No. 7600046

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Seed Research Associates, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

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

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

WHEAT

'5411'

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

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION 5411	2. KIND NAME Hard Red Winter Wheat	FOR OFFICIAL USE ONLY PV NUMBER 7600046
3. GENUS AND SPECIES NAME Triticum aestivum	4. FAMILY NAME *(Botanical)* Graminaeae	FILING DATE 2/27/76 — TIME 10 A.M.
	5. DATE OF DETERMINATION June 1971	FEE RECEIVED $ 250.00 — BALANCE DUE $ —
		$ 250.00 — $ —
		$ 250.00 — $ —
6. NAME OF APPLICANT(S) Seed Research Associates Inc.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* Route 2 Box 48 Scott City, Kansas, 67871	8. TELEPHONE AREA CODE AND NUMBER 316-872-2807

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* corporation	10. STATE OF INCORPORATION Kansas	11. DATE OF INCORPORATION June 1973

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

Kenneth L. Goertzen, President
Seed Research Associates Inc.
Route 2
Scott City, Kansas, 67871

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

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

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

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

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

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

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

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

2/24/76
(DATE)

Kenneth L. Goertzen
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

4/24/76

EXHIBIT A: Wheat Application No. 7600046 (5411)

Origin & Breeding History:

SRAI 2380 X SRAI 2390

There were no commonly grown wheats involved in the parentage. One parent was spring habit, semi dwarf with genetically high protein. This parent was unknown origin. The other parent had winter habit, was semi dwarf with genetically high protein and is a SRAI line derived from a Norin 26 cross.

A single plant was selected in F_3 generation from this cross.

This selection had brown chaff and semi dwarf stature.

Breeders seed is maintained from increased seed from this original single plant selection. Purity is maintained by roguing and isolation. Breeders seed will be increased from selections made from this line that exhibit the varietal characteristics of ~~Plainsman IV~~ '5411', KHE

The variation in ~~Plainsman IV~~ '5411' KHE is no greater than that found in Scout when grown in the same environment.

No known variants.

Seed Research Associates Inc.
Route 2
Scott City, Kansas, 67871

13B Botanical Description of 5411

Seed is hard red with genetically high protein

The seed is long ovate with a short small brush

The crease is narrow, mid deep with rounded cheeks.

The germ is large.

Juvenile growth is prostrate. Measuremement of juvenile leaf 12 cm long and 4 mm wide.

Spike is awned, oblong, mid dense with brown chaff

Position of spike at maturity is erect.

Glumes are brown, hard, and leathery. The outer glume is long and narrow.

Shoulder is oblique to wanting and beak acuminate

Awns are brown.

INSTRUCTIONS

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

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

RECEIVED FEB 27 1976

13~~C~~B Objective description of 5411

Hard red winter

Semi dwarf

Early season

Genetically high protein

Shows some resistance to soil borne mosaic

Shows resistance to common races of leaf and stem rust.

Brown chaff

Strong gluten wheat with long mixing time

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-5
(2-15-73)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Wheat)

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

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Seed Research Associates Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
Route 2, Box 48
Scott City, Kansas, 67871

FOR OFFICIAL USE ONLY
PVPO NUMBER 7600046
VARIETY NAME OR TEMPORARY DESIGNATION 5411 KHE

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)* _____
[2] 1 = SOFT 2 = HARD 3 = OTHER *(Specify)* _____
[2] 1 = WHITE 2 = RED 3 = OTHER *(Specify)* _____

3. SEASON - NUMBER OF DAYS FROM ~~EMERGENCE TO~~ January 1 to
[ ][ ][ ] FIRST FLOWERING
[ ][ ][ ] LAST FLOWERING

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

5. PLANT HEIGHT *(From soil level to top of head)*:
[8][3][ ] CM. HIGH
[ ][ ] CM. TALLER THAN . . . . . [ ] 1 = ARTHUR 2 = SCOUT 3 = CHRIS
[1][1] CM. SHORTER THAN . . . . . [2] 4 = LEMHI 5 = NUGAINES 6 = LEEDS

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
[ ] 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][3] CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

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

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

FORM GR-470-6 (REVERSE)

11. HEAD:

[2] Density: 1 = LAX 2 = DENSE Mid

[4] Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER *(Specify)* oblong

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

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

[0 8] CM. LENGTH [1 1] MM. WIDTH

12. GLUMES AT MATURITY:

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

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

[1] 1 Glabrous 2 Pubescent

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

7 oblique to wanting

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

13. COLEOPTILE COLOR:

[1] 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

[1] 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

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

16. SEED:

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

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

4 long ovate

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

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

[ ] Phenol reaction *(See instructions)*: 1 = IVORY 2 = FAWN 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 [ ] 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'

[2] 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)

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

[0] POWDERY MILDEW [0] BUNT [2] OTHER *(Specify)* Soil borne mosaic

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

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

[ ] OTHER *(Specify)* _____ HESSIAN FLY RACES: [0] GP [0] A [0] B [0] C [0] D [0] E [0] F [0] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Plainsman V	Seed size	Plainsman V
Leaf size	"	Seed shape	"
Leaf color	"	Coleoptile elongation	"
Leaf carriage	"	Seedling pigmentation	"

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 1278, 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 attachment.)*

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

EXHIBIT D: Application No. 7600046 (5411 Wheat)

Most similar variety is Plainsman V

	5411	Plainsman V
awns	bearded	bearded
seed color	red	red
seed texture	hard	hard
height (1975 Irrigated)	85 cm.	78 cm.
season (1975 Scott County Irrigated)	heads 4 days earlier than Scout	heads 5 days earlier than Scout
(Reno County dryland - 1975)	heads with Triumph 64	heads 1 day earlier Triumph 64
Chaff color	brown	brown
Genetically high protein	Yes	Yes
Protein % (Scott County Irrigated-1975)	18.12 %	17.00%
Straw strength	Good	Good

COMPARATIVE DATA FROM HARD WINTER WHEAT QUALITY ADVISORY COUNCIL EVALUATION - 1974 -

	Scout	5411	Plainsman V
Protein %	12.31	17.07	16.01
Farinogram:			
arrival time, min.	2.0	9.0	4.5
peak time, min.	7.5	18.0	9.5
stability, min.	14.0	22.0	17.0
MTI	40.0	20.0	25.0
Valorimeter	70.0	94.0	77.0
Absorption %	64.6	67.0	67.2
Extensigram Time:			
Area CM^2	134.19	245.80	225.05
Resis. 5 min. B.U.	425.0	535.0	475.0
Resis. Peak B.U.	605.0	1000.0	940.0
Extensibil mm.	163.0	190.0	201.0

Seed Research Associates
Route 2, Box 48
Scott City, Kansas 67871

13E Ownership of 5411

Dixie Portland Flour Mill will be producing this wheat under contract for grain. Its ability to produce high protein and gluten of great strength will be utilized in blends for special markets and to make low protein weak gluten wheats usable for white pan bread.

At present ownership of germplasm remains with Seed Research Associates and Certified seed will be produced by Seed Research Associates.

Plant breeders are Kenneth L. Goertzen and Betty L. Goertzen.

Irrigated yield plot
Scott City, Kansas - 1975
3 waterings

VARIETY	YIELD Bu./acre	Height cm.	Days to Heading Compared to Scout	Lodging%	Leaf Rust Rating 5 best	Protein
Scout	63	103	0	30%	3.5	—
Dual I	74.5	82	-1	0%	5	14.45
Dual III	69	78	-1	0%	5	—
Dual V	67	82	-3	0%	5	15.68
Dual VIII	71	83	-1	0%	5	15.02
2148	66	69	-4	0%	5	—
Plainsman IV (5411)	69.8	85	-4	0%	5	18.12
Plainsman V	72.5	78	-5	0%	5	17.0
Plainsman IX	66.7	78	-4	0%	5	17.55
Plainsman VIII	74	84	-4	0%	5	16.92
4555	70.3	76	-4	0%	4.5	—
4543	63.5	74	-3	0%	3	15.78
Eagle	64	95	0	10%	4	—
Centurk	61	98	+2	10%	4	—

Name Ashley Lukes

Address Scott City 1974

KANSAS MILLING AND BAKING SHOW SCORE CARD

Entry No. SC-71

Variety Plainsman IV (5411)

Variety Analysis

Seed Research Associates
Route 2, Box 48
Scott City, Kansas 67871

Factor	Sample Analysis	Possible Score	Actual Score	Scoring Basis	Deductions
Test Weight	62.5	10	8.75	Physical Test	10 points for 65 up; 9½ points for 64; 9 points for 63; 8½ points for 62; 8 points for 61; 7 points for 60; 6 points for 59; 5 points for 58; 3 points for 57; 0 points for 56; Out below 56
Wheat Protein %	17.10	20	16.5	Analytical Chemical Test	20 points for 19 up; 18 points for 18; 16 points for 17; 14 points for 16; 12 points for 15; 10 points for 14; 6 points for 13; 2 points for 12; 0 points for-12
Cleanoff %		10	10.0	Physical Test	10 points for less than 1.4% clean-out with loss of 1 point for each 1/2% clean-out over 1.4%
TOTAL For Screening		40	35.25		
Flour Yield	16	20	16	Percentage of Flour Obtained in Milling	20 for 75% or more 2 points off for each 1% less than 75%
Flour Ash	.45	5	4.4	Analytical Chemical Test	5 for .43 and 0.3 point off for each 0.01 more
Farinograph Absorption	65	5	5	Percent Water Absorbed by Flour	5 for .60 and .5 point off for each 1% less
Farinograph Mixing Required	11	10	10	Minutes Required to Mix Dough	10 points for 15 up; 9 points for 13; 8 points for 11; 7 points for 10; 6 points for 9; 5 points for 8; 3 points for 7; 1 point for 6; Out under 5
Farinograph Mixing Tolerance	20f	15	15	Minutes of Tolerance	15 points for 20 up; 14 points for 18; 13 points for 16; 12 points for 14; 11 points for 12; 10 points for 11; 9 points for 10; 8 points for 9; 6 points for 8; 3 points for 7; 0 points for 6
TOTAL For Screening		95	55.65		
Loaf Volume	3200	20	20	Volume Measure of Loaf Size	20 for highest in puploaf group .5 off for each 10 cc less (20 for highest in 1# loaf group 1 off for each 50 cc less)
Crumb Color	5	5	5	Visual Estimate	
Loaf Texture and Grain	20	30	20	Internal Appearance, Feel, and Cell Structure	
External Appearance	7	10	10	Visual Estimate	
TOTAL		160	140.65		

Extension Service, K. S. U.

3a-482-0-1M

Dryland Yield and Observation Plot
1975 Haven, Kansas
(Reno County)

	Variety	Days to Heading Compared to Triumph 64	Yield Bu/Acre	Test weight	Yield as % of Triumph 64	% Protein	# Protein/Acre	Protein per Acre as % of Triumph 64
	Triumph 64	0	28	60	100	10.9	183	100
	Dual I	+2	51	60	182	10.2	312	170
	Dual III	+4	57	61	204	12.0	410	224
	Dual V	+4	53	60	189	11.9	378	207
	Dual VIII	+2	47	60	168	10.9	307	168
	2148	+2	47	62	168	11.9	336	184
5411	Clemmons IV	0	51	61	182	13.4	410	224
	Clemmons V	-1	64	62	229	12.9	495	270
	Clemmons VIII	0	72	62	257	13.6	587	321
	4555	-2	50	61	179	10.8	324	177

Continuous crop - low soil fertility

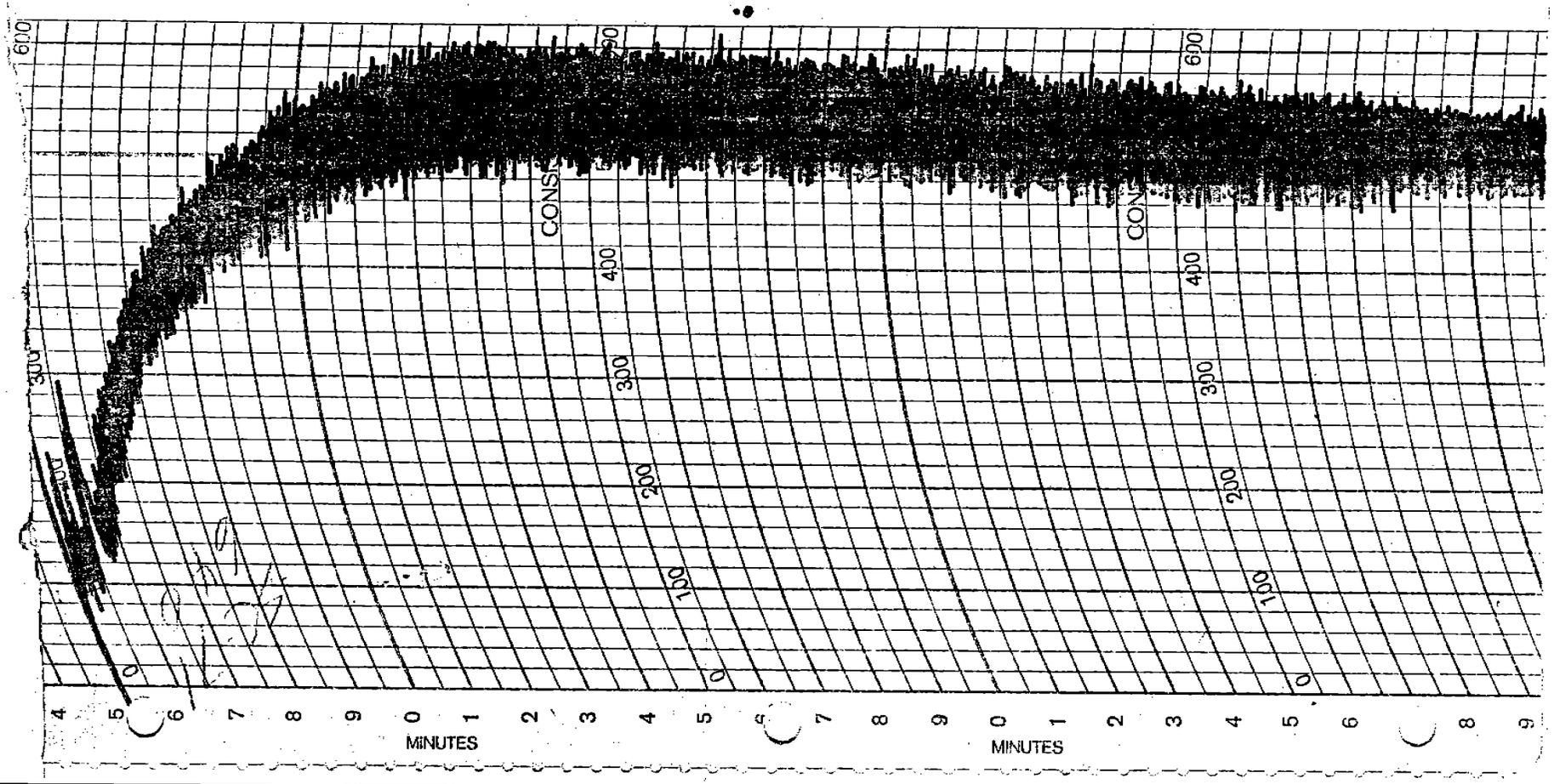
C. W. BRABENDER INSTRUMENTS, INC. SOUTH HACKENSACK, N.J. U.S.A.

FARINO-PLASTO-CHART

ROSS INDUSTRIES, INC.
Division of Cargill

SC-71

65-11-20+



	Protein	test wt.	T.K.W.	Flour Yield %	Flour Ash	FARINOGRAPH				BAKE			
						Peak	MTI	Tol.	ABS.	ABS.	MIX.	Loaf Volume	Texture Grade
Scout (check)	13.49	63.0	36.5	73.6	42	8	20	11 3/4	61.2	64	10	2900	Good
5411	17.36	61.0	33.8	73.0	45	7	20	13 1/2	67.9	66.5	17	3200	Excellent

5411

FARINO-PLASTO-CHART

C. W. BRABEI

FRINOGRAPH RECORD

Ross Industries, Inc.

Date 8-10-72

No.

Brand LB 727 (5411)

Car No.

Absorption 67.9

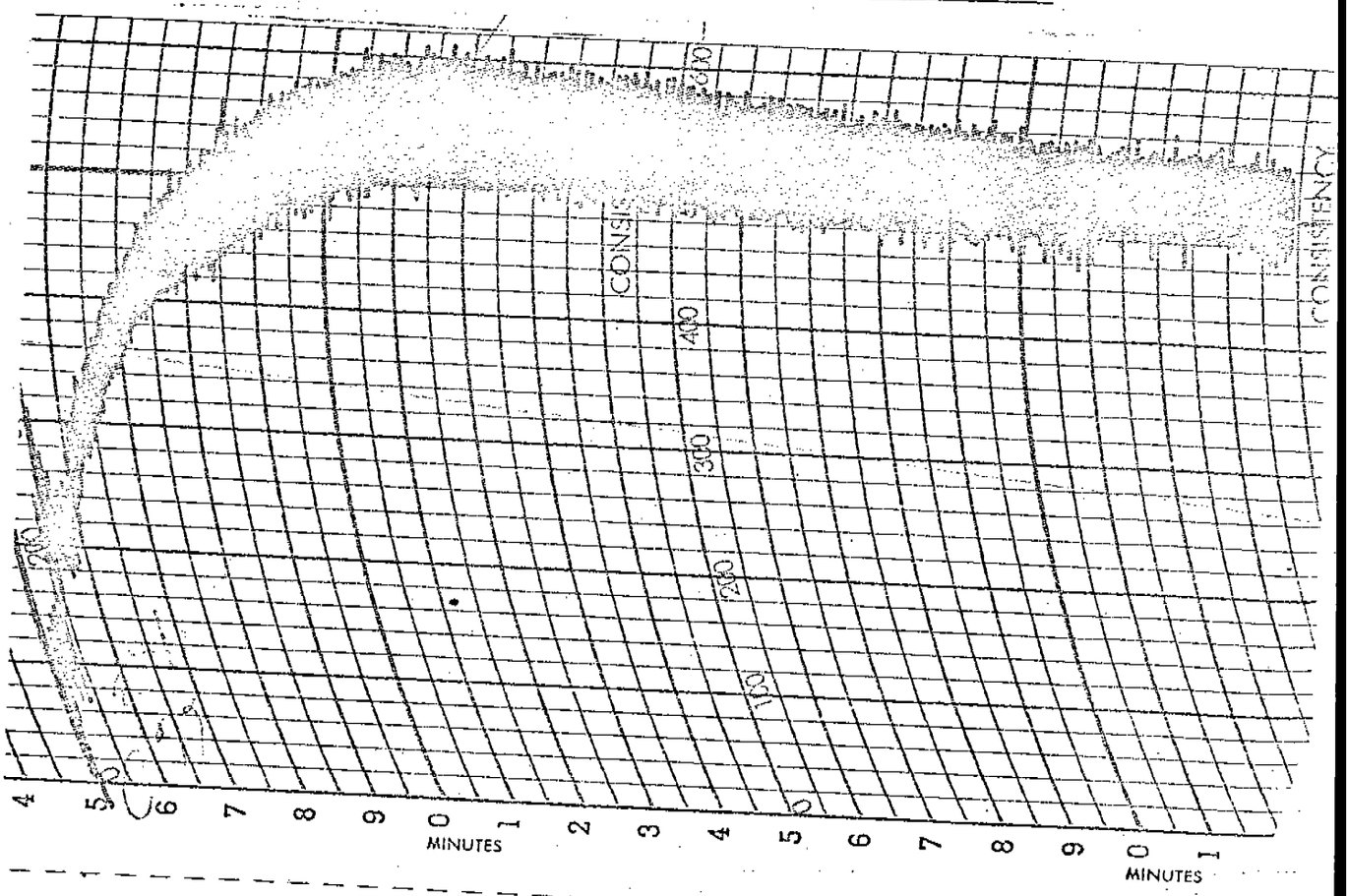
Moisture 14.4

Mixing Peak 7

Ash

Mixing Tolerance 13½

Protein

M. T. I. 30

Amylograph