

US00PP10925P

### United States Patent [19]

### Meier et al.

[54]	KENTUC	KY BLUEGRASS, NAMED 'BA74-17'
[75]	Inventors:	Virgil D. Meier, Marysville, Ohio; Jay B. Burr, Salem, Oreg.
[73]	Assignee:	OMS Investments, Inc., Wilmington, Del.

[21]	Appl. N	o.: <b>08/949,938</b>	
[22]	Filed:	Oct. 14, 1997	
[51]	Int. Cl.	j ••••••••••••••••••••••••••••••••••••	A01H 5/00
[52]	U.S. Cl.	404 400 141 141 141 141 141 141 141 141	Plt./90.2
[58]	Field of	Search	Plt./90.2

#### **References Cited** [56]

P.P. 3,156	5/1972	Fuchigami et al.	Plt./88
P.P. 3,186	5/1972	Barenbrug et al	Plt./88
P.P. 4,336	11/1978	Mayer et al	Plt./88
		Meier et al.	

U.S. PATENT DOCUMENTS

[11]	Patent Number:	Plant 10,925
[45]	Date of Patent:	May 25, 1999

P.P. 6,537	1/1989	Meier et al Plt./88
P.P. 6,538	1/1989	Meier et al Plt./88
P.P. 6,585	2/1989	Meier et al Plt./88
P.P. 7,831	3/1992	Meier et al
P.P. 8,490	12/1993	Meier et al
P.P. 9,036	1/1995	Meier et al
P.P. 9.209	7/1995	Meier et al
P.P. 9,611	7/1996	Meier Plt./90.2
P.P. 9,848		Meier et al
P.P. 9.977		Meier et al

Primary Examiner—Elizabeth Kemmerer Attorney, Agent, or Firm-Jones. Day, Reavis & Pogue

#### **ABSTRACT** [57]

A variety of Kentucky Bluegrass having a medium to high level of resistance to leaf spot and melting out, leaf rust, Fusarium patch and red thread; a dark green color throughout the growing season; the ability to form a medium to high quality turf under a variety of environmental conditions; short growth and a high seed yielding capacity.

### 1 Drawing Sheet

### FIELD OF THE INVENTION

The present invention relates to a new and distinct variety of *Poa pratensis* that has been designated Ba74-17 Kentucky Bluegrass.

### DESCRIPTION OF RELATED ART

Kentucky Bluegrass have been disclosed 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 Pat. No. 4,336, issued Nov. 28, 1978; U.S. Plant Pat. 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 Pat. 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; U.S. Plant Pat. No. 9,848, issued Apr. 1, 1997; U.S. Plant Pat. No. 9,977, issued Jul. 22, 1997; pending U.S. Plant patent application Ser. No. 08/680,168, filed Jul. 15, 1997; pending U.S. Plant patent application Ser. No. 08/680,167, filed Jul. 15, 1997; pending U.S. Plant patent application Ser. No. 08/763,076, filed Dec. 10, 1996.

### SUMMARY OF THE VARIETY

The present invention relates to a new and distinct variety of *Poa pratensis* that has been designated Ba74-17 Kentucky Bluegrass.

Ba74-17 plant material was selected from the open pollinated progeny of PI-1369718, a Kentucky Bluegrass plant grown and maintained in a Breeders Nursey at The Scott Company's Research Station in Marysville, Ohio. After testing and observing the Ba74-17 Kentucky Bluegrass 35 variety, it was determined to be a distinct variety, and it was asexually propagated by rhizomes, tillers and disseminules, Seed of Ba74-17 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 40 seed production fields.

In field and laboratory tests, it was demonstrated that Ba74-17 was significantly different at the 0.05% level from its female parent, PI-1369718, on the basis of the following characteristics: culm length, panicle length, seed weight, and leaf spot incidence. A comparison of the two grasses is given in the following table:

			Mean	Values	
Variety	Variety	Culm Length (cm)	Panicle Length (cm)	Seed weight (gms)	Leaf spot Incidence*
	Ba74-17	33.6	7.7	0.26	7.8
	PI 1369718	30.0	7.2	0.21	8.2

\*Leaf spot incidence rated 0-9, 9 = most leaf spot disease

Asexual production of Ba 74-17 by propagules (tillers and rhizomes) and by disseminules (modified caryopses produced by apomixis) has consistantly produced progeny plants indistinguishable from a mother plant Ba 74-17 in regard to characteristics other than those specified above. The apomixis level of Ba74-17 is approximately 95% based upon examining seedling characteristics of approximately 100 to 150 seedlings from different crop years in a growth chamber.

Ba74-17 has a number of highly desirable characteristics including a medium to high level of resistance to Drechslera spp. that causes leaf spot, melting out and crown rot, Puccinia spp. that causes rust infection such as leaf rust, Fusarium spp. that causes Fusarium patch and Laetisaria fuciformis that causes red thread. Ba74-17 is an overall good turfgrass performer as evidenced by medium to high scores for quality and color. Ba74-17 has a high seed yield potential in the Bluegrass seed production region of the northwestern U.S.A.

In comparison with a number of other Kentucky Bluegrass varieties, Ba74-17 is slightly above average in seed length and width, and rachilla length and has an average amount of lemma hairs. The panicle is below average in length and width, above average in whorl number, and above

average branch count for both the lower and third whorls. Ba74-17 has below average size spikelets, a significantly lower number of florets and shorter glumes. The peduncle is below average in length and above average width, and significantly shorter culm length, below average in node number and internode length. The flag leaf is of average length, width and thickness. The flag leaf ligule is above average in length, has an average amount of hair on the dorsal side of the ligule but below average hair content on the leaf margin. The vegetative leaf is of average length and thickness but the leaf width is significantly narrower and the ligule is below average in length. The hair content of the vegetative leaf is above average for the upper margin of the ligule, and is significantly less on the leaf margin.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a Ba74-17 Kentucky Bluegrass panicle during anthesis;

FIG. 2 is a Ba74-17 Kentucky Bluegrass seed; and FIG. 3 is a Ba74-17 Kentucky Bluegrass plant shortly after completing anthesis.

### DETAILED DESCRIPTION OF THE VARIETY

Ba74-17 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 undisturbed by clipping under moderate temperatures (60–80 F.), culms are erect averaging 31.0 cm in length and 3.1 nodes per culm. The uppermost internode averages 7.6 cm in length. The peduncle average 20.7 cm in length and 0.76 mm in width. The vegetative leaf averages 19.3 cm in length, 3.0 mm in width, 0.30 mm in thickness and the ligule 0.14 mm in length. The flag leaf averages 4.3 cm in length, 3.1 mm in width, 0.20 mm in thickness and a ligule length of 1.2 mm.

The panicle averages 75.1 mm in length, 53.4 mm in width, and 9.8 whorls. The lowest whorl and the third whorl from the bottom of the panicle average 3.9 and 3.6 branches, respectively. A spikelet in the lowest whorl averages 4.2 mm in length, 2.1 mm in width, 2.4 florets, the outer and inner glumes average 2.5 mm and 2.9 mm in length, respectively. A spikelet from the third whorl from the bottom of the panicle averages 4.4 mm in length, 2.2 mm in width, 2.1 florets and the outer and inner glumes average 2.5 mm and 2.9 mm in length, respectively.

Conditioned seed of Ba74-17 averages 3.00 mm in length, 0.88 mm in width, a rachilla length of 0.83 mm and an average hair content at the base of the lemma.

Comparisons of Ba74-17 with other Kentucky Bluegrass varieties in terms of seed dimensions and seed numbers per pound are shown in Tables 1 and 2 as follows:

TABLE 1

Morphological Comparisons of Seed Length and Width; Rachilla and Lemma Hairs of Ba74-17 and Other Kentucky Bluegrass

Varieties After Conditioning at Marysville, OH.

	S	ed	•	Lemma Hairs*	
Variety	Length mm	Width	Rachilla mm		
Ba74-17	3.00	0.88	0.83	4.4	_
Abbey	2.97	0.89	0.80	3.8	
Adelphi	2.70	0.84	0.65	4.4	

TABLE 1-continued

Morphological Comparisons of Seed Length and Width; Rachilla and Lemma Hairs of Ba74-17 and Other Kentucky Bluegrass Varieties After Conditioning at Marysville, OH.

	Se	ed	•	
Variety	Length nun	Width	Rachilla mm	Lemma Hairs*
Allure	2.78	0.86	0.70	4.7
Ascot	3.00	0.85	0.82	3.9
Baron	3.08	0.81	0.71	5.0
Bristol	2.94	0.88	0.73	4.3
Buckingham	3.23	0.89	0.88	4.2
Cannon	3.00	0.94	0.86	4.9
Chateau	2.81	0.86	0.71	4.5
Coventry	2.71	0.81	0.70	4.0
Eclipse	2.77	0.83	0.68	3.5
Georgetown	2.94	0.82	0.74	4.9
Gnome	2.78	0.83	0.75	4.1
Kelly	3.07	0.89	0.75	4.2
Midnight	2.94	0.76	0.78	5.7
Nassau	3.07	0.86	0.68	3.4
Nottingham	3.05	0.88	0.82	3.8
Ram 1	3.23	0.89	0.80	6.0
Touchdown	2.93	0.88	0.41	4.6
Victa	3.00	0.80	0.82	3.5
Viva	3.04	0.91	0.84	4.4
LSD (.05)	0.16	0.05	0.13	0.86

<sup>\*</sup>Rating Scale: 0-9; 9 = most hairs

TABLE 2

Bluegrass Varieties After Conditioning.  Variety  Seeds Per Pound					
Variety	Seeds Per Pound				
Ba74-17	1,128,600				
Ba78-258	1,127,000				
Ba78-165	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				

Ba74-17 differs significantly from several of the other Kentucky Bluegrass varieties in regard to the following morphological characteristics: (1) the culm length and number of nodes per culm; (2) the number of florets in both the lowest and third whorl; (3) the length of the outer glumes in the third whorl; and (4) vegetative leaf length, ligule length and leaf margin hairs. Since environmental conditions such as soil and climate may influence morphological characteristics to some extent comparisons of Ba74-17 were made with other Kentucky Bluegrass varieties and the comparisons are set forth in Tables 3-8:

Morphological Comparison of Glumes of Ba74-17 and Other

Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH

TABLE 3

TABLE 5

Morphological Comparison of Panicles, Whorl Number and Whorl Branches of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH

Panicles					Number of Branches	
Variety	Nodding*	Length (mm)	Width (mm)	Whorl Number	Lowest Whorl	Third Whorl
Ba74-17	1.3	75.1	53,4	9.8	3.9	3.6
Abbey	1.6	80.4	59.3	9.3	3.8	3.3
Adelphi	1.8	106.8	76.4	10.0	3.6	3.0
Allure	2.2	60.8	47.6	8.4	3.9	3.0
Ascot	2.4	77.1	66.0	9.2	2.3	2.1
Baron	2.2	92.6	71.0	10.0	3.4	2.8
Bristol	2.0	85.5	61.5	8.4	2.8	2.7
Buckingham	2.0	88.8	62.0	9.3	2.1	2.1
Cannon	1.1	80.2	55.3	9.8	4.1	3.9
Chateau	2.9	65.2	57.3	8.5	3.3	2.8
Coventry	2.5	<b>64</b> .0	54.2	8.4	3.3	2.5
Eclipse	1.3	89.2	74.0	10.7	3.3	2.1
Georgetown	1.0	80.0	57.0	7.4	2.1	2.6
Gnome	1.1	80.6	56.0	10.6	4.6	3.9
Kelly	2.0	88.0	70.2	9.8	4.6	3.7
Midnight	2.0	75.8	48.4	7.1	2.9	3.0
Nassau	2.2	91.2	68.6	10.0	2.5	2.1
Nottingham	1.2	77.5	56.1	8.7	4.0	3.5
Ram 1	1.3	67.7	47.0	7.3	3.0	3.2
Touchdown	1.1	73.1	75.0	7.6	2.1	2.3
Victa	1.7	74.9	58.3	10.0	4.7	3.5
Viva	1.6	88.8	68.4	8.8	4.3	3.7
LSD (.05)	0.68	7.35	8.62	0.66	0.72	0.50

<sup>\*</sup>Rating Scale: 1-9; 9 = most nodding

TABLE 4

Morphological Comparison of Spikelets and Florets of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH.

	<del></del>	Spil	Number of Florets			
	Lowest Whorl		Third	Whorl	Per Spikelet	
Variety	Length mm	Width mm	Length mm	Width mm	Lowest Whorl	Third Whorl
Ba74-17	4.2	2.1	4.4	2.2	2.4	2.1
Abbey	4.4	2.2	4.5	2.2	3.0	3.0
Adelphi	4.6	2.2	4.8	2.2	4.4	4.4
Allure	4.3	2.2	4.3	2.2	3.4	3.2
Ascot	5.4	2.6	5.3	2.9	3.1	3.1
Baron	5.4	2.8	5.4	3.1	4.0	4.2
Bristol	4.9	2.4	5.0	2.5	4.2	4.5
Buckingham	5.6	3.2	5.6	3.3	4.1	4.1
Cannon	4.7	2.4	4.6	2.6	2.7	2.7
Chateau	4.4	2.4	4.4	2.4	3.4	3.5
Coventry	4.4	2.2	4.5	2.4	3.2	3.5
Eclipse	4.6	2.4	4.6	2.4	3.6	3.6
Georgetown	5.0	2.3	5.0	2.6	4.8	4.9
Gnome	4.6	2.5	4.6	2.9	3.2	3.2
Kelly	5.1	2.5	5.2	2.8	3.7	3.8
Midnight	5.3	2.5	5.5	2.4	4.4	4.7
Nassau	4.7	2.6	4.8	3.0	4.2	4.3
Nottingham	4.6	2.5	4.8	2.6	3.3	3.4
Ram 1	5.4	2.6	5.3	2.8	3.6	3.4
Touchdown	5.1	2.9	4.8	2.8	4.1	4.0
Victa	4.5	2.5	4.5	2.4	3.3	3.2
Viva	4.6	2.5	4.7	2.6	2.6	2.8
LSD (.05)	0.41	0.35	0.38	0.35	0.58	0.3

	Glume Length (mm)					
	Ot	uter	In	ner		
Variety	Lowest Whorl	Third Whorl	Lowest Whori	Third Whorl		
Ba74-17	2.5	2.5	2.9	2.9	_	
Abbey	2.7	2.7	3.1	3.1		
Adelphi	2.7	2.6	3.0	3.1		
Allure	2.6	2.7	3.0	3.0		
Ascot	3.7	3.7	4.1	4.0		
Baron	3.1	3.2	3.6	3.7		
Bristol	2.8	3.0	3.3	3.4		
Buckingham	3.5	3.3	3.9	3.8		
Cannon	2.8	2.9	3.2	3.1		
Chateau	2.8	2.9	3.1	3.2		
Coventry	2.7	2.8	3.1	3.1		
Eclipse	3.0	3.0	3.4	3.4		
Georgetown	2.8	2.8	3.1	3.1		

2.9

3.1

2.6

2.7

2.8

3.0

3.3

2.7

0.22

2.8

3.0

2.6

2.6

2.7

2.9

3.3

2.8

0.23

Gnome

Midnight

Nottingham

Touchdown

LSD (.05)

Nassau

Ram 1

Victa

Viva

Kelly

3.3

3.4

3.0

2.9

3.3

3.6

3.8

3.1

3.2

0.22

3.3

3.5

3.1

3.0

3.3

3.5

3.8

3.1

3.1

0.23

	Glume Hairs*				
	Lowest	Whorl	Third	Whorl	
Variety	Outer	Inner	Outer	Inner	
Ba74-17	1.3	3.0	1.9	2.9	
Abbey	0.6	0.9	1.0	1.0	
Adelphi	0.6	2.7	1.1	1.9	
Allure	2.5	3.0	2.5	2.5	
Ascot	2.1	3.0	2.0	2.3	
Baron	4.8	4.4	4.2	4.6	
Bristol	1.0	2.2	8.0	2.2	
Buckingham	2.6	3.2	2.2	2.8	
Cannon	1.7	2.3	2.1	2.3	
Chateau	1.5	2.6	2.0	1.8	
Coventry	1.5	2.7	1.6	2.4	
Eclipse	1.5	1.9	1.8	1.9	
Georgetown	1.7	2.7	1.2	2.4	
Gnome	1.0	1.9	1.2	1.6	
Kelly	1.3	1.5	1.1	0.8	
Midnight	1.8	2.8	1.0	2.4	
Nassau	2.1	2.6	4.2	4.4	
Nottingham	2.4	2.2	1.9	2.1	
Ram 1	1.1	2.3	0.7	1.2	
Touchdown	0.7	2.1	1.1	1.4	
Victa	0.8	1.1	1.1	1.3	
Viva	1.7	1.3	1.3	2.0	
LSD (.05)	0.9	0.9	0.9	0.9	

<sup>\*</sup>Rating Scale: 0-9; 9 = most hairs

TABLE 6

Morphological Comparison of Flag Leaves of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH

			Leaves	. <b>-</b>	
Variety	Length cm	Width mm	Thickness mm	Angle	Curve
Ba74-17	4.3	3.1	0.20	1.2	5.0
Abbey	3.8	3.4	0.14	2.7	4.1
Adelphi	5.7	3.4	0.18	5.2	5.0
Allure	3.8	2.9	0.21	1.0	4.9
Ascot	4.7	3.5	0.29	2.1	4.5
Baron	7.0	4.2	0.15	9.2	4.4
Bristol	4.3	3.2	0.21	2.3	5.0
Buckingham	5.3	3.4	0.23	1.4	5.0
Camon	4.3	3.5	0.22	1.9	5.0
Chateau	4.0	2.7	0.19	3.4	2.0
Coventry	3.7	3.0	0.14	0.7	4.3
Eclipse	3.9	3.2	0.19	8.7	5.0
Georgetown	5.7	2.8	0.22	1.9	5.0
Gnome	4.5	3.5	0.18	4.3	5.0
Kelly	4.8	4.1	0.18	3.1	4.4
Midnight	3.8	2.6	0.19	1.1	5.0
Nassau	6.0	3.7	0.19	5.9	4.7
Nottingham	4.3	3.7	0.22	2.0	4.6
Ram 1	3.4	3.1	0.19	1.0	4.8
Touchdown	4.1	2.7	0.16	3.4	4.1
Victa	3.9	3.7	0.27	2.1	4.6
Viva	4.5	3.6	0.18	5.1	4.4
LSD (.05)	1.0	0.42	0.02	2.50	0.44

Variety	Ligule mm	Leaf Margin	Ligule	Sheath Color**	
Ba74-17	1.2	0.2	2.8	2.0	
Abbey	1.3	0.8	1.6	0.2	
Adelphi	1.1	1.8	1.6	0.4	
Allure	0.8	0.4	2.3	2.0	
Ascot	1.5	0.6	0.7	0.9	
Baron	1.2	1.0	3.8	2.6	
Bristol	0.6	0.4	1.9	2.0	
Buckingham	1.2	0.5	2.1	1.8	
Cannon	1.3	0.4	3.6	1.5	
Chateau	0.9	1.1	3.1	0.3	
Coventry	0.9	0.8	1.7	2.0	
Eclipse	1.1	1.0	1.0	0.2	
Georgetown	0.6	0.6	2.0	2.0	
Gnome	0.8	0.9	3.2	1.5	
Kelly	1.5	1.1	2.5	2.2	
Midnight	30.4	0.4	0.3	2.0	
Nassau	1.1	2.6	2.4	0.8	
Nottingham	1.3	1.5	2.3	1.8	
Ram 1	0.7	0.5	1.3	2.0	
Touchdown	1.1	1.0	1.0	7.7	
Victa	1.3	1.0	0.8	0.5	
Viva	1.5	0.4	2.2	0.5	
LSD (.05)	0.17	0.50	0.70	0.76	

<sup>\*</sup>Rating Scale: 0-9; 9 = most hairs \*\*Rating Scale: 0-9; 9 = most color

TABLE 7

Morphological Comparison of Peduncles, Culms, Nodes Per Culm
and Top Internode Length of Ba74-17 and Other Kentucky
Bluegrass Varieties in the Greenhouse at Marysville, OH

	Pedu	ncle	Culm		Тор
Variety	Length	Width	Length	Nodes	Internode
	cm	mm	cm	Per Culm	length (cm)
Ba74-17	20.7	0.76	31.0	3.1	7.6
Abbey	23.2	0.65	41.3	4.1	11.0

TABLE 7-continued

Morphological Comparison of Peduncles, Culms, Nodes Per Culm and Top Internode Length of Ba74-17 and Other Kentucky

Bluegrass Varieties in the Greenhouse at Marysville, OH

	Pedu	ncle	Culm		Top
Variety	Length cm	Width	Length cm	Nodes Per Culm	Internode length (cm)
Adelphi	24.5	0.66	40.0	4.0	10.4
Allure	17.9	0.61	28.0	3.1	7.7
Ascot	20.0	0.64	36.3	3.0	12.7
Baron	34.0	0.70	52.8	4.2	12.8
Bristol	22.9	0.73	43.5	4.0	12.6
Buckingham	24.7	0.71	44.9	3.7	13.4
Cannon	24.3	0.81	39.5	3.1	10.8
Chateau	20.7	0.61	38.9	4.4	9.9
Coventry	19.6	0.49	34.7	4.5	7.9
Eclipse	23.7	0.66	39.2	4.9	9.9
Georgetown	21.7	0.68	37.5	3.2	11.1
Gnome	19.4	0.84	35.3	3.1	9.2
Kelly	29.4	0.75	46.6	3.6	11.8
Midnight	20.5	0.72	29.5	2.8	7.6
Nassau	25.0	0.66	36.0	3.9	7.4
Nottingham	26.9	0.82	39.7	2.9	9.7
Ram 1	22.2	0.69	30.5	2.5	6.6
Touchdown	23.6	0.52	38.0	4.0	8.4
Victa	21.2	0.81	37.9	3.7	10.3
Viva	26.4	0.70	42.7	4.1	9.2
LSD (.05)	3.2	80.0	3.3	0.4	1.9

TABLE 8

Morphological Comparison of Vegetative Leaves of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH

		· · · · · · · · · · · · · · · · · · ·	Leaf		
Variety	Length cm	Width mm	Thickness mm	Angle*	Curve***
Ba74-17	19.3	3.0	0.30	51.9	7.3
Abbey	20.7	3.6	0.28	51.3	7.4
Adelphi	19.4	3.7	0.28	67.0	4.6
Allure	18.1	3.5	0.30	53.0	6.2
Ascot	17.4	3.4	0.35	67.9	5.5
Baron	18.2	4.3	0.29	35.0	4.4
Bristol	18.2	3.7	0.32	65.5	6.9
Buckingham	18.9	4.5	0.36	<b>5</b> 0.9	5.0
Cannon	22.1	3.3	0.30	62.5	8.2
Chateau	23.1	3.3	0.33	39.7	5.4
Coventry	23.4	3.6	0.25	63.0	7.3
Eclipse	20.3	4.4	0.30	65.5	5.4
Georgetown	19.5	3.6	0.29	56.7	5.8
Gnome	18.2	2.9	0.29	43.2	6.6
Kelly	22.8	3.9	0.30	55.5	7.0
Midnight	19.5	3.5	0.31	63.3	5.0
Nassau	16.3	3.7	0.29	63.2	4.9
Nottingham	18.6	3.8	0.34	61.6	7.7
Ram 1	19.1	3.6	0.27	70.8	6.5
Touchdown	16.7	3.7	0.24	51.3	4.0
Victa	21.5	3.6	0.36	56.3	6.7
Viva	22.9	3.8	0.40	53.0	7.1
LSD (.05)	3.5	0.43	0.04	15.9	1.5

	Ligule	Hair	S***	
	Length	Leaf	Leaf	Color***
Ba74-17	0.14	3.5	0.9	2.0
Abbey	0.32	4.4	2.8	0.0
Adelphi	0.34	2.6	3.4	0.0
Allure	0.14	2.0	1.6	1.9
Ascot	0.22	1.5	2.0	1.4
Baron	0.33	4.6	3.6	0.4
Bristol	0.12	2.6	3.0	2.0

TABLE 8-continued

Buckingham	0.14	3.3	2.6	2.0
Cannon	0.16	3.2	0.7	2.0
Chateau	0.22	3.3	3.1	0.5
Coventry	0.32	3.1	2.4	0.3
Eclipse	0.38	2.8	2.6	0.2
Georgetown	0.14	2.5	2.4	2.0
Gnome	0.23	1.6	0.8	1.4
Kelly	0.34	4.6	2.4	0.0
Midnight	0.10	1.3	1.6	2.0
Nassau	0.34	2.5	3.3	1.4
Nottingham	0.21	3.1	2.0	1.4
Ram 1	0.09	1.8	1.0	2.0
Touchdown	0.29	1.4	1.3	8.0
Victa	0.26	2.3	1.7	0.1
Viva	0.23	5.2	4.2	0.0
LSD (.05)	0.04	0.8	0.6	0.6

\*Leaf Angle: Degrees from stem

\*\*Leaf Curve: 1-9; 1-4 = curves up; 5 = no curve; 6-9 = curves down

\*\*\*Leaf Hairs: 0-9; 0 = none; 9 = many

\*\*\*\*Sheath Color: 0-9; 0 = none; 9 = many

With regard to comparative analysis conducted for purposes of determining color of Ba74-17 plants relative to other Kentucky Bluegrass varieties, readings were taken of the vegetative color of Ba74-17 during mid-October while the turf was actively growing with adequate nutrient and 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 Ba74-17 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 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 Ba74-17 with other Kentucky Bluegrass varieties for quality, genetic color, spring greenup, winter color, leaf texture, percent living ground, drought tolerance, canopy height, nitrogen deficiency, flood recovery and seed-heads are set forth hereinafter in Tables 9-20.

TABLE 9

A Comparison of Quality of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance in Five (5) Tests
A-E conducted at various Locations in the US.
•

		TEST	'S (Mean V	alues)	
Variety	A	В	С	D	E
Ba74-17	5.3	4.9	4.4	4.6	3.9
Baron	5.3	5.0	4.5	4.6	4.1
Gnome	5.2	4.6	4.4	4.7	4.1
Haga	5.3	4.8	4.6	4.5	4.1
Kenblue	4.5	4.2	4.3	4.0	3.3
Liberty	5.2	5.0	4.5	4.4	3.9
Merion	4.3	4.6	4.2	4.5	3.9
Merit	5.4	4.9	4.5	4.6	4.1
Midnight	5.7	5.6	4.7	4.9	4.2
Monopoly	5.2	5.0	4.6	4.9	4.0
Park	4.6	4.2	4.1	4.1	3.8
Ram 1	5.5	5.1	4.7	4.9	4.6

TABLE 9-continued

A Comparison of Quality of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance in Five (5) Tests
A-E conducted at various Locations in the US.

-		TEST	'S (Mean V	alues)	
Variety	A	В	C	D	E
South Dakota	4.1	3.9	3.9	3.9	3.3
LSD (0.05)	0.3	0.3	0.3	0.3	0.4

Rating Scale: 1-9; 9 = Ideal Turf

TABLE 10

A Comparison of Quality of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Four (4)

Locations in the US.

	Test Locations			
Variety	Rathdrum Idaho	St. Louis Missouri	Pittstown New Jersey	Washington DC
Ba74-17	6.3	6.4	6.4	4.1
Baron	6.5	6.6	6.0	3.1
Gnome	6.1	6.3	5.7	3.1
Haga	6.7	6.0	5.1	3.2
Kenblue	4.5	5.1	3.7	3.2
Liberty	6.6	6.1	5.3	3.4
Merion	5.9	6.1	3.4	1.7
Merit	6.4	6.5	6.0	3.3
Midnight	7.2	7.8	6.7	2.4
Monopoly	4.9	5.5	4.8	3.9
Park	4.6	5.0	3.9	3.3
Ram 1	7.1	6.9	6.2	2.8
South Dakota	4.0	4.5	3.5	2.3
LSD (0.05)	0.9	0.8	0.7	1.0

Rating Scale: 1-9; 9 = Ideal Turf

TABLE 11

A Comparison of Genetic Color of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Seven (7) Locations in US.

	Color Ratings By Locations						
	Rath- drum ID	St. Louis MO	Lincoln NE	North Brunswick NJ	Marys- ville OH	Univ. Park PA	Nor- ton VA
74-17	7.2	6.7	6.4	7.0	7.2	6.4	6.3
Baron	6.0	6.9	6.4	6.3	7.5	6.3	6.5
Gnome	6.8	6.7	6.6	5.3	7.5	6.1	6.7
Haga	3.3	5.6	5.8	4.3	6.3	5.4	5.0
Kenblue	4.5	6.2	5.6	3.7	7.2	5.7	3.7
Liberty	6.0	6.6	6.0	5.3	7.0	5.8	5.7
Merion	5.7	6.3	5.8	5.3	7.0	5.8	5.0
Merit	6.5	6.6	6.4	5.7	7.2	6.2	6.7
Midnight	7.3	7.3	7.4	7.3	8.2	8.0	7.2
Monopoly	2.3	5.8	5.4	3.7	6.0	4.9	5.0
Park	4.0	5.3	5.3	3.0	6.5	4.9	4.0
Ram 1	7.2	7.2	6.0	6.0	7.3	6.1	5.8
South	4.8	5.8	5.2	3.7	7.0	5.9	4.3
LSD (0.05)	1.6	1.0	0.7	1.2	0.5	0.9	0.9

Genetic Color Rating Scale: 1-9; 9 = Dark

TABLE 12

A Comparison of Spring Greenup Ba74-17 and Other
Kentucky Bluegrass Varieties under Low Maintenance
at Two (2) locations in the US.

Variety		Rathdrum ID	Park Park
Ba74-17	7.0	3.3	
Baron	6.3	2.7	
Gnome	6.0	3.0	
Haga	5.3	2.3	
Kenblue	2.7	1.3	
Liberty	5.7	2.3	
Merion	7.7	3.3	
Merit	6.3	2.7	
Midnight	8.3	2.3	
Monopoly	2.7	1.7	
Park	3.3	2.3	
Ram 1	<b>7.</b> O	1.0	
South Dakota	3.0	1.3	
LSD (0.05)	1.8	0.8	

Spring Greenup Rating Scale: 1-9; 9 = Completely Green

TABLE 13

A Comparison of Winter Color of Ba74-17 and Other Kentucky Bluegrass Varieties under Low maintenance at Rathdrum, ID

Variety	Winter Color	
Ba74-17	7.0	
Baron	6.3	
Gnome	6.7	
Haga	6.3	
Kenblue	3.7	
Liberty	6.7	
Merion	7.7	
Merit	7.0	
Midnight	8.3	
Monopoly	3.7	
Park	5.3	
Ram 1	7.7	
South Dakota	3.7	
LSD (0.05)	1.5	

Winter Color Rating Scale: 1-9; 9 = Complete Color Retention

TABLE 14

A Comparison of Leaf Texture of Ba74-17 and Other
Kentucky Bluegrass Varieties under Low Maintenance at
Two (2) Locations in the US.

Variety	Rathdrum ID	St. Louis MO
Ba74-17	6.3	5.3
Baron	5.7	5.8
Gnome	<b>6</b> .0	5.3
Haga	6.7	6.2
Kenblue	9.0	7.8
Liberty	7.3	5.9
Merion	<b>6</b> .0	5.5
Merit	5.7	5.1
Midnight	8.3	6.3
Monopoly	6.3	5.8
Park	8.0	6.7
Ram 1	7.3	6.4
South Dakota	8.3	6.8
LSD (0.05)	1.1	0.8

Leaf Texture Rating Scale: 1-9; 9 = very fine

TABLE 15

A Comparison of Percent Living Ground Cover in Spring of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at the Washington Monument Grounds, DC.

Variety	% Cover
Ba74-17	41.7
Baron	25.0
Gnome	31.7
Haga	48.3
Kenblue	33.3
Liberty	43.3
Merion	10.0
Merit	<b>2</b> 0.0
Midnight	21.7
Monopoly	53.3
Park	33.3
Ram 1	36.7
South Dakota	11.7
LSD (0.05)	23.2

TABLE 16

A Comparison of Drought Tolerance (Dormancy) of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Beltsville, MD and Hubbard, OR.

Variety	Beltsville MD	Hubbard OR	
Ba74-17	6.3	5.3	
Baron	4.7	2.0	
Gnome	5.3	3.0	
Haga	5.3	2.0	
Kenblue	4.0	2.7	
Liberty	3.0	3.0	
Merion	6.0	4.7	
Merit	5.7	4.0	
Midnight	6.7	3.0	
Monopoly	5.7	3.0	
Park	4.7	3.3	
Ram 1	5.7	4.0	
South Dakota	5.7	3.7	
LSD (0.05)	2.0	2.2	

Dormancy Rating Scale: 1-9; 9 = No Dormancy

TABLE 17

A Comparison of Canopy Height in Inches of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at University Park, PA.

Variety	Height in Inches
Ba74-17	4.5
Baron	5.0
Gnome	5.2
Haga	6.2
Kenblue	7.3
Liberty	4.5
Merion	4.3
Merit	4.5
Midnight	3.2
Monopoly	7.0
Park	7.3
Ram 1	5.2
South Dakota	6.3
LSD (0.05)	1.4

TABLE 18

A Comparison of Nitrogen

Deficiency Ratings of Ba74-17 and Other

Kentucky Bluegrass Varieties under Low Maintenance at Rathdrum, ID.

Variety	Nitrogen Deficiency	
Ba74-17	6.3	
Baron	6.3	
Gnome	6.7	
Haga	5.0	
Kenblue	1.7	
Liberty	6.7	
Merion	3.7	
Merit	5.3	
Midnight	7.0	
Monopoly	5.3	
Park	4.0	
Ram 1	7.3	
South Dakota	1.7	
LSD (0.05)	2.1	

Nitrogen Deficiency Rating Scale: 1-9; 9 = no symptoms

TABLE 19

A Comparison of Flood Recovery
Ratings of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance at Lincoln, NE.

Variety	Flood Recovery
Ba74-17	5.7
Baron	3.3
Gnome	4.0
Haga	1.7
Kenblue	2.3
Liberty	3.3
Merion	5.3
Merit	4.0
Midnight	4.3
Monopoly	1.7
Park	1.7
Ram 1	2.3
South Dakota	2.0
LSD (0.05)	3.2

Flood Recovery Rating Scale: 1-9; 9 = best

TABLE 20

A Comparison of
Seedheads of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance at North Brunswick, NJ.

Variety	Seedheads	
Ba74-17	2.3	
Baron	3.0	
Gnome	3.7	
Haga	4.7	
Kenblue	9.0	
Liberty	4.0	
Merion	4.0	
Merit	2.0	
Midnight	9.0	
Monopoly	6.0	
Park	9.0	
Ram 1	6.3	
South Dakota	8.7	
LSD (0.05)	1.8	

Seedhead Rating Scale: 1-9; 9 = none

Turf diseases are one of the major causes of inconsistent and poor turf performance. Ba74-17 has been found to have a medium to high level of resistance to the following diseases: (a) leaf spot and melting out caused by *Drechslera*  poae formerly called *Helminthosporium vagans*; (b) diseases such as leaf rust caused by Puccinia spp; (c) Fusarium patch caused by Fusarium spp; and (d) red thread caused by *Laetisaria fuciformis*.

Compounds of disease incidence of Ba74-17 as compared with other Kentucky Bluegrass Varieties in regard to leaf spot, melting out, leaf rust, Fusarium patch and red thread are presented in Tables 21-26.

TABLE 21

A Comparison of Leaf Spot Incidence of Ba74-17 and Other Kentucky Bluegrass
Varieties under Low Maintenance at Five (5) Locations in the US.

Variety	N. Brunswick NJ	Pittstown NJ	Marysville OH	Beltsville MD	Norton VA
Ba74-17	4.7	5.7	<b>6</b> .0	4.0	5.7
Baron	4.7	5.3	6.7	4.0	4.0
Gnome	3.7	4.0	6.3	3.3	4.7
Haga	2.7	3.3	6.3	3.3	4.3
Kenblue	1.0	1.0	3.3	1.3	2.3
Liberty	4.7	4.7	7.3	3.7	5.7
Merion	5.7	6.3	<b>6</b> .0	3.3	6.0
Merit	4.3	4.7	6.7	4.3	5.0
Midnight	7.7	7.3	7.7	6.7	6.3
Monopoly	3.3	3.3	5.7	3.7	4.0
Park	2.0	2.7	4.0	2.0	3.7
Ram 1	4.3	3.7	6.7	4.7	4.3
South	1.0	1.3	3.3	1.0	4.0
LSD (0.05)	1.4	1.5	1.0	1.2	1.7

Leaf Spot Rating Scale: 1-9; 9 = no disease

TABLE 22

A Comparison of Leaf Spot Incidence of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Pittstown, NJ and Ithaca, NY

Variety	Pittstown NJ	Ithaca NY
Ba74-17	5.7	9.0
Baron	5.3	9.0
Gnome	4.0	9.0
Haga	3.3	8.0
Kenblue	1.0	1.3
Liberty	4.7	8.3
Merion	6.3	8.0
Merit	4.7	7.3
Midnight	7.3	9.0
Monopoly	3.3	5.0
Park	2.7	2.3
Ram 1	3.7	3.7
South Dakota	1.3	4.3
LSD (0.05)	1.5	2.7

Leaf Spot Rating Scale: 1-9; 9 = No Disease

TABLE 23

A Comparison of Melting Out Incidence of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Rathdrum, ID.

Variety	Melting Out	
Ba74-17	6.0	
Baron	7.0	
Gnome	5.3	
Haga	6.3	
Kenblue	4.0	
Liberty	6.3	
Merion	6.0	
Merit	6.7	
Midnight	8.0	

TABLE 23-continued

A Comparison of Melting Out
Incidence of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance at Rathdrum, ID.

Variety	Melting Out
Monopoly	5.0
Park	4.3
Ram 1	8.0
South Dakota	4.0
LSD (0.05)	1.5

Melting Out Rating Scale: 1-9; 9 = No Damage

**TABLE 24** 

A Comparison of Leaf Rust
Incidence of Ba74-17 and Other Kentucky
Bluegrass Varieties under Low Maintenance at Rathdrum, ID.

Variety	Leaf Rust
Ba74-17	7.3
Baron	6.0
Gnome	0.8
Haga	5.7
Kenblue	4.3
Liberty	6.5
Merion	3.7
Merit	6.3
Midnight	5.7
Monopoly	3.0
Park	2.7
Ram 1	7.7
South Dakota	3.7
LSD (0.05)	1.7

Leaf Rust Rating Scale: 1-9; 9 = No Disease

TABLE 25

A Comparison of Fusarium Patch Incidence of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Rathdrum, ID.

Variety	Fusarium Patch
Ba74-17	5.7
Baron	4.3
Gnome	6.0
Haga	4.7
Kenblue	2.3
Liberty	6.0
Merion	3.3
Merit	5.7
Midnight	4.7
Monopoly	3.3
Park	1.7
Ram 1	6.0
South Dakota	2.7
LSD (0.05)	1.8

Fusarium Patch Rating Scale: 1-9; 9 = No Disease

TABLE 26

A Comparison of Red Thread Incidence of Ba74-17 and Other Kentucky Bluegrass Varieties under Low Maintenance at Kingston, RI and Marysville, OH.

Variety	Kingston RI	Marysville OH
Ba74-17	7.0	8.0
Baron	7.0	7.7
Gnome	5.7	8.0

TABLE 26-continued

A Comparison of Red Thread
Incidence of Ba74-17 and Other Kentucky Bluegrass
Varieties under Low Maintenance at Kingston, RI and Marysville, OH

Variety	Kingston RI	Marysville OH
Haga	6.3	8.0
Kenblue	3.7	4.7
Liberty	7.7	8.0
Merion	8.3	7.7
Merit	7.0	8.0
Midnight	6.3	7.7
Monopoly	6.0	7.7
Park	6.0	6.0
Ram 1	7.3	7.3
South Dakota	6.7	7.7
LSD (0.05)	2.1	1.2

Red Thread Rating Scale: 1-9; 9 = no disease

Additional comparisons for mature plant height, vegetative growth versus seed heads, panicle length, days to heading, days to anthesis and seed yields are presented in Tables 27–32.

TABLE 27

A Comparison of Mature Plant Height of Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Height cm	
Ba74-17	62.2	
Ba78-258	60.3	
Ba77-700	60.0	
Ba78-165	53.4	
Abbey	65.0	
Allure	53.0	
Ascot	56.0	
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 (0.05)	8.7	

TABLE 28

A Comparison of Vegetative Growth Versus Seed Heads of Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Vegatative Growth vs Seed Heads
Ba74-17	5.6
Ba78-258	6.9
Ba77-700	7.2
Ba78-165	5.8
Abbey	5.8
Allure	7.2
Ascot	4.2
Bristol	6.0
Buckingham	5.6
Cannon	8.0
Chateau	6.8
Coventry	0.8
Estate	8.6
Fairfax	7.2
Gnome	6.6

TABLE 28-continued

A Comparison of Vegetative Growth Versus Seed Heads
of Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Vegatative Growth vs Seed Heads		
Kelly	4.8		
Newport	3.4		
Victa	7.8		
Viva	7.2		
LSD (0.05)	1.8		

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

TABLE 29

	A Comparison of Panicle Length
of Ba74-17 and	Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Panicle Length (cm)
Ba74-17	9.3
Ba78-258	11.1
Ba77-700	8.9
Ba78-165	8.6
Abbey	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
Victa	10.0
Viva	9.8
LSD (0.05)	2.0

TABLE 30

A Comparison of Days to Heading of Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

	<del></del>	Days to Headin	19
Variety	First	50%	100%
Ba74-17	103.0	119.2	122.0
Ba78-258	110.1	125.5	128.1
Ba77-700	109.8	125.4	127.2
Ba78-165	100.2	118.6	121.6
Abbey	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

### TABLE 30-continued

## A Comparison of Days to Heading of Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

Variety	Days to Heading		
	First	50%	100%
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 Ba74-17 and Other Kentucky Bluegrass Varieties at Gervais, OR.

		Days to Anthes	sis
Variety	First	50%	100%
Ba74-17	125.0	127.0	132.0
Ba78-258	129.1	134.1	137.5
Ba77-700	129.0	134.4	137.8
Ba78-165	124.2	126.2	132.0
Abbey	129.2	132.4	136.6
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 Ba74-17 and Other Kentucky Bluegrass Varieties in Three (3) Tests Conducted at Imbler, OR.

Test 1	Test 2	Test 3
1,433	1,238	1,284
1,377	1,211	1,076
1,569	1,105	1,156
1,549	1,324	1,090
748	923	740
1,551	1,130	1,171

839

1,074

1,111

271

847

766

296

1,054

Seed Yield (Lb/acre)

What is claimed is:

Variety

Ba74-17

Ba78-258

Ba77-700

Buckingham

Abbey

Cannon

Fairfax

Viva

Coventry

LSD (0.05)

1. A variety of Kentucky Bluegrass, 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, leaf rust, Fusarium patch and red thread; a dark green color throughout the growing season; a medium to high quality turf formation under a wide variety of environmental conditions; short growth and a high level of seed yielding capacity.

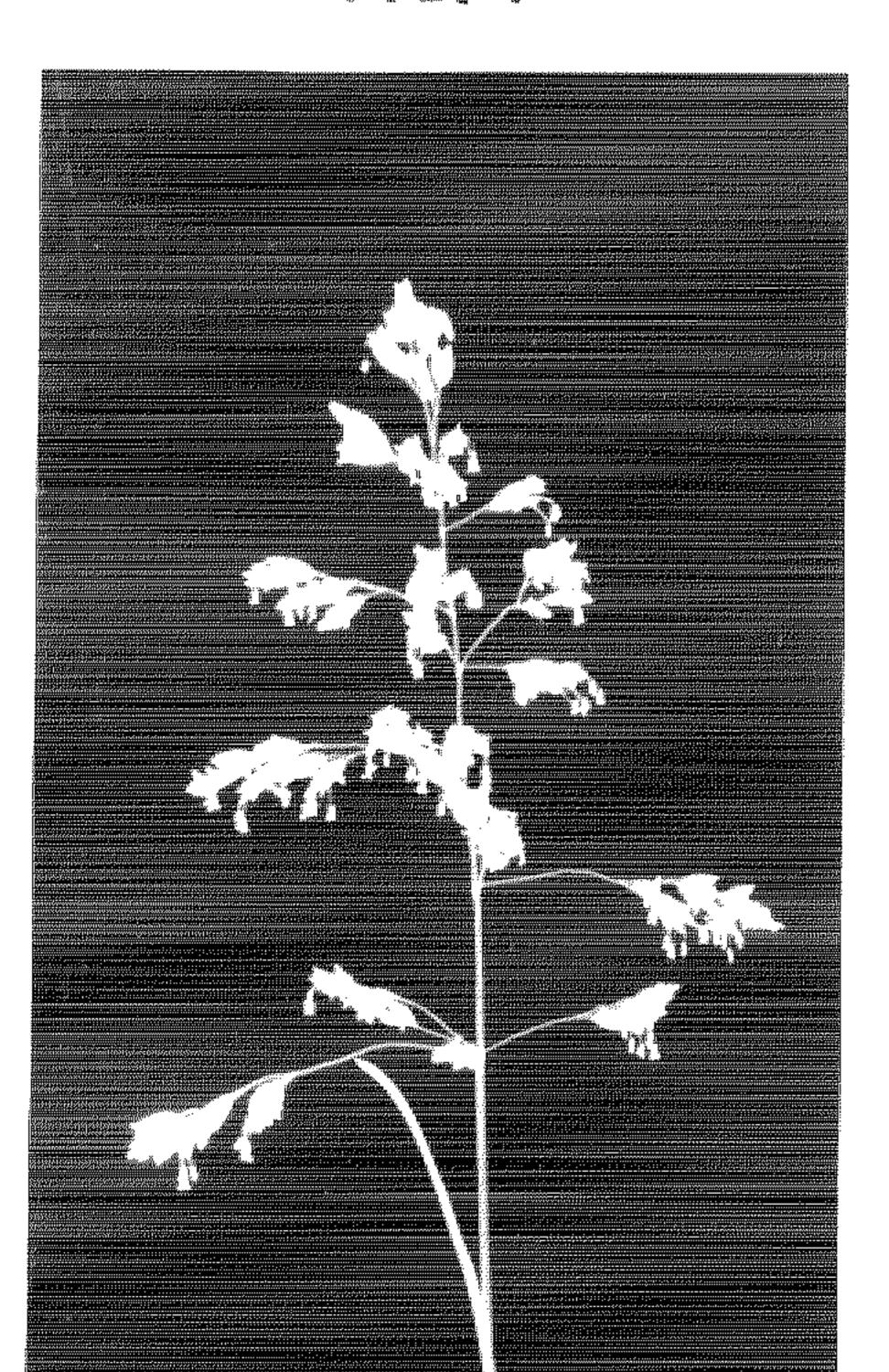
1,046

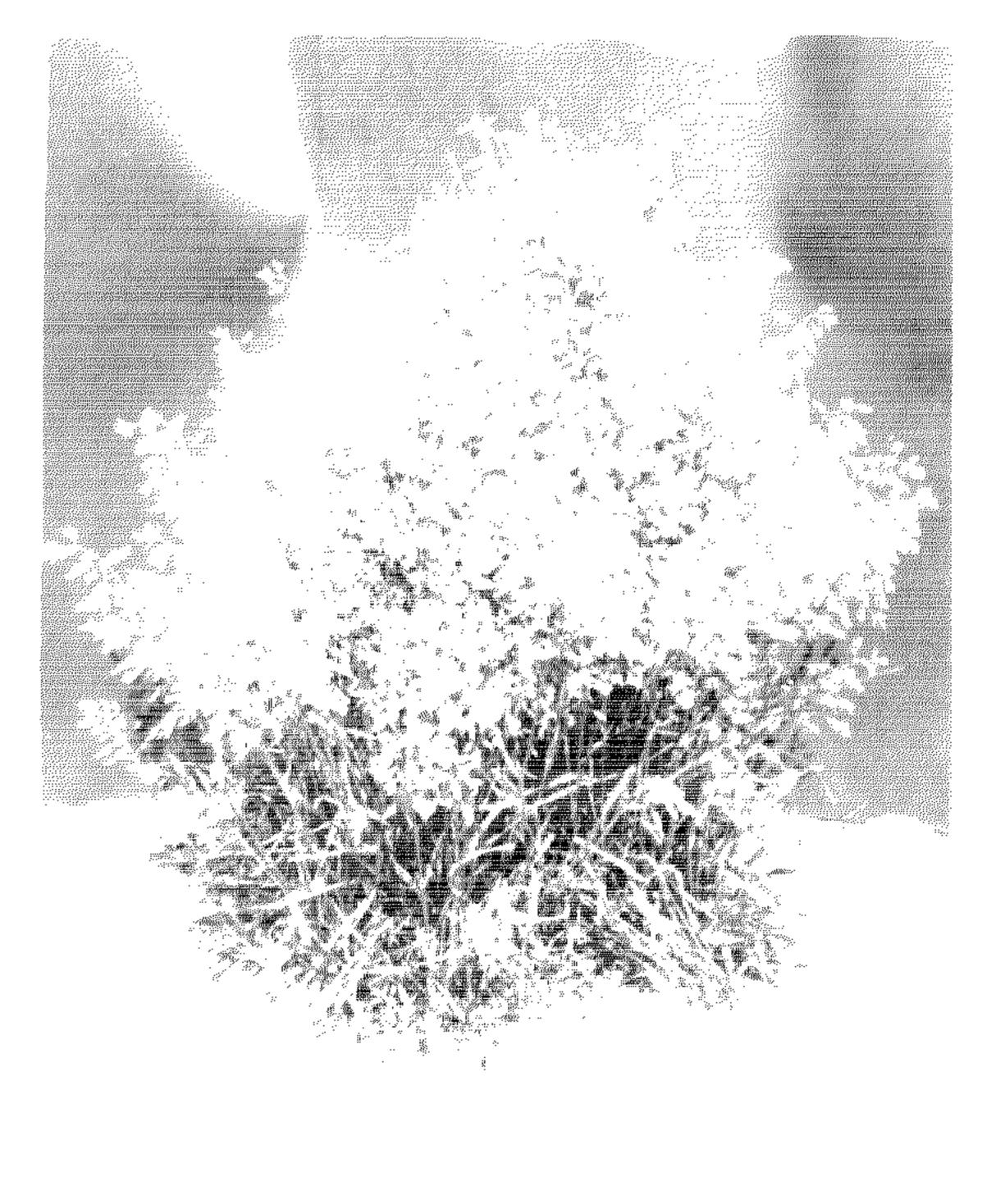
1,159

1,612

160









# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : PP 10,925 Page 1 of 1

DATED : May 25, 1999

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 1,

Line 8, change "Bluegrass" to -- Bluegrasses --.

### Column 7,

Table 6, under the heading "Ligule mm" for "Midnight Variety" change "30.4" to -- 0.4 --.

### Column 8,

Table 8, change the heading "Ligule Length" to -- Ligule Length mm --; change the heading "Leaf" to -- Leaf Ligule --; change the heading "Leaf" (second occurrence) to -- Leaf Margin --; change the heading "Color\*\*\*" to -- Sheath Color\*\*\* --.

### Column 9,

The first paragraph before Table 9, line 14, delete "and" (second occurrence).

### Column 11,

Table 12, the heading "Rathdrum, ID" should appear above the first column of numbers and the heading "Univ. Park, PA" should appear above the second column of numbers.

Signed and Sealed this

Twenty-seventh Day of January, 2004

JON W. DUDAS
Acting Director of the United States Patent and Trademark Office