No. 200500268

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ag Bio Tech of Oregon, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED 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 TWENTY 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 [illegible]GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR [illegible]RTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE [illegible]URPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT [illegible] BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) [illegible] SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMB[illegible]ERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ORCHARDGRASS

'Potomac II'

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, D.C. this twentieth day of August, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

...form number and date on all reproductions

Form Approved - OMB No. 0581-005

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER: Ag Biotech of Oregon, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME: OG01B OG88Poha

3. VARIETY NAME: Potomac II

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
1125 SW Stopp Place
Corvallis, OR 97333

RAD 6/3/08

5. TELEPHONE *(include area code)*: 541-753-4144

6. FAX *(include area code)*: 541-752-1889

FOR OFFICIAL USE ONLY

PVPO NUMBER: 200500268

FILING DATE: Apr 19, 2005
4-19-2005

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*: Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION: Oregon

9. DATE OF INCORPORATION: 1988

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
John R. Hardison
Ag Biotech of Oregon, Inc.
1125 SW Stopp Place
Corvallis, Or 97333

FEES RECEIVED

FILING AND EXAMINATION FEES: $ 3652.00
DATE 4-19-2005

CERTIFICATION FEE: $ 768.00
DATE 8/4/08

RAD 5/5/08

11. TELEPHONE *(Include area code)*: 541-753-4144

12. FAX *(Include area code)*:

13. E-MAIL: JHardison@Dockton.net

14. CROP KIND *(Common Name)*: Orchardgrass

15. GENUS AND SPECIES NAME OF CROP: Dactylis glomerata

16. FAMILY NAME *(Botanical)*: Poaceae (Gramineae)

17. IS THE VARIETY A FIRST GENERATION HYBRID? ☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☒ Filing and Examination Fee ($2,705), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

RAD 8/14/08

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☒ YES *(If "yes", answer items 20 and 21 below)* ☐ NO *(If "no", go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☒ YES ☐ NO
IF YES, WHICH CLASSES? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, *etc.* ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO RAD 5/5/08
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☐ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER: John R Hardison

NAME *(Please print or type)*: John R. Hardison

CAPACITY OR TITLE: President

DATE: 4-14-05

SIGNATURE OF OWNER:

NAME *(Please print or type)*:

CAPACITY OR TITLE:

DATE:

470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 5.0a. Replaces STB-470 (02-01) which is obsolete.

EXHIBIT A Origin and Breeding History of the Variety

Potomac II orchardgrass is an advanced generation synthetic cultivar developed by recurrent phenotypic selection of progeny plants produced by intercrossing superior plants discovered in a certified seed production field of Potomac near Corvallis, Oregon in which most plants were infected with leaf and stem diseases. Additional similar plants were obtained in a Potomac foundation seed production field in Linn County, Oregon, These plants were inoculated with urediniospores of stripe rust, Puccinia striiformis Westend. Plants that were rust free or had resistant type infections were transplanted to a spaced plant nursery and screened by natural inoculation for resistance to Rhynchosporium scald, Mastigosporium purple eyespot, Cercosporidium (syn. Scolecotrichum) brown stripe, Pseudoseptoria (syn. Selenophoma) stem eyespot, and also tolerance to yellow dwarf virus. Superior plants were intercrossed, and the process was repeated in three cycles. Final selection criteria included resistance and tolerance to disease, yield and quality of the forage and seed yield.Freedom from choke (syn. cattail disease) Epichloe typhina (Fr.) Tul. and bacterial blight or Rathays disease and associated seed nematode was maintained during all cycles.

Stability and uniformity of Potomac II was observed during two generations of reproduction during seed increase and the variety was found to be stable and uniform. No variants were found. Potomac II is a stable and uniform variety.
Potomac II is more than 50% Potomac.

John R. Hardison is the breeder of Potomac II.

OG01B
Potomac II

EXHIBIT B Statement of Distincness

OG01B orchardgrass can be distinguished from other cultivars by a combination of characters summarized in themeasurements of 29 characters in fifteen varieties provided as part of Exhibit C.

OG01B orchardgrass is most similar to Potomac orchardgrass but differs from Potomac based on certain characters measured at two locations as follows:

Character	OG01B Potomac	Potomac
No. primary panicle branches		
Tangent	6.47	4.~~58~~ 52
Shedd	7.22	6.64
Average	6.84	5.~~58~~ 61
Number panicle tillers		
Tangent	35.43	29.53
Shedd	37.18	34.64
Average	36.37	32,09
Plant height (cm)		
Tangent	108.2	99.38
Shedd	106.6	107.54
Average	107.58	103.46
Heading dates		
Tangent	20 May	18 May
Shedd	21 May	17 May
Tiller leaf width (mm)		
Tangent	8.40	7.~~40~~ 47
Shedd	7.~~83~~ 53	6.67
Average	7.97	7.~~04~~ 07

Orchardgrass PVP Application No. 200500268, 'Potomac II'
Effectively filed April 19, 2005 by Alan A, Atchley, copy attached.

RAD 7/8/2008

Exhibit B. Statement of Distinctness Continued

Potomac II (OG01B) was shown to be distinct from other varieties by differences recorded at two locations near Tangent and Shedd in Linn County, Oregon during 2001 and 2002. Traits were measured in three replications in a complete block design with 20 plants per replications for a total of 60 plants per variety with results analyzed in Two Way Analysis of Variance, all by Steve Johnson PhD.

The varieties included Justus, Profile, Ambassador, Cambria, OG01B (Potomac II), OG01PP (Paiute II), Benchmark, Hallmark, Haymate, Pennlate, Boone, Okay, Potomac, Paiute, and Progress. Differences are shown in 29 Tables, copies attached.

Special distinctness of Potomac II (OG01B) is shown as follows:

1. Leaf color, Table 6. OG01B (Potomac II) had the darkest green leaf color of all 15 varieties.

2. Awn length (mm). Table 24. OG01B (Potomac II) at 1.07 mm was the second longest awn in the 15 varieties exceeded only by Haymate at 1.09 mm.

3. Seed width (mm). Table 26. OG01B (Potomac II) and Benchmark at 1.20 mm mm each have the widest seed width of the 15 varieties.

4. Forage yield. 1988 orchardgrass trial at Agriculture Canada Research STATion, Agassiz, B.C.: Table 29.Potomac II (Code name OG88Poh in Table 29, at4049 kg/ha produced the second highest yield first cutting May 10, 1991 second only barely to Benchmark at 4088. Also Potomac II (OG01B) Produced the second highest two year average 13889 kg/ha exceeded only by Benchmark 3 year average of 14310 kg/ha.

Varieties in the B.C. forage yield trial included Benchmark, Dana, Rapido, Profile, Justus, Phyliox, Lidacia, Comet, DS7, Sparta, Fillippa, Sumas, and Potomac II (OG88Poh Code name in Table 29).

5. Forage yield trial, Table 30. (2005 Orchardgrass Variety Forage Yield Trial-Boyd, Ky. directed by Dr. Steve Reed, DLF International Seeds).

Potomac II was rated third best on Establishment that was beaten by only second place Potomac while first place was a non-commercial. Potomac II was rated second place only to Justus.in development. Potomac II produced the second highest 2006 dry matter that was second only to Paiute II. among 17 varieties including as follows: Ambassador, Mammoth, Amba, Athos, Frode, Justus, LG31, Paiute, Paiute II, Potomac, Potomac II, Haymate, Progress, Sparta, Baradana, Iowa OG79-DPT, Endurance and 15 other proprietary code numbered varieties.

Plant growth characteristics (continued) of orchardgrass varieties grown near Tangent and Shedd, Oregon in 2001-2002.

NAME	Table 7 Leaf Hairiness (1=Glaborous, 2=Slightly Pubescent, 3=Pubescent)			Table 8 Flag Leaf Height (cm)			Table 9 Flag Leaf Length (cm)			Table 10 Flag Leaf Width (mm)			Table 11 Tiller Leaf Length (cm)			Table 12 Tiller Leaf Width (mm)		
	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average
Progress	2.21	1.88	2.04	53.37	68.22	60.79	18.12	16.86	17.49	6.75	6.95	6.85	21.54	22.62	22.08	7.70	7.53	7.62
Pennlate	2.11	1.80	1.95	57.49	69.49	63.49	20.25	18.99	19.62	8.19	6.69	7.44	23.38	23.80	23.59	8.77	8.99	8.88
Ambassador	2.10	2.15	2.13	68.30	67.93	68.11	15.62	17.97	16.80	7.04	6.60	6.82	22.10	22.47	22.28	8.36	7.70	8.03
OG01PP	2.10	2.05	2.08	60.96	73.66	67.31	17.08	16.51	16.80	6.31	6.07	6.19	22.78	22.09	22.44	7.02	6.74	6.88
Okay	2.10	1.68	1.89	59.03	67.85	63.44	17.28	18.96	18.12	8.25	6.22	7.23	20.48	23.49	21.98	9.53	8.38	8.95
Profile	2.05	1.82	1.93	60.81	65.13	62.97	19.65	17.50	18.58	8.22	6.20	7.21	22.87	21.22	22.04	7.35	7.40	7.37
Cambria	1.98	2.25	2.12	62.92	75.44	69.18	15.82	17.20	16.51	7.27	6.88	7.07	20.39	24.60	22.50	8.78	8.71	8.74
Haymate	1.93	1.99	1.96	57.94	70.10	64.02	15.49	20.13	17.81	6.93	8.05	7.49	21.46	24.58	23.02	8.23	9.36	8.80
Paiute	1.86	1.83	1.85	59.33	60.00	59.67	13.08	16.52	14.80	6.43	5.50	5.96	17.98	20.23	19.11	7.78	6.29	7.04
Justus	1.80	2.02	1.91	69.27	72.78	71.03	17.92	19.55	18.73	6.69	7.52	7.11	24.01	25.59	24.80	8.01	8.63	8.32
OG01B	**1.73**	**1.85**	**1.79**	**62.16**	**61.95**	**62.05**	**15.56**	**15.68**	**15.62**	**7.48**	**6.29**	**6.89**	**21.05**	**19.83**	**20.44**	**8.40**	**7.53**	**7.97**
Boone	1.44	2.05	1.74	56.22	61.46	58.84	16.56	14.49	15.52	6.48	5.46	5.97	18.34	18.56	18.45	6.88	6.29	6.59
Hallmark	1.41	1.60	1.50	54.98	67.83	61.41	13.55	15.46	14.51	6.66	6.28	6.47	17.25	19.17	18.21	7.40	6.67	7.04
Potomac	1.26	2.14	1.70	56.45	63.50	59.98	14.73	14.49	14.61	6.62	5.40	6.01	22.34	18.70	20.52	7.47	6.38	6.93
Benchmark	1.00	1.78	1.39	60.04	63.81	61.93	14.59	13.36	13.98	6.08	5.32	5.70	19.57	18.89	19.23	7.04	6.03	6.53
LSD @ 0.05	0.35	0.24		5.14	6.47		2.51	2.45		1.25	0.79		3.48	3.20		0.84	0.81	

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Pancile characteristics of orchardgrass varieties grown near Tangent and Shedd, Oregon in 2001-2002

NAME	Table 13 Panicle Length (mm)			Table 14 Number of Primary Panicle Branches			Table 15 Number of Spikelets of Lowest Glomerule			Table 16 Panicle Cast (1=Yellow, 2=Brown, 3=Purple)			Table 17 Rachis Tip Angle (1=0°, 2=<45°, 3=>45°)			Table 18 Panicle Branch Angle, (1=<300, 2=30°-90°, 3=>90°)		
	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average
Ambassador	18.13	17.22	17.68	5.02	7.66	6.34	2.67	2.88	2.78	2.18	2.03	2.11	1.67	1.98	1.83	1.76	1.67	1.72
Justus	16.54	16.46	16.50	7.38	7.65	7.52	3.82	3.28	3.55	2.24	2.16	2.20	1.76	2.37	2.07	1.73	1.49	1.61
Pennlate	16.52	18.08	17.30	8.23	9.46	8.85	4.02	4.12	4.07	2.13	2.11	2.12	2.22	1.94	2.08	1.61	1.70	1.66
Okay	16.36	17.43	15.90	7.71	7.12	7.42	3.58	3.21	3.40	2.05	2.04	2.04	2.41	2.58	2.50	1.34	1.49	1.42
Profile	16.11	13.92	15.01	6.65	6.58	6.62	3.53	2.68	3.11	2.17	2.03	2.10	2.03	1.83	1.93	1.85	1.52	1.68
Progress	15.46	14.33	14.40	6.33	6.78	6.55	2.58	2.66	2.62	2.00	2.08	2.04	1.56	2.11	1.83	1.69	1.60	1.64
Benchmark	15.30	14.11	14.70	4.51	6.56	5.54	2.61	2.56	2.59	2.39	2.05	2.22	1.52	1.82	1.67	1.64	1.39	1.52
Potomac	14.94	12.69	13.81	4.52	6.64	5.58	3.41	2.60	3.01	2.28	2.00	2.14	1.87	1.88	1.88	1.68	1.39	1.54
Boone	14.83	14.42	14.63	4.22	7.27	5.75	2.58	2.89	2.73	2.13	2.05	2.09	1.54	1.93	1.74	1.78	1.74	1.76
OG01PP	14.66	16.68	15.67	6.87	7.64	7.25	3.03	3.21	3.12	2.02	2.26	2.14	1.63	2.40	2.02	1.75	1.61	1.68
Hallmark	14.08	13.67	13.88	4.75	6.77	5.76	2.82	2.68	2.75	2.60	2.08	2.34	1.53	1.88	1.71	1.75	1.52	1.63
Haymate	14.04	16.90	15.47	6.93	6.82	6.88	3.33	3.13	3.23	2.41	2.08	2.24	1.85	2.28	2.06	1.36	1.58	1.47
OG01B	**13.93**	**14.29**	**14.11**	**6.47**	**7.22**	**6.84**	**2.88**	**2.75**	**2.82**	**2.07**	**2.10**	**2.08**	**1.80**	**1.87**	**1.83**	**1.54**	**1.47**	**1.50**
Paiute	13.74	14.32	14.03	5.93	6.97	6.45	3.08	2.65	2.86	2.15	2.07	2.11	1.63	2.09	1.86	1.59	1.43	1.51
Cambria	12.93	14.89	13.91	6.99	6.65	6.82	3.58	2.75	3.16	2.36	2.14	2.25	1.76	2.19	1.98	1.33	1.44	1.39
LSD @ 0.05	1.96	2.08		0.61	0.49		0.57	0.30		0.22	0.10		0.21	0.32		0.17	0.17	

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FORM GR-470-40
(7-77)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 40-R3712

BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
ORCHARDGRASS
(Dactylis glomerata L.)

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION
Ag Biotech of Oregon, Inc.	OG01B Potomac II OG88Poha
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) 1125 SW Stopp Pl. Corvallis, OR 97331	FOR OFFICIAL USE ONLY PVPO NUMBER #200500268

Place the appropriate number that describes the varietal character of this variety in the boxes below. Fill unused columns with zeroes (e.g. [0|9|9] when number is 99). In comparisons to Potomac (standard variety) be sure to strike out the comparative term which does not apply [e.g. (~~shorter~~) (longer)]; the value [0|0] should only be used to indicate that the varieties are equal. The symbol ▲ indicates a decimal point. Characteristics described, including numerical measurements, should represent those which are TYPICAL for the variety. Measured data should be for SPACED PLANTS. Any recognized color fan, e.g. Royal Horticultural Colour Chart, may be used to determine plant colors; designate system used:_____. Give location of test area_____. Ranges of values are valuable and may be included with additional description elsewhere in the application.

NOTE: FOR SINGLE PLANT DATA A MINIMUM OF 100 PLANTS IS SUGGESTED.

1. PLOIDY:

[2] 1 = DIPLOID (2N = 14) 2 = TETRAPLOID (2N = 28) 3 = OTHER (Specify) _____

2. ADAPTATION (for forage or pasture):

[8] 1 = NORTHEAST 2 = EAST CENTRAL 3 = SOUTHEAST 4 = NORTH CENTRAL
5 = SOUTH CENTRAL 6 = PACIFIC NW. 7 = SOUTHWEST 8 = OTHER (Specify)
8 Wherever orchardgrass can be grown

3. WINTER HARDINESS:

[7] 3 = TENDER (HALLMARK) 5 = INTERMEDIATE (PENNLATE) 7 = HARDY (CHINOOK)

4. MATURITY:

[2] SEASON: 1 = VERY EARLY (BOONE) 2 = EARLY (STERLING) 3 = MIDSEASON (PENNMEAD)
4 = LATE (PENNLATE) 5 = VERY LATE (MASSHARDY)

FLOWERING DATE (50% BLOOM) COMPARED TO POTOMAC . . . [| 3] DAYS (~~EARLIER~~) (LATER)

BEGINNING OF SPRING GROWTH COMPARED TO POTOMAC Same [|] DAYS (EARLIER) (LATER)

5. PLANT HEIGHT (From soil level to top of panicle):

[1|0|7] CM. TALL; COMPARED TO POTOMAC 103. . . [| 4] CM. (~~SHORTER~~) (TALLER)

6. PLANT GROWTH TYPE (at maturity):

[3] TYPE: 1 = PROSTRATE (S-143) 2 = INTERMEDIATE (PENNMEAD) 3 = ERECT (BOONE)

PLANT WIDTH: DIAMETER ACROSS 2ND YEAR PLANT (TO TIPS OF OPPOSITE PANICLES). USE SAME OR COMPARABLE PLANTS AS FOR PLANT HEIGHT.

[8|6▲8] CM. PLANT WIDTH; COMPARED TO POTOMAC . . [0▲7] CM. (NARROWER) (~~WIDER~~)

[2] EARLY LEAFINESS:
1 = PANICLE TILLERS EXSERTED BEFORE BARREN TILLERS 2 = PANICLE AND BARREN TILLERS EXSERTED TOGETHER

[3|6▲3] NO. PANICLE TILLERS AT MATURITY

[9|3▲6] NO. BARREN TILLERS AT MATURITY

LEAF ELEVATION DATA: (USE SAME OR COMPARABLE PLANTS FOR BOTH CHARACTERS)

[2▲1] CM. LENGTH OF 5TH INTERNODE BELOW PANICLE (USUALLY 1ST NONCONTRACTED INTERNODE)

[9|3] CM. TOTAL STRAW LENGTH (TO LOWEST BRANCH OF PANICLE)

OG01B Potomac II #200500268

7. LEAF:

2 CULM LEAF ATTITUDE (AT EARLY BOOT): 1 = ERECT (ORBIT) 2 = DROOPING (POTOMAC)

3 LEAF COLOR: 1 = YELLOW GREEN (LATAR) 2 = GREEN (STERLING) 3 = DARK GREEN (POTOMAC) 4 = BLUE GREEN (SUMAS)

Rated #2 Slightly pubescent on scale L=glabrous, 2=Sl Pubesc. 3=Pubescent

LEAF HAIRINESS (% PLANTS WITH EACH SURFACE):

72 % GLABROUS 26 % SLIGHTLY PUBESCENT 2 % PUBESCENT

68 MM. WIDTH (FIRST LEAF BLADE BELOW FLAG LEAF); COMPARED TO POTOMAC . . . 08 MM. ~~(NARROWER)~~ (WIDER)

156 MM. LENGTH (FIRST LEAF BLADE BELOW FLAG LEAF); COMPARED TO POTOMAC 10 MM. ~~(SHORTER)~~ (LONGER)

8. PANICLE: (from lowest panicle branch to tip of rachis):

14 CM. PANICLE LENGTH; COMPARED TO POTOMAC . . . . . 03 CM. ~~(SHORTER)~~ (LONGER)

68 NO. PRIMARY BRANCHES 28 NO. SPIKELETS OF LOWEST GLOMERULE (SPIKELET CLUSTER)

2 CAST (SECONDARY COLOR) OF PANICLE: 1 = YELLOWISH 2 = BROWN 3 = PURPLE 4 = OTHER *(Specify)*

PANICLE TYPE: IN THE TABLE BELOW GIVE PERCENTAGE OF PLANTS WITH EACH PANICLE TYPE. PANICLE TYPE IS DETERMINED BY THE ANGLES FROM THE VERTICAL FORMED BY (A) THE RACHIS TIP AND (B) THE LOWEST BRANCH.

		(A) ANGLE OF RACHIS TIP (FROM VERTICAL)		
		0° (ERECT)	< 45°	> 45°
(B) ANGLE OF LOWEST BRANCH (FROM VERTICAL)	(< 30°)	18	26	9
	(30° – 90°)	15	21	7
	(> 90°)	1	2	1

9. LEMMA (first spikelet of lowest cluster):

LEMMA HAIRINESS (% PLANTS WITH EACH SURFACE):

% GLABROUS 70 % PUBESCENT

LEMMA KEEL HAIRINESS (% PLANTS WITH EACH SURFACE):

% GLABROUS 816 % CILIATE

167 % PLANTS WITH NOTCHED LEMMA APEX 07 MM. DEPTH APICAL NOTCH

966 % PLANTS WITH LEMMA AWNS 107 MM. TYPICAL AWN LENGTH

10. SEED:

120 MM. WIDTH; COMPARED TO POTOMAC . . . . . 01 MM. ~~(NARROWER)~~ (WIDER)

620 MM. LENGTH; COMPARED TO POTOMAC . . . . . 11 MM. (SHORTER) ~~(LONGER)~~

1 724 MG. PER 1,000 PURE SEED; COMPARED TO POTOMAC . . . . . 40 MG. ~~(LIGHTER)~~ (HEAVIER)

11. DISEASE AND INSECT RESISTANCE (rate resistance 0–9, Where 0 = not tested, 1 = 100% susceptible, and 9 = 100% resistant):

8 POWDERY MILDEW (ERYSIPHE GRAMINIS)

0 ANTHRACNOSE (COLLETOTRICHUM GRAMINICOLA)

OTHER *(Specify)*_____

0 STRIPE SMUT (USTILAGO STRIIFORMIS)

8

11. DISEASE AND INSECT RESISTANCE (Continued)

RUST AND LEAF SPOT: SPECIFY AS COMPLETELY AS POSSIBLE INCLUDING SPECIES AND RACES WHERE KNOWN. IF GENERALIZED RESISTANCE OR SUSCEPTIBILITY IS CLAIMED (FIRST BOX), INCLUDE OR APPEND EXPLANATION. (0 = NOT TESTED, 1–9 = 100% SUSCEPTIBLE TO 100% RESISTANT, RESPECTIVELY.

		COMMENTS:
	RUST	
0	STEM RUST (PUCCINIA GRAMINIS)	
0	CROWN RUST (P. CORONATA)	
0	LEAF RUST (P. RUBIGO-VERA)	
8	STRIPE RUST (P. GLUMARUM)	

		COMMENTS:
	LEAF SPOT	
7	LEAF STREAK (SCOLECOTRICHUM GRAMINIS)	
0	LEAF BLOTCH (STAGONOSPORA ARENARIA)	
0	PURPLE LEAF SPOT (STAGONOSPORA MACULATA)	
8	SCALD (RHYNCHOSPORIUM ORTHOSPORIUM)	
0	LEAF SPOT (ASCOCHYTA GRAMINICOLA)	
7	LEAF SPOT (MASTIGOSPORIUM RUBICOSUM)	
0	LEAF SPOT (HELMINTHOSPORIUM SPP.)	
0	LEAF SPOT (SEPTORIA SPP.)	
	OTHER	

12. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
LEAFINESS	Potomac	SEEDLING VIGOR	Potomac
WINTER HARDINESS	Potomac	SEED SIZE	Potomac
FROST RESISTANCE	Potomac	% LIGNIN	Potomac
SUMMER DORMANCY	Potomac	PERSISTENCE	Potomac
HEAT TOLERANCE	Potomac	TILLERING	Potomac

REFERENCES:

R. G. STAPLEDON, COCKSFOOT GRASS (DACTYLIS GLOMERATA L.) ECOTYPES IN RELATION TO THE BIOTIC FACTORS. JOURNAL OF ECOLOGY 16:71–104 1928.

P.F. PARKER, GENETIC VARIATION IN DIPLOID DACTYLIS III PANICLE, SPIKELET AND FLORET CHARACTERS. HEREDITY 24:383–405 1969.

COMMENTS:

200500268

EXHIBIT D Additional Description of the Variety

Additional data in support of the application is supplied by the measurements of twenty nine characters obtained for fifteen varieties contained in the tables that are here included as further reference under Exhibit D in the following seven pages.

Plant growth characteristics of orchardgrass varieties grown near Tangent and Shedd, Oregon in 2001-2002.

NAME	Table 1 Plant Height (cm)			Table 2 Plant Width (cm)			Table 3 Number of Panicle Tillers			Table 4 Length of 5th Internode			Table 5 Straw Length (cm)			Table 6 Leaf Color (1=Yellow Green, 2=Green, 3=Dark Green, 4=Blue Green		
	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average
Justus	115.68	118.60	117.14	104.00	100.48	102.24	29.25	42.97	36.11	2.15	1.90	2.03	99.13	102.14	100.64	3.56	2.98	3.27
Profile	112.27	109.90	111.08	97.29	88.54	92.92	29.27	38.14	33.71	2.12	1.92	2.02	96.17	95.98	96.08	3.40	2.92	3.16
Ambassador	111.34	116.08	113.71	94.41	87.42	90.91	45.55	39.76	42.66	3.25	2.24	2.75	93.20	98.86	96.03	3.55	3.03	3.29
Cambria	110.93	120.74	115.83	101.96	114.87	108.42	32.28	39.77	36.03	1.85	1.74	1.80	98.00	105.85	101.93	3.58	2.95	3.27
OG01B	**108.88**	**106.28**	**107.58**	**95.86**	**77.74**	**86.80**	**35.43**	**37.18**	**36.31**	**2.03**	**2.23**	**2.13**	**94.95**	**92.00**	**93.47**	**3.66**	**3.42**	**3.54**
OG01PP	108.61	115.79	112.20	91.18	80.48	85.83	36.79	40.70	38.75	2.15	2.25	2.20	93.96	99.11	96.53	3.43	3.44	3.44
Benchmark	106.88	109.93	108.41	89.12	83.71	86.42	30.66	27.79	29.23	2.01	2.25	2.13	91.58	95.82	93.70	3.48	3.30	3.39
Hallmark	105.84	113.84	109.84	87.42	79.58	83.50	30.73	32.10	31.42	2.48	2.18	2.33	91.75	100.17	95.96	3.78	3.45	3.61
Haymate	105.78	119.78	112.78	89.55	103.98	96.77	31.43	38.63	35.03	2.24	1.98	2.11	91.73	102.89	97.31	3.54	2.85	3.20
Pennlate	104.47	116.79	110.63	79.28	83.96	81.62	27.82	33.65	30.73	2.26	2.33	2.29	87.95	98.71	93.33	3.24	2.77	3.01
Boone	103.30	104.64	103.97	103.52	89.11	96.31	34.19	33.82	34.01	2.93	1.99	2.46	88.47	90.21	89.34	2.64	3.08	2.86
Okay	102.68	112.54	107.61	81.50	94.17	87.83	17.36	34.75	26.06	2.25	2.69	2.47	88.32	95.11	91.72	3.08	2.17	2.63
Potomac	99.38	107.54	103.46	99.73	75.36	87.55	29.53	34.64	32.09	2.01	2.15	2.08	84.45	94.86	89.65	3.14	3.29	3.22
Paiute	98.97	101.44	100.20	91.88	66.44	79.16	38.60	27.91	33.26	2.55	2.08	2.31	85.23	87.12	86.18	3.39	3.29	3.34
Progress	96.89	107.39	102.14	90.63	82.61	86.62	38.45	47.92	43.19	1.95	1.81	1.88	81.43	94.06	87.75	2.98	2.82	2.90
LSD @ 0.05	4.19	5.94		8.54	7.51		8.15	10.08		0.55	0.38		4.27	5.51		0.40	0.39	

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Lemma characteristics of orchardgrass cultivars grown near Tangent and Shedd, Oregon in 2001-2002

	Table 19			Table 20			Table 21			Table 22			Table 23			Table 24		
	Lemma Hairiness (% Pubescent)			Lemma Keel Hairiness (% Ciliate)			% Plants With Notched Lemma Apex			Lemma Notch Depth (mm)			% Plants With Awns			Awn Length (mm)		
NAME	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average
Boone	90.00	66.67	78.33	96.67	93.33	95.00	3.33	6.67	5.00	0.17	0.08	0.13	96.67	96.67	96.67	1.10	0.86	0.98
Paiute	83.33	76.67	80.00	90.00	76.67	83.33	0.00	0.00	0.00	0.00	0.00	0.00	100.00	96.67	98.33	0.96	1.01	0.99
Potomac	80.00	60.00	70.00	86.67	93.33	90.00	10.00	6.67	8.33	0.13	0.05	0.09	96.67	90.00	93.33	0.98	1.08	1.03
OG01PP	73.33	100.00	86.67	96.67	90.00	93.33	3.33	0.00	1.67	0.07	0.00	0.03	96.67	100.00	98.33	1.05	1.02	1.04
Ambassador	73.33	56.67	65.00	86.67	70.00	78.33	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	0.90	1.04	0.97
Justus	70.00	60.00	65.00	93.33	96.67	95.00	0.00	0.00	0.00	0.00	0.00	0.00	96.67	100.00	98.33	1.01	0.88	0.95
Benchmark	66.67	80.00	73.33	86.67	93.33	90.00	6.67	16.67	11.67	0.08	0.31	0.20	93.33	100.00	96.67	1.03	1.07	1.05
Hallmark	66.67	35.00	50.83	66.67	70.00	68.33	0.00	0.00	0.00	0.00	0.00	0.00	93.33	90.00	91.67	1.11	0.94	1.03
Cambria	63.33	76.67	70.00	83.33	90.00	86.67	0.00	6.67	3.33	0.00	0.20	0.10	100.00	86.67	93.33	0.90	1.04	0.97
Profile	63.33	73.33	68.33	93.33	86.67	90.00	10.00	3.33	6.67	0.18	0.10	0.14	86.67	100.00	93.33	0.97	1.13	1.05
OG01B	**60.00**	**80.00**	**70.00**	**83.33**	**80.00**	**81.67**	**3.33**	**0.00**	**1.67**	**0.13**	**0.00**	**0.07**	**93.33**	**100.00**	**96.67**	**1.02**	**1.12**	**1.07**
Haymate	53.33	70.00	61.67	80.00	73.33	76.67	16.67	6.67	11.67	0.33	0.17	0.25	100.00	96.67	98.33	1.13	1.05	1.09
Progress	50.00	80.00	65.00	80.00	80.00	80.00	16.67	16.67	16.67	0.12	0.16	0.14	100.00	93.33	96.67	0.79	0.89	0.84
Okay	23.33	40.00	31.67	90.00	70.00	80.00	16.67	13.33	15.00	0.25	0.18	0.22	100.00	100.00	100.00	1.06	0.96	1.01
Pennlate	20.00	36.67	28.33	83.33	80.00	81.67	10.00	6.67	8.33	0.08	0.17	0.13	93.33	96.67	95.00	0.90	0.88	0.89
LSD @ 0.05	25.11	22.72		15.42	17.23		13.96	10.60		NS	0.17		NS	NS		NS	NS	

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Seed characteristics of orchardgrass varieties near Tangent and Shedd, Oregon in 2001-2002

	Table 25			Table 26			Table 27		
	Seed Length (mm)			Seed Width (mm)			1000 Seed Weight (mg)		
NAME	Tangent	Shedd	Average	Tangent	Shedd	Average	Tangent	Shedd	Average
Potomac	6.52	6.10	6.31	1.22	1.16	1.19	1762.5	1606.6	1684.5
Paiute	6.42	6.35	6.38	1.20	1.18	1.19	1938.9	1617.0	1778.0
Boone	6.39	5.85	6.12	1.18	1.10	1.14	1680.7	1439.1	1559.9
Justus	6.35	6.33	6.34	1.11	1.14	1.12	1691.3	1560.1	1625.7
Okay	6.18	6.20	6.19	1.14	1.15	1.15	1564.1	1322.9	1443.5
OG01B	**6.16**	**6.24**	**6.20**	**1.20**	**1.21**	**1.20**	**1731.4**	**1716.8**	**1724.1**
Profile	6.14	6.36	6.25	1.12	1.15	1.14	1838.0	1685.4	1761.7
Ambassador	6.13	5.97	6.05	1.18	1.17	1.18	1656.9	1612.3	1634.6
OG01PP	6.11	5.89	6.00	1.17	1.13	1.15	1904.2	1734.2	1819.2
Haymate	6.08	6.21	6.15	1.16	1.19	1.18	1610.6	1449.3	1529.9
Hallmark	6.08	6.05	6.07	1.16	1.23	1.19	1937.2	1802.6	1869.9
Benchmark	6.03	6.37	6.20	1.16	1.23	1.20	1912.7	1759.6	1836.1
Cambria	5.94	6.51	6.23	1.18	1.19	1.18	1632.1	1729.9	1681.0
Pennlate	5.79	5.82	5.80	1.15	1.17	1.16	1552.1	1526.0	1539.1
Progress	5.55	6.00	5.78	1.07	1.11	1.09	1502.1	1571.0	1536.5
LSD @ 0.05	0.35	0.31		0.06	0.04		278.4	248.1	

Table 28

Heading Dates of Orchardgrass Varieties Grown Near Tangent and Shedd, Oregon in 2001-2002

	Tangent	Shedd
Boone	15-May	14-May
Benchmark	16-May	16-May
Potomac	18-May	17-May
Hallmark	18-May	17-May
Ambassador	18-May	18-May
OG01B	**20-May**	**21-May**
Paiute	20-May	20-May
OG01PP	21-May	19-May
Profile	22-May	21-May
Justus	23-May	20-May
Progress	24-May	22-May
Pennlate	25-May	24-May
Haymate	26-May	23-May
Cambria	26-May	25-May
Okay	30-May	27-May

OG01B

Angle of Rachis Tip From Vertical

		0^0 (ERECT)	$< 45^0$	$> 45^0$
Angle of Lowest	$< 30^0$	18	26	9
Branch from	30^0-90^0	15	21	7
Vertical	$> 90^0$	1	2	1

Table 29
1988 Orchardgrass Trial
Agriculture Canada Research Station, Agassiz, B.C.

Cultivar or Strain	1991 Forage Yields (kg/ha) Cut 1 May 10	Cut 2 June 19	Cut 3 July 31	Cut 4 Sept 17	Total 4 cuts	1989-91 3 yr. average (kg/ha)	% of Sumas
Benchmark	4088	2328	2803	2779	11998	14310	114
Dana	3909	2427	2987	2956	12279	13880	110
Rapido*	2808	2666	3067	2752	11293	13856	110
PRO-FILE	3982	2340	2734	2883	11890	13845	110
Justus	2980	2473	2776	2916	11146	13834	110
Phyllox	1471	3063	2972	3027	10533	13766	109
Lidacta	2819	2819	3119	2978	11735	13757	109
Comet	3723	2252	2836	2622	11434	13565	108
DS 7	3257	2418	3064	2755	11494	13521	107
Sparta	2418	3002	3030	2631	11081	13347	106
Fillippa	2394	2738	2975	2816	10913	13050	104
SUMAS*	291	2396	2782	2788	10457	12607	100
Potomac II – OG 88 Poh[1]	4049	2432	2742	2921	12144	13889[1]	110
Mean	3094	2570	2920	2828	11412		
L.S.D. (0.05)	565	276	215	440	574		
CV (%)	15.4	9.1	6.2	13.1	4.2		

[1] 2 year average

Source: ARDSA South Coastal Variety Trials

Winter-hardiness and yield of orchardgrass cultivars

Variety	Maturity (50% heading)	Winter-hardiness rating (1-10; 10=best)	Yield 1989-90 tonne/ha	Yield 1989-91 tonne/ha
Pro-file	May 9	7.3	14.8	13.8
Hallmark	May 9	6.8	15.7	–
Benchmark	May 9	6.4	15.6	14.3
Dana	May 11	6.0	14.7	13.9
Napier	May 13	5.9	14.9	14.0
Amba	May 14	5.7	14.5	13.5
Dactus	May 16	5.2	14.4	–
Lidacta	May 24	4.9	14.8	13.8
Sumas	May 23	4.2	13.7	12.6
Mobite	May 31	3.8	13.7	12.5
Prairial	May 19	3.6	14.5	13.6

Table 30

2005 Orchardgrass Variety Forage Yield Trial - Boyd, KY
FINAL REPORT

ENTRY NAME	ESTABLISHMENT 1-9, 9=EXCELLENT ESTABLISHMENT	RANK	DEVELOPMENT 1-9, 9=EXCELLENT DEVELOPMENT	RANK	AVERAGE SPRING GROWTH 1-9, 9=EARLY SPRING GROWTH	RANK	AVERAGE LEAF DISEASE 1-9, 9=NO DISEASE	RANK	HEADING 1-9, 9=LATE	TOTAL 2006 DRY MATTER YLD (LBS/A)	% OF MEAN	TOTAL 2007 DRY MATTER YLD (LBS/A)	% OF MEAN	TOTAL 2006-07 DRY MATTER YLD (LBS/A)	% OF MEAN
1 AMBASSADOR	8.50	18	6.00	25	6.0000	18	6.6250	12	2.50	10189.43	92.2	5805.00	105.9	15994.33	98.3
2 MAMMOTH	7.50	11	8.00	7	7.2500	3	5.8750	21	1.00	10889.80	98.6	5381.59	98.2	16271.39	98.4
3 AMBA	8.00	20	5.00	29	5.7500	21	5.8750	22	7.50	9502.86	86.0	4874.00	88.9	14377.01	87.0
4 ATHOS	5.50	24	3.50	31	4.2500	31	7.3750	2	9.00	10213.15	92.4	5131.50	93.6	15344.43	92.8
5 FRODE	7.00	15	7.00	13	6.5000	13	6.1250	17	6.50	10849.08	98.2	5776.00	105.4	16625.19	100.6
6 JUSTUS	8.00	6	8.50	1	7.0000	8	5.8750	20	6.50	11786.23	106.7	5820.00	106.2	17606.13	106.5
7 LG 31	4.50	29	5.50	27	4.2500	32	5.7500	23	9.00	10140.64	91.8	5273.50	96.2	15414.30	93.2
8 PAIUTE	8.00	7	8.50	4	6.7500	11	5.7500	26	5.00	11182.21	101.2	5123.50	93.5	16305.60	98.6
9 PAIUTE II	8.00	8	8.00	8	8.2500	1	6.0000	19	5.00	13523.08	122.4	5535.00	101.0	19058.08	115.3
10 POTOMAC	8.00	2	8.00	6	7.0000	6	5.2500	31	4.00	11305.51	102.3	4820.50	87.9	16125.91	97.6
11 POTOMAC II	8.00	3	8.50	2	7.2500	5	5.2500	30	4.00	12397.40	111.4	5238.50	95.6	17546.19	106.1
12 HAYMATE	3.50	32	5.00	30	6.0000	20	6.5000	15	7.50	11138.07	100.8	6636.00	121.1	17773.77	107.5
13 PROGRESS	8.00	4	8.00	5	6.7500	9	6.2500	16	6.50	11321.52	102.5	5514.50	100.6	16836.11	101.9
14 SPARTA	4.50	31	3.00	32	5.0000	27	4.8750	32	9.00	8654.73	78.3	4591.50	83.8	13246.67	80.1
15 BARADANA	5.50	26	6.50	20	6.2500	16	5.7500	24	8.00	11439.21	103.5	5658.00	103.2	17097.08	103.4
16 IOWA OG 79-OPT	8.00	21	7.50	9	7.0000	7	7.6250	1	7.00	11442.50	103.6	6314.50	115.2	17756.98	107.4
17 IS-OG 4	7.50	9	7.50	12	6.2500	17	6.8750	8	6.50	11864.26	107.4	5914.00	107.9	17778.75	107.5
18 IS-OG 9	7.00	17	8.00	24	6.0000	19	6.6750	9	7.50	10743.55	97.2	6232.00	113.7	16975.43	102.7
19 IS-OG 9 SEL	5.50	25	7.00	14	6.5000	14	6.7500	11	6.50	10729.61	97.1	6321.00	115.3	17056.71	103.1
20 IS-OG 17	4.50	30	6.50	19	5.2500	25	7.1250	3	7.00	10928.07	98.9	5817.00	106.1	16745.34	101.3
21 IS-OG 21	6.50	19	8.00	22	5.5000	24	6.8750	7	8.00	11085.74	100.3	5055.50	92.2	16141.27	97.6
22 IS-OG 22	6.00	23	6.50	17	4.7500	28	7.0000	6	7.50	11643.46	105.4	5354.50	97.7	16998.09	102.8
23 IS-OG 23	7.00	14	7.00	16	6.7500	10	7.1250	4	6.50	11211.29	101.5	5995.00	109.4	17206.18	104.1
24 IS-OG 25	6.00	22	6.00	23	5.2500	26	7.1250	5	7.00	10403.54	94.2	5277.00	96.3	15680.37	94.9
25 IS-OG 26	5.00	27	5.50	26	5.5000	23	6.6250	13	7.50	10647.66	96.4	5488.00	100.1	16135.61	97.6
26 IS-OG 27	7.00	16	6.50	21	4.5000	30	6.7500	10	8.50	11551.27	104.5	5301.00	96.7	16852.20	101.9
27 ENDURANCE	7.00	13	6.50	18	6.7500	12	5.3750	29	4.50	11158.95	101.0	5488.00	100.1	16646.84	100.7
28 IS-OG 29	8.00	5	7.50	10	7.2500	4	5.6250	27	4.50	11927.73	108.0	5123.00	93.5	17050.68	103.1
29 IS-OG 39	8.50	1	8.50	3	7.5000	2	5.3750	28	5.00	10961.15	99.2	4872.50	88.9	15834.03	95.8
30 IS-OG 40	7.00	12	7.50	11	6.2500	15	6.7500	25	6.00	10784.31	97.6	4502.00	82.1	15286.38	92.5
31 IS-OG 41	5.00	28	5.50	28	5.7500	22	6.0000	18	6.00	10105.52	91.5	5279.50	96.3	15385.16	93.1
32 IS-OG SRS	7.50	10	7.00	15	4.7500	29	6.5000	14	7.50	11927.05	107.9	5896.00	107.6	17823.04	107.8
GRAND MEAN	6.56		6.67		6.12		6.27		6.38	11048.71		5481.55		16530.28	
CV (%)	13.04		13.35		7.13		5.01		7.94	5.13		8.01		4.68	
LSD (0.05)	1.45		1.51		0.74		0.53		0.86	961.15		744.47		1312.03	

Any difference greater than the LSD is considered significant. Bold are not significant from each other.

The 2005 Orchardgrass variety trial was sown on October 13, 2005 in two replications of 91.43 sqft plots at a rate of 26.26 pounds per acre at 1/2 inch depth. There were three harvests in 2006 and two in 2007. The trial represented a range of maturities.

#20050026 8

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FORM APPROVED - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)
Ag Biotech of Oregon, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
OG01B

3. VARIETY NAME
Potomac II

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*
1125 SW Stopp Place
Corvallis, OR 97333

5. TELEPHONE *(Include area code)*
541-753-4144

6. FAX *(Include area code)*

7. PVPO NUMBER
20050268

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. National or a U.S. based company? If no, give name of country [X] YES [ ] NO

10. Is the applicant the original owner? [X] YES [ ] NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

[ ] YES [ ] NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

[ ] YES [ ] NO If no, give name of country

11. Additional explanation on ownership *(If needed, use the reverse for extra space)*:

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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ST-470-E (04-99) *(Destroy previous editions).*

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