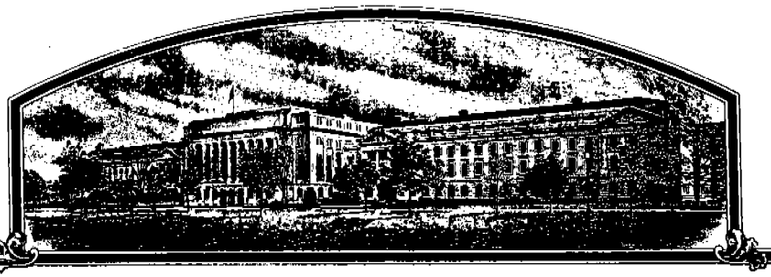

No. 7500061

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Research Corporation

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. [illegible] THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS [illegible] CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS [illegible]IED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BARLEY

'Washonupana'

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* 20th *day of* December *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 WASHONUPANA	2. KIND NAME BARLEY	FOR OFFICIAL USE ONLY PV NUMBER 7500061
3. GENUS AND SPECIES NAME HORDEUM VULGARE	4. FAMILY NAME *(Botanical)* GRAMINAE	FILING DATE 2·27·75 / TIME 11:30 A.M.
	5. DATE OF DETERMINATION JULY 1, 1974	FEE RECEIVED $250·00 $250·00 $250.00 / BALANCE DUE $ — $ — $ —
6. NAME OF APPLICANT(S) RESEARCH CORPORATION	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* 405 LEXINGTON AVENUE NEW YORK, NEW YORK 10017	8. TELEPHONE AREA CODE AND NUMBER 212/986-6622

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
NOT-FOR-PROFIT CORPORATION	NEW YORK	2/26/72*

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

Norman F. Oblon
Oblon, Fisher, Spivak, McClelland & Maier
1755 S. Jefferson Davis Highway
Crystal Square - Suite 400
Arlington, Virginia 22202

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.)* Ext 6/24/76
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [XX] 13C. Exhibit C, Objective Description of the Variety
- [XX] 13D. Exhibit D, Data Indicative of Novelty
- [XX] 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? [XX] 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.

RESEARCH CORPORATION

4 April 1975
(DATE)

By: Willard Marcy.
(SIGNATURE OF APPLICANT)

Vice President

(DATE)

(SIGNATURE OF APPLICANT)

*Confirmed by laws of New York Chapter 523, March 30, 1972

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.

APR 22 1975
U. S. DEPARTMENT OF AGRICULTURE

Exhibit A

Washonupana originated in Montana from hand crossed seed of the following pedigree:

'Waxy Oderbrucker'/7* 'Compana'/2/'Sermo'/7*'Compana', F_4.

The breeding history and description of 'Compana' may be found in Technical Bulletin No. 1224, USDA, Classification of Barley Varieties Grown in the United States and Canada in 1958.

This backcross derived variety of 'Compana' is very similar to 'Compana' except as noted in Exhibit C. Some pleotropic effects of the short awn gene may be noted such as a higher number of seed per spike and smaller seed than 'Compana'. The short awn gene is 1k2 2k2 on chromosome 1 and the variety also has the waxy endosperm gene wx wx located on chromosome 1. The variety also has the hullness gene n n located on chromosome 1. The variety is a composite of a number of selected, F_3 lines.

ADDENDUM TO EXHIBIT A

STATEMENT OF TYPE AND FREQUENCY OF VARIANCE DURING REPRODUCTION AND MULTIPLICATION OF VARIETY AND HOW THESE VARIANTS MAY BE IDENTIFIED. EVIDENCE OF STABILITY.

"WASHONUPANA" BARLEY

From the cross of short awn hulless plants, from Sermo/7*Compana, with Wapana, short awn hulless plants were selected. These plants were segregating for waxy and non-waxy endosperm and plants homozygous for the waxy endosperm character were selected. Separation was done in the field by applying IKI solution to freshly cut endosperm cross-sections. In the absence of amylose the IKI stain remains brown for a short period of time when applied to the exposed endosperm, rather than purple if amylose is present in abundance.

The general aspect of all plants is the same as Compana except for the short awn and attendant pleotropic effects (e.g. more and smaller seed per spike). Upon the threshing the variety will be found to be hulless and not covered as is Compana. We have observed this combination of characters to be stable through at least 6 generations.

Exhibit B - Botanical Description of the Variety

Washonupana

Description - Two-rowed semismooth-awned spring barley; early growth erect; plant midseason, short; basal leaf sheaths without hairs, green or faintly purple; upper leaf sheaths waxy, yellow or faintly purple or sometimes slightly black at maturity; auricles rarely purple streaked; leaves short, wide, drooping; flagleaves short, wide; stems yellow or sometimes slightly black at maturity; exposed nodes green or purple; distance flagleaf to spike 0 to 2 cm., very often the spikes do not emerge from the boot; collars closed; basal rachis internode curved or occasionally straight, 2 to 3 mm. long; rachis tough, with long-haired edges; spike lax, midlong, parallel, waxy, erect to inclined; lemma awn short; awns semismooth (tending to be rough at some locations), tips sometimes faintly purple; glume awn equal to length of glume, rough, tips sometimes faintly purple; glumes half the length of lemma, with long hairs covering the glumes or confined to bands; rachilla long haired, abortive in about 30 percent of kernels; lemma yellow, no teeth on lateral nerves and few on marginal nerves, with depression at base; stamens in central florets 3.0 to 3.5 mm long containing good pollen, in lateral florets 0.8 mm. long without pollen; stigma moderately hairy; kernels white, midlong hulless, weight 30-50 mg endosperm waxy: hulls smooth.

This variety differs from Compana in that is has short awns, is hulless, produces more and smaller kernels per spike, and the endosperm is waxy. Otherwise it is very similar to Compana.

FORM APPROVED. OMB NO. 40-R3712

FORM [illegible] (11-1-72)

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

EXHIBIT C
(Barley)

Washonupana

OBJECTIVE DESCRIPTION OF VARIETY
BARLEY (*HORDEUM VULGARE*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
RESEARCH CORPORATION

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
405 LEXINGTON AVENUE
ROCHESTER, NEW YORK 10017

FOR OFFICIAL USE ONLY
PVPO NUMBER: 7500061
VARIETY NAME OR TEMPORARY DESIGNATION: WASHONUPANA

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

1. GROWTH HABIT:

[1] 1 = SPRING 2 = FACULTATIVE WINTER 3 = WINTER

[3] Early Growth: 1 = PROSTRATE 2 = SEMIPROSTRATE 3 = ERECT

2. MATURITY (50% Flowering):

[2] 1 = EARLY (California Mariout) 2 = MIDSEASON (Betzes) 3 = LATE (Frontier)

[3] No. of days *Earlier* than ..... [1]
[0] No. of days *Later* than ..... [7]
1 = BETZES 2 = CALIFORNIA MARIOUT 3 = CONQUEST 4 = DICKSON 5 = PIROLINE 6 = PRIMUS 7 = UNITAN

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

[ ] 1 = SEMIDWARF 2 = SHORT (California Mariout) 3 = MEDIUM TALL (Betzes) 4 = TALL (Conquest)

[0][9] Cm. *Shorter* than ..... [1]
[ ][ ] Cm. *Taller* than ..... [ ]
1 = BETZES 2 = CALIFORNIA MARIOUT 3 = CONQUEST 4 = DICKSON 5 = PIROLINE 6 = PRIMUS 7 = UNITAN

4. STEM:

[1] Exertion (*Flag to spike at maturity*): 1 = 0 - 3 cm. 2 = 3 - 10 cm. 3 = 10 - 15 cm.

[2] Anthocyanin: 1 = ABSENT 2 = PRESENT

[0][5] NO. OF NODES (Originating from node above ground)

[1] Collar Shape: 1 = CLOSED 2 = V-SHAPED 3 = OPEN 4 = MODIFIED CLOSED OR OPEN

[1] Shape of Neck: 1 = STRAIGHT 2 = SNAKY 3 = OTHER (Specify) _____

5. LEAF:

[1] Basal leaf sheath (*seedling*): 1 = GLABROUS 2 = PUBESCENT

[2] Position of flag leaf (*at boot stage*): 1 = DROOPING 2 = UPRIGHT

[3] Waxiness: 1 = ABSENT (Glossy) 2 = SLIGHTLY WAXY 3 = WAXY

[1][1] MM. WIDTH (First leaf below flag leaf)

[1][9] CM. LENGTH (First leaf below flag leaf)

[2] Anthocyanin in leaf sheath: 1 = ABSENT 2 = PRESENT

6. HEAD:

[1] Type: 1 = TWO-ROWED 2 = SIX-ROWED

[2] Density: 1 = LAX 2 = ERECT (Not dense) 3 = ERECT (Dense)

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

[3] Waxiness: 1 = ABSENT (Glossy) 2 = SLIGHTLY WAXY 3 = WAXY

[—] Lateral Kernels Overlap: 1 = NONE 2 = AT TIP 3 = 1/4 - 1/2 OF HEAD

[3] Rachis (*Hair on edge*): 1 = LACKING 2 = FEW 3 = COVERED

7. GLUME:

[2] Length: 1 = 1/3 OF LEMMA 2 = 1/2 OF LEMMA 3 = MORE THAN 1/2 OF LEMMA

[3] Hairs: 1 = NONE 2 = SHORT 3 = LONG

[3 4] Hair covering: 1 = NONE 2 = RESTRICTED TO MIDDLE 3 = CONFINED TO BAND 4 = COMPLETELY COVERED

[2] Awns: 1 = LESS THAN EQUAL TO LENGTH OF GLUMES 2 = EQUAL TO LENGTH OF GLUMES 3 = MORE THAN EQUAL TO LENGTH OF GLUMES

[2] Awn Surface: 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH

75-61

FORM GR-470-5 (Reverse)

8. LEMMA:

[4] Awn: 1 = AWNLESS 2 = AWNLETS ON CENTRAL ROWS, AWNLESS ON LATERAL ROWS 3 = SHORT ON CENTRAL ROWS, AWNLETS ON LATERAL ROWS 4 = SHORT (less than equal to length of spike) 5 = LONG (longer than spike) 6 = HOODED

[2] Awn Surface: 0 = AWNLESS 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH

[2] Teeth: 1 = ABSENT 2 = FEW 3 = NUMEROUS

[1] Hair: 1 = ABSENT 2 = PRESENT

[1] Shape of base: 1 = DEPRESSION 2 = SLIGHT CREASE 3 = TRANSVERSE CREASE (none on fullers) set 6/24/76

[2] Rachilla Hairs: 1 = SHORT 2 = LONG

9. STIGMA:

[1] Hairs: 1 = FEW 2 = MANY

10. SEED:

[1] Type: 1 = NAKED 2 = COVERED

[1] Hairs on Ventral Furrow: 1 = ABSENT 2 = PRESENT

[4] Length: 1 = SHORT (8.0 mm.) 2 = SHORT TO MIDLONG (7.5 - 9.0 mm.) 3 = MIDLONG (8.5 - 9.5 mm.) 4 = MIDLONG TO LONG (9.0 10.5 mm.) 5 = LONG (10.0 mm.)

[1] Wrinkling of hull: 1 = NAKED 2 = SLIGHTLY WRINKLED 3 = SEMIWRINKLED 4 = WRINKLED

[1] Aleurone Color: 1 = COLORLESS (White or Yellow) 2 = BLUE

[~~0~~ ~~0~~] PERCENT ABORTIVE 30% Est as per letter dtd 6/21/76

[~~4~~ 5] GMS. PER 1000 SEEDS

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

[0] SEPTORIA	[0] NET BLOTCH	[0] SPOT BLOTCH	[0] POWDERY MILDEW
[1] LOOSE SMUT	[1] BACTERIAL BLIGHT	[0] COVERED SMUT	[0] FALSE LOOSE SMUT
[1] STEM RUST	[0] LEAF RUST	[0] SCAB	[0] SCALD
[0] AY	[1] BSMV	[1] BYDV	[0] OTHER (Specify)

12. INSECT: (0 = Not tested, 1 = Susceptible 2 = Resistant)

[0] GREEN BUG	[0] ENGLISH GRAIN APHID	[0] CHINCH BUG	[0] ARMYWORM
[2] GRASS HOPPERS	[0] CERIAL LEAF BETTLE	[0] OTHER (Specify) _____	

HESSIAN FLY RACES: [0] GP [0] A [0] B [0] C [0] D [0] E [0] F [0] G

13. CHEMICAL (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] DDT [ ] OTHER (Specify) _____

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

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

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

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

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

00006

Exhibit D

Novelty is based on the unique combination of the following characters:

'Washonupana' very closely resembles 'Compana' except it has the unique gene combination and accompanying characteristic.

1. waxy endosperm, wx wx
2. short awns, 1k2 1k2
3. nude or hulless, n n
4. the starch retains an attached enzyme throughout the starch manufacturing process.

That is, contrary to the standard starch process in which the starch granules are cooked in water to form a paste, cooled, treated with α-amylase enzymes to reduce viscosity and heated to inactivate the enzymes, it has been found that the starch granules extracted from this variety will paste without inactivation of the α-amylase naturally present on the granules, so that further addition of the enzymes after initial cooking can be eliminated.

EXHIBIT E

Applicant is the Assignee of the breeder, Dr. Robert F. Eslick, who is a professor in the Plant & Soil Science Department of the Montana State University.

A copy of the Assignment to Applicant is attached hereto.

RESEARCH CORPORATION

By Willard Marcy
Willard Marcy
Vice President

Date: 6 February 1975

ADDENDUM TO EXHIBIT E

Further assignment information is attached.

Montana State University

Bozeman, Montana 59715 Tel. 406-~~587-3121~~
994-2381

Office of the President
Carl W. McIntosh, President
Wm. A. Johnstone, Vice Pres. for Administration

Roy E. Huffman, Vice Pres. for Research
I. E. Dayton, Vice Pres. for Academic Affairs

December 5, 1974

Mr. Norman F. Oblon
Oblon, Fisher, Spivak,
McClelland & Maier
Crystal Mall One, Suite 908
1911 Jefferson Davis Highway
Arlington, Virginia 22202

Dear Mr. Oblon:

This will indicate that the assignment of the barley variety "Washonupana" to the Research Corporation by Professor Robert Eslick of Montana State University has the approval of the University. The assignment is made under the terms of an agreement between the Research Corporation and Montana State University with regard to the Patent Application and the Plant Variety Protection Certificate.

Sincerely yours,

Roy E. Huffman
Vice President
for Research

REH/mm
CC:Robert Eslick
Kenneth Goering

A S S I G N M E N T

WHEREAS, ROBERT F. ESLICK of Bozeman, State of Montana, is the breeder of a novel variety of sexually reproduced plant who has so reproduced said variety designated WASHONUPANA variety of barley; and

WHEREAS, RESEARCH CORPORATION, a New York not-for-profit corporation with offices at 405 Lexington Avenue, New York, New York 10017, and herein termed "RESEARCH", is desirous of acquiring certain rights in and to said novel variety;

NOW, THEREFORE, in consideration of one dollar in hand paid and other good and valuable consideration by RESEARCH to said ROBERT F. ESLICK, the receipt of which is hereby acknowledged, said ROBERT F. ESLICK has agreed to and by these presents does hereby sell, assign and tranfer unto said RESEARCH the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to said novel variety, including the right to apply to the United States Plant Variety Protection Office of the Department of Agriculture for a Certificate of Plant Variety Protection therefor, and any and all corresponding certificates for protection in any other country, and in patents (including extensions thereof) of any country, which have been or may be granted on said novel variety or any

part thereof, or on said application or any divisional, substitute, continuation, renewal, reissue or other patent or other application for protection based -in-whole or -in-part thereon, or based upon said novel variety;

TO BE HELD AND ENJOYED by said RESEARCH, its successors and assigns, to the full ends of the respective terms for which said Certificate of Plant Variety Protection or patents or any of them have been or may be granted as fully and entirely as the same would have been held and enjoyed by said ROBERT F. ESLICK had no sale and assignment of said interest been made;

AND ROBERT F. ESLICK hereby authorizes the Plant Variety Protection Office of the United States of America to issue any and all Plant Variety Protection Certificates which may be granted upon said novel variety or any part thereof, to said RESEARCH;

AND said ROBERT F. ESLICK does agree for himself and his heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any divisional, substitute, continuation-in-whole, renewal, reissue, or other applications for plant variety protection certificates or patents of any country that might be

deemed necessary by said RESEARCH fully to secure to said RESEARCH its interest as aforesaid in and to said novel variety or any part thereof, and in and to said several certificates or patents or any of them and said ROBERT F. ESLICK further agrees to cooperate with RESEARCH in making available such sample or samples of basic seed necessary for propagation of said novel variety as is or may be required by RESEARCH to file for or maintain any such certificates or patents;

AND said ROBERT F. ESLICK does covenant for himself and his legal representatives, and agrees with said RESEARCH, its successors and assigns, that no right or license has been granted to anyone to sell, offer for sale, reproduce, import, export, or use such novel variety in producing (as distinguished from developing) a hybrid or different variety therefrom, and that prior to the execution of this assignment, the right, title and interest in said novel variety had not been otherwise encumbered, and that no instrument in conflict herewith has been executed

or shall be executed by said ROBERT F. ESLICK.

Executed this 30th day of January 1975.

Robert F. Eslick
ROBERT F. ESLICK

STATE OF MONTANA)
) ss.
COUNTY OF GALLATIN)

On this 30th day of January, 1975, personally appeard the above-named ROBERT F. ESLICK, personally known to me and known by me to be the one who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged the same to be his free act and deed, before me.

Raymond L. Barrett
Notary Public

My commission expires: August 15, 1975

Notary Public for the State of Montana
Residing at Bozeman, Montana
My Commission Expires 8-15-75

Page 4 of a 4-page assignment from ROBERT F. ESLICK to RESEARCH CORPORATION