing height in inches

[†]Tests to be terminated in 2020 received no fall applications