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 EXHIBITS, 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 REPLACEMENT 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, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 932, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'Monte Verde'

In testimonia veritate, 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., 31st day of January in the year of our Lord one thousand nine hundred and ninety-seven.

[Signature]

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]

Secretary of Agriculture
# Application for Plant Variety Protection Certificate

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

<table>
<thead>
<tr>
<th>U.S. DEPARTMENT OF AGRICULTURE</th>
<th>AGRICULTURAL MARKETING SERVICE</th>
</tr>
</thead>
</table>

1. **NAME OF APPLICANT(s) (as it is to appear on the Certificate)**
   - North Carolina Agricultural Research Service

2. **TEMPORARY DESIGNATION OR EXPERIMENTAL NO.**
   - 8322-46-1-1-1

3. **VARIETY NAME**
   - Monte Verde

4. **ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)**
   - N.C. State University
   - Box 7643
   - Raleigh, NC 27695-7643
   - 919-515-2717

5. **PHONE (Include area code)**

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

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

8. **CROP KIND NAME (Common Name)**
   - tomato

9. **DATE OF DETERMINATION**
   - March 13, 1992

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

11. **IF INCORPORATED, GIVE STATE OF INCORPORATION**
    - NC

12. **DATE OF INCORPORATION**
    - May 5, 1987

13. **NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS**
    - Michael W. Baker
    - NC Foundation Seed Producers, Inc.
    - 8220 Riley Road
    - Zebulon, NC 27597
    - 919-269-5592

14. **CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)**
   - [ ] Exhibit A. Origin and Breeding History of the Variety.
   - [ ] Exhibit B. Novelty Statement.
   - [ ] Exhibit C. Objective Description of Variety.
   - [ ] Exhibit D. Additional Description of Variety.
   - [ ] Exhibit E. Statement of the Basis of Applicant's Ownership.
   - [ ] Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office.
   - [ ] 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.)**
    - [X] 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.?**
    - [X] YES (If "YES," give names of countries and dates)
    - [ ] NO

19. **HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?**
    - [ ] YES (If "YES," give names of countries and dates)
    - [ ] 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 is (are) informed that false representation herein can jeopardize protection and result in penalties.

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

**CAPACITY OR TITLE**

**DATE**

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

**CAPACITY OR TITLE**

**DATE**
Tomato
'Monte Verde'

14A. Exhibit A:

Pedigree:

8322(X)-46-1-1-1 - Flora-Dade
='Monte Verde'  - Summit

'Monte Verde', an inbred tomato line in the F₇ generation, was developed using the pedigree breeding method. Its pedigree includes the University of Florida release, 'Flora-Dade', and the North Carolina State University release, 'Summit' (registered with the PVP office).

Single plant selections were made in the F₂ through F₅ generations. The F₂ selection was made in the greenhouse based on days from seeding to flowering. F₃, F₄, and F₅ selections were made in field plots at Fletcher, North Carolina. The F₆ generation was bulked.

'Monte Verde' appeared uniform and stable in the F₄ through F₅ generations in research station plots and grower trial plots of several thousand plants in the F₇ generation. No variants or off-types have been observed in 'Monte Verde'.
Exhibit B. Novelty Statement

'Monte Verde' is most similar to the variety 'Flora-Dade': It differs from 'Flora-Dade' in having larger fruit (Table 1 attached). Fruit of 'Monte Verde' have a smoother blossom scar than fruit of 'Flora-Dade', resulting in less non-marketable fruit as a result of rough blossom scar (catfacing) (Table 2 attached).
Table 1. Mean fruit weight (grams/fruit) of tomato varieties.

<table>
<thead>
<tr>
<th>Variety</th>
<th>1990&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1991&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1991&lt;sup&gt;c&lt;/sup&gt;</th>
<th>1991&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flora-Dade</td>
<td>210</td>
<td>176</td>
<td>190</td>
<td>213</td>
</tr>
<tr>
<td>Monte Verde</td>
<td>241</td>
<td>222</td>
<td>227</td>
<td>267</td>
</tr>
<tr>
<td>Summit</td>
<td>-</td>
<td>250</td>
<td>236</td>
<td>281</td>
</tr>
<tr>
<td>Colonial</td>
<td>244</td>
<td>213</td>
<td>219</td>
<td>258</td>
</tr>
<tr>
<td>Sunny</td>
<td>258</td>
<td>207</td>
<td>210</td>
<td>241</td>
</tr>
<tr>
<td>LSD (0.05)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>14</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

<sup>a</sup>Varieties grown in a randomized complete block design with 4 replicates of 6 plants per replicate. Location: Mountain Horticultural Crops Research Station, Fletcher, NC.

<sup>b</sup>Varieties grown in a randomized complete block design with 4 replicates of 6 plants per replicate. Location: grower field, Tryon, NC.

<sup>c</sup>Varieties grown in a randomized complete block design with 2 replicates of 8 plants per replicate. Location: Mountain Horticultural Crops Research Station, Fletcher, NC.

<sup>d</sup>Data were analyzed by analysis of variance (ANOVA) and means separated by a least significant difference test at the 95% confidence level.
Table 2. Percentage of total harvested tomato fruit weight with rough blossom scar (catfacing) severe enough to be classified as non-marketable (cull).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flora-Dade</td>
<td>24</td>
<td>24</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Monte Verde</td>
<td>11</td>
<td>7</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Summit</td>
<td>-</td>
<td>15</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Colonial</td>
<td>21</td>
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<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Sunny</td>
<td>31</td>
<td>18</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>LSD (0.05)d</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

*aVarieties grown in a randomized complete block design with 4 replicates of 6 plants per replicate. Location: Mountain Horticultural Crops Research Station, Fletcher, NC.

*bVarieties grown in a randomized complete block design with 4 replicates of 6 plants per replicate. Location: grower field, Tryon, NC.

*cVarieties grown in a randomized complete block design with 2 replicates of 8 plants per replicate. Location: Mountain Horticultural Crops Research Station, Fletcher, NC.

*dData were analyzed by analysis of variance (ANOVA) and means separated by a least significant difference test (LSD) at the 95% confidence level.
**OBJECTIVE DESCRIPTION OF VARIETY**

**TOMATO (Lycopersicon esculentum Mill.)**

<table>
<thead>
<tr>
<th>NAME OF APPLICANT(S)</th>
<th>TEMPORARY DESIGNATION</th>
<th>VARIETY NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.C. Agricultural Research Service</td>
<td>8322(X)-46-1-1-1</td>
<td>Monte Verde</td>
</tr>
</tbody>
</table>

**ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code)**

N.C. State University
Box 7643
Raleigh, NC 27695-7643

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 zeros 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. Try direct-seeded or transplanted or staked or unstaked. Give locations and dates of seeding and transplanting here.

**Fletcher: North Carolina**
Seeding Dates: 4/17/89; 4/24/89; 5/1/89; 5/9/89; 5/16/89; 5/23/89; 4/16/91; 4/18/91; 5/10/91
Transplant Dates: 5/31/89; 5/25/90; 5/2/91; 6/4/91

**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.**

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<thead>
<tr>
<th>1</th>
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<tr>
<td>Ace 55 VF</td>
<td>Homestead 24</td>
<td>Red Rock</td>
<td>VF 134</td>
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<tr>
<td>Campbell 37</td>
<td>Marglobe</td>
<td>Roma VF</td>
<td>US 28</td>
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<tr>
<td>Chico 3</td>
<td>Murrieta</td>
<td>Rutgers</td>
<td>VF 145B7879</td>
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<tr>
<td>Flora Dade 10</td>
<td>New Yorker</td>
<td>Sunray</td>
<td>Other (Specify)</td>
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<tr>
<td>Florida MH-1</td>
<td>Ohio MH-13</td>
<td>Tropic</td>
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<tr>
<td>Heinz 1350</td>
<td>Red Cherry Large</td>
<td>UC 82</td>
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<td>16</td>
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<td>0</td>
<td>Cm. Height</td>
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</tr>
</tbody>
</table>

1. **SEEDLING:**

- 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 = 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 ('Brem'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: 1 = No. of nodes between later-developing 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')  2 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

**FORM LMGS-470-55 (2-82) Page 1 of 5**
4. LEAF (mature leaf beneath the 3rd inflorescence -- continued):

<table>
<thead>
<tr>
<th>2</th>
<th>2</th>
<th>2</th>
<th>4 = Wooly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface of major leaflets:</td>
<td>1 = Smooth</td>
<td>2 = Rugose (bumpy or veinly)</td>
<td></td>
</tr>
<tr>
<td>Pubescence:</td>
<td>1 = Smooth (no long hairs)</td>
<td>2 = Normal</td>
<td>3 = Hirsute</td>
</tr>
</tbody>
</table>
### 7. FRUIT (3rd fruit of 2nd or 3rd cluster): Continued

<table>
<thead>
<tr>
<th>Trait</th>
<th>Code 1</th>
<th>Code 2</th>
<th>Code 3</th>
<th>Code 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ripening</td>
<td>1: Inside out</td>
<td>2: Uniformly</td>
<td>3: Outside in</td>
<td>4: Stem scar size (1: Small (&quot;Roma&quot;), 2: Medium (&quot;Rutgers&quot;), 3: Large)</td>
</tr>
<tr>
<td>Epidermis color</td>
<td>1: Colorless</td>
<td>2: Yellow</td>
<td>3: Normal</td>
<td>4: Epidermis color</td>
</tr>
<tr>
<td>Epidermis</td>
<td>1: Normal</td>
<td>2: Easy-peel</td>
<td>3: Tendril</td>
<td>4: Epidermis texture</td>
</tr>
<tr>
<td>Texture</td>
<td>1: Tender</td>
<td>2: Average</td>
<td>3: Tough</td>
<td>4: Thickness of pericarp, check var. no.</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>
<td>4: Over 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 1</th>
<th>Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blossom end rot</td>
<td>2: 22</td>
<td></td>
</tr>
<tr>
<td>Catface</td>
<td>2: Fruit pox</td>
<td></td>
</tr>
<tr>
<td>Bloating ripening</td>
<td>2: Cracking, concentric</td>
<td></td>
</tr>
<tr>
<td>Bursting</td>
<td>2: Cracking, radial</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:

<table>
<thead>
<tr>
<th>Virus</th>
<th>Code 0</th>
<th>Code 0</th>
<th>Code 0</th>
<th>Code 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cucumber mosaic</td>
<td>0: 0</td>
<td></td>
<td></td>
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<tr>
<td>Curly top</td>
<td>0: 0</td>
<td></td>
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<tr>
<td>Potato-Y virus</td>
<td>0: 0</td>
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<tr>
<td>Other virus (Specify)</td>
<td>0: 0</td>
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#### BACTERIAL DISEASES:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Code 0</th>
<th>Code 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial canker (Corynebacterium michiganense)</td>
<td>0: 0</td>
<td></td>
</tr>
<tr>
<td>Bacterial soft rot (Erwinia carotovora)</td>
<td>0: 0</td>
<td></td>
</tr>
<tr>
<td>Bacterial spec (Pseudomonas tomato)</td>
<td>0: 0</td>
<td></td>
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</tbody>
</table>

#### FUNGAL DISEASES:

<table>
<thead>
<tr>
<th>Disease</th>
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</thead>
<tbody>
<tr>
<td>Anthracnose (Colletotrichum spp.)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Brown root rot or corky root, (Pyrenochaeta lycopersici)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Collar rot or stem canker, (Alternaria solani)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Early blight defoliation, (Alternaria solani)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Fusarium wilt, Race 1, (F. oxysporum f. lycopersici)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Fusarium wilt, Race 2</td>
<td>0: 0</td>
</tr>
<tr>
<td>Fusarium wilt, Race 3</td>
<td>0: 0</td>
</tr>
<tr>
<td>Gray leaf spot (Stemphylium spp.)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Late blight, Race 0, (Phytophthora infestans)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Late blight, Race 1</td>
<td>0: 0</td>
</tr>
<tr>
<td>Nailhead spot (Alternaria tomatophila)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Septoria leaf spot (S. lycopersici)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Target leaf spot (Corynespora cassiicola)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Verticillium wilt, Race 1 (V. albo-atrum)</td>
<td>0: 0</td>
</tr>
<tr>
<td>Verticillium wilt, Race 2</td>
<td>0: 0</td>
</tr>
<tr>
<td>Other fungal disease</td>
<td>0: 0</td>
</tr>
<tr>
<td>Other fungal disease</td>
<td>0: 0</td>
</tr>
</tbody>
</table>
9. 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 (*Epitrix hirtipennis*)

**POLLUTANTS:**

- [ ] Ozone
- [ ] Sulfur dioxide
- [ ] Other (Specify)

10. 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>

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>APPLICATION VARIETY</th>
<th>Check variety</th>
<th>Check variety</th>
<th>Check variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed to 50% flower (1 open flower on 50% of plants)</td>
<td>61 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>
</tr>
</tbody>
</table>

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

Relative maturity in areas tested:
1 = Early
4 = Medium late
2 = Medium early
5 = Late
3 = Medium
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
3 = Whole-pack canning

**Principal use(s):**
1 = Home garden
2 = Fresh market
4 = Concentrated products
5 = Other (Specify)

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

Regions to which adaptation has been demonstrated:
1 = Northeast
2 = Mid Atlantic
3 = Southeast
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
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=nippled, 4=tapered

Shape of pistil scar:

1=dot, 2=stellate, 3=linear, 4=irregular

REFERENCES


### Statement of the Basis of Ownership

1. **Name of Applicant(s):**
   North Carolina Agricultural Research Service  
   Dr. R. G. Gardner (Breeder)

2. **Temporary Designation or Experimental Number:**
   8322(X)-46-1-1-1

3. **Variety Name:**
   'Monte Verde'

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):**
   (704) 684-3562

6. **Fax (include area code):**
   (704) 684-8715

7. **PVP Number:**
   300161

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 breeder? If no, please answer the following:
    - a. If original rights to variety were owned by individual(s):
       Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country
    - b. If original rights to variety were owned by a company:
       Is the original breeder(s) U.S. based company? If no, give name of country

11. Additional explanation on ownership (If needed, use reverse for extra space):
    'Monte Verde' 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 28732-9216. Phone: (704) 684-3562, Fax: (704) 684-8715

**Please Note:**

Plant variety protection can be afforded only to owners (not licensees) who meet one 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 breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.
Exhibit E. Statement of The Basis of Applicant's Ownership

Monte Verde was developed by Dr. R. G. Gardner, 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. Monte Verde is owned exclusively by the NCARS which retains all rights to its use.