

## **2004 Perennial Ryegrass Cultivar Trial**

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This was the second full year of the trial that began in the fall of 2004 with the establishment of 134 cultivars of perennial ryegrass at the Iowa State University Horticulture Research Station. The study was established on an irrigated area that was maintained at a 2-inch mowing height and fertilized with 3 to 4 lb N/1000 ft<sup>2</sup>/yr. The area received herbicide treatments as required.

The visual quality was evaluated monthly in 2006 for May and June (Table 1). The percentage cover data was collected in April 2006. The values listed under each month in Table 1 are the averages of visual quality ratings made on three replicated plots. Visual quality was based on a scale of 9 to 1: 9 = best quality, 6 = lowest acceptable quality, and 1 = worst quality. The yearly average of the two months of data for each cultivar was calculated and is listed in the last column (Mean). The first cultivar listed in Table 1 had the highest average visual quality rating for the entire 2006 season. The cultivars are listed in descending order by average quality. The last row states the LSD (least significant difference), which is a statistical measurement of how widely the data in each column must vary before they are considered to be different from one another.

**Table 1.** 2006 visual quality and percent establishment for the 2004 National Perennial Ryegrass Study

NAME	GENCOLOR	LEAFTEX	Visual Quality							MEAN
			APR	MAY	JUN	JUL	AUG	SEP	OCT	
DERBY XTREME (IS-PR 268)	8.3	6.3	7.0	8.3	8.3	8.3	8.7	8.7	7.7	8.1
PARAGON GLR	8.7	5.3	7.3	8.0	8.0	8.3	8.7	9.0	7.7	8.1
ASP6006 (LPFG)	8.3	5.3	7.7	8.7	8.3	8.0	8.3	8.0	6.7	8.0
DP1	8.7	5.7	7.3	8.7	8.0	8.0	8.3	8.7	7.3	8.0
ALL*STAR 3 (IS-PR 274)	8.7	6.7	6.7	8.3	8.0	7.7	8.0	9.0	7.7	7.9
AMAZING GS (IS-PR 276)	8.3	5.3	7.0	9.0	8.0	7.3	8.0	8.7	7.0	7.9
GPR	8.3	5.3	7.7	8.3	8.0	7.7	7.3	8.0	7.3	7.8
PST-2AG4	7.0	5.0	7.7	8.0	8.0	8.0	7.3	8.7	7.0	7.8
QUICKSILVER	8.3	5.3	7.3	8.0	7.7	7.7	8.3	8.3	6.7	7.7
REPELL GLS	6.7	5.3	7.3	8.0	7.7	7.3	7.7	8.7	7.0	7.7
AF	7.3	5.0	7.0	8.0	7.7	8.0	7.7	8.3	6.7	7.6
APR 1648	7.7	7.0	6.7	8.0	8.0	8.0	7.7	8.0	6.7	7.6
BAR LP 4920	6.7	5.7	7.7	8.3	8.0	7.3	8.0	8.0	6.0	7.6
BUENA VISTA	8.0	5.7	7.0	8.0	7.7	7.3	8.0	8.3	6.7	7.6
RNS	8.0	5.3	7.0	8.0	7.3	8.0	7.3	8.3	7.0	7.6
BAR LP 4317	5.7	6.3	6.3	7.7	8.0	8.3	7.7	8.0	6.7	7.5
D04-UP	7.7	5.3	7.7	8.0	7.7	7.3	7.0	8.0	7.0	7.5
MMW	7.7	5.3	6.7	7.7	7.3	7.3	7.7	8.3	7.3	7.5
PALACE (IS-PR 273)	9.0	5.7	7.3	7.7	7.3	8.0	7.3	8.0	7.0	7.5
PANTHER	4.7	7.0	7.3	8.3	8.3	8.0	7.7	7.3	5.3	7.5
RAD-PR8	6.7	5.7	7.0	8.0	8.0	8.0	8.0	7.3	6.3	7.5
WIND DANCE 2 (PWDR)	8.3	5.7	7.0	8.7	7.3	7.3	7.7	7.7	6.7	7.5
CABO II (IS-PR 233)	8.7	5.0	7.0	8.3	8.0	6.7	7.7	8.0	6.3	7.4
MONTEREY 3 (JR-408)	5.0	7.3	7.0	9.0	7.7	7.7	7.0	7.0	6.3	7.4
PM 101	8.3	5.3	6.7	8.3	8.0	7.3	7.0	8.0	6.7	7.4
PREMIER	3.7	4.3	8.7	8.0	8.3	8.3	6.3	7.0	5.0	7.4
SNR	8.0	5.0	6.3	7.7	7.3	7.7	8.7	7.7	6.3	7.4
TR47	8.3	5.3	7.7	8.0	7.7	7.7	8.0	6.7	6.0	7.4
\$ILVER DOLLAR	7.3	3.0	7.7	7.7	7.3	7.7	7.3	7.3	6.3	7.3
D04-1667	6.0	7.0	6.3	8.0	7.3	7.3	7.7	8.0	6.3	7.3
DCM	7.0	6.3	6.7	8.0	7.7	7.3	7.3	7.3	7.0	7.3
LINE DRIVE GLS (APR 1797)	6.0	4.0	7.3	7.7	7.3	7.3	7.7	7.3	6.3	7.3
PALMER IV	7.7	5.0	6.7	7.7	6.7	7.3	7.3	8.3	7.0	7.3
PROTEGE GLR	7.7	4.3	6.0	7.7	7.0	7.7	7.3	9.0	6.7	7.3
PST-2LAN	6.7	4.0	7.0	7.0	7.0	8.0	7.7	8.0	6.3	7.3
SECRETARIAT II GLSR (LTP-101-GLSR)	6.7	5.7	6.7	7.7	7.3	7.7	7.3	8.0	6.7	7.3
VB77	8.3	6.3	7.3	8.7	8.0	7.7	7.0	6.7	6.0	7.3
04-BRE	7.0	6.0	6.7	8.0	7.3	7.3	7.0	7.7	6.7	7.2
AC2	8.0	5.3	6.7	7.3	7.0	7.7	8.0	7.7	6.3	7.2
APPLE GL (AAZ-B104)	8.3	3.7	6.3	7.7	7.7	7.3	7.0	8.0	6.7	7.2
ASP6004 (EXS54)	7.3	6.3	6.7	8.3	7.7	7.7	7.0	7.0	6.3	7.2
BRIGHTSTAR SLT	6.0	4.7	7.3	8.0	7.3	7.3	6.3	7.3	6.7	7.2
CITATION FORE	6.0	4.7	6.7	7.7	7.7	8.0	7.3	7.0	6.0	7.2
ES45	8.0	6.0	6.7	8.0	7.7	7.3	7.3	7.3	6.3	7.2
HARRIER (SRX 4UP3)	7.7	5.3	7.0	7.3	7.3	7.3	6.7	8.3	6.7	7.2
LCK	8.0	6.0	6.7	7.7	7.0	8.0	7.7	7.7	6.0	7.2

LPR 02203	4.7	6.3	7.3	7.7	6.7	8.7	7.7	7.3	5.0	7.2
PICK RB-1	6.7	6.0	6.0	7.3	7.0	7.7	7.7	8.0	7.0	7.2
PREMIER II	5.0	6.0	7.0	8.0	8.0	7.7	6.7	6.7	6.3	7.2
SR 4600 (SRX 4SP)	8.0	5.0	6.7	7.7	7.0	7.3	7.0	8.3	6.7	7.2
VB99	7.3	5.0	7.0	8.3	8.3	6.3	7.0	7.7	6.0	7.2
ASP6002 (BPR)	8.3	5.3	6.3	8.3	7.7	7.3	7.3	7.0	5.7	7.1
CADDIESHACK II (JR-163)	6.3	6.7	6.0	8.0	8.0	8.0	7.7	7.0	5.0	7.1
D04-11T	8.3	6.0	5.3	7.3	7.3	7.7	7.7	8.0	6.7	7.1
GRAY STAR (PST-2LGL)	7.0	4.7	6.0	8.3	7.7	7.7	7.0	7.3	6.0	7.1
INSPIRE	5.7	5.3	6.7	8.0	7.7	7.0	7.0	7.3	6.0	7.1
KEYSTONE 2 (IS-PR 312)	7.0	5.7	6.0	7.7	7.3	7.3	7.3	7.7	6.3	7.1
LA QUINTA (JR-255)	7.3	4.7	7.7	8.0	8.0	7.3	6.3	7.3	5.3	7.1
PHENOM (APR 1660)	7.0	4.0	7.0	8.0	7.3	7.3	7.0	7.3	6.0	7.1
PST-2MNG	6.7	4.0	6.3	7.3	7.0	8.0	7.3	7.3	6.3	7.1
SRX 4682	4.3	4.0	7.3	7.7	7.7	7.3	7.0	7.3	5.3	7.1
1G2 (APR 1664)	6.7	4.0	6.7	7.3	7.0	7.0	6.7	7.3	6.7	7.0
ACCENT II (JR-119)	5.7	6.3	6.0	7.7	7.7	8.0	7.7	6.3	5.3	7.0
APR 1670	6.7	5.0	6.7	7.7	7.0	7.0	7.0	7.7	6.0	7.0
ASP6001 (RTS)	7.3	6.0	6.3	7.3	6.7	7.3	7.7	7.7	5.7	7.0
D04-LP05	7.0	4.0	7.3	7.7	7.0	6.7	6.7	7.3	6.0	7.0
EXACTA II GLSR (LTP-611-GLSR)	7.0	5.3	7.0	7.3	7.0	7.0	6.7	8.0	6.3	7.0
FUSION	7.7	5.0	6.0	7.3	7.0	7.3	7.0	8.0	6.0	7.0
GOALKEEPER II (JR-114)	6.0	6.7	6.3	7.7	7.3	7.7	7.7	6.7	6.0	7.0
HALO (KN42)	7.7	5.0	6.3	7.7	7.3	7.3	6.7	7.7	5.7	7.0
KOKOMO II (IS-PR 235)	7.7	4.7	6.7	7.3	7.0	7.3	6.7	7.0	6.7	7.0
PENTIUM	5.3	4.3	6.7	7.7	7.3	7.3	7.3	7.0	6.0	7.0
PINNACLE	3.3	5.3	7.7	7.7	7.7	7.7	6.7	6.7	4.7	7.0
PST-2GSM	7.7	5.3	6.0	7.7	7.7	7.3	6.7	7.7	6.0	7.0
REGAL 5 (IS-PR 271)	8.0	5.7	6.7	7.7	7.3	7.3	6.7	7.0	6.3	7.0
SP4	8.7	5.3	6.3	7.7	7.0	7.3	7.3	7.3	6.0	7.0
TOP GUN II (JR-324)	6.7	7.0	6.7	7.3	7.3	7.3	7.0	7.0	6.3	7.0
ATTRIBUTE (IS-PR 270)	8.0	5.3	5.7	7.0	7.3	7.3	6.7	7.7	6.3	6.9
DP 17-9788	6.0	6.3	6.7	7.7	6.3	7.7	7.3	7.0	5.7	6.9
E-99	6.3	5.3	6.3	7.0	6.7	7.0	7.0	8.0	6.0	6.9
GL-2	6.7	4.3	5.7	7.0	6.7	8.0	7.0	7.7	6.0	6.9
MACH I	7.0	4.7	6.3	7.7	7.0	6.7	6.7	7.7	6.3	6.9
OVERDRIVE	8.0	5.7	6.3	8.3	7.7	7.3	6.3	6.3	5.7	6.9
PLEASURE SUPREME (PM 103)	6.7	5.0	6.3	8.0	6.7	6.3	7.0	7.7	6.3	6.9
PM 102	8.0	5.0	6.0	7.7	7.0	7.3	7.3	7.0	6.0	6.9
PRIMARY (IS-PR 269)	6.3	4.3	6.0	7.3	7.0	7.3	7.0	7.3	6.0	6.9
PST-217	7.3	4.7	5.7	7.3	7.0	7.3	7.3	7.7	6.0	6.9
STELLAR GL (IS-PR 236)	6.7	4.7	6.3	7.7	7.0	7.3	6.3	7.3	6.3	6.9
DART (APR 1663)	6.7	4.7	6.7	7.7	6.7	7.0	6.7	7.0	5.7	6.8
DP 17-9499	7.7	5.0	6.3	7.3	7.3	7.3	6.7	7.0	5.7	6.8
FIESTA 4 (PICK F4)	7.7	5.0	6.0	7.3	7.0	7.0	6.7	7.0	6.7	6.8
FIREBOLT (PRG HS-01-09)	8.0	7.7	6.3	7.7	6.7	7.3	6.7	7.0	5.7	6.8
MANHATTAN 5 GLR (PST-2AM)	6.3	5.3	6.3	6.7	7.0	7.0	6.7	8.0	5.7	6.8
PIZZAZZ	6.7	4.3	6.7	7.7	6.7	6.3	6.7	7.0	6.7	6.8
PRESIDIO (CNV)	7.0	5.3	6.7	7.3	7.0	6.7	6.7	7.3	6.0	6.8
04-BEN	6.3	4.3	6.3	7.3	6.3	6.7	7.0	7.0	6.0	6.7

<b>AFFINITY</b>	3.0	4.0	7.3	7.3	7.0	7.3	6.3	6.3	5.0	6.7
<b>BARLENNIUM</b>	5.3	5.3	6.7	8.0	7.0	7.0	6.3	6.3	5.3	6.7
<b>PINNACLE II</b>	7.3	5.0	6.3	7.3	6.3	7.0	6.7	7.3	6.0	6.7
<b>SRX 4692</b>	6.7	4.0	7.0	7.3	7.0	7.7	6.3	6.7	5.0	6.7
<b>ASP6003 (TRS)</b>	8.0	6.7	5.3	7.3	6.3	6.7	7.7	7.0	5.7	6.6
<b>CHARISMATIC II GLSR (LTP-PG-GLSR)</b>	7.3	5.0	6.7	7.0	6.7	6.7	6.7	7.0	5.3	6.6
<b>HOMERUN (RG3P)</b>	6.7	6.3	5.3	6.3	7.0	7.0	7.0	7.7	6.0	6.6
<b>LINN</b>	1.3	6.7	9.0	6.7	7.7	6.0	5.0	7.7	4.0	6.6
<b>MS2</b>	8.0	5.0	6.7	7.7	6.3	6.7	6.3	7.0	5.3	6.6
<b>ASP6005 (AJM)</b>	7.7	5.3	6.0	7.0	6.7	6.7	6.7	7.0	5.3	6.5
<b>DELAWARE XL (PICK 01-2)</b>	7.3	5.3	5.7	7.0	6.7	6.7	7.3	6.7	5.7	6.5
<b>L44</b>	8.7	3.7	5.7	7.3	6.7	7.3	6.3	6.7	5.3	6.5
<b>PANTHER GLS</b>	6.3	5.0	5.7	7.3	6.0	7.0	7.0	7.0	5.3	6.5
<b>PIANIST (DP 17-9505)</b>	7.0	4.0	6.0	7.3	6.7	7.0	6.7	6.7	5.3	6.5
<b>PICK 02-R</b>	7.0	5.0	6.0	7.7	7.3	7.0	6.0	6.0	5.3	6.5
<b>REVENGE GLX (JR-348)</b>	7.7	3.7	5.3	7.0	6.3	7.0	7.0	7.3	5.7	6.5
<b>GALATTI (DP 17-9502)</b>	5.3	6.0	6.0	7.3	7.3	6.7	6.3	6.3	5.0	6.4
<b>HEADSTART 2</b>	7.0	5.7	6.0	7.3	6.7	6.7	5.7	6.7	5.7	6.4
<b>PS-2</b>	6.3	4.7	5.7	7.0	7.0	6.7	7.0	6.3	5.3	6.4
<b>PST-2BLK</b>	7.0	4.0	6.3	7.7	6.7	6.3	5.7	6.3	5.7	6.4
<b>BAR LP 4420</b>	7.3	5.0	5.3	7.3	6.3	6.3	6.7	6.3	5.0	6.2
<b>PALMER III</b>	5.7	4.7	6.3	6.7	7.3	6.7	5.7	6.0	5.0	6.2
<b>SUNSHINE 2</b>	7.0	6.7	5.3	7.0	6.0	6.3	6.3	6.3	5.0	6.0
<b>LSD</b>	1.4	2.3	2.0	NS	NS	2.3	1.9	1.5	2.0	1.8