TO ALL TO WHOM THESE PRESENTS SHALL COME:

North Carolina Agricultural Research Service Jr. R.C. Gardner

(breeder)

Whereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREBETO 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 HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIVABLE 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 CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN BREEDING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'NC 15'

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 twenty-ninth day of February, in the year of our Lord two thousand.

[Signatures]

Commissioner
Plants Variety Protection Office
Agricultural Marketing Service
**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

**1. NAME OF OWNER**
North Carolina Agricultural Research Service
Dr. R. G. Gardner (Breeder)

**2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME**
8439(X)-12-3-1-1-1

**3. VARIETY NAME**
NC 1ly

**4. ADDRESS (street and no., or R.F.D. No., City, State, and ZIP Code, and Country)**
North Carolina State University
Box 7643
Raleigh, NC 27695-7643

**5. TELEPHONE (include area code)**
919-515-2717
828-684-3562

**6. FAX (include area code)**
828-684-8715

**7. IF THE OWNER NAME IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)**
State Governmental Agency

**8. IF INCORPORATED, GIVE STATE OF INCORPORATION**

**9. DATE OF INCORPORATION**
July 14, 1999

**10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION**
Dr. Eric Young
Assistant Director, NCARS
100 Patterson Hall, Box 7643
Raleigh NC 27695-7643

**11. TELEPHONE (include area code)**
919 515 2717

**12. FAX (include area code)**
919 515 7745

**13. E-MAIL**
eric_young@ncsu.edu

**14. CROP KIND (Common Name)**
Tomato

**15. GENUS AND SPECIES NAME OF CROP**
Lycopersicon esculentum

**16. FAMILY NAME (Botanical)**
Solanaceae

**17. IS THE VARIETY A FIRST GENERATION HYBRID?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED**
- [ ] Exhibit A. Origin and Breeding History of the Variety
- [ ] Exhibit B. Description of Distinctness
- [ ] Exhibit C. Objective Description of Variety
- [ ] Exhibit D. Additional Description of the Variety (Continued)
- [ ] Exhibit E. Statement of the Basis of the Owner's Ownership
- [ ] Voucher Samples (500 seeds of each variety, certification that tissue culture will be deposited and maintained in an approved public repository)
- [ ] Filing and Examination Fee ($2.50), made payable to "Treasurer of the United States" paid in the Plant Variety Protection Office

**19. DOES THE OWNER SPECIFY THAT THUS VARIETY WILL BE SOLD AS A CLASS OF CERTIFIED SEEDS?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**20. DOES THE OWNER SPECIFY THAT THIS VARIETY WILL BE SOLD AS A CLASS OF CERTIFIED SEEDS?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?**

- [ ] Foundation
- [ ] Registered
- [ ] Certified

**22. HAS THE VARIETY INCLUDING ANY HARVESTED MATERIAL OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRY?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**23. IF YES TO ITEM 22, DESCRIPTION, TRANSFER, OR USE IN ANY COUNTRY OR THE CIRCUMSTANCES. (Please see space indicated on reverse.)**

**24. The owner(s) declare that a viable sterile of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a viable culture will be deposited in a public repository and maintained for the duration of the certificate.**

**25. The undersigned owner(s) declare that the owner(s) have a viable sterile or a viable culture of the variety and agree to abide by the terms and conditions of the certificate.**

**SIGNATURE OF OWNER**
Johnny C. Wyne

**DATE**
3/9/99

**CAPACITY OR TITLE**
Director, NC Agri Res Service

**SIGNATURE OF OWNER**
Randolph G. Gardner

**DATE**
- [ ] 3/9/99

**CAPACITY OR TITLE**
Professor of Horticulture (Plant Breeder)

**NOTE:** Form Approved - OMB No. 0581-0050.
NC 1y, an inbred line in the F₁ generation, was developed using the pedigree breeding method. The objective in the breeding program was to develop an improved tomato line with the tangerine gene (T) for yellow-orange fruit color and improved resistance to gray wall.

Mountain Gold PVP was used as a source of the t gene. Single plant selections were made in the F₂ through F₅ generations for gray wall resistance in field plots at Fletcher, North Carolina. A bulk of the F₅ generation was harvested to produce the F₇ generation.

NC 1y appeared uniform and stable in the F₆ through F₇ generations in research station field and greenhouse trials and seed increase plantings. No variant or off-type plants were observed.
Exhibit B. Novelty statement

NC 1y is most similar to the tomato variety 'Mountain Gold' PVP. It differs from 'Mountain Gold' PVP in having a high level of resistance to gray wall (Table 1). 'Mountain Gold' PVP has shown moderate to severe gray wall under some growing conditions whereas NC 1y has not exhibited gray wall symptoms in any trials.
OBJECTIVE DESCRIPTION OF VARIETY
TOMATO (Lycopersicon esculentum Mill.)

NAME OF APPLICANT(S)
North Carolina Agricultural Research Service
Dr. R. G. Gardner (Breeder)

ADDRESS (Street No., or R.F.D. No, City, State, and Zip Code)
North Carolina State University
Box 7643
Raleigh, NC 27695-7643

TEMPORARY DESIGNATION
NC 88439(X)-12
-3-1-1-Bk

VARIETY NAME
NC 1y

FOR OFFICIAL USE ONLY
PVPO NUMBER
9900353

Choose responses for the following characters which best fit your variety. Complete this form as fully as possible for best characterization of the variety.

When a single quantitative value is requested (e.g., fruit weight), your answer should be the mean of an adequate-sized, unbiased sample of plants. Use leading zeroes when necessary (e.g., 0 9 or 0 8 1, etc.). The applicant variety should be compared with at least one well-known standard check variety of the same type (see list of recommended check varieties below), and grown in the same trials. The characters on this form should be described from plants grown under normal conditions of culture for the variety. Indicate by a check whether trial data are from greenhouse ☑️ or field ☐ plantings.

Trials direct-seeded ☑️ or transplanted ☑️; staked ☑️ or unstaked ☐. Give locations and dates of seeding and transplanting here:

Transplant dates: 6/5, 6/30/92; 6/1, 7/1/93; 5/27, 6/30/94; 6/2, 6/30/95; 5/31, 7/2/96

1. SEEDLING:

   2 Anthocyanin in hypocotyl of 2-15 cm. seedling: 1 = Absent 2 = Present 1 Habit of 3-4 week old seedling: 1 = Normal 2 = Compact

2. MATURE PLANT (at maximum vegetative development):

   1 Growth: 1 = Indeterminate 2 = Determinate
   8 Form: 1 = Lax, open 2 = Normal
   3 Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large
   2 Habit: 1 = Sprawling (decumbent) 2 = Semi-erect 3 = Erect ('Dwarf Champion')

3. STEM:

   2 Branching: 1 = Sparse ('Brehm's Solid Red', 'Fireball') 2 = Intermediate ('Wesstoever') 3 = Profuse ('UC 82')
   1 Branching at cotyledonary or first leafy node: 1 = Present 2 = Absent
   3 No. of nodes below the first inflorescence: 1 = 1-4 2 = 4-7 3 = 7-10 4 = 10 or more
   2 No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescences: 2
   2 Pubescence on younger stems: 1 = Smooth (no long hairs) 2 = Sparsely hairy (scattered long hairs) 3 = Moderately hairy 4 = Dense hairy or woolly

4. LEAF (mature leaf beneath the 3rd inflorescence):

   1 Type: 1 = Tomato 2 = Potato ('Trip-L-Crop') 2 Morphology (choose illustration on pg. 5 of this form that is most similar)
   3 Margins of major leaflets: 1 = Nearly entire 2 = Shallowly toothed or scalloped
   3 = Deeply toothed or cut, esp. towards base
   1 Marginal rolling or winitless: 1 = Absent 2 = Slight 3 = Moderate 4 = Strong
   1 Onset of leaflet rolling: 1 = Early-season 2 = Mid-season 3 = Late season

FORM LMGS-470-SS (2-62)
4. LEAF (mature leaf beneath the 3rd inflorescence – continued):
1. Surface of major leaflets:
   1 = Smooth
   2 = Rugose (bumpy or veiny)
2. Pubescence:  
   1 = Smooth (no long hairs)
   2 = Normal
   3 = Hirsute
   4 = Wooly

5. INFLORESCENCE (make observations on 3rd inflorescence):
1. Type:
   1 = Simple
   2 = Forked (2 major axes)
   3 = Compound (much branched)
2. Number of flowers in inflorescence, average
3. Leafy or "running" inflorescences:
   1 = Absent
   2 = Occasional
   3 = Frequent

6. FLOWER:
1. Calyx:
   1 = Normal, lobesawl-shape
   2 = Macrocalyx, lobes large, leafflike
   3 = Fleshy
2. Calyx-lobes:
   1 = Shorter than corolla
   2 = Approx. equalling corolla
   3 = Distinctly longer than corolla
3. Corolla color:
   1 = Yellow
   2 = Old gold
   3 = White or tan
4. Style pubescence:
   1 = Absent
   2 = Sparse
   3 = Dense
5. Anthers:
   1 = All fused into tube
   2 = Separating into 2 or more groups at anthesis
6. Fasciation (1st flower of 2nd or 3rd inflorescence):
   1 = Absent
   2 = Occasionally present
   3 = Frequently present

7. FRUIT (3rd fruit of 2nd or 3rd cluster): For the first 5 characters below, match your variety with the most similar illustration on pg. 5 of this form.
   1. Typical fruit shape:
   2. Shape of transverse section:
   3. Shape of stem end:
   4. Shape of blossom end:
   5. Shape of petal scar:

1. Abscission layer:
   1 = Present (pedicellate)
   2 = Absent (jointless)

10. mm length of pedicel (from joint to calyx attachment)
   11. mm length of mature fruit (stem axis)
   12. mm diameter of fruit at widest point
   13. g weight of mature fruit

1. No. of locules:
   1 = Two
   2 = Three and four
   3 = Five or more

1. Fruit surface:
   1 = Smooth
   2 = Slightly rough
   3 = Moderately rough or ribbed

1. Fruit base color:
   1 = Light green (‘Lanai’, ‘VF145-F5’)
   2 = Light gray-green (‘Westover’)
   3 = Apple or medium green (‘Heinz 1439 VF’)
   4 = Yellow green
   5 = Dark green

1. Fruit pattern
   1 = Uniform green
   2 = Green-shouldered
   3 = Radial stripes on sides of fruit

1. Shoulder color if different from base:
   1 = Dark green
   2 = Grey green
   3 = Yellow green

1. Fruit color, full-ripe:
   1 = White
   2 = Yellow
   3 = Orange
   4 = Pink
   5 = Red

1. Flesh color, full-ripe:
   1 = Yellow
   2 = Pink
   3 = Red/Crimson
   4 = Orange
   5 = Other (Specify)

1. Flesh color:
   1 = Uniform
   2 = With lighter and darker areas in walls

1. Locular gel color of table-ripe fruit:
   1 = Green
   2 = Yellow
   3 = Red

1. Ripening:
   1 = Blossom-to-stem end
   2 = Uniform
7. FRUIT (3rd fruit of 2nd or 3rd cluster): Continued

<table>
<thead>
<tr>
<th>Ripening</th>
<th>1 = Inside out</th>
<th>2 = Uniformly</th>
<th>3 = Outside in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidermis color</td>
<td>1 = Colorless</td>
<td>2 = Yellow</td>
<td></td>
</tr>
<tr>
<td>Epidermis</td>
<td>1 = Normal</td>
<td>2 = Easy-peel</td>
<td></td>
</tr>
<tr>
<td>Epidermis texture</td>
<td>1 = Tender</td>
<td>2 = Average</td>
<td>3 = Tough</td>
</tr>
<tr>
<td>Thickness of pericarp</td>
<td>1 = Under 3 mm</td>
<td>2 = 3-6 mm</td>
<td>3 = 6-9 mm</td>
</tr>
</tbody>
</table>

8. RESISTANCE TO FRUIT DISORDERS (Use code: 0 = Unknown, 1 = Susceptible, 2 = Resistant)

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blossom end rot</td>
<td>2</td>
</tr>
<tr>
<td>Catface</td>
<td>2</td>
</tr>
<tr>
<td>Fruit pox</td>
<td>2</td>
</tr>
<tr>
<td>Zippering</td>
<td></td>
</tr>
<tr>
<td>Blotchy ripening</td>
<td>2</td>
</tr>
<tr>
<td>Cracking, concentric</td>
<td>2</td>
</tr>
<tr>
<td>Gold fleck</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
<tr>
<td>Bursting</td>
<td>2</td>
</tr>
<tr>
<td>Cracking, radial</td>
<td>2</td>
</tr>
<tr>
<td>Graywall</td>
<td></td>
</tr>
</tbody>
</table>

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant). NOTE: If claim of novelty is based wholly or in substantial part upon disease resistance, trial data should be appended. These should specify the method of testing, the reaction of the application variety, and reaction of well-known check varieties grown in the trial (identified by name).

**VIRAL DISEASES:**

- Cucumber mosaic
- Curly top
- Potato-Y virus
- Other virus (Specify)
- Tobacco mosaic, Race 0
- Tobacco mosaic, Race 1
- Tobacco mosaic, Race 2
- Tomato spotted wilt
- Tomato yellows

**BACTERIAL DISEASES:**

- Bacterial canker (Corynebacterium michiganense)
- Bacterial soft rot (Erwinia carotovora)
- Bacterial speck (Pseudomonas solani)
- Bacterial spot (Xanthomonas vesicatorium)
- Bacterial wilt, (Pseudomonas solanacearum)
- Other bacterial disease (Specify)

**FUNGAL DISEASES:**

- Anthracnose (Colletotrichum spp.)
- Brown root rot or corky root, (Pyrenochaeta lycopersici)
- Collar rot or stem canker, (Alternaria solani)
- Early blight defoliation, (Alternaria solani)
- Fusarium wilt, Race 1, (F. oxysporum f. lycopersici)
- Fusarium wilt, Race 2
- Fusarium wilt, Race 3
- Gray leaf spot (Stemphylium spp.)
- Late blight, Race 0, (Phytophthora infestans)
- Late blight, Race 1
- Leaf mold, Race 1 (Cleodosprium fulvum)
- Leaf mold, Race 2
- Leaf mold, Race 3
- Leaf mold, other races (Specify)
- Nailhead spot (Alternaria solani)
- Septoria leafspot (S. lycopersici)
- Target leafspot (Corynespora cassicata)
- Verticillium wilt, Race 1 (V. albo-atrum)
- Verticillium wilt, Race 2
- Other fungal disease
- Other fungal disease
**DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant – Continued)**

**INSECTS AND PESTS:**
- 0 Colorado potato beetle (*Leptinotarsa decemlineata*)
- 0 Tomato hornworm (*Manduca quinquemaculata*)
- 0 Southern root knot nematode (*Meloidogyne incognita*)
- 0 Tomato fruitworm (*Heliothis zeas*)
- 0 Spider mites (*Tetranychus spp.*)
- 0 Whitefly (*Trialeurodes vaporariorum*)
- 0 Sugar beet army worm (*Spodoptera exigua*)
- Other (Specify) __________________________
- Tobacco flea beetle (*Epitrix hirtipennis*)

**POLLUTANTS:**
- 0 Ozone
- 0 Sulfur dioxide
- Other (Specify) __________________________

**CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS:** Suggested test methods may be found in “Tomato Products,” 5th ed., National Canners Assn. Bull. 27-L. Please specify test methods or give a reference to methods used. Fill in table below with values for the new variety and for at least one well-known check variety of similar type grown in the same trial. Specify names or numbers of check varieties.

<table>
<thead>
<tr>
<th>SUBMITTED VARIETY</th>
<th>Check Variety</th>
<th>Check Variety</th>
<th>Check Variety</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titratable acidity, as % citric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total solids (dry matter, seeds and skin removed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soluble solids, as °Brix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PHENOLOGY:** Express length of developmental stages either as calendar days or as heat units (growing degree days), in degrees Celsius. If heat units are used, indicate the base temperature used in their calculation here: ______°C. See paper by Warnock under “References” for method. Give comparative data for at least one check variety; identify checks by name or by number from table on page 1.

<table>
<thead>
<tr>
<th>APPLICATION VARIETY</th>
<th>Check variety Mountain Gold</th>
<th>Check variety Flora-Dade</th>
<th>Check variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeding to 50% flower (1 open flower on 50% of plants)</td>
<td>61 days</td>
<td>61</td>
<td>66</td>
</tr>
</tbody>
</table>

| Seed to once-over harvest (if applicable) | |

Fruiting season:
- 1 = Long (‘Marglobe’)
- 2 = Medium (‘Westover’)
- 3 = Short, concentrated (‘VF 145’)
- 4 = Very concentrated (‘UC 82’)

Relative maturity in areas tested:
- 1 = Early
- 2 = Medium early
- 3 = Medium
- 4 = Medium late
- 5 = Late
- 6 = Variable (if relative maturity is known to differ by location or environment, please explain on separate sheet).

**ADAPTATION:** If more than one category applies, list all in rank order.

<table>
<thead>
<tr>
<th>Culture:</th>
<th>1 = Field</th>
<th>2 = Greenhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 2 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principal use(s):</th>
<th>1 = Home garden</th>
<th>2 = Fresh market</th>
<th>3 = Whole-pack canning</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = Concentrated products</td>
<td>5 = Other (Specify) Parent in F1 hybrid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Machine harvest:
- 1 = Not adapted
- 2 = Adapted

<table>
<thead>
<tr>
<th>Regions to which adaptation has been demonstrated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Northeast</td>
</tr>
<tr>
<td>5 = Great Plains</td>
</tr>
<tr>
<td>9 = California: Sacramento and Upper San Joaquin Valley</td>
</tr>
</tbody>
</table>

**FORM LMGS-470-55 (2-82)**
4. LEAF: Morphology:

---

7. FRUIT: Typical fruit shape:

---

REFERENCES


Table 1. Percent of Tomato Fruit Harvest Weight with Graywall. Fletcher, NC.

<table>
<thead>
<tr>
<th></th>
<th>Early trial 8/23/94</th>
<th>Late Trial 9/27/94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Gold</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Carolina Gold</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 1y</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 2y</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1996 Early Trial

<table>
<thead>
<tr>
<th>Harvest Date</th>
<th>8/14</th>
<th>8/21</th>
<th>8/28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Gold</td>
<td>23</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Carolina Gold</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 1y</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 2y</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1996 Late Trial

<table>
<thead>
<tr>
<th>Harvest Date</th>
<th>9/11</th>
<th>9/18</th>
<th>9/25</th>
<th>10/3</th>
<th>10/9</th>
<th>10/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Gold</td>
<td>19</td>
<td>33</td>
<td>44</td>
<td>10</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Carolina Gold</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 1y</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 2y</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*All data obtained from two replicates of 8 plants per rep grown in randomized complete block designs with fruit harvested vine-ripe.
**EXHIBIT E**

**STATEMENT OF THE BASIS OF OWNERSHIP**

<table>
<thead>
<tr>
<th>1. NAME OF APPLICANT(S)</th>
<th>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER</th>
<th>3. VARIETY NAME</th>
</tr>
</thead>
</table>
| North Carolina Agricultural Research Service  
Dr. R. G. Gardner (Breeder) | 88439(X)-12-3-1-1-Hk | NC ly           |

<table>
<thead>
<tr>
<th>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)</th>
<th>5. TELEPHONE (include area code)</th>
<th>6. FAX (include area code)</th>
</tr>
</thead>
</table>
| North Carolina State University  
Box 7643  
Raleigh, NC 27695-7643 | 919-515-2717 | 828-684-3562 |
| | 828-684-8715 | |

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.  
[ ] YES  [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?  
[ ] YES  [ ] NO

10. Is the applicant the original owner?  
[ ] YES  [ ] NO  
If no, please answer one of the following:

   a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?  
[ ] YES  [ ] NO  
If no, give name of country

   b. If original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?  
[ ] YES  [ ] NO  
If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

   NC ly was developed by Dr. R.G. Gardner, Professor of Horticultural Science and plant breeder with the NC Ag. Research Service, NC State University, 2016 Fanning Bridge Road, Fletcher, NC 28732-9244. Phone: (828) 684-3562  FAX: (828) 684-8715  email: rgardner@fletcher.celestate.ncc.us

**PLEASE NOTE:**

Plants variety protection can be afforded only to owners (not licensees) who meet one or more of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the first breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0085. This time required to complete this information collection is estimated to average 1.5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination against any person in its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, or genetic information (Title II and Title VI of the Civil Rights Act, 7 USCS 2000a-2000d and 42 USCS 2000e-2000e-2 and 42 USCS 2000e-3). Inquiries may be directed to USDA’s TARGET Center at 202-720-2600 or toll-free at 1-866-632-9999 (voice and TDD).

To file a complaint with the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

**STD-470-E (07-97)** (Delete previous editions).
Electronic version designed using WordPerfect Forms by USDA-WMS-UM.