No. 200100248

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Arkansas
Agricultural Experiment Station

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 PURPOSE , OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE [illegible] 84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Sabbe'

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 thirteenth day of December, in the year two thousand two.

Attest:

Acting Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

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
University of Arkansas
Agricultural Experiment Station

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
AR 656-5-1

3. VARIETY NAME
Sabbe

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
AFLS Building, Room 219
Fayetteville, AR 72701

5. TELEPHONE *(include area code)*
501/575-4750

6. FAX *(include area code)*
501/575-2410

FOR OFFICIAL USE ONLY

PVPO NUMBER
200100248

FILING DATE
August 6, 2001

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

8. IF INCORPORATED, GIVE STATE OF INCORPORATION

9. DATE OF INCORPORATION

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Robert Bacon
Crop, Soil, and Environmental Sciences
115 Plant Science Building
University of Arkansas
Fayetteville, AR 72701

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 2705.00
DATE 8/06/01

CERTIFICATION FEE:
$ 320.00
DATE 5/3/02

11. TELEPHONE *(include area code)*
501/575-5725

12. FAX *(include area code)*
501/575-7465

13. E-MAIL
rbacon@uark.edu

14. CROP KIND *(Common Name)*
Wheat, common

15. GENUS AND SPECIES NAME OF CROP
Triticum aestiuum.

16. FAMILY NAME *(Botanical)*
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)*

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. [1] FOUNDATION [ ] REGISTERED [1] 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
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.)*

24. 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
G J Weidemann

SIGNATURE OF OWNER

NAME *(Please print or type)*
Greg Weidemann

NAME *(Please print or type)*

CAPACITY OR TITLE
Interim Dean & Associate Director

DATE
07/24/01

CAPACITY OR TITLE

DATE

18a. Exhibit A: Origin and Breeding History of the Variety

Pedigree: Corin / AR 584

Sabbe was developed from a cross made in 1989 of Corin / AR 584. AR 584 was an F_1 from the cross Florida 302 // Coker 833 / Hunter. 'Corin' is a cultivar that was obtained from Jean-Pierre Jaubertie with Semences Cargill in France and according to the Germplasm Resources Information Network (GRIN), it was developed by Nickerson RPB, Ltd. of England. Sabbe originated from an F_5 selection. The population was grown as a bulk during the F_2 and F_3 generations at Stuttgart, Arkansas to allow natural selection for adaptation, particularly for wet soil conditions. Single head selections were made in the F_4 and the F_5 generations based on plant height, maturity date, plant type and disease reaction. Plant type selection was for reduced tillering and thicker stems. Disease reaction was based primarily on leaf rust (caused by *Puccinia triticina* Eriks.) and Septoria leaf blotch (caused by *Septoria tritici* Roberge in Desmaz.) The resulting experimental line was designated as AR 656-5-1. During the F_6 generation it was selected for resistance to a complex of soilborne wheat mosaic (SBWMV) and wheat spindle streak mosaic (WSSMV). During subsequent generations it was selected based on test weight and grain yield under Arkansas conditions.

Sabbe was tested in the Arkansas Small-Grain Cultivar Performance Trials in 1998, 1999 and 2000. It was tested in the Uniform Southern and Uniform Eastern Soft Red Winter Wheat regional trials in 2000. Sabbe has appeared stable and uniform for seven generations. Variants may include awned plants ($\leq$0.1%) or tall plants ($\leq$0.1%).

18b. Exhibit B: Statement of Distinctness

The phenotype of Sabbe is more typical of European wheat cultivars than American cultivars. Compared to typical cultivars in Arkansas, the culm is thicker, number of tillers is reduced, spikes are blocky, and the leaves are shorter and wider. Sabbe is most similar to 'AgriPro Shiloh' in appearance. Both are approximately 94 cm tall and have a plant color of 147A (as referenced by the Royal Horticultural Society Color Chart). Sabbe has leaves approximately 0.6 cm wider than Shiloh and the maturity date is 4 days later. The difference in maturity is shown by a significant difference according to the LSD test at the 0.05 probability level in the 2000-2001 Arkansas Small-Grain Cultivar Performance Tests (report is included, see pages 10-17). At maturity, Sabbe has spikes which are awnless, mid-density, oblong and erect at maturity. Due to environmental influence the apical rachis internodes may be shortened giving the spike a slightly clavate appearance or the end of the spike may taper resulting in a somewhat fusiform shape. The white glumes are glabrous, short (9 mm) and midwide with oblique shoulders and acute beaks. Kernels are red, short to midlong and ovate, with a midsize germ; the kernel brush is midsized and short to midlong; the kernel crease is narrow in width and is mid-deep with rounded cheeks. Kernels on average are 6.3 mm long and 3.4 mm wide with a kernel weight of 33 mg.

Heading Date Difference from the "2000-2001 Summary for Arkansas Small-Grain Cultivar Performance Tests":

Table #	Location	Input	'Sabbe'	'Shiloh'	Difference
2	Keiser	Standard	5-26	5-21	+5
3	Keiser	High	5-29	5-23	+6
4	Marianna	Standard	5-21	5-17	+4
5	Marianna	High	5-23	5-17	+6
6	Stuttgart	Standard	4-17	4-14	+3
7	Stuttgart	High	4-16	4-14	+2

200100248

STANDARD INPUT WHEAT TEST
NORTHEAST RESEARCH AND EXTENSION CENTER, KEISER, AR

SOIL SERIES....Sharkey silty clay
PREVIOUS CROP....Soybean
PLANTING DATE....October 11, 2000
FERTILIZER....100 lb/A N on March 9, 2001; 50 lb/A N on March 21, 2001
HERBICIDE....2 pt/A Hoelon on December 5, 2000; ½ oz/A Harmony Extra + 1 pt/A 2,4-D on March 19, 2001
FUNGICIDE....None
INSECTICIDE....None
HARVEST DATE....June 20, 2001
PRECIPITATION

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
	Inches								
2000-2001	0.9	6.0	3.3	2.2	6.8	3.7	1.1	4.9	28.9
Normal	2.4	4.1	4.7	3.4	3.0	4.8	5.1	5.3	32.8
Departure	-1.5	+1.9	-1.4	-1.2	+3.8	-1.1	-4.0	-0.4	-3.9

Table 2. Performance of Wheat Cultivars in Standard Input Test, Keiser.

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			----bu/A----	
DELTA KING 9121	72.0	56.1	4	30	4-21	5-22	78.2	68.9
DELTA KING 9216	68.3	54.7	1	32	4-22	5-22		
PIONEER BRAND XW586	65.8	56.5	3	26	4-21	5-20		
PIONEER BRAND 26R38	65.8	57.3	2	30	4-22	5-21	82.2	
AGRIPRO PATTON	65.2	56.6	2	31	4-22	5-23	74.2	72.3
DELTA KING 1551W	64.8	57.4	0	28	4-23	5-23	72.5	69.7
DELTA KING XTJ9333	64.6	55.2	4	35	4-21	5-20		
DELTA GROW 4888	64.2	57.3	9	34	4-22	5-21		
AR 839-25-8-2	63.8	58.9	1	29	4-23	5-22		
DELTA KING XTJ7777	62.9	57.4	6	33	4-22	5-22		
AR 839-28-1-2	61.6	58.1	0	29	4-22	5-22		
DELTA GROW 5300	61.5	57.1	8	30	4-22	5-21		
DELTA KING XTJ3333	61.2	55.8	1	30	4-21	5-20		
LA 90518PB43-3-1-4	60.8	56.1	0	30	4-21	5-20		
VA98W-593	60.6	60.1	5	26	4-23	5-24		
DIXIE 900	60.5	58.3	1	31	4-21	5-20	74.8	
FFR 510	60.2	57.2	2	28	4-20	5-19	74.5	
USG 3709	59.9	55.3	1	29	4-22	5-21	77.5	74.9
UGA 901146E15	59.8	53.9	1	27	4-20	5-21		
HBK X3030	59.6	56.6	5	26	4-19	5-19		
SOUTH. STATES SS 522	59.6	58.4	2	27	4-22	5-21	70.7	69.4
F 334W	59.5	58.1	6	32	4-25	5-26		
AGS 2000	59.5	56.8	8	30	4-21	5-22	80.6	81.0
AR 839-27-1-3	59.0	58.9	6	31	4-25	5-27	68.8	
DELTA KING XTJ7531	59.0	54.3	4	33	4-23	5-21		
TERRAL TV8910	58.9	54.9	0	30	4-22	5-22	72.0	
DELTA KING XTJ7900	58.9	57.2	2	34	4-20	5-19		
DIXIE 911	58.4	55.7	6	29	4-23	5-23	66.1	61.5
SOUTH. STATES SS 516	58.3	58.4	1	28	4-20	5-19	70.6	
ARMOR 3035	58.0	58.0	8	32	4-23	5-22	74.4	
NK COKER 9543	57.8	56.6	32	29	4-22	5-20	68.4	64.5
SOUTH. STATES SS 518	57.6	53.3	16	28	4-19	5-18	72.6	

5

Table 2. Continued

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			----bu/A----	
AGRIPRO M96*4403	57.3	56.4	24	31	4-23	5-23		
ARMOR 2025	57.1	57.1	2	34	4-21	5-22	74.4	
VA97W-206	57.0	57.6	9	28	4-22	5-22		
PROGENY 156	56.9	57.1	5	32	4-22	5-22	71.7	68.4
TERRAL TV 8825	56.8	53.4	15	31	4-26	5-27	71.7	68.4
PIONEER BRAND 2684	56.5	57.2	3	27	4-21	5-21	75.6	73.0
PIONEER BRAND 26R46	56.4	58.0	5	27	4-22	5-21	72.4	70.1
HBK X3020	56.3	56.9	6	31	4-22	5-21		
DELTA KING XTJ9486	56.2	58.4	3	33	4-22	5-20	71.5	
USG 3209	56.1	57.8	4	26	4-22	5-22	74.3	74.2
STINE 454	56.1	56.4	8	32	4-23	5-23		
PIONEER BRAND 26R24	56.0	56.6	7	28	4-23	5-22	73.6	72.3
PROGENY 103	55.6	56.3	4	30	4-24	5-22	64.4	63.4
DELTA KING 9027	55.2	56.1	4	29	4-20	5-20	68.7	67.4
DIXIE 2000	54.9	56.3	5	30	4-21	5-21	68.1	63.7
AR 584A-3-1-3	54.4	57.3	28	29	4-24	5-22		
FFR 522W	54.2	58.0	3	25	4-22	5-20		
UGA 91426E39	54.2	58.3	4	27	4-23	5-20		
STINE 422	53.4	57.4	4	28	4-23	5-22	68.6	
DELTA KING XTJ7599	53.1	56.5	1	31	4-22	5-21		
AR LA85411	53.0	58.6	3	27	4-24	5-23	72.0	
CROPLAN GENET. SR218	52.5	58.2	11	33	4-24	5-23	75.1	69.0
CROPLAN GENET. SR204	52.5	58.6	5	31	4-25	5-25	72.1	68.6
SOUTH. STATES SS 535	52.3	59.3	2	26	4-22	5-21	72.0	
DIXIE 922	52.3	58.3	4	32	4-22	5-21	71.5	
ARMOR 4045	51.9	58.1	5	33	4-22	5-22	66.9	
DELTA GROW 1100	50.9	55.7	8	30	4-21	5-21		
NK BL940812	50.9	59.7	3	28	4-23	5-23		
ARMOR 3135	50.8	57.7	7	34	4-22	5-22	71.4	
AGRIPRO SHILOH	50.3	56.3	4	29	4-23	5-21	56.0	58.5
FFR 551	50.3	55.7	11	26	4-23	5-23	64.5	
AR 494B-2-2	50.1	57.1	8	31	4-25	5-25	66.7	66.5
AGRIPRO MASON	50.0	54.0	6	33	4-20	5-19		
VA 96W-270	49.7	57.8	3	28	4-20	5-18	63.0	
NK BL940582	49.6	56.0	1	29	4-22	5-19		
F 335W	49.4	56.3	4	32	4-22	5-20		
LA 90185G3-1-3-4-2	49.2	57.7	29	29	4-23	5-23		
FFR 558W	48.3	57.9	3	31	4-25	5-25	68.9	65.3
AGRIPRO NATCHEZ	47.8	55.7	21	32	4-24	5-25	67.1	
ROANE	46.9	58.5	0	25	4-23	5-22	65.2	65.0
AGRIPRO SHELBY	46.7	58.3	9	31	4-23	5-22	62.1	64.6
SABBE	46.5	55.4	3	27	4-26	5-26	66.0	65.5
TERRAL TV 8555	45.4	58.0	1	25	4-23	5-21	68.3	65.5
NK COKER 9663	42.5	58.0	6	31	4-24	5-24	66.5	68.5
Grand mean	55.9	56.8	6	30	4-22	5-22	70.5	68.2
LSD (5%)	9.1	1.9	10	2	2	2	14.9	11.5
C.V. (%)	11.8	2.4	112	5	2	2	10.4	12.3

Ldg = Lodging Pt ht = Plant height

6

HIGH INPUT WHEAT TEST
NORTHEAST RESEARCH AND EXTENSION CENTER, KEISER, AR

SOIL SERIES....Sharkey silty clay
PREVIOUS CROP....Soybean
PLANTING DATE....October 11, 2000
FERTILIZER....100 lb/A N on March 9, 2001; 100 lb/A N on March 21, 2001
HERBICIDE....2 pt/A Hoelon on December 5, 2000; ½ oz/A Harmony Extra + 1 pt/A 2,4-D on March 19, 2001
FUNGICIDE....4 oz/A Tilt on April 16, 2001
INSECTICIDE....None
HARVEST DATE....June 20, 2001
PRECIPITATION

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
	Inches								
2000-2001	0.9	6.0	3.3	2.2	6.8	3.7	1.1	4.9	28.9
Normal	2.4	4.1	4.7	3.4	3.0	4.8	5.1	5.3	32.8
Departure	-1.5	+1.9	-1.4	-1.2	+3.8	-1.1	-4.0	-0.4	-3.9

Table 3. Performance of Wheat Cultivars in High Input Test, Keiser.

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			----bu/A----	
DELTA KING XTJ7777	72.8	57.4	8	32	4-23	5-23		
DELTA KING 9121	72.4	57.6	2	29	4-21	5-21	82.0	73.0
DELTA KING 9216	72.3	57.7	6	32	4-18	5-23		
DELTA KING XTJ7531	71.5	55.6	4	32	4-23	5-21		
PIONEER BRAND 26R38	71.1	57.2	3	28	4-23	5-22	85.0	
USG 3709	70.1	56.0	1	29	4-23	5-22	87.7	80.5
AR 839-27-1-3	69.3	58.3	2	30	4-27	5-27	80.5	
DELTA KING 1551W	68.5	57.7	1	27	4-23	5-23	80.1	75.0
F 334W	67.5	58.4	10	32	4-25	5-26		
AGRIPRO M96*4403	66.7	56.8	23	30	4-23	5-23		
DELTA GROW 1100	66.4	57.8	8	29	4-23	5-22		
AR 839-25-8-2	65.7	58.5	1	27	4-25	5-26		
HBK X3020	65.5	57.4	9	30	4-24	5-23		
ARMOR 3035	65.1	58.1	4	31	4-23	5-23	79.0	
NK COKER 9663	64.6	57.9	9	32	4-24	5-26	81.6	82.6
TERRAL TV8910	64.3	57.3	4	29	4-23	5-22	81.5	
VA98W-593	63.8	59.9	4	26	4-23	5-25		
DELTA KING XTJ3333	63.6	57.0	13	30	4-22	5-21		
STINE 454	63.5	57.4	8	29	4-22	5-21		
AGS 2000	63.3	57.7	11	28	4-22	5-25	86.8	85.6
DELTA KING XTJ9486	63.3	58.6	6	33	4-23	5-22	83.2	
FFR 551	62.7	56.2	15	25	4-25	5-24	80.1	
STINE 422	62.6	56.5	24	28	4-23	5-22	81.2	
DELTA KING XTJ9333	62.3	57.3	6	34	4-22	5-21		
DELTA KING 9027	62.1	57.0	9	31	4-21	5-20	82.3	79.4
AR 839-28-1-2	61.1	57.4	1	28	4-24	5-24		
DIXIE 900	60.9	58.6	6	32	4-23	5-23	78.9	
DIXIE 911	60.6	55.4	10	31	4-22	5-23	77.1	74.8
SABBE	60.3	55.0	6	27	4-28	5-29	77.0	76.6
AGRIPRO PATTON	60.3	56.8	4	29	4-24	5-23	77.9	72.9
HBK X3030	60.1	56.9	4	27	4-20	5-21		
SOUTH. STATES SS 516	60.1	58.5	1	28	4-19	5-20	76.3	

Table 3. Continued

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			----bu/A----	
AGRIPRO SHELBY	59.9	59.1	21	29	4-23	5-22	76.1	75.3
PIONEER BRAND XW586	59.5	57.3	3	26	4-20	5-20		
DELTA GROW 5300	59.5	56.4	10	28	4-23	5-22		
FFR 522W	59.3	59.3	10	27	4-22	5-21		
UGA 901146E15	59.2	55.0	3	25	4-22	5-23		
DELTA GROW 4888	59.0	57.6	9	30	4-23	5-23		
PROGENY 156	58.9	57.7	6	30	4-23	5-23	74.7	72.4
LA 90518PB43-3-1-4	58.7	57.3	1	27	4-23	5-21		
USG 3209	58.5	58.0	4	25	4-23	5-23	81.6	77.8
VA 96W-270	58.4	57.1	2	26	4-21	5-20	71.7	
SOUTH. STATES SS 535	58.3	59.6	6	26	4-23	5-22	74.0	
SOUTH. STATES SS 522	58.0	59.0	11	26	4-21	5-21	78.0	73.4
TERRAL TV 8825	58.0	52.5	25	30	4-28	5-27	74.4	72.9
PROGENY 103	58.0	56.1	14	28	4-23	5-22	72.9	71.7
LA 90185G3-1-3-4-2	58.0	56.2	13	29	4-23	5-24		
PIONEER BRAND 26R46	57.9	57.9	2	27	4-23	5-22	78.4	77.7
ARMOR 3135	57.5	58.5	9	32	4-22	5-22	76.9	
DIXIE 2000	56.6	56.4	8	27	4-23	5-22	78.4	69.8
VA97W-206	56.5	57.7	8	27	4-24	5-23		
PIONEER BRAND 26R24	56.4	58.0	11	28	4-22	5-22	78.5	75.5
UGA 91426E39	56.3	56.3	4	27	4-23	5-22		
PIONEER BRAND 2684	56.2	57.6	4	28	4-22	5-22	78.8	76.8
ARMOR 2025	56.2	57.2	11	31	4-23	5-22	79.4	
DELTA KING XTJ7900	56.1	58.5	5	30	4-22	5-21		
ARMOR 4045	56.1	57.0	6	30	4-22	5-23	78.1	
DIXIE 922	55.5	56.8	10	31	4-23	5-23	80.2	
AR LA85411	55.4	58.3	4	27	4-23	5-24	81.5	
AGRIPRO NATCHEZ	55.4	55.6	36	31	4-24	5-26	76.0	
AR 494B-2-2	54.9	55.3	11	31	4-27	5-26	71.8	74.1
F 335W	54.9	56.5	8	29	4-22	5-21		
FFR 558W	54.8	58.2	13	29	4-26	5-26	76.7	74.6
NK BL940812	54.5	59.5	3	26	4-24	5-24		
ROANE	54.4	59.6	4	27	4-23	5-22	76.3	71.8
DELTA KING XTJ7599	54.4	58.1	2	30	4-23	5-23		
FFR 510	53.0	57.7	5	29	4-21	5-20	76.5	
AGRIPRO MASON	52.3	54.3	9	31	4-21	5-21		
AGRIPRO SHILOH	51.0	56.5	11	27	4-25	5-23	68.6	69.3
NK BL940582	50.8	57.4	4	31	4-22	5-21		
CROPLAN GENET. SR218	50.6	57.1	15	33	4-25	5-25	71.4	66.9
NK COKER 9543	50.0	55.5	28	26	4-23	5-21	64.8	65.6
SOUTH. STATES SS 518	49.8	51.9	23	27	4-21	5-20	71.0	
TERRAL TV 8555	49.5	55.5	3	26	4-24	5-22	72.8	68.9
CROPLAN GENET. SR204	49.4	52.8	9	28	4-25	5-25	72.0	69.4
AR 584A-3-1-3	45.4	53.2	33	29	4-23	5-21		
Grand mean	59.2	56.9	9	29	4-23	5-23	77.3	74.2
LSD (5%)	10.5	2.7	9	2	2	2	12.1	9.9
C.V. (%)	12.8	3.4	67	6	3	2	10.6	11.3

Ldg = Lodging Pt ht = Plant height

8

STANDARD INPUT WHEAT TEST
COTTON BRANCH STATION, MARIANNA, AR

SOIL SERIES....Loring silt loam
PREVIOUS CROP....Fallow
PLANTING DATE....October 18, 2000
FERTILIZER.... 60 lb/A N on Feb. 20, 2001; 40 lb/A N on March 4, 2001: 16 lb N/A and 18 lb S/A on March 30, 2001
HERBICIDE....1⅓ pt/A Hoelon on November 21, 2000; ½ oz/A Harmony Extra on March 7, 2001
INSECTICIDE....1pt/A Methyl Parathion on April 27, 2001
HARVEST DATE....June 4, 2001
PRECIPITATION

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
	Inches								
2000-2001	0.3	7.8	3.4	3.2	8.0	2.2	4.0	4.0	32.9
Normal	3.0	4.4	4.8	4.4	4.1	5.4	5.5	5.2	36.8
Departure	-2.7	+3.4	-1.4	-1.2	+3.9	-3.2	-1.5	-1.2	-3.9

Table 4. Performance of Wheat Cultivars in Standard Input Test, Marianna.

Entry Name	Yield	Test wt	Ldg	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%			-----bu/A-----	
ARMOR 3035	93.8	58.6	0	4-20	5-20	92.1	
LA 90185G3-1-3-4-2	90.8	57.8	1	4-17	5-22		
DELTA KING XTJ7777	86.0	58.7	1	4-20	5-19		
PIONEER BRAND 26R38	84.9	57.0	0	4-18	5-18	84.9	
SOUTH. STATES SS 535	84.8	59.8	3	4-21	5-20	87.7	
PIONEER BRAND 26R46	83.9	58.4	0	4-18	5-19	88.4	87.7
NK BL940582	83.8	55.9	0	4-17	5-17		
TERRAL TV 8825	83.4	57.8	3	4-25	5-26	86.9	85.3
DIXIE 900	83.2	58.4	1	4-18	5-21	94.2	
UGA 901146E15	82.9	55.8	1	4-16	5-20		
FFR 522W	82.7	60.1	1	4-17	5-19		
PIONEER BRAND 26R24	82.6	58.8	1	4-20	5-19	83.6	86.4
AGRIPRO SHELBY	81.9	59.3	0	4-21	5-21	91.3	93.0
AGRIPRO SHILOH	81.5	57.6	1	4-21	5-17	86.3	87.3
DELTA KING 9216	81.3	57.8	1	4-22	5-22		
ARMOR 2025	81.3	55.6	1	4-17	5-19	90.7	
TERRAL TV 8555	80.8	58.3	0	4-20	5-21	89.3	89.5
AGRIPRO MASON	80.6	57.6	0	4-17	5-18		
DELTA KING XTJ9333	80.6	58.1	0	4-21	5-20		
FFR 558W	79.7	58.1	1	4-21	5-22	87.7	88.0
DELTA KING XTJ7599	79.7	59.3	1	4-18	5-19		
AR 584A-3-1-3	79.5	56.0	3	4-17	5-17		
VA98W-593	79.4	59.7	0	4-21	5-22		
STINE 422	79.3	56.7	0	4-18	5-17	87.3	
SOUTH. STATES SS 522	78.8	59.7	1	4-18	5-21	81.7	84.6
DELTA KING XTJ7531	78.8	56.6	0	4-23	5-20		
AGS 2000	78.8	56.8	0	4-18	5-20	87.2	88.2
AR 839-28-1-2	78.5	58.2	0	4-21	5-23		
LA 90518PB43-3-1-4	78.1	56.7	0	4-17	5-17		
NK COKER 9663	77.9	60.2	0	4-23	5-23	84.6	88.5
DELTA GROW 4888	77.4	56.1	1	4-19	5-20		
AR 839-27-1-3	77.3	59.9	0	4-26	5-27	84.9	

Table 4. Continued

Entry Name	Yield	Test wt	Ldg	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%			----bu/A-----	
AR 839-25-8-2	77.3	60.1	0	4-22	5-24		
AGRIPRO NATCHEZ	77.3	56.5	1	4-25	5-24	84.5	
DELTA KING XTJ7900	77.2	57.2	0	4-20	5-21		
SOUTH. STATES SS 518	76.7	55.8	0	4-17	5-17	80.2	
ARMOR 4045	76.5	57.7	0	4-20	5-21	86.0	
CROPLAN GENET. SR204	76.5	59.3	0	4-22	5-22	79.2	78.8
USG 3209	76.4	56.9	1	4-18	5-17	82.9	86.3
DIXIE 922	76.3	57.6	0	4-21	5-21	89.4	
AR LA85411	75.7	60.3	0	4-21	5-18	82.7	
AGRIPRO PATTON	75.2	55.7	1	4-19	5-18	80.8	84.1
UGA 91426E39	74.9	58.6	0	4-21	5-17		
F 334W	74.5	58.0	1	4-23	5-26		
USG 3709	74.4	54.3	0	4-20	5-17	80.0	81.8
ARMOR 3135	74.4	57.2	1	4-21	5-23	86.9	
FFR 510	74.2	56.2	1	4-16	5-16	82.7	
FFR 551	74.0	57.0	4	4-17	5-19	78.8	
PIONEER BRAND 2684	73.8	59.5	0	4-17	5-17	80.4	84.9
PROGENY 156	73.8	55.3	0	4-23	5-22	83.2	84.4
HBK X3020	73.8	58.3	0	4-22	5-21		
DELTA KING XTJ9486	73.7	57.8	4	4-21	5-21	87.5	
CROPLAN GENET. SR218	73.6	59.0	1	4-24	5-23	78.1	80.0
PIONEER BRAND XW586	73.4	56.6	0	4-16	5-16		
STINE 454	73.4	56.8	1	4-19	5-18		
DELTA KING XTJ7357	73.1	57.4	4	4-20	5-17		
VA97W-206	72.5	57.5	0	4-21	5-17		
NK COKER 9543	72.4	58.0	10	4-17	5-17	76.0	77.7
DIXIE 2000	71.9	54.1	6	4-17	5-17	83.4	80.5
TERRAL TV8910	71.8	56.2	0	4-18	5-17	76.3	
F 335W	71.5	56.5	0	4-20	5-19		
DELTA GROW 5300	71.2	55.2	0	4-21	5-17		
AR 494B-2-2	71.0	56.8	0	4-25	5-22	80.6	82.2
DELTA KING 1551W	70.5	56.1	0	4-23	5-21	85.3	85.9
NK BL940812	70.1	61.9	0	4-21	5-21		
PROGENY 103	69.4	54.5	1	4-21	5-18	81.9	86.8
DELTA GROW 1100	69.1	55.8	1	4-20	5-17		
SABBE	68.6	55.7	0	4-23	5-21	76.7	80.1
HBK X3030	68.1	56.0	0	4-16	5-18		
DELTA KING 9121	67.7	56.4	1	4-19	5-17	75.0	79.2
DELTA KING XTJ3333	67.3	51.5	14	4-17	5-17		
AGRIPRO M96*4403	66.6	54.5	0	4-20	5-19		
DIXIE 911	65.4	54.1	1	4-19	5-18	77.9	80.0
VA 96W-270	65.3	57.7	4	4-16	5-19	74.6	
ROANE	64.6	58.2	0	4-22	5-19	80.2	83.5
DELTA KING 9027	61.3	52.4	3	4-17	5-17	75.0	75.5
SOUTH. STATES SS 516	60.0	57.9	0	4-17	5-16	72.0	
Grand mean	76.0	57.3	1	4-20	5-20	83.1	84.1
LSD (5%)	9.6	2.6	6	1	2	11.6	8.1
C.V. (%)	9.1	3.2	401	2	2	7.9	7.3

Ldg = Lodging

10

HIGH INPUT WHEAT TEST
COTTON BRANCH STATION, MARIANNA, AR

SOIL SERIES....Loring silt loam
PREVIOUS CROP....Fallow
PLANTING DATE....October 18, 2000
FERTILIZER.... 90 lb/A N on February 20; 60 lb/A N on March 4: 16 lb N/A and 18 lb S/A on March 30
HERBICIDE....1⅓ pt/A Hoelon on November 21, 2000; ½ oz/A Harmony Extra on March 7, 2001
FUNGICIDE....4 oz/A Tilt on April 10, 2001
INSECTICIDE....1pt/A Methyl Parathion on April 27, 2001
HARVEST DATE....June 4, 2001
PRECIPITATION

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
	Inches								
2000-2001	0.3	7.8	3.4	3.2	8.0	2.2	4.0	4.0	32.9
Normal	3.0	4.4	4.8	4.4	4.1	5.4	5.5	5.2	36.8
Departure	-2.7	+3.4	-1.4	-1.2	+3.9	-3.2	-1.5	-1.2	-3.9

Table 5. Performance of Wheat Cultivars in High Input Test, Marianna.

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			-----bu/A----	
PIONEER BRAND 26R38	95.4	58.8	0	33	4-18	5-17	92.8	
PIONEER BRAND 26R46	94.0	58.3	0	29	4-18	5-21	96.4	93.5
PIONEER BRAND 26R24	92.9	60.3	1	29	4-19	5-21	96.9	98.6
FFR 522W	92.8	61.8	1	30	4-17	5-21		
DELTA GROW 4888	92.7	59.1	0	33	4-18	5-23		
AGRIPRO SHELBY	91.8	60.3	1	33	4-22	5-24	94.2	94.2
LA 90185G3-1-3-4-2	91.6	58.9	0	32	4-17	5-22		
VA98W-593	91.1	61.5	0	29	4-22	5-26		
USG 3209	90.5	58.9	0	24	4-17	5-19	85.1	89.8
DIXIE 900	89.8	58.3	0	31	4-17	5-23	93.0	
DELTA KING XTJ7777	89.7	58.8	0	33	4-20	5-21		
AGS 2000	89.7	59.1	0	30	4-17	5-21	96.9	95.6
DELTA KING XTJ7531	89.6	59.0	0	32	4-23	5-21		
SOUTH. STATES SS 522	88.8	61.3	1	30	4-17	5-20	92.1	90.1
DELTA KING XTJ7900	88.7	58.0	0	35	4-18	5-23		
PROGENY 156	87.9	59.3	0	33	4-23	5-26	96.4	94.5
DELTA KING XTJ9486	87.8	58.1	0	34	4-18	5-22	96.8	
SOUTH. STATES SS 535	87.7	60.3	3	29	4-18	5-20	93.4	
ARMOR 3035	87.5	59.1	0	33	4-19	5-23	99.1	
FFR 558W	87.5	60.3	0	32	4-20	5-25	94.0	93.5
ARMOR 2025	87.5	58.3	0	31	4-17	5-20	94.3	
DELTA KING 9216	87.4	59.6	0	33	4-23	5-25		
PIONEER BRAND 2684	87.4	60.3	4	27	4-17	5-18	96.3	101.3
PIONEER BRAND XW586	87.2	57.8	0	30	4-16	5-17		
SOUTH. STATES SS 518	87.0	56.4	1	26	4-16	5-17	88.5	
TERRAL TV 8555	86.9	59.2	0	27	4-20	5-18	88.7	91.0
HBK X3020	86.7	58.6	1	32	4-22	5-26		
F 334W	86.5	60.5	0	35	4-25	5-27		
AGRIPRO NATCHEZ	86.4	57.2	0	33	4-25	5-25	94.9	
UGA 901146E15	85.9	57.1	0	27	4-16	5-20		
DIXIE 922	85.8	58.5	0	32	4-18	5-21	93.2	
ARMOR 4045	85.6	58.3	1	34	4-18	5-22	94.4	

Table 5. Continued

Entry Name	Yield	Test wt	Ldg	Pt ht	Head date	Mat. date	2-Yr avg	3-Yr avg
	bu/A	lb/bu	%	in			-----bu/A----	
UGA 91426E39	85.3	60.7	0	29	4-20	5-17		
USG 3709	85.2	56.2	0	30	4-19	5-18	88.5	88.9
AR LA85411	85.0	61.3	0	32	4-20	5-19	90.4	
AR 839-28-1-2	84.9	60.8	0	32	4-23	5-18		
STINE 422	84.6	57.9	0	28	4-18	5-17	93.8	
NK BL940582	84.5	58.7	1	34	4-17	5-17		
AR 839-25-8-2	84.4	60.7	0	30	4-22	5-24		
FFR 551	84.4	57.8	1	27	4-17	5-19	92.5	
AR 494B-2-2	84.3	59.7	1	34	4-25	5-25	89.7	90.1
NK COKER 9663	84.3	60.9	0	34	4-23	5-18	95.8	95.8
F 335W	84.3	57.5	1	31	4-17	5-20		
VA97W-206	84.2	58.3	4	28	4-19	5-17		
TERRAL TV 8825	83.9	56.2	4	31	4-25	5-26	87.9	83.9
LA 90518PB43-3-1-4	83.5	57.3	0	30	4-17	5-18		
AR 839-27-1-3	83.4	60.2	0	34	4-27	5-28	90.5	
AR 584A-3-1-3	83.3	58.0	9	30	4-17	5-17		
DELTA GROW 5300	83.1	57.3	3	31	4-21	5-18		
CROPLAN GENET. SR218	83.1	60.3	0	34	4-25	5-26	89.7	89.4
AGRIPRO MASON	82.9	57.0	0	30	4-17	5-17		
DELTA KING 1551W	82.8	59.5	0	30	4-24	5-23	94.4	93.0
FFR 510	82.7	56.8	2	30	4-15	5-17	92.1	
PROGENY 103	82.4	56.6	0	32	4-20	5-21	91.7	92.1
DELTA KING XTJ7599	82.4	59.7	0	32	4-18	5-19		
NK COKER 9543	82.3	59.2	3	28	4-17	5-17	85.3	85.6
DELTA KING XTJ7357	82.2	59.6	2	32	4-18	5-19		
STINE 454	81.7	56.9	6	31	4-18	5-19		
AGRIPRO SHILOH	81.3	58.4	1	33	4-21	5-17	90.6	89.9
DELTA KING XTJ9333	81.3	59.5	0	37	4-20	5-22		
CROPLAN GENET. SR204	81.1	59.9	0	35	4-23	5-24	90.0	88.9
ARMOR 3135	80.2	58.4	0	34	4-21	5-23	94.4	
AGRIPRO M96*4403	78.8	56.3	6	30	4-18	5-19		
DELTA KING XTJ3333	78.7	57.0	2	28	4-17	5-18		
AGRIPRO PATTON	77.9	57.1	0	32	4-18	5-17	85.8	88.6
SOUTH. STATES SS 516	77.8	58.7	0	26	4-17	5-17	84.4	
ROANE	77.2	61.1	0	27	4-21	5-19	87.3	90.8
DELTA GROW 1100	76.6	57.5	2	31	4-19	5-19		
SABBE	76.2	56.7	0	34	4-24	5-23	87.4	89.7
VA 96W-270	76.1	58.2	0	27	4-16	5-17	88.3	
HBK X3030	76.0	57.1	0	25	4-16	5-19		
TERRAL TV8910	75.8	55.9	0	29	4-18	5-17	84.2	
DIXIE 911	75.3	55.5	1	29	4-18	5-24	88.5	90.0
NK BL940812	73.9	61.1	0	28	4-20	5-19		
DIXIE 2000	73.9	56.8	2	28	4-17	5-19	87.4	82.6
DELTA KING 9027	73.7	56.4	1	28	4-17	5-17	86.7	87.8
DELTA KING 9121	72.6	57.6	0	30	4-19	5-19	86.9	85.7
Grand mean	84.3	58.6	1	31	4-19	5-20	91.3	90.9
LSD (5%)	7.5	1.2	3		1	4	12.6	10.0
C.V. (%)	6.4	1.5	227		2	4	9.4	8.4

Ldg = Lodging Pt ht = Plant height

12

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(*Wheat*)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* spp.)

NAME OF APPLICANT(S)

University of Arkansas Agricultural Experiment Station

ADDRESS (*Street and No. or R.F.D. No., City, State, and Zip Code*)

AFLS Building, Room 219
Fayetteville, AR 72701

FOR OFFICIAL USE ONLY

PVPO NUMBER 200100248

VARIETY NAME

Sabbe

TEMPORARY OR EXPERIMENTAL DESIGNATION

AR 656-5-1

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 (e.g. [ ][ ][ ] or [ ][ ]) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____.

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

[1] 1=Common 2=Durum 3=Club 4=Other (SPECIFY) _____

2. VERNALIZATION:

[2] 1=Spring 2=Winter 3=Other (SPECIFY) _____

3. COLEOPTILE ANTHOCYANIN:

[1] 1=Absent 2=Present

4. JUVENILE PLANT GROWTH:

[2] 1=Prostrate 2=Semi-erect 3=Erect

5. PLANT COLOR (boot stage):

[2] 1 = Yellow-Green 2 = Green 3 = Blue-Green

6. FLAG LEAF (boot stage):

[2] 1 = Erect 2 = Recurved [1] 1 = Not Twisted 2 = Twisted

7. EAR EMERGENCE:

[0 1] Number of Days Earlier Than Terral TV 8825 *

[0 4] Number of Days Later Than AGS 2000 *

8. ANTHER COLOR:

[1] 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

[03 3] cm Taller Than AGS 2000 *

[0 6] cm Shorter Than Coker 9663 *

10. STEM:

A. ANTHOCYANIN

[1] 1= Absent 2=Present

B. WAXY BLOOM

[1] 1=Absent 2=Present

C. HAIRINESS (last internode of rachis)

[1] 1=Absent 2=Present

D. INTERNODE (SPECIFY NUMBER) 4

[1] 1=Hollow 2=Semi-solid 3=Solid

E. PEDUNCLE

[1] 1=Absent 2=Present

[ ] cm Length

11. HEAD (at Maturity):

A. DENSITY

[2] 1=Lax 2=Middense 3= Dense

B. SHAPE

[4] 1 = Tapering 2= Strap 3 = Clavate 4 = Other (SPECIFY) Fusiform

C. CURVATURE

[1] 1 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

[1] 1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned

12. GLUMES (at Maturity):

A. COLOR

[1] 1 = White 2 = Tan 3 = Other (SPECIFY) _____

B. SHOULDER

[2] 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

[2] 1 = Obtuse 2 = Acute 3 =Acuminate

D. LENGTH

[1] 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

[2] 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

[1] 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

[1] 1=Rounded 2=Angular

C. BRUSH

[2] 1=Short 2=Medium 3=Long

[1] 1 = Not Collared 2 = Collared

D. CREASE

[1] 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

[1] 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

13. SEED: (continued)

E. COLOR

[3] 1 = White 2 = Amber 3 = Red 4 = Other (SPECIFY) _____

F. TEXTURE

[2] 1=Hard 2=Soft

G. PHENOL REACTION *(see instructions)*:

[?] 1 = Ivory 2 = Fawn 3 = Light Brown 4 = Dark Brown 5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

Stem Rust *(Puccinia graminis* f. sp. *tritici)* [1] _____

Stripe Rust *(Puccinia striiformis)* [3] _____

Tan Spot *(Pyrenophora tritici-repentis)* [0] _____

Halo Spot *(Selenophoma donacis)* [0] _____

Septoria nodorum (Glume Blotch) [3] _____

Septoria avenae (Speckled Leaf Disease) [0] _____

Septoria tritici (Speckled Leaf Blotch) [2] _____

Scab (*Fusarium* spp.) [1] _____

"Black Point" (Kernel Smudge) [0] _____

Barley Yellow Dwarf Virus (BYDV) [3] _____

Soilborne Mosaic Virus (SBMV) [3] _____

Wheat Yellow (Spindle Streak) Mosaic Virus [3] _____

Wheat Streak Mosaic Virus (WSMV) [0] _____

Other (SPECIFY) _____ [ ] _____

Other (SPECIFY) _____ [ ] _____

Other (SPECIFY) _____ [ ] _____

Leaf Rust *(Puccinia recondita* f. sp. *tritici)* [1] _____

Loose Smut *(Ustilago tritici)* [1] _____

Flag Smut *(Urocystis agropyri)* [0] _____

Common Bunt *(Tilletia tritici* or *T. laevis)* [0] _____

Dwarf Bunt *(Tilletia controversa)* [0] _____

Karnal Bunt *(Tilletia indica)* [0] _____

Powdery Mildew *(Erysiphe graminis* f. sp. *tritici)* [3] _____

"Snow Molds" [0] _____

Common Root Rot *(Fusarium, Cochliobolus* and *Bipolaris* spp.*)* [0] _____

Rhizoctonia Root Rot *(Rhizoctonia solani)* [0] _____

Black Chaff *(Xanthomonas campestris* pv. *translucens)* [0] _____

Bacterial Leaf Blight *(Pseudomonas syringae* pv. *syringae)* [0] _____

Other (SPECIFY) Bacterial Streak [3] Xanthomonas campestris putrans

Other (SPECIFY) _____ [ ] _____

Other (SPECIFY) _____ [ ] _____

Other (SPECIFY) _____ [ ] _____

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

Hessian Fly *(Mayetiola destructor)*
[1] GP, B, C, D, E, L

Stem Sawfly *(Cephus* spp.)
[0]

Cereal Leaf Beetle *(Oulema melanopa)*
[0]

Russian Aphid *(Diuraphis noxia)*
[0]

Greenbug *(Schizaphis graminum)*
[0]

Aphids
[0]

Other (SPECIFY)

Other (SPECIFY)

Other (SPECIFY)

Other (SPECIFY)

Other (SPECIFY)

Other (SPECIFY)

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

EXHIBIT D - MILLING AND BAKING DATA

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1
STD = #2503, MASON

LAB NO.		ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCOR	COMBINED QUALITY SCOR	MICRO T.W. LB/BU
****		STANDARD	100.0 A	100.0 A	100.0 A	60.3
2501	1	Coker 9835	104.8 A	95.3 B	95.3 B	60.4
2502	2	Coker 9663	96.2 B	92.6 C	92.6 C	61.4
2503	3	Mason	100.0 A	99.9 A	99.9 A	60.3
2504	4	GA89482E7	105.5 A	106.3 A	105.5 A	62.7
2505	5	SC921285	96.2 B	83.6 E	83.6 E	61.9
2506	6	SC921299	95.8 B	87.8 D	87.8 D	61.5
2507	7	S9412192	84.9 E	62.6 F	62.6 F	60.0
2508	8	LA90115C25-36-2	99.5 B	102.3 A	99.5 B	60.0
2509	9	LA90518PB4331-4	103.7 A	97.1 B	97.1 B	60.7
2510	10	LA8983B14-31-4	96.0 B	107.7 A	96.0 B	60.6
2511	11	LA90185G31-34-2	100.9 A	100.6 A	100.6 A	61.3
2512	12	VA96W-270	99.4 B	92.7 C	92.7 C	60.4
2513	13	VA97W-206	97.0 B	95.7 B	95.7 B	61.4
2514	14	VA98W-593	99.9 A	83.9 E	83.9 E	64.3
2515	15	AW-M96'4403	101.8 A	104.5 A	101.8 A	61.5
2516	16	AW-D97-6750	100.5 A	96.2 B	96.2 B	62.8
2517	17	AW-M94'1626-7	88.6 D	91.9 C	88.6 D	62.3
2518	18	NC96-13155	102.0 A	101.9 A	101.9 A	62.2
2519	19	NC96-13965	104.0 A	105.3 A	104.0 A	62.4
2520	20	B950590	105.0 A	107.5 A	105.0 A	60.3
2521	21	B950904	100.6 A	107.5 A	100.6 A	61.8
2522	22	B950943	97.5 B	93.2 C	93.2 C	61.0
2523	23	TX96D1320	94.1 C	96.7 B	94.1 C	59.4
2524	24	TX97D4556	90.8 C	92.9 C	90.8 C	61.5
2525	25	TX97D6719	87.4 D	82.4 E	82.4 E	62.0
2526	26	TX97D6737	102.8 A	103.0 A	102.8 A	60.7
2527	27	TX91-27	92.2 C	90.6 C	90.6 C	60.2
2528	28	TX91-57	90.3 C	89.4 D	89.4 D	60.9
2529	29	AR656-5-1	99.7 B	103.3 A	99.7 B	61.5
2530	30	AR647-1-6	102.3 A	97.9 B	97.9 B	62.4
2531	31	GA90552AE33	98.5 B	90.4 C	90.4 C	63.5
2532	32	GA93059LE6	90.6 C	86.7 D	86.7 D	61.6
2533	33	GA91426E39	89.7 D	83.0 E	83.0 E	61.4

EXHIBIT D - MILLING AND BAKING DATA

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1
STD = #2503, MASON

	ENTRY	SOFT. EQUI .	FLOUR YIELD	FLOUR PROT.	MICRO AWRC	COOKI DIAM.	TOP GR.
	STANDARD	59.2	70.8	8.91	57.3	17.91	5
1	Coker 9835	64.9	71.2	8.13	61 Q	18.01	5
2	Coker 9663	52.0 Q	70.9	8.52	56.3	17.76	5
3	Mason	59.2	70.8	8.90	57.3	17.91	5
4	GA89482E7	58.3	73.1	8.75	56.5	18.15	5
5	SC921285	59.7	69.6 *	9.64	59.6 *	17.38 Q	4
6	SC921299	59.5	69.6 *	9.98	59.1 *	17.53 *	5
7	S9412192	55.5 *	67.6 Q	9.17	61.7 Q	16.83 Q	4
8	LA90115C25-36-2	56.1	71.2	9.01	56.4	18.05	6
9	LA90518PB4331-4	58.6	71.8	10.01	55.7	17.68	4
10	LA8983B14-31-4 .	59.4	69.7 *	8.81	55	18.5	6
11	LA90185G31-34-2	59.0	71.0	8.91	56.5	17.85	6
12	VA96W-270	54.5 *	71.4	9.39	54.8	17.65 *	5
13	VA97W-206	53.7 *	70.8	7.96	54.8	17.83	7
14	VA98W-593	56.6	70.8	8.95	61.8 Q	17.8	5
15	AW-M96'4403	56.0	71.7	8.66	55	18.23	6
16	AW-D97-6750	57.6	70.9	9.59	55.8	17.68	4
17	AW-M94'1626-7	56.4	68.1 Q	10.37	56.1	17.53 *	4
18	NC96-13155	53.2 *	73.5	9.81	55.3	18.3	6
19	NC96-13965	56.9	72.0	9.57	54.7	18.22	4
20	B950590	59.2	72.5	8.40	55.7	18.3	4
21	B950904	59.1	70.8	9.13	55.3	18.38	6
22	B950943	53.8 *	71.0	8.59	56.7	17.75	6
23	TX96D1320	55.5 *	70.0 *	9.70	55.7	17.8	6
24	TX97D4556	51.2 Q	69.6 *	9.53	55.1	17.81	4
25	TX97D6719	59.7	67.4 Q	9.14	61.9 Q	17.6 *	4
26	TX97D6737	55.5 *	72.7	9.52	53.6	18.1	4
27	TX91-27	55.0 *	69.5 *	9.63	56.1	17.53 *	5
28	TX91-57	54.6 *	69.0 Q	9.25	56.8	17.55 *	4
29	AR656-5-1	54.7 *	71.3	8.82	56.2	18.48	6
30	AR647-1-6	53.4 *	72.1	9.22	56.1	17.95	5
31	GA90552AE33	53.7 *	71.0	9.46	55.4	17.58 *	4
32	GA93059LE6	58.0	68.5 Q	8.70	58.9 *	17.53 *	4
33	GA91426E39	54.3 *	68.9 Q	9.09	58.5	17.47 *	4

EXHIBIT D - MILLING AND BAKING DATA

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1
STD = #2503, MASON

	ENTRY	LACTIC ACID ABSORP
	STANDARD	
1	Coker 9835	103.9
2	Coker 9663	115.5
3	Mason	123.6
4	GA89482E7	110.3
5	SC921285	146.7
6	SC921299	145.8
7	S9412192	100.0
8	LA90115C25-36-2	103.7
9	LA90518PB4331-4	117.9
10	LA8983B14-31-4	115.7
11	LA90185G31-34-2	113.5
12	VA96W-270	103.3
13	VA97W-206	113.7
14	VA98W-593	108.8
15	AW-M96'4403	119.8
16	AW-D97-6750	134.9
17	AW-M94'1626-7	146.0
18	NC96-13155	116.2
19	NC96-13965	126.4
20	B950590	118.4
21	B950904	129.8
22	B950943	123.7
23	TX96D1320	122.1
24	TX97D4556	129.5
25	TX97D6719	114.8
26	TX97D6737	117.6
27	TX91-27	117.5
28	TX91-57	125.7
29	AR656-5-1	90.7
30	AR647-1-6	109.9
31	GA90552AE33	114.2
32	GA93059LE6	106.3
33	GA91426E39	111.9

EXHIBIT D - MILLING AND BAKING DATA

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2

STD = #2553, MASON

LAB NO.		ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCOR	MICRO T.W. LB/BU
****		STANDARD	100.0 A	100.0 A	100.0 A	61.4
2551	1	Coker 9835	103.4 A	96.0 B	96.0 B	59.7 *
2552	2	Coker 9663	92.3 C	85.6 D	85.6 D	61.9
2553	3	Mason	100.1 A	100.1 A	100.1 A	61.4
2554	4	GA89482E7	104.3 A	96.4 B	96.4 B	62.2
2555	5	SC921285	97.2 B	90.6 C	90.6 C	62.5
2556	6	SC921299	94.6 C	90.9 C	90.9 C	62.7
2557	7	S9412192	81.8 E	56.2 F	56.2 F	59.2 *
2558	8	LA90115C25-36-2	100.5 A	103.3 A	100.5 A	60.8
2559	9	LA90518PB4331-4	100.8 A	98.0 B	98.0 B	60.1 *
2560	10	LA8983B14-31-4	94.7 C	108.8 A	94.7 C	60.9
2561	11	LA90185G31-34-2	100.8 A	100.9 A	100.8 A	60.4
2562	12	VA96W-270	95.2 B	97.8 B	95.2 B	61.5
2563	13	VA97W-206	95.6 B	93.9 C	93.9 C	60.9
2564	14	VA98W-593	98.0 B	83.0 E	83.0 E	64.5
2565	15	AW-M96'4403	101.0 A	105.6 A	101.0 A	61.5
2566	16	AW-D97-6750	96.1 B	102.2 A	96.1 B	62.8
2567	17	AW-M94'1626-7	86.2 D	99.8 B	86.2 D	62.5
2568	18	NC96-13155	103.1 A	103.6 A	103.1 A	62.9
2569	19	NC96-13965	103.8 A	108.3 A	103.8 A	63.3
2570	20	B950590	103.7 A	104.7 A	103.7 A	61.1
2571	21	B950904	98.9 B	109.5 A	98.9 B	62.8
2572	22	B950943	97.1 B	99.8 B	97.1 B	61.5
2573	23	TX96D1320	90.5 C	101.3 A	90.5 C	59.9 *
2574	24	TX97D4556	86.8 D	85.9 D	85.9 D	61.2
2575	25	TX97D6719	86.7 D	93.5 C	86.7 D	62.9
2576	26	TX97D6737	103.4 A	105.4 A	103.4 A	61.1
2577	27	TX91-27	92.2 C	101.1 A	92.2 C	60.6
2578	28	TX91-57	89.1 D	90.6 C	89.1 D	62.0
2579	29	AR656-5-1	100.4 A	103.9 A	100.4 A	60.7
2580	30	AR647-1-6	103.5 A	100.7 A	100.7 A	62.6
2581	31	GA90552AE33	98.8 B	91.4 C	91.4 C	63.7
2582	32	GA93059LE6	88.3 D	86.2 D	86.2 D	61.7
2583	33	GA91426E39	91.5 C	73.6 F	73.6 F	63.6

EXHIBIT D - MILLING AND BAKING DATA

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2
STD = #2553, MASON

	ENTRY	SOFT. EQU .	FLOUR YIELD	FLOUR PROT.	MICRO AWRC	COOKI DIAM.	TOP GR.
	STANDARD	54.2	71.1	9.18	57.2	17.9	6
1	Coker 9835	61.7	71.2	7.96	59.5 *	17.9	6
2	Coker 9663	48.3 Q	70.1 *	8.76	58.4	17.7 *	7
3	Mason	54.2	71.1	9.18	57.2	17.9	6
4	GA89482E7	52.7	73.1	9.52	56.8	17.8	5
5	SC921285	55.3	70.0 *	10.06	58.0	17.5 *	4
6	SC921299	55.0	69.4 Q	10.62	58.2	17.6 *	4
7	S9412192	51.8	67.1 Q	9.60	63.6 Q	16.7 Q	3
8	LA90115C25-36-2	54.1	71.2	9.14	56.6	18.0	5
9	LA90518PB4331-4	55.4	71.2	10.20	56.8	17.7	4
10	LA8983B14-31-4	55.4	69.5 *	8.91	55.8	18.5	6
11	LA90185G31-34-2	57.6	70.7	8.55	57.3	17.9	6
12	VA96W-270	50.2 *	70.5	9.38	55.1	17.9	6
13	VA97W-206	52.9	70.2 *	9.52	56.8	17.6 *	5
14	VA98W-593	49.3 *	71.1	8.52	60.2 *	17.7	7
15	AW-M96'4403	52.3	71.6	9.78	53.7	18.2	5
16	AW-D97-6750	54.5	69.8 *	10.26	54.7	17.9	5
17	AW-M94'1626-7	54.2	67.4 Q	10.85	55.5	17.8	4
18	NC96-13155	50.4 *	73.3	9.80	55.0	18.6	7
19	NC96-13965	54.9	71.7	9.68	53.1	18.5	5
20	B950590	55.0	71.9	9.17	55.0	18.0	4
21	B950904	56.1	70.3 *	9.29	55.9	18.2	5
22	B950943	50.9 *	70.9	8.92	56.3	18.0	6
23	TX96D1320	51.2 *	69.3 Q	8.88	54.8	18.0	7
24	TX97D4556	47.6 Q	68.9 Q	10.08	55.1	17.4 *	4
25	TX97D6719	55.8	67.2 Q	8.85	59.4 *	17.8	4
26	TX97D6737	52.1	72.8	9.67	53.2	18.2	4
27	TX91-27	53.0	69.4 Q	9.65	55.2	17.9	4
28	TX91-57	50.5 *	68.8 Q	9.27	57.1	17.6 *	5
29	AR656-5-1	52.1	71.6	9.20	56.2	18.1	7
30	AR647-1-6	51.2 *	72.4	9.06	56.1	18.0	8
31	GA90552AE33	51.1 *	71.0	9.42	56.6	17.6 *	4
32	GA93059LE6	53.4	68.2 Q	8.63	60.6 Q	17.7	5
33	GA91426E39	51.7	69.1 Q	8.77	59.3 *	17.0 Q	4

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2

STD = #2553, MASON

	ENTRY	LACTIC ACID ABSORP
	STANDARD	
1	Coker 9835	86.0
2	Coker 9663	107.9
3	Mason	109.7
4	GA89482E7	102.5
5	SC921285	132.6
6	SC921299	130.5
7	S9412192	89.9
8	LA90115C25-36-2	87.9
9	LA90518PB4331-4	106.6
10	LA8983B14-31-4	106.3
11	LA90185G31-34-2	96.0
12	VA96W-270	97.7
13	VA97W-206	102.9
14	VA98W-593	109.2
15	AW-M96'4403	114.2
16	AW-D97-6750	125.1
17	AW-M94'1626-7	134.8
18	NC96-13155	98.8
19	NC96-13965	118.7
20	B950590	111.9
21	B950904	123.8
22	B950943	106.5
23	TX96D1320	110.0
24	TX97D4556	122.2
25	TX97D6719	102.7
26	TX97D6737	105.1
27	TX91-27	104.8
28	TX91-57	116.6
29	AR656-5-1	82.0
30	AR647-1-6	107.2
31	GA90552AE33	103.2
32	GA93059LE6	100.6
33	GA91426E39	102.0

REPRODUCE LOCALLY. *Include form number and date on all reproductions.*

FORM APPROVED - OMB NO. 0581-0055 EXPIRES: 12-31-96

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

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

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 APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
University of Arkansas Agricultural Experiment Station	AR 656-5-1	Sabbe

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*	5. TELEPHONE *(include area code)*	6. FAX *(include area code)*
AFLS Building, Room 219 Fayetteville, AR 72701	501/575-4750	501/575-2410
	7. PVPO NUMBER 200100248	

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

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

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

a. If original rights to variety were owned by individual(s):
Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

b. If original rights to variety were owned by a company: [ ] YES [ ] NO
Is the original breeder(s) U.S. based company? If no, give name of country _____

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

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of 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 breeder, both the original breeder and the applicant must meet one of the above criteria.

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

Public reporting burden for this collection of information is estimated to average 10 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. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (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 the USDA Office of Communications at (202) 720-2791.

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.