

No.



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

WestBred, LLC

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 right to exclude others from selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or conditioning it for propagation, or stocking it for any of the above purposes, or using it in producing a hybrid or different variety therefrom, to the extent provided by the PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BARLEY

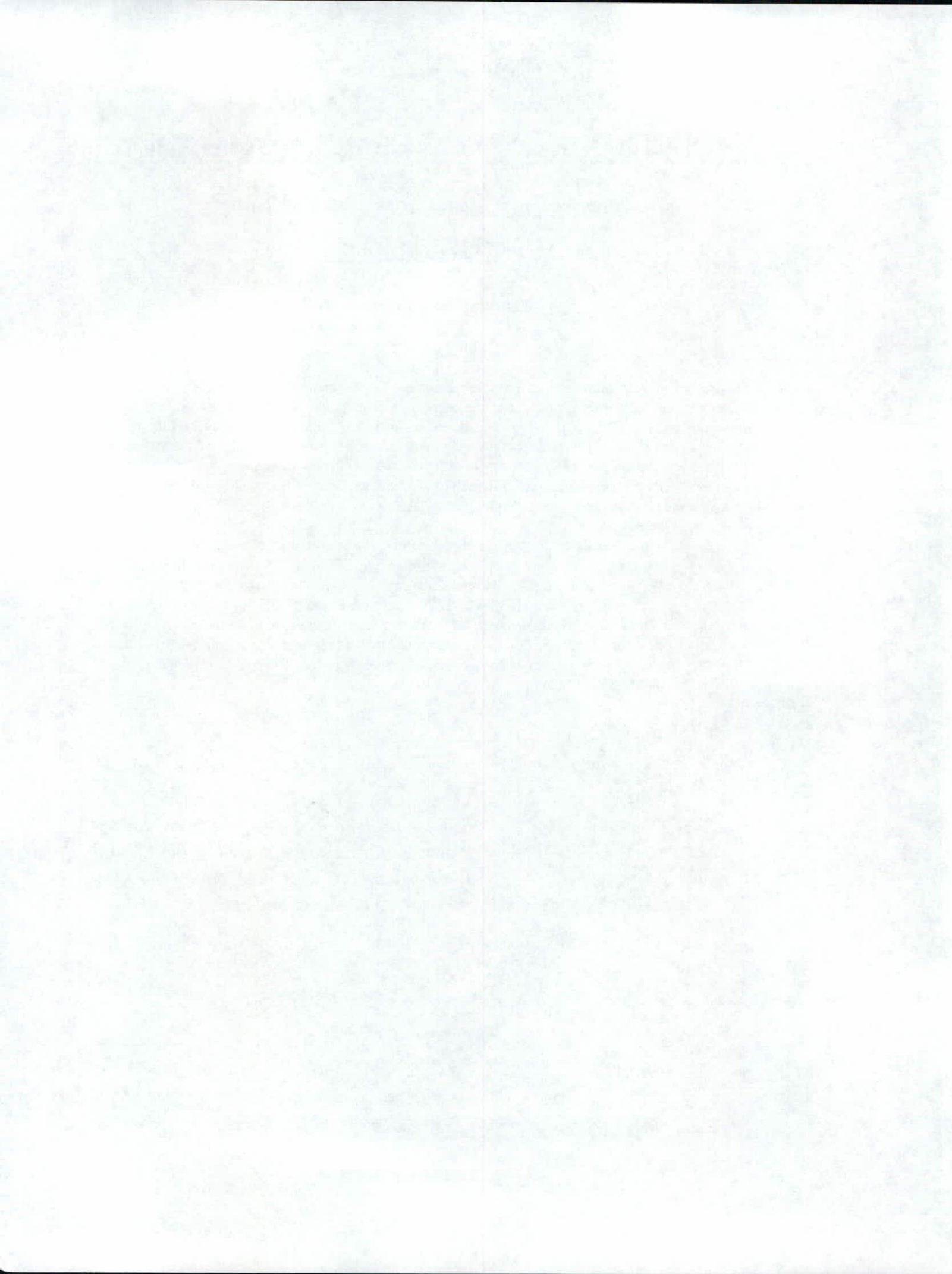
'Champion'

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 third day of June, in the year two thousand and nine.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

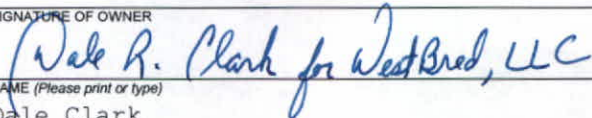
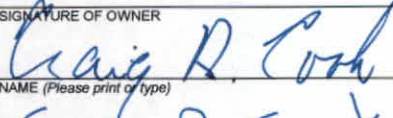


U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

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).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
 (Instructions and information collection burden statement on reverse)

1. NAME OF OWNER WestBred LLC		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME YU501-385		3. VARIETY NAME Champion	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 81 Timberline Dr. Bozeman, MT 59718-6994		5. TELEPHONE (include area code) 406-587-1218		FOR OFFICIAL USE ONLY PVPO NUMBER <h1 style="margin: 0;">#200800382</h1> FILING DATE <h2 style="margin: 0;">AUGUST 27, 2008</h2>	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Limited Liability Corporation		6. FAX (include area code) 406-586-8247			
8. IF INCORPORATED, GIVE STATE OF INCORPORATION Arizona		9. DATE OF INCORPORATION August 4, 2003		FILING AND EXAMINATION FEES: \$ 4,382.00 DATE 8/27/08 CERTIFICATION FEE: \$ 768.00 DATE 12/15/08	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Dr. Dale Clark, WestBred, LLC 81 Timberline Dr. Bozeman, MT 59718-6994					
11. TELEPHONE (Include area code) 406-587-1218		12. FAX (Include area code) 406-586-8247		13. E-MAIL dclark@westbred.com	
14. CROP KIND (Common Name) Barley		16. FAMILY NAME (Botanical) Poaceae		18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION. _____	
15. GENUS AND SPECIES NAME OF CROP Hordeum vulgare L.		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		20. 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) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input checked="" type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)				21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
23. 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? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 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.)				22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)					
25. The owners declare that a viable sample of basic seed of the variety has been 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  NAME (Please print or type) Dale Clark			SIGNATURE OF OWNER  NAME (Please print or type) Craig R. Cook		
CAPACITY OR TITLE Research Director		DATE July 2, 2008		CAPACITY OR TITLE Wheat Breeder	
CAPACITY OR TITLE Research Director		DATE July 2, 2008		DATE July 2, 2008	

(See reverse for instructions and information collection burden statement)

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GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety per se, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVP@mail.usda.gov
Homepage: <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give:
 - (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

Plant Breeders Rights Canada; April 3, 2007; Application Number 07-5819

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 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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“Champion”

Two-rowed, Spring Barley

Exhibit A. Origin and Breeding History

Champion was developed by WestBred LLC, Bozeman, Montana from a cross made in 1997 between Baronesse / Camas. The F₁ seed was planted near Yuma, Arizona in November, 1997 with the F₂ seed harvested in April, 1998. The F₂ seed was planted near Bozeman, Montana in May, 1998 where spikes were selected from the F₂ plants and used to plant single F₃ rows near Bozeman in May, 1999. Single spikes were selected from the F₃ rows in September, 1999 and planted as single F₄ rows near Bozeman, Montana in May, 2000. Single spikes were selected from the F₄ rows in October, 2000 and planted as single F₅ rows in Yuma, Arizona in November, 2000. Agronomically desired rows were selected, harvested and given permanent numbers. One such row was given the experimental designation “YU501-385”.

The F₆ seed from this row was used to plant a single 5 ft. x 15 ft. plot near Bozeman, Montana and one near Calgary, Alberta. The F₇ seed from the Bozeman plot was harvested in September, 2001 and used to plant replicated yield trials near Bozeman, Montana and three locations in Alberta in May, 2002. Continued yield testing of the F₈ to F₁₁ generations was performed in 2003-2006 in the states of Washington, Idaho, Montana using the experimental designation of YU501-385 and the provinces of Alberta, Saskatchewan and Manitoba using the experimental designation of 'TR04-719'.

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Heads were selected for purification from an F₉ plot in September, 2004 and planted as head-row plots near Yuma, AZ in November, 2004. Uniform appearing plots were harvested individually in April, 2005 and planted separately as strips in May near Bozeman, MT. Uniform appearing strips were harvested individually in September, 2005. Seed from these strips were planted separately near Bozeman, MT and near Calgary, AB in April, 2006. Uniform strips were harvested and bulked in August, 2006 and YU501-385 (TR04-719) was named Champion. A Foundation seed increase was grown in 2007. The first unencumbered sale of Champion will be in the spring of 2009. WestBred LLC will maintain Breeder seed of Champion by planting head rows when necessary.

Champion may contain a tall variant (4-8 inches taller) at a frequency of up to 4/10000 seed (0.04%). No other variants are known to occur and Champion is a stable and uniform variety in appearance and performance over several generations and growing conditions.

Champion has been evaluated for yield, quality, standability, and general agronomics in public trials (Table 1- 3). Champion has been found to be well adapted to the Northwest Region of the US.

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Table 1. Agronomic Performance of Champion (YU501-385) in Washington State University Spring Barley Trials from 2004 to 2007.

Year	No. Sites	Variety	Yield bu/A	LSD 0.10	Test Weight	
					lbs/bu	LSD 0.10
2004	14	Baronesse	97.3	3.4	48.3	0.5
	14	Champion	101.3		51.0	
2005	12	Baronesse	84.3	4.0	49.0	0.5
	12	Champion	86.8		51.0	
2006	12	Baronesse	94.9	3.9	50.5	0.4
	12	Champion	106.7		52.8	
2007	10	Baronesse	79.8	2.8	47.9	0.5
	10	Champion	91.4		50.4	
Average	48	Baronesse	89.1		48.9	
	48	Champion	96.5		51.3	

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Table 2. Agronomic Performance of Champion (YU501-385) in University of Idaho Cooperative Extension Barley Trials in 2007.

Year	Area	No. Sites	Variety	Yield bu/a	LSD 0.10	Test Weight lbs/bu	LSD 0.10	Height cm	Lodging %	Plump %
2007	N. Idaho	4	Baronesse	74	3.0	48.2	0.5	66.0	0	58
			Champion	85		51		71.1	0	60
2007	S. Idaho	5	Baronesse	124.6	7.0	51.2	0.7	71.1	56	83.9
			Champion	135.7		52		73.7	53	78.6
Average		9	Baronesse	99.3		49.7		68.6	28.0	71.0
			Champion	110.4		51.5		72.4	26.5	69.3

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Table 3. Agronomic Performance of Champion (YU501-385) in Montana State Agricultural Extension Barley Trials from 2005 to 2007.

Years/Type	Variety	Yield bu/ac	Test Weight		Protein %	Plant Height cm	Plump %	Thin %	Heading Date Julian
			LSD 0.05	lb/bu					
2005-2007									
Overall Average	Baronesse	92.97	3.1	49.86	13.19	74.3	66.26	14.75	177.34
	Champion	100.66		51.99	12.43	79.3	67.07	13.19	174.73
No. environments		24		24	24	23	23	21	22
2005-2007 dryland									
	Baronesse	76.18	4.4	48.70	13.74	69.7	55.23	20.70	178.09
	Champion	84.60		51.33	12.83	75.6	54.03	19.46	174.92
No. environments		13		13	13	13	12	12	13
2005-2007 Irrigated									
	Baronesse	112.82	4.3	51.24	12.54	80.2	78.29	6.81	176.25
	Champion	119.63		52.77	11.95	84.2	81.30	4.83	174.47
No. environments		11		11	11	10	11	9	9

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Exhibit B. Statement of Distinctness

Champion is most similar to the variety Baronesse but differs in three characteristics.

- 1) Champion has a tapering head and Baronesse has a strap head.
- 2) Champion has short glume hairs and Baronesse has long glume hairs.
- 3) Champion has a higher test weight than Baronesse.

Table 4. Paired t-test for Test Weight between Champion and Baronesse.

	n	Mean	SD	SE
Baronesse	81	49.186	3.118	0.3465
Champion	81	51.448	2.816	0.3129
Difference	81	-2.262	1.580	0.1755
t statistic		-12.89		
2-tailed p		<0.0001		

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Table 5. Paired Test Weight Data for Champion and Baronesse from 2004 – 2007 in MT, WA and ID.

		Baronesse	Champion			Baronesse	Champion
05MT	1	48.7	52.7	05WA	42	50.2	53.4
	2	50.5	52.7		43	52.4	53.8
	3	49.3	52.9		44	47.9	51.6
	4	51.6	54.7		45	50.3	54.1
	5	46.1	50.2		46	50.9	54.8
	6	43.6	48.3		47	47.2	50.4
	7	49.1	49.9		48	46.8	51.3
	8	50.1	52.1		49	51.6	53.3
	9	47.2	51.3		50	53.5	52.9
	10	48.9	50.2	06WA	51	45.1	50.0
	11	48.2	49.8		52	44.9	48.7
06MT	12	51.8	54.1		53	49.8	51.9
	13	53.6	55.1		54	49.9	52.0
	14	54.6	55.9		55	50.0	52.0
	15	53.8	56.0		56	50.7	52.8
	16	44.5	47.9		57	51.3	52.8
	17	48.9	50.7		58	51.9	54.7
	18	53.7	53.9		59	52.1	53.8
	19	51.3	53.0		60	52.0	54.8
	20	52.9	51.3		61	53.5	54.8
	21	47.8	50.3		62	54.4	55.8
	22	47.7	49.2	07WA	63	45.2	48.2
07MT	23	48.7	51.5		64	45.0	47.3
	24	54.0	54.1		65	49.4	51.3
04 WA	25	49.1	51.8		66	47.2	49.0
	26	46.8	48.1		67	48.7	50.6
	27	47.4	47.9		68	47.7	48.9
	28	46.2	48.3		69	49.0	51.7
	29	45.0	52.7		70	47.9	52.6
	30	49.4	51.9		71	48.1	51.6
	31	47.4	51.1		72	51.1	52.6
	32	47.8	48.7	07 ID	73	40.4	45.0
	33	50.5	52.1		74	52.3	55.3
	34	50.8	51.9		75	51.3	54.3
	35	45.0	49.9		76	48.6	49.6
	36	51.6	54.3		77	51.2	51.3
	37	52.0	54.4		78	50.4	52.6
	38	48.0	50.3		79	51.3	52.0
05WA	39	40.9	39.4		80	52.0	52.0
	40	47.2	49.9		81	39.8	44.0
	41	49.3	47.3				

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**OBJECTIVE DESCRIPTION OF VARIETY
Barley (*Hordeum vulgare* L.)**

NAME OF APPLICANT (S) WestBred LLC	TEMPORARY OR EXPERIMENTAL DESIGNATION YU501-385	VARIETY NAME Champion
ADDRESS (Street and No., or RD No., City, State, Zip Code, and Country) 81 Timberline Dr. Bozeman, MT 59718-6994		FOR OFFICIAL USE ONLY PVPO NUMBER #200800382

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

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

1. GROWTH HABIT:

1 = Spring 2 = Facultative Winter 3 = Winter Early Growth: 1 = Prostrate 2 = Semi-Prostrate 3 = Erect

2. MATURITY: (50% Flowering)

 1 = Early (California Mariout) 2 = Mid-Season (Betzes) 3 = Late (Frontier)

 No. Days Earlier Than _____ *

Same as Check Baronesse *

 No. of Days Later Than _____ *

3. PLANT: (From Soil Level to Top of Head)

 1 = Semi-Dwarf 2 = Short (California Mariout) 3 = Medium Tall (Betzes) 4 = Tall (Conquest)

 cm Shorter Than _____ *

Same as Check _____ *

 cm Taller Than Baronesse *

4. STEM:

 Exsertion (Flag to Spike at Maturity): 1 = (0 - 3 cm) 2 = (3 - 10 cm) 3 = (10 - 15 cm)

 Anthocyanin: 1 = Absent 2 = Present

 No. of Nodes (Originating from Node Above Ground)

 Collar Shape: 1 = Closed 2 = V-Shaped 3 = Open 4 = Modified Closed or Open

 Shape of Neck: 1 = Straight 2 = Snaky 3 = Other (Specify) _____

* A commercial variety grown in the same trial.

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5. LEAF:

- 1 Basal Leaf Sheath (Seedling): 1 = Glabrous 2 = Pubescent
- 2 Position of Flag Leaf (At Boot Stage): 1 = Drooping 2 = Upright
- 2 Waxiness: 1 = Absent (Glossy) 2 = Slightly Waxy 3 = Waxy
- 1 2 mm Width (First Leaf Below Flag Leaf)
- 2 4 cm Length (First Leaf Below Flag Leaf)
- 1 Anthocyanin in Leaf Sheath: 1 = Absent 2 = Present

6. HEAD:

- 1 Type: 1 = Two-Rowed 2 = Six-Rowed
- 2 Density: 1 = Lax 2 = Erect (Not Dense) 3 = Erect (Dense) 4 = Other (Specify) _____
- 1 Shape: 1 = Tapering 2 Strap 3 = Clavate 4 = Other (Specify) _____
- 2 Waxiness 1 = Absent (Glossy) 2 = Slightly Waxy 3 = Waxy
- 1 Lateral Kernels Overlap: 1 = None 2 = At Tip 3 = 1/4 - 1/2 of Head
- 3 Rachis (Hair on Edge): 1 = Lacking 2 = Few 3 = Covered

7. GLUME:

- 2 Length: 1 = 1/3 of Lemma 2 = 1/2 of Lemma 3 = More than 1/2 of Lemma
- 2 Hairs: 1 = None 2 = Short 3 = Long
- 4 Hair Covering: 1 = None 2 = Restricted to Middle 3 = Confined to Band 4 = Completely Covered
- 2 Awns: 1 = Less than Equal to Length of Glumes 2 = Equal to Length of Glumes 3 = More than Equal to Length of Glumes
- 3 Awn Surface: 1 = Smooth 2 = Semi-Smooth 3 = Rough

8. LEMMA:

- 5 Awn: 1 = Awnless
2 = Awnlets on Central Rows, Awnless on Lateral Rows
3 = Short on Central Rows, Awnlets on Lateral Rows
4 = Short (Less than Equal to Length of Spike)
5 = Long (Longer than Spike)
6 = Hooded
- 4 Awn Surface: 1 = Awnless 2 = Smooth 3 = Semi-Smooth 4 = Rough
- 1 Teeth: 1 = Absent 2 = Few 3 = Numerous
- 1 Hair: 1 = Absent 2 = Present
- 1 Shape of Base: 1 = Depression 2 = Slight Crease 3 = Transverse Crease
- 2 Raachilla Hairs: 1 = Short 2 = Long

9. STIGMA:

- 2 Hairs: 1 = Few 2 = Many

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10. SEED:

Type: 1 = Naked 2 = Covered

Hairs on Ventral Furrow: 1 = Absent 2 = Present

Length: 1 = Short (8.0 mm)
2 = Short to Mid-Long (7.5 - 9.0 mm)
3 = Mid-Long (8.5 - 9.5 mm)
4 = Mid-Long to Long (9.0 - 10.5 mm)
5 = Long (10.0 mm)

Wrinkling of Hull: 1 = Naked 2 = Slightly Wrinkled 3 = Semi-Wrinkled 4 = Wrinkled

Aleurone Color: 1 = Colorless (White or Yellow) 2 = Blue

Percent Abortive GMS. per 1000 Seeds

11. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 - Tolerant)

Septoria Net Blotch Spot Blotch Powdery Mildew

Loose Smut Bacterial Blight Covered Smut False Loose Smut

Stem Rust Leaf Rust Scab Scald

Aster Yellows Virus BSMV BYDV Other (Specify) stripe rust

12. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 - Tolerant)

Green Bug English Grain Aphid Chinch Bug Armyworm

Grasshoppers Cerial Leaf Beetle Other (Specify) _____

Hessian Fly Races { GP A B C D E F G Other Specify _____

13. CHEMICAL: (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Intermediate, 4 = Tolerant)

DDT Other (Specify) _____

14. INDICATE WHICH VAREITY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Tillering	Baronesse	Seed Size	Baronesse
Leaf Size	Baronesse	Coleoptile Elongation	Baronesse
Leaf Color	Baronesse	Seedling Pigmentation	Baronesse
Leaf Carriage	Baronesse		

REFERENCES:

The following publications may be used as a reference aid for the standardization of character descriptions and terms used in this form:

1. Wiebe, G.A., and D.A. Reid, 1961, Classifications of Barley Varieties Grown in the United States and Canada in 1958, Technical Bulletin No. 1224, U.S. Department of Agriculture.
2. Reid, D.A., and G.A. Wiebe, 1968, Barley: Origin, Botany, Culture, Winter Hardiness, Genetics, Utilization, Pests, Agriculture Handbook No. 338, U.S. Department of Agriculture, pp. 61-84.
3. Malting Barley Improvement Association, Milwaukee, Wisconsin, 1971, Barley Variety Dictionary.

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

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U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE

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).

**EXHIBIT E
 STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) WestBred LLC	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER YU501-385	3. VARIETY NAME Champion
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 81 Timberline Dr. Bozeman, MT 59718-6994	5. TELEPHONE (Include area code) (406) 587-1218	6. FAX (Include area code) (406) 586-8247
7. PVPO NUMBER #200800382		

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

10. Is the applicant the original owner? 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 (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

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 0.1 hour 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

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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 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT F
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S) WestBred LLC	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 81 Timberline Dr. Bozeman, MT 59718-6994	TEMPORARY OR EXPERIMENTAL DESIGNATION YU501-385
NAME OF OWNER REPRESENTATIVE (S) Dr. Dale Clark	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 81 Timberline Dr. Bozeman, MT 59718-6994	VARIETY NAME Champion FOR OFFICIAL USE ONLY PVPO NUMBER #200800382

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature Dale R. Clark for WestBred, LLC

Date Aug 20, 2008

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