United States Patent [19]

Meier et al.

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[54] **KENTUCKY BLUEGRASS 'BA 72-492'**

[75] Inventors: **Virgil D. Meier; Eugene W. Mayer,** both of Marysville, Ohio

[73] Assignee: **The O. M. Scott & Sons Company,** Marysville, Ohio

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[58] **Field of Search** Plt./88

Primary Examiner—James R. Feyrer

[57] **ABSTRACT**

A variety of Kentucky bluegrass having a high level of disease resistance, excellent turf performance in the sun and shade and a medium level of seed yield potential.

1 Drawing Sheet

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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 patent application, Ser. No. 872,537, filed June 10, 1986; U.S. Plant patent application, Ser. No. 910,146, filed Sept. 19, 1986; and U.S. Plant patent application, Ser. No. 028,424, filed of even date herewith.

SUMMARY OF THE VARIETY

The present invention relates to a new and distinct variety of *Poa pratensis* which has been designated Ba 72-492 Kentucky bluegrass.

Ba 72-492 plant material originated by crossing a Kentucky bluegrass plant ("Gnome") disclosed in U.S. Plant patent application Ser. No. 872,537, the seed parent, with a pollen parent plant. As a result of this breeding, a distinct variety was produced and asexually propagated by rhizomes, tillers and disseminules. Seed of Ba 72-492 was produced first at Marysville, Ohio and later at Gervais, Oreg.

Asexual reproduction of Ba 72-492 by propagules (tillers and rhizomes) and by disseminules (modified caryopses produced by apomixis) has consistently produced plants indistinguishable from the mother plant.

Ba 72-492 has a number of highly desirable characteristics including a good level of resistance to Helminthosporium spp that causes leaf spot, melting out and crown rot, *Ustilago striiformis* that causes stripe smut, *Erysiphe graminis* that causes powdery mildew, and Puccinia spp. that causes rust; an attractive leafy turf type growth habit; moderately wide leaf blades; an attractive green color which can be maintained throughout the entire growing season; good turf performance as evidenced by consistently high scores in tests throughout the U.S.A. and Canada; and a medium seed yield potential in the bluegrass seed production region of the U.S.A.

In comparison with its seed parent, Gnome, the new variety is more shade tolerant and has better resistance to powdery mildew and rust. In comparison to another Kentucky bluegrass (Ba 72-500) which is disclosed in U.S. Plant patent application Ser. No. 910,146 which also has Gnome as its seed parent, Ba 72-492 produces seeds that are shorter than Ba 72-500 and the panicle of Ba 72-492 does not nod as much as Ba 72-500.

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BRIEF DESCRIPTION OF THE DRAWING

FIG. **1** is a photograph of Ba 72-492 Kentucky bluegrass plant in the vegetative stage including the extensive root and rhizome system;

FIG. **2** is a photograph of Ba 72-492 Kentucky bluegrass panicle; and

FIG. **3** is a photograph of Ba 72-492 Kentucky bluegrass seed.

DETAILED DESCRIPTION OF THE VARIETY

Ba 72-492 Kentucky bluegrass (*Poa protensis* L.) is perennial with creeping rhizomes forming a moderately dense turf. When plants overwinter in the field with freezing temperatures and then are brought into the greenhouse during late winter to continue growth undisturbed by clipping under moderate temperatures (60°-80° F.), culms are erect averaging 486 mm in length with an average of 2.2 nodes per culm. The uppermost internode averages 10.5 cm, and the peduncle averages 12.6 cm in length and 0.552 mm in thickness. The flag leaf averages 5.2 cm in length, 3.6 mm in width and 0.117 mm in thickness. The panicle is generally erect as opposed to nodding with an average length of 12.6 cm, width of 4.2 cm, and 5.5 whorls. The lowest whorl has an average of 4.0 branches and the third whorl from the bottom of the panicle has an average of 3.0 branches. The average spikelet at the tip of a branch in the lowest whorl is 5.2 mm in length and has 4.4 florets with an outer glume of 2.9 mm and an inner glume of 3.3 mm in length. A similar spikelet from the third whorl from the bottom of the panicle is 5.0 mm in length and has 4.2 florets with an outer glume of 3.0 mm and an inner glume of 3.3 mm in length. After the seed has been conditioned, the lemma has a generally smooth keel and almost no long fine hairs at the base. The seed of Ba 72-492 is 2.53 mm in length and 0.76 mm in width with approximately 1,275,740 seeds per pound. Comparisons of Ba 72-492 with other bluegrass varieties on seed dimensions are shown in Table 1 and on seed numbers per pound are shown in Table 2.

TABLE 1

Seed Measurements of Ba 72-492 and Other Bluegrass Varieties After Conditioning

Variety	Length (mm)	Width (mm)
Ba 72-492	2.53	0.76
Ba 70-139	2.86	0.78
Ba 72-500	2.77	0.80
Baron	3.07	0.86

TABLE 1-continued

Seed Measurements of Ba 72-492 and Other Bluegrass Varieties After Conditioning

Variety	Length (mm)	Width (mm)
Bristol	2.73	0.80
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

TABLE 2

Seed Counts per Pound of Ba 72-492 and Other Bluegrass Varieties After Conditioning

	Number of Seeds Per Pound
Ba 72-492	1,275,740
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
Classic	1,250,316
Eclipse	1,335,668
Georgetown	1,232,913
Glade	1,108,441
Kenblue	1,463,923
Merit	1,109,728
Nassau	1,127,130
Newport	1,226,481
Park	1,248,349
Sydsport	1,355,644
Vantage	1,555,303
Victa	1,038,298

Since environmental conditions such as soil and climate may influence morphological characters to some extent, comparisons of morphological characteristics of Ba 72-492 are made with other Kentucky bluegrass varieties in Tables 3-7.

TABLE 3

Morphological Comparisons of Ba 72-492 and Other Bluegrass Varieties Grown As Unmowed Spaced Plants in the Field at Marysville, Ohio.

	Mature Plant Height 2 Year Mean	Leaf Blade Width Annual	Panicle Density 2 Year Mean
Ba 74-492	40	2.4	52
A-34	63	2.4	61
Bristol	31	2.0	38
Glade	35	2.3	58
Kenblue	51	2.0	43
Merion	28	2.3	26
Nugget	23	2.1	34
Parade	53	3.0	67
Park	51	2.1	54
P-104	39	2.4	33
Vantage	54	2.3	52
Victa	38	2.5	49

Ratings:
Mature Plant Height (cm) - includes panicles.
Leaf Blade Width - 1-4, 4 = wide blade.
Panicle Density - 1-100, 100 = high panicle density

TABLE 4

Morphological Comparison of Panicles of Ba 72-492 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.

	Panicle	Panicle	Panicle	Number of Whorls

TABLE 4-continued

Morphological Comparison of Panicles of Ba 72-492 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.

Variety	Nodding*	Length (cm)	Width (cm)	Per Panicle
Ba 72-492	1.2	7.5	4.2	5.5
Ba 70-139	2.0	6.7	3.7	4.8
Ba 72-500	2.0	6.8	3.8	5.0
Baron	1.0	7.8	4.1	5.2
Bristol	2.0	9.7	5.0	5.0
Nassau	2.0	10.0	6.0	5.0
Newport	2.0	10.3	4.4	4.5
Park	1.6	9.0	3.7	4.0
Ram I	2.0	9.0	4.7	4.0
Victa	1.2	7.5	4.1	5.4
LSD (.05)	0.5	1.6	1.0	0.8

	Number of Branches		Peduncle Length	Peduncle Width
Variety	Lower Whorl	Third Whorl	(cm)	(mm)
Ba 72-492	4.0	3.0	12.6	0.558
Ba 70-139	3.8	2.7	13.2	0.610
Ba 72-500	4.0	2.4	12.9	0.660
Baron	3.8	2.5	12.7	0.559
Bristol	3.3	2.7	15.0	0.686
Nassau	3.0	2.0	8.0	0.533
Newport	2.3	2.3	18.0	0.558
Park	4.3	3.7	14.3	0.787
Ram I	2.5	2.0	18.5	0.610
Victa	4.4	3.4	12.2	0.711
LSD (.05)	0.7	0.8	3.7	0.018

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

TABLE 5

Morphological Comparison of Culms and Flag Leaves of Ba 72-492 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.

Variety	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Thickness (mm)
Ba 72-492	5.2	3.6	0.117
Ba 70-139	4.7	3.2	0.112
Ba 72-500	4.1	3.2	0.112
Baron	4.5	3.2	0.119
Bristol	5.5	3.4	0.127
Nassau	6.2	3.1	0.127
Newport	6.1	3.5	0.135
Park	4.2	2.6	0.109
Ram I	4.7	3.1	0.127
Victa	5.9	4.0	0.124
LSD (.05)	1.8	0.6	0.013

Variety	Top Internode Length (cm)	Culm Length (mm)	Number of Nodes Per Culm
Ba 72-492	10.5	486	2.2
Ba 70-139	10.2	435	2.7
Ba 72-500	9.8	439	2.7
Baron	10.1	482	2.5
Bristol	11.3	522	2.7
Nassau	11.2	450	2.5
Newport	11.2	547	2.3
Park	13.0	578	3.0
Ram I	10.2	527	3.0
Victa	10.6	474	2.4
LSD (.05)	2.1	79	0.6

TABLE 6

Morphological Comparison of Spikelets and Florets of Ba 72-492 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.

	Spikelet Length (mm)		Number of Florets per Spikelet	
Variety	Lowest Whorl	Third Whorl	Lowest Whorl	Third Whorl
Ba 72-492	5.2	5.0	4.4	4.2
Ba 70-139	5.2	5.2	4.2	4.0
Ba 72-500	5.1	5.0	4.2	3.9
Baron	5.0	5.0	3.7	3.8

TABLE 6-continued

Morphological Comparison of Spikelets and Florets of Ba 72-492 and Other Bluegrass Varieties in the Greenhouse at Marysville, Ohio.

Bristol	6.2	6.0	5.7	5.3
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

	Glume Length (mm)			
	Outer		Inner	
Variety	Lowest Whorl	Third Whorl	Lowest Whorl	Third Whorl
Ba 72-492	2.9	3.0	3.3	3.3
Ba 70-139	3.2	3.1	3.5	3.5
Ba 72-500	3.1	3.1	3.4	3.4
Baron	2.9	2.8	3.4	3.3
Bristol	3.4	3.3	3.7	3.9
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 7

Morphological Comparison of Leaves of Ba 72-492 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 72-492	0.28	239	4.4	52
Ba 70-139	0.26	218	4.1	55
Ba 72-500	0.25	204	4.1	50
Baron	0.30	313	4.4	63
Bristol	0.30	253	4.3	37
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

Variety	Hairs[a] Around Ligule on Upper Surface of the Leaf	Hairs[a] on Collar	Hairs[b] on Ligule
Ba 72-492	1.0	3.2	1.3
Ba 70-139	1.0	3.5	1.5
Ba 72-500	1.0	3.5	2.7
Baron	1.0	5.0	4.0
Bristol	1.3	4.7	4.3
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 1–5: 1 = none, 5 = many.
[b]Hairs on ligule rated 0–5: 0 = none, 5 = many.

Ba 72-492 has performed well throughout the U.S.A. and Canada as exhibited by high turf quality ratings in many different locations in comparison to other varieties as shown in Table 8.

TABLE 8

Comparison of the Turf Quality of Ba 72-492 and Other Bluegrass Varieties in the U.S.A. and Canada

Variety	St. Louis Missouri 1 Year Mean	Winnipeg Manitoba 2 Year Mean	Beltsville Maryland 1 Year Mean	Adelphia New Jersey 2 Year Mean
Ba 72-492	3.2	6.4	5.7	6.2

TABLE 8-continued

Comparison of the Turf Quality of Ba 72-492 and Other Bluegrass Varieties in the U.S.A. and Canada

Variety	Lincoln Nebraska 2 Year Mean	Agassiz British Columbia 1 Year Mean	Gervais Oregon 3 Year Mean	Marysville Ohio 5 Year Mean
Ba 72-492	6.0	5.5	2.6	2.8
A-34	6.2			
Adelphi	6.1		2.4	2.7
Admiral				
America			2.5	
Aquila				
Banff				
Baron	5.6			
Birka	5.9			
Bonnieblue	5.8			
Bono		5.2		
Bristol	5.9	6.1	2.8	2.7
Cheri	6.3			
Columbia				
Eclipse	5.8			
Enmundi	5.9			
Fylking	6.1			
Geary				
Georgetown		4.9		
Geronimo		5.1		
Glade	6.4		2.5	
Gnome			2.3	
Kenblue			1.4	
Melba		5.9		
Merion	5.9	5.3		
Merit	6.0	4.9	2.4	
Midnight	5.9			
Monopoly				
Mosa				
Mystic				

Variety				
A-34		6.6	5.6	
Adelphi	2.9		5.9	6.4
Admiral		6.0		
America	2.8			
Aquila		7.1		5.7
Banff			4.8	
Baron	2.7	6.2	5.3	6.4
Birka	2.3			5.9
Bonnieblue			5.0	6.7
Bono				
Bristol	2.7		5.0	6.5
Cheri			5.1	6.0
Columbia			4.9	5.9
Eclipse			5.9	7.2
Enmundi			5.5	6.3
Fylking			4.9	5.7
Geary				3.6
Georgetown				
Geronimo				
Glade	2.8		5.3	6.7
Gnome	2.9			6.4
Kenblue				3.3
Melba		6.9		
Merion			5.3	6.0
Merit	2.8	6.5	6.1	6.2
Midnight			5.5	7.3
Monopoly			4.9	5.7
Mosa				
Mystic		6.6		
Nassau		5.9	4.5	5.9
Newport				
Nugget		7.1		
Parade			5.0	5.6
Park	1.8			
Ram I			4.6	6.2
Rugby				
SD Common				3.2
Shasta		7.1		5.7
Sydsport	2.7		5.8	6.0
Touchdown	2.7	6.8	5.8	6.1
Trampas		6.3		
Trenton				
Vantage	2.6		5.5	3.6
Victa	2.8		5.5	6.5
Wabash				4.8

TABLE 8-continued

Comparison of the Turf Quality of Ba 72-492 and Other Bluegrass Varieties in the U.S.A. and Canada

Variety	Prince Frederick Maryland 4 Year Mean	Somis California 1 Year Mean	Marysville Ohio 2 Year Mean
Ba 72-492	2.2	2.8	2.3
A-34			
Adelphi	2.4		1.9
Admiral			
America			
Aquila			
Banff			
Baron	2.4		
Birka	1.8		
Bonnieblue	2.3		
Bono	1.9		
Bristol	2.3	3.0	2.1
Cheri			
Columbia	2.5		
Eclipse			
Enmundi			
Fylking			
Geary			
Georgetown			
Geronimo			
Glade			2.0
Gnome			2.0
Kenblue	1.8		
Melba			
Merion			
Merit	2.3		
Midnight	2.4		
Monopoly			
Mosa		2.3	
Mystic			
Nassau			
Newport			
Nugget			
Parade			
Park	2.0		
Ram I	2.4		
Rugby	2.2		
SD Common			
Shasta			
Sydsport			2.0
Touchdown			
Trampas			
Trenton	2.4		
Vantage	2.3		
Victa	2.3	2.5	2.0
Wabash			
Nassau			
Newport			1.4
Nugget			
Parade	6.5		2.7
Park	5.7		2.1
Ram I	5.9		
Rugby			
SD Common			
Shasta			
Sydsport	6.3		
Touchdown	5.9		
Trampas		5.7	
Trenton	5.8		2.6
Vantage	5.7	2.2	2.6
Victa			
Wabash			

Rating Scale: Larger number indicates higher quality.

In addition, Ba 72-492 tolerates shady growing conditions very well which is an important characteristic that allows an even broader range of use. Comparisons of Ba 72-492 and other varieties for shade performance are found in Table 9 and Table 10.

TABLE 9

Turf Performance Ratings Under Natural Shade of Ba 72-492 and Other Bluegrass Varieties at Marysville, Ohio

	Quality				4 Yr
	Year 1	Year 2	Year 3	Year 4	Mean
Ba 72-492	2.2	2.6	2.5	2.6	2.5
Merion	1.8	1.6	2.0	1.8	1.8
Fylking	1.8	1.9	1.9	2.0	1.9
A-34	2.0	2.2	2.6	2.7	2.4
Park	1.7	1.8	1.9	2.0	1.9
Newport	1.9	1.7	1.9	2.1	1.9
Bristol	1.8	2.1	2.2	1.8	2.0
Enmundi	2.0	2.0	2.2	2.5	2.2
Bonnieblue	2.0	1.7	2.0	1.7	1.9
Touchdown	1.8	2.1	2.1	1.7	1.9
Aquila	1.8	1.7	1.7	2.1	1.8
Parade	1.8	2.0	2.2	1.8	2.0
Victa	2.0	1.5	1.8	2.0	1.8
LSD (.05)		.46		.47	

Rated 1–4, 4 = Best

TABLE 10

Turf Performance Ratings Under Natural Shade of Ba 72-492 and Other Bluegrass Varieties at Gervais, Oregon

	Year 1				Quality Year 2		
	June	Aug.	Oct.	Mean	Feb.	Sept.	Mean
Ba 72-492	3.3	3.2	2.8	3.1	2.5	2.8	2.7
Bristol	2.5	2.8	2.3	2.6	3.0	1.7	2.4
Gnome	3.5	1.0	1.0	1.8	1.0	0.5	.8
Victa	2.8	1.8	1.7	2.1	2.0	1.8	1.9
LSD(.05)	.97	.97	.63		.95	.96	

	Year 3 Feb.	Year 4 May	4 Yr Mean
Ba 72-492	2.2	1.8	2.5
Bristol	2.0	2.3	2.3
Gnome	1.3	2.3	1.6
Victa	1.8	1.0	1.7
LSD(.05)	.83	.80	

Rated 1–4, 4 = Best

The new variety has a pleasant medium green color which can be maintained throughout the growing season and widely scattered locations in the U.S.A. and Canada as shown by the comparative test results in Table 11.

TABLE 11

Comparison of Turf Color of Ba 72-492 and Other Bluegrass Varieties at Various Locations in the U.S.A. and Canada.

Variety	St. Louis Missouri 1 Year Mean	Truro Nova Scotia 1 Year Mean	Winnipeg Manitoba 1 Year Mean	Lincoln Nebraska 2 Year Mean	Agassiz British Columbia 1 Year Mean
Ba 72-492	9.2	7.1	7.2	7.0	5.7
A-34			6.3	6.5	
Adelphi	9.4			7.2	
America	9.4			7.0	
Aquila			7.3	6.7	
Baron	9.2		7.3	6.9	
Birka	9.1			6.7	
Bonnieblue				7.0	
Bono	9.0				6.0
Bristol	9.5			7.3	7.0
Cheri				7.0	
Eclipse				7.0	
Enmundi				7.0	
Fylking				6.8	
Georgetown					6.2
Geronimo					5.8
Glade	9.3			7.1	
Gnome	9.3	7.5			
Kenblue					
Melba		6.9			
Merion				6.9	5.7

TABLE 11-continued

Comparison of Turf Color of Ba 72-492 and Other Bluegrass Varieties at Various Locations in the U.S.A. and Canada.

Variety	Gervais Oregon 3 Year Mean	Marysville Ohio 4 Year Mean	Prince Frederick Maryland 4 Year Mean	Somis California 1 Year Mean
Ba 72-492	6.9	7.2	7.6	6.7
A-34				
Adelphi	7.6		7.4	
America	7.6			6.5
Aquila				
Baron				
Birka				6.3
Bonnieblue				
Bono				6.2
Bristol	9.3	7.8	8.3	7.6
Cheri				
Eclipse				
Enmundi				
Fylking		6.6		
Georgetown				
Geronimo				
Glade	8.3		8.0	7.0
Gnome	7.4			
Kenblue	6.6	7.2		5.8
Melba				
Merion		6.9		
Merit	7.4	7.1	7.4	5.8
Midnight				5.5
Mystic				
Nassau				
Newport	7.5	7.0		6.0
Nugget				
Parade				
Park			6.8	
Ram I				7.3
Rugby				6.7
Shasta				
Sydsport		7.1		
Touchdown				
Trampas				
Vantage		6.9	6.8	5.7
Victa	7.1	7.1	7.6	6.0

Variety	St. Louis[a]	Beltsville[b]	Adelphia[b]	Agassiz[c] British
Merit	9.2		7.2	7.0 6.5
Midnight			8.1	7.9
Mystic			6.5	
Nassau			7.2	
Newport				
Nugget			7.3	
Parade				6.8
Park	9.0			6.1
Ram I				7.3
Rugby				6.8
Shasta			7.2	
Sydsport	9.2			7.0
Touchdown	9.0		6.6	6.8
Trampas		6.9		
Vantage	9.2			6.8
Victa	9.2	7.5		6.9

Rating Scale: Larger number indicates darker green color.

Turf diseases are one of the major causes of inconsistent and poor turf performance among locations and years. Comparisons of resistance to leaf spot (also known as melting out and crown rot) caused by *Helminthosporium vagans,* powdery mildew caused by *Erysiphe graminis,* rust caused by Puccinia spp., dollarspot caused by *Sclerotina homeocarpa,* and red thread caused by *Corticium fuciform* are presented in Tables 12,13,14,15,16 and 17, respectively.

TABLE 12

Comparison of Leafspot Disease Incidence on Ba 72-492 and Other Bluegrasses at Several Locations in the U.S.A. and Canada.

TABLE 12-continued

Comparison of Leafspot Disease Incidence on Ba 72-492 and Other Bluegrasses at Several Locations in the U.S.A. and Canada.

Variety	Missouri 1 Year Mean	Maryland 1 Year Mean	New Jersey 1 Year Mean	Columbia 1 Year Mean
Ba 72-492	3	8.3	6.3	3.0
A-34		5.3	4.3	
Adelphi	2	8.0	5.7	
America	8			
Aquila			6.3	
Banff		5.3	7.0	
Baron	2	7.0	8.7	
Birka	5		6.3	
Bonnieblue			7.0	
Bono	7			3.0
Bristol	2	7.0	8.3	2.3
Cheri		6.3		
Columbia		5.7	6.3	
Eclipse		7.7	9.0	
Enmundi		7.0		
Fylking		6.7	6.3	
Geary			2.0	
Georgetown				4.3
Geronimo				4.7
Glade	2	7.3	6.3	
Gnome	2	7.0	8.0	
Kenblue		3.3	1.7	
Merion		6.3	7.7	3.0
Merit	3	7.3	7.7	
Midnight		7.0	7.0	
Monopoly		5.3	6.0	
Nassau		7.7	7.4	
Newport				
Parade		6.0	5.0	
Park	52			
Ram I		6.5	7.0	
Regent				3.7
Rugby			5.0	
Shasta			6.0	
Sydsport	3	7.3	6.3	
Touchdown	7	7.7		
Trenton			6.0	
Vantage	7	5.0	2.0	
Victa	2	8.0	7.0	
Wabash			2.0	
LSD (.05)	7		1.9	

Variety	Gervais[a] Oregon 3 Year Mean	Marysville[1] Ohio 5 Year Mean	Marysville[a] Ohio(Shade) 1 Year Mean
Ba 72-492	22	4	0
A-34			
Adelphi	46	9	
America	29		0
Aquila			
Banff			
Baron			
Birka			0
Bonnieblue			
Bono			
Bristol	8	5	2
Cheri			
Columbia			
Eclipse			
Enmundi			
Fylking			
Geary			
Georgetown			
Geronimo			
Glade	46		0
Gnome	76		0
Kenblue	75		67
Merion			
Merit	65		
Midnight			
Monopoly			
Nassau			
Newport	45		
Parade		10	
Park		54	
Ram I			

TABLE 12-continued

Comparison of Leafspot Disease Incidence on Ba 72-492 and Other Bluegrasses at Several Locations in the U.S.A. and Canada.

Regent			
Rugby			
Shasta			
Sydsport			
Touchdown			0
Trenton			
Vantage		15	
Victa	70	7	0
Wabash			
LSD (.05)	15	5	4

Ratings
[a]% of turf affected by disease
[b]1-9, 9 = least disease
[c]1-9, 9 = most disease

TABLE 13

Comparison of Powdery Mildew Disease Incidence on Ba 72-492 and Other Bluegrasses.

	Gervais	Natural Shade[b]	
Variety	Oregon 1 Year Mean	Marysville Ohio 3 Year Mean	Marysville Ohio 2 Year Mean
Ba 72-492	5	3	5
A-34			
Adelphi			
America			7
Banff		15	
Birka			2
Bristol	3	10	1
Eclipse			3
Geronimo			40
Glade		37	21
Gnome	78		61
Kenblue			2
Merion			
Monopoly		2	
Mosa			
Newport		33	
Nugget			
Parade			
Park			
Rugby		15	
Touchdown			0
Vantage			
Victa	35	47	52
LSD (.05)	21	16	6

Variety	Prince Frederick Maryland 1 Year Mean	Spaced Plants - Sun[b] Marysville Ohio 2 Year Mean
Ba 72-492	2	14
A-34	2	52
Adelphi	12	23
America		
Banff		
Birka		
Bristol	1	15
Eclipse		
Geronimo		
Glade	57	8
Gnome		
Kenblue		20
Merion		12
Monopoly		
Mosa	58	
Newport		
Nugget		5
Parade		5
Park		15
Rugby		
Touchdown		
Vantage		34
Victa	25	14
LSD (.05)	13	

[a]Rated 0-9,9 = least disease
[b]Rated as % of turf affected by disease

TABLE 14

Comparison of Stem Rust (*Puccinia graminis*) Disease Incidence on Ba 72-492 and Other Bluegrasses at Adelphia, New Jersey

Ba 72-492	7.9
Midnight	7.0
Columbia	6.7
Banff	6.5
Bristol	7.7
Parade	6.2
Monopoly	7.1
Ram I	7.0
Victa	5.6
Merit	5.7
Baron	6.4
Nassau	6.8
Eclipse	4.7
Aquila	6.9
Bonnieblue	5.4
Adelphi	7.1
America	7.4
Vantage	6.2
Touchdown	3.5
Birka	3.5
Merion	2.4
LSD (.05)	0.9

Rated 1-9, 9 = No disease

TABLE 15

Comparison of Rust (Puccinia spp.) Disease Incidence on Ba 72-492 and Other Bluegrasses.

Variety	Turf Aggasiz[a] British Columbia 2 Year Mean	Gervais[b] Oregon 1 Year Mean	Unmowed Spaced Plants Marysville[b] Ohio 2 Year Mean
Ba 72-492	1.2	2	9
A-34			12
Adelphi		23	10
America		9	
Bono	2.1		
Bristol	1.2	6	17
Geronimo	1.5		
Glade		4	11
Gnome		13	
Kenblue		30	23
Merion	2.8		16
Merit	2.9	8	
Newport		23	
Nugget			12
Parade			15
Park			25
Vantage			36
Victa		9	14
LSD (.05)		12	

[a]Rated 1-9, 9 = most disease
[b]Rated as % of disease incidence

TABLE 16

Comparison of Dollarspot Incidence on Ba 72-492 and Other Bluegrasses.

Variety	Prince Frederick Maryland	Marysville Ohio
Ba 72-492	9	60
Adelphi	8	20
America		13
Baron	50	23
Birka	6	47
Bonnieblue	10	
Bono	4	63
Bristol	6	17
Columbia	10	
Eclipse		8
Glade		40
Gnome		22
Kenblue	8	37
Merit	4	
Midnight	6	

TABLE 16-continued

Comparison of Dollarspot Incidence on Ba 72-492 and Other Bluegrasses.

Variety	Prince Frederick Maryland	Marysville Ohio
Park		33
Ram I	40	
Rugby	12	
Sydsport		43
Touchdown		50
Trenton	28	
Vantage	11	15
Victa	5	23
Wabash	11	
LSD (.05)	19	24

Rating: % of turf that is affected by disease.

TABLE 17

Comparison of Red Thread Disease Incidence on Ba 72-492 and Other Bluegrasses at Gervais, Oregon.

	Red Thread
Ba 72-492	7
Victa	10
Bristol	0
Glade	15
Adelphi	0
Kenblue	23
Newport	3
America	2
Merit	7
Gnome	0
LSD (.05)	13

Rating: % of turf affected by disease

Tests in Maryland and Ohio indicate that Ba 72-492 is not highly susceptible to stripe smut caused by *Ustilago striiformis* since some unreleased selections of bluegrass had a high incidence of stripe smut but Ba 72-492 was not affected.

The new variety has a low growth habit and a slower vertical growth rate than many varieties and especially the common type of varieties such as Park, Kenblue and Newport, as indicated by comparisons in Table 18, which should allow it to tolerate lower mowing heights and possibly decrease the total number of mowings per year without sacrificing overall turf performance.

TABLE 18

Comparison of Growth Habit of Ba 72-492 and Other Bluegrasses at Marysville, Ohio.

Variety	Test 1 1 Year Mean[a]	Test 2 2 Year Mean[a]	Test 3 3 Year Mean[b]
Ba 72-492	2.0	1.4	74
Adelphi	2.0	2.4	
America	1.8		
Baron	1.8		
Birka	2.0		
Bono	2.0		
Bristol	2.0	2.0	74
Eclipse	2.0		
Fylking			93
Glade	2.2		
Gnome	2.0		
Kenblue	2.9		96
Merion			78
Merit			84
Newport			100
Parade		2.2	
Park	2.9	2.2	
Sydsport	1.9		72
Touchdown	2.0		
Vantage	2.7	2.0	84
Victa	1.9	2.0	77

TABLE 18-continued

Comparison of Growth Habit of Ba 72-492 and Other Bluegrasses at Marysville, Ohio.

Variety	Test 1 1 Year Mean[a]	Test 2 2 Year Mean[a]	Test 3 3 Year Mean[b]
LSD (.05)	0.3	0.5	12

[a]Rated 1-5, 5 = high growth, 1 = dwarf.
[b]Rated as height (mm) of turf about one week after last mowing.

The leaf texture of Ba 72-492 is similar to many bluegrass varieties when maintained under mowed turf conditions as the comparisons show in Table 19.

TABLE 19

Comparison of Leaf Texture of Ba 72-492 and Other Bluegrasses Under Mowed Turf Conditions.

Variety	St. Louis Missouri	Agassiz British Columbia	Marysville Ohio
Ba 72-492	4.0	6.0	5.0
Adelphi	5.3		
America	6.0		
Baron	4.6		
Birka	6.0		
Bono	5.6	6.7	
Bristol	5.3	7.0	5.0
Fylking			5.8
Geronimo		5.7	
Glade	6.0		
Gnome	4.3		
Kenblue			5.5
Merion		6.3	5.0
Merit	4.3	5.0	5.0
Newport			5.0
Park	6.0		
Sydsport	5.0		5.0
Touchdown	5.0		
Vantage	6.0		5.3
Victa	4.4		4.8
LSD (.05)	0.7		0.4

Rating: 1-9, 9 = finest texture.

Ba 72-492 has a medium level of seed yielding ability which should make it an economically feasible variety to produce for commercial markets as shown in Table 20.

TABLE 20

Seed Yield Comparisons of Ba 72-492 and Other Bluegrass Varieties in Oregon

	Gervais			La Grande			
Variety	Year 1	Year 2	Mean	Year 1	Year 2	Mean	Madras Year 1
Ba 72-492	585	864	725	1025	846	936	875
Ba 72-500	559	757	658	876	857	867	1113
Victa	780	1394	1087	1419	1200	1310	1324
Newport	435	1256	846				
Bristol	347	808	578	1089	970	1030	
Mosa	322	1060	691				
Julia	296	1016	656				1194
Trampas							388
LSD (.05)	140	134		149	181	220	

Ratings: Pounds per acre of conditioned seed.

The low susceptibility of Ba 72-492 to rust and lodging under typical seed field conditions should aid in producing economical seed crops as noted by the comparative results on Table 21.

TABLE 21

Plant Characteristics of Ba 72-492 and Other Bluegrass Varieties at Gervais, Oregon Under Seed Production Conditions.

	Rust	Lodging	
	Year 1	Year 1	Year 2
Ba 72-492	1	2.5	0.2

TABLE 21-continued

Plant Characteristics of Ba 72-492 and Other Bluegrass Varieties at Gervais, Oregon Under Seed Production Conditions.

	Rust	Lodging	
	Year 1	Year 1	Year 2
Victa	2	2.0	0
Bristol	4	4.0	1
Newport	4	4.0	1
Mosa	4	2.0	0

TABLE 21-continued

Plant Characteristics of Ba 72-492 and Other Bluegrass Varieties at Gervais, Oregon Under Seed Production Conditions.

	Rust	Lodging	
	Year 1	Year 1	Year 2
Julia	4	5.0	4

Ratings
Rust: 1–4, 4 = very susceptible
Lodging: 0–5, 5 = severe lodging

What is claimed is:

1. A variety of Kentucky bluegrass plant, substantially as shown and described, characterized particularly by a high level of resistance to diseases, a desirable green color throughout the growing season, a high quality persistent turf under a wide range of environmental conditions including shady conditions and a medium level of seed yielding capacity.

* * * * *

FIG. 1

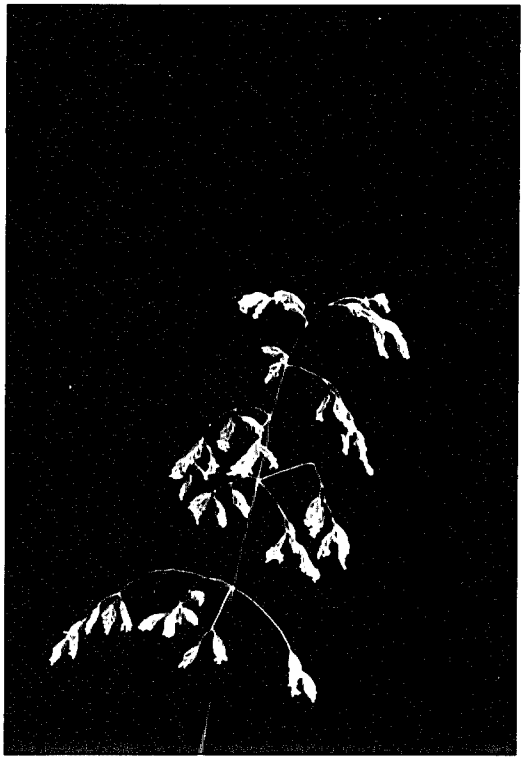

FIG. 2

FIG. 3