THE UNITED STATES OF AMERICA

TO All TO WHOM THESE PRESENTS SHALL COME:

Resource Seeds, Inc.

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 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 THEREOF IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT, INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT 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 TO THE SAID APPLICANT, AND THE SUCCESSORS, HEIRS OR ASSESSORS OF THE SAID APPLICANT, FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLACEMENT OF VIABLE BASIC SEED OR THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THIS 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 PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (34 STAT. 1543, AS AMENDED, 7 U.S.C. 2331 ET SEQ.)

TRITICALE

'498'

In testimony whereof, I have hereto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of January, in the year two thousand three.

[Signature]

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

**1. NAME OF OWNER**

Resource Seeds, Inc.

**2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME**

XT498

**3. VARIETY NAME**

498

**4. ADDRESS**

2280 Hecker Pass Highway
Gilroy, California 95020

**5. TELEPHONE (include area code)**

408/847-1051

**6. FAX (include area code)**

408/847-0604

**7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)**

Corporation

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

California

**9. DATE OF INCORPORATION**

October 1, 1990

**10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION (First person listed will receive all papers)**

Dr. George Fohner
Resource Seeds, Inc.
P.O. Box 1319
Gilroy, CA 95021

**11. TELEPHONE (include area code)**

408/847-1051

**12. FAX (include area code)**

408/847-0604

**13. E-MAIL**

george@resourceseds.com

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

Triticale

**15. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED**

- Exhibit A. Origin and Breeding History of the Variety
- Exhibit B. Statement of Distinctness
- Exhibit C. Objective Description of Variety
- Exhibit D. Additional Description of the Variety (Optional)
- Exhibit E. Statement of the Basis of the Owner's Ownership
- Voucher Sample (2,500 viable untreated seeds or, for naked propagated varieties, 2,500 cultured plants that will culture will be deposited and maintained in an approved public repository)
- Filming and Examination Fee ($5,245.00), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)

**16. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 63(a) of the Plant Variety Protection Act)**

- YES (If "YES", answer Items 20 and 21 below)
- NO (If "NO", go to item 22)

**17. IF YES, WHICH CLASSES?**

- FOUNDATION
- REGISTERED
- CERTIFIED

**18. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS?**

- YES
- NO

**19. IF YES, SPECIFY THE NUMBER 1, 2, 3, etc.**

- FOUNDATION
- REGISTERED
- CERTIFIED

**20. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHTS (PLANT BREEDER'S RIGHT OR PATENT)?**

- YES
- NO

**21. IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND REFERENCED NUMBER. (Please use space indicated on reverse)**

IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)

**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 COUNTRIES?**

- YES
- NO

If YES, you must provide the date of first sale, disposition, transfer, or use for each country and the circumstances. (Please use space indicated on reverse.)

**23. ARE THE NEW, DISTINCT, UNIFORM, AND STABLE?**

- YES
- NO

The undersigned owner(s) is(are) the owner of this variety and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

**SIGNATURE OF OWNER**

George Fohner
President

**DATE**

9/12/00

**CERTIFICATION OF PRELIMINARY EXAMINATION OF VARIETY**

408/847-0604

**DATE**

August 30, 1996

**CERTIFICATION FEE:**

$320.00

**DATE**

4/1/2002

**FILING AND EXAMINATION FEES:**

$2,450.00

**DATE**

8/17/1996

<table>
<thead>
<tr>
<th>NAME (Please print or type)</th>
<th>SIGNATURE OF OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Fohner</td>
<td></td>
</tr>
</tbody>
</table>

**CAPACITY OR TITLE**

President

**DATE**

(new form)

12/00

**CAPACITY OR TITLE**

President
GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid that it will reproduce an entire plant; tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $2,450 applications will be held in the PVPO for not more than 90 days, then returned to the applicant as undelivered. Mail application and other requirements to Plant Variety Office, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the application form must be submitted in duplicate. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

ITEM

18a. 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) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is similar to one variety 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 (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. 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 this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, 97.103).

22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.

23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each count and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

USA, November 1995 Sold for seed multiplication and on-farm testing under the supervision of Resource Seeds, Inc.

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 7.175(h) of the Regulations and Rules of Practice.)
TRITICALE

"498"

EXHIBIT A: ORIGIN AND BREEDING HISTORY

Pedigree [Daws x Snoopy] x 179-1] 6TC027

Triticale 498, a facultative type of triticale developed by Resource Seeds, Inc., is a pure line selection from the 1982 cross of octoploid triticale Daws/Snoopy with two hexaploids L179-1, and 6TC027. The octoploid triticale accession Daws/Snoopy is a USDA-Corvallis triticale breeding line developed by Dr. Robert Metzger by crossing the public wheat variety Daws and the CIMMYT experimental rye, Snoopy. L179-1 and 6TC027 were breeding lines in The Jenkins Foundation for Research program on triticale, now owned by Resource Seeds. L179-1 was an experimental hexaploid triticale accession received by Dr. Charles Jenkins from Dr. T. Wolski, Laski Plant Breeding Station, Laski, Poland. 6TC027 was a triticale line developed by Dr. Jenkins from a cross made in 1967 described in Dr. Jenkins records as being a cross between a publicly available land race of purple wheat collected from a cultivated field in China and the triticale breeding line 6T0TXB140. His records further indicate that 6T0TXB140 was a selection from the triticale breeding population composed of bulked 6T02413 and 6T02418, both populations of which were produced from F1 plant selections from the cross between the primary hexaploid triticale 6T6TXA002 and OT6TXA031. OT6TXA031 was an F1 plant selection from a cross between the primary hexaploid triticale P4160(E)X6AT and the hexaploid triticale breeding line X6A274. P4160(E)X6AT was a publicly available line from a triticale collection at Michigan State University and X6A274 was a publicly available line from the collection at CIMMYT.

The cross designated XT498 was advanced by the bulk breeding method in the F2 and F3 generations. In 1984 head selections were made from the F3 bulk and grown as F4 headrows in 1985. Bulk selection XT498-6 from a single F4 head row was tested in yield trials for 3 years, and was selected for commercial development on the basis of superior grain yields.

Breeder seed of 498 was formed from a composite of 180 plant selections derived from 200 heads sampled from XT498-6 in 1988 and selected in 1989 and 1990 for uniformity of height, chaff color, and seed color.

Triticale 498 has been observed to be uniform and stable over six generations of testing in California and the southeast U.S., its primary area of commercial adaptation. During the multiplication process some taller variants have been observed at a frequency of approximately 1:4000-5000.
TRITICALE

"498"

EXHIBIT B: STATEMENT OF DISTINCTNESS (NOVELTY STATEMENT)

Triticale 498 is most similar to the triticale variety 2700 (PVP 9300122) in that both have a more erect spike than that of other intermediate or spring-type triticale varieties. Triticale 498 differs from 2700 in having shorter straw and earlier maturity (Tables 1 & 2). Trical 498 has an erect spike, which distinguishes it from many other triticale varieties grown in its area of adaptation.
<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>498</th>
<th>2700</th>
<th>Std Error of Mean</th>
<th>&quot;t&quot; Test Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Carolina 1995</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clemson</td>
<td></td>
<td>99</td>
<td>130</td>
<td>2.0</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Florence</td>
<td></td>
<td>104</td>
<td>127</td>
<td>2.3</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Blackville</td>
<td></td>
<td>109</td>
<td>119</td>
<td>1.3</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Hollister, California</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td>128</td>
<td>158</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td>137</td>
<td>166</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1989</td>
<td></td>
<td>140</td>
<td>162</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Gilroy, California</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td>142</td>
<td>165</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Knoxville, Tennessee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>94</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange, Virginia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>104</td>
<td>150</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>AVG</td>
<td></td>
<td>118</td>
<td>146</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paired "t" test on means across all sites:  
\[ t = -7.55 \]  
\[ p < 0.001 \]
<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>498 Days after March 31</th>
<th>2700 Days after March 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Carolina 1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clemson</td>
<td></td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Hollister, California</td>
<td>1988</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Gilroy, California</td>
<td>1991</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Knoxville, Tennessee</td>
<td>1995</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Orange, Virginia</td>
<td>1995</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>AVG</td>
<td></td>
<td>15</td>
<td>24</td>
</tr>
</tbody>
</table>

Paired "t" Test:  
\[ t = -5.58 \]
\[ p < 0.01 \]
<table>
<thead>
<tr>
<th>NAME OF APPLICANT(S)</th>
<th>VARIETY NAME OR TEMPORARY DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Seeds, Inc.</td>
<td>VTR498</td>
</tr>
</tbody>
</table>

**OBJECTIVE DESCRIPTION OF VARIETY TRITICALE**

**PLACE:**

Place the appropriate number that describes the varietal character of this variety in the boxes below.

**FOR OFFICIAL USE ONLY**

<table>
<thead>
<tr>
<th>JVPO NUMBER</th>
<th>P = 000361</th>
</tr>
</thead>
</table>

**1. GROWTH HABIT:**

- **2**
  - 1 = SPRING
  - 2 = INTERMEDIATE
  - 3 = WINTER
- **2**
  - Juvenile Plant Growth: 1 = PROSTRATE
  - 2 = SEMIPROSTRATE
  - 3 = ERECT
- **2**
  - Photoperiod: 1 = INSENSITIVE
  - 2 = SENSITIVE

**2. PLOIDY:**

- **1**
  - 1 = HEXAPLOID
  - 2 = OCTOPLOID
  - 3 = OTHER (Specify)
- **4**
  - 2n CHROMOSOME NUMBER

**3. MATURITY (50% Flowering):**

- **3**
  - 1 = VERY EARLY
  - 2 = EARLY
  - 3 = MIDSEASON
  - 4 = LATE
  - 5 = VERY LATE
- **11**
  - DAYS Earlier Than Presto: ...... [ ]
  - 1 = CARMACK
  - 2 = ROSNER
  - 3 = PATHFINDER
- **7**
  - DAYS Later Than Florico: ...... [ ]
  - 4 = STA 204
  - 5 = ARMADILLA

**4. HEIGHT:**

- **105**
  - CM. HIGH in Southeast U.S. [ ]
  - 1 = DWARF
  - 2 = SEMIDWARF
  - 3 = SHORT
  - 4 = MIDTALL
  - 5 = TALL
- **10**
  - CM. SHORTER THAN Florico: ...... [ ]
  - 1 = CARMACK
  - 2 = ROSNER
  - 3 = PATHFINDER
- **0**
  - CM. TALLER THAN Florico: ...... [ ]
  - 4 = STA 204
  - 5 = ARMADILLA

**5. PLANT COLOR AT BOOT STAGE:**

- **2**
  - 1 = YELLOW GREEN
  - 2 = GREEN
  - 3 = BLUE GREEN

**6. STEM:**

- **2**
  - Anthocyanin: 1 = ABSENT
  - 2 = PRESENT
- **2**
  - Neck Hairiness: 1 = NONE
  - 2 = SLIGHT
  - 3 = MODERATE
  - 4 = HEAVY
- **2**
  - Shape Of Neck: 1 = STRAIGHT
  - 2 = WAVY
  - 3 = OTHER (Specify)

**7. LEAVES:**

- **1**
  - Flag Leaf: 1 = NOT TWISTED
  - 2 = TWISTED
  - 3 = 0 CM. LEAF LENGTH: 1st Leaf Below Flag Leaf
- **2**
  - Waxy Bloom On Leaf At Boot: 1 = ABSENT
  - 2 = PRESENT
  - 1 = 0 MM. LEAF WIDTH: 1st Leaf Below Flag Leaf
- **2**
  - Leaf Carriage: 1 = UPRIGHT
  - 2 = RECURVED
  - 3 = DROOPING
  - 2 = Atricle Color: 1 = COLORLESS OR WHITE
  - 2 = PURPLE
  - 3 = OTHER (Specify)
8. HEAD:

<table>
<thead>
<tr>
<th>Density</th>
<th>1 = LAX</th>
<th>2 = MIDDENSE</th>
<th>3 = DENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape</td>
<td>1 = FUSIFORM</td>
<td>2 = OBLONG</td>
<td>3 = CLAVATE</td>
</tr>
<tr>
<td>Awnedness</td>
<td>1 = AWNLESS</td>
<td>2 = APICALLY AWNLETTED</td>
<td>3 = AWNLETTED</td>
</tr>
<tr>
<td>Awn Color</td>
<td>1 = WHITE</td>
<td>2 = YELLOW</td>
<td>3 = TAN</td>
</tr>
</tbody>
</table>

| CM. HEAD LENGTH | 15 |
| MM. HEAD WIDTH |

9. GLUMES AT MATURITY:

<table>
<thead>
<tr>
<th>Pubescence</th>
<th>1 = GLABROUS</th>
<th>2 = SLIGHTLY PUBESCENT</th>
<th>3 = PUBESCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>1 = WHITE</td>
<td>2 = YELLOW</td>
<td>3 = TAN</td>
</tr>
<tr>
<td>Length</td>
<td>1 = SHORT</td>
<td>2 = MIDLONG</td>
<td>3 = LONG</td>
</tr>
<tr>
<td>Shoulder</td>
<td>1 = WANTING</td>
<td>2 = OBLIQUE</td>
<td>3 = ROUNDED</td>
</tr>
<tr>
<td>Width</td>
<td>1 = NARROW</td>
<td>2 = MIDWIDE</td>
<td>3 = WIDE</td>
</tr>
<tr>
<td>Beak</td>
<td>1 = OBTUSE</td>
<td>2 = ACUTE</td>
<td>3 = ACUMINATE</td>
</tr>
</tbody>
</table>

10. COLEOPTILE COLOR:

| 1 = WHITE | 2 = GREEN | 3 = PURPLE |

11. SEED:

<table>
<thead>
<tr>
<th>Shape</th>
<th>1 = OVATE</th>
<th>2 = OVAL</th>
<th>3 = ELLIPTICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoothness</td>
<td>1 = SMOOTH</td>
<td>2 = SLIGHTLY WRINKLED</td>
<td>3 = WRINKLED</td>
</tr>
<tr>
<td>Brush Area</td>
<td>1 = SMALL</td>
<td>2 = MIDSIZE</td>
<td>3 = LARGE</td>
</tr>
<tr>
<td>Brush Length</td>
<td>1 = SHORT</td>
<td>2 = MIDLONG</td>
<td>3 = LONG</td>
</tr>
<tr>
<td>Phenol Reaction</td>
<td>1 = IVORY</td>
<td>2 = FAWN</td>
<td>3 = LIGHT BROWN</td>
</tr>
<tr>
<td>Color</td>
<td>1 = WHITE</td>
<td>2 = AMBER</td>
<td>3 = RED</td>
</tr>
<tr>
<td>GMS, PER 1,000 SEED</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. DISEASE (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

<table>
<thead>
<tr>
<th>STEM RUST (Race)</th>
<th>1 = LEAF RUST (Race)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>STRIPE RUST (Race)</td>
<td>ERGOT</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>POWDERY MILDEW</td>
<td>0 = BACTERIAL STRIPE</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SEPTORIA</td>
<td>3 = YELLOW DWARF</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>OTHER (Specify)</td>
<td>OTHER (Specify)</td>
</tr>
</tbody>
</table>

13. INSECT (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

<table>
<thead>
<tr>
<th>GREENBUG</th>
<th>HESSIAN FLY RACE: 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CEREAL LEAF BEETLE</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OTHER (Specify)</td>
<td>corn borer</td>
</tr>
<tr>
<td></td>
<td>GP A B C D E F G</td>
</tr>
</tbody>
</table>
14. **INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:**

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>VARIETY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLANT TILLERING</td>
<td></td>
</tr>
<tr>
<td>WINTER HARDINESS</td>
<td>Stan II</td>
</tr>
<tr>
<td>AREA OF ADAPTATION</td>
<td>Florico &amp; Stan II</td>
</tr>
<tr>
<td>SEED SHAPE</td>
<td></td>
</tr>
</tbody>
</table>

**REFERENCES:**


**COMMENTS:**
Table 3

Heading Date of 498 vs Other Triticale Grown in Southeast U.S.

<table>
<thead>
<tr>
<th>Location</th>
<th>498 Days after March 31</th>
<th>Florico</th>
<th>Presto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orangeburg, S. Carolina</td>
<td>11.5</td>
<td>3.0</td>
<td>21.0</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clemson, S. Carolina</td>
<td>14</td>
<td>7</td>
<td>NA</td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurenburg, N. Carolina</td>
<td>13.8</td>
<td>7.5</td>
<td>26.0</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVG</td>
<td>13</td>
<td>6</td>
<td>24</td>
</tr>
</tbody>
</table>
Table 4  
Height of 498 vs Florico Triticale

<table>
<thead>
<tr>
<th>Location, S. Carolina</th>
<th>498</th>
<th>Florico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cm</td>
<td></td>
</tr>
<tr>
<td>Blackville, S. Carolina</td>
<td>1993</td>
<td>97</td>
</tr>
<tr>
<td>Clemson, S. Carolina</td>
<td>1994</td>
<td>112</td>
</tr>
<tr>
<td>Florence, S. Carolina</td>
<td>1994</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>104</td>
</tr>
<tr>
<td>AVG</td>
<td>109</td>
<td>119</td>
</tr>
</tbody>
</table>
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S):
   Resource Seeds, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
   XT498

3. VARIETY NAME
   498

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)
   P.O. Box 1319
   Gilroy, CA 95021

5. TELEPHONE (Include area code)
   408-847-1051

6. FAX (Include area code)
   408-847-0604

7. PVPO NUMBER
   9600361

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

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

10. Is the applicant the original breeder? If no, please answer the following:
    X YES  NO

   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):

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.