No. 9000017

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Florida Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

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

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

WHEAT

'ATW 270'

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* 30th *day of* November *in the year of our Lord one thousand nine hundred and* ninety-three.

Attest:

Kenneth K Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

Public reporting burden for this collection of information is estimated to average 30 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 Office, OIRM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250.

FORM APPROVED: OMB 0581-0055, Expires 1/31/91

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

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) *(as it is to appear on the Certificate)*
Florida Agricultural Experiment Station
University of Florida-IFAS

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.
FL7927-G29

3. VARIETY NAME
ATW 270

4. ADDRESS *(street and no. or R.F.D. no., city, state, and ZIP)*
Dean for Research
1022 McCarty Hall-University of Florida
Gainesville, Florida 32611

5. PHONE *(Include area code)*
904/392-1784

FOR OFFICIAL USE ONLY
PVPO NUMBER
9000017

FILING
Date: Nov. 3, 1989
Time: 1:30 ☐ A.M. ☑ P.M.

FEES RECEIVED
Filing and Examination Fee: $2150.—
Date: Nov. 3, 1989
Certificate Fee: $250.00
Date: Nov. 16, 1993

6. GENUS AND SPECIES NAME
Triticum aestivum

7. FAMILY NAME *(Botanical)*
Gramineae

8. CROP KIND NAME *(Common Name)*
Wheat, common

9. DATE OF DETERMINATION
1. 1985 May
2. ~~1989~~

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

12. DATE OF INCORPORATION

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
R. D. Barnett, Rt. 3 Box 4370, Quincy, Florida 32351, 904/627-9236

PHONE *(Include area code)*:

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*
- a. [X] Exhibit A, Origin and Breeding History of the Variety.
- b. [X] Exhibit B, Novelty Statement.
- c. [X] Exhibit C, Objective Description of Variety.
- d. [X] Exhibit D, Additional Description of Variety.
- e. [X] Exhibit E, Statement of the Basis of Applicant's Ownership.
- f. [X] Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 10-27-89
- g. [X] Filing and Examination Fee ($2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See section 83(a) of the Plant Variety Protection Act.)*
[X] YES *(If "YES," answer items 16 and 17 below)* ☐ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
[X] YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
[X] FOUNDATION [X] REGISTERED [X] CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES *(If "YES," through* ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____ .)
[X] NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☐ YES (If "YES," give names of countries and dates)
[X] NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

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

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

SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE
Ronald D. Barnett	Professor of Agronomy	10/27/89
SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE
J. M. Davidson	Dean for Research	10/30/89

FORM CSSD-470 (5-89) Edition of FORM LS-470, 3-86, is obsolete.

Exhibit A

Origin and Breeding History of ATW 270

Pedigree: Florida 302 sib/Coker 797

Date of Cross: 1979

Breeding History:

'ATW 270' (FL7927-G29) was selected from a cross made at Quincy, Florida between a bronze chaffed sister line of Florida 302 and Coker 797. ATW 270 originated from a single plant selected in the F_3 generation. It was grown as an F_4 plant row and appeared to be uniform and stable. It was selected from survivors of leaf rust screening made in the greenhouse during the F_3 generation. Yield performance evaluation began in the F_5 generation. The line performed well in yield trials between 1984 and 1986. It was included in the Uniform Southern Soft Red Winter Wheat Nursery in 1988 and 1989. It was included in state variety trials in Georgia and South Carolina in 1987 and practically all southern states in 1988 and 1989.

ATW 270 is uniform and stable. Less than 1% of the plants were rogued from the foundation field in 1988. It does contain several offtype plants. An occasional bearded and an occasional white chaffed plant may be found. Also an occasional taller plant may occur. But these offtype plants have occurred at less than 1% in subsequent generations.

Exclusive rights to market, produce and distribute ATW 270 were granted to AgraTech Seeds Inc., 244 Perimeter Center Parkway, N. E., P. O. Box 2210, Atlanta, Georgia 30301 (404/393-5410) in 1989. AgraTech Seeds Inc. is a wholly owned subsidiary of Gold Kist Inc., headquartered in Atlanta, Georgia.

Exhibit B

Novelty Statement

ATW 270 is most similar to the soft red winter wheat Coker 797. However, it can be easily distinguished since it is bronze chaffed and Coker 797 is white chaffed.

LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
BELTSVILLE, MARYLAND 20705

(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*TRITICUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(s)
Florida Agricultural Experiment Station
University of Florida - IFAS

ADDRESS (*Street and No., or R.F.D. No., City, State, and ZIP Code*)
Dean for Research - University of Florida
1022 McCarty Hall
Gainesville FL 32611

FOR OFFICIAL USE ONLY
PVPO NUMBER 9000017
VARIETY NAME OR TEMPORARY DESIGNATION
ATW 270

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. KIND:
[1] 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:
[2] 1 = SPRING 2 = WINTER 3 = OTHER (*Specify*) _____
[1] 1 = SOFT 2 = HARD 3 = OTHER (*Specify*) _____
[2] 1 = WHITE 2 = RED 3 = OTHER (*Specify*) _____

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:
[1][3][4] FIRST FLOWERING
[1][3][9] LAST FLOWERING

4. MATURITY (*50% Flowering*):
[0][6] NO. OF DAYS *EARLIER* THAN .....
[ ][ ] NO. OF DAYS *LATER* THAN .....
[7] 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS 7 = Florida 302

5. PLANT HEIGHT (*From soil level to top of head*):
[0][9][0] CM. HIGH
[ ][ ] CM. TALLER THAN .....
[0][6] CM. SHORTER THAN .....
[7] 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS 7 = Florida 302

6. PLANT COLOR AT BOOTING (*See reverse*):
[2] 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHER COLOR:
[1] 1 = YELLOW 2 = PURPLE

8. STEM:
[1] Anthocyanin: 1 = ABSENT 2 = PRESENT
[1] Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT
[0][4] NO. OF NODES (*Originating from node above ground*)
[2] Waxy bloom: 1 = ABSENT 2 = PRESENT
[1] Internodes: 1 = HOLLOW 2 = SOLID
[2][1] CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:
[1] Anthocyanin: 1 = ABSENT 2 = PRESENT
[1] Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:
[1] Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (*Specify*): _____
[1] Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT
[ ][ ] MM. LEAF WIDTH (*First leaf below flag leaf*)
[1] Flag leaf: 1 = NOT TWISTED 2 = TWISTED
[2] Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT
[ ][ ] CM. LEAF LENGTH (*First leaf below flag leaf*)

FORM LMGS 470-5 (6-82) (Formerly Form LPGS 470-6 (3-79), which may be used)

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[2] Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED 3 = mid-dense

[4] Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER (Specify):

[1][0] CM. LENGTH [1][2] MM. WIDTH

12. GLUMES AT MATURITY:

[2] Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.)

[3] Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

[2] Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

[2] Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

[ ] 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

[ ] 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

[2] 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

[1] Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

[3] Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

[1] Brush: 1 = NOT COLLARED 2 = COLLARED

[ ] Phenol reaction (See instructions): 1 = IVORY 2 = TAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

[3] Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify)

[0][7] MM. LENGTH [0][3] MM. WIDTH [3][7] GM. PER 1000 SEEDS

17. SEED CREASE:

[1] Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

[3] Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1] STEM RUST (Races) [2] LEAF RUST (Races) [0] STRIPE RUST (Races) [0] LOOSE SMUT

[1] POWDERY MILDEW [0] BUNT [ ] OTHER (Specify)

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] SAWFLY [0] APHID (Bydv.) [ ] GREEN BUG [ ] CEREAL LEAF BEETLE

[ ] OTHER (Specify)

HESSIAN FLY RACES: [1] GP [1] A [1] B [1] C [1] D [1] E [1] F [1] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Coker 797	Seed size	Coker 797
Leaf size	Coker 797	Seed shape	Coker 797
Leaf color	Coker 797	Coleoptile elongation	Coker 797
Leaf carriage	Florida 302	Seedling pigmentation	[illegible]

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States. Technical Bulletin 1276, United States Department of Agriculture.

(b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachments.)

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

EXHIBIT D

ADDITIONAL DESCRIPTION OF ATW 270

ATW 270 is a common soft red winter wheat, Triticum aestivum L. bred and developed by the University of Florida, Institute of Food and Agricultural Sciences at the North Florida Research and Education Center at Quincy, Florida.

ATW 270 resembles the Coker 797 parent but is several days later in maturity and is slightly taller. It is bronze chaffed whereas Coker 797 is white chaffed. It is higher yielding and has better disease resistance. It is awnless and has excellent lodging resistance. It is resistant to powdery mildew but is susceptible to septoria glume blotch and hessian fly. It has a low vernalization requirement similar to Florida 301 so it performs well in late plantings and in double cropping systems. It is widely adapted to the Southern Soft Red Winter Wheat growing area but probably will not be as widely grown as Florida 302 because it has less winterhardiness than Florida 302.

Table 1 . Performance of selected entries in the 1985 Advanced Wheat Test grown at the North Florida Research and Education Center, Quincy, Florida.

Entry	Grain yield	Test wt.	Lodging	Plant ht.	Heading date	Powdery mildew	Leaf rust
	bu/a	lbs/bu	%	in.		%	
Florida 301	56	54	2	37	3-30	30	0
Hunter	53	57	0	28	4-1	10	40S
FL7927-G29	50	56	1	33	4-6	T	0
FL7927-G21	49	55	0	30	4-3	0	0
FL&927-G26	46	56	1	30	3-30	30	0
Florida 302	45	55	3	32	4-16	0	0
Coker 797	43	55	1	28	4-1	10	0
Coker 983	42	56	0	30	4-12	5	20MS
Coker 762	41	51	11	30	4-12	40	0
Coker 916	34	54	0	29	4-17	t	0

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Table 2. 1986 Advanced Wheat Performance Trial.

Entry	Grain Yield				Test[1/] wt	Plant[2/] ht.	Heading[3/] date	Leaf[1/] rust
	Quincy	Marianna	Quincy late	Weighed average				
	bu/A				lbs/bu	in		
FL7927-G29	71	25	15	44	56	33	4-2	0
FL7927-G26	67	25	19	43	55	28	4-1	0
Florida 301	60	30	20	42	55	40	4-2	10S
FL7927-G21	60	25	15	39	56	31	4-2	0
Traveler	60	24	11	39	55	31	3-31	5S
Florida 302	48	20	9	31	52	32	4-8	ts

1/ Three test average.
2/ Average of Quincy early planted and Marianna.
3/ Quincy early planted.

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Table 3 . Performance of selected entries in the 1987 Florida State Variety Test.

Entry	Grain Yield Quincy	Grain Yield Jay	Grain Yield 2 loc. avg.	Test wt.[1/]	Leaf rust[1/]	Plant height[2/]
	---------bu/A--------			lbs/bu		in
FL7927-G21	64	82	73	58	0	34
FL7927-G29	61	84	72	58	0	36
Coker 797	58	80	69	59	5MS	34
Hunter	58	78	68	59	30S	31
FL7927-G26	52	78	65	57	0	34
Traveler	58	73	65	57	5S	34
Florida 301	57	73	65	57	5MR	40
Florida 302	55	74	65	56	ts	38
Coker 9323	56	73	64	57	50S	34
Coker 9733	51	76	64	59	0	38
Coker 762	52	73	63	55	10S	34
Coker 9766	53	67	60	57	5MS	36
Coker 9227	47	73	60	59	5S	35
Florida 301H6	52	67	59	57	ts	38
Coker 916	50	67	59	56	ts	30
Williams	49	60	54	55	30S	32
Coker 983	51	58	54	58	30S	35
Coker 747	42	65	54	59	30S	26
Saluda	45	62	53	57	10S	30
Stacy	41	58	50	58	30S	34
Caldwell	26	29	28	53	5MS	31
Tyler	20	36	28	51	60S	26
Mean	48	67	58			
CV%	13	11				

[1/] Average of Quincy and Jay locations.

[2/] Quincy location.

Table 4 . Performance of selected entries in the 1987 Florida Uniform Southern Wheat Test.

Entry	Grain Yield Quincy	Grain Yield Jay	Grain Yield 2 loc. avg.	Test wt.[1/]	Leaf rust[1/]	Plant height[2/]
	--------Bu/A---------			lbs/bu		in.
FL7927-G21	62	87	74	59	0	31
FL7927-G29	68	73	70	58	0	35
Florida 302	65	72	69	57	ts	36
Traveler	62	74	68	57	10S	31
FL7927-G26	63	65	64	57	0	31
Coker 797	64	58	61	57	ts	31
Coker 9733	44	69	57	60	0	38
Florida 301	43	60	52	58	5MS	36
Tyler	22	40	31	51	40S	30

1/ Average of Quincy and Jay locations.

2/ Quincy location.

Table 5. 1987 Georgia State Wheat Variety Test.

Entry	Grain yield[1/]	Test weight[1/]	Height[1/]	Lodging[1/]	Heading date[2/]	Septoria nodorum blotch[3/]	Leaf rust[3/]	Barley yellow dwarf virus[4/]	Powdery mildew[5/]
	bu/A	lbs/bu	in.	%		%	%	%	%
FL7927-G29	62	59	39	1	4-13	8	1	0	0
Florida 302	61	57	38	1	4-23	8	13	0	0
FL7927-G21	58	59	36	0	4-13	15	0	0	0
Coker 9766	58	57	36	5	4-24	5	0	5	0
Coker 983	58	60	32	1	4-22	8	25	0	0
Coker 9733	56	59	41	5	4-20	10	1	0	0
FL7927-G26	55	58	36	1	4-11	23	0	0	0
Hunter	54	61	31	2	4-16	18	40	0	0
Coker 916	54	58	33	1	4-22	5	10	15	0
Williams	54	56	37	2	4-25	15	20	5	50
Florida 301	52	59	42	21	4-15	8	5	0	0
Stacy	50	58	40	12	4-23	5	21	10	0

1/ Average of 5 locations - Tifton, Plains, Midville, Griffin, Calhoun.
2/ Average of 4 locations - Tifton, Plains, Griffin, Calhoun.
3/ Average of 2 locations - Plains and Griffin.
4/ One location - Plains.
5/ One location - Griffin.

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Table 6 . 1987 South Carolina State Wheat Variety Test

Entry	Grain yield[1/]	Test wt.[1/]	Height[1/]	Heading date[2/]
	bu/A	lbs/bu	in.	
FL7927-G21	53	57	34	4-17
FL7927-G29	51	54	36	4-17
FL7927-G26	47	57	34	4-17
Coker 983	47	57	31	4-24
Coker 916	46	56	32	4-23
Coker 9733	45	56	39	4-24
Coker 9766	44	54	34	4-26
Williams	44	55	35	4-26
Florida 302	43	55	36	4-25
Coker 797	41	56	33	4-26
Stacy	41	56	38	4-25
Florida 301	40	56	39	4-19
Hunter	40	58	31	4-20

1/ Average of 5 locations - Clemson - Early planted, Clemson-late planted, Charleston, Blackville, Florence.

2/ Average of 3 locations - Clemson - Early planted, Clemson-late planted, Charleston.

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EARLY GENERATION SCREENING EVALUATION

FOR SOFT WHEAT MILLING AND BAKING QUALITITES

1988 CROP

DR. R.D. BARNETT
QUINCY, FLORIDA
STATE VARIETY TEST

STANDARD = AVERAGE OF THREE FLA. 301 ENTRIES

SAMPLE NO	ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	ADJ. YIELD	PROTEIN %	AWRC %	SOFT-NESS EQUIV.	ALLIS EQUIVALENTS ESI	BR FL	EXT
****	STANDARD	100 A	100 A	100 A	73.33	10.9	55.5	46.62	11.4	26.5	76
****	BENCHMARK	102.8 A	110 A	102.8 A	74.16	8.3	52.4	57.74	10.2	35.4	76.8
6645	SV 1 - Florida 301	101.5 A	101 A	101 A	73.77	10.9	54.8	44.42	10.7	24.7	76.4
6646	SV 2 - Florida 302	100.9 A	89 D	89 D	73.61	10.4	58.2 *	45.58	11	25.7	76.2
6647	SV 3 - Florida 303	99.6 B	104.3 A	99.6 B	73.21	10.3	55.6	49.8	11.5	29	75.8
6648	SV 4 - Traveler	99.9 B	101.6 A	99.9 B	73.29	10.1	56.4	50.5	11.4	29.6	75.9
6649	SV 6 - FL7927-G29	101.8 A	106.6 A	101.8 A	73.87	10.6	54.6	48.58	10.6	28.1	76.5
6650	SV 7 - Florida 301H	100 A	97.89 B	97.89 B	73.33	12.1 *	55.2	46.98	11.4	26.8	76
6651	SV 8 - Pioneer 2555	103.4 A	109.8 A	103.4 A	74.33	9.8	52.7	50.78	10	29.8	76.9
6652	SV 9 - Coker 9733	96.1 B	101.3 A	96.1 B	72.18*	11.4	54.9	46.84	12.9	26.7	74.8
6653	SV 10 - Coker 9766	90.6 C	72.4 F	72.4 F	70.52*	8.5	62.4 *	46.73	15.2	26.6	73.2
6654	SV 11 - Coker 983	99.1 B	93.5 C	93.5 C	73.07	11.4	56.8	47.31	11.7	27	75.7
6655	SV 12 - Coker 9227	96.9 B	86.7 D	86.7 D	72.41*	12.5 *	57.2	45.38	12.6	25.5	75.1
6656	SV 13 - Coker 9323	100.4 A	104.9 A	100.4 A	73.46	11.7	53.3	50.37	11.2	29.5	76.1
6657	SV 14 - Coker 916	94.2 C	76.5 F	76.5 F	71.61*	11.7	59.5 *	42.4 *	13.7	23.1	74.3
6658	SV 15 - Coker 747	104.2 A	109.9 A	104.2 A	74.57	10.2	51.9	50.93	9.7	29.9	77.2
6659	SV 17 - Coker 797	100 A	103.8 A	100 A	73.33	11.4	54.5	48.11	11.4	27.7	76
6660	SV 18 - Williams	100.7 A	100.1 A	100.1 A	73.55	11.2	55.6	48.13	11.1	27.7	76.2
6661	SV 19 - McNair 1003	96.4 B	89.6 D	89.6 D	72.25*	12.2 *	56.6	44.72	12.8	25	74.9
6662	SV 2 - Hunter	99.1 B	104.3 A	99.1 B	73.07	11.7	53.6	49.69	11.7	29	75.7

ATW 270

9000017

DATA RANKED ACCORDING TO COMBINED QUALITY SCORE

QUINCY, FLORIDA

STATE VARIETY TEST

SAMPLE NO	ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	ADJ. YIELD	PROTEIN %	AWRC %	SOFT-NESS EQUIV.	ALLIS EQUIVALENTS ESI	BR FL	EXT.
6658	SV 15 - Coker 747	104.2 A	109.9 A	104.2 A	74.57	10.2	51.9	50.93	9.7	29.9	77.2
6651	SV 8 - Pioneer 2555	103.4 A	109.8 A	103.4 A	74.33	9.8	52.7	50.78	10	29.8	76.9
****	BENCHMARK	102.8 A	110 A	102.8 A	74.16	8.3	52.4	57.74	10.2	35.4	76.8
6649	SV 6 - FL7927-G29	101.8 A	106.6 A	101.8 A	73.87	10.6	54.6	48.58	10.6	28.1	76.5
6645	SV 1 - Florida 301	101.5 A	101 A	101 A	73.77	10.9	54.8	44.42	10.7	24.7	76.4
6656	SV 13 - Coker 9323	100.4 A	104.9 A	100.4 A	73.46	11.7	53.3	50.37	11.2	29.5	76.1
6660	SV 18 - Williams	100.7 A	100.1 A	100.1 A	73.55	11.2	55.6	48.13	11.1	27.7	76.2
****	STANDARD	100 A	100 A	100 A	73.33	10.9	55.5	46.62	11.4	26.5	76
6659	SV 17 - Coker 797	100 A	103.8 A	100 A	73.33	11.4	54.5	48.11	11.4	27.7	76
6648	SV 4 - Traveler	99.9 B	101.6 A	99.9 B	73.29	10.1	56.4	50.5	11.4	29.6	75.9
6647	SV 3 - Florida 303	99.6 B	104.3 A	99.6 B	73.21	10.3	55.6	49.8	11.5	29	75.8
6662	SV 2 - Hunter	99.1 B	104.3 A	99.1 B	73.07	11.7	53.6	49.69	11.7	29	75.7
6650	SV 7 - Florida 301H	100 A	97.89 B	97.89 B	73.33	12.1 *	55.2	46.98	11.4	26.8	76
6652	SV 9 - Coker 9733	96.1 B	101.3 A	96.1 B	72.18*	11.4	54.9	46.84	12.9	26.7	74.8
6654	SV 11 - Coker 983	99.1 B	93.5 C	93.5 C	73.07	11.4	56.8	47.31	11.7	27	75.7
6661	SV 19 - McNair 1003	96.4 B	89.6 D	89.6 D	72.25*	12.2 *	56.6	44.72	12.8	25	74.9
6646	SV 2 - Florida 302	100.9 A	89 D	89 D	73.61	10.4	58.2 *	45.58	11	25.7	76.2
6655	SV 12 - Coker 9227	96.9 B	86.7 D	86.7 D	72.41*	12.5 *	57.2	45.38	12.6	25.5	75.1
6657	SV 14 - Coker 916	94.2 C	76.5 F	76.5 F	71.61*	11.7	59.5 *	42.4 *	13.7	23.1	74.3
6653	SV 10 - Coker 9766	90.6 C	72.4 F	72.4 F	70.52*	8.5	62.4 *	46.73	15.2	26.6	73.2

9000017

EVALUATION SUMMARY
* USING STANDARD *

COMBINED SCORES	AVERAGED DATA		ADJUSTED L.S.D. VALUES		NOTATION BEGINS	
A = 20 ENTRIES	ADJ. YIELD	= 71.9	YIELD	= 0.79	YIELD	= 72.54
B = 20 ENTRIES	SOFTNESS EQUIV.	= 49.6	SOFTNESS	= 2.51	SOFTNESS	= 44.11
C = 13 ENTRIES	PROTEIN	= 10.1	PROTEIN	= 1.07	PROTEIN	= 11.97
D = 15 ENTRIES	A.W.R.C.	= 55.9	A.W.R.C.	= 2.44	A.W.R.C.	= 57.94
E = 5 ENTRIES	ESI EQUIV	= 13.3				
F = 5 ENTRIES	BREAK FL. EQUIV.	= 28.9				
	EXTRACTION EQUIV	= 74.6				

78 TOTAL

SUMMARY IS FOR ENTRIES 6645 TO 6662

1988 CROP
UNIFORM SOUTHERN NURSERY

The composite was made from samples from the following locations:

College Park, MD.	700g	15.9%
Northrup-King	700g	15.9%
Clemson,SC	400g	9.1%
Tifton, GA	700g	15.9%
Fayetteville, AR	700g	15.9%
Warsaw,VA	700g	15.9%
Lexington, KY	400g	9.2%
North Carolina	90-350g(all)	2.2%
Total	4400g	100%

Fla 302 (88-337) was selected as the standard. In the past Tyler was used as the standard; however, Fla 302 had better quality attributes than Tyler. Tyler data for 1987 was significantly better, but 1988 compares to the 1986 Tyler. (Tyler dropped from 7th in 1987 to 14th place in 1988.)

When rankings were analyzed, most samples that were analyzed for more than one year had similar rankings for both years. Exceptions were Tyler, which dropped from 7th to 14th, and Bayles which went up from 31st to 21st.

Tyler dropped because of a large decrease in break flour yield (29.8% vs 37.3% in 1987).

Bayles (at 83WHR 6208) also dropped significantly in break flour yield (1987=34.6% and 1988=28.9%). However, it went up in rank ten places. The rest of the data was similar for both years.

When 1987 and 1988 crops are compared for break flour yields and cookie diameters, 1988 has lower break flour yields but higher cookie diameters.

1988 CROP

UNIFORM SOUTHERN NURSERY
STANDARD = 88337, FLA 302

WHEAT AND MILLING DATA

LAB NO.	ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	TEST WT.	BREAK FLOUR YIELD	ST. GR. FLOUR YIELD	RED PASSES	FRIABILITY	E.S.I.	MILLABILITY
***	STANDARD	100 A	100 A	100 A	61.3	30.3	77.8	7	29.9	8.6	123.7
***	BENCHMARK	102.2A	100.7A	100.7A	61.6	35.6	76.3*	7	28 Q	10.4Q	123.7
336 1	TYLER	92.5 C	99.8 B	92.5 C	60.5*	29.8	76.4*	7	28.6Q	10.6Q	110.4*
337 2	FLA 302	100 A	100 A	100 A	61.3	30.3	77.8	7	29.9	8.6	123.7
338 3	FLA 303	95.1 B	105 A	95.1 B	62	30.1	77.4	7	28.8Q	9.6 *	113.5
339 4	NASW77-42-25	90.1 C	84.8 E	84.8 E	61.2	31	75.8Q	7	27.7Q	11.4Q	103.9*
340 5	BAYLES	90.7 C	88 D	88 D	61.1	28.9*	76.8*	7	27.5Q	10.7Q	106.9*
341 6	COKER P9877	88.7 D	90.1 C	88.7 D	61.6	27.4Q	76.7*	7	28.2Q	11.3Q	103.4*
342 7	PIONEER 2555	98.8 B	114.2A	98.8 B	61.6	34.5	77.7	7	30	8.8	117.9
343 8	SC 820556	85.2 D	74.2 F	74.2 F	62.8	28.1Q	76.3*	7	27.4Q	11.3Q	94.7 Q
344 9	SC 820886	87.6 D	42.4 F	42.4 F	62.8	18.9Q	77	7	27.7Q	9.4 *	106.3*
345 10	COKER 86-31	90.4 C	70.9 F	70.9 F	62.8	28.6Q	76.8*	7	28.1Q	9.6 *	104.4*
346 11	GA 781197	92.6 C	109.1A	92.6 C	61.4	33.8	76.6*	7	29 Q	9.4 *	106.5*
347 12	NASW 84-160	97.1 B	97.2 B	97.1 B	62.5	31.3	78.2	7	29.4*	9	115.9
348 13	NASW 84-313	86.7 D	84.9 E	84.9 E	60.9	26.4Q	76.4*	7	28.3Q	11.2Q	101.1Q
349 14	TX 79-30	94.5 C	106.7A	94.5 C	62.7	33.5	76.3*	7	28.9Q	10.7Q	108.8*
350 15	TX 79-19-1	90.9 C	88.6 D	88.6 D	61.5	30.9	76.3*	8	27.7Q	10.9Q	105.2*
351 16	MD 75191-80	97.1 B	88.8 D	88.8 D	59.4Q	30.9	77.5	7	29.2*	9	119.9
352 17	MD 73025-51	96.4 B	103.6A	96.4 B	58.9Q	31	78.6	7	29.7	8.6	119.1
353 18	MD 73065-03	86.2 D	89.3 D	86.2 D	60.1Q	31.3	75.9Q	7	27.4Q	10.4Q	97.4 Q
354 19	AR 26415	82.6 E	79.5 F	79.5 F	62.7	29.7	74 Q	7	26.7Q	12.6Q	88.5 Q
355 20	FL 7927-G26	98.6 B	95.4 B	95.4 B	61	31.1	78.3	7	30	8.5	120.8
356 21	FL 7927-G29 (ATW 270)	100.4A	92.4 C	92.4 C	62.6	28.8*	78.4	7	29.8	8.5	124.1
357 22	FLORIDA 301H6	93.9 C	77.6 F	77.6 F	62.5	28 Q	77.1	7	28.4Q	10 *	112.1*
358 23	FL 85TW152-1	88.8 D	63.9 F	63.9 F	63	22.2Q	77	7	27.4Q	9.9 *	105.9*
359 24	GA 80078-P1988	96.5 B	91.9 C	91.9 C	61.9	32.8	76.4*	7	29.2*	10.4Q	114.2
360 25	CL 850655	93 C	93 C	93 C	62.4	30.7	76.5*	7	28.5Q	10.7Q	108.5*
361 26	C 86-27	87.8 D	72.4 F	72.4 F	63.7	27.6Q	76.4*	7	28.1Q	11.1Q	99.1 Q
362 27	COKER 87-12	95.5 B	89.2 D	89.2 D	62	31.7	77.5	7	28.9Q	9.3	113.1*
363 28	COKER 87-13	98 B	95.5 B	95.5 B	62.6	32.5	77.2	7	29.3*	9.3	116.6
364 29	GA 801310	93.4 C	96 B	93.4 C	60.6*	27.5Q	76.7*	7	28.3Q	10.1*	113.7
365 30	VA 85-52-24	94.1 C	97 B	94.1 C	61.4	26.7Q	77.4	7	29.5*	9.8 *	114.8
366 31	VA 85-52-34	93.2 C	100.7A	93.2 C	61.5	31.3	76.9	7	28.4Q	10.1*	109.4*
367 32	KY 83-27	84 E	107.1A	84 E	60.2*	31.6	75 Q	7	27.7Q	11.9Q	92.9 Q

1988 CROP

UNIFORM SOUTHERN NURSERY
STANDARD = 88337, FLA 302

STRAIGHT-GRADE FLOUR

LAB NO.	FLOUR PROTEIN %	FLOUR ASH %	MICRO AWRC %	COOKIE DIAMETER CM.	TOP GRAIN
***	8.23	.38	51.8	18.3	5
***	8.899*	.35	51.3	18.35	7
336	8.09	.38	51.5	18.27	4
337	8.23	.38	51.8	18.3	5
338	9 *	.4 *	52.3	18.51	6
339	8.45	.38	53.1	18 *	5
340	9.69 Q	.39	52	18.13	4
341	8.33	.41 *	51.3	18.04*	5
342	8.46	.41 *	51.8	19.07	6
343	11.1 Q	.44 Q	53.5 *	17.97*	5
344	9.16 Q	.42 Q	59.2 Q	17.28Q	5
345	8.96 *	.43 Q	53.2	17.7 Q	5
346	8.89 *	.43 Q	51.8	18.58	5
347	8.3	.42 Q	52.8	18.28	6
348	9.42 Q	.42 Q	52.4	18.05*	5
349	9.38 Q	.39	51.8	18.56	5
350	8.8 *	.39	53.3	18.13	4
351	7.71	.38	52.5	18.01*	6
352	8.65	.42 Q	49.9	18.35	5
353	8.94 *	.43 Q	51.3	18.07	5
354	9.49 Q	.4 *	52.8	17.94*	3
355	9.27 Q	.41 *	51.1	18.24	4
356	8.98 *	.39	51.1	18.14	5
357	9.87 Q	.39	51.2	17.85*	4
358	10 Q	.41 *	54.7 *	17.68Q	4
359	8.52	.37	53.3	18.19	7
360	8.76 *	.39	52.9	18.22	5
361	8.95 *	.43 Q	53.5 *	17.75Q	4
362	8.76 *	.41 *	51.7	18.07	4
363	8.65	.39	52.2	18.24	4
364	9.38 Q	.37	51.5	18.28	5
365	8.84 *	.4 *	49.6	18.2	4
366	8.36	.4 *	50.3	18.26	6
367	8.42	.42 Q	51.3	18.47	6

DATA RANKED ACCORDING TO COMBINED QUALITY SCORE

1988 CROP

UNIFORM SOUTHERN NURSERY
STANDARD = 88337, FLA 302

WHEAT AND MILLING DATA

LAB NO.		ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	TEST WT.	BREAK FLOUR YIELD	ST.GR. FLOUR YIELD	RED PASSES	FRIABILITY	E.S.I.	MILLABILITY
***		BENCHMARK	102.A	100.7A	100.A	61.6	35.6	76.3*	7	28 Q	10.4Q	123.7
***		STANDARD	100 A	100 A	100 A	61.3	30.3	77.8	7	29.9	8.6	123.7
337	2	FLA 302	100 A	100 A	100 A	61.3	30.3	77.8	7	29.9	8.6	123.7
342	7	PIONEER 2555	98.8B	114.2A	98.8B	61.6	34.5	77.7	7	30	8.8	117.9
347	12	NASW 84-160	97.1B	97.2 B	97.1B	62.5	31.3	78.2	7	29.4 *	9	115.9
352	17	MD 73025-51	96.4B	103.6A	96.4B	58.9Q	31	78.6	7	29.7	8.6	119.1
363	28	COKER 87-13	98 B	95.5 B	95.5B	62.6	32.5	77.2	7	29.3 *	9.3	116.6
355	20	FL 7927-G26	98.6B	95.4 B	95.4B	61	31.1	78.3	7	30	8.5	120.8
338	3	FLA 303	95.1B	105 A	95.1B	62	30.1	77.4	7	28.8 Q	9.6 *	113.5
349	14	TX 79-30	94.5C	106.7A	94.5C	62.7	33.5	76.3*	7	28.9 Q	10.7Q	108.8*
365	30	VA 85-52-24	94.1C	97 B	94.1C	61.4	26.7Q	77.4	7	29.5 *	9.8 *	114.8
364	29	GA 801310	93.4C	96 B	93.4C	60.6*	27.5Q	76.7*	7	28.3 Q	10.1*	113.7
366	31	VA 85-52-34	93.2C	100.7A	93.2C	61.5	31.3	76.9	7	28.4 Q	10.1*	109.4*
360	25	CL 850655	93 C	93 C	93 C	62.4	30.7	76.5*	7	28.5 Q	10.7Q	108.5*
346	11	GA 781197	92.6C	109.1A	92.6C	61.4	33.8	76.6*	7	29 Q	9.4 *	106.5*
336	1	TYLER	92.5C	99.8 B	92.5C	60.5*	29.8	76.4*	7	28.6 Q	10.6Q	110.4*
356	21	FL 7927-G29 (ATW 270)	100.A	92.4 C	92.4C	62.6	28.8*	78.4	7	29.8	8.5	124.1
359	24	GA 80078-P1988	96.5B	91.9 C	91.9C	61.9	32.8	76.4*	7	29.2 *	10.4Q	114.2
362	27	COKER 87-12	95.5B	89.2 D	89.2D	62	31.7	77.5	7	28.9 Q	9.3	113.1*
351	16	MD 75191-80	97.1B	88.8 D	88.8D	59.4Q	30.9	77.5	7	29.2 *	9	119.9
341	6	COKER P9877	88.7D	90.1 C	88.7D	61.6	27.4Q	76.7*	7	28.2 Q	11.3Q	103.4*
350	15	TX 79-19-1	90.9C	88.6 D	88.6D	61.5	30.9	76.3*	8	27.7 Q	10.9Q	105.2*
340	5	BAYLES	90.7C	88 D	88 D	61.1	28.9*	76.8*	7	27.5 Q	10.7Q	106.9*
353	18	MD 73065-03	86.2D	89.3 D	86.2D	60.1Q	31.3	75.9Q	7	27.4 Q	10.4Q	97.4 Q
348	13	NASW 84-313	86.7D	84.9 E	84.9E	60.9	26.4Q	76.4*	7	28.3 Q	11.2Q	101.1Q
339	4	NASW77-42-25	90.1C	84.8 E	84.8E	61.2	31	75.8Q	7	27.7 Q	11.4Q	103.9*
367	32	KY 83-27	84 E	107.1A	84 E	60.2*	31.6	75 Q	7	27.7 Q	11.9Q	92.9 Q
354	19	AR 26415	82.6E	79.5 F	79.5F	62.7	29.7	74 Q	7	26.7 Q	12.6Q	88.5 Q
357	22	FLORIDA 301H6	93.9C	77.6 F	77.6F	62.5	28 Q	77.1	7	28.4 Q	10 *	112.1*
343	8	SC 820556	85.2D	74.2 F	74.2F	62.8	28.1Q	76.3*	7	27.4 Q	11.3Q	94.7 Q
361	26	C 86-27	87.8D	72.4 F	72.4F	63.7	27.6Q	76.4*	7	28.1 Q	11.1Q	99.1 Q
345	10	COKER 86-31	90.4C	70.9 F	70.9F	62.8	28.6Q	76.8*	7	28.1 Q	9.6 *	104.4*
358	23	FL 85TW152-1	88.8D	63.9 F	63.9F	63	22.2Q	77	7	27.4 Q	9.9 *	105.9*
344	9	SC 820886	87.6D	42.4 F	42.4F	62.8	18.9Q	77	7	27.7 Q	9.4 *	106.3*

9000017

DATA RANKED ACCORDING TO COMBINED QUALITY SCORE

1988 CROP

UNIFORM SOUTHERN NURSERY
STANDARD = 88337, FLA 302

STRAIGHT-GRADE FLOUR

LAB NO.	FLOUR PROTEIN %	FLOUR ASH %	MICRO A.W.R.C. %	COOKIE DIAMETER CM.	TOP GRAIN
***	8.899*	.35	51.3	18.35	7
***	8.23	.38	51.8	18.3	5
337	8.23	.38	51.8	18.3	5
342	8.46	.41 *	51.8	19.07	6
347	8.3	.42 Q	52.8	18.28	6
352	8.65	.42 Q	49.9	18.35	5
363	8.65	.39	52.2	18.24	4
355	9.27 Q	.41 *	51.1	18.24	4
338	9 *	.4 *	52.3	18.51	6
349	9.38 Q	.39	51.8	18.56	5
365	8.84 *	.4 *	49.6	18.2	4
364	9.38 Q	.37	51.5	18.28	5
366	8.36	.4 *	50.3	18.26	6
360	8.76 *	.39	52.9	18.22	5
346	8.89 *	.43 Q	51.8	18.58	5
336	8.09	.38	51.5	18.27	4
356	8.98 *	.39	51.1	18.14	5
359	8.52	.37	53.3	18.19	7
362	8.76 *	.41 *	51.7	18.07	4
351	7.71	.38	52.5	18.01*	6
341	8.33	.41 *	51.3	18.04*	5
350	8.8 *	.39	53.3	18.13	4
340	9.69 Q	.39	52	18.13	4
353	8.94 *	.43 Q	51.3	18.07	5
348	9.42 Q	.42 Q	52.4	18.05*	5
339	8.45	.38	53.1	18 *	5
367	8.42	.42 Q	51.3	18.47	6
354	9.49 Q	.4 *	52.8	17.94*	3
357	9.87 Q	.39	51.2	17.85*	4
343	11.1 Q	.44 Q	53.5 *	17.97*	5
361	8.95 *	.43 Q	53.5 *	17.75Q	4
345	8.96 *	.43 Q	53.2	17.7 Q	5
358	10 Q	.41 *	54.7 *	17.68Q	4
344	9.16 Q	.42 Q	59.2 Q	17.28Q	5

EVALUATION SUMMARY

SUMMARY IS FOR ENTRIES 336 TO 367

	STANDARD DATA	ADJUSTED LSD	NOTATION BEGINS *	NOTATION BEGINS Q	AVERAGED DATA
MILLING QUALITY	100.0	----	----	----	92.5
BAKING QUALITY	100.0	----	----	----	90.3
COMBINED QUALITY	100.0	----	----	----	86.9
WHEAT DATA					
MILLABILITY	123.7	10.27	113.43	103.17	109.1
E.S.I.	8.60	0.79	9.39	10.18	10.10
TEST WEIGHT	61.3	0.56	60.74	60.18	61.7
RED. PASSES	7.0	----	----	----	7.0
BREAK FLOUR YIELD	30.3	0.778	29.5	28.7	29.7
FLOUR YIELD	77.8	0.91	76.9	76.0	76.9
FRIABILITY	29.9	0.35	29.5	29.2	28.6
FLOUR DATA					
FLOUR PROTEIN	8.23	0.46	8.69	9.14	8.90
FLOUR ASH	.38	.02	.40	.42	.40
A.W.R.C.	51.8	1.86	53.46	55.12	52.30
COOKIE DIAMETER	18.30	0.25	18.05	17.80	18.20
TOP GRAIN	5.0	2.08	2.92	0.83	4.90

COMBINED SCORES

A = 1 ENTRIES
B = 6 ENTRIES
C = 9 ENTRIES
D = 6 ENTRIES
E = 3 ENTRIES
F = 7 ENTRIES

32 ENTRIES AVERAGED FOR WHEAT DATA
32 ENTRIES AVERAGED FOR FLOUR DATA

32 TOTAL ENTRIES

Table 7 . 1987 Arkansas State Wheat Variety Test.

Entry	Grain yield[1/]	Test wt.[2/]	Heading date[3/]	Plant height[4/]
	bu/A	lbs/bu		in.
Florida 302	57	54	4-19	36
Caldwell	52	53	4-20	35
Coker 983	51	57	4-17	30
Coker 916	51	55	4-16	32
Coker 9733	50	57	4-18	36
FL7927-G21	38	57	4-8	33
FL7927-G29	38	57	4-9	36
FL7927-G26	33	56	4-6	32
Florida 301	33	56	4-10	39

1/ Average of 11 locations.
2/ Average of 7 locations.
3/ Average of 10 locations.
4/ Average of 9 locations.

EXHIBIT E

Statement of the Basis of Applicant's Ownership

ATW 270 was bred and developed by Dr. R. D. Barnett, University of Florida, Institute of Food and Agricultural Sciences, Florida Agricultural Experiment Station. The owner of the variety is the Florida Agricultural Experiment Station, University of Florida, IFAS. The address for correspondence with the owner is as follows: Dean for Research, 1022 McCarty Hall, University of Florida, Gainesville, Florida 32611. Exclusive rights to market, produce, and distribute ATW 270 were granted to AgraTech Seeds, Inc. of Atlanta, Georgia in 1989.