No. 8900281

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Genecorp, 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 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 VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (7 U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Raider'

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* June *in the year of our Lord one thousand nine hundred and* ninety-two.

Attest:

Kenneth A. Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Edward Madigan

Secretary of Agriculture

APPROVAL EXPIRES 2-28-88

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO. 0581-0055

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): GENECORP, INC.

2. TEMPORARY DESIGNATION:

3. VARIETY NAME: RAIDER

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*: 124A GRIFFIN STREET, SALINAS, CALIFORNIA 93901

5. PHONE *(Include area code)*: 408-757-0169

FOR OFFICIAL USE ONLY

PVPO NUMBER: 8900281

6. GENUS AND SPECIES NAME: Lactuca sativa

7. FAMILY NAME *(Botanical)*: COMPOSITAE

FILING — DATE: Aug. 2, 1989 — TIME: 10:30 [✓] A.M. [ ] P.M.

8. KIND NAME: LETTUCE

9. DATE OF DETERMINATION: NOVEMBER 27, 1987

FEES RECEIVED — AMOUNT FOR FILING: $ 2150.— DATE: Aug. 2, 1989 — AMOUNT FOR CERTIFICATE: $ 250.— DATE: June 16, 1992

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

11. IF INCORPORATED, GIVE STATE OF INCORPORATION: CALIFORNIA

12. DATE OF INCORPORATION: MARCH 26, 1982

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

~~MR. STAN ROLLIN~~
~~6802 OREM DRIVE~~
~~LAUREL, MARYLAND 20707~~

1/26/90 Mr. Ken Dubas, Research Director
124-A Griffin St., GeneCorp, INC.
Salinas, CA 93901

PHONE *(Include area code)*: ~~301-725-2651~~ (800) 237-4691 (408) 757-0169

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. [X] Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
b. [X] Exhibit B, Novelty Statement.
c. [X] Exhibit C, Objective Description of Variety *(Request form from Plant Variety Protection Office.)*
d. [X] Exhibit D, Additional Description of Variety.
e. [X] Exhibit E, Statement of the Basis of Applicant's Ownership.

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.)* [ ] Yes *(If "Yes," answer items 16 and 17 below)* [X] No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? [ ] Yes [ ] No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? [ ] Foundation [ ] Registered [ ] Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? [ ] Yes *(If "Yes," give date)* [X] No

19. HAS THE VARIETY BEEN RELEASED, 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: Nathan J. Olivas — DATE: JULY 28, 1989

SIGNATURE OF APPLICANT: NATHAN J. OLIVAS — DATE:

FORM LS-470 (3-86) *Edition of 7-84 obsolete.*

INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds *(furnish only untreated seed)*, and $1,800 fee *($200 filing fee and $1,600 examination fee)* to the U. S. Department of Agriculture, Agricultural Marketing Service, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. *(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

9 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.

14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

14e Section 52(4) of the Plant Variety Protection Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

15 If "Yes" is specified *(seed of this variety be sold by variety name only as a class of certified seed)* the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. *(See Section 180.16 of the Regulations and Rules of Practice.)*

19 See Sections 41 (i,j) and 42 of the Plant Variety Protection Act and Section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

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AUG 2 - 1989
Plant Variety
Protection Ofc.

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF THE VARIETY

RAIDER originated from a hand pollinated cross between Winterset and Ithaca. Winterset was used as the female parent and Ithaca was used as the male parent. The cross was made in 1984. The F_1 seed was planted in Corcoran, California in April 1985. The progeny was observed and the selfs were removed. The seed from the F_1 plants were harvested in mass in August 1985. The F_2 seed was planted in Yuma, Arizona on September 22, 1985. Eleven individual plant selections were made based on head formation, bolt tolerance, texture, size and general appearance. The selected plants were removed, taken to the greenhouse and allowed to reproduce seed. F_3 seed from the eleven selections were planted in Corcoran, California in April 1986. The progeny of the selections were observed. Seven plants were selected in June 1986 from the progeny of the #1 plant that was selected in Yuma. The seven selected plants were allowed to reproduce seed which was harvested in August 1986. The F_4 seed from the seven selected plants were planted in Yuma, Arizona on September 21, 1986. The progeny was observed and three plants were selected from the progeny of the #6 plant selected in Corcoran. The selections were made based on headability, bolting tolerance, texture, size and general appearance. The selected plants were removed and taken to a greenhouse where they were allowed to reproduce seed. The F_5 seed was harvested and planted in Corcoran, California in April April 1987. The progeny was observed and three plants were selected from the #3 plant that was selected in the previous generation. The F_6 seed was harvested and planted in Yuma, Arizona on September 20, 1987. The progeny from the #2 plant selected had the desired horticultural type. It appeared uniform and no segregation was noted. Remnant seed from the #2 plant was planted in Corcoran, California in April 1988 for a preliminary increase. The seed was harvested and several trial plantings were made in Arizona.

RAIDER carries the pedigree of GCA3-OC-1Y-6C-3Y-2C-OC.

7/26/89:bdo

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EXHIBIT B

NOVELTY STATEMENT

Raider is a Vanguard type lettuce that is most similar to Autumn Gold. It differs from Autumn Gold in having a larger frame diameter, larger head diameter and shorter core length. See Table #1. The days from planting to seed stalk emergence is longer on Raider than on Autumn Gold.

Days from Planting to Seed Stalk Emergence

Planting Date	Raider	Autumn Gold
5-16-90 Corcoran, CA	58	56
6-06-91 Corcoran, CA	71	69

Raider has more solidity than Autumn Gold as indicated in Table #2. The color of Raider is a lighter green color than Autumn Gold. The indentation of mature leaves on Raider are shallow dentate vs. deeply dentate for Autumn Gold.

Raider differs from Morangold in that Raider is in the Vanguard group and Morangold is in the Great Lakes group. Raider has a shorter core length than Morangold as noted in Table #3 and Table #4.

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TABLE 1
EACH SAMPLE TESTED USING STANDARD T-TEST PROCEDURES
CRITICAL NUMBER BASED ON 95% PROBABILITY

	FRAME DIAMETER (IN CENTIMETERS)		HEAD DIAMETER (IN CENTIMETERS)		CORE LENGTH (IN CENTIMETERS)	
	RAIDER	AUTUMN GOLD	RAIDER	AUTUMN GOLD	RAIDER	AUTUMN GOLD
9-20-88 PLANTING YUMA, AZ						
HEAD 1	49.0	47.0	15.5	16.3	6.1	13.0
HEAD 2	51.0	45.0	16.8	14.2	10.2	11.0
HEAD 3	48.0	48.0	15.2	11.3	9.9	9.8
HEAD 4	50.0	43.0	16.6	14.6	7.3	7.6
HEAD 5	47.0	46.0	14.3	16.1	8.2	12.2
HEAD 6	49.0	47.0	15.2	15.4	8.3	8.9
HEAD 7	52.0	44.0	14.9	13.1	7.9	11.1
HEAD 8	46.0	48.0	15.4	10.5	8.1	7.3
HEAD 9	49.0	45.0	13.2	11.6	11.1	6.1
HEAD 10	48.0	46.0	14.6	13.9	8.2	12.1
MEAN	48.90	45.90	15.17	13.70	8.53	9.91
VARIANCE	2.89	2.49	0.99	3.73	1.95	4.99
TEST STATISTIC	4.09		2.14		(1.66)	
CRITICAL NUMBER	1.73		1.73		1.73	

4

TABLE 2
EACH SAMPLE TESTED USING STANDARD T-TEST PROCEDURES
CRITICAL NUMBER BASED ON 95% PROBABILITY

9-20-88 PLANTING YUMA, AZ	HEAD WEIGHT (IN GRAMS) RAIDER	AUTUMN GOLD
HEAD 1	835.0	550.0
HEAD 2	720.0	810.0
HEAD 3	695.0	720.0
HEAD 4	530.0	610.0
HEAD 5	690.0	670.0
HEAD 6	690.0	570.0
HEAD 7	775.0	725.0
HEAD 8	685.0	875.0
HEAD 9	730.0	515.0
HEAD 10	670.0	590.0
MEAN	702.00	663.50
VARIANCE	5536.00	12515.25
TEST STATISTIC	0.91	
CRITICAL NUMBER	1.73	

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED DIVISION

EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY
LETTUCE *Lactuca sativa*

NAME OF APPLICANT (S)
GENECORP, INC.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
124A GRIFFIN STREET
SALINAS, CALIFORNIA 93901

FOR OFFICIAL USE ONLY

PVPO NUMBER
8900281

VARIETY NAME
RAIDER

EXPERIMENTAL DESIGNATION
88C28

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of wel spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is:
YUMA, ARIZONA

Color System Used:
RHS

1. PLANT TYPE: *(See list of suggested check varieties page 4.)*

[0 6]

01=Cutting/Leaf
02=Butterhead
03=Bibb
04=Cos or Romaine
05=Great Lakes Group
06=Vanguard Group
07=Imperial Group
08=Eastern (Ithaca) Group
09=Stem
10=Latin
11=OTHER

2. SEED:

COLOR [2]
1=White (Silver Gray)
2=Black (Gray Brown)
3=Brown (Amber)

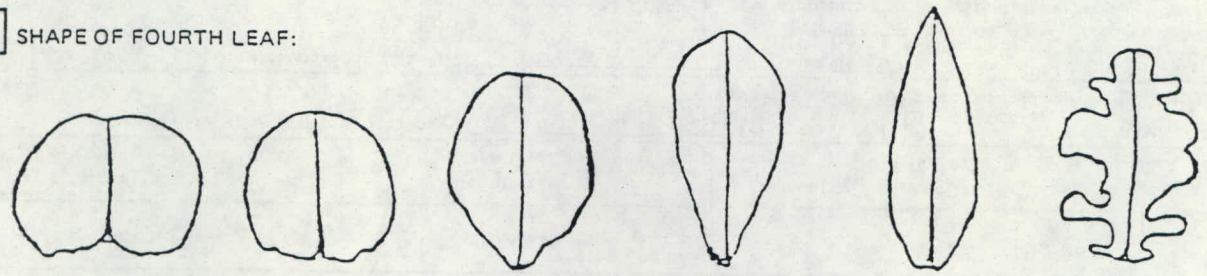
LIGHT DORMANCY [2]
1=Light Required
2=Light Not Required

HEAT DORMANCY [1]
1=Susceptible
2=Not Susceptible

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

[2] SHAPE OF COTYLEDONS: 1=Broad 2=Intermediate 3=Spatulate

[3] SHAPE OF FOURTH LEAF:



1 2 3 4 5 6

[1 0] LENGTH/WIDTH INDEX OF FOURTH LEAF: L/W x 10

[3] APICAL MARGIN:
[5] BASAL MARGIN:
1=Entire
2=Creanate/Gnawed
3=Finely Dentate
4=Moderately Dentate
5=Coarsely Dentate
6=Incised
7=Lobed
8=OTHER *(specify)*

[3] UNDULATION: 1=Flat 2=Slight 3=Medium 4=Marked

[4] GREEN COLOR: 1=Yellow Green 2=Light Green 3=Medium Green 4=Dark Green 5=Blue Green 6=Silver Green 7=Gray Green

ANTHOCYANIN:

[1] DISTRIBUTION: 1=Absent 2=Margin Only 3=Spotted 4=Throughout 5=OTHER *(specify)*

[ ] CONCENTRATION: 1=Light 2=Moderate 3=Intense

[2] ROLLING: 1=Absent 2=Present

[2] CUPPING: 1=Uncupped 2=Slight 3=Markedly

[1] REFLEXING: 1=None 2=Apical Margin 3=Lateral Margins

6

FORM LS-470-1 (9-86) *Formerly Form GR-470-1 which is obsolete*

4. MATURE LEAVES *(observe harvest-mature outer leaves)*:

NOTE: Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics.

MARGIN:

2	INCISION DEPTH: *(deepest penetration of the margin)*	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
2	INDENTATION: *(finest divisions of the margin)*	1=Entire (Dark Green Boston) 2=Shallowly Dentate (Great Lakes 65)	3=Deeply Dentate (Great Lakes 659) 4=Crenate (Vanguard)	5=OTHER *(specify)* _____
2	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659
3	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3=Medium Green (Great Lakes) 4=Dark Green (Vanguard)	5=Very Dark Green 6=OTHER _____

ANTHOCYANIN *(grown at or below 10 C)*:

1	DISTRIBUTION:	1=Absent 2=Margin Only (Big Boston)	3=Spotted (Calif. Cream Butter) 4=Throughout (Prize Head)	5=OTHER *(specify)* _____
	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
2	SIZE:	1=Small	2=Medium	3=Large
2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
2	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
3	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
1	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

5. PLANT *(at market stage. Choose a comparison variety appropriate for this type.)*:

*1 49 SPREAD OF FRAME LEAVES: cm This Variety 46 cm AUTUMN GOLD *(specify comparison variety)*

15 HEAD DIAMETER *(market trimmed with single cap leaf)*: cm This Variety 14 cm AUTUMN GOLD *(specify comparison variety)*

3	HEAD SHAPE:	1=Flattened 2=Slightly Flattened	3=Spherical 4=Elongate	5=Non-Heading 6=OTHER _____
2	HEAD SIZE CLASS:	1=Small	2=Medium	3=Large

24 HEAD COUNT PER CARTON

702 HEAD WEIGHT: g This Variety 664 g AUTUMN GOLD *(specify comparison variety)*

3	HEAD FIRMNESS:	1=Loose 2=Moderate	3=Firm 4=Very Firm

6. BUTT *(bottom of market-trimmed head)*:

2	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
2	MIDRIB:	1=Flattened (Salinas)	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)

7. CORE *(stem of market-trimmed head)*:

31 mm Diameter at base of head

4.8 Ratio of head diameter/core diameter

85 Core height from base of head to apex: mm This Variety 99 mm AUTUMN GOLD *(specify comparison variety)*

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8. BOLTING *(Give First Water Date* 4/09/89 *)*: NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

*2

Number of days from First Water Date to seed stalk emergence *(summer conditions)*:

82 This Variety 82 CHAMP *(specify comparison variety)*

3	BOLTING CLASS:	1=Very Slow 2=Slow	3=Medium 4=Rapid	5=Very Rapid

94 Height of mature seed stalk: cm This Variety 120 cm CHAMP *(specify comparison variety)*

7

BOLTING cont'd. on next page

8. BOLTING cont'd.

Spread of Bolter Plant *(at widest point)*:

[3 8] cm This Variety [3 6] cm CHAMP *(specify comparison variety)*

[2] BOLTER LEAVES: 1=Straight 2=Curved

[1] MARGIN: 1=Entire 2=Dentate

[3] COLOR: 1=Light Green 2=Medium Green 3=Dark Green

BOLTER HABIT:

[2] TERMINAL INFLORESCENCE: 1=Absent 2=Present

[2] LATERAL SHOOTS: *(above head)* 1=Absent 2=Present

[1] BASAL SIDE SHOOTS: 1=Absent 2=Present

9. MATURITY *(earliness of harvest-mature head formation)*:

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ #of days	Check 1/ #of days	CHECK VARIETY 2/
Spring			
Summer			
Fall	8 0	8 3	MORANGOLD
Winter			

Give planting date(s), and location(s):

Spring

Summer

Fall SEPTEMBER 26, 1988 YUMA, ARIZONA

Winter

1/ First water date to harvest. 2/ Fill in check variety name on the appropriate line.

10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION *(tested and proven adapted)*: (0=Not tested 1=Not Adapted 2=Adapted)

[2] Southwest *(Calif., Ariz. desert)* [0] West Coast [0] Northeast

[0] Northcentral [0] Southeast [ ] OTHER

SEASON:

[ ] Spring (area) [2] Fall (area SOUTHWEST)

[ ] Summer (area) [ ] Winter (area)

[0] GREENHOUSE: 0=Not tested 1=Not Adapted 2=Adapted

[1] SOIL TYPE: 1=Mineral 2=Organic 3=Both

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11. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- [0] Big Vein
- [0] Lettuce Mosaic
- [0] Cucumber Mosaic
- [0] Broad Bean Wilt
- [0] Turnip Mosaic
- [0] Beet Western Yellows
- [2] Lett. Infectious Yellows
- [ ] Other Virus _____

FUNGAL/BACTERIAL

- [0] Corky Root Rot (Pythium Root Rot)
- [0] Downy Mildew (Races _____)
- [0] Powdery Mildew
- [0] Sclerotinia Rot
- [0] Bacterial Soft Rot (Pseudomonas spp. & others)
- [0] Botrytis (Gray Mold)
- [ ] OTHER _____

INSECTS

- [0] Cabbage Loopers
- [0] Root Aphids
- [0] Green Peach Aphid
- [ ] Other Insect _____

PHYSIOLOGICAL/STRESS

- [5] Tipburn
- [2] Heat
- [0] Drought
- [0] Cold
- [0] Salt
- [0] Brown Rib (Rib Discoloration, Rib Blight)
- [ ] OTHER _____

POST HARVEST

- [2] Pink Rib
- [0] Russet Spotting
- [0] Rusty Brown Discoloration
- [0] Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)
- [0] Brown Stain

12. BIOCHEMICAL OR ELECTROPHORETIC MARKERS:

13. COMMENTS:

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SUGGESTED CHECK VARIETIES

TYPE	CHECK VARIETY
1) CUTTING/LEAF	SALAD BOWL
2) BUTTERHEAD	DARK GREEN BOSTON
3) BIBB	BIBB
4) COS, OR ROMAINE	PARRIS ISLAND
5) GREAT LAKES GROUP	GREAT LAKES 659-700
6) VANGUARD GROUP	VANGUARD
7) IMPERIAL GROUP	VIVA
8) EASTERN GROUP	ITHACA
9) STEM	CELTUCE
10) LATIN	MATCHLESS

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EXHIBIT C

*1 Based on a September 20, 1988 planting in Yuma, Arizona.

*2 Based on a April 9, 1989 planting in Corcoran, California.

'Raider'
PVP 8900281

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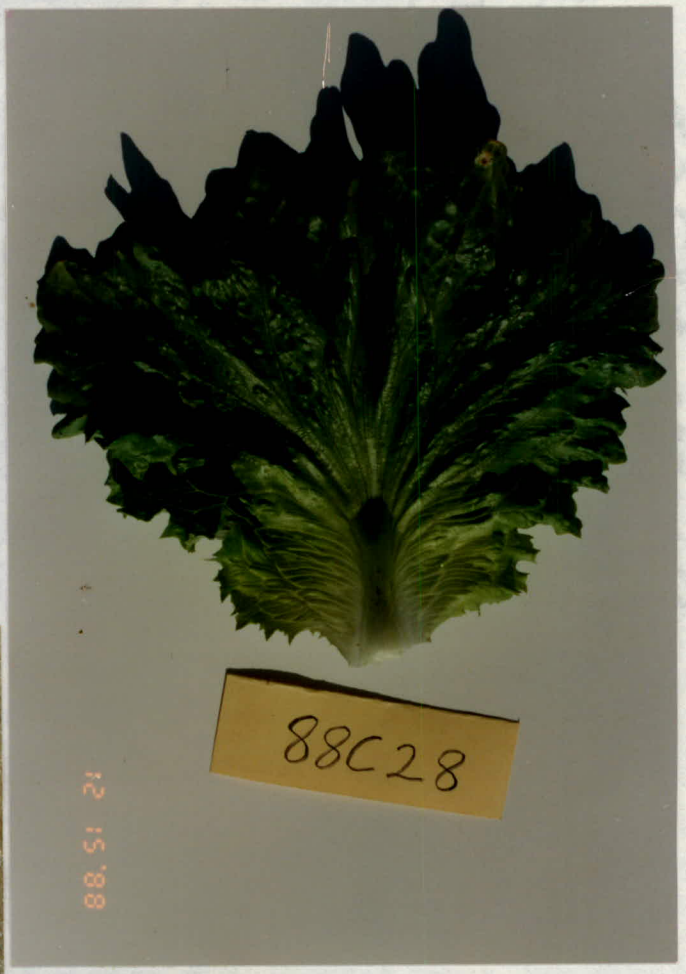
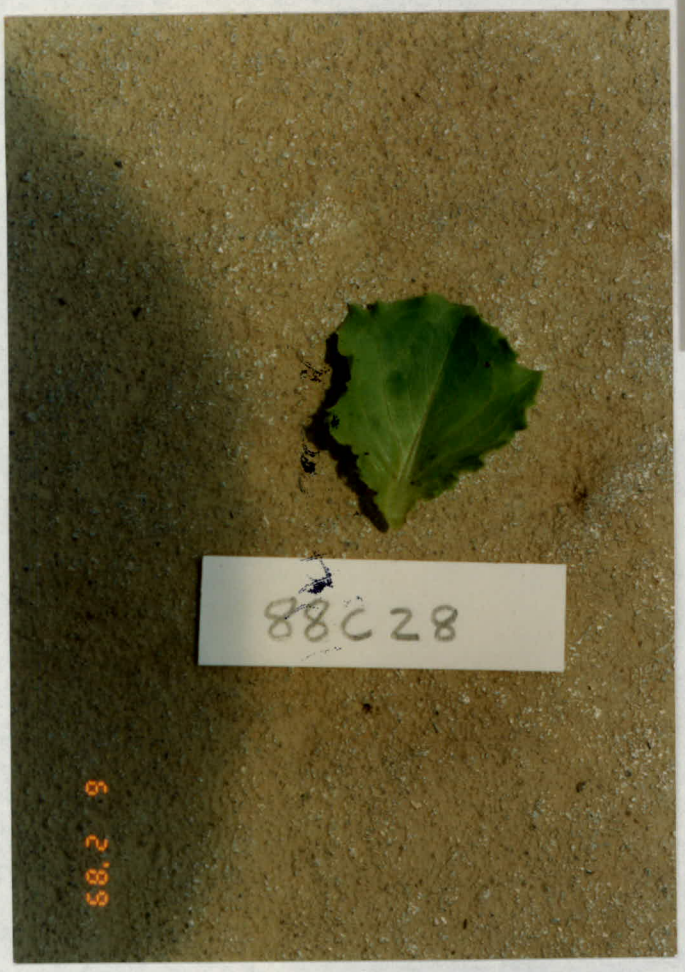
16





8900281

E X H I B I T D

OBJECTIVE DESCRIPTION OF VARIETY

RAIDER is an iceberg variety of the Vanguard group. It has a narrow range of adaptability. If planted too early, **RAIDER** will bolt. If planted too late, it will not have enough size for marketable heads. **RAIDER** has a wide leaf petiole and a large core diameter. The leaf surface is smoother than that of Autumn Gold. The midribs are not as pronounced as Autumn Gold.

RAIDER has a color of 141A on the RHS Colour Chart.

TABLE 3
EACH SAMPLE TESTED USING STANDARD T-TEST PROCEDURES
CRITICAL NUMBER BASED ON 95% PROBABILITY

9-26-88 PLANTING YUMA, AZ	CORE LENGTH (IN CENTIMETERS) RAIDER	MORANGOLD
HEAD 1	5.1	7.6
HEAD 2	5.7	8.0
HEAD 3	4.8	10.5
HEAD 4	4.6	11.0
HEAD 5	5.2	10.5
HEAD 6	6.8	11.0
HEAD 7	4.5	9.0
HEAD 8	5.2	10.0
HEAD 9	4.7	13.2
HEAD 10	4.9	9.0
MEAN	5.15	9.98
VARIANCE	0.41	2.45
TEST STATISTIC	(9.03)	
CRITICAL NUMBER	1.73	

TABLE 4
EACH SAMPLE TESTED USING STANDARD T-TEST PROCEDURES
CRITICAL NUMBER BASED ON 95% PROBABILITY

9-28-88 PLANTING YUMA, AZ	CORE LENGTH (IN CENTIMETERS) RAIDER	MORANGOLD
HEAD 1	5.1	9.2
HEAD 2	4.9	9.0
HEAD 3	4.6	11.1
HEAD 4	5.0	11.6
HEAD 5	5.0	9.0
HEAD 6	4.6	9.7
HEAD 7	4.9	10.5
HEAD 8	5.0	11.4
HEAD 9	4.9	9.9
HEAD 10	5.2	11.0
MEAN	4.92	10.24
VARIANCE	0.03	0.91
TEST STATISTIC	(17.28)	
CRITICAL NUMBER	1.73	

8900281

E X H I B I T E

STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP

RAIDER is the property of Genecorp, Inc. as the breeding, selection and trial work was done by personnel while employed by Genecorp, Inc.

7/26/89:bdo