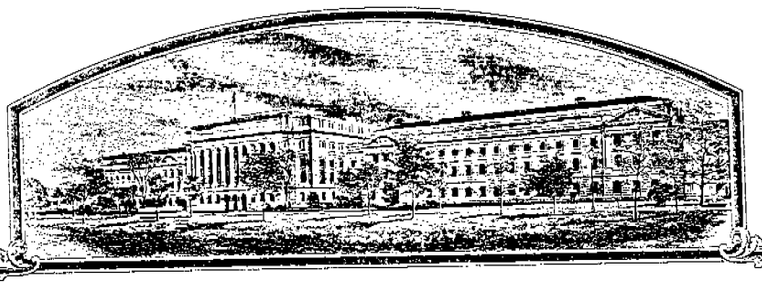

No. 7200037

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

McNair Seed Company

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, OR 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. 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 CERTIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'McNair 4823'

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* eighth *day of* April *in the year of our Lord one thousand nine hundred and* seventy-five

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

RECEIVED MAR 27 1978 U.S. DEPT. OF AGRICULTURE

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.

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: McNair 4823	2. KIND NAME: Wheat	FOR OFFICIAL USE ONLY — PV NUMBER: 72037
3. GENUS AND SPECIES NAME: Triticum aestivum L. em Thell.	4. FAMILY NAME *(Botanical)*: Gramineae	FILING DATE: 10.21.78 — TIME: 1:30 P.M.
	5. DATE OF DETERMINATION: 1967	FEE RECEIVED: $ 250.00 $ 250.00 $ 250.00 — BALANCE DUE: $ — $ — $ —
6. NAME OF APPLICANT(S): ROHM AND HAAS SEEDS INC. ~~NORTHRUP KING CO.~~ ~~McNair Seed Company~~ Ent 4/30/85 Ent 1/28/80	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*: INDEPENDENCE MALL WEST PHILADELPHIA, PA 19105 Ent 6/20/85 ~~P.O. Box 706, Laurinburg, N.C. 28352~~ ~~1500 JACKSON ST NE MINNEAPOLIS MN 55413~~ Ent 1/28/80	8. TELEPHONE AREA CODE AND NUMBER: (215) 641-7838 ~~(919) 276-0733~~ Ent 6/20/85
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*: Corporation	10. STATE OF INCORPORATION: North Carolina	11. DATE OF INCORPORATION: 11-1-47

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

Ent 6/20/85
DR. JAMES E. STROIKE
727 NORRISTOWN ROAD
BUILDING 70
SPRING HOUSE, PA 19477

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.

3/23/79 (DATE) — Richard C. Cole, John M. Green, V.P. (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

72037

13A.

~~12A.~~ Exhibit A. Origin and Breeding History of the Variety

McNair 4823, C.I. 15290, wheat is a selection from the cross of Dual x C.I. 13250 (Coker 55-9), the cross having been made at the South Carolina Agricultural Experiment Station. The selection was made by the McNair Seed Company in 1964 and grown as a head-row the following winter. It was in a preliminary yield test in 1965-66 and since that time has been in regular tests each year.

Blocks of head-rows have been grown for purification, with any mixtures or off-types rogued. Those that appear uniform have been grown again in longer rows and again rogued. After repeating this process twice, the material has been bulked and increased.

No definite variants are available.

72037

13B.

~~12B.~~ Exhibit B. Botanical Description of the Variety

McNair 4823 is a short, stiff-strawed variety. As an average of four replications in McNair Seed Company tests in 1970, it measured 36 inches tall compared to 39 to 40 inches for two Blueboy selections. It is awnletted, with golden brown chaff. The foliage tends to droop, especially as it matures. This variety produces grain of good test weight (usually 58-60 pounds per bushel). It has shown excellent leaf rust (Puccinia recondita tritici) resistance in tests across the south east. In the Cooperative Rust Laboratory, University of Minnesota, St. Paul, Minnesota, it has shown seedling resistance to five races of stem rust (Puccinia graminis tritici): Races 15B-2, 15B-6, 17A, 31 and 113.

72037

FORM GR-470-6 (REVERSE)

11. HEAD:

[2] Density: 1 = LAX 2 = DENSE

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

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

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

[0 8] CM. LENGTH

[0 8] MM. WIDTH

12. GLUMES AT MATURITY:

[1] 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.)*

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

[1] 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:

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

16. SEED:

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

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

[2] 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

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

[0 6] MM. LENGTH

[0 3] MM. WIDTH

[2 5] GM. PER 1000 SEEDS

17. SEED CREASE:

[2] 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)* 15B-2, 15B-6

[2] LEAF RUST *(Races)* _____

[0] STRIPE RUST *(Races)* _____

[0] LOOSE SMUT

[1] POWDERY MILDEW 17A, 31, 113

[0] BUNT

[ ] OTHER *(Specify)* _____

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

[0] SAWFLY

[0] APHID *(Bydv.)*

[0] GREEN BUG

[1] CEREAL LEAF BEETLE

[ ] OTHER *(Specify)* _____

HESSIAN FLY RACES:

[2] GP [0] A [1] B [2] C

[1] D [1] E [0] F [0] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering		Seed size	
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.

New Fn C Feb 14, 1973 KE

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-6
(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)
McNair Seed Company

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
Post Office Box 706
Laurinburg, N. C. 28352

FOR OFFICIAL USE ONLY

PVPO NUMBER
72037

VARIETY NAME OR TEMPORARY DESIGNATION
McNair 4823

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 6 8 FIRST FLOWERING

LAST FLOWERING

4. MATURITY *(50% Flowering)*:

NO. OF DAYS *EARLIER* THAN .....

1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS

0 4 NO. OF DAYS *LATER* THAN .....

1 KE for ld Ex C.

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

0 8 5 CM. HIGH

CM. TALLER THAN .....

1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS

0 8 CM. SHORTER THAN .....

1

6. PLANT COLOR AT BOOTING *(See reverse)*:

1 — 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHER COLOR:

1 — 1 = YELLOW 2 = PURPLE

8. STEM:

1 — Anthocyanin: 1 = ABSENT 2 = PRESENT

2 — Waxy bloom: 1 = ABSENT 2 = PRESENT

2 — Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

1 — Internodes: 1 = HOLLOW 2 = SOLID

0 3 NO. OF NODES *(Originating from node above ground)*

1 6 CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

2 — Anthocyanin: 1 = ABSENT 2 = PRESENT

2 — Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

1 — Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER *(Specify)*: _____

2 — Flag leaf: 1 = NOT TWISTED 2 = TWISTED

1 — Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

2 — Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

1 5 MM. LEAF WIDTH *(First leaf below flag leaf)*

2 4 CM. LEAF LENGTH *(First leaf below flag leaf)*:

72037

Exhibit D - Data Indicative of Novelity

'McNair 4823' most closely resembles 'Arthur' wheat in North Carolina. At maturity, McNair 4823 is 6-8 days later heading, 6-12 cm shorter and has smaller kernels (25 vs. 35 g/mk) than Arthur. In the Midwest the difference in heading date between these two varieties is only 2-3 days.

PV# 72037

13E.

~~12E~~. Exhibit E. Statement of the Basis of Applicant's Ownership

McNair 4823 is the property of McNair Seed Company. This variety was developed by Dr. Gordon K. Middleton and J. R. Bennett, who were employed by McNair Seed Company during the time of its development. All costs of development were borne by McNair Seed Company.

ASSIGNMENT OF UNITED STATES PLANT VARIETY PROTECTION CERTIFICATES AND APPLICATIONS

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, McNair Seed Company, a North Carolina corporation, P.O. Box 706, Laurinburg, North Carolina 28352, does hereby sell, assign, transfer and convey to Northrup King Co. a Delaware corporation, 1500 Jackson Street N.E., Minneapolis, Minnesota 55413, the entire right, title and interest in and to the following United States Plant Variety Protection Certificates and Applications, together with all reissues, divisions and continuations thereof and the plant varieties described and claimed therein:

Certificate Number	Variety	Date Issued
7600077	McNair 220 (Cotton)	July 19, 1977
7400023	McNair 612 (Cotton)	March 6, 1974
7200095	McNair 511 (Cotton)	May 21, 1974
7100090	McNair 210 (Cotton)	June 20, 1974
7400035	McNair 944 (Tobacco)	March 18, 1977
7700084	McNair 1003 (Wheat)	August 10, 1978
7200037	McNair 4823 (Wheat)	April 8, 1975
7500006	McNair 1813 (Wheat)	May 1, 1975
7200038	McNair 701 (Wheat)	February 26, 1974
76TQ016	McNair 500 (Soybeans)	February 15, 1977
7100075	McNair 600 (Soybeans)	February 26, 1974
7100042	McNair 800 (Soybeans)	April 10, 1974

Application Number	Variety	Date Filed
7900059	McNair 307 (Cotton)	December 19, 1978
7900053	McNair 308 (Cotton)	December 19, 1978
7800068	McNair 235 (Cotton)	February 23, 1978
N/A	McNair 373 (Tobacco)	October 31, 1979
7900088	McNair 710 (Soybeans)	June 20, 1979
7900089	McNair 770 (Soybeans)	July 10, 1979
7900094	McNair 780 (Soybeans)	July 25, 1979
7900093	McNair 700 (Soybeans)	July 25, 1979

the same to be held and enjoyed by said Northrup King Co. for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives, for the full term or terms for which said Certificates are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by said McNair Seed Company if this assignment and sale had not been made; together with all claims for damages by reason of past infringement of said Certificates and Applications, including the right to sue for and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, McNair Seed Company has caused this assignment to be executed by its duly authorized officer, effective the 1st day of November, 1979.

McNAIR SEED COMPANY

(CORPORATE SEAL)

By E. Harry Evans Jr

STATE OF NORTH CAROLINA)
) ss.
COUNTY OF Scotland)

On this 9th day of November, 1979, before me, a Notary Public in and for the county and state aforesaid, personally appeared A. Vernon Evans Jr., to me personally known, who, being by me duly sworn, did say that he is the President of McNair Seed Company; that the seal affixed to the foregoing assignment is the corporate seal of McNair Seed Company and that the assignment was executed in behalf of McNair Seed Company by authority of its board of directors; and did acknowledge the assignment to be the free act and deed of McNair Seed Company.

Witness my hand and seal the day and year set forth above.

Bobbie H. Dickson
Notary Public

My Commission Expires April 9, 1981

ASSIGNMENT OF UNITED STATES PLANT VARIETY PROTECTION CERTIFICATES

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Northrup King Co., a Delaware corporation having an office at 1500 Jackson Street N.E., Minneapolis, Minnesota 55413, does hereby sell, assign, transfer and convey to Rohm and Haas Seeds Inc., a Delaware corporation, Independence Mall West, Philadelphia, Pennsylvania 19105, the entire right, title and interest in and to the following United States Plant Variety Protection Certificates together with all the rights described and claimed therein:

Certificate Number	Variety	Date Issued
7500005	Prodax	June 30, 1975
7800010	Solar	March 29, 1979
8200002	Walera	June 17, 1982
8100013	711	December 10, 1981
	715	Applied for in 1983
8200033	817	June 17, 1982
8200094	830	September 23, 1982
8200006	835	March 11, 1982
7200038	McNair 701	February 26, 1974
7700084	McNair 1003	August 10, 1978
7500006	McNair 1813	May 1, 1975
7200037	McNair 4823	April 8, 1975
	RHS 8232	Applied for in 1984

the same to be held and enjoyed by said Rohm and Haas Seeds Inc. for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives, for the full term or terms for which said Certificates are or may be granted or reissued, as fully and entirely as the same would have been held and

enjoyed by said Northrup King Co. if this assignment and sale had not been made; together with all claims for damages by reason of past infringement of said Certificates, including the right to sue for and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, Northrup King Co. has caused this assignment to be executed by its duly authorized officer, effective the 20TH day of JULY, 1984.

NORTHRUP KING CO.

By: George L. Jones

(CORPORATE SEAL)

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

On this 20TH day of JULY, 1984, before me, a Notary Public in and for the county and state aforesaid, personally appeared GEORGE L. JONES, to me personally known, who, being by me duly sworn, did say that he is the PRESIDENT of Northrup King Co.; that the seal affixed to the foregoing assignment is the corporate seal of Northrup King Co. and that the assignment was executed in behalf of Northrup King Co. by authority of its board of directors; and did acknowledge the assignment to be the free act and deed of Northrup King Co.

Witness my hand and seal the day and year set forth above.

Edward C. Resler
Notary Public

EDWARD C. RESLER
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Commission Expires Nov. 2, 1990

ASSIGNMENT

WHEREAS, Rohm and Haas Seeds Inc., a Delaware corporation, with its principal office at Independence Mall West, Philadelphia, Pennsylvania 19105 ("RHS") is the owner of the entire right, title and interest in and to the following wheat varieties, application for United States Plant Variety Protection Certificates and United States Plant Variety Protection Certificates (collectively referred to as "Certificates"):

Wheat Variety	Certificate Number	Date Issued
McNair 4823	7200037	April 8, 1975
McNair 701	7200038	February 26, 1974

Wheat Variety	Application Number	Filing Date
RHS 8232	8400136	July 16, 1984

WHEREAS, CR Seeds, a general partnership, having its principal office at 900 Darlington Highway, Hartsville, South Carolina 29550 ("Partnership") is desirous of acquiring the entire interest in the aforementioned varieties and Certificates;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RHS does hereby sell, assign, transfer to Partnership the entire

right, title and interest in and to the varities and Certificates for its use and benefit and for its successors and assigns.

IN TESTIMONY THEREOF, Rohm and Haas Seeds Inc. intending to be legally bound has caused this assignment to be executed by its duly authorized officer, effective as of the 20th day of December, 1984.

ROHM AND HAAS SEEDS INC.

Date: 12/23/85

By: Charles A Baker

Title: Pres

STATE OF Penn. :
:SS
COUNTY OF Phila. :

On this 23 day of December, 1985, before me appeared Charles A. Baker of Rohm and Haas Seeds Inc., the person who signed this instrument, who acknowledged that he signed it as a free act on behalf of Rohm and Haas Seeds Inc. with authority to do so.

Joan B. Henderson
Notary Public

JOAN B. HENDERSON
Notary Public, Phila., Phila. Co.
My Commission Expires Nov. 29, 1986

My Commission Expires:

ASSIGNMENT

WHEREAS, CR Seeds, a general partnership having it principal office at 900 Darlington Highway, Hartsville, South Carolina 29550 ("Partnership"), is the owner of the entire right, title and interest to the United States Plant Variety Protection Certificates and applications for such Certificates (collectively "Certificates") listed on Appendix A attached hereto;

WHEREAS, the partners of CR Seeds, Rohm and Haas Seeds Inc., a Delaware corporation having its principal office at Independence Mall West, Philadelphia, PA 19105 ("RHS") and Coker's Pedigreed Seed Company, a South Carolina corporation with its principal office at 900 Darlington Highway, Hartsville, SC 29550 ("CPS"), are each desirous of acquiring a one-half undivided interest in the varieies and Certificates listed on Appendix A;

NOW, THEREFOR, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CR Seeds does hereby sell, assign and transfer to RHS a one-half undivided interest in and to the varieties and Certificates and to CPS a one-half undivided interest in and to the varieties and Certificates for each of their use and benefit and for each of their successors and assigns.

IN TESTIMONY THEREOF, CR Seeds intending to be legally bound has caused this assignment to be executed by its duly authorized officer.

CR Seeds

By: E. Joe Dahmer
President

State of South Carolina)
)SS
County of Darlington)

On this 30th day of December, 1986, before me appeared E. Joe Dahmer of CR Seeds, the person who signed this instrument who acknowledged that he signed it as a free act on behalf of CR Seeds with authority to do so.

Louise B. Elliott
Notary Public

My commission expires 4-14-91.

APPENDIX A

Soft Red Winter Wheat Varieties

Variety Name	U.S. Plant Variety Certificate No.	Issue Date
Coker 68-15	7200014	Mar. 6, 1974
Coker 68-19	7200015	Mar. 6, 1974
Coker 747	76TQ015	Sept. 9, 1978
Coker 762	8000152	Dec. 12, 1981
Coker 797	8000145	Dec. 12, 1981
Coker 916	8300036	Sept. 27, 1985
Coker 983	8400058[1]	Feb. 27, 1984[1]
McNair 701	7200038	Feb. 26, 1974
McNair 4823	7200037	April 8, 1975
RHS 8232	8400136[1]	July 16, 1984[1]
9227	8600009[1]	Oct. 22, 1985[1]
9323	8600010[1]	Oct. 22, 1985[1]

1. Application number and filing date.

Winter Oat Varieties

Variety Name	U.S. Plant Variety Certificate No.	Issue Date
Coker 227	7500007	Oct. 20, 1977
Coker 716	7900003	Dec. 28, 1978
Coker 820	8400059[1]	Feb. 28, 1984[1]
Coker 234	7500008	Oct. 26, 1977
Four Twenty Two	7700085	Apr. 12, 1979
Big Mac	8200121	Aug. 19, 1982
Mesquite	8200122	Aug. 19, 1982

1. Application number and filing date.

Soybean Varieties

Coker Hampton 266A	7100022	Sept. 6, 1973
Coker 136	7300091	Oct. 18, 1973
Coker 338	7400058	Oct. 29, 1976
Coker 237	7800034	July 13, 1978
Coker 488	7800035	July 13, 1978
Coker 156	7900043	Nov. 27, 1979
Coker 317	8100095	Nov. 19, 1981
Coker 368	8200140	Aug. 31, 1983
Coker 425	8400077	May 31, 1985
Coker 485	8400078	May 31, 1985
Coker 393 (Q327-4270)	8400018	Jan. 25, 1985
Coker 355 (XP5878)	8400019	Jan. 25, 1985
Coker 627	8700001[1]	Oct. 3, 1986[1]
Coker 686	Pending[1]	Dec. 19, 1986

1. Application number and filing date.

Variety Name	U.S. Plant Variety Certificate No.	Issue Date
AP55	8100089	Feb. 18, 1982
AP70	7800081	Feb. 15, 1979
AP71	8100090	Sept. 24, 1981
Lancer	7600044	Sept. 29, 1976
RA-526	7500067	Dec. 12, 1975
RA-604	7900008	Mar. 1, 1975
RA-680	8100097	Apr. 15, 1982
RA-502	8200160	Aug. 31, 1983
RA-606	8200161	Oct. 27, 1983
RA-580	8300075	Apr. 30, 1984
Mitchell	7300054	Oct. 30, 1974
RA-401	7800030	June 22, 1978
RA-601	7800031	June 22, 1978
Mitchell 450	7900046	June 14, 1979
RA-481	8000054	Mar. 26, 1981
RA-402	8000093	July 31, 1981
Mitchell 410	8200162	Oct. 27, 1983
RA-403	8200163	Oct. 27, 1983

Variety Name	Certificate No.	Issue Date
RA-451	8500008[1]	Oct. 10, 1984[1]
RA-452	8500009[1]	Oct. 10, 1984[1]
RA-405	8500010[1]	Oct. 10, 1984[1]
RA-501 A	76TQ006	May 11, 1978
RA-480	7900007	Feb. 15, 1979

1. Application number and filing date.

ASSIGNMENT

WHEREAS, Rohm and Haas Seeds Inc., a Delaware corporation having its principal office at Independence Mall West, Philadelphia, PA 19105 ("RHS"), is the owner of a one-half undivided interest in and to the United States Plant Variety Protection Certificates and applications for such Certificates (collectively "Certificates") listed on Appendix A attached hereto:

WHEREAS, Coker's Pedigreed Seed Company, a South Carolina corporation with its principal office at 900 Darlington Highway, Hartsville, SC 29550 ("CPS"), is desirous of acquiring this one-half undivided interest in the aforementioned varieties and Certificates;

NOW, THEREFOR, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RHS does hereby sell, assign and transfer to CPS RHS's one-half undivided interest in and to the varieties and Certificates for CPS's use and benefit and for its successors and assigns.

IN TESTIMONY THEREOF, RHS intending to be legally bound has caused this assignment to be executed by its duly authorized officer.

ROHM AND HAAS SEEDS INC.

By: Howard A. Mergelkamp Jr.
Assistant Treasurer

State of Pennsylvania)
)SS
County of Philadelphia)

On this 31st day of December, 1986, before me appeared Howard A. Mergelkamp of Rohm and Haas Seeds Inc., the person who signed this instrument who acknowledged that he signed it as a free act on behalf of Rohm and Haas Seeds Inc. with authority to do so.

Elizabeth A. Smith
Notary Public

ELIZABETH A. SMITH
Notary Public, Phila., Phila. Co.
My Commission Expires Oct. 14, 1989

My commission expires _____.

7200037

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES

WHEREAS, **COKER'S PEDIGREED SEED COMPANY**, a South Carolina corporation ("Coker's"), having its offices at 900 Darlington Highway, Hartsville, South Carolina 29550, has adopted and used and is the sole and exclusive owner of certain United States Plant Variety Protection Certificates and similar rights under laws of countries other than the United States as listed in Exhibit A hereto:

WHEREAS, COKER'S PEDIGREED SEED CO. and **NORTHRUP KING CO.**, a Delaware corporation ("NK"), have entered into an Asset Purchase Agreement, dated July 20, 1988, providing for the purchase and sale of substantially all of the assets and business of Coker's and the assumption of certain of Coker's liabilities and obligations by NK; and

WHEREAS, NK desires to acquire the right, title and interest in, to and under the Plant Variety Protection Certificates listed on Exhibit A hereto and the pending applications hereto (collectively, the "Plant Variety Protection Certificates").

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Coker's hereby sells, assigns, transfers and sets over to NK the Plant Variety Protection Certificates. Coker's further agrees, at no cost to it, to execute and deliver to NK, upon the request of NK, any further instrument of assignment that may be necessary to effectuate the transfer of each Plant Variety Protection Certificate.

IN WITNESS WHEREOF, Coker's has caused this instrument to be executed by its duly authorized representative as of the 20th day of July, 1988.

COKER'S PEDIGREED SEED COMPANY

By: _____
E. Joe Dahmer
President

STATE OF MINNESOTA)
) ss:
COUNTY OF HENNEPIN)

On this 20th day of July, 1988, before me, a Notary Public in and for the County aforesaid, the undersigned officer, E. Joe Dahmer, personally appeared and acknowledged himself to be the President of Coker's Pedigreed Seed Co., and that he executed the foregoing instrument for the purposes therein.

WITNESS my hand and seal this 20th day of July, 1988.

TIMOTHY M. BANGASSER
NOTARY PUBLIC — MINNESOTA
HENNEPIN COUNTY
My Commission Expires May 22 1992

_____
Notary Public

Cotton Varieties, Continued

Variety Name	U.S. Plant Variety Certificate Number	Issue Date	Term (Yrs.)
Coker 3131	8100019	Sept. 24, 1981	18
Coker 208	8300082	Sept. 29, 1983	18
Coker 139	8700070	Dec. 18, 1987	18

Soft Red Winter Wheat Varieties

Coker 68-15	7200014	Mar. 6, 1974	17
Coker 68-19	7200015	Mar. 6, 1975	17
Coker 747	76TQ015	Sept. 20, 1978	17
Coker 762	8000152	Dec. 10, 1981	18
Coker 797	8000145	Dec. 10, 1981	18
Coker 916	8300036	Sept. 27, 1985	18
Coker 983	8400058	Dec. 31, 1980	18
McNair 701	7200038	Feb. 26, 1974	17
McNair 4823	7200037	Apr. 8, 1975	17
RHS 8232	8400136	Oct. 31, 1985	18
9227	8600009	May 31, 1988	18
9323	8600010	Apr. 29, 1988	18
McNair 1813	7500006	May 1, 1975	17
McNair 1003	7700084	Aug. 10, 1978	17
Coker 833	8800005(1)	Oct. 2, 1987(1)	-
Coker 9733	8700159(1)	July 16, 1987(1)	-
Coker 9766	8700160(1)	July 17, 1987(1)	-

(1) Application number and filing date.