

1999 Perennial Ryegrass Cultivar Trial

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This was the fourth full year of the trial that began in the fall of 1999 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 ft²/yr. The area received herbicide treatments as required.

The visual quality was evaluated monthly in 2004 for May and June (Table 1). Following the June rating, the area was killed and a new perennial ryegrass trial was established in the fall of 2004. 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 2004 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 datum in each column must vary before they are considered to be different from one another.

Data for genetic color (GenColor) and leaf texture (LeafTex) were also collected in June 2002. Genetic color was rated using a 9 to 1 scale with 9 = dark and 1 = light green. Leaf texture was assessed with a 9 to 1 scale with 9 = fine and 1 = coarse texture. Spring greenup (Greenup) data were taken in April 2004 and were estimated using a 9 to 1 scale with 9 = green and 1 = dormant turf.

Table 1. 2003 visual quality and other ratings for the 1999 National Perennial Ryegrass Study.

Cultivar	GenColor	Greenup	LeafText	Quality	Quality	Mean Quality
				May	June	
Paragon	9	7	8	9	9	9
Pick PR QH-97	9	7	8	9	9	9
PST-2M4	9	7	8	9	8	9
APR 1236	8	7	8	9	8	9
Pick RC2	8	8	8	9	8	9
LTP 98-501	9	8	8	9	8	9
CIS-PR-84	9	7	8	8	9	9
APR 1237	8	6	8	9	8	9
PST-2RT	8	7	8	8	8	8
PST-2A6B	9	7	8	9	8	8
PST-2SBE	9	6	8	9	8	8
PST-2BR	8	7	8	9	8	8
ABT-99-4.721	8	7	8	8	8	8
Seville II	9	7	8	8	8	8
AG-P981	8	7	8	9	8	8
APR 1232	9	8	8	8	8	8
SRX 4801	8	7	8	8	8	8
ABT-99-4.724	9	8	8	8	8	8
ABT-99-4.461	9	7	8	8	8	8
ABT-99-4.629	9	7	8	8	8	8
ABT-99-4.903	8	8	8	9	8	8
Radiant	8	7	8	8	8	8
APR 1233	9	8	8	9	8	8
CIS-PR-80	9	8	8	9	8	8
R8000	9	7	8	9	8	8
Ascend	8	8	8	9	8	8
B1	9	8	8	8	9	8
Exacta	8	8	8	8	8	8
Affirmed	8	7	8	8	8	8
BAR 9 B2	9	7	8	9	7	8
Pick PR B-97	8	6	8	8	8	8
PST-2LA	8	8	8	8	8	8

Manhattan 3	8	7	8	8	8	8
ABT-00-4.339	8	8	8	8	8	8
ABT-99-4.815	8	7	8	8	8	8
ABT-99-4.834	8	6	8	8	8	8
Cathedral II	8	7	8	8	8	8
Pennant II	8	7	8	8	8	8
Allsport	8	7	8	8	8	8
Line Drive	9	7	8	8	8	8
APR 1231	8	7	8	8	8	8
SR 4500	8	7	8	8	8	8
CAS-LP84	8	7	8	8	8	8
MP108	8	7	8	8	8	8
MP103	8	7	8	8	8	8
PST-2L96	8	7	8	8	8	8
ABT-99-4.633	9	7	8	8	8	8
ABT-99-4.753	9	6	8	8	8	8
Pick EX2	8	7	8	8	8	8
Pennington-11301	9	6	8	8	8	8
CIS-PR-85	8	8	8	8	8	8
Fiesta III	8	7	8	8	8	8
Pizzazz	8	7	8	8	8	8
Promise	8	7	8	8	8	8
Nexus	9	7	8	8	8	8
CIS-PR-69	8	7	8	8	8	8
Majesty	8	7	8	8	8	8
Churchill	8	7	8	8	8	8
LTP-ME	8	7	8	8	8	8
Premier II	8	7	8	8	8	8
Premier	9	7	8	8	8	8
JR-187	8	7	8	8	8	8
JR-317	8	6	8	8	8	8
JR-151	8	7	8	8	8	8
Pick MDR	9	7	8	8	8	8
Pick PRNGS	8	7	8	8	8	8
PST-2SLX	8	7	8	8	8	8
PST-CATS	8	7	8	8	8	8
Brightstar II	8	7	8	8	8	8
Carger II	8	7	8	8	8	8
Phantom	8	7	8	8	8	8
Wilmington	8	7	8	8	8	8
SRX 4RHT	8	8	8	8	8	8
MDP	8	7	8	8	8	8
EPD	8	7	8	8	8	8
MP58	8	7	8	8	8	8
ABT-99-4.115	8	7	8	8	8	8
ABT-99-4.960	8	7	8	8	8	8
ABT-99-4.965	8	7	8	8	8	8
CIS-PR-72	8	7	8	8	8	8
PST-2JH	8	7	8	8	8	8
PST-2CRR	9	7	8	7	8	8
PST-2CRL	8	7	8	8	8	8
Palmer III	8	8	8	8	8	8
ABT-99-4.464	9	7	8	8	8	8

ABT-99-4.600	8	7	8	8	8	8
Panther	8	7	8	8	8	8
DP LP-1	8	7	8	8	8	8
SRX 4120	8	7	8	8	8	8
EP53	8	7	8	8	8	8
EP57	8	7	8	8	8	8
Skyhawk	8	7	8	8	8	8
MEPY	8	7	8	8	8	8
AT-99-4.560	8	7	8	8	8	8
ABT-99-4.625	8	7	8	8	8	8
Jet	8	7	8	8	8	8
Calypso	8	7	8	7	8	8
Buccaneer	9	7	8	8	8	8
Passport	8	7	8	8	8	8
DLF-LDD	8	8	8	7	8	8
Roberts-627	8	6	8	8	8	8
CIS-PR-75	8	7	8	8	8	8
CIS-PR-78	8	7	8	8	8	8
Divine	8	7	8	8	8	8
Pleasure XL	8	7	8	8	8	8
APR 1235	8	8	8	8	8	8
Barlennium	8	8	8	7	8	8
JR-128	8	7	8	7	8	8
Catalina	8	7	8	7	8	8
6011	8	7	8	8	8	8
APR 777	7	7	8	7	8	8
APR 776	8	6	8	8	7	8
Elfkin	8	7	8	7	8	8
ABT-99-4.709	8	7	8	8	8	8
SRX 4820	9	8	8	7	8	8
BY-100	8	7	8	7	8	8
Racer	8	7	8	8	8	8
LPR 98-144	8	7	8	8	8	8
Affinity	8	7	8	8	8	8
Pick PR 1-94	7	7	8	7	8	8
Headstart	7	7	8	7	8	8
Secretariat	7	7	8	7	8	8
APR 1234	8	7	8	8	7	8
Edge	8	7	8	7	7	7
DP 17-9069	8	6	8	7	7	7
LPR 98-143	8	7	7	7	8	7
YatsuGreen	7	6	8	7	7	7
WVPB-R-84	8	7	8	7	7	7
NJ-6401	8	7	8	7	7	7
Koos R-71	7	7	8	7	7	7
DP 17-9391	7	6	8	7	7	7
WVPB-R-82	7	6	8	6	7	7
Linn	7	5	7	6	7	7
DP 17-9496	6	5	7	6	7	6
LSD 0.05	1.0	1.1	0.3	1.3	0.8	0.9