



US00PP10925P

United States Patent [19]

[11] Patent Number: Plant 10,925

Meier et al.

[45] Date of Patent: May 25, 1999

[54] KENTUCKY BLUEGRASS, NAMED 'BA74-17'

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.	Plt./88
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 et al.	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

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[21] Appl. No.: 08/949,938

[22] Filed: Oct. 14, 1997

[51] Int. Cl.⁶ A01H 5/00

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

[58] Field of Search Plt./90.2

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[57] ABSTRACT

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

[56] References Cited

U.S. PATENT DOCUMENTS

PP. 3,156	5/1972	Fuchigami et al.	Plt./88
PP. 3,186	5/1972	Barenbrug et al.	Plt./88
PP. 4,336	11/1978	Mayer et al.	Plt./88
PP. 6,280	9/1988	Meier et al.	Plt./88

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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 Nursery at The Scott Company's Research Station in Marysville, Ohio. After testing and observing the Ba74-17 Kentucky Bluegrass 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 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:

Variety	Mean Values			
	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 consistently 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.				
Variety	Seed			
	Length mm	Width mm	Rachilla mm	Lemma Hairs*
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.				
Variety	Seed		Rachilla mm	Lemma Hairs*
	Length mm	Width mm		
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

*Rating Scale: 0-9; 9 = most hairs

TABLE 2

Comparisons of Seeds Per Pound of Ba74-17 and Other Kentucky Bluegrass Varieties After Conditioning.	
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:

TABLE 3

Morphological Comparison of Panicles, Whorl Number and Whorl Branches of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH						
Variety	Nodding*	Panicles		Whorl Number	Number of Branches	
		Length (mm)	Width (mm)		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	64.0	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

*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.						
Variety	Spikelets				Number of Florets	
	Lowest Whorl		Third Whorl		Per Spikelet	
	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

TABLE 5

Morphological Comparison of Glumes of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH				
Variety	Glume Length (mm)			
	Outer		Inner	
	Lowest Whorl	Third Whorl	Lowest Whorl	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
Gnome	2.8	2.9	3.3	3.3
Kelly	3.0	3.1	3.4	3.5
Midnight	2.6	2.6	3.0	3.1
Nassau	2.6	2.7	2.9	3.0
Nottingham	2.7	2.8	3.3	3.3
Ram 1	2.9	3.0	3.6	3.5
Touchdown	3.3	3.3	3.8	3.8
Victa	2.8	2.7	3.1	3.1
Viva	2.8	2.8	3.2	3.1
LSD (.05)	0.23	0.22	0.22	0.23

Glume Hairs*

Variety	Glume Hairs*			
	Lowest Whorl		Third Whorl	
	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	0.8	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

*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

Variety	Leaves				
	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
Cañnon	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

Hairs*

Variety	Hairs*			
	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

*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

Variety	Peduncle		Culm		Top
	Length cm	Width mm	Length cm	Nodes Per Culm	Internode 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

Variety	Peduncle		Culm		Top
	Length cm	Width mm	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	0.08	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

Variety	Leaf				
	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	50.9	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

Hairs***

Variety	Ligule	Hairs***		
	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

Morphological Comparison of Vegetative Leaves of Ba74-17 and Other Kentucky Bluegrass Varieties in the Greenhouse at Marysville, OH				
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 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.					
Variety	TESTS (Mean Values)				
	A	B	C	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.					
Variety	TESTS (Mean Values)				
	A	B	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.				
Variety	Test Locations			
	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.							
Variety	Color Ratings By Locations						
	Rathdrum ID	St. Louis MO	Lincoln NE	North Brunswick NJ	Marysville OH	Univ. Park PA	Norton 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	Univ. Park, PA
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	7.0	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	6.0	5.3
Haga	6.7	6.2
Kenblue	9.0	7.8
Liberty	7.3	5.9
Merion	6.0	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	20.0
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	6.0	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	6.0	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	8.0
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	Vegetative 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	8.0
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	Vegetative 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.

Variety	Days to Heading		
	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.

Variety	Days to Anthesis		
	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.

Variety	Seed Yield (Lb/acre)		
	Test 1	Test 2	Test 3
Ba74-17	1,433	1,238	1,284
Ba78-258	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 (0.05)	160	271	296

What is claimed is:

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.

* * * * *

FIG. 1

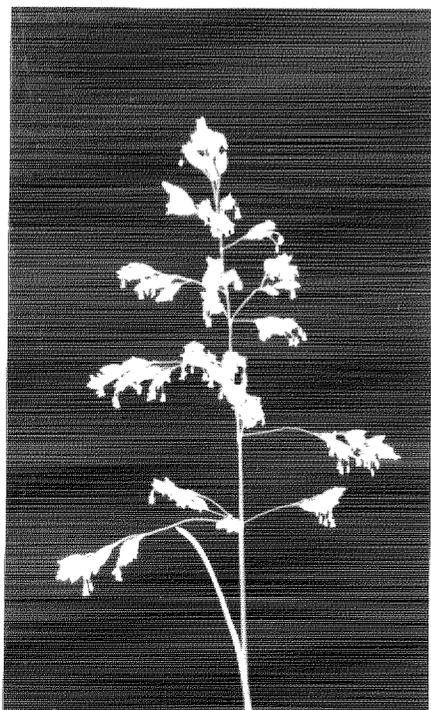


FIG. 3

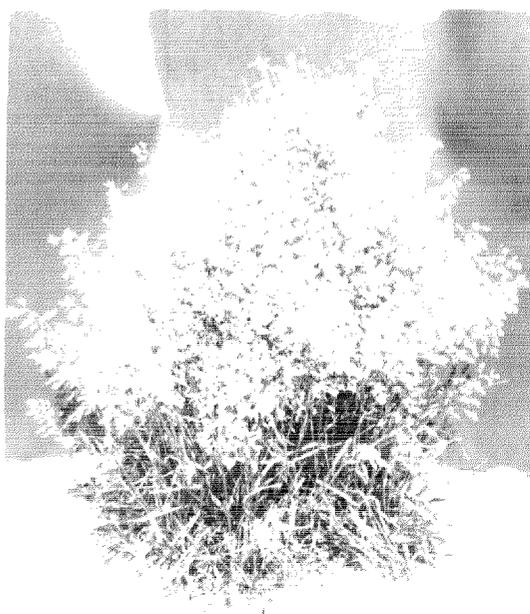


FIG. 2

