THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

North Carolina Agricultural Research Service

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 exhibit, a copy of which is hereto 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. 2321 et seq.).

TOMATO

'NC 2C'

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 31st day of January in the year of our Lord one thousand nine hundred and ninety-two.

[Signature]

Edward Madigan
Secretary of Agriculture
# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

**Instructions on reverse**

1. **NAME OF APPLICANT(S) (as it is to appear on the Certificate):**
   - NC Agricultural Research Service
   - Dr. R. G. Gardner (Breeder)

2. **TEMPORARY DESIGNATION OR EXPERIMENTAL NO.:**
   - 8337(X)-3-1P-1A-1

3. **VARIETY NAME:**
   - NC 2C

4. **ADDRESS (street and no. or R.F.D. no., city, state, and ZIP):**
   - NC State University
   - Box 7643
   - Raleigh NC 27695-7643

5. **PHONE (include area code):**
   - 919-737-2217
   - 919-737-2821

6. **GENUS AND SPECIES NAME:**
   - Lycopersicon esculentum
   - Solanaceae

7. **FAMILY NAME (Botanical):**
   - Solanaceae

8. **CROP KIND NAME (Common Name):**
   - Cherry Tomato

9. **DATE OF DETERMINATION:**
   - March 21, 1990

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

11. **DATE OF INCORPORATION:**
    - Dec. 23, 1991

12. **DATE OF INCORPORATION:**
    - Dec. 23, 1991

13. **NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:**
    - Michael W. Baker, Manager
    - NC Foundation Seed Producers, Inc.
    - P.O. Box 33245, Method Station
    - Raleigh NC 27635

14. **CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse):**
   - b. Exhibit B. Novelty Statement.
   - c. Exhibit C. Objective Description of Variety.
   - d. Exhibit D. Additional Description of Variety.
   - e. Exhibit E. Statement of the Basis of Applicant's Ownership.
   - f. Send Sample (2,500 viable untreated seeds). Data Seed Sample mailed to Plant Variety Protection Office.
   - g. Filing and Examination Fee ($2,150) made payable to "Treasurer of the United States."

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 63a of the Plant Variety Protection Act.)**
    - YES (if "YES," answer items 16 and 17 below)
    - NO (if "NO," skip to item 18 below)

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
    - NO

19. **HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?**
    - YES
    - 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 (Owner(s)):**

**CAPACITY OR TITLE:**
- Director, NC Agri. Res. Svc.
- Nov. 13, 1990

**DATE:**
- 11/14/90

**SIGNATURE OF APPLICANT (Owner(s)):**

**CAPACITY OR TITLE:**
- Assoc. Prof. of Horticulture (Plant Breeder)
- Nov. 13, 1990

**DATE:**
- 11/14/90
14A. Exhibit A:

Pedigree:

```
8337(X)-3-1P-1A-1A-1 -
  F7
```

<table>
<thead>
<tr>
<th>Castlette F₁ hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Rose</td>
</tr>
</tbody>
</table>

NC 2C, an inbred cherry tomato line in the F₇ generation, was developed using the pedigree breeding method. Single plant selections were made in the F₂ through F₆ generations grown in field plots at Fletcher, North Carolina. Seedling inoculation tests in the greenhouse showed the F₄ and subsequent generations to be homozygous resistant to race 1 (I gene) of *Fusarium oxysporum* f. sp. *lycopersici* and susceptible to race 1 of *Verticillium dahliae*. A seedling inoculation trial of the F₇ indicated susceptibility to race 2 of *F. oxysporum* f. sp. *lycopersici*.

NC 2C appeared stable and uniform in the F₄-F₇ generations in research station plots. The only offtypes observed were infrequent male steriles, which did not exceed the percentage normally seen in other varieties.
Exhibit B. Novelty Statement

NC 2C is most similar to the F₁ hybrid 'Castlette'. It differs from 'Castlette' in having the u gene for uniform light green color of non-ripe fruit in contrast to the dark green shoulder color of 'Castlette'. Like 'Castlette', NC 2C has the jointless pedicel character (j-2 gene) which distinguishes it from many other cherry tomato cultivars and lines.
**OBJECTIVE DESCRIPTION OF VARIETY**

**Tomato (Lycopersicon esculentum Mill.)**

**NAME OF APPLICANT(S)**
- NC Agricultural Research Service
- Dr. R. G. Gardner (Breeder)

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

**TEMPORARY DESIGNATION**
- 8337(X)-3-1P-1A-1A-1

**VARIETY NAME**
- NC 2C

**FOR OFFICIAL USE ONLY**
- PVPO NUMBER: 9100051

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., 09 or 081, 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. Fletcher, North Carolina. Seeding dates: 4/17/86, 4/14/87, 4/15/88, 4/17/89, 4/16/90


**COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VARIETIES IN THE FOLLOWING LIST, IF AT ALL POSSIBLE. ENTER THE NUMBER OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUESTED.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Check Variety</th>
<th>1 = Absent</th>
<th>2 = Present</th>
<th>3 = Normal</th>
<th>2 = Present</th>
<th>1 = Normal</th>
<th>2 = Compact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ace 55 VF</td>
<td>7 = Homestead 24</td>
<td></td>
<td>3 = Red Rock</td>
<td>13 = Red Rock</td>
<td></td>
<td>19 = VF 134</td>
</tr>
<tr>
<td>2</td>
<td>Campbell 37</td>
<td>8 = Marglobe</td>
<td></td>
<td>14 = Roma VF</td>
<td>15 = Rutgers</td>
<td>21 = VF 145 B 7679</td>
<td>20 = US 29</td>
</tr>
<tr>
<td>3</td>
<td>Chico III</td>
<td>9 = Muristica</td>
<td></td>
<td>16 = Sunray</td>
<td>22 = Other (Specify)</td>
<td></td>
<td>21 = VF 145 B 7679</td>
</tr>
<tr>
<td>4</td>
<td>Florida Dade</td>
<td>10 = New Yorker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Florida MH-1</td>
<td>11 = Ohio MR-13</td>
<td></td>
<td>17 = Tropic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Heinz 1350</td>
<td>12 = Red Cherry Large</td>
<td></td>
<td>18 = UC 82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1. SEEDLING:**

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

**2. MATURE PLANT (at maximum vegetative development):**

- Growth: 1 = Indeterminate 2 = Determinate
- Form: 1 = Lax, open 2 = Normal 3 = Compact 4 = Dwarf 5 = Brachytic
- Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large
- Habit: 1 = Sprawling (decumbent) 2 = Semi-erect 3 = Erect ('Dwarf Champion')

**3. STEM:**

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

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

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

2. Calyx-lobes:
   1 = Shorter than corolla
   2 = Approx. equaling 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.

2. Typical fruit shape:

1. Shape of transverse section:

2. Shape of stem end:

1. Shape of blosson end:

1. Shape of pistil scar:

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

2. Point of detachment of fruit at harvest:
   1 = At pedicel joint
   2 = At calyx attachment

3. mm length of pedicel (from joint to calyx attachment)

0 3 5

4. mm length of mature fruit (stem axis)

0 3 0

5. mm diameter of fruit at widest point

0 2 0

6. g weight of mature fruit

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

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

5. 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

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

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

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

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

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

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

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

- Ripening: 1 = Inside out, 2 = Uniformly, 3 = Outside in
- Epidermis color: 1 = Colorless, 2 = Yellow
- Epidermis: 1 = Normal, 2 = Easy-peel
- Epidermis texture: 1 = Tender, 2 = Average, 3 = Tough
- Thickness of pericarp: 1 = Under 3 mm, 2 = 3-6 mm, 3 = 6-9 mm, 4 = Over 9 mm

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

- Blossom end rot
- Cleft face
- Fruit pox
- Zippering
- Blotchy ripening
- Cracking, concentric
- Gold fleck
- Other
- Bursting
- Cracking, radial
- Graywall

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

**BACTERIAL DISEASES:**

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

**FUNGAL DISEASES:**

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

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

POLLUTANTS:
- Ozone ____________
- Sulfur dioxide ____________
- Other (Specify) ____________

10. CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS: Suggested test methods may be found in “Tomato Products,” 6th 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></th>
<th>SUBMITTED VARIETY</th>
<th>Check Variety Cherry Grande</th>
<th>Check Variety Castlette</th>
<th>Check Variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Titratable acidity, as % citric</td>
<td></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>
<td></td>
</tr>
<tr>
<td>Soluble solids, as °Brix at 21°C</td>
<td>4.1</td>
<td>3.9</td>
<td>4.1</td>
<td></td>
</tr>
</tbody>
</table>

11. 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></th>
<th>APPLICATION VARIETY</th>
<th>Check Variety Cherry Grande</th>
<th>Check Variety Castlette</th>
<th>Check variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeding to 50% flower (1 open flower on 50% of plants)</td>
<td>50.2 days</td>
<td>53.5 days</td>
<td>56 days</td>
<td></td>
</tr>
<tr>
<td>Seed to once-over harvest (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 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).

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

- Culture: 1 = Field, 2 = Greenhouse
- Principal use(s): 1 = Home garden, 2 = Fresh market, 3 = Whole-pack canning, 4 = Concentrated products, 5 = Other (Specify) ________ Parent line for F₁ hybrid ________
- Machine harvest: 1 = Not adapted, 2 = Adapted
- Regions to which adaptation has been demonstrated: 1 = Northeast, 2 = Mid Atlantic, 3 = Southeast, 4 = Florida, 5 = Great Plains, 6 = South-central, 7 = Intermountain West, 8 = Northwest, 9 = California: Sacramento and Upper San Joaquin Valley, 10 = California: Coastal areas, 11 = California: Southern San Joaquin Valley & deserts

FORM LMGE-470-66 (2-82)
4. LEAF: Morphology:

7. FRUIT: Typical fruit shape:

Shape of transverse section:
1=round  2=flattened  3=angular  4=irregular

Shape of stem end:
1=flat  2=indented

Shape of blossom end:
1=indented  2=flat  3=nipped  4=tapered

Shape of pistil scar:
1=dot  2=stellate  3=linear  4=irregular

REFERENCES


Exhibit D. Additional Description of NC 2C

NC 2C produces yields similar to the F₁ hybrid cherry tomato cultivars 'Cherry Grande' and 'Castlette' (Table 1).

NC 2C produces fruit similar in size to 'Castlette' and smaller than 'Cherry Grande' (Tables 2, 3, and 4).

NC 2C is similar in season of maturity to 'Castlette' and later in maturity than 'Cherry Grande' (Table 5).
Table 1. Marketable yield (15-lb. flats/acre) of cherry tomatoes. MHCRS, Fletcher, NC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Cherry Grande</td>
<td>4160</td>
<td>4620</td>
<td>5819</td>
<td>5034</td>
</tr>
<tr>
<td>Castlette</td>
<td>4603</td>
<td>6472</td>
<td>6185</td>
<td>4868</td>
</tr>
<tr>
<td>Mountain Belle</td>
<td>4095</td>
<td>4771</td>
<td>6086</td>
<td>5133</td>
</tr>
<tr>
<td>NC 1C</td>
<td>--</td>
<td>--</td>
<td>4835</td>
<td>3727</td>
</tr>
<tr>
<td>NC 2C</td>
<td>4240</td>
<td>6321</td>
<td>6447</td>
<td>4467</td>
</tr>
<tr>
<td>LSD(.05)</td>
<td>356</td>
<td>515</td>
<td>730</td>
<td>633</td>
</tr>
</tbody>
</table>

Table 2. Percent of cherry tomato yield with fruit diameter of 1 1/4" - 1 1/2". MHCRS, Fletcher, NC.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Grande</td>
<td>46</td>
<td>48</td>
<td>58</td>
<td>40</td>
</tr>
<tr>
<td>Castlette</td>
<td>70</td>
<td>61</td>
<td>56</td>
<td>68</td>
</tr>
<tr>
<td>Mountain Belle</td>
<td>50</td>
<td>48</td>
<td>61</td>
<td>70</td>
</tr>
<tr>
<td>NC 1C</td>
<td>--</td>
<td>--</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>NC 2C</td>
<td>69</td>
<td>58</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>LSD(.05)</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 3. Percent of cherry tomato yield with fruit diameter of 1" - 1 1/4". MHCRS, Fletcher, NC.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Grande</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Castlette</td>
<td>22</td>
<td>29</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Mountain Belle</td>
<td>50</td>
<td>46</td>
<td>37</td>
<td>23</td>
</tr>
<tr>
<td>NC 1C</td>
<td>--</td>
<td>--</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>NC 2C</td>
<td>18</td>
<td>34</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>LSD(.05)</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 4. Percent of cherry tomato yield with fruit diameter greater than 1 1/2",  MHCRS, Fletcher, NC.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Cherry Grande</td>
<td>48</td>
<td>43</td>
<td>32</td>
<td>56</td>
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<tr>
<td>Castlette</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>14</td>
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<tr>
<td>Mountain Belle</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>NC 1C</td>
<td>--</td>
<td>--</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NC 2C</td>
<td>13</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>LSD(.05)</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 5. Marketable yield (15-lb. flats/acre) of cherry tomatoes during first two weeks of harvest. MHCRS, Fletcher, NC.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Cherry Grande</td>
<td>998</td>
<td>3407</td>
<td>1874</td>
<td>1200</td>
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<td>Castlette</td>
<td>388</td>
<td>2314</td>
<td>689</td>
<td>431</td>
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<tr>
<td>Mountain Belle</td>
<td>627</td>
<td>2441</td>
<td>1539</td>
<td>849</td>
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<tr>
<td>NC 1C</td>
<td>--</td>
<td>--</td>
<td>1903</td>
<td>751</td>
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<td>NC 2C</td>
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<td>2178</td>
<td>852</td>
<td>486</td>
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<tr>
<td>LSD(.05)</td>
<td>112</td>
<td>285</td>
<td>225</td>
<td>183</td>
</tr>
</tbody>
</table>
TOMATO

NC 2C

Exhibit E. Statement of The Basis of Applicant's Ownership

NC 2C was developed by Dr. R. G. Gardner, Associate Professor of Horticultural Science and plant breeder with the N. C. Agricultural Research Service (NCARS), College of Agriculture and Life Sciences, N. C. State University. NC 2C is owned exclusively by the NCARS which retains all rights to its use.