

## NTEP Kentucky Bluegrass Study

### RFR-A1632

Nick Christians, university professor  
Adam Thoms, assistant professor  
Isaac Mertz, graduate research assistant  
Department of Horticulture

### Introduction

The National Turfgrass Evaluation Program (NTEP) conducts trials throughout the United States on turfgrass adaptation. This trial was established in September 2011 as part of the NTEP program. It contains 82 Kentucky bluegrass cultivars.

### Materials and Methods

The individual plots measure 5 ft × 5 ft and the study is replicated three times. The plot area is not irrigated and went through a period of drought in midseason. Genetic color ratings were conducted in June and quality ratings were conducted monthly in 2016 from May to October. Ratings are based on a scale of 9 = best quality and 1 = lowest quality. A rating of 6 or above is considered to be commercially acceptable. In the case of color and greenup, a 9 is the darkest green color and a 9 is the highest greenup rating. Summer patch data

were collected in August 2016. A 9 is no summer patch and a 1 is completely dead from summer patch.

### Results and Discussion

Table 1 contains genetic color, spring greenup, quality, and uniformity ratings for the 2016 season. The mean quality rating also was calculated for each cultivar. The area is not irrigated and there was a dry period in midsummer. This accounts for the lack of significance among cultivars during the summer months. Summer patch was variable, but some of the cultivars were heavily damaged by this disease. This was the last season of data collection for this trial. A new Kentucky bluegrass trial will begin in 2017. The data are submitted to NTEP each year, and will be included in their yearly report with data from all of the other states conducting this trial. Their data can be accessed at [www.ntep.org](http://www.ntep.org).

### Acknowledgements

Appreciation is extended to the NTEP organization for funding to conduct this project.

**Table 1. Data for 2016 from the Kentucky Bluegrass trial.**

	Color <sup>2</sup>	Greenup <sup>3</sup>	Quality 2016 <sup>1</sup>						Mean Q	Summer patch <sup>4</sup>
			May	June	July	Aug	Sept	Oct		
1	612	4	6	6	7	6	6	8	7	9
2	BAR 8PP 504	4	6	6	5	5	7	6	6	7
3	America	5	6	6	7	6	7	7	7	9
4	A05-361	5	6	6	6	6	7	6	6	9
5	Cabernet	6	7	7	6	7	7	7	7	9
6	Award	4	8	7	6	8	8	8	7	9
7	Nu Chicago	4	8	6	5	8	8	8	7	9
8	Kenblue	8	6	6	6	6	7	6	6	9
9	J-1770	3	8	7	6	7	8	8	7	9
10	J-1136	4	8	7	7	6	8	8	7	9
11	Rush	4	7	6	6	7	7	8	7	9
12	Sudden Impact	3	8	6	6	7	7	7	7	9
13	J-1853	4	7	7	5	7	7	8	7	9

**Table 1. Data for 2016 from the Kentucky Bluegrass trial (continued).**

		Quality 2016 <sup>1</sup>								Mean Q	Summer patch <sup>4</sup>
		Color <sup>2</sup>	Greenup <sup>3</sup>	May	June	July	Aug	Sept	Oct		
14	A05-204	7	6	7	6	6	6	6	7	6	9
15	A05-329	7	5	6	7	7	7	7	6	7	9
16	A98-344	7	6	7	7	6	6	7	8	7	9
17	A98-363	7	6	6	6	6	6	7	7	6	9
18	RAD-1492	7	7	7	6	7	7	7	6	7	9
19	A04-38	7	4	7	5	5	5	7	8	6	9
20	A05-360	6	5	7	6	6	7	7	8	7	9
21	PpH 9131	7	5	7	6	5	6	7	8	6	9
22	DPPp 818	6	6	6	5	8	7	6	7	6	9
23	Pp 10847	7	4	6	6	7	6	7	6	7	9
24	Pick 033	7	5	7	6	6	7	8	8	7	9
25	Pick MP07	7	6	6	6	5	6	6	6	6	9
26	Pick 4340	7	4	6	5	5	6	6	6	6	8
27	SRX 466	8	7	8	7	7	8	7	7	7	9
28	SRX 2758	7	5	7	6	7	7	8	7	7	7
29	SRX 4338	6	5	6	6	6	6	6	7	6	9
30	LTP-08-6	7	5	7	7	7	7	8	7	7	9
31	A00-2882	8	6	7	8	8	7	8	7	8	9
32	A04-342	7	5	8	7	7	6	7	8	7	9
33	A06-46	8	6	7	7	6	8	7	7	7	9
34	A05-TB-382	9	5	7	7	7	7	7	7	7	8
35	H99-1653	6	5	6	6	6	5	6	6	6	9
36	Blue Note	7	6	7	6	7	7	8	8	7	9
37	A10-1	7	5	7	6	6	6	7	6	6	9
38	A05-306	6	5	6	5	6	6	6	6	6	9
39	A03-1017	8	4	8	6	6	8	8	9	8	9
40	A04-74	9	5	7	7	6	5	7	8	7	9
41	RAD-849	6	6	6	5	5	7	7	6	6	9
42	Avid	7	4	7	6	6	6	7	7	7	9
43	Empire	7	6	8	6	6	7	7	8	7	9
44	Burl 3-51	8	5	8	6	6	6	7	7	7	9
45	Burl 06-11	6	5	6	5	5	6	6	6	6	9
46	PST-K4-3	7	5	7	5	6	6	7	7	6	9
47	PST-K9-90	7	5	7	6	6	6	7	7	7	9
48	PST-K10-106D	8	5	7	7	7	6	7	6	7	9
49	BAR Pp 119327	7	4	6	6	6	6	6	7	6	6
50	Barduke	7	5	7	6	7	6	7	7	7	9
51	Baron	7	6	8	6	6	6	7	7	6	9
52	BAR VV 0709	6	7	6	6	6	7	7	6	6	9
53	BAR VV 112916	8	8	7	7	6	7	7	7	7	9
54	BAR Pp 110358	7	6	7	7	5	6	7	6	6	9
55	BAR Pp 119326	6	6	6	6	7	6	6	6	6	8
56	BAR VV 118532	7	5	6	6	6	7	7	8	7	9
57	Skye	7	5	7	6	5	7	6	6	6	9
58	AKB 2282	7	4	6	6	6	6	7	6	6	9

**Table 1. Data for 2016 from the Kentucky Bluegrass trial (continued).**

		Quality 2016 <sup>1</sup>								Mean Q	Summer patch <sup>4</sup>
		Color <sup>2</sup>	Greenup <sup>3</sup>	May	June	July	Aug	Sept	Oct		
59	AKB 2555	8	6	7	7	6	7	7	7	7	9
60	A00-4199	7	5	7	6	7	6	7	7	7	9
61	A06-26	7	6	8	6	6	5	7	7	7	9
62	Pick TD8	7	5	6	6	7	7	7	7	7	9
63	SRX 5321	7	5	7	6	7	7	7	7	7	9
64	Pick TD9	7	7	6	6	5	7	7	6	6	9
65	Blackjack	8	5	7	6	6	6	7	7	7	9
66	Arrowhead	7	4	6	5	6	6	7	6	6	9
67	PST-K9-99	6	4	6	6	6	5	7	6	6	8
68	PST-07-261	7	6	6	6	6	6	6	7	6	9
69	PST-T10-18	7	7	6	6	6	6	6	6	6	9
70	PST-K4-7	7	5	7	6	6	7	6	7	7	9
71	PST-K9-97	7	5	7	6	7	7	7	6	7	8
72	4S2W	7	5	8	6	6	7	7	7	7	9
73	3733	7	5	7	6	7	7	7	7	7	9
74	A05-315	7	6	7	6	6	7	7	7	6	9
75	A05-999	8	5	6	6	6	7	7	6	6	9
76	A06-47	7	4	7	6	6	6	6	6	6	9
77	RAD-507	8	5	7	5	7	6	6	6	6	9
78	A04-36	8	5	7	6	7	7	7	8	7	9
79	Shamrock	7	5	7	5	6	6	8	7	6	9
80	A01-1106	7	6	8	7	7	8	8	8	8	8
81	Midnight	8	5	9	6	6	7	7	8	7	9
82	Thermal Blue	8	7	7	6	7	7	7	6	7	9
	LSD 0.05	NS	2	1	NS	NS	2	NS	1	1	NS

<sup>1</sup>Quality rated on a 1 to 9 scale with 9 = best quality, 1 = lowest quality, and 6 or above = commercially acceptable.

<sup>2</sup>Color rated on a 1 to 9 scale with 9 = darkest green color and 1 = least green color.

<sup>3</sup>Greenup rated on a 1 to 9 scale with 9 = highest greenup and 1 = least greenup.

<sup>4</sup>Summer patch rated on a 1 to 9 scale with 9 – no summer patch and 1 = completely dead from summer patch.