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- [54] BA 73-540 KENTUCKY BLUEGRASS
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[57] ABSTRACT

A variety of Kentucky bluegrass having a medium to high level of disease resistance strong sod forming ability, high quality dense persistent turf formation properties under a wide variety of environmental conditions and a medium level of seed yield potential.

4 Drawing Sheets

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BACKGROUND

Kentucky bluegrasses have been disclosed in U.S. Plant Pat. No. 3,156 which issued on May 9, 1972; U.S. Plant Pat. No. 3,186 which issued on May 23, 1972; U.S. Plant Pat. No. 4,336 which issued on Nov. 28, 1978; U.S. Plant Pat. No. 6,280 which issued on Sep. 6, 1988; U.S. Plant Pat. No. 6,537 which issued on Jan. 17, 1989; U.S. Plant Pat. No. 6,538 which issued on Jan. 17, 1989; 6,585 which issued on Feb. 7, 1989; U.S. Plant Pat. No. 7,831 which issued on Mar. 17, 1992 and U.S. Plant patent application Ser. No. 792,173, which was filed on Nov. 14, 1991, now abandoned.

SUMMARY OF THE VARIETY

The present invention relates to a new and improved variety of Kentucky bluegrass, *Poa pratensis*, that has been designated Ba 73-540.

Ba 73-540 plant material originated by crossing two Kentucky bluegrass plants maintained in the O. M. Scott & Sons Company plant nursery. The female parent plant for the present variety was a Kentucky bluegrass locally identified under the designation Bd 68-486 and the male parent plant was a Kentucky bluegrass locally identified under the designation Bd 64-36-1 in the plant nursery. Neither the Bd 68-486 plant nor the Bd 64-36-1 plant has been released as a commercial variety to date. As a result of this breeding, a distinct variety was produced and asexually propagated by rhizomes, tillers and disseminules. Seed of Ba 73-540 was produced first at Marysville, Ohio and later at Gervais, Oreg. This seed was used to plant turf performance evaluation trails and later seed production fields.

Asexual production of Ba 73-540 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 73-540 is 100% based upon examining seedling characteristics of approximately 130 to 140 seedlings from four different crop years in a growth chamber.

Ba 73-540 has a number of highly desirable characteristics including a good level of resistance to Drechslera spp. (formerly called Helminthosporium spp.) that causes leaf spot, melting out and crown rot; *Sclerotinia homoeocarpa* that causes dollar spot; Puccinia spp. that causes several types of rust infections and *Erysiphe graminis* that causes powdery mildew. Ba 73-540 has an attractive leafy turf type growth habit; moderately wide

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leaf blades; an attractive green color which can be maintained throughout the entire growing season; good drought and heat tolerance and good turf performance as evidenced by consistently high scores for quality, color and density in National Turfgrass Evaluation Tests sponsored by the U.S. Department of Agriculture and conducted throughout the U.S.A. and Canada. Ba 73-540 has a medium seed yield potential in the bluegrass seed production region of the U.S.A.

In comparison with a number of other Kentucky bluegrasses, Ba 73-540 has a small seed, high seed count, the shortest and narrowest panicle, a short, narrow and thin flag leaf, a short and narrow peduncle, the shortest culm and the shortest and narrowest leaf blade when Ba 73-540 and the other Kentucky bluegrasses are grown as single, spaced plants without competition to the flowering stage. Under close mowing as practiced under lawn maintenance conditions, Ba 73-540 has a leaf blade coarser than a number of other Kentucky bluegrasses which all were treated as uniformly as possible before and during data collection. Thus, in relation to other Kentucky bluegrasses, Ba 73-540 has narrower leaf blades as a mature plant under non-mowed and non-competitive conditions and has coarser leaf blades under mowed and highly competitive conditions. In addition, Ba 73-45 exhibits a high degree of resistance to powdery mildew and various rust diseases. Ba 73-540 is a medium seed yielder.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 shows a Ba 73-540 Kentucky bluegrass plant in the vegetative stage including the extensive root and rhizome system;

FIG. 2 shows a Ba 73-540 Kentucky bluegrass panicle;

FIG. 3 shows Ba 73-540 Kentucky bluegrass seed; and

FIG. 4 shows a Ba 73-540 Kentucky bluegrass plant shortly after completing anthesis.

DETAILED DESCRIPTION OF THE VARIETY

Ba 73-540 Kentucky bluegrass (*Poa pratensis* L.) is perennial with creeping rhizomes forming a dense turf. When plants overwinter in the field with 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 416 mm in length with an

average of 2.3 nodes per culm. The uppermost internode averages 10.1 cm, and the peduncle averages 11.4 cm in length, and 0.565 mm in width. The flag leaf averages 4.1 cm in length, 2.8 mm in width and 0.012 mm in thickness. The panicle has an average length of 6.3 cm, width of 3.6 cm, and 4.6 whorls. The lowest whorl has an average of 3.5 branches and the third whorl from the bottom of the panicle has an average of 2.2 branches. The average spikelet at the tip of a branch in the lowest whorl is 5.3 mm in length and has 4.4 florets with an outer glume of 3.0 mm and an inner glume of 3.4 mm in length. A similar spikelet from the third whorl from the bottom of the panicle is 5.2 mm in length and has 4.4 florets with an outer glume of 3.1 mm and an inner glume of 3.4 mm in length. After the seed has been conditioned, the lemma has a generally smooth keel with occasional short hairs and a few long fine hairs at the base. The seed of Ba 73-540 is 2.80 mm in length and 0.78 mm in width with approximately 1,357,914 seeds per pound. Comparisons of Ba 73-540 with other varieties in terms of seed dimensions and on seed numbers per pound are shown in Tables 1 and 2 as follows:

TABLE 1

Seed Measurements of Ba 73-540 and Other Bluegrass Varieties After Conditioning.		
Variety	Length (mm)	Width (mm)
Ba 73-540	2.80	0.78
Kelly	2.98	0.80
Abbey	3.18	0.88
Coventry	2.86	0.78
Estate	2.53	0.76
Chateau	2.77	0.80
Baron	3.07	0.86
Bristol	2.73	0.80
Marquis	2.84	0.78
Nassau	2.96	0.78
Newport	2.76	0.71
Park	3.04	0.72
Ram I	3.51	0.84
Victa	3.20	0.86
LSD (.05)	0.19	0.06

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Since environmental conditions such as soil and climate may influence morphological characteristics to some extent, comparisons of morphological characteristics of Ba 73-540 are made with other Kentucky bluegrass varieties in Tables 3-10.

TABLE 3

Morphological Comparison of Panicles of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio						
Variety	Panicle Nodding*	Panicle Length (cm)	Panicle Width (cm)	Panicle Per Panicle	Number of Whorls	
					Lower Whorl	Third Whorl
Ba 73-540	2.0	6.3	3.6	4.6	3.5	2.2
Kelly	1.3	9.7	6.0	5.5	4.5	3.4
Abbey	1.4	7.6	4.2	5.2	4.0	2.7
Baron	1.0	7.8	4.1	5.2	3.8	2.5
Bristol	2.0	9.7	5.0	5.0	3.3	2.7
Chateau	2.0	6.8	3.8	5.0	4.0	2.4
Coventry	2.0	6.7	3.7	4.8	3.8	2.7
Estate	1.2	7.5	4.2	5.5	4.0	3.0
Marquis	1.7	7.8	4.5	5.2	4.1	3.1
Nassau	2.0	10.0	6.0	5.0	3.0	2.0
Newport	2.0	10.3	4.4	4.5	2.3	2.3
Park	1.6	9.0	3.7	4.0	4.3	3.7
Ram I	2.0	9.0	4.7	4.0	2.5	2.0
Victa	1.2	7.5	4.1	5.4	4.4	3.4

TABLE 3-continued

Morphological Comparison of Panicles of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio						
Variety	Panicle Nodding*	Panicle Length (cm)	Panicle Width (cm)	Panicle Per Panicle	Number of Whorls	
					Lower Whorl	Third Whorl
LSD (.05)	0.5	1.6	1.0	0.8	0.7	0.8

*Panicle nodding rated: 1 = erect, 2 = nodding

TABLE 4

Morphological Comparison of Spikelets of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.				
Variety	Spikelet Length (mm)		Number of Florets per Spikelet	
	Lowest Whorl	Third Whorl	Lowest Whorl	Third Whorl
Ba 73-540	5.3	5.2	4.4	4.4
Kelly	5.8	5.6	4.4	4.1
Abbey	5.1	5.0	3.9	3.8
Baron	5.0	5.0	3.7	3.8
Bristol	6.2	6.0	5.7	5.3
Chateau	5.1	5.0	4.2	3.9
Coventry	5.2	5.2	4.2	4.0
Estate	5.2	5.0	4.2	4.2
Marquis	5.4	5.2	4.1	3.9
Nassau	4.6	4.6	4.5	4.5
Newport	5.3	5.2	5.2	5.2
Park	6.5	6.7	5.2	4.7
Ram I	4.7	5.2	5.2	5.5
Victa	5.2	5.0	3.8	3.8
LSD (.05)	0.9	0.8	1.1	1.0

TABLE 5

Morphological Comparison of Glumes of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.				
Variety	Glume Length (mm)			
	Outer		Inner	
	Lowest Whorl	Third Whorl	Lowest Whorl	Third Whorl
Ba 73-540	3.0	3.1	3.4	3.4
Kelly	3.2	3.3	3.7	3.6
Abbey	2.9	2.9	3.3	3.3
Baron	2.9	2.8	3.4	3.3
Bristol	3.4	3.3	3.7	3.9
Chateau	3.1	3.1	3.4	3.4
Coventry	3.2	3.1	3.5	3.5
Estate	2.9	3.0	3.3	3.3
Marquis	2.9	2.8	3.3	3.2
Nassau	2.3	2.4	2.7	2.7
Newport	2.6	2.5	2.9	2.9
Park	3.0	3.2	3.5	3.7
Ram I	2.6	2.4	2.9	2.7
Victa	2.8	3.0	3.3	3.3
LSD (.05)	0.5	0.4	0.4	0.4

TABLE 6

Morphological Comparison of Flag Leaves of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.			
Variety	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Thickness (mm)
	Ba 73-540	4.1	2.8
Kelly	5.8	4.2	0.119
Abbey	4.3	3.3	0.107
Baron	4.5	3.2	0.119
Bristol	5.5	3.4	0.127
Chateau	4.1	3.2	0.111

TABLE 6-continued

Morphological Comparison of Flag Leaves of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.			
Variety	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Thickness (mm)
Coventry	4.7	3.2	0.112
Estate	5.2	3.6	0.117
Marquis	4.7	3.6	0.112
Nassau	6.2	3.1	0.127
Newport	6.1	3.5	0.135
Park	4.2	2.6	0.110
Ram I	4.7	3.1	0.127
Victa	5.9	4.0	0.124
LSD (.05)	1.8	0.6	0.013

TABLE 7

Morphological Comparison of Peduncles, Culms, and Internodes of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.					
Variety	Peduncle Length (cm)	Peduncle Width (mm)	Culm Length (mm)	Number of Nodes Per Culm	Top Internode Length (cm)
Ba 73-540	11.4	0.565	416	2.3	10.1
Kelly	12.3	0.772	514	2.3	12.4
Abbey	10.6	0.564	421	2.7	9.3
Baron	12.7	0.555	482	2.5	10.1
Bristol	15.0	0.677	522	2.7	11.3
Chateau	12.9	0.654	439	2.7	9.8
Coventry	13.2	0.607	435	2.7	10.2
Estate	12.6	0.552	486	2.2	10.5
Marquis	11.4	0.667	434	2.6	9.5
Nassau	8.0	0.546	450	2.5	11.2
Newport	18.0	0.567	547	2.3	11.2
Park	14.3	0.779	578	3.0	13.0
Ram I	18.5	0.622	527	3.0	10.2
Victa	12.2	0.716	474	2.4	10.6
LSD (.05)	3.7	0.018	79	0.6	2.1

TABLE 8

Morphological Comparison of Leaves of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.				
Variety	Ligule Length (mm)	Leaf Length (mm)	Leaf Width (mm)	Leaf Angle (Degrees) From Horizontal
Ba 73-540	0.22	186	3.8	50
Kelly	0.29	215	4.4	46
Abbey	0.23	218	3.9	56
Baron	0.30	313	4.4	63
Bristol	0.30	253	4.3	37
Chateau	0.25	204	4.1	50
Coventry	0.26	218	4.1	55
Estate	0.28	239	4.4	52
Marquis	0.31	215	4.2	57
Nassau	0.22	226	3.5	39
Newport	0.22	251	4.1	50
Park	0.33	329	4.2	44
Ram I	0.18	188	3.7	40
Victa	0.28	235	4.3	52
LSD (.05)	0.11	49	0.6	10

TABLE 9

Morphological Comparison of Leaf Hairs of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.			
Variety	Hairs Around Ligule on Upper Surface of the Leaf (a)	Hairs on Collar (a)	Hairs on Ligule (b)
Ba 73-540	1.0	3.2	2.1

TABLE 9-continued

Morphological Comparison of Leaf Hairs of Ba 73-540 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.			
Variety	Hairs Around Ligule on Upper Surface of the Leaf (a)	Hairs on Collar (a)	Hairs on Ligule (b)
Kelly	1.2	4.2	3.6
Abbey	1.0	3.4	2.2
Baron	1.0	5.0	4.0
Bristol	1.3	4.7	4.3
Chateau	1.0	3.5	2.7
Coventry	1.0	3.5	1.5
Estate	1.0	3.2	1.3
Marquis	1.2	4.4	2.6
Nassau	2.7	5.0	1.0
Newport	1.0	4.0	0.8
Park	1.0	1.7	0.0
Ram I	1.0	3.7	0.3
Victa	1.0	3.3	2.2
LSD (.05)	0.3	1.4	1.8

(a) Hairs around ligule and on collar rated 1-4: 1 = none, 5 = many
 (b) Hairs on ligule rated 0-5: 0 = none, 5 = many

TABLE 10

Morphological Comparisons of Ba 73-540 and Other Bluegrass Varieties Grown as Unmowed Spaced Plants in the Field at Marysville, Ohio.			
	Mature Plant Height (a)	Panicle Density (b)	Maturity (c)
Ba 73-540	54	7	8
Kelly	50	5	8
Abbey	49	5	7
Baron	44	5	9
Chateau	49	5	7
Coventry	48	5	7
Marquis	47	5	9
Estate	49	5	7
Nassau	46	6	9
Bristol	54	3	8
Merit	61	5	9
Glade	49	2	9
Ram I	49	3	7
Victa	54	6	8

Ratings:
 (a) Mature Plant Height (cm) includes panicle
 (b) Panicle Density - 1-10, 10 = high panicle density
 (c) Maturity - 1-9, 9 = most mature

45 No discernible differences were noted in flower parts and seed coloration other than those characteristics listed in the above tables.

Ba 73-540 has performed well in regions throughout the U.S.A. and Canada, as exhibited by high turf quality ratings in many different locations in comparison to other varieties. In addition, Ba 73-450 has a pleasant medium green color which can be maintained throughout the growing season and good winter color. Comparisons of Ba 73-540 with other varieties for quality, genetic color and winter color are set forth in Tables 11-13 hereinafter. According to comparisons with the Munsell Book of Colors during mid-June, the color of Ba 73450 leaf blades is in the range of 5 GY 4/4 to 5 GY 4/8 to 7/5 GY 4/4. During the same time period the color of similar leaf blades of several other Kentucky bluegrass varieties—Gnome, Midnight, Bristol and Victa—fall in the same range and as a result were indistinguishable based upon use of this color dictionary. Plant age, time of year, management practices of fertilization, irrigation and mowing also influence this color range. Additional comparisons for leaf texture, and spring, summer and fall density, are presented in Tables 14-17.

TABLE 11

Comparison of Turfgrass Quality of Ba 73-540 and Other Kentucky Bluegrass Varieties at various Locations Over a Four Year Period in the U.S.A. and Canada.

Variety	Turfgrass Quality - Annual Mean Values (a)			
	Year 1	Year 2	Year 3	Year 4
Ba 73-540	5.8	5.9	6.0	5.8
Abbey	5.6	5.7	5.9	5.7
Able I	5.7	5.7	6.0	6.1
Amazon	5.4	5.5	5.5	5.5
America	5.8	5.9	6.1	6.2
Aquila	5.4	5.6	5.9	5.7
A-34	5.6	5.9	6.0	6.1
Aspen	5.6	5.7	6.0	6.2
Asset	6.0	5.9	6.2	6.2
Baron	5.8	5.6	5.9	5.8
Barzan	5.0	5.2	5.4	5.4
Bristol	5.7	6.0	6.1	6.0
Challenger	5.8	5.9	6.0	5.9
Chateau	6.0	5.8	6.0	6.0
Cheri	5.8	5.7	6.1	5.9
Classic	5.9	5.8	6.0	5.9
Coventry	5.8	5.8	5.9	5.8
Eclipse	5.6	5.9	6.2	6.3
Estate	5.9	5.9	5.9	5.8
Georgetown	5.8	5.6	5.8	5.8
Glade	5.7	5.8	6.1	6.1
Gnome	5.5	5.3	5.6	5.5
Haga	5.8	5.8	5.8	5.9
Julia	5.7	5.8	5.9	5.7
Kelly	5.6	5.7	5.9	5.8
Kenblue	5.0	4.7	5.0	5.2
Liberty	5.7	5.7	5.8	5.7
Marquis	5.3	5.6	5.7	5.7
Merion	5.4	5.4	5.7	5.6
Merit	5.6	5.6	5.9	5.8
Midnight	6.1	6.3	6.4	6.3
Monopoly	5.5	5.5	5.9	5.9
Mystic	5.4	5.4	5.8	6.0
Nassau	5.6	5.7	5.8	5.5
Parade	5.7	5.7	5.9	5.8
Ram I	5.7	5.6	5.9	5.8
Rugby	6.0	5.8	5.9	5.9
Sydsport	5.8	5.8	6.0	5.9
Victa	5.8	5.7	5.8	5.8
Wabash	5.7	5.4	5.8	5.9
Welcome	5.3	5.5	5.7	5.5
LSD 0.05	0.2	0.2	0.2	0.2

(a) Rating Scale 1-9: 9 = ideal turf

TABLE 12

Comparison of Genetic Color of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations Over a Four Year Period in the U.S.A. and Canada.

Variety	Genetic Color - Annual Mean Values (a)			
	Year 1	Year 2	Year 2	Year 2
Ba 73-540	6.5	6.2	6.3	6.5
Abbey	6.8	6.2	6.7	6.6
Able I	7.1	6.8	6.7	6.9
Amazon	6.2	6.9	7.0	6.5
America	6.8	6.6	7.0	6.6
Aquila	6.5	6.0	6.6	6.3
A-34	5.7	5.6	5.7	5.7
Aspen	7.1	6.4	6.7	6.5
Asset	6.7	6.3	6.3	6.4
Baron	6.8	6.5	6.9	6.8
Barzan	6.5	6.1	6.6	6.3
Bristol	7.3	7.1	6.6	6.6
Challenger	7.2	6.9	6.8	6.7
Chateau	6.5	6.0	6.2	6.5
Cheri	6.6	5.9	6.3	6.3
Classic	5.8	5.6	6.3	5.9
Coventry	6.5	6.0	6.5	6.6
Eclipse	7.7	6.7	6.5	6.6
Estate	6.7	5.9	6.3	6.6
Georgetown	6.1	5.7	5.9	5.7
Glade	7.4	7.0	6.7	6.9
Gnome	6.4	6.5	6.8	6.7
Haga	5.8	5.5	6.1	5.8

TABLE 12-continued

Comparison of Genetic Color of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations Over a Four Year Period in the U.S.A. and Canada.

Variety	Genetic Color - Annual Mean Values (a)			
	Year 1	Year 2	Year 2	Year 2
Julia	6.4	6.3	6.7	6.3
Kelly	6.7	6.5	6.9	6.5
Kenblue	5.2	5.2	5.5	6.0
Liberty	6.5	6.5	6.4	6.0
Marquis	7.2	6.6	6.8	6.5
Merion	6.4	5.6	6.0	6.5
Merit	6.7	6.4	6.5	6.1
Midnight	8.0	7.9	7.5	7.7
Monopoly	5.3	5.5	5.5	5.3
Mystic	5.9	5.6	6.3	6.0
Nassau	7.1	6.7	6.9	6.8
Parade	5.9	5.5	6.0	6.1
Ram I	6.9	6.6	6.9	6.6
Rugby	6.2	5.4	6.1	5.8
Sydsport	6.5	6.1	6.2	6.2
Victa	6.7	6.3	6.7	6.5
Wabash	6.0	5.1	5.7	5.3
Welcome	6.1	6.0	6.1	6.4
LSD (.05)	0.4	0.4	0.4	0.4

(a) Rating Scale 1-9: 9 = dark green

TABLE 13

Comparison of Winter Color of Ba 73-540 and Other Kentucky Bluegrass Varieties in the U.S.A. and Canada.

Variety	Winter Color - Annual Mean Values (a)	
	Wichita Kansas	Agassiz British Columbia
	Test Location	Test Location
Ba 73-540	5.0	5.0
Abbey	3.0	4.7
Able I	5.7	4.0
Amazon	4.0	8.7
America	4.7	4.0
Aquila	3.0	4.0
A-34	4.7	4.3
Aspen	4.7	4.0
Asset	3.7	4.3
Baron	3.3	4.7
Barzan	4.7	5.0
Bristol	5.7	5.0
Challenger	5.0	4.0
Chateau	5.0	5.0
Cheri	4.3	5.0
Classic	5.0	4.0
Coventry	5.0	5.0
Eclipse	4.0	4.3
Estate	4.3	5.0
Georgetown	5.3	4.0
Glade	3.3	4.3
Gnome	2.7	4.3
Haga	5.0	4.0
Julia	5.0	5.0
Kenblue	3.0	3.0
Liberty	5.0	—
Merion	3.0	4.0
Merit	3.3	5.0
Midnight	4.3	4.7
Monopoly	3.7	4.7
Mystic	4.0	2.0
Nassau	5.7	5.0
Parade	5.3	4.0
Ram I	5.0	4.7
Rugby	4.7	4.3
Sydsport	4.3	5.0
Victa	3.7	5.0
Wabash	4.7	3.3
Welcome	4.3	5.0
LSD (.05)	1.0	0.6

(a) Rating Scale: 1-9: 9 = complete color retention.

TABLE 14

Comparison of Leaf Texture of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations Over A Four Year Period in the U.S.A. and Canada.

Variety	Leaf Texture - Annual Mean Values (a)			
	Year 1	Year 2	Year 3	Year 4
Ba 73-540	5.8	5.6	5.3	4.8
A-34	6.4	6.9	5.7	5.2
Abbey	6.3	6.3	5.7	5.2
Able I	7.1	7.3	6.0	6.0
Amazon	7.5	7.2	6.3	5.8
America	7.1	7.2	6.0	6.7
Aquila	6.9	6.9	6.0	6.3
Aspen	6.6	6.9	5.7	5.8
Asset	6.8	6.7	6.0	6.2
Baron	6.8	6.1	6.0	5.8
Barzan	6.1	6.7	6.0	5.7
Bristol	6.7	6.3	5.0	5.5
Challenger	6.8	6.7	5.7	5.2
Chateau	6.1	6.0	5.7	4.8
Cheri	6.2	6.1	5.7	4.7
Classic	6.6	7.0	6.0	6.0
Coventry	5.9	5.7	5.3	4.7
Eclipse	6.4	6.5	6.0	6.3
Estate	6.3	5.9	5.7	4.8
Georgetown	6.8	6.8	5.3	6.0
Glade	6.8	6.7	6.0	5.7
Gnome	6.1	6.2	5.3	5.2
Haga	6.7	7.1	6.0	6.2
Julia	6.7	6.3	6.0	5.8
Kelly	6.4	5.7	5.3	5.0
Kenblue	7.8	7.3	6.7	7.7
Liberty	6.8	6.6	—	5.2
Marquis	6.1	5.7	5.3	5.3
Merion	6.7	6.8	6.0	5.7
Merit	6.3	6.1	6.0	5.2
Midnight	7.3	6.7	6.0	4.8
Monopoly	7.1	6.8	6.0	6.3
Mystic	7.4	7.5	7.3	7.8
Nassau	6.6	6.5	5.0	5.3
Parade	7.1	7.0	6.0	6.3
Ram I	7.3	7.1	6.3	4.8
Rugby	6.8	6.7	6.0	6.2
Sydsport	5.9	5.8	6.0	5.0
Victoria	6.3	6.0	5.7	5.3
Wabash	7.1	7.2	6.3	7.7
Welcome	7.5	7.1	6.0	7.2
LSD 0.05	0.5	0.5	0.6	0.7

(a) Rating Scale 1-9: 9 = very fine

TABLE 15

Comparison of Spring Density of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Three Year Period.

Variety	Spring Density - Annual Mean Values (a)		
	Year 1	Year 2	Year 3
Ba 73-540	6.3	6.5	7.6
Abbey	6.3	5.8	6.8
Able I	5.4	5.8	7.4
Amazon	6.7	6.7	6.7
America	7.0	6.2	7.1
Aquila	5.9	6.5	6.6
A-34	6.6	5.7	7.3
Aspen	5.7	5.5	7.4
Asset	6.0	7.5	7.7
Baron	6.1	6.3	6.8
Barzan	5.3	6.0	6.5
Bristol	5.6	5.3	6.9
Challenger	6.4	6.0	6.9
Chateau	6.6	6.7	7.3
Cheri	6.3	7.2	7.4
Classic	6.9	5.5	7.2
Coventry	6.7	6.5	7.1
Eclipse	6.2	5.5	7.1
Estate	6.1	6.3	7.2
Georgetown	5.9	5.5	6.9
Glade	5.9	6.8	7.3
Gnome	5.8	6.0	6.3
Haga	6.6	5.5	7.3

TABLE 15-continued

Comparison of Spring Density of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Three Year Period.

Variety	Spring Density - Annual Mean Values (a)		
	Year 1	Year 2	Year 3
Julia	6.0	6.5	7.4
Kelly	6.1	6.3	6.7
Kenblue	5.9	6.2	6.0
Liberty	5.9	5.5	6.8
Marquis	5.7	6.0	6.6
Merion	6.3	6.3	7.3
Merit	6.0	5.8	6.7
Midnight	6.1	6.7	7.4
Monopoly	6.0	6.2	7.0
Mystic	6.3	6.7	6.9
Nassau	5.7	6.2	6.6
Parade	6.2	6.0	6.9
Ram I	6.6	7.0	6.4
Rugby	5.8	5.3	7.0
Sydsport	6.3	6.3	7.2
Victoria	5.8	5.8	6.8
Wabash	6.8	6.7	7.0
Welcome	6.2	6.0	6.6
LSD (.05)	0.8	0.8	0.7

(a) Rating Scale 1-9: 9 = maximum density

TABLE 16

Comparison of Summer Density of Ba 73-540 and Other Kentucky Bluegrass at Various Locations in Canada and U.S.A. Over a Two Year Period

Variety	Summer Density - Annual Mean Values (a)	
	Year 1	Year 2
Ba 73-540	6.7	8.2
Abbey	7.1	8.0
Able I	6.8	7.8
Amazon	6.8	8.2
America	6.8	7.7
Aquila	6.7	8.0
A-34	6.8	7.8
Aspen	6.2	7.5
Asset	7.3	8.2
Baron	6.3	7.7
Barzan	5.3	7.3
Bristol	6.4	7.8
Challenger	6.2	7.5
Chateau	7.3	8.3
Cheri	7.0	8.0
Classic	6.3	8.0
Coventry	6.8	8.2
Eclipse	6.3	7.7
Estate	6.6	8.2
Georgetown	5.9	7.3
Glade	6.2	8.2
Gnome	6.3	7.3
Haga	6.3	7.7
Julia	6.1	8.3
Kelly	6.4	7.7
Kenblue	6.1	7.2
Liberty	5.5	7.5
Marquis	6.3	7.0
Merion	6.4	7.8
Merit	6.3	7.8
Midnight	6.5	7.8
Monopoly	5.8	7.7
Mystic	7.3	8.0
Nassau	6.1	7.0
Parade	6.5	7.7
Ram I	6.7	7.8
Rugby	5.6	7.5
Sydsport	6.8	8.0
Victoria	6.2	8.0
Wabash	7.1	8.7
Welcome	6.7	7.7
LSD (.05)	0.8	0.7

(a) Rating Scale 1-9: 9 = maximum density

TABLE 17

Comparison of Fall Density of Ba-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Three Year Period

Variety	Fall Density - Annual Mean Values (a)		
	Year 1	Year 2	Year 3
Ba 73-540	7.7	8.7	7.8
Abbey	7.3	7.0	7.2
Able I	6.7	8.2	7.4
Amazon	7.0	9.0	7.8
America	7.0	8.7	7.5
Aquila	6.7	7.5	7.8
A-34	7.0	8.2	7.9
Aspen	6.7	7.2	7.7
Asset	6.0	8.7	7.5
Baron	7.3	8.0	7.0
Barzan	6.0	7.8	7.3
Bristol	6.7	7.8	7.5
Challenger	6.7	8.3	7.9
Chateau	7.7	8.2	7.5
Cheri	7.3	8.5	7.5
Classic	7.3	8.2	7.5
Coventry	7.3	9.0	7.3
Eclipse	7.3	8.0	7.5
Estate	6.3	8.0	7.4
Georgetown	7.3	7.3	7.1
Glade	6.0	7.8	7.6
Gnome	7.0	7.7	7.1
Haga	7.0	8.3	7.5
Julia	7.0	8.0	7.4
Kelly	7.3	7.2	7.0
Kenblue	7.7	8.3	7.5
Liberty	6.7	8.0	7.0
Marquis	6.0	6.2	6.8
Merion	6.3	7.3	7.3
Merit	7.0	7.2	7.0
Midnight	7.0	8.3	8.1
Monopoly	6.7	7.5	7.1
Mystic	7.3	8.8	7.8
Nassau	6.3	6.5	7.3
Parade	7.0	8.7	7.5
Ram I	8.0	9.0	7.6
Rugby	6.3	7.8	7.3
Sydsport	7.0	8.7	7.5
Victoria	7.3	7.8	7.1
Wabash	7.7	9.0	8.1
Welcome	7.7	9.0	7.7
LSD (.05)	1.4	0.5	0.6

(a) Rating Scale 1-9: 9 = maximum density

TABLE 18-continued

Comparison of Leaf Spot Disease Incidence of Ba 73-540 and other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Four Year Period

Variety	Leaf Spot - Annual Mean Values (a)			
	Year 1	Year 2	Year 3	Year 4
Abbey	4.6	5.8	6.0	5.3
Able I	6.8	5.7	6.0	8.0
Amazon	5.2	5.8	6.3	7.0
America	5.7	6.5	6.0	6.3
Aquila	6.3	4.3	6.0	3.7
A-34	6.3	5.7	5.8	6.3
Aspen	6.6	6.3	6.0	6.3
Asset	6.7	5.7	6.3	6.0
Baron	6.0	6.5	6.0	5.3
Barzan	6.4	5.3	6.3	1.3
Bristol	7.9	6.5	5.7	5.3
Challenger	7.2	6.7	6.3	5.0
Chateau	6.4	6.2	6.3	6.3
Cheri	5.7	5.7	6.7	4.7
Classic	6.2	6.0	6.3	4.3
Coventry	5.0	6.2	5.7	6.0
Eclipse	7.4	7.0	6.7	7.7
Estate	6.8	5.8	6.3	6.7
Georgetown	6.7	6.5	5.7	4.3
Glade	7.4	5.8	6.3	7.0
Gnome	6.0	6.3	6.0	4.3
Haga	6.7	6.0	6.0	4.7
Julia	6.0	6.0	6.7	4.7
Kelly	5.1	6.2	6.0	5.0
Kenblue	4.8	2.0	5.3	1.0
Liberty	6.9	6.3	—	5.3
Marquis	6.4	6.2	6.3	4.7
Merion	6.2	6.3	6.7	3.7
Merit	5.6	6.5	5.7	5.0
Midnight	7.2	6.2	6.3	6.3
Monopoly	5.6	5.7	6.7	3.3
Mystic	5.6	5.0	5.7	5.7
Nassau	6.6	6.2	6.3	5.3
Parade	5.3	5.3	6.0	5.0
Ram I	4.9	5.0	6.3	2.3
Rugby	6.4	5.8	6.3	4.3
Sydsport	6.7	6.5	6.3	6.3
Victoria	6.0	6.2	6.7	4.7
Wabash	4.2	2.3	5.3	2.0
Welcome	5.2	4.8	6.0	3.7
LSD (.05)	1.0	0.9	0.9	1.6

(a) Rating Scale 1-9: 9 = maximum density

Turf diseases are one of the major causes of inconsistent and poor turf performance. Ba 73-540 has been found to have a high level of resistance to a serious bluegrass disease known as leaf spot (also known as melting out) caused by *Drechslera poae* (formerly called *Helminthosporium vagans*); a medium to high level of resistance to several rust diseases caused by *Puccinia* spp.; and a medium to high level of resistance to dollarspot caused by *Sclerotinia homoeocarpa*, to snow mold caused by *Typhula incarnata* and to powdery mildew caused by *Erysiphe graminis*. Comparisons of disease incidence of Ba 73-540 as compared with other varieties in regard to leaf spot, rusts, dollarspot, snow mold and powdery mildew are presented in Tables 18-23. Additional comparisons are presented in Tables 24-27 for browning due to heat and drought stress, sod strength and seed yields.

TABLE 18

Comparison of Leaf Spot Disease Incidence of Ba 73-540 and other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Four Year Period

Variety	Leaf Spot - Annual Mean Values (a)			
	Year 1	Year 2	Year 3	Year 4
Ba 73-540	5.9	5.7	6.7	6.0

TABLE 19

Comparison of Melting Out Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Two Year Period

Variety	Melting Out - Mean Values (a)			
	Year 1		Year 2	
	Spring (b)	Fall (c)	Spring (d)	Fall Mean (e)
Ba 73-540	5.2	8.7	7.3	6.3
Abbey	3.7	8.0	6.3	6.7
Able I	4.5	9.0	6.5	6.3
Amazon	4.2	7.0	7.2	6.3
America	5.2	8.7	6.8	7.0
Aquila	3.8	7.3	6.8	5.7
A-34	4.8	8.7	6.5	6.3
Aspen	5.0	8.7	6.2	6.0
Asset	4.7	9.0	6.8	7.0
Baron	4.3	8.3	6.5	6.3
Barzan	4.0	3.3	6.2	6.7
Bristol	5.7	9.0	6.5	6.3
Challenger	4.8	9.0	6.5	6.0
Chateau	5.5	9.0	5.7	6.7
Cheri	4.7	8.7	6.7	6.7
Classic	6.2	8.7	6.3	6.7
Coventry	4.3	9.0	6.2	6.7
Eclipse	5.0	7.0	7.2	7.0
Estate	5.3	9.0	6.5	6.7
Georgetown	5.8	9.0	6.0	6.0
Glade	4.5	8.0	7.3	6.7

TABLE 19-continued

Comparison of Melting Out Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada Over a Two Year Period				
Variety	Melting Out - Mean Values (a)			
	Year 1		Year 2	
	Spring (b)	Fall (c)	Spring (d)	Fall Mean (e)
Gnome	4.5	8.7	6.7	6.3
Haga	6.2	9.0	6.0	6.3
Julia	6.0	9.0	6.8	6.3
Kelly	3.8	8.3	6.5	6.3
Kenblue	3.7	1.0	4.3	5.3
Liberty	5.5	8.7	7.7	—
Marquis	4.8	7.7	6.7	6.0
Merion	5.0	9.0	7.0	7.0
Merit	4.2	8.3	6.3	6.3
Midnight	4.0	9.0	7.2	6.0
Monopoly	4.5	8.0	6.5	6.7
Mystic	5.0	1.0	6.3	4.7
Nassau	5.0	9.0	6.5	7.0
Parade	5.7	9.0	6.2	6.0
Ram I	4.5	5.3	6.3	7.0
Rugby	5.7	9.0	6.3	6.7
Sydsport	5.5	9.0	6.5	6.7
Victa	5.2	8.0	7.2	6.7
Wabash	4.7	6.3	4.7	4.7
Welcome	3.8	1.3	6.5	7.0
LSD (.05)	0.7	1.6	1.1	1.0

(a) Rating Scale 1-9: 9 = no disease
 (b) Test Locations: Blacksburg and Blackstone, Virginia
 (c) Test Location: Puyallup, Washington
 (d) Test Locations: Agassiz, British Columbia; Post Falls, Idaho
 (e) Test Location: Agassiz, British Columbia

TABLE 19

Comparison of Dollar Spot and Powdery Mildew Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties in the U.S.A.

Variety	Columbia Missouri	Adelphia New Jersey
	Dollar Spot	Powdery Mildew
Ba 73-540	8.0	5.7
Abbey	7.3	1.0
Able I	7.7	6.7
Amazon	6.7	5.0
America	7.3	7.7
Aquila	7.3	8.3
A-34	7.3	6.7
Aspen	6.7	4.7
Asset	7.0	2.0
Baron	7.0	1.3
Barzan	6.3	8.3
Bristol	7.7	7.0
Challenger	7.3	3.3
Chateau	6.7	5.3
Cheri	8.0	3.3
Classic	6.3	2.7
Coventry	7.7	6.0
Eclipse	7.7	5.0
Estate	7.3	7.0
Georgetown	7.3	2.7
Glade	7.3	3.3
Gnome	8.0	1.0
Haga	7.3	3.0
Julia	7.7	2.0
Kelly	7.0	1.7
Kenblue	7.3	5.0
Liberty	7.0	4.0
Marquis	7.7	1.0
Merion	7.3	1.0
Merit	6.7	1.7
Midnight	6.7	1.7
Monopoly	7.0	6.7
Mystic	8.0	8.0
Nassau	6.7	2.3
Parade	7.7	2.0
Ram I	6.0	6.7
Rugby	6.7	2.7
Sydsport	7.3	6.7

TABLE 19-continued

Comparison of Dollar Spot and Powdery Mildew Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties in the U.S.A.

Variety	Columbia Missouri	Adelphia New Jersey
	Dollar Spot	Powdery Mildew
Victa	7.7	1.7
Wabash	7.3	6.7
Welcome	7.7	6.3
LSD (.05)	1.4	1.4

(a) Rating Scale 1-9: 9 = no disease

TABLE 21

Comparison of Powdery Mildew Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties at Marysville, OH.

Variety	% Mildew (a)	
	Test 1	Test 2
Ba 73-540	19.2	18.3
Adelphi	29.2	24.2
America	0.0	
Banff	5.0	
Bristol	5.8	16.7
Classic	54.2	
Eclipse	1.7	
Georgetown	12.5	
Glade	40.0	27.5
Merion	37.5	48.3
Merit	66.7	
Monopoly		7.5
Nassau	24.2	24.2
Newport	20.0	
Park	0.8	28.3
Ram I	12.5	30.8
Sydsport	7.5	
Vantage	12.5	15.8
Victa	56.7	45.8
Wabash		10.0

(a) Mean for three ratings taken during summer months.

TABLE 22

Comparison of Four Rust Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties at in the U.S.A. and Canada.

Variety	Stem Rust ^(a)		Stripe Rust ^(a)
	Adelphia, NJ	Post Falls Idaho	Agassiz, British Columbia
Ba 73-540	8.0	8.0	8.0
Abbey	6.3	8.3	6.3
Able I	7.0	8.0	7.3
Amazon	6.0	7.3	7.0
America	8.3	7.7	8.0
Aquila	8.0	7.0	6.7
Aspen	8.0	7.0	6.7
Asset	8.0	8.7	7.3
A-34	8.0	8.0	7.0
Baron	7.3	8.0	7.0
Barzan	8.0	8.0	7.0
Bristol	8.7	8.0	8.0
Challenger	7.7	8.0	6.7
Chateau	8.3	7.3	7.3
Cheri	7.7	8.7	6.7
Classic	8.7	8.3	8.0
Coventry	8.3	8.0	8.0
Eclipse	7.7	8.3	6.3
Estate	7.3	7.7	8.0
Georgetown	9.0	7.7	7.0
Glade	7.7	8.0	6.0
Gnome	7.7	8.7	7.0
Haga	9.0	7.3	7.3
Julia	8.0	7.3	7.0
Kelly	7.3	8.7	5.7
Kenblue	8.3	7.7	7.7

TABLE 22-continued

Comparison of Four Rust Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties at in the U.S.A. and Canada.			
Variety	Crown Rust ^(a)		
	Leaf Rust ^(a) Santa Ana Cal.	Agassiz BC	Columbia Mo. and Ritzville, Wash.
Liberty	8.3	8.0	—
Marquis	6.3	7.7	7.3
Merion	2.7	4.0	5.3
Merit	8.0	8.0	6.7
Midnight	8.3	7.3	5.7
Monopoly	8.0	7.3	7.3
Mystic	5.3	6.0	5.3
Nassau	7.7	8.0	7.3
Parade	9.0	7.0	7.7
Ram I	8.7	6.7	7.0
Rugby	8.7	7.3	7.7
Sydsport	8.0	7.7	8.0
Victa	7.7	5.7	5.7
Wabash	8.0	8.0	6.3
Welcome	7.3	7.7	7.3
LSD (.05)	1.0	2.0	1.2

Ba 73-540	5.0	9.0	8.0
Abbey	3.0	7.0	6.8
Able I	2.0	8.3	7.5
Amazon	3.0	9.0	6.7
America	5.0	8.3	9.0
Aquila	3.0	7.0	9.0
Aspen	3.7	6.0	8.2
Asset	2.7	9.0	8.8
A-34	3.7	8.3	7.7
Baron	3.3	8.0	7.7
Barzan	5.0	8.3	8.7
Bristol	5.3	8.3	9.0
Challenger	4.0	6.3	8.0
Chateau	4.0	9.0	9.0
Cheri	5.3	9.0	8.7
Classic	6.3	9.0	8.2
Coventry	4.0	8.9	9.0
Eclipse	2.0	9.0	7.5
Estate	5.0	9.0	8.2
Georgetown	5.3	8.7	7.2
Glade	5.0	6.7	8.0
Gnome	2.7	7.7	6.5
Haga	5.7	8.0	8.7
Julia	2.0	9.0	7.0
Kelly	5.2	6.3	6.3
Kenblue	4.0	6.7	7.0
Liberty	5.3	—	7.7
Marquis	5.0	6.7	8.5
Merion	2.3	5.0	6.2
Merit	2.7	7.0	8.0
Midnight	4.0	6.3	6.7
Monopoly	3.7	9.0	8.2
Mystic	3.0	7.0	7.0
Nassau	4.3	8.3	8.8
Parade	5.3	9.0	7.2
Ram I	5.0	8.3	7.7
Rugby	5.0	8.7	8.5
Sydsport	4.0	8.7	7.8
Victa	3.0	7.3	7.7
Wabash	4.3	7.3	7.7
Welcome	4.7	9.0	7.5
LSD (.05)	1.7	1.4	1.7

^(a)Rating Scale: 1-9 9 = no disease

TABLE 23

Comparison of Snow Mold Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties	
Variety	Snowmold ^(a) East Lansing Michigan
Ba 73-540	6.7
Abbey	7.0
Able I	4.7

TABLE 23-continued

Comparison of Snow Mold Disease Incidence of Ba 73-540 and Other Kentucky Bluegrass Varieties	
Variety	Snowmold ^(a) East Lansing Michigan
Amazon	1.7
America	3.7
Aquila	6.0
Aspen	6.7
Asset	4.7
A-34	5.3
Baron	5.0
Barzan	6.7
Bristol	7.3
Challenger	6.3
Chateau	4.3
Cheri	4.3
Classic	5.7
Coventry	4.7
Eclipse	4.7
Estate	5.0
Georgetown	6.7
Glade	5.7
Gnome	4.7
Haga	6.0
Julia	6.0
Kelly	6.0
Kenblue	5.0
Liberty	5.7
Marquis	5.0
Merion	4.0
Merit	7.3
Midnight	3.7
Monopoly	5.0
Mystic	5.3
Nassau	6.7
Parade	6.3
Ram I	5.3
Rugby	6.7
Sydsport	4.3
Victa	4.7
Wabash	3.3
Welcome	4.0
LSD (.05)	2.5

^(a)Rating Scale: 1-9 9 = no disease

TABLE 24

Comparison of % Browning of Ba 73-540 and Other Kentucky Bluegrasses Under Heat and Drought Stress at Prince Frederick, Maryland.	
Variety	% Browning Mean ^(a)
Ba 73-540	11.3
Adelphi	20.0
Bristol	18.7
Cynthia	36.3
Glade	20.0
Merion	28.0
Merit	28.5
Nugget	32.5
Park	24.5
Pascal	45.0
Vantage	19.2
Victa	18.2

^(a)Mean for two ratings taken in August

TABLE 25

Comparison of Drought Tolerance Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada	
Variety	Drought Tolerance ^(a)
Ba 73-540	7.7
Abbey	7.7
Able I	7.7
Amazon	7.0
America	8.0

TABLE 25-continued

Comparison of Drought Tolerance Ba 73-540 and Other Kentucky Bluegrass Varieties at Various Locations in the U.S.A. and Canada	
Variety	Drought Tolerance ^(a)
Aquila	7.3
A-34	6.0
Aspen	7.3
Asset	7.0
Baron	7.0
Barzan	6.0
Bristol	6.7
Challenger	8.3
Chateau	7.0
Cheri	7.3
Classic	7.3
Coventry	7.3
Eclipse	7.3
Estate	7.0
Georgetown	6.7
Glade	6.7
Gnome	8.0
Haga	6.7
Julia	7.3
Kelly	7.7
Kenblue	6.3
Liberty	7.7
Marquis	7.7
Merion	7.3
Merit	8.0
Midnight	6.0
Monopoly	6.7
Mystic	7.7
Nassau	8.0
Parade	5.7
Ram I	8.7
Rugby	7.0
Sydsport	7.0
Victa	7.7
Wabash	6.7
Welcome	7.3
LSD 0.05	1.7

^(a)Rating Scale 1-9: 9 = no dormancy

TABLE 26

Comparison of Sod Strength Eight Months After Planting of Ba 73-540 and Other Kentucky Bluegrasses at Remington, Va.	
Variety	SOD STRENGTH ^(a) 8 Months
Ba 73-540	20.3
Abbey	17.0
Able I	16.3
Amazon	18.0
America	30.7
Aquila	19.3
A-34	21.7
Aspen	21.7
Asset	23.7

TABLE 26-continued

Comparison of Sod Strength Eight Months After Planting of Ba 73-540 and Other Kentucky Bluegrasses at Remington, Va.	
Variety	SOD STRENGTH ^(a) 8 Months
Baron	25.7
Barzan	13.0
Bristol	24.7
Challenger	23.0
Chateau	23.3
Cheri	28.3
Classic	23.0
Coventry	18.0
Eclipse	22.0
Estate	23.3
Georgetown	30.0
Glade	26.3
Gnome	22.0
Haga	22.3
Julia	12.3
Kenblue	22.0
Liberty	20.3
Marquis	23.0
Merion	21.3
Merit	25.3
Midnight	22.3
Monopoly	26.0
Mystic	21.3
Nassau	22.3
Parade	26.0
Ram I	22.3
Rugby	20.3
Sydsport	26.0
Victa	29.3
Wabash	16.7
Welcome	24.7
LSD (.05)	6.9

^(a)Rating Scale: Kilograms of tension needed to tear sod.

TABLE 27

Seed yield Comparisons in Pounds Per Acre of Ba 73-540 and Other Kentucky Bluegrass Varieties in Oregon Over a Three Year Period			
Variety	Lbs/Acre		
	Gervais Year 1	LaGrande Year 2	Year 3
Ba 73-540	859	1224	993
Bristol	862	1021	690
Victa	1342	1425	1224
LSD (.05)		220	160

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 several serious diseases, including leaf spot disease (also known as melting out disease), various rusts, dollarspot, snowmold and powdery mildew; a desirable green color throughout the growing season; a strong sod forming ability; high quality dense persistent turf formation under a wide variety of environmental conditions; and a medium level of seed yielding capacity.

* * * * *

60

65



FIG. 1



FIG. 2



FIG. 3



FIG. 4

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Plant 8,490

Page 1 of 4

DATED : December 7, 1993

INVENTOR(S) : Virgil D. Meier, Eugene W. Mayer

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

Column 3, line 4, change "0.012" to --0.102--

Column 3, line 47, change "73-450" to --73-540--

Column 6, line 21, change "1-4" to --1-5--

Column 6, line 51, change "73-450" to --73-540--

Column 6, line 58, change "73450" to --73-540

Column 8, line 14, change "55" to --5.5--

Column 8, line 42, change "Barzon" to --Barzan--

Column 9, line 47, delete underlining of "Kentucky Bluegrass Varieties at Various Locations in"

Column 9, line 54, change "Aquilla" to --Aquila--

Column 10, line 27, delete underlining of "Comparison of Summer Density of BA-73-540 and Other"

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Plant 8,490

Page 2 of 4

DATED : December 7, 1993

INVENTOR(S) : Virgil D. Meier, Eugene W. Mayer

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

Col. 1, line 55; col. 10, line 37; col. 11, line 12; and col. 12, line 12, in Tables 15, 16, 17, 18, change "Aquilla" to --Aquila--.

Column 11, line 1, change "-540" to --73-540--

Column 12, line 42, footnote to Table 18, change "9=maximum density" to --9 = no disease--

Column 13, line 32, change "Table 19" to --Table 20--

Column 14, line 1, change "Table 19" to --Table 20--

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Plant 8,490

Page 3 of 4

DATED :

INVENTOR(S) : December 7, 1993

Virgil D. Meier, Eugene W. Mayer

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

Column 3, after all of Table 1 and before "t70" insert all of Table 2 as follows:

Comparison of Seed Numbers Per Pound of Ba 73-540 and Other Bluegrass Varieties After Conditioning.

	<u>Number of Seeds Per Pound</u>
Ba 73-540	1,357,914
Kelly	921,166
Abbey	1,003,037
Coventry	1,246,200
Estate	1,275,740
Chateau	1,300,105
Adelphi	1,383,976
America	1,659,824
Gnome	1,017,641
Baron	1,051,693
Birka	1,223,530
Bonnieblue	1,135,303
Bristol	1,270,821
Eclipse	1,335,668
Fylking	1,130,000
Glade	1,108,441
Marquis	1,054,642
Kenblue	1,463,923
Merit	1,109,728
Nassau	1,127,130
Newport	1,226,481
Park	1,248,349
Sydsport	1,355,644

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Plant 8,490

Page 4 of 4

DATED : December 7, 1993

INVENTOR(S) : Virgil D. Meier, Eugene W. Mayer

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

Vantage	1,555,303
Victa	1,038,298
Windsor	1,520,885

Signed and Sealed this

Twenty-eight Day of March, 1995

Attest:



BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks