

EVALUATING NEW TURFGRASS VARIETIES FOR USE IN MICHIGAN

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As concerns increase regarding lowering water tables, the fescues assume an increasingly important role because of the ability to provide satisfactory turf with much less water than Kentucky bluegrass.

The Hancock Laboratory provides a site for evaluating cultivars of all the major fescue species, for breeding research to provide improved lines, and isolation potential, through the use of cereal rye, for the production of relatively large numbers of synthetic combinations in a small area of space.

The fescues being studied include creeping red, chewings, hand, sheep, tall and meadow. Each of these has its respective values, and a goal is to identify the most appropriate cultivars for each need.

Kentucky bluegrass and perennial ryegrass varieties are on display. Ratings of seedling vigor of the varieties are given on the following 4 pages.

Table 11. 1980 Creeping red fescue cultivars. Hancock Turf Center.

No.	Treatment	Seedling Vigor Rating and Statistical Test (DMRT 5%)
		6/3/81
1	Accent	5.7 AD
2	Adonis	2.0 F
3	Boreal	6.0 AD
4	Common	6.7 AB
5	Dawson	5.3 AD
6	Ensylva	7.3 A
7	Envira	2.0 F
8	Enzet	2.7 EF
9	Erika	4.0 DE
10	Frt-Gb Bar	5.0 BD
11	Illahee	5.7 AD
12	Moncorde	5.7 AD
13	MSU X1	4.3 CE
14	MSU X2	4.7 BD
15	Oase	5.0 BD
16	Pennlawn	5.7 AD
17	Polar	6.3 AC
18	Ruby	5.7 AD
19	Satin	5.3 AD
20	Starlight	1.0 F

Table 12. 1980 Chewings fescue cultivars. Hancock Turf Center.

No.	Treatment	Seedling Vigor Rating and Statistical Test (DMRT 5%)
		6/3/81
1	Agram	1.0 C
2	Atlanta	2.0 AC
3	Banner	2.7 AB
4	Barfalla	1.3 BC
5	Cascade	1.0 C
6	Checker	2.7 AB
7	Cirrus	1.7 AC
8	Diamond	3.0 A
9	Fidelimo	2.7 AB
10	Fortress	1.3 BC
11	Grelo	1.0 C
12	Highlight	2.0 AC
13	Jade	1.7 AC
14	Jamestown	3.0 A
15	Koket	2.7 AB
16	Lifalla	1.0 C
17	Longfellow	1.3 BC
18	MSU Wintergreen Br	3.0 A
19	NK Wintergreen Found	1.3 BC
20	Shadow	2.0 AC
21	Sonnet	2.3 AC

Table 13.

NATIONAL KENTUCKY BLUEGRASS TEST-1
EAST LANSING (KB1)

No.	Treatment	Rating and Statistical Test (DMRT5%)	
		7/21/81	8/31/81
1	01 Adelphi	3.5 BF	6.3 AD
2	02 Glade	2.5 DG	5.7 BE
3	03 Birka	2.8 CG	6.3 AD
4	04 Monopoly	3.2 BG	5.7 BE
5	05 Ram-1	3.3 BG	5.0 DE
6	06 Fylking	1.3 G	5.0 DE
7	07 Cheri	3.5 BF	6.0 AE
8	09 Wabash	4.2 AE	5.7 BE
9	10 Nuggett	2.2 EG	5.7 BE
10	17 Baron	4.3 AE	6.3 AD
11	18 Enmundi	4.0 AF	5.3 CE
12	19 Plush	5.8 A	6.7 AD
13	20 Parade	3.2 BG	6.3 AD
14	21 Trenton	3.2 BG	8.0 A
15	22 Rugby	3.7 AF	7.0 AB
16	26 Holiday	3.8 AF	6.3 AD
17	27 Geronimo	5.0 AB	6.7 AD
18	31 Toughdown	3.7 AF	4.7 DE
19	32 Welcome	4.7 AC	8.0 A
20	35 Bono	2.7 CG	5.3 CE
21	36 Kenblue	4.3 AE	7.3 AC
22	37 Harmony	2.5 DG	5.3 CE
23	38 America	4.2 AE	6.0 AE
24	39 Vanessa	4.0 AF	5.7 BE
25	40 Mosa	3.8 AF	5.7 BE
26	41 Cello	5.2 AB	7.3 AC
27	44 Majestic	3.3 BG	5.3 CE
28	45 Bonnieblue	3.3 BG	5.0 DE
29	46 Vantage	4.2 AE	6.3 AD
30	47 Merit	4.5 AD	5.7 BE
31	57 Shasta	4.7 AC	5.7 BE
32	58 Columbia	3.3 BG	7.3 AC
33	60 A-34	3.3 BG	6.0 AE
34	61 Sydsport	4.0 AF	6.0 AE
35	66 Bristol	2.8 CG	5.0 DE
36	67 Victa	3.7 AF	5.3 CE
37	68 Enoble	3.2 BG	4.0 E
38	72 Merion	4.5 AD	6.7 AD
39	74 Bayside	4.0 AF	5.7 BE
40	76 Mystic	4.8 AC	6.0 AE
41	78 Eclipse	2.0 FG	5.0 DE
42	84 Barblue	4.8 AC	6.0 AE

Table 14.

1980 PERENNIAL RYEGRASS CULTIVAR EVALUATION
EAST LANSING (H25)

DATE BEGUN: 8/12/81 DATE EVALUATED: 8/31/81
AGE OF STUDY: 19 DA

VALUES ARE SEEDLING DENSITY RATINGS

Relative Rank	Treatment Name	Highest Rating Indicates Best Density
1	Manhattan	5.3 A
2	Regal	5.0 AB
3	Bellatrix	4.7 ABC
4	Compas	4.7 ABC
5	Omega	4.7 ABC
6	Arno	4.3 ABCD
7	Dasher	4.3 ABCD
8	Derby	4.3 ABCD
9	Goalie	4.3 ABCD
10	Belle	4.0 ABCD
11	Pennfine	4.0 ABCD
12	Premier	4.0 ABCD
13	Yorktown II	4.0 ABCD
14	Blazer	3.7 ABCD
15	Ensporta	3.7 ABCD
16	Hunter	3.7 ABCD
17	Loretta	3.7 ABCD
18	Pennant	3.7 ABCD
19	Princess	3.7 ABCD
20	Ranger	3.7 ABCD
21	Runner	3.7 ABCD
22	Venlona	3.7 ABCD
23	Acclaim	3.3 ABCD
24	Crown	3.3 ABCD
25	CBS	3.0 BCD
26	Clipper	3.0 BCD
27	Delray	3.0 BCD
28	Elka	3.0 BCD
29	Idole	3.0 BCD
30	NK 200	3.0 BCD
31	Player	3.0 BCD
32	Citation	2.7 CD
33	Diplomat	2.7 CD
34	Fiesta	2.7 CD
35	Jackpot	2.7 CD
36	Norlea	2.7 CD
37	Pronto	2.7 CD
38	Trimmer	2.3 D

Treatments having the same letter are not significantly different.
Mean separation by Duncan's MRT (5%). Standard error = .6