

National Turfgrass Evaluation Program 2003 Bentgrass Trials

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Putting Green Trial

A trial to evaluate bentgrass species and cultivars for putting green use was established in September 2003 on a sand-based putting green at the R.L. Goss Turfgrass Research Facility at Washington State University in Puyallup. There were 26 official entries, and two unofficial entries added by the WSU staff. Six of the cultivars are velvet bentgrass (*Agrostis canina*), and the remaining are creeping bentgrass (*A. stolonifera*). This trial is being maintained under reduced-input maintenance conditions, as defined by NTEP. The mowing height range is 0.14 – 0.16 inches, and the nitrogen fertilization rate is 0.25 – 0.5 lbs N per 1000 ft² per month during the growing season. Solid tine cultivation only is permitted, and vertical mowing, topdressing and grooming are permitted to limit thatch development. Data collected during 2005 is presented, ranked by Annual Mean Quality (average of January – December ratings). Commercially available varieties in the top statistical group based on Annual Mean Quality in 2005 were Villa, Independence, and Declaration creeping bentgrasses and Legendary and Greenwich velvet bentgrasses. Data collection for this trial will continue through 2007.

Fairway / Tee Trial

A trial to evaluate bentgrass species for golf course fairway and/or tee use was established in September 2003 on Puyallup fine sandy loam soil at the R.L. Goss Turfgrass Research Facility at Washington State University in Puyallup. There were 28 official entries, and four unofficial entries added by the WSU staff. Seven of the cultivars are colonial bentgrass (*A. capillaris*), one is velvet bentgrass (*A. canina*), and the remaining are creeping bentgrass (*A. stolonifera*). This trial is being maintained under reduced-input maintenance conditions, as defined by NTEP. The mowing height is 0.5 inches, and the nitrogen fertilization rate is 0.25 – 0.38 lbs N per 1000 ft² per month during the growing season. Solid tine cultivation only is permitted, and vertical mowing is permitted to limit thatch development. Data collected during 2005 is presented, ranked by Annual Mean Quality (average of January – December ratings). Commercially available varieties in the top statistical group based on Annual Mean Quality in 2005 were Declaration, Independence, and T-1 creeping bentgrasses, SR 7100 colonial bentgrass, and SR 7200 velvet bentgrass. Data collection for this trial will continue through 2007.

2003 NTEP Bentgrass Putting Green Trial - Year 2005 data

Entry Name	Quality Ratings												Genetic Color	Spring	Greenup	Summer density
	Annual mean	January	February	March	April	May	June	July	August	September	October	November				
235050	6.4	5.3	5.0	5.3	6.0	7.3	7.3	7.0	7.3	7.0	7.0	7.0	5.7	6.0	5.7	7.0
Villa (IS-AC 1)	6.3	5.7	5.0	5.0	6.3	6.7	5.7	7.3	7.3	7.0	6.3	6.7	6.7	8.0	5.0	8.3
Mackenzie (SRX1GPD)	6.3	5.7	5.0	6.0	5.7	7.3	7.0	7.0	6.7	6.3	6.7	6.7	5.7	5.0	5.7	7.7
007 (DSB)	6.2	5.7	5.0	5.0	5.7	7.0	7.0	6.7	7.3	6.3	6.7	6.3	5.7	6.7	6.0	6.7
Tyee (SRX1GD)	6.2	5.3	5.3	5.7	5.0	7.0	7.0	6.7	7.0	6.7	6.7	6.0	6.0	6.3	5.3	7.7
Independence	6.2	5.0	5.0	5.0	6.0	6.7	7.0	6.7	7.7	6.7	7.0	6.0	5.7	6.3	5.0	7.0
Shark (23R)	6.2	4.7	4.7	6.0	6.0	6.7	7.0	7.0	7.0	6.7	6.7	6.3	5.7	6.0	5.3	7.0
Legendary	6.0	4.7	4.3	4.3	6.0	7.0	6.0	6.3	7.3	6.7	6.0	7.0	6.7	8.0	5.0	8.3
EFD	6.0	6.0	5.0	5.0	5.7	6.0	5.3	5.3	7.0	7.0	6.7	6.3	6.3	8.0	5.7	8.3
Declaration	5.9	5.0	5.0	5.0	5.3	7.0	6.3	6.0	7.0	6.3	6.3	6.0	5.7	6.7	5.7	7.0
Alpha	5.8	4.7	4.7	4.7	5.7	6.3	6.7	6.3	6.7	6.7	6.7	5.7	5.0	6.7	4.7	6.3
Greenwich	5.8	5.0	4.7	4.7	5.3	6.3	6.7	6.3	6.7	6.0	6.0	6.3	5.7	8.0	4.7	8.0
CY-2	5.8	5.3	4.0	5.0	5.0	6.3	6.3	6.0	6.7	7.0	6.3	6.0	5.3	5.3	5.3	6.7
Penn A1	5.7	5.3	4.0	5.0	5.0	6.7	5.7	5.7	6.7	6.0	6.7	6.3	5.7	6.3	4.0	7.0
Vesper	5.6	5.0	5.0	4.3	5.3	6.3	5.7	5.7	6.0	6.3	6.3	6.0	5.3	8.0	5.3	8.0
Benchmark DSR	5.4	4.3	4.7	4.7	5.3	6.0	6.0	5.7	5.7	5.7	6.0	5.7	5.0	7.0	5.0	6.0
T-1	5.4	4.7	4.7	4.7	5.0	6.0	5.7	5.7	6.0	5.7	5.7	6.0	5.0	7.7	4.7	6.3
IS-AP 9	5.4	4.3	3.7	4.3	4.7	6.3	6.3	5.7	6.3	6.0	5.7	6.0	5.0	6.7	3.0	6.7
Kingpin (9200)	5.4	4.7	4.7	4.7	4.3	5.7	6.3	6.0	5.7	5.3	6.0	5.7	5.3	7.0	5.3	6.7
LS-44	5.3	4.3	4.0	4.7	4.7	6.3	6.0	6.0	6.0	5.7	5.7	5.7	5.0	6.7	4.0	6.3
Bengal	5.3	5.0	4.7	5.0	4.7	6.0	5.7	5.3	5.7	5.7	5.7	6.0	4.7	6.7	4.7	6.0
SR 7200	5.3	5.0	4.7	4.0	4.7	5.3	5.0	5.7	6.0	6.0	5.3	6.3	5.7	8.0	5.7	8.3
13-M	5.3	4.7	4.3	4.7	5.3	6.0	5.7	5.3	5.7	6.0	6.0	5.3	4.7	6.0	4.7	6.0
Memorial (A03-ED1)	5.2	5.0	4.3	4.3	4.7	6.0	5.3	5.7	5.7	5.0	5.7	5.7	4.7	6.3	4.7	6.3
SRX 1WICR1	5.2	4.3	3.7	4.0	5.0	5.7	6.0	6.0	6.3	5.7	6.0	5.0	4.3	6.0	3.7	5.7
3.0797	5.0	4.3	3.7	3.7	4.3	5.0	4.3	5.0	6.0	5.3	5.3	6.7	6.0	7.7	5.0	7.7
SR 1119	4.9	4.3	4.0	4.3	4.7	5.7	5.3	5.0	5.3	5.3	5.3	5.0	5.0	6.7	4.0	5.7
Brighton	4.9	4.3	4.0	3.7	4.7	6.0	5.0	5.0	6.0	5.3	5.3	5.3	4.7	7.0	4.0	5.0
Pennlinks II	4.5	3.7	3.7	4.0	5.0	5.3	5.0	5.0	4.7	4.7	4.7	4.3	4.0	6.7	4.0	5.7
Penncross	4.3	3.0	3.0	3.7	4.0	4.3	4.0	4.7	5.3	5.3	5.0	4.7	4.0	6.3	3.3	5.0
Isd	0.7	0.8	0.8	1.2	1.3	1.1	1.0	1.1	1.2	1.4	1.2	0.9	0.9	0.9	1.3	0.9

List is ranked by the Annual Quality Mean (column 3) from best to worst quality.

* To determine if ratings between two varieties are truly different, subtract the lower rating from the higher one. If the result is greater than the LSD value for that column, then the difference is real.

Trial planted September 2003.

SR 1119 and Brighton are unofficial entries (added by WSU staff).

SR 7200, Legendary, IS-AC 1, EFD, Vesper, and Greenwich are velvet bentgrass (*Agrostis canina*). All others are creeping bentgrass (*A. stolonifera*).

All data is a mean of three replications.

All ratings are on a scale of 1 to 9 (1 = dead, 9 = ideal, 5 = acceptable).