

STOP 7

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Bentgrass Cultivar Evaluation for Fairways and Tees

Twenty bentgrass cultivars were managed under 0.5 inch cutting height for evaluation representative of fairways and tees. They were established in September of 1968. Mowing is done three times per week. Nitrogen subplots of 4 and 7 pounds per 1000 square feet per year were applied.

After five years of evaluation (48 observations), Pennpar ranks highest of the named cultivars in appearance (Table 12). Toronto, MSU-38Ap, and Emerald rank almost as good, but a marked thatching tendency has been observed in Toronto, Cohansey, and Penncross. Seaside rates well in appearance and does not develop the excessive thatch under the 1/2 inch cut.

Bentgrass Cultivar Evaluations for Greens

Twenty bentgrass cultivars were established September 30, 1968. Both seeded and vegetatively propagated types are included as well as creeping and colonial species. The plots are mowed six times weekly at 0.25 inch with clippings removed. Split plot nitrogen applications at 4 and 7 pounds of N per 1000 square feet per year are made.

After five years of evaluation (51 observations) MSU-28-AP ranks highest. This is a vegetatively propagated selection with a dark, blue-green color, excellent disease resistance and an outstanding ability to resist invasion by annual bluegrass at 0.25 inch height of cut. It has a slight tendency to develop grain, but vertical mowing has not been done on these plots. It is being considered for release by M.S.U.

Of the named cultivars, Emerald ranks second closely followed by Penncross, Pennpar, and Cohansey. Toronto has performed very well and is nearly equal in average performance to the above. Kingston, a velvet bentgrass, has been invaded by other bents and annual bluegrass.

The data is presented in Table 13.

Table 12. Bentgrass Cultivar Evaluations for Fairways and Tees
 East Lansing, Michigan
 1968-1973
 Area D-1

Cultivar	Seedling	Percent	Spring	Appearance**					Weighted Average (48)
	Appearance**	Cover	Green up**						
	Fall, 1968 (3)*	4/24/69 (3)	1969 (3)	1969 (12)	1970 (15)	1971 (12)	1972 (6)	1973 (3)	
Pennpar	1.0	98%	1.7	2.3	2.8	1.7	1.0	1.0	2.1
Nr 42-23	6.7	15	4.0	2.1	2.4	2.1	1.5	1.3	2.1
Toronto	1.7	95	2.7	1.4	2.3	2.9	1.8	2.3	2.2
MSU-38-AP	2.0	93	2.7	1.9	2.6	1.8	2.7	1.7	2.2
Emerald	6.0	12	4.0	2.0	2.3	2.4	1.7	2.0	2.2
MSU-28-AP	2.3	92	1.7	1.8	3.1	2.1	3.0	3.3	2.5
Penncross	5.0	12	3.7	2.9	2.9	2.0	1.9	2.0	2.5
MSU-18-AP	3.0	95	1.3	2.2	2.9	3.0	2.5	1.7	2.7
Cohansey	2.0	97	4.3	2.8	2.7	2.5	3.3	3.3	2.8
Seaside	5.3	12	4.0	3.4	3.4	2.5	1.7	2.3	2.9
Kingston velvet	-	20	4.0	2.9	2.7	3.9	3.5	3.0	3.2
Holfior colonial	2.3	20	4.0	3.8	3.3	3.3	2.9	2.7	3.4
Prominent	-	-	-	-	-	-	3.4	2.7	3.4
Brabantia	6.3	4	4.0	3.7	3.6	3.4	3.2	2.7	3.5
Exeter colonial	4.7	13	3.7	3.9	3.8	3.7	3.2	2.3	3.7
Boral	2.3	22	4.0	3.9	3.6	4.1	4.0	2.7	3.9
Astoria colonial	3.0	18	3.7	4.1	3.5	4.3	3.7	3.7	3.9
Bt-806-Browntop	7.7	43	3.5	3.4	3.7	5.0	4.2	4.3	4.0
Bardot	4.0	2	4.0	3.0	4.3	4.6	3.9	-	4.0
Highland colonial	6.3	13	4.0	4.5	4.3	4.4	2.7	3.0	4.2

* Number in parentheses () refers to the number of observations in mean value.

** 1 = best, 9 = poorest.

Table 13. Bentgrass Cultivar Evaluations Under Greens Conditions
 East Lansing
 1968-1973
 Area B-2

Cultivar	Seedling Appearance ² Fall, 1968 (3)*	Percent Cover 4/24/69 (3)	Spring Green up ² 1969 (3)	Appearance ²					Weighted Average (51)
				1969 (15)	1970 (18)	1971 (12)	1972 (3)	1973 (3)	
MSU-28-AP	3.3	92%	1.7	1.5	2.3	1.6	1.0	2.3	1.8
Emerald	3.3	23	3.7	2.9	2.3	1.6	1.7	1.0	2.2
NR-42-23	4.0	34	3.5	2.7	2.3	1.9	1.7	1.3	2.2
MSU-38-AP	2.6	93	3.0	2.1	2.7	2.0	1.0	2.7	2.3
Penncross	2.6	34	4.0	2.8	2.2	2.3	1.0	1.0	2.3
Pennpar	2.3	90	1.3	2.7	2.6	1.3	1.7	1.7	2.3
Cohansey	3.7	67	2.3	2.7	2.7	1.5	2.0	1.7	2.3
MSU-18-AP	3.0	97	1.3	2.6	2.6	2.1	1.0	2.0	2.3
Toronto	3.6	87	3.0	2.0	2.1	2.9	2.3	3.7	2.4
Kingston velvet ¹	3.0	48	4.0	2.8	2.4	3.4	5.3	5.3	3.1
Seaside	3.0	34	4.0	3.6	3.3	2.3	2.7	2.3	3.1
Exeter colonial	4.0	7	3.5	4.1	3.6	3.6	4.0	3.3	3.8
Astoria colonial	3.0	23	4.0	3.8	3.7	4.4	4.0	5.0	4.0
Holfior colonial	2.6	28	4.0	3.9	3.8	4.4	5.0	3.3	4.0
Drabantia	5.6	10	3.5	4.2	3.7	3.9	5.7	4.3	4.1
Bt-806-Browntop	6.6	22	4.0	3.6	4.0	4.2	6.0	6.3	4.2
Boral	2.6	43	4.0	3.8	4.0	4.2	6.0	6.3	4.2
Highland colonial	5.3	7	4.0	4.2	3.9	4.6	6.0	4.3	4.3
Bardot	-	8	3.5	3.9	4.9	4.5	6.3	6.3	4.7

* number in parenthesis () refers to the number of observations in mean value, e.g. (3) = 1 date x 3 replications; (12) = four dates x 3 replications each.

¹ Only 5% Kingston.

² 1 = best, 9 = poorest.