US00PP10384P

United States Patent [19]

Meier et al.

[11] Patent Number: Plant 10,384

[45] Date of Patent: May 5, 1998

[54] **BA 78-258 KENTUCKY BLUEGRASS**

[75] Inventors: **Virgil D. Meier**, Marysville, Ohio; **Jay B. Burr**, Salem, Oreg.

[73] Assignee: **OMS Investments, Inc.**, Wilmington, Del.

[21] Appl. No.: **763,076**

[22] Filed: **Dec. 10, 1996**

[51] **Int. Cl.**[6] **A01H 5/00**

[52] **U.S. Cl.** **Plt./90.2**

[58] **Field of Search** Plt./90.2

[56] **References Cited**

U.S. PATENT DOCUMENTS

P.P. 3,156	5/1972	Fuchigami et al.	Plt./90.2
P.P. 3,186	5/1972	Barenbrug et al.	Plt./90.2
P.P. 4,336	11/1978	Mayer et al.	Plt./90.2
P.P. 6,280	9/1988	Meier et al.	Plt./90.2
P.P. 6,537	1/1989	Meier et al.	Plt./90.2
P.P. 6,538	1/1989	Meier et al.	Plt./90.2
P.P. 6,585	2/1989	Meier et al.	Plt./90.2
P.P. 7,831	3/1992	Meier et al.	Plt./90.2
P.P. 8,490	12/1993	Meier et al.	Plt./90.2
P.P. 9,036	1/1995	Meier et al.	Plt./90.2
P.P. 9,209	7/1995	Meier et al.	Plt./90.2
P.P. 9,611	7/1996	Meier	Plt./90.2
P.P. 9,848	4/1997	Meier et al.	Plt./90.2
P.P. 9,977	7/1997	Meier et al.	Plt./90.2

Primary Examiner—James R. Feyrer
Attorney, Agent, or Firm—Jones, Day, Reavis & Pogue

[57] **ABSTRACT**

A variety of Kentucky Bluegrass having a medium to high level of resistance to leaf spot and melting out, dollar spot rusts and brown patch; a dark green color throughout the growing season; the ability to form a medium to high quality turf under a variety of environmental conditions; a moderately wide leaf blade; a strong root system and a high level of seed yielding capacity.

2 Drawing Sheets

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a new and distinct variety of *Poa pratensis* that has been designated Ba 78-258 Kentucky Bluegrass.

2. Description of Related Art

Kentucky Bluegrasses have been dislcosed in U.S. Plant Pat. No. 3,156, issued May 9, 1972, U.S. Plant Pat. No. 3,186, issued May 23, 1972; U.S. Plant Patent No. 4,336, issued Nov. 28, 1978; U.S. Plant No. 6,280, issued Sep. 6, 1988; U.S. Plant Pat. Nos. 6,537 and 6,538, issued on Jan. 17, 1989; U.S. Plant Pat. No. 6,585, issued Feb. 7, 1989; U.S. Plant No. 7,831, issued Mar. 17, 1992; U.S. Plant Pat. No. 8,490, issued Dec. 7, 1993; U.S. Plant. Pat. No. 9,036, issued Jan. 3, 1995; U.S. Plant Pat. No. 9,209, issued Jul. 18, 1995; U.S. Plant Pat. No. 9,611, issued Jul. 23, 1996; and pending U.S. Plant patent applications Ser. No. 08/532,995, filed Sep. 22, 1995, now U.S. Plant Pat. No. 9,848, issued Apr. 1, 1997; Ser. No. 08/604,763, filed Feb. 23, 1996, now U.S. Plant Pat. No. 9,977, issued Jul. 22, 1997; Ser. No. 08/680,167, filed Jul. 15, 1996 and Ser. No. 08/680,168, filed Jul. 15, 1996.

SUMMARY OF THE VARIETY

Ba 78-258 plant material was selected from the open pollinated progeny of Ba70-62 Kentucky Bluegrass, a bluegrass plant maintained at The Scott Company's Research Station in Marysville, Ohio. After testing and observing the Ba 78-258 Kentucky Bluegrass variety, it was determined to be a distinct variety, and it was asexually propagated by rhizomes, tillers and disseminules.

Seed of Ba 78-258 Kentucky Bluegrass was produced first at Marysville, Ohio and later at Gervais, Oreg. This seed was used to plant turf performance evaluation trials and later seed production fields. Asexual production of Ba 78-258 by propagules (tillers and rhizomes) and by disseminules (modified caryopses produced by apomixis) has consistently

produced progeny plants indistinguishable from the mother plant. The apomixis level of Ba 78-258 is approximately 95% based upon examining seedling characteristics of approximately 100 to 150 seedlings from different crop years in a growth chamber.

Ba 78-258 has a number of highly desirable characteristics including a medium to high level of resistance to (a) Dreschslera spp. that causes leaf spot, melting and out and crown rot; (b) *Sclerotinia homoeocarpa* that causes dollar spot; (c) Puccinia spp. that causes several types of rust infections; and (d) *Rhizoctonia solani* that causes brown patch. Ba 78-258 is an overall goof turfgrass performer as evidence by medium to high scores for quality and color. Ba 78-258 has a high seed yield potential in the Bluegrass seed production region of the northwestern United States.

In comparison with a number of other Kentucky Bluegrass varieties, Ba 78-258 has an average size seed and rachilla; significantly more hairs on the palea than other grasses; and an above average seed count. The panicle is above average in length and width; average in whorl number, and has an above average branch count for both the lower and third whorls. Ba 78-258 has average size spikelets, floret number and glumes. The peduncle is above average in length and width, and culm length; average in node number and internode length; and below average for internode color. The flag leaf and flag ligule are significantly longer than several other grasses. The leaf is above average in width and thickness and has above average hair content on the dosal side of the ligule and the leaf sheath margin. The leaf has below average hair on the leaf's margin and dosal side. The vegetative leaf and the vegetative ligule are above average in length; but, leaf width and thickness are close to average in comparison to other gases. The hair content of the vegetative leaf is as follows: (a) significantly greater than most other grasses for the upper margin of the ligule; (b) above average for the sheath margins and the leaf dosal side; and (c) below average for the leaf margins, and ventral sides, collar margins, and the dosal side of the sheath.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a Ba 78-258 Kentucky Bluegrass panicle;

FIG. 2 is a Ba 78-258 Kentucky Bluegrass seed; and

FIG. 3 is a Ba 78-258 Kentucky Bluegrass plant shortly after completing anthesis.

DETAILED DESCRIPTION OF THE VARIETY

Ba 78-258 Kentucky Bluegrass (*Poa pratensis* L.) is perennial with creeping rhizomes forming a dense turf. When plants overwinter in the field under freezing temperatures and are then brought into the greenhouse during late winter to continue growth undistributed by clipping under moderate temperatures (60°–80° F.), culms are erect averaging 48.6 cm in length and 3.2 nodes per culm and the uppermost internode averages 13.6 cm in length. The peduncle averages 22.2 cm in length and 0.71 mm in width. The vegetative leaf averages 22.4 cm in length, 3.4 mm in width, 0.24 mm in thickness and a ligule length of 0.46 mm. The flag leaf averages 5.6 cm in length, 3.7 mm in width, 0.13 mm in thickness and a ligule length of 1.73 mm.

The panicle averages 90.3 mm in length, 56.6 mm in width, and 8.5 whorls. The lowest whorl and the third whorl from the bottom of the panicle average 2.8 and 3.5 branches, respectively. A spikelet in the lowest whorl averages 4.7 mm in length, 2.2 mm in width, 3.2 florets and the outer and inner glumes average 3.1 mm and 3.6 mm in length and 0.6 mm and 0.8 mm in width, respectively. A spikelet from the third whorl from the bottom of the panicle averages 4.5 mm in length, 2.3 mm in width, 3.3 florets and the outer and inner glumes average 3.0 mm and 3.5 mm in length and 0.5 mm and 0.7 mm in width, respectively.

The conditioned seed of Ba 78-258 averages 3.02 mm in length, 0.85 mm in width, and a rachilla length of 0.85 mm. The seed has a high level of hairs at the base of the lemma and palea margin.

Comparisons of Ba 78-258 with other Kentucky Bluegrass varieties in terms of seed dimensions and seed numbers per pound are shown in Table 1 and 2 as follows:

TABLE 1

Morphological Comparison of Seed Length and Width; Rachilla, and Lemma Hairs and Palea Hairs of Ba 78-258 and Other Kentucky Bluegrass Varieties After Conditioning.

	Seed			Hairs*	
Variety	Length mm	Width mm	Rachilla mm	Lemma Base	Palea Margin
Ba 78-258	3.02	0.85	0.68	3.50	3.10
Ba 78-165	3.32	0.97	0.50	4.00	1.60
Ba 77-700	3.20	0.85	0.77	2.80	0.90
Abbey	3.02	0.85	0.56	1.80	0.40
Ascot	3.00	0.82	0.68	6.30	1.50
Cannon	3.32	0.85	0.72	0.20	2.00
Gnome	2.93	0.90	0.61	2.10	0.80
Merit	2.85	0.78	0.62	0.90	0.15
Viva	2.72	0.77	0.79	1.20	0.20
LSD (.05)	0.191	0.072	0.177	1.53	0.823

*Rating Scale: 0–9; 9 = most hairs

TABLE 2

Comparison of Seeds Per Pound of Ba 78-258 and Other Kentucky Bluegrass Varieties After Conditioning.

Variety	Seeds Per Pound
Ba 78-258	1,127,000
Ba 78-165	965,500
Abbey	988,500
Buckingham	978,000
Cannon	1,023,250
Coventry	1,374,750
Garfield	1,250,500
Newport	1,250,250
Viva	993,500
LSD (.05)	77,042

Ba 78-258 differs significantly from several of the Kentucky Bluegrass varieties in regard to the following morphological characteristics: (1) the culm and top internode length; (2) the flag leaf and flag leaf ligule; (3) significantly more hair for the upper margin of the vegetative leaf ligule; and (4) significantly more hairs on the palea. Since environmental conditions such as soil and climate may influence morphological characteristics to some extent, comparisons of morphological characteristics of Ba 78-258 were made with other Kentucky Bluegrass varieties and the comparisons are set forth in the following Tables 3–8:

TABLE 3

Morphological Comparison of Panicles, Whorl Number and Whorl Branches of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Panicles			Number of Branches	
Variety	Length (mm)	Width (mm)	Whorl Number	Lowest Whorl	Third Whorl
Ba 78-258	90.3	56.6	8.5	3.8	3.5
Ba 78-165	78.7	48.2	8.1	3.2	2.5
Ba 77-700	87.7	57.9	8.2	3.9	3.3
Abbey	86.4	54.1	9.0	4.1	3.3
Ascot	91.4	60.7	9.1	2.4	2.3
Cannon	91.7	49.9	8.9	4.4	3.6
Gnome	85.4	43.7	9.1	3.6	3.4
Merit	77.3	38.9	8.1	2.9	2.8
Viva	82.5	46.6	8.0	3.4	3.0
LSD (.05)	8.03	8.83	0.65	0.71	0.59

TABLE 4

Morphological Comparison of Spikelets and Florets of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Spikelets				Number of Florets	
	Lowest Whorl		Third Whorl		Per Spikelet	
Variety	Length mm	Width mm	Length mm	Width mm	Lowest Whorl	Third Whorl
Ba 78-258	4.7	2.2	4.5	2.3	3.2	3.3
Ba 78-165	4.3	2.1	4.5	2.2	2.8	2.9
Ba 77-700	4.6	2.1	4.7	2.4	2.9	3.2
Abbey	5.0	2.3	4.9	2.3	3.3	3.3
Ascot	5.3	2.3	5.5	2.5	3.2	3.6
Cannon	4.7	2.0	4.8	2.1	3.2	3.1
Gnome	4.5	2.3	4.7	2.2	3.2	3.0

TABLE 4-continued

Morphological Comparison of Spikelets and Florets of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Spikelets				Number of Florets	
	Lowest Whorl		Third Whorl		Per Spikelet	
Variety	Length mm	Width mm	Length mm	Width mm	Lowest Whorl	Third Whorl
Merit	5.0	2.5	5.2	2.5	3.9	3.8
Viva	4.9	1.9	5.0	2.0	3.3	3.3
LSD (.05)	0.43	0.35	0.46	0.34	0.52	0.59

TABLE 5

Morphological Comparison of Glumes of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Outer Glume			
	Lowest Whorl		Third Whorl	
Variety	Length mm	Width mm	Length mm	Width mm
Ba 78-258	3.1	0.6	3.0	0.5
Ba 78-165	2.7	0.4	2.7	0.5
Ba 77-700	3.0	0.6	2.9	0.6
Abbey	2.9	0.6	3.0	0.7
Ascot	3.9	0.6	4.0	0.7
Cannon	3.2	0.7	3.1	0.6
Gnome	2.8	0.6	2.9	0.6
Merit	3.0	0.6	3.0	0.6
Viva	3.1	0.5	3.1	0.5
LSD (.05)	0.29	0.12	0.29	0.13

	Inner Glume			
	Lowest Whorl		Third Whorl	
Variety	Length mm	Width mm	Length mm	Width mm
Ba 78-258	3.6	0.8	3.5	0.7
Ba 78-165	3.2	0.6	3.4	0.6
Ba 77-700	3.4	0.7	3.5	0.7
Abbey	3.4	0.9	3.5	0.8
Ascot	4.3	0.7	4.5	0.9
Cannon	3.5	0.8	3.5	0.8
Gnome	3.3	0.8	3.3	0.8
Merit	3.4	0.8	3.5	0.9
Viva	3.6	0.7	3.6	0.7
LSD (.05)	0.29	0.13	0.28	0.14

TABLE 6

Morphological Comparison of Flag Leaves of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Leaf			
Variety	Length cm	Width mm	Thickness mm	Ligule Length mm
Ba 78-258	5.6	3.7	0.13	1.73
Ba 78-165	4.0	3.5	0.12	1.45
Ba 77-700	4.1	3.0	0.08	1.35
Abbey	4.7	3.6	0.12	1.53
***Ascot	4.4	2.9	0.11	1.52
Cannon	5.3	3.7	0.12	1.75
Gnome	4.6	3.2	0.10	1.40

TABLE 6-continued

Morphological Comparison of Flag Leaves of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

Merit	4.2	2.3	0.08	0.98
Viva	3.4	2.5	0.11	1.45
LSD (.05)	1.14	0.61	0.02	0.24

	Hairs			
Variety	Ligule Dosal	Leaf Margin	Leaf Sheath Margin	Leaf Sheath Dosal
Ba 78-258	2.1	1.4	1.2	0.0
Ba 78-165	2.0	0.2	0.1	0.0
Ba 77-700	1.3	1.8	0.8	0.0
Abbey	1.9	2.2	1.3	0.6
***Ascot	0.8	1.9	0.5	1.2
Cannon	1.4	2.4	0.8	0.0
Gnome	1.8	1.3	1.0	0.4
Merit	1.0	1.8	0.9	1.4
Viva	2.5	1.5	0.4	0.0
LSD (.05)	0.83	0.72	0.79	0.62

*Rating Scale: 0–9; 0 = none; 9 =0 many

TABLE 7

Morphological Comparison of Peduncles, Culms, Nodes Numbers Per Culm, Internode Length, and Internode Color or Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Peduncle		Culm	Nodes	Internode*	Inter-
Variety	Length cm	Width mm	Length cm	Per Culm	Length cm	node** Color
Ba 78-258	22.2	0.71	48.6	3.2	13.6	0.3
Ba 78-165	22.4	0.73	47.5	3.1	14.8	1.9
Ba 77-700	21.6	0.68	50.6	3.2	14.7	0.2
Abbey	21.5	0.77	40.6	2.6	10.7	0.1
Ascot	17.5	0.68	41.9	3.1	14.6	1.6
Cannon	20.0	0.74	48.3	3.6	13.4	0.0
Gnome	17.3	0.69	40.6	3.2	10.6	1.2
Merit	23.6	0.66	44.1	3.0	11.8	0.8
Viva	19.7	0.55	50.7	3.5	14.9	0.0
LSD (.05)	2.6	0.8	2.6	0.5	1.2	0.8

*Top Internode
**Rating Scale: 0–9; = darkest color

TABLE 8

Morphological Comparison of Vegetative Leaves of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Leaf			
Variety	Length cm	Width mm	Thickness mm	Ligule Length mm
Ba 78-258	22.4	3.4	0.24	0.46
Ba 78-165	24.2	3.9	0.23	0.35
Ba 77-700	23.2	3.5	0.23	0.50
Abbey	19.3	3.5	0.21	0.45
Ascot	20.4	3.2	0.21	0.42
Cannon	24.6	3.6	0.40	0.46
Gnome	19.5	3.8	0.24	0.48
Merit	21.8	3.6	0.23	0.41
Viva	25.0	3.2	0.24	0.40
LSD (.05)	3.67	0.42	0.14	0.06

TABLE 8-continued

Morphological Comparison of Vegetative Leaves of Ba 78-258 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	Hair*			
Variety	Ligule upper Margin	Color Margin	Sheath Margin	Sheath Dosal
Ba 78-258	7.7	2.1	4.1	4.7
Ba 78-165	4.5	2.0	3.3	3.9
Ba 77-700	7.3	2.9	3.1	5.3
Abbey	3.9	2.9	2.1	3.3
Ascot	4.1	3.5	3.0	3.2
Cannon	6.2	2.9	3.2	3.7
Gnome	5.6	3.9	2.9	3.1
Merit	5.4	3.2	3.7	3.0
Viva	6.6	4.5	4.3	3.9
LSD (.05)	1.10	0.87	1.21	0.98

	Leaf Hairs*		
Variety	Margin	Ventral	Dosal
Ba 78-258	0.6	0.4	1.0
Ba 78-165	1.3	0.2	1.7
Ba 77-700	1.5	0.2	0.1
Abbey	0.4	1.0	0.2
Ascot	0.9	0.0	0.9
Cannon	0.4	0.9	0.7
Gnome	1.0	0.9	0.5
Merit	0.1	0.5	0.0
Viva	1.5	0.2	0.2
LSD (.05)	0.75	0.61	0.54

*Rating Scale: 0–9; 0 = none; 9 = many

Ba 78-258 has performed well throughout the U.S. as exhibited by medium to high turf quality ratings in comparison to many other Kentucky Bluegrass varieties. In addition, it has a dark green color which can be maintained throughout the growing season.

With regard to comparative analysis conducted for purposes of determining color of Ba 78-258 plants relative to other Kentucky Bluegrass varieties, readings were taken of the vegetative color of Ba 78-258 during mid-October while the turf was actively growing with adequate nutrient with water availability. The readings were taken in full sun with several actively growing leaves being compared, one at a time, utilizing color chips from the Munsell Book of Color as a reference. On this basis, the color of Ba 78-258 was determined to be 5 GY 4/6. During the same time period, the color of similar leaves of other Kentucky Bluegrass varieties were determined by the same procedure to be as follows: Ascot — 5 Gy 4/4; Buckingham — 7.5 GY 4/4; Ba77-700 — 5 GY 4/6; Midnight — 7.5 GY 4/4, Abbey — 5 GY 4/6; and Victa — 5 GY 4/4. However, it should be noted that the general apparent color of turf does not always correlate directly with the color of the individual actively growing leaves within the turf and that turf color varies with nutrient level and time of year with some varieties being darker or lighter green depending on such factors.

Comparisons of Ba 78-258 with other Kentucky Bluegrass varieties for quality, genetic color, winter color, leaf texture, drought tolerance including wilting, dormancy and recovery are set forth hereinafter in Tables 9–18:

TABLE 9

A Comparison of Quality of Ba 78-258 and Other Kentucky Bluegrass Varieties at Six (6) Locations in the U.S.

	Test Locations					
Variety	Fort Collins	Post Falls	Lexington	Marys-ville	Belts-ville	Blacks-burg
Ba 78-258	8.7	6.1	6.1	6.8	6.7	4.9
Ba 77-700	8.0	5.1	5.5	6.2	6.7	4.9
Abbey	7.0	5.1	6.2	6.7	6.8	5.0
Able 1	7.7	7.3	5.4	7.0	6.5	5.0
Allure	8.7	6.2	5.8	7.3	7.1	4.6
Ascot	9.0	7.7	5.5	5.8	7.4	4.9
A-34	8.7	5.9	5.2	7.0	6.2	4.9
Banff	8.7	6.2	6.6	6.8	6.7	5.1
Baron	7.7	5.4	6.4	7.0	7.0	5.7
Buckingham	7.3	7.3	4.4	5.5	6.3	4.1
Cannon	8.0	5.1	5.7	6.5	6.8	5.1
Challenger	8.7	7.3	5.2	6.7	6.6	4.1
Classic	8.3	5.5	5.6	6.8	6.7	4.8
Coventry	8.7	7.2	6.5	6.7	7.0	4.7
Eclipse	8.3	5.9	6.9	6.2	7.3	5.0
Estate	8.7	6.4	6.0	7.0	6.4	5.0
Fairfax	8.7	6.7	5.8	6.8	6.8	4.9
Georgetown	8.0	6.3	6.0	6.5	6.9	4.4
Glade	9.0	7.5	6.8	7.0	7.6	4.3
Gnome	8.0	5.2	5.8	7.0	7.0	5.0
Haga	8.0	5.9	6.4	7.0	6.8	4.5
Kelly	7.7	5.7	6.0	6.5	6.8	5.0
Kenblue	7.7	2.7	4.9	7.0	6.2	3.9
Liberty	8.3	6.5	5.5	6.5	6.7	4.7
Merion	6.7	2.7	3.8	5.2	4.8	3.2
Merit	8.0	4.8	5.9	6.5	6.6	5.0
Midnight	8.0	7.9	6.7	6.7	7.7	4.9
Monopoly	7.7	4.9	6.0	7.3	6.1	5.1
Nassau	8.0	5.8	6.0	6.0	6.3	4.8
Ram 1	8.0	7.3	5.3	7.3	7.0	5.3
So. Dakota	7.0	4.3	4.7	6.2	4.9	3.0
Touchdown	9.0	7.1	5.3	6.7	6.5	4.7
Viva	7.7	5.1	5.5	6.5	6.6	4.9
LSD (.05)	1.2	1.1	1.0	1.1	0.5	0.9

Rating Scale: 1–9; 9 = Ideal Turf

TABLE 10

A Comparison of Quality of Ba 78-258 and Other Kentucky Bluegrass Varieties at Four (4) Locations in the U.S.

	Test Locations			
Variety	Urbana IL	Marysville OH	Hubbard OR	Pullman WA
Ba 78-258	5.5	7.0	5.6	6.3
Ba 77-700	4.8	6.7	4.6	5.8
Abbey	4.8	6.0	4.9	6.5
Able 1	5.5	7.0	5.4	5.8
Allure	6.0	7.0	6.4	5.9
Ascot	4.9	7.0	6.7	6.5
A-34	6.0	7.0	5.3	5.5
Banff	5.6	6.7	5.3	6.1
Baron	5.3	7.0	5.8	6.1
Buckingham	4.3	6.0	4.9	6.1
Cannon	5.1	6.3	4.7	5.7
Challenger	5.0	7.3	5.4	6.3
Classic	6.2	6.3	4.5	6.2
Coventry	6.0	7.0	5.9	6.1
Eclipse	5.9	7.0	5.3	6.1
Estate	5.9	7.3	6.6	6.2
Fairfax	6.5	6.3	6.5	6.1
Georgetown	5.2	6.7	4.9	6.3
Glade	5.8	7.0	5.0	6.3
Gnome	4.7	6.3	4.1	5.9
Haga	5.5	7.0	5.2	6.4
Kelly	5.0	6.7	4.4	5.5
Kenblue	4.8	4.0	4.3	5.2

TABLE 10-continued

A Comparison of Quality of Ba 78-258 and Other Kentucky Bluegrass Varieties at Four (4) Locations in the U.S.

Variety	Test Locations: Urbana IL	Marysville OH	Hubbard OR	Pullman WA
Liberty	5.3	6.7	5.6	6.3
Merion	3.8	6.7	4.1	6.2
Merit	4.8	6.3	4.3	6.0
Midnight	5.0	7.0	4.2	6.2
Monopoly	6.0	6.7	4.4	5.3
Nassau	4.2	6.7	4.9	6.3
Ram 1	5.0	7.0	5.6	6.7
So. Dakota	4.2	3.7	2.7	5.3
Touchdown	5.6	6.3	3.3	6.4
Viva	4.8	6.0	4.9	6.2
LSD (.05)	0.9	0.9	1.1	0.7

Rating Scale: 1–9; 9 = Ideal Turf

TABLE 11

A Comparison of Quality of Ba 78-258 and Other Kentucky Bluegrass Varieties at Five (5) Locations in the U.S.

Variety	Test Locations: Fort Collins CO	Urbana IL	Martinsville NJ	Kingston RI	Pullman WA
Ba 78-258	6.7	4.6	5.4	5.7	5.9
Ba 77-700	6.3	3.9	4.4	5.7	5.3
Abbey	6.3	3.6	4.7	5.7	5.6
Able 1	6.3	4.2	6.1	5.8	5.6
Allure	5.9	5.5	5.4	5.3	5.8
Ascot	6.7	4.2	6.0	5.7	6.0
A-34	5.2	4.6	5.0	5.6	5.2
Banff	6.1	4.0	5.0	5.0	5.4
Baron	5.3	4.1	5.0	5.7	5.8
Buckingham	5.6	2.9	5.4	4.6	5.7
Cannon	6.1	4.0	4.3	5.4	6.0
Challenger	6.1	3.2	5.3	5.2	5.3
Classic	5.8	4.8	4.9	5.4	5.9
Coventry	6.1	5.4	5.0	5.0	5.9
Eclipse	6.6	5.0	5.9	6.1	6.3
Estate	5.8	4.7	5.1	5.2	5.6
Fairfax	5.9	5.3	4.8	5.3	5.7
Georgetown	5.8	4.3	5.0	5.3	5.4
Glade	6.1	5.2	4.6	5.8	4.9
Gnome	5.9	3.6	4.7	5.4	5.7
Haga	5.6	4.2	4.8	5.2	5.4
Kelly	5.9	4.3	4.2	5.2	5.3
Kenblue	3.7	4.2	2.8	4.9	3.9
Liberty	6.2	4.5	5.2	5.3	6.0
Merion	5.1	3.1	4.1	5.4	5.8
Merit	6.1	4.6	5.1	5.7	5.9
Midnight	7.1	4.3	7.3	5.1	6.1
Monopoly	4.7	5.7	4.6	5.5	5.3
Nassau	5.8	3.0	5.2	5.2	5.6
Ram 1	6.1	3.8	4.7	5.7	4.7
So. Dakota	4.1	3.6	2.1	4.6	3.7
Touchdown	6.4	4.5	5.3	5.2	6.0
Viva	6.1	4.0	4.4	5.9	5.8
LSD (.05)	0.7	1.1	0.9	0.7	0.7

Rating Scale: 1–9; 9 = Ideal Turf

TABLE 12

A Comparison of Quality of Ba 78-258 and Other Kentucky Bluegrass Varieties at Four (4) Locations in the U.S.

Variety	Test Locations: Ames IA	Hubbard OR	Kingston RI	Haymarket VA
Ba 78-258	7.3	4.9	5.8	5.3
Ba 77-700	6.9	3.7	6.0	5.4
Abbey	6.8	3.2	5.7	5.4
Able 1	7.2	5.4	5.9	3.6
Allure	7.4	5.6	5.0	5.7
Ascot	7.8	6.1	5.8	4.2
A-34	7.2	4.0	5.4	4.7
Banff	7.0	3.7	4.6	4.4
Baron	6.9	3.7	5.6	5.7
Buckingham	6.7	3.8	4.4	4.4
Cannon	6.7	3.8	5.2	5.4
Challenger	7.1	3.8	4.7	5.2
Classic	7.1	3.6	4.9	4.8
Coventry	7.3	5.1	5.3	5.8
Eclipse	7.1	3.2	6.0	4.9
Estate	7.7	5.2	5.5	5.7
Fairfax	7.4	5.1	5.6	5.7
Georgetown	7.2	3.1	5.4	4.9
Glade	7.1	2.9	4.8	5.8
Gnome	7.1	3.0	5.5	5.7
Haga	7.0	3.4	5.1	5.1
Kelly	6.9	4.0	5.3	5.5
Kenblue	5.8	2.9	4.5	4.7
Liberty	7.1	3.6	5.3	4.2
Merion	6.9	3.7	5.4	5.6
Merit	6.9	3.9	5.7	5.3
Midnight	8.2	3.2	5.0	5.2
Monopoly	6.9	3.1	5.2	4.8
Nassau	6.9	4.0	4.9	5.2
Ram 1	7.2	3.3	5.2	5.2
So. Dakota	6.1	2.8	4.8	4.8
Touchdown	7.0	3.0	4.5	4.3
Viva	6.9	3.4	5.6	5.8
LSD (.05)	0.5	1.4	0.8	1.0

Rating Scale: 1–9; 9 = Ideal Turf

TABLE 13

A Comparison of Genetic Color of Ba 78-258 and Other Kentucky Bluegrass Varieties in Four (4) Tests A–D Conducted at Various Locations in the U.S.

Variety	Tests (Mean Values): A	B	C	D
Ba 78-258	5.9	5.7	5.8	6.4
Ba 77-700	5.7	5.5	5.8	6.3
Abbey	5.6	5.9	5.8	6.7
Able 1	6.6	6.8	6.8	6.9
Allure	5.7	5.2	5.6	5.7
Ascot	6.9	6.8	7.2	7.4
A-34	5.0	5.4	4.6	5.7
Banff	5.1	6.0	5.5	5.8
Baron	6.0	6.0	5.9	6.6
Buckingham	7.0	7.2	7.2	7.2
Cannon	6.0	5.7	6.4	6.6
Challenger	6.0	6.2	5.9	5.9
Classic	5.2	5.9	5.2	5.9
Coventry	5.9	5.6	5.8	6.0
Eclipse	6.3	6.6	6.4	7.2
Estate	5.8	5.3	5.3	6.3
Fairfax	6.0	5.4	5.4	5.9
Georgetown	5.2	6.1	5.3	6.2
Glade	6.7	6.3	6.7	6.6
Gnome	6.0	6.1	5.8	6.7
Haga	5.1	5.8	5.3	6.1
Kelly	5.6	5.7	6.1	6.8

TABLE 13-continued

A Comparison of Genetic Color of Ba 78-258 and Other Kentucky Bluegrass Varieties in Four (4) Tests A–D Conducted at Various Locations in the U.S.

Variety	Tests (Mean Values) A	B	C	D
Kenblue	4.6	5.0	5.3	5.6
Liberty	5.9	6.1	6.1	6.4
Merion	5.7	5.8	5.4	6.0
Merit	5.7	5.7	6.2	6.6
Midnight	7.1	7.3	7.7	7.6
Monopoly	4.8	4.9	4.8	4.7
Nassau	6.0	6.6	6.5	6.8
Ram 1	6.7	5.9	6.6	6.2
So. Dakota	4.5	4.8	4.7	5.8
Touchdown	5.5	5.5	5.3	6.1
Viva	5.5	5.5	5.9	6.6
LSD (.05)	0.5	0.4	0.7	0.8

Genetic Color Rating Scale: 1–9; 9 = Dark Green

TABLE 14

A Comparison of Winter Color of Ba 78-258 and Other Kentucky Bluegrass Varieties in Two (2) Tests A–B Conducted at Various Locations in the U.S.

Variety	Test A*	Test B**
Ba 78-258	6.0	4.7
Ba 77-700	5.0	5.0
Abbey	1.7	6.3
Able 1	6.3	3.3
Allure	6.0	6.3
Ascot	4.7	4.3
A-34	6.7	2.0
Banff	9.0	3.7
Baron	2.3	5.7
Buckingham	5.3	6.3
Cannon	2.3	6.0
Challenger	7.3	4.3
Classic	9.0	3.3
Coventry	7.0	3.7
Eclipse	4.7	3.7
Estate	5.7	5.0
Fairfax	6.0	4.5
Georgetown	8.0	3.3
Glade	1.7	3.7
Gnome	1.0	5.7
Haga	9.0	3.0
Kelly	2.3	5.7
Kenblue	1.3	3.0
Liberty	7.3	3.3
Merion	6.7	3.3
Merit	3.7	6.0
Midnight	3.0	1.7
Monopoly	4.3	2.7
Nassau	7.7	5.0
Ram 1	1.7	3.7
So. Dakota	2.3	4.0
Touchdown	3.0	2.3
Viva	2.3	4.0
LSD (.05)	1.9	2.1

Winter Color Rating Scale: 1–9; 9 = Complete Color Retention
*Location: North Brunswick, NJ
**Location: Post Falls, ID

TABLE 15

A Comparison of Leaf Texture of Ba 78-258 and Other Kentucky Bluegrass Varieties in Two (2) Test A–B Conducted at Various Locations in the U.S.

Variety	Test A*	Test B*
Ba 78-258	4.7	4.0
Ba 77-700	4.0	4.0
Abbey	5.0	4.3
Able 1	5.7	6.3
Allure	4.3	4.0
Ascot	5.3	6.0
A-34	4.3	5.2
Banff	5.3	5.2
Baron	5.0	4.2
Buckingham	4.0	3.7
Cannon	4.0	4.0
Challenger	5.0	4.5
Classic	5.3	5.3
Coventry	5.0	4.2
Eclipse	5.7	5.7
Estate	4.3	3.8
Fairfax	4.7	4.0
Georgetown	6.0	4.8
Glade	5.0	4.8
Gnome	5.3	4.2
Haga	5.7	5.2
Kelly	4.3	4.0
Kenblue	6.0	5.8
Liberty	5.0	4.7
Merion	4.0	4.2
Merit	4.7	4.0
Midnight	6.7	6.0
Monopoly	5.0	4.5
Nassau	5.0	4.3
Ram 1	5.0	4.8
So. Dakota	3.7	4.8
Touchdown	5.3	5.8
Viva	4.3	4.0
LSD (.05)	0.9	0.8

Leaf Texture Rating Scale: 1–9; 9 = very fine
*Locations: Martinsville, NJ; pooled data from Halsey, Hubbard, and Gervais, OR.

TABLE 16

A Comparison of Drought Tolerance (Wilting) of Ba 78-258 and Other Kentucky Varieties in a Test A Conducted at Richmond Hills, Canada.

Variety	Test A
Ba 78-258	5.3
Ba 77-700	5.0
Abbey	5.0
Able 1	5.3
Allure	4.3
Ascot	4.0
A-34	5.3
Banff	4.7
Baron	4.7
Buckingham	4.3
Cannon	5.0
Challenger	4.7
Classic	4.7
Coventry	4.7
Eclipse	5.0
Estate	5.3
Fairfax	4.3
Georgetown	4.7
Glade	5.0
Gnome	4.0
Haga	4.3
Kelly	5.0
Kenblue	4.3
Liberty	5.0
Merion	5.0

TABLE 16-continued

A Comparison of Drought Tolerance (Wilting) of Ba 78-258 and Other Kentucky Varieties in a Test A Conducted at Richmond Hills, Canada.

Variety	Test A
Merit	4.3
Midnight	4.7
Monopoly	5.0
Nassau	4.0
Ram 1	4.7
So. Dakota	4.3
Touchdown	4.7
Viva	5.0
LSD (.05)	1.2

Drought Tolerance (Wilting) Rating Scale: 1–9; 9 = No Wilting

TABLE 17

A Comparison of Drought Tolerance (Dormancy) of Ba 78-258 and Other Kentucky Bluegrass Varieties in a Test A Conducted at Haymarket, VA.

Variety	Test A
Ba 78-258	4.7
Ba 77-700	5.3
Abbey	4.3
Able 1	3.3
Allure	4.0
Ascot	4.0
A-34	3.0
Banff	3.3
Baron	4.0
Buckingham	4.0
Cannon	4.0
Challenger	3.3
Classic	3.7
Coventry	3.7
Eclipse	4.3
Estate	4.3
Fairfax	4.3
Georgetown	3.7
Glade	5.0
Gnome	3.7
Haga	3.0
Kelly	4.0
Kenblue	4.0
Liberty	3.0
Merion	3.7
Merit	4.7
Midnight	3.7
Monopoly	4.0
Nassau	3.3
Ram 1	4.3
So. Dakota	4.0
Touchdown	4.0
Viva	4.7
LSD (.05)	1.1

Drought Tolerance (Dormancy) Rating Scale: 1–9; 9 = No Dormancy

TABLE 18

A Comparison of Drought Tolerance (Recovery) of Ba 78-258 and Other Kentucky Bluegrass Varieties in a Test A Conducted at Various Locations in the U.S.

Variety	Test A* (Mean Values)
Ba 78-258	5.3
Ba 77-700	4.8
Abbey	4.5
Able 1	4.3
Allure	4.7
Ascot	3.2

TABLE 18-continued

A Comparison of Drought Tolerance (Recovery) of Ba 78-258 and Other Kentucky Bluegrass Varieties in a Test A Conducted at Various Locations in the U.S.

Variety	Test A* (Mean Values)
A-34	3.3
Banff	3.5
Baron	5.5
Buckingham	2.8
Cannon	4.3
Challenger	3.5
Classic	4.2
Coventry	4.7
Eclipse	3.3
Estate	5.5
Fairfax	5.0
Georgetown	3.5
Glade	4.2
Gnome	4.8
Haga	4.0
Kelly	4.5
Kenblue	4.8
Liberty	4.2
Merion	3.5
Merit	5.7
Midnight	4.5
Monopoly	4.7
Nassau	5.0
Ram 1	4.3
So. Dakota	3.7
Touchdown	4.3
Viva	4.8
LSD (.05)	1.2

Drought Recovery Rating Scale: 1–9; 9 = Complete Recovery
*Locations: Carbondale, IL; pooled data from Halsey, Hubbard and Gervais, OR.

Turf diseases are one of the major causes of inconsistent and poor turf performance. Ba 78-258 has been found to have a medium to high level of resistance to the following diseases: (a) leaf spot and melting out caused by *Dreschslera poae* formerly called *Helminthosporium vagans*; (b) dollar spot caused by *Sclerotinia homoecarpa*; (c) several diseases of rusts caused by Puccinia spp.; and (d) brown patch caused by *Rhizoctonia solani*.

Comparisons of disease incidence of Ba 78-258 as compared with other Kentucky Bluegrass varieties in regard to leaf spot, dollar spot, rusts, and brown patch are presented in Tables 19–24.

TABLE 19

A Comparison of Leaf Spot incidence IN Ba 78-258 and Other Kentucky Bluegrass Varieties in Two (2) Tests Conducted at Various Locations in the U.S.

	Means	
Variety	Test 1*	Test 2**
Ba 78-258	5.8	6.9
Ba 77-700	5.7	7.2
Abbey	5.1	7.8
Able 1	7.1	7.8
Allure	5.8	7.7
Ascot	7.4	8.1
A-34	5.4	7.2
Banff	5.9	7.8
Baron	5.4	7.1
Buckingham	6.8	8.3
Cannon	5.8	8.0
Challenger	6.9	8.0

TABLE 19-continued

A Comparison of Leaf Spot incidence IN Ba 78-258 and Other Kentucky Bluegrass Varieties in Two (2) Tests Conducted at Various Locations in the U.S.

	Means	
Variety	Test 1*	Test 2**
Classic	5.4	7.8
Coventry	5.8	6.8
Eclipse	7.4	8.1
Estate	5.9	7.9
Fairfax	4.9	6.6
Georgetown	6.3	8.0
Glade	4.8	4.8
Gnome	5.7	7.6
Haga	5.9	7.2
Kelly	5.1	7.2
Kenblue	1.8	1.2
Liberty	6.8	8.1
Merion	7.3	8.0
Merit	5.4	7.4
Midnight	6.6	8.1
Monopoly	5.2	7.1
Nassau	6.2	8.2
Ram 1	4.9	3.4
So. Dakota	1.8	2.2
Touchdown	6.3	7.4
Viva	5.1	7.4
LSD (.05)	0.7	0.9

Leaf Spot Rating Scale: 1–9; 9 = No Disease
*Locations: Post, Falls, ID; North Brunswick, NJ; Adelphia, NJ; Marysville, OH
**Locations: Post Falls, ID; North Brunswick, NJ; Adelphia, NJ.

TABLE 20

A Comparison of Dollar Spot Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties in Three (3) Tests Conducted at Various Locations in the U.S.

	Means		
Variety	Test 1*	Test 2**	Test 3***
Ba 78-258	7.0	6.2	8.3
Ba 77-700	7.0	7.0	7.7
Abbey	6.8	6.3	8.3
Able 1	6.8	6.1	7.7
Allure	6.4	5.3	6.0
Ascot	7.8	7.0	8.3
A-34	6.7	6.0	8.7
Banff	6.4	6.2	8.7
Baron	6.9	6.8	8.0
Buckingham	7.9	4.8	8.3
Cannon	6.6	6.4	8.7
Challenger	6.4	4.7	—
Classic	7.4	6.3	8.5
Coventry	5.9	5.9	7.0
Eclipse	7.5	7.2	8.3
Estate	5.3	5.6	8.0
Fairfax	5.8	6.0	6.5
Georgetown	6.9	6.1	8.3
Glade	7.0	6.4	7.7
Gnome	6.7	6.1	8.3
Haga	6.3	6.2	8.3
Kelly	7.3	6.3	8.3
Kenblue	6.8	6.8	8.7
Liberty	7.3	6.8	8.0
Merion	6.9	6.1	8.0
Merit	6.8	6.7	8.0
Midnight	8.0	6.6	8.3
Monopoly	7.1	6.7	7.7
Nassau	7.4	6.7	8.3
Ram 1	6.0	4.9	6.3
So. Dakota	7.3	5.8	8.5

TABLE 20-continued

A Comparison of Dollar Spot Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties in Three (3) Tests Conducted at Various Locations in the U.S.

	Means		
Variety	Test 1*	Test 2**	Test 3***
Touchdown	6.8	6.1	7.3
Viva	7.1	6.2	8.0
LSD (.05)	1.1	0.8	1.1

Dollar Spot Rating Scale: 1–9; 9 = No Disease
*Locations: Urbana, IL; Adelphia, NJ; Kingston, RI; Haymarket, VA.
**Locations: Urbana, IL; Silver Spring, MD; Kingston, RI.
***Locations: Silver Spring, MD.

TABLE 21

A comparison of Stem Rust Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Adelphia, NJ.

Variety	Stem Rust
Ba 78-258	7.0
Ba77-700	7.3
Abbey	7.0
Able 1	3.3
Allure	6.3
Ascot	7.3
A-34	4.3
Banff	7.7
Baron	7.0
Buckingham	5.7
Cannon	7.3
Challenger	4.0
Classic	8.0
Coventry	6.7
Eclipse	4.0
Estate	6.3
Fairfax	6.3
Georgetown	8.7
Glade	7.7
Gnome	7.0
Haga	8.0
Kelly	8.0
Kenblue	5.7
Liberty	7.7
Merion	1.0
Merit	6.3
Midnight	8.0
Monopoly	6.3
Nassau	8.0
Ram 1	8.0
So. Dakota	4.3
Touchdown	2.3
Viva	6.7
LSD (.05)	1.4

Stem Rust Rating Scale: 1–9; 9 = No Disease

TABLE 22

A Comparison of Leaf Rust Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Kingston, RI.

Variety	Leaf Rust
Ba 78-258	7.3
Ba77-700	8.0
Abbey	6.3
Able 1	7.0
Allure	6.0
Ascot	6.0
A-34	6.0
Banff	7.0

TABLE 22-continued

A Comparison of Leaf Rust Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Kingston, RI.

Variety	Leaf Rust
Baron	8.3
Buckingham	6.7
Cannon	6.3
Challenger	5.7
Classic	8.7
Coventry	7.0
Eclipse	5.7
Estate	6.3
Fairfax	6.0
Georgetown	7.7
Glade	7.0
Gnome	6.7
Haga	7.0
Kelly	5.0
Kenblue	6.7
Liberty	7.3
Merion	2.3
Merit	6.0
Midnight	6.0
Monopoly	5.3
Nassau	7.0
Ram 1	6.7
So. Dakota	6.7
Touchdown	3.7
Viva	5.7
LSD (.05)	2.4

Leaf Rust Range Scale: 1–9; 9 = No Disease

TABLE 23

A Comparison of Brown Patch Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Haymarket, VA.

Variety	Brown Patch
Ba 78-258	8.7
Ba77-700	6.0
Abbey	9.0
Able 1	8.3
Allure	7.7
Ascot	8.7
A-34	7.3
Banff	8.0
Baron	7.7
Buckingham	7.0
Cannon	8.7
Challenger	6.0
Classic	7.0
Coventry	6.7
Eclipse	7.3
Estate	7.0
Fairfax	5.3
Georgetown	6.7
Glade	8.3
Gnome	7.7
Haga	7.0
Kelly	7.0
Kenblue	5.3
Liberty	7.0
Merion	7.0
Merit	8.7
Midnight	8.3
Monopoly	7.0
Nassau	8.0
Ram 1	6.7
So. Dakota	6.3
Touchdown	8.3

TABLE 23-continued

A Comparison of Brown Patch Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Haymarket, VA.

Variety	Brown Patch
Viva	7.7
LSD (.05)	2.4

Brown Patch Rating Scale: 1–9; 9 = No Disease

TABLE 24

A Comparison of Stripe Rust Disease Incidence in Ba 78-258 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Stripe Rust
Ba 78-258	3.6
Ba77-700	3.6
Ba 78-165	6.0
Abbey	4.0
Allure	2.4
Ascot	6.4
Bristol	4.6
Buckingham	4.6
Cannon	5.6
Chateau	2.4
Coventry	1.8
Estate	2.8
Fairfax	2.6
Gnome	4.2
Kelly	5.8
Newport	8.8
Victa	6.4
Viva	4.4
LSD (.05)	1.6

Stripe Rust Rating Scale: 1–9; 9 = Most Rust

Additional comparisons for sod strength, *Poa annua* content, mature plant height, vegetative growth versus seed heads, panicle length, days to heading, days to anthesis and seed yields are presented in Tables 25–32.

TABLE 25

A Comparison of Sod Strength of Ba 78-258 and Other Kentucky Bluegrass Varieties at Haymarket, VA.

Variety	Sod Strength
Ba 78-258	36.0
Ba77-700	34.3
Abbey	49.7
Able 1	31.3
Allure	34.3
Ascot	27.7
A-34	29.0
Banff	33.3
Baron	38.3
Buckingham	26.0
Cannon	29.0
Challenger	31.7
Classic	28.3
Coventry	36.3
Eclipse	26.3
Estate	35.3
Fairfax	32.0
Georgetown	24.3
Glade	21.0
Gnome	39.0
Haga	26.7
Kelly	39.7
Kenblue	31.7
Liberty	27.7

TABLE 25-continued

A Comparison of Sod Strength of Ba 78-258 and Other Kentucky Bluegrass Varieties at Haymarket, VA.

Variety	Sod Strength
Merion	27.7
Merit	41.0
Midnight	26.7
Monopoly	28.7
Nassau	21.7
Ram 1	36.3
So. Dakota	18.3
Touchdown	38.7
Viva	31.0
LSD (.05)	12.7

Sod Strength Measured in Kilograms of Tension

TABLE 26

A Comparison of *Poa Annua* Content of Ba 78-258 and Other Kentucky Bluegrass Varieties Based on Pooled Data from Halsey, Hubbard and Gervais, OR.

Variety	*Poa Annua* Content
Ba 78-258	7.7
Ba77-700	6.3
Abbey	5.7
Able 1	5.0
Allure	7.3
Ascot	4.0
A-34	5.7
Banff	8.7
Baron	7.3
Buckingham	6.7
Cannon	6.7
Challenger	7.7
Classic	8.3
Coventry	5 0
Eclipse	5.0
Estate	6.3
Fairfax	7.3
Georgetown	8.3
Glade	6.7
Gnome	4.7
Haga	8.7
Kelly	4.7
Kenblue	8.0
Liberty	7.7
Merion	1.7
Merit	6.3
Midnight	6.3
Monopoly	8.0
Nassau	7.7
Ram 1	8.3
So. Dakota	7.3
Touchdown	7.3
Viva	6.0
LSD (.05)	1.8

Poa annua Content Rating Scale: 1–9; 9 = No Poa annua

TABLE 27

A Comparison of Mature Plant Height of Ba 78-258 and Other Kentucky Varieties at Gervais, OR.

Variety	Height (cm)
Ba 78-258	60.3
Ba77-700	60.0
Ba 78-165	53.4
Abbey	65.0
Allure	53.0
Ascot	56.0

TABLE 27-continued

A Comparison of Mature Plant Height of Ba 78-258 and Other Kentucky Varieties at Gervais, OR.

Variety	Height (cm)
Bristol	69.4
Buckingham	66.8
Cannon	68.4
Chateau	60.2
Coventry	62.4
Estate	57.4
Fairfax	60.6
Gnome	60.8
Kelly	65.2
Newport	74.9
Victa	68.2
Viva	61.6
LSD (.05)	8.7

TABLE 28

A Comparison of Vegetative Growth Versus Seed Heads of Ba 78-258 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Vegetative Growth vs. Seed Heads
Ba 78-258	6.9
Ba77-700	7.2
Ba 78-165	5.8
Abby	5.8
Allure	7.2
Ascot	4.2
Bristol	6.0
Buckingham	5.6
Cannon	8.0
Chateau	6.8
Coventry	8.0
Estate	8.6
Fairfax	7.2
Gnome	6.6
Kelly	4.8
Newport	3.4
Victa	7.8
Viva	7.2
LSD (.05)	1.8

Vegetative Growth versus Seed Heads Rating Scale: 1–9; 9 = Most vegetative Growth

TABLE 29

A Comparison of Panicle Length of Ba 78-258 and Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Panicle Length (cm)
Ba 78-258	11.1
Ba77-700	8.9
Ba 78-165	8.6
Abby	10.4
Allure	7.8
Ascot	9.5
Bristol	13.6
Buckingham	11.9
Cannon	9.9
Chateau	7.7
Coventry	7.8
Estate	8.3
Fairfax	9.1
Gnome	9.7
Kelly	9.7
Newport	10.8

TABLE 29-continued

A Comparison of Panicle Length of Ba 78-258 and Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Panicle Length (cm)
Victa	10.0
Viva	9.8
LSD (.05)	2.0

TABLE 30

A Comparison of Days to Heading of Ba 78-258 and Other Kentucky Bluegrass Varieties at Gervais, OR

	Days to Heading		
Variety	First	50%	100%
Ba 78-258	110.1	125.5	128.1
Ba77-700	109.8	125.4	127.2
Ba 78-165	100.2	118.6	121.6
Abby	108.2	124.2	127.2
Allure	110.6	125.0	126.2
Ascot	88.0	112.0	118.6
Bristol	95.4	118.6	122.2
Buckingham	94.0	112.4	120.0
Cannon	113.4	125.0	127.0
Chateau	106.0	123.8	126.0
Coventry	105.8	122.4	124.6
Estate	105.8	123.8	125.6
Fairfax	102.6	121.6	124.4
Gnome	109.8	125.4	127.2
Kelly	112.2	125.4	127.2
Newport	85.0	109.8	118.2
Victa	111.6	125.0	127.0
Viva	109.4	125.0	127.2
LSD 0.05	5.3	4.0	1.8

TABLE 31

A Comparison of Days to Anthesis of Ba 78-258 and Other Kentucky Bluegrass Varieties at Gervais, OR

	Days to Anthesis		
Variety	First	50%	100%
Ba 78-258	129.1	134.1	137.5
Ba77-700	129.0	134.4	137.8
Ba 78-165	124.2	126.2	132.0
Abbey	129.2	132.4	136.6

TABLE 31-continued

A Comparison of Days to Anthesis of Ba 78-258 and Other Kentucky Bluegrass Varieties at Gervais, OR

	Days to Anthesis		
Variety	First	50%	100%
Allure	127.8	131.0	134.8
Ascot	118.6	123.8	131.8
Bristol	124.6	126.6	132.0
Buckingham	123.4	127.6	133.6
Cannon	129.0	132.2	136.0
Chateau	128.2	130.8	135.2
Coventry	126.6	128.6	134.4
Estate	127.0	129.2	135.2
Fairfax	125.8	128.8	132.8
Gnome	129.0	133.2	136.6
Kelly	129.0	132.8	136.6
Newport	120.4	123.4	131.4
Victa	129.0	132.2	136.0
Viva	129.0	132.8	136.6
LSD (0.05)	2.1	2.5	1.8

TABLE 32

A Comparison of Seed Yields of Ba 78-258 and Other Kentucky Bluegrass Varieties in Three (3) Tests Conducted at Imbler, OR.

	Seed Yield (Lbs./acre)		
Variety	Test 1	Test 2	Test 3
Ba 78-258	1,377	1,211	1,076
Ba77-700	1,569	1,105	1,156
Abbey	1,549	1,324	1,090
Buckingham	748	923	740
Cannon	1,551	1,130	1,171
Coventry	1,046	839	847
Fairfax	1,159	1,074	766
Viva	1,612	1,111	1,054
LSD (.05)	160	271	296

What is claimed is:

1. A variety of Kentucky Bluegrass plant, substantially as shown and described, characterized by a medium to high level of resistance to a broad spectrum of serious diseases including leaf spot and melting out, dollar spot, rusts and brown patch; a dark green color throughout the growing season; a medium to high quality turf formation under a wide variety of environmental conditions; a moderately wide blade; a strong root system and a high level of seed yielding capacity.

* * * * *

1/2

FIG. 1

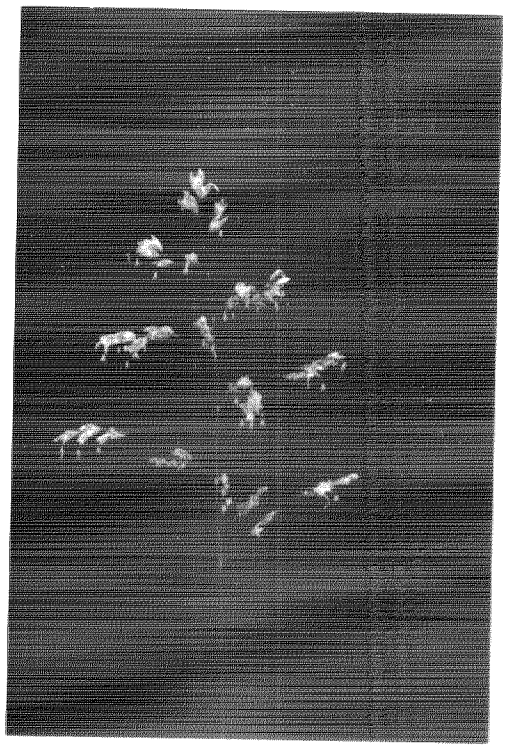

FIG. 2

FIG. 3

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : PP 10,384
DATED : May 5, 1998
INVENTOR(S) : Virgil D. Meier et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2,
Line 13, change "goof" to -- good --.
Line 14, change "evidence" to -- evidenced --.
Lines 31, 32, 38 & 40, change "dosal" to -- dorsal --.
Line 35, change "gases" to -- grasses --.

Column 6,
Table 6, in the headings, change "Dosal" (2 occurrences) to -- Dorsal --.
Table 7, first line of the title, delete "Numbers".
Table 7, under the heading "Width mm", change "0.8" to -- 0.08 --.
Table 8, in the headings, change "Dosal" (2 occurrences) to -- Dorsal --.

Column 7,
Line 5, of the second paragraph, change "with" to -- and --.
Line 13, of the second paragraph, change "5 Gy" to -- 5 GY --.

Column 8,
Table 9, in the headings, change "Fort Collins" to -- Fort Collins CO --; change "Post Falls" to -- Post Falls ID --; change "Lexington" to -- Lexington KY --; change "Marysville" to -- Marysville, OH --; change "Beltsville" to -- Beltsville UB --; and change "Blacksburg" to -- Blacksburg VA --.

Signed and Sealed this

Fourteenth Day of October, 2003

JAMES E. ROGAN
Director of the United States Patent and Trademark Office