

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Van Engelen Zaden B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

KENTUCKY BLUEGRASS

'Enmundi'

In Testimony Whereof, I have hereunto set
 my hand and caused the seal of the Plant
 Variety Protection Office to be affixed
 at the City of Washington
 this eighth day of August in
 the year of our Lord one thousand nine
 hundred and seventy-five

Attest:

J. J. Rollin
 Commissioner
 Plant Variety Protection Office
 Grain Division
 Agricultural Marketing Service

Earl L. Bets

Secretary of Agriculture



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION Enmundi (EVB 282)		2. KIND NAME Kentucky Bluegrass		FOR OFFICIAL USE ONLY	
3. GENUS AND SPECIES NAME Poa pratensis		4. FAMILY NAME (Botanical) Graminea		PV NUMBER 7400017	
5. DATE OF DETERMINATION Summer 1965		FILING DATE 9/10/73		TIME 11:45 A.M.	
6. NAME OF APPLICANT(S) Van Engelen Zaden B.V.		7. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) Vijfhoevenlaan 4, Vlijmen Netherlands		FEE RECEIVED \$ 250.00 \$ 250.00 \$ 250.00	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. STATE OF INCORPORATION Netherlands		BALANCE DUE \$ — \$ — \$ —	
				8. TELEPHONE AREA CODE AND NUMBER 04108-3251	
				11. DATE OF INCORPORATION	

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Messrs. International Seeds Inc.
820 First Street P.O. Box 168
Halsey/Oregon
97348

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- 13B. Exhibit B, Botanical Description of the Variety
- 13C. Exhibit C, Objective Description of the Variety
- 13D. Exhibit D, Data Indicative of Novelty
- 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B. and 14C. below.) YES NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? YES NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? FOUNDATION REGISTERED CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

August, 17th 1973
(DATE)

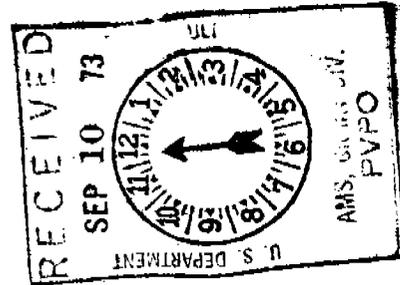
(SIGNATURE OF APPLICANT)

1

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

Kentucky Bluegrass Enmundi
Application Variety Protection

Exhibit A.

Origine and Breeding-history of the variety.

In July 1965 we harvested seed on a spaced plant nursery of collected material. The mother-plant of the variety Enmundi did give sufficient seed to establish a small plot in our trials, that were established in 1966. The mother-plant was cloned and in 1966 we harvested seed for more intensive testing. The results of these tests were very satisfactory and in 1968 we established our first multiplications. In any of these multiplications this variety appeared to be highly apomyctic as we did find only a very limited number of off-types. Seed from later multiplications is used extensively for testing purposes as well in Europe as in Northern America.

Kentucky Bluegrass Enmundi
Application Variety Protection

Exhibit B, botanical description

The official Dutch description, prepared by the "Raad voor het Kwekersrecht" (= Board for Plant Breeders Rights) - see appendix 1 - gives the following description:

Leaves of vegetative tiller: sheaths of seedlings not red; with glabrous edges, without hairtufts beneath auricles.

ligule glabrous

leaf blades rather wide; with fringe of hairs on auricles; upper and lower surface glabrous

Culms:

short

Panicles:

not red, no bend in rachis at the lowest whorl.
collar open.
branches at lower whorl horizontal.

Seed:

large

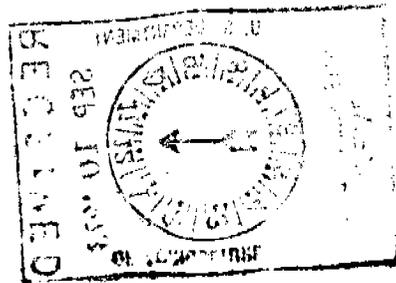
date of anthesis:

late

Difference with other varieties:

The combination of the above mentioned characteristics characterizes this variety.

3



ENMUNDI Poa pratensis
Application No. 740017

EXHIBIT A

Frequency and description of variants.

Enmundi is highly apomictic, averaging from 95 to 98% apomictic progeny. The 2 to 5% off-types do not show particular characteristics but are usually smaller and less vigorous than apomictic progeny.

EXHIBIT C

1. Panicle Habit:

The panicle habit of Enmundi is upright.

2. Seed:

The average seed length of Enmundi is 2.7 mm; the 10,000 seed weight has, depending on lot, ranged from 4.25 g to 5.00 g with the average being 4.65 grams.

OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS (POA SPP.)

NAME OF APPLICANT(S) Van Engelen Zaden B.V.	FOR OFFICIAL USE ONLY
	PVPO NUMBER 74 00017
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Vlijmen, Holland Vijfhoevenlaan 4 P.O. Box 35	VARIETY NAME OR TEMPORARY DESIGNATION ENMUNDI (EVB 252)

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. or) when number is either 99 or less or 9 or less.

1. KIND:
 1 = POA COMPRESSA 2 = P. PRATENSIS 3 = P. TRIVIALIS 4 = OTHER (Specify) _____

2. REGION OF BEST ADAPTATION:
 1 = NORTHEAST 2 = TRANSITIONAL ZONE 3 = NORTH CENTRAL 4 = PACIFIC N.W. 5 = OTHER (Specify) _____

3. MATURITY (At First Anthesis):
 1 = EARLY (Delta) 2 = MEDIUM EARLY (Fylking) 3 = MEDIUM (Newport) 4 = LATE (Merion)

<input type="text" value="0"/> <input type="text" value="1"/>	NUMBER OF DAYS EARLIER THAN	<input type="text" value="4"/>	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value="0"/> <input type="text" value="1"/>	NUMBER OF DAYS LATER THAN	<input type="text" value="4"/>	

4. PLANT HEIGHT (Longest Shoot from Soil Surface to Top of Head):

CM. HEIGHT

<input type="text" value="0"/> <input type="text" value="4"/>	CM. SHORTER THAN	<input type="text" value="4"/>	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value="0"/> <input type="text" value="4"/>	CM. TALLER THAN	<input type="text" value="4"/>	

5. HABIT: 6. VEGETATIVE REPRODUCTION (1 = Absent; 2 = Present):

1 = PROSTRATE (Fylking) 2 = SEMI-PROSTRATE (Marion) 3 = ERECT (Delta)

RHIZOMES STOLONS

7. LEAF BLADE:

Color: 1 = LIGHT GREEN (Rough Bluegrass) 2 = BLUE GREEN (Canada Bluegrass) 3 = MODERATELY DARK GREEN (Merion)
4 = DARK GREEN (Adelphi) 5 = OTHER (Specify) _____

Upper Surface: 1 = SHINY 2 = DULL Lower Surface: 1 = SHINY 2 = DULL

MM. WIDTH MM. LENGTH

8. LEAF SHEATH (Base):

Seedling Color: 1 = GREEN 2 = RED MM. LENGTH Keel: 1 = NOT KEELED 2 = KEELED

Surface: 1 = GLABROUS 2 = PUBESCENT 1 = SMOOTH 2 = ROUGH 1 = NON-GLAUCOUS 2 = GLAUCOUS

9. LEAFINESS (At First Anthesis):
 Number of leaves per tiller or shoot: 1 = FEW (1 - 3) 2 = INTERMEDIATE (4 - 6) 3 = MANY (More than 6)

10. PANICLE:

MM. LENGTH

<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	MM. LONGER THAN	<input type="text" value="5"/>	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	MM. SHORTER THAN	<input type="text" value="5"/>	

ENMUNDI Poa pratensis
Application No. 740017

EXHIBIT D
Data Indicative of Novelty

Novelty of "Enmundi" is based on the unique combination of characteristics as summarized in tables 1 through 4.

"Enmundi" most closely resembles the patented cultivar "Baron" except as shown:

1. better winter color,
2. better turf density,
3. better wear resistance,
4. better resistance to leafspot (Helmintho sporium vagans) and stem rust (Puccinia graminis),
5. finer texture under turf management,
6. more susceptibility to powdery mildew (Erysiphe graminis),
7. no hairs on the leaf sheath, leaf margin or ligule,
8. no tuft of hairs beneath the auricles,
9. no red coloration of the panicles,
10. and does not show a bend in the panicle rachis.

TABLE 1
 Official Dutch Trials
 Wageningen, Holland

9= BEST

CULTIVAR	turfdensity	texture	resistance to leafspot	resistance to rust	winter-colour	wear resistance	resistance to powdery mildew
Fylking	8	7	8	8	6	8	6
Merion	7	5	8	4	5	7	5
Baron	7	4	7	7	5	7	7
Arista	5	7	5	6	5	4	8
Prato	5	6	4	6	6	4	5
Monopoly	7	5	8	6	7	8	7
Parade	8	5	8	7	8	7	6
Birka	8	6	8	7	7	7	7
Enmundi	8	5	8	8	6	8	6
Aquila	6	6	6	6	6	4	-
Sydsport	8	5	7	8	4	7	-
Nugget	7	7	7	4	3	5	-

TABLE 2. Characters of 18 poa pratensis cultivars
 TABVEAU 2. Caractères de 18 cultivars de Poa Pratensis

	① Red sheath in young stage Coloration rouge de la gaine de la feuille au stade jeune	② Hairs on sheath margin Ciliation du bord de la gaine de la feuille	③ Hairtuft on sheath just below top of the sheath Touffe de poils sur la gaine juste au-dessous du sommet de la gaine	④ Hairs on ligule Pilosité de la ligule	⑤ Width of leaf Largeur de la feuille	⑥ Fringe of hairs at junction of leaf blade with sheath Frangé de poils à la jonction du limbe de la feuille et de la gaine	⑦ Hairs on upper leaf surface Pilosité de la face supérieure de la feuille	⑧ Hairs on lower leaf surface Pilosité de la face inférieure de la feuille	⑨ Length of culm Longueur de la Tige	⑩ Red panicle Coloration rouge de la panicule	⑪ Bend in rachis Courbure du rachis	⑫ Closed collar Fermeture du col du rachis	⑬ Angle of lower side branches Angle des plus basses ramifications latérales	⑭ Size of seed Dimension des semences	⑮ Date of ear emergence Date d'épiaison
Adorno	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Arista	2	1	1	1	1	1	2	1	2	1	1	2	2	1	1
Atlas	2	2	2	3	3	2	1	1	1	1	2	2	2	2	3
Barkenta	2	1	1	1	4	2	1	1	2	2	1	2	2	2	1
Captan	1	1	1	1	3	2	2	1	2	1	1	2	2	2	2
Delft	2	2	2	1	3	2	1	1	2	1	1	2	2	1	1
Delta	2	1	1	1	2	1	2	1	3	1	1	1	2	1	2
Fylking	1	2	2	1	3	2	1	1	2	1	1	2	2	2	4
Golf	1	2	2	2	4	2	1	1	2	2	1	1	1	4	4
Gullåker	2	2	1	2	4	2	1	1	4	1	2	2	2	1	4
Merion	1	2	1	1	3	2	2	2	2	1	2	2	2	1	4
Newport	2	2	1	2	①	2	1	1	3	1	1	2	2	2	3
Park	2	1	1	1	2	2	3	3	1	1	1	2	2	2	2
Pondorosa	2	1	1	1	2	2	2	1	3	2	2	2	1	1	1
Prato	1	1	2	1	3	2	1	1	1	1	1	3	2	3	3
Primo	2	2	1	2	4	2	1	1	3	2	2	2	2	2	3
Späths	2	2	1	2	4	2	1	2	2	1	2	2	2	2	3
Windsor	1	1	2	1	3	2	2	1	3	1	1	2	2	2	2
Enmundi	1	1	1	1	3	2	1	1	1	1	1	2	2	4	
Baron	1	2	2	2	3	2	1	1	1	2	2	2	2	4	

SOURCE: Dr. R. Duyvendak
 I.V.R.O. Wageningen
 The Netherlands

6. Characters which may be used to distinguish cultivars of *Poa pratensis*. (Information supplied by R. Duyvendak, I.V.R.O., Netherlands.)

6.1. Characters used for identification of *Poa pratensis* cultivars (See Table 2 and 3).

Red leaf sheath in young stage

Diagram 6

Hairs on margin of leaf sheath

Diagram 7

Hair tuft on leaf sheath just below top of the sheath

Diagram 8

Hairs on ligule

Diagram 9

Width of leaf

Diagram 10

Fringe of hairs at junction of leaf blade and sheath

Diagram 11

Hairs on upper leaf surface

Diagram 12

Hairs on lower leaf surface

Diagram 13

Length of culm of full grown plant

Diagram 14

Red panicle

Diagram 15

Bend in rachis opposite lower side branches

Diagram 16

Closed collar of rachis opposite lower side branches

Diagram 17

Angle of lower side branches

Diagram 18

Size of seed

Diagram 19

Mean date of ear emergence:

early 1, medium early 2, medium late 3, late 4.

6. Caractères utilisables pour distinguer les cultivars de *Poa pratensis*. (Renseignements fournis par M. R. Duyvendak, I.V.R.O., Pays-Bas).

6.1. Caractères utilisés pour l'identification des cultivars de *Poa pratensis* (Voir Tableaux 2 et 3).

Coloration rouge de la gaine de la feuille au stade jeune:

Figure 6

Ciliation du bord de la gaine de la feuille:

Figure 7

Touffe de poils sur la gaine juste au-dessous du sommet de la gaine:

Figure 8

Pilosité de la ligule

Figure 9

Largeur de la feuille

Figure 10

Frange de poils à la jonction du limbe de la feuille et de la gaine

Figure 11

Pilosité de la face supérieure de la feuille

Figure 12

Pilosité de la face inférieure de la feuille

Figure 13

Longueur de la tige lorsque la plante a atteint son complet développement

Figure 14

Coloration rouge de la panicule

Figure 15

Courbure du rachis du côté opposé aux plus basses ramifications latérales

Figure 16

Fermeture du col du rachis du côté opposé aux plus basses ramifications latérales

Figure 17

Angle des plus basses ramifications latérales

Figure 18

Dimension des semences

Figure 19

Date moyenne d'épiaison: précoce 1,

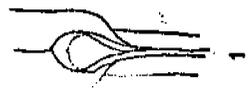


Diagram 6



Diagram 7

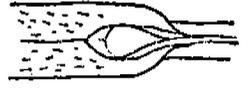
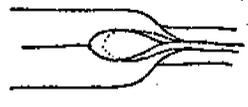
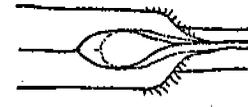
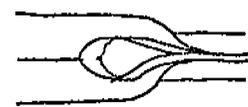
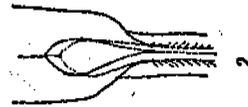
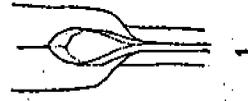


Diagram 11

Diagram 12

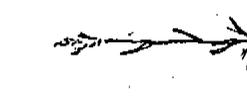
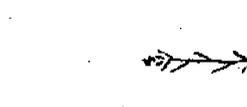
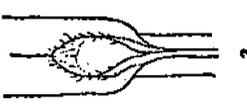
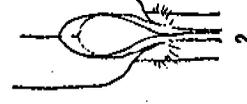


Diagram 8

Diagram 9

Diagram 13

Diagram 14

11

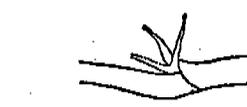
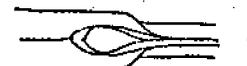
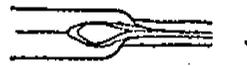


Diagram 10

Diagram 15

Diagram 16

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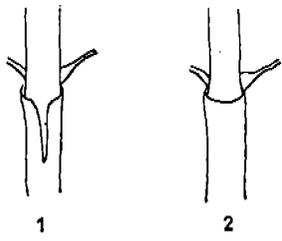


Diagram 17

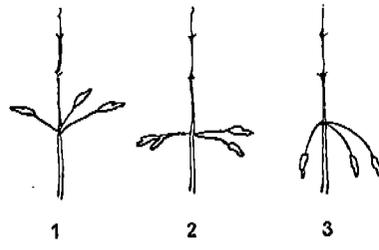


Diagram 18

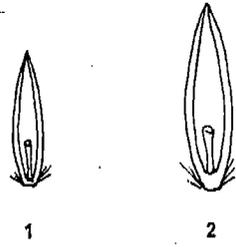


Diagram 19

TABLE 3

Rutgers University
New Brunswick, N.J.

NOT FOR PUBLICATION

1972 Regional Bluegrass Test - Rutgers 3/4-inch Cut

Rank	Entry	Turf Quality 9 = best											
		1972											1973
		Ave.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave.
1	P-142	6.3	8.3	8.7	7.7	6.7	7.0	6.0	6.3	6.7	7.7	8.3	7.3
2	Majestic (P-84)	7.3	7.7	7.7	8.0	7.7	6.3	6.5	6.0	6.3	7.0	7.0	7.0
3	Brunswick (P-57)	5.5	6.7	6.7	6.3	6.7	7.0	8.0	7.0	6.7	7.0	6.7	6.9
4	Merion	6.3	6.0	7.0	5.7	5.7	7.3	8.0	7.7	7.3	7.0	6.7	6.8
5	Ram #1	7.5	6.3	5.3	6.0	6.7	7.7	7.0	6.7	7.0	8.0	7.7	6.8
6	P-141	5.0	7.0	6.7	6.3	7.3	6.7	6.0	6.0	7.0	7.7	7.3	6.8
7	Bonnieblue	6.3	7.3	7.0	7.7	7.0	7.0	6.3	6.3	5.7	6.0	6.7	6.7
8	Adelphi (P-69)	7.0	7.3	7.3	7.0	7.0	7.0	6.2	5.3	6.3	6.3	6.7	6.7
9	Sodco	6.8	5.7	5.7	6.0	6.3	7.0	7.5	7.0	7.0	7.7	7.0	6.7
10	Glade (P-29)	6.5	4.0	4.7	5.7	7.0	8.0	7.2	6.7	7.0	7.0	7.3	6.5
11	Pennstar	6.0	6.3	6.7	7.3	8.0	7.0	6.3	5.3	5.7	6.0	6.3	6.5
12	Parade	6.0	7.3	7.3	6.7	5.0	5.7	6.5	5.7	6.3	7.0	7.7	6.5
13	Plush (P-133)	6.0	5.3	5.7	6.0	6.7	7.3	7.2	6.3	6.3	7.3	7.3	6.5
14	Galaxy (P-27)	6.3	7.0	7.3	6.7	6.7	6.3	6.3	5.3	6.0	6.0	6.0	6.4
15	EVB 282 Enmundi	7.8	6.3	7.0	7.7	7.0	7.3	7.0	5.7	5.0	5.7	5.7	6.4
16	Fylking	6.0	6.3	6.3	6.0	6.7	6.7	6.2	5.7	5.7	6.3	6.7	6.3
17	Ram #2	6.0	5.7	6.0	6.3	6.3	6.7	6.5	6.3	6.0	6.3	6.3	6.2
18	Sydsport	5.0	5.7	5.7	5.7	5.7	5.7	5.8	6.0	6.0	6.7	6.7	6.0
19	W. Freehold OT	6.0	5.0	5.0	5.7	6.3	6.0	6.8	7.0	6.0	5.7	5.3	5.9
20	Baron	4.5	5.7	5.3	4.7	5.0	6.0	6.5	6.0	6.3	5.7	6.0	5.7
21	Victa	4.5	5.3	6.0	5.3	5.3	6.0	6.5	5.7	5.7	5.7	5.7	5.7
22	Cheri	5.5	5.0	5.3	5.0	5.7	5.3	6.3	6.0	5.7	5.7	5.7	5.6
23	EVB 391 Enoble	6.8	6.3	6.3	6.0	5.0	5.7	5.7	5.3	5.3	5.3	5.7	5.7
24	Windsor	4.5	3.7	4.0	4.0	4.7	5.7	6.7	7.0	7.0	6.3	6.3	5.5
25	Monopoly	4.5	6.0	6.0	5.3	5.3	5.3	5.2	5.0	4.7	6.0	6.3	5.5

1972 Regional Bluegrass Test (Continued)

Rank	Entry	Turf Quality 9 = best											
		1972						1973					
		Ave.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ave.
26	EVB 305 Enita	6.8	5.7	5.7	6.3	6.7	5.7	5.2	4.0	4.7	5.3	5.0	5.4
27	EVB 307 Entopper	6.3	6.3	7.0	6.3	6.3	5.7	5.2	4.7	4.3	4.3	4.3	5.4
28	Nugget	7.0	4.0	6.7	8.0	8.3	6.0	4.3	3.3	4.0	4.0	4.3	5.3
29	Vantage	3.8	4.3	4.0	3.7	4.0	5.3	6.0	6.7	5.7	5.3	5.7	5.1
30	Geronimo	5.5	5.0	4.7	4.7	5.0	5.0	5.5	5.3	4.7	4.7	4.3	4.9
31	Campina	5.3	4.3	4.7	4.0	3.0	3.3	3.7	3.7	4.0	4.3	4.7	4.0
32	Delft	4.8	5.3	4.7	4.0	4.0	3.3	2.3	2.0	2.7	2.7	3.7	3.5
33	Xenblue	4.0	3.0	3.3	2.3	2.0	2.7	3.0	3.3	3.7	3.3	3.7	3.0
34	Park	3.8	4.7	3.0	2.3	2.0	2.3	2.3	3.0	3.0	3.0	3.3	2.9

Tricalcium arsenate injury ratings on Kentucky bluegrass varieties, blends and mixtures - November, 1973
(9 = greatest injury)

Variety	Injury Rating	Variety	Injury Rating
1. P-142	6.7	26. Victa	1.2
2. Nugget	5.7	27. Brunswick	1.2
3. Enita	5.7	28. Ram #1	1.2
4. Entopper	5.2	29. P-141	1.1
5. Pennstar	4.1	30. Merion	1.0
6. Fylking	3.7	31. Windsor	1.0
7. Plush	3.5	32. Enmundi	1.0
8. Geronimo	3.2	33. W. Freehold OT	0.8
9. Campina	3.1		
10. Sydsport	2.9		
		LSD at 5%	1.6
11. Enoble	2.8		
12. Majestic	2.7		
13. Galaxy	2.6		
14. Parade	2.5		
15. Bonnieblue	2.0		
16. Adelphi	2.0		
17. Delft	1.9		
18. Cheri	1.8		
19. Vantage	1.7		
20. Park	1.7		
21. Ram #2	1.6		
22. Glade	1.5		
23. Monopoly	1.4		
24. Sodco	1.4		
25. Baron	1.2		

SOURCE: -Rutgers University
New Brunswick, N.J.

Kentucky Bluegrass: Enmundi
Application Variety Protection

Exhibit D.

The variety Enmundi has got Plant Breeders rights in the Netherlands. According to the Dutch legal system this means that this variety has been tested by civil servants in field trials in 2 consecutive seeding years and that in these trials no evidence was found that Enmundi is identical to any known variety.

The application in the Netherlands has been filed on September 12th 1969, at 24.00 hours and Plant Breeders Rights have been granted on June 27th 1973. In Germany an application has been made on September 27th 1971; this application is still pending. No applications have been made prior to the Dutch one.

The act requires that an application for Plant Variety Protection has to be made within one year after the first application for the same variety in a foreign country.

In accordance with § 180.7 (a) (7) of the "Rules and Regulations of Practice under the Plant Variety Protection Act" we apply for extension of this period until 4 years i.e. until Sept. 12th, 1973 as the official grow-out tests in the Netherlands have taken more than 3 years.

Based on the results of the official European tests and also on our own observations of trials in Northern America and Europe and on the trial reports that we have received, we are not aware of any variety that might be identical to Enmundi, as described in exhibits B and C.



van engelen/zaden

Van Engelen Zaden B.V.
Vlijmen - Holland

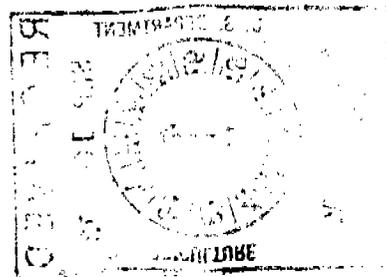
7400017

Kentucky Bluegrass Enmundi
Application Variety Protection

Exhibit E.

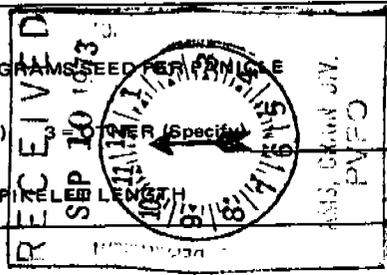
As the variety Enmundi has been discovered and bred by "Van Engelen Zaden B.V." the property of this variety belongs to our company no other company is involved.

18



10. PANICLE (Cont.):

NUMBER OF PANICLES PER PLANT MILLIGRAMS SEED PER PANICLE
 2 Branches LOWEST WHORL: 1 = DROOPING (Prato) 2 = HORIZONTAL (Merion)
 2 Panicle Habit: 1 = NODDING (Newport) 2 = UPRIGHT (Nugget) MM. SPIKELEAF LENGTH



11. LEMMA

KEEL } 1 = GLABROUS 2 = SLIGHTLY PUBESCENT 3 = PUBESCENT 4 = OTHER (Specify)
 LATERAL NERVES }
 Intermediate Nerves: 1 = DISTINCT 2 = OBSCURE Basal Webbing: 1 = NONE 2 = SCANT 3 = COPIOUS

12. SEED:

1 Apomictic Percentage: 1 = MORE THAN 95 2 = 85 TO 95 3 = LESS THAN 85
 4 Phenol Reaction: 1 = NONE - LEMMA REMOVED (Merion) 2 = BEIGE (Cougar) 3 = BROWN (Windsor)
 4 = BLACK (Delta - 2 hours) 5 = BLACK (Anheuser - 24 hours)
 MM. WIDTH ^{123/15} 2 7 MM. LENGTH ^{123/15} 4 6 5 GRAMS PER 10,000 SEEDS CHROMOSOME NO. (2n)

13. TURF DENSITY MAINTENANCE AT ONE INCH CUT:

2 1 = POOR 2 = MODERATE (Merion) 3 = SUPERIOR (Nugget) 4 = EXCELLENT

14. VERTICAL GROWTH RATE:

2 1 = SLOW (Nugget) 2 = MEDIUM (Merion) 3 = FAST (Delta) 4 = OTHER (Specify relation to a standard)

15. SPRING GREEN UP:

2 1 = EARLY (Windsor) 2 = MEDIUM (Fylking) 3 = LATE (Nugget)

16. FALL DORMANCY: (1 = Not Dormant; 2 = Intermediate; 3 = Dormant)

2 NORTHERN (42° 30' ± 30' Lat.) INTERMEDIATE (40° ± 30' Lat.) SOUTHERN (37° 30' ± 30' Lat.)

17. SEEDLING VIGOR (Growth Rate):

2 Seedling: 1 = SLOW 2 = MEDIUM 3 = FAST

18. ENVIRONMENTAL RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input checked="" type="checkbox"/> 2 COOL TEMPERATURE (Winter color)	<input checked="" type="checkbox"/> 2 COLD (Injury)	<input type="checkbox"/> 0 HEAT	<input checked="" type="checkbox"/> 2 DROUGHT
<input type="checkbox"/> 1 SHADE	<input checked="" type="checkbox"/> 2 POOR FERTILITY	<input checked="" type="checkbox"/> 2 ACID SOIL	<input type="checkbox"/> 0 ALKALINITY
<input type="checkbox"/> 0 SALINITY	<input checked="" type="checkbox"/> 2 SOIL COMPACTION	<input type="checkbox"/> 0 POOR DRAINAGE	<input type="checkbox"/> 0 AIR POLLUTION
<input type="checkbox"/> OTHER (Specify) _____			

19. DISEASE, INSECTS, AND NEMATODE RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input checked="" type="checkbox"/> 2 HELMINTHOSPORIUM VAGANS	<input checked="" type="checkbox"/> 2 H. SOROKINIANUM	<input type="checkbox"/> 0 H. DICTYOIDES	<input type="checkbox"/> 0 RHIZOCTONIA SOLANI
<input type="checkbox"/> 1 ERYSIPIHE GRAMINIS	<input checked="" type="checkbox"/> 2* USTILAGO STRIIFORMIS	<input type="checkbox"/> 0 FUSARIUM NIVALE	<input type="checkbox"/> 0 F. ROSEUM
<input type="checkbox"/> 0 TYPHULA IOTANA	<input type="checkbox"/> 0 SCLEROTINIA HOMEOCARPA	<input type="checkbox"/> 1 PUCCINIA GRAMINIA	<input type="checkbox"/> 0 P. STRIIFORMIS
<input checked="" type="checkbox"/> 2 PYTHIUM ULTIMATUM	<input type="checkbox"/> 0 CRAMBUS BONIFATELLUNS	<input type="checkbox"/> OTHER (Specify) _____	

REFERENCE

Nickerson's or any recognized color fan may be used to determine plant colors of the described variety.

* Appears resistant at this time.